Finding of No Significant Impact North Unit Visitor Center Replacement

In compliance with the National Environmental Policy Act (NEPA), as amended, and its implementing regulations by the Council on Environmental Quality (CEQ) (40 CFR 1500-1508), and Director's Order 12 (D0-12), Conservation Planning, Environmental Impact Analysis and Decision-making and its accompanying Handbook, the National Park Service (NPS) prepared an environmental assessment (EA) to examine alternatives and potential environmental impacts associated with the proposal to replace the North Unit Visitor Center of Theodore Roosevelt National Park (park), which was abandoned because of structural problems on July 17, 2013.

The 1987 General Management Plan/ Environmental Assessment (GMP/EA) approved the abandoned Visitor Center location and the park constructed a 4,600 square foot building with a full basement in 1992. The park observed structural movement caused by excessive underground pressure soon after construction and this movement was evaluated in a 1998 structural investigation and study. Combinations of forces resulting from expansive clays, an underground coal seam actively carrying water to the structure, and pressure from the sloughing earthen slope behind the structure, were determined to have caused structural movement, excessive stress, heaving, and wall cracking. A stabilization project in 2001 temporarily resolved most of the problems. However, following the 2001 project, a large section of the earthen slope behind the structure slid against the exterior of the structure. This movement generated additional pressure on the Visitor Center columns, beams, and roof trusses and caused comprehensive damage. Roof and floor trusses were compromised due to the building movement and, as a result, will not support the code-required design loads. The building is no longer structurally safe for occupancy.

The proposal to replace the Visitor Center building includes construction of a single-story building, not to exceed 4,700 square feet, which is approximately the same square footage as the abandoned Visitor Center. The proposed facility will include similar visitor amenities such as a lobby, multi-purpose room, interpretive exhibits, restrooms, and a Cooperating Association bookstore. The facility will also provide space for NPS administrative operations that would include offices, conference room, a break room, staff restrooms, and storage. The facility will be designed and constructed according to the U.S. Green Building Council's Leadership in Energy and Environmental Design (LEED) Silver standards, with attention given to site orientation, energy efficiency, sustainability, and other green building qualities.

The purpose of the proposed project is to develop a new visitor center that will remain stable when exposed to surface and sub-surface soil and water movement, improve visitor capacity and use, enhance visitor experience, incorporate energy-saving technologies, and accommodate administrative functions.

The proposed project will address the 1987 GMP/EA goal of developing a multi-purpose visitor center and administrative facility for the North Unit of the park. The proposed project needs, as discussed below, are in concert with the GMP/EA:

- Accommodate unstable soils and subsurface geologic materials and groundwater;
- Address the shortcomings of the current temporary facilities;
- Provide adequate visitor services including interpretation of Theodore Roosevelt National Park: and
- Provide for park administrative functions.

The instability of expansive soils and subsurface materials throughout the North Unit are readily apparent and demonstrated through landslides, soil slumping, and other erosion-induced events. The Proposed Visitor Center will not have a basement and will be constructed with a pier-based deep foundation system to accommodate the inherently unstable soils and groundwater movement. The building will be constructed with structural components designed to resist expansive soil heave.

The abandoned Visitor Center was originally designed as a visitor center and operations facility. Subsequent to its abandonment, most visitor center functions were moved to the Camptender's Cottage in Juniper Campground, and administrative functions were moved to Quarters 205B. The Camptender's Cottage and Quarters 205B were constructed as housing units and are not suitable for visitor and administrative functions. Due to a critical employee housing shortage, two trailers were moved near the park entrance after completion of the EA. The trailers were previously used by the US Air Force and by the NPS at Minute Man Missile National Historic Site. These trailers were placed on this level site to take advantage of existing utilities and parking lot, and became operational in July 2015. One of the trailers serves as the new temporary visitor center, providing limited visitor services; the other trailer provides park administrative and support space. The trailers are temporary and are not large enough to fit the need for long-term visitor and administrative facilities.

Five alternatives were evaluated in the EA: a No-Action Alternative and Build Alternatives 1, 2, 3, and 4. The proposed Visitor Center EA did not identify an agency preferred alternative because the NPS wanted unbiased public input on the document as the Watford City community had a role in the decision concerning the original location of the Visitor Center.

This finding of no significant impact (FONSI) and the EA constitute the record of the environmental impact analysis and decision-making process for the project. The NPS will implement the selected alternative to construct a visitor center/administrative facility.

Selected Alternative

The NPS explored several possible locations for the new facility through the EA process. Based upon that EA and the public comments, the NPS has selected a preferred alternative. The NPS also considered costs associated with building a new visitor center, and the ability of the NPS to construct the facility in a reasonable amount of time.

The NPS selected alternative is Build Alternative 1, located approximately 1,200 feet west of U.S. Highway 85 (US 85). The center of Alternative Site 1 is located approximately 120 feet southeast of the center of the abandoned Visitor Center and is currently maintained as an open space. The site is fairly level, with a gentle, approximately 4 percent slope toward the south. Construction of the new Visitor Center at this site will include a deep foundation and pier system. Most of the basement floor and four basement walls of the abandoned Visitor Center will be retained to enhance the stability of the abandoned site. Fill will be added to the basement void and the area will be rehabilitated.

Nearly all of the land affected by construction at Alternative Site 1 was previously disturbed by construction of the original Visitor Center or to abate surface drainage issues experienced on the site. The estimated construction footprint of the new facility will be approximately 1 acre. The abandoned structure will be demolished, rubble will be removed, and the site will be graded. The estimated footprint for demolition is approximately 0.2 acre. The existing parking lot is

immediately adjacent to Alternative Site 1 and will be reused. Similarly, the existing utility lines will be reused and connected to the New Visitor Center at Alternative Site 1.

Build Alternative 1 was selected for the New Visitor Center as the existing infrastructure, which includes the current access road, parking lot and utilities (water, sewer and electric), can be used without the additional cost of replacing or substantially moving those facilities, which would be necessary at the other alternative sites. In addition, Build Alternative 1 will cause fewer new disturbances to the general area. With the use of a drilled pier foundation system, Build Alternative 1 will alleviate potential movement of the soil below the building and will resolve the problem posed by expansive soils. Build Alternative 1 will minimize the project's capital investment and long-term maintenance costs because less infrastructure would be built that would require maintenance.

The selected alternative meets the purpose of the proposed action by providing a new visitor center/administrative facility to increase visitor capacity and use, enhancing visitor experience quality, expanding interpretive exhibits, and accommodating administrative offices.

Mitigation Measures

Geologic Resources

• The new visitor center will be constructed with a deep foundation system to mitigate the expansive soils and groundwater conditions.

Water Quality or Quantity

• To prevent soil from eroding and depositing into water sources, the following measures will be taken: stockpiled fill material will be surrounded by silt fencing and overtopped by semi-permeable matting anchored together to prevent siltation from heavy runoff during rainstorms or snow melt; adequate erosion control or drainage structures will be installed and maintained; a National Pollutant Discharge Elimination System (NPDES) permit will be required for sites disturbing one or more acres; a Storm Water Pollution Prevention Plan will be required for the NPDES permit.

Cultural Resources

 Upon discovery of previously unidentified prehistoric or historic archeological resources during any portion of the project, work in the area associated with the find will cease until evaluated by the NPS archeologist or designated representative, and procedures outlined in 36 Code of Federal Regulations (CFR) 800, Protection of Historic Properties, will be followed.

Resources (including Resource Conservation Potential and Sustainability)

 The New Visitor Center will be designed and constructed to a LEED certification level of silver to conserve resources and be sustainable.

Alternatives Considered

In addition to the selected alternative, a No-Action Alternative and three other Build Alternatives were considered and evaluated in the EA.

No-Action Alternative

Under the No-Action Alternative, the abandoned Visitor Center would continue to deteriorate and would eventually be removed. The NPS would continue to use the two trailers as a temporary visitor center and for administrative offices. The two trailers that have been moved near the park entrance provide only limited visitor services and park administrative and support space and are not a viable long-term option. The No-Action Alternative does not meet the purpose and need for the project.

Build Alternative 2

The center of Alternative Site 2 is located approximately 250 feet northwest of the center of the abandoned Visitor Center. With the exception of the western end of Alternative Site 2, the existing land rises up steeply from Scenic Drive and the abandoned Visitor Center and includes a hillside approximately 15 feet above the elevation of Scenic Drive near the southern portion of the site. The site would be graded, and fill material could be necessary to create a level building site. This hill includes landslide material that is prone to slumping and coal seams below the ground surface. Similar to the other alternative sites, construction of the visitor center at this site would include a deep foundation and pier system. The site slopes approximately 10 to 12 percent to the west. The estimated construction footprint would be approximately 2 acres and is located in natural grassland.

Building the new visitor center at this site would require construction of a new parking lot and demolition of most of the existing parking lot, with the exception of a portion to be reused for the access road. The NPS considered reuse of the existing parking lot for Alternative Site 2, but discounted the option because the distance may not meet Americans with Disabilities Act (ADA) requirements and could discourage some visitors from stopping as they enter the park. This alternative would also require extending water, sewer and electric utilities and construction of a new access road to the site. The abandoned Visitor Center would be demolished and rubble would be removed. The site would be graded, and fill material would be added to create a level building site. The estimated footprint for demolition of the abandoned Visitor Center and parking lot is approximately 0.6 acre.

Construction of an access road, parking lot, and extending utilities, as well as additional grading, increases the cost of this alternative compared to the selected alternative. This alternative would require more long-term maintenance than the Alternative Build Site 1.

Build Alternative 3

The center of Alternative Site 3 is located approximately 240 feet southwest of the center of the abandoned Visitor Center. The proposed site slopes approximately 5 percent toward the south and west. The site would be graded, and fill material could be needed to create a level building site. The estimated construction footprint of Alternative Site 3 would be approximately 2 acres. Approximately 70 percent of the site is developed and approximately 30 percent is grassland. An unnamed tributary of the Little Missouri River is approximately 50 feet downhill from the site, west of the North Unit Maintenance Road. The tributary has a steep erosion scarp that can result in slumping. The area includes landslide material, and potentially includes subsurface coal

seams that can transmit groundwater and cause subsurface instability. Similar to the other alternative sites, construction of the visitor center at this site would include a deep foundation and pier system.

This alternative would require extending utilities (water, sewer and electric) and constructing a new access road and parking area. The existing parking lot would be demolished as the desired location of the parking lot would be on the same side of the road as the visitor center for safety considerations. The abandoned Visitor Center would be demolished, rubble would be removed, fill would be added, and the site would be graded. The estimated footprint for demolition of the abandoned Visitor Center and parking lot is approximately 0.7 acre.

Construction of an access road, parking lot, and extending utilities increases the cost of this alternative as compared to Alternative Site 1 where existing utilities, parking, and access can be used. This alternative would require more long-term maintenance than the selected alternative.

Build Alternative 4

Alternative Site 4 was developed in response to internal and public scoping comments. The center of Alternative Site 4 is located approximately 700 feet west of the center of the abandoned Visitor Center. The site is bound on the north by Scenic Drive and on the east, south, and west by relatively deep intermittent water courses that flow south to the Little Missouri River. These drainages have a steep erosion scarp that can result in localized slumping. The area includes alluvium and potentially includes subsurface coal seams. Similar to the other alternative sites, construction of the visitor center at this site would include a deep foundation and pier system. The site is relatively flat and gently slopes north to south at approximately 1 to 4 percent, and east to west at approximately 1 to 2 percent.

The site would be graded, and fill material could be needed to create a level building site. The estimated construction footprint of Alternative Site 4 would be approximately 3 acres and is located in grassland habitat. A portion of the existing parking lot would be demolished, and approximately 0.2 acre of the existing parking lot would be used as a pull out area and temporary parking for visitors who stop at the interpretive kiosk or want to take pictures of the park entrance sign.

The abandoned Visitor Center would be demolished, rubble would be removed, fill would be added, and the site would be graded. The estimated footprint for demolition of the abandoned Visitor Center and a portion of the parking lot is approximately 0.5 acre.

Build Alternative 4 would require trenching in new utilities (water, sewer, and electric), building a new access road into the site, and constructing a new parking lot. Electrical and telecommunications lines are present along Scenic Drive, but there are no sewer or water utilities on this site. Sewer and water lines would need to be extended from existing lines from the abandoned Visitor Center to this site. Approximately 0.2 acre of ground would be disturbed for extension of these utilities.

Construction of an access road, parking lot, and utilities increases the cost of this alternative as compared to Alternative Site 1, where existing utilities, parking, and access can be used. This alternative would require more long-term maintenance than the selected alternative. This additional infrastructure would be a capital improvement requiring long-term maintenance. This alternative would require more long-term maintenance than the Alternative Build Site 1.

Why the Selected Alternative Will Not Have a Significant Effect on the Human Environment

As defined in 40 CFR 1508.27, significance is determined by examining the following criteria:

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

Implementation of the selected alternative will result in short- and long-term minor adverse impacts to the biological and physical environment. The adverse effects, as fully identified and described in the EA, include short- and long-term minor adverse effects to geologic resources and the potential to increase the introduction of non-native species. Visitor experience and aesthetic resources would benefit from the replacement of the abandoned Visitor Center by removing the temporary trailers and providing visitor services from a new Visitor Center. In addition, recreational resources would also benefit from the replacement of the Visitor Center.

The overall benefit of the project outweighs the minor adverse effects.

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

The selected alternative will not adversely affect public health and safety. The project will not create unsafe or unhealthy conditions. An accident prevention plan will be required for construction. Unauthorized firearms will be prohibited on site. The use of hazardous materials will be approved in advance and subject to conditions that limit the risk of spills and impacts to air and water quality.

Unique characteristics of the geographic area such as proximity to historic or cultural resources, Park lands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas

The selected alternative will not impact unique characteristics of the area because these resources do not exist in the project areas. The selected alternative is within lands zoned for development.

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

There were no highly controversial effects identified during either the preparation of the EA or during the two public review periods (one for scoping and one for review of the EA).

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

The effects of constructing the proposed visitor center are straightforward and do not pose uncertainties. The environmental process did not identify any effects that may involve highly unique or unknown risks.

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

The selected alternative is not expected to set a precedent for future actions with significant effects, nor does it represent a decision in principle about a future consideration.

Whether the action is related to other actions with individually insignificant but cumulatively significant impacts. Significance exists if it is reasonable to anticipate a cumulatively significant impact on the environment. Significance cannot be avoided by terming an action temporary or by breaking it down into small component parts.

Several reasonably foreseeable projects in the area were assessed for cumulative effects. The construction and operation of the visitor center/administrative facility will not add significant adverse impacts associated with other past, present, or reasonably foreseeable projects.

The degree to which the action may adversely affect districts, sites, highways, structures, or objects listed in or eligible for listing in the National Register of Historic Places (NRHP) or may cause loss or destruction of significant scientific, cultural, or historical resources.

No historic properties either listed in or eligible for listing in the NRHP will be affected by the selected alternative. A follow-up archeological survey was conducted in the project area in November 2014; no sites of concern were identified. No known archaeological sites have been located in previous surveys on the Project area, and no known prehistoric or historic structures listed on the NRHP or determined eligible for listing on the NRHP are located at the sites of the proposed action alternatives. The NPS coordinated with the North Dakota State Historic Preservation Office (SHPO), and on March 3, 2014, the SHPO concurred with the NPS determination that the project would result in no historic properties being affected.

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

The park consulted with US Fish and Wildlife Service (USFWS) about potential effects to threatened and/or endangered species. A letter from USFWS was received by the park on March 6, 2014, indicating that no listed threatened or endangered species were known to occupy the project area, and that the project would not likely adversely affect threatened and endangered species. No further consultation under Section 7 of the Endangered Species Act is necessary.

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

The selected alternative will not violate any federal, state, or local laws or environmental protection laws.

Public/Agency Involvement

The Park posted a public scoping document on the NPS Planning, Environmental, and Public Comment website for public review and comment from February 18, 2014 to March 6, 2014. Five comments were received. Concerns about the suitability of the site for a new visitor center were expressed; three commenters suggested considering alternate sites to Alternative Sites 1, 2, and 3.

The EA was made available for public review and comment during a 30-day period ending June 17, 2015. Eleven public comments were received during the comment period and were taken into consideration as the EA was finalized. All commenters favored building a new visitor center. Two commenters did not state a preference for a site, one commenter favored Build Alternative 4, one commenter favored Build Alternatives 3 or 4, and one commenter favored Build Alternative 1. One commenter favored constructing a visitor center along the north edge of the park and one favored locating the visitor center at the campground or picnic area. Concerns regarding the location of the

visitor center include stable ground, the view from the visitor center, size of the visitor center, access for the disabled, intrusion into the wilderness area, and preserving the wilderness area.

No comments were received from American Indian tribes. No changes to the text of the EA were required.

As the NPS did not identify a preferred alternative in the EA, the park posted a statement regarding the selection of a preferred alternative on the project's public webpage and available to the public from January 8, 2016 to January 22, 2016. No public comments were received regarding this notice.

Conclusion

The NPS will implement the selected alternative, presented as Build Alternative 1, after considering the impacts described in the EA, natural and cultural resources information, professional judgment, and input from other agencies and the public. Implementing the selected alternative will enhance visitor experience, while preserving, protecting, and managing the cultural and natural resources of the park.

The NPS selected alternative does not constitute an action meeting the criteria that normally require preparation of an environmental impact statement (EIS). The selected alternative will not have a significant effect on the human environment. Environmental impacts that could occur are limited in context and intensity. There are no unmitigated adverse effects on public health, public safety, threatened or endangered species, or other unique characteristics of the region. No highly uncertain or controversial impacts, unique or unknown risks, significant cumulative effects, or elements of precedence were identified. Implementation of the selected alternative will not violate any federal, state, or local environmental protection laws.

Based on the foregoing, the National Park Service has determined that an EIS is not required for this project and thus one will not be prepared.

Recommended:

Wendy Ross, Superintendent
Theodore Roosevelt National Park

Approved:

Cam Sholly, Regional Director
Midwest Region

All Manual Manual Mark

Approved:

Date

ATTACHMENT A: NON-IMPAIRMENT DETERMINATION

In addition to determining the environmental consequences of alternatives to proposed actions, NPS *Management Policies 2006* and Director's Order-12 require an analysis of potential impacts and effects to determine if actions will impair park resources. Impairment is an impact that would, in the professional judgment of the responsible NPS manager, harm the integrity of park resources or values, including opportunities that will otherwise be present for the enjoyment of those resources or values. A determination of impairment is made for particular resource impact topics carried forward and analyzed in the environmental assessment for the selected alternative. The selected alternative (Build Alternative 1) for meeting the objectives established in the North Unit Visitor Center Replacement EA is described in Chapter 2 of the EA. The EA also includes detailed information on existing conditions of resources and the impacts or effects the selected alternative will have on those resources (EA Chapter 3). Existing conditions and impacts or effects are briefly summarized in this impairment determination.

The description of park significance in Chapter 1 of the EA was used as a basis for determining if a resource is:

- Necessary to fulfill specific purposes identified in the establishing legislation or proclamation of the park, or
- Key to the natural or cultural integrity of the park, or to opportunities for enjoyment of the park, or
- Identified in the park's general management plan or other relevant NPS planning documents as being of significance.

Per Section 1.4.6 of *Management Policies 2006*, park resources and values that may not be impaired include:

- the park's scenery, natural and historic objects, and wildlife, and the processes and
 conditions that sustain them, including, to the extent present in the park: the ecological,
 biological, and physical processes that created the park and continue to act upon it; scenic
 features; natural visibility, both in daytime and at night; natural landscapes; natural
 soundscapes and smells; water and air resources; soils; geological resources;
 paleontological resources; archeological resources; cultural landscapes; ethnographic
 resources; historic and prehistoric sites, structures, and objects; museum collections; and
 native plants and animals;
- appropriate opportunities to experience enjoyment of the above resources, to the extent that can be done without impairing them;
- the park's role in contributing to the national dignity, the high public value and integrity, and the superlative environmental quality of the national park system, and the benefit and inspiration provided to the American people by the national park system; and
- any additional attributes encompassed by the specific values and purposes for which the park was established.

Impairment may result from activities in managing the park, visitor activities, or activities undertaken by concessioners, contractors, and others operating in the park. Impairment may also result from sources or activities outside the park, but this would not be a violation of the Organic Act, unless the park was in some way responsible for the action.

The North Unit Visitor Center Replacement EA analyzes impacts to the following resources: geologic resources, introduction of invasive non-native species, visitor experience and aesthetic resources, and recreational resources. NPS guidance provides that a non-impairment determination must include a discussion, for each impacted resource analyzed in detail in the associated EA or EIS, of why the selected action's impacts will not result in impairment. The impairment determination does not include discussion of impacts to visitor experience, socioeconomics, public health and safety, environmental justice, land use, park operations, etc., as these do not constitute impacts on park resources and values subject to the non-impairment standard.

Management Policies 2006 (NPS, August 2006) states that enjoyment of the NPS resources and values by the public is part of the fundamental purpose of all parks and that NPS is committed to providing appropriate, high-quality opportunities for visitors to enjoy the parks. NPS seeks to (1) preserve natural resources and systems; (2) preserve cultural resources; and (3) sustain visitor enjoyment, human health, and scenic vistas.

Non-Impairment Determination for the Selected Alternative

This impairment determination is based on current NPS guidance on determining impairment of park resources and values. The impairment determination for each resource and value includes:

- a brief description of the condition of the resource;
- whether the resource is necessary to fulfill the purposes for which the park was established;
- whether the resource is key to the natural or cultural integrity of the park or to the opportunity for enjoyment of the park;
- whether the resource is identified as a significant resource in the park's planning documents; and
- a statement as to why the action will or will not result in impairment of the resource, including a discussion of the context, severity, duration, and timing of any impacts, and any mitigation measures, if applicable.

Based on the aforementioned guidelines and basis for determining impairment of park resources and values, a determination of impairment is made for the following resource impact topics carried forward and analyzed in the EA for the selected alternative: geologic resources, invasive non-native species, aesthetic resources, and recreational resources.

Geologic Resources

Nearly two-thirds of the North Unit is designated Wilderness, one of the largest wilderness areas in the northern Great Plains region (approximately 19,400 acres). The area is dominated by the colorful and scenic Little Missouri River Badlands. These badlands were formed, and continue to be re-formed, by the ongoing water and wind erosion of sedimentary rocks (that is, sandstone, siltstone, and claystone) formed from deposits of sand, silt, mud, and layers of volcanic ash. Seams of lignite coal are also present in many areas of these badlands. Soils and subsurface materials throughout the Theodore Roosevelt National Park North Unit are unstable due to past landslides, soil slumping, and erosion events, and subsurface movement of groundwater into soils susceptible to expansion and movement. To accommodate the unstable soils and groundwater movement through these unstable soils, the proposed visitor center will not have a basement and will be constructed with a deep foundation system including deeper piers that will extend down to a layer of sufficient strength and stability. The building will be constructed with

structural components designed to resist expansive soil heave. The void of the basement of the abandoned Visitor Center will be filled and the site will be leveled. The foundation and walls of the current basement will be retained to provide stabilization protection. The new visitor center would be constructed to drain surface water away from the facility. Short-term impacts on geologic resources during the approximately 1-year construction period will be adverse and localized within the construction footprint and will be minor (temporary and barely affecting adjacent streams or existing vegetation outside of the construction footprint). Using best management practices (for example, EPA rules on stormwater discharges on construction sites), National Pollutant Discharge Elimination System (NPDES) requirements, and those in accordance with Natural Resource Management Reference Manual #77 (NPS, February 5, 2004), and Clean Water Act requirements, erosion control measures would be implemented to protect soil and water resources. Erosion control measures could include silt fences placed at the limits of grading. Any fill material would be clean from hazardous materials, appropriate for use as construction fill, and weed free to the extent practical in accordance with Natural Resource Management Reference Manual #77 (NPS, February 5, 2004). The short-term adverse effects on geologic resources will not diminish its role in fulfilling the park's purpose of preserving and interpreting the natural and cultural history, and the natural integrity of the national park.

Long-term impacts on geologic resources will be minor, adverse, and localized because the site and the new visitor center will be protected with the design of the facility described above. The ground in the vicinity of the abandoned Visitor Center and the proposed visitor center would still be unstable; however, constructing the proposed visitor center with a deep foundation and pier system will minimize the effect of the unstable soil on the proposed visitor center structure. Final grading and revegetation of the site will return surface erosion to pre-construction levels, conforming to NPDES permit conditions and NPS policies. NPS policies support the preservation of geologic resources from the adverse effects of human activity, while allowing natural processes to continue; preserve the soil resources of parks and prevent, to the extent possible, the unnatural erosion, physical removal, or contamination of the soil, or its contamination of other resources; and maintain water in its natural condition, free of pollutants generated by human activity. The long-term adverse effects on geologic resources will not diminish its role in fulfilling the park's purpose of preserving and interpreting the natural and cultural history, and the natural integrity of the national park. Therefore, the selected alternative will not impair geologic resources.

Introduction of Invasive Non-Native Species

Another significant feature of the park is its flora and fauna. Nearly 800 species of vascular plants and 252 species of vertebrate wildlife are found in the park. Reintroduced bison, bighorn sheep, and elk, as well as the long-term native mule deer, white-tailed deer, pronghorn, badger, beaver, coyote, porcupine, eagle, hawk, and the ubiquitous prairie dog are the most frequently observed wildlife. Invasive plants are very aggressive species that actively invade and replace native plant communities. Potential harm caused by non-native invasive plants include the reduction in native wildlife habitat, and soil erosion problems caused by displacing native grasses and other plants that better protect the soils from blowing away. Over 60 species of non-native plants have been found at the park. Two non-native invasive species that have substantially impacted the natural environment of the park are leafy spurge (*Euphorbia esula*) and Canada thistle (*Cirsium arvense*).

The selected alternative site is classified as developed land with sparse vegetative cover and is less of a grassland than the other sites. Implementation of the selected alternative will result in a short-term, local, minor adverse impact on the establishment of invasive non-native species. Activities associated with this alternative include construction of a new visitor center and demolition of the abandoned Visitor Center. These activities will result in localized ground disturbance of approximately 0.5 to 1 acre of vegetation removal, plus disturbance of approximately 0.2 acre of vegetation adjacent to the abandoned Visitor Center during its demolition. This disturbance will provide the opportunity for invasive plant species to multiply and potentially invade nearby areas of native vegetation. In addition, the use of construction equipment and imported fill will increase the potential for the introduction of an invasive non-native species. Imported fill has the potential to contain and introduce invasive non-native species. The construction footprint of Build Alternative 1 is minimized by using the existing parking lot, which reduces the disturbed area and potential for introducing invasive non-native species. Monitoring, prevention, and treatment of invasive plant species will continue to be implemented through park staff and the Northern Great Plains Exotic Plant Management Team.

Short-term impacts will be minor (barely noticeable), adverse, and localized because of the proposed resource protection measures discussed in the Mitigation Measures Section of this FONSI. The implementation of these measures will limit the establishment and spread of invasive non-native species. The short-term adverse effects on invasive non-native species will not diminish its role in fulfilling the park's purpose of preserving and interpreting the natural and cultural history, and the natural integrity of the national park. The Selected Alternative will have a long-term negligible (not noticeable) adverse local impact on invasive non-native species. Therefore, the selected alternative will not impair native species.

Aesthetic Resources

Theodore Roosevelt National Park has been designated in the Clean Air Act as a Mandatory Federal Class I area. A Class I area (national parks, wilderness areas, monuments, and other areas of special national and cultural significance) is one in which visibility is protected more stringently than under the national ambient air quality standards. Air quality effects on visibility are an important consideration for aesthetics and impacts on visitor experience because the park is treasured for its vistas.

The area near the entrance to the park provides a welcome point for park visitors. The abandoned Visitor Center is located approximately 1,300 feet west of the park entrance and US 85. This area of the park is designated as a development zone, where development of facilities to support the park's mission is compatible with park purposes. A designated wilderness area, a primary resource of the park, begins approximately 1,500 feet northwest of the abandoned Visitor Center.

Construction of a new visitor center will temporarily affect local air quality because land disturbance of approximately 1 acre will generate emissions of particulate matter from fugitive dust. Noise from construction equipment and activities will temporarily modify the park soundscape. The construction equipment and construction site will impact the viewshed and aesthetic resources in the vicinity of construction. These short-term impacts will last approximately 1 year and will be minor and adverse (affecting a few visitors, but resulting in little change to the quality of the experience) throughout Theodore Roosevelt National Park North Unit. Impacts on visitor experience and aesthetics will be limited to the vicinity of construction and will not affect the designated wilderness area. The new visitor center will

minimally (not noticeably) disturb the landscape. To the extent possible, materials from the abandoned Visitor Center will be used to construct the new facilities. To minimize the impact on aesthetics, colors will be selected to match or blend into the surrounding environment. Native vegetation of sufficient height and adapted for this site will be planted to provide a visual buffer of the parking lot from other areas of the park. The short-term adverse effects on aesthetic resources will not diminish its role in fulfilling the park's purpose of preserving and interpreting the natural and cultural history, and the natural integrity of the national park.

The proposed visitor center would aesthetically blend into the existing landscape; resulting in a long-term negligible adverse local impact. The long-term adverse effects on aesthetic resources will not diminish its role in fulfilling the park's purpose of preserving and interpreting the natural and cultural history, and the natural integrity of the national park.

Recreational Resources

The undeveloped backcountry provides excellent opportunities for hiking, horseback riding, and exploring, and for experiencing the environment much the way Theodore Roosevelt did. The construction of the selected alternative will have a short-term minor adverse local impact (affecting a few visitors, but resulting in little change to the quality of the experience) on recreational activities during the construction of the new visitor center. During the construction period, construction activities may delay traffic near the site of the selected alternative. Access to recreational trails and other resources in the North Unit are west of the site for Selected Alternative, requiring visitors to travel through the construction area. None of the trails, campsites, or other recreational resources will be affected by construction and development of the selected alternative. These minor impacts on visitors' ability to access recreational resources will last throughout the approximately one year construction period. The short-term adverse effects on recreational resources will not diminish its role in fulfilling the park's purpose of preserving and interpreting the natural and cultural history, and the natural integrity of the national park.

Development of the selected alternative will result in a long-term moderate beneficial local impact (noticeably increasing the quality of experience for a large number of visitors) on recreational resources with the improved facilities associated with the new visitor center. The construction of a new visitor center will allow the two trailers to return to their original use and provide facilities better suited for a visitor center. The new visitor center will be located near the abandoned Visitor Center near the entrance to the North Unit and will provide visitors a larger and more convenient location to obtain information on the park recreational resources. The long-term beneficial effects on recreational resources will not diminish its role in fulfilling the park's purpose of preserving and interpreting the natural and cultural history, and the natural integrity of the park.

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