



RESOURCE STEWARDSHIP STRATEGY SUMMARY

FORT UNION TRADING POST NATIONAL HISTORIC SITE
MONTANA | NORTH DAKOTA



CONTENTS

Introduction.....	1
Purpose of a Resource Stewardship Strategy	1
Intent of this Summary Document.....	2
Brief Description of Fort Union Trading Post National Historic Site	3
Development of The Resource Stewardship Strategy for Fort Union Trading Post National Historic Site	5
Key Park Issues, Stressors, and Threats	7
Climate Change and Park Resources	11
Priority Resources	13
Priority Resource Summaries.....	14
Parkwide Resources	14
Archeological Resources.....	14
Museum Collection And Archives.....	15
Reconstructed Trading Post	16
Cultural Landscape.....	17
Ethnographic Resources	19
Native Vegetation Communities And Wildlife.....	20
In Situ Paleontological Resources.....	23
History	24
Stewardship Goals and High-Priority Activities.....	25
Ongoing Implementation of the Resource Stewardship Strategy	31
References	32
Appendix A: Fort Union Trading Post NHS RSS	33
Contact Information.....	44

FIGURES

Figure 1. Park Map	4
Figure 2. Birdseye Perspective of the Reconstructed Trading Post	5
Figure 3. Average Annual Temperature (Tmean) at Fort Union Trading Post National Historic Site.....	11
Figure 4. Vegetation Cover and Land Use.....	21
Figure 5. RSS Implementation Process	31

TABLES

Table 1. Key Issues, Stressors, and Threats; Potential Implications; and Affected Resources.....	8
Table 2. Priority Resources.....	13
Table 3a. High-Priority Stewardship Activities for Parkwide Resources	26
Table 3b. High-Priority Stewardship Activities for Archeological Resources.....	26
Table 3c. High-Priority Stewardship Activities for Museum Collection and Archives	27
Table 3d. High-Priority Stewardship Activities for Reconstructed Trading Post	27
Table 3e. High-Priority Stewardship Activities for Cultural Landscape	27
Table 3f. High-Priority Stewardship Activities for Ethnographic Resources.....	28
Table 3g. High-Priority Stewardship Activities for Native Vegetation Communities and Wildlife	29
Table 3h. High-Priority Stewardship Activities for In Situ Paleontological Resources	30
Table 3i. High-Priority Stewardship Activities for History	30

INTRODUCTION

PURPOSE OF A RESOURCE STEWARDSHIP STRATEGY

A resource stewardship strategy (RSS) is a strategic plan intended to help park managers achieve and maintain desired resource conditions over time (see NPS Management Policies 2006 [§2.3.2]). As part of a park’s planning portfolio, a resource stewardship strategy serves as a bridge between the park’s foundation document, other plans, and everyday management of its natural and cultural resources.

More specifically, a resource stewardship strategy is a dynamic planning tool used to set stewardship goals and track progress in achieving and maintaining desired natural and cultural resource conditions. All resource stewardship goals and activities should be based on science, law, NPS management policies, and the long-term public interest.

Essentially, a resource stewardship strategy establishes a framework and a coordinated process for

1. evaluating and summarizing existing information about priority park resources (including key issues, stressors, and threats),
2. using science and scholarship to establish stewardship goals for priority resources,
3. integrating natural and cultural resource management to achieve stewardship goals, and
4. determining what stewardship activities are needed to get us “from where we are to where we want to be.”

This information provides a basis for making informed resource management decisions for specific project proposals and for developing and revising annual work plans over time.

A resource stewardship strategy is not a static document or one-time effort. Rather, it is a dynamic framework that should be routinely updated as conditions change; new issues, stressors, or threats are identified; and activities are accomplished. A resource stewardship strategy is reviewed by NPS subject-matter experts and decision makers; however, it is not a publicly reviewed decision document.

The RSS process also provides an opportunity for a park to take an integrated approach to resource management by capitalizing on overlapping opportunities among and within disciplines, identifying stewardship activities that benefit multiple resources, or addressing larger parkwide issues. Taking an integrated approach can result in more effective stewardship for resources through the use of science, scholarship, research, policy, interpretation, and direct management.

INTENT OF THIS SUMMARY DOCUMENT

This summary document is intended to provide readers with a snapshot of the resource stewardship strategy for Fort Union Trading Post National Historic Site. For the sake of simplification, this unit of the national park system is also referred to as “the park” or FOUS in this document. The document serves as a communication tool that complements the dynamic and evolving RSS desktop application that is actively used for resource management. This summary is not intended to describe all of the elements in the resource stewardship strategy, but instead focuses on those components of the strategy that are essential for communicating information about the park’s plan to address key management issues and seize opportunities for those resources identified as priority natural and cultural resources.

This document includes a summary of key issues, stressors, and threats affecting park resources, brief descriptions of the park’s priority resources, stewardship goals for priority resources, and stewardship activities determined to be high priorities for the next 3 to 5 years. The document concludes with a brief description of future RSS implementation.

It is important to remember that implementation of the resource stewardship strategy is an ongoing process, with necessary updates and revisions occurring as resource and management conditions change and stewardship activities are carried out.



BRIEF DESCRIPTION OF FORT UNION TRADING POST NATIONAL HISTORIC SITE

The following brief description of the park was adapted from the park's foundation document, which was approved in 2013.

Fort Union Trading Post National Historic Site, a designated national historic landmark, is located on the North Dakota—Montana border, 25 miles southwest of Williston, North Dakota, and 24 miles north of Sidney, Montana (figure 1). Today's fort is a full-scale reconstruction of the 1850s-era fur trade fort on the exact location of its original structures (figure 2).

The American Fur Company established Fort Union Trading Post in 1828. From then to 1867, it was the largest and most imposing fur trading post on the upper Missouri River. During this time, many Native American tribes came to the fort to trade buffalo robes and other goods. The trading post was the center of economic and social exchange between Euro-Americans and Native Americans. Fort Union Trading Post National Historic Site was authorized by an act of Congress on June 20, 1966 (80 Stat. 211), to commemorate the significant role played by Fort Union as a fur trading post on the upper Missouri River. The boundary of Fort Union Trading Post National Historic Site was expanded to 444 acres by Public Law 95-625 (92 STAT 3467) in 1978. This statute also directed the Secretary of the Interior to study the possible reconstruction of the historic remains of Fort Union and to transmit to Congress a recommendation on the reconstruction of the fort based on historic documentation.

Archeological excavations at Fort Union Trading Post National Historic Site began in 1968 and ran seasonally in 1969, 1970, and 1972. The park's archeological collections are products of excavations in the 1960s, 1970s, and 1980s, as well as subsequent small-scale compliance-related surveys, inventories, and data recovery excavations. The recovered archeological collections span the fort's entire period of historical significance (1828-1867) and make it one of the largest and most significant fur trade collections in existence. The collections also include diverse artifacts from site occupation and use before and after the Fort Union-period, including the Mondak settlement period (1904–1928).

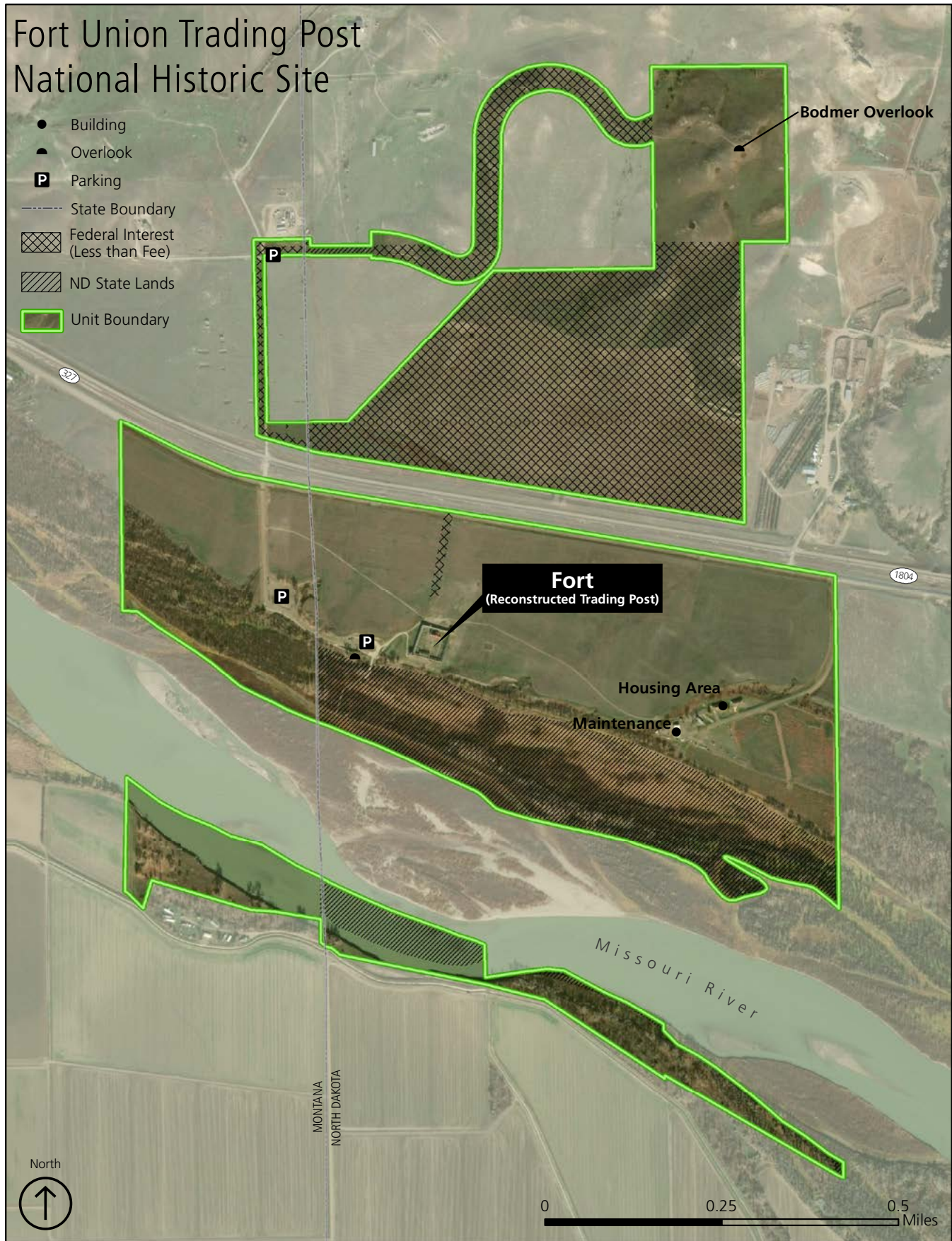
In December of 1985, Congress passed a bill mandating the reconstruction of the trading post at Fort Union Trading Post National Historic Site. Realizing that an important and irreplaceable archeological resource was about to be destroyed by this action, the National Park Service instructed its Midwest Archeological Center (MWAC) to salvage as much information as possible from the site. This began one of the National Park Service's largest-ever archeological projects.

From 1986 to 1988, MWAC archeological teams conducted large-scale excavations at Fort Union Trading Post National Historic Site. In total, these teams excavated approximately 4,400 square meters of the site. The project's highest priority was the recovery of architectural information to aid in reconstruction planning. The fieldwork also provided opportunities to address additional research questions relating to the site's architectural and cultural history. At the time, before either artifact processing or cataloging commenced, principal investigator William Hunt, Jr., estimated that excavators had unearthed 1.5 million archeological objects. The reconstruction of the Bourgeois House finished in 1987, followed by the palisade walls and bastions in 1989. The final reconstruction of the trade house was completed in 1991. The cataloging of excavated objects is ongoing.

Today the partially reconstructed fort serves as a stage for park staff to share the rich history of Fort Union Trading Post. The 17-foot palisade walls once again dominate the plains. A trade house and clerk's office sit just inside the south gate. The Bourgeois House communicates the grandeur that it held in the 1800s. Fort Union Trading Post is also important to indigenous people who have traditional and cultural connections to the site from before, during, and after the Fort Union period of significance.

In addition to its rich cultural history, Fort Union Trading Post is home to a large diversity of natural resources. Sitting on the Missouri Plateau of the Northwestern Great Plains Ecoregion, the Fort Union ecosystem comprises a riparian forest, natural and reconstructed prairies, and rivers and streams. Fort Union is used by migratory and non-migratory birds along a major flyway, and a wide diversity of small mammals and reptiles can be found inside the park as well.

Figure 1. Park Map



Produced by NPS Denver Service Center Planning Division

March 2019

DEVELOPMENT OF THE RESOURCE STEWARDSHIP STRATEGY FOR FORT UNION TRADING POST NATIONAL HISTORIC SITE

This resource stewardship strategy represents the collaborative efforts of National Park Service (NPS) personnel from the park; the NPS Midwest Region (MWRO), Midwest Archeological Center; the NPS Cultural Resources, Partnerships and Science Directorate (CRPS); the NPS Natural Resource Stewardship and Science Directorate (NRSS); and the NPS Denver Service Center, Planning Division (DSC-P). It is based on information about park resources that was available at the time of RSS development and on the experience and professional judgment of resource specialists.

In developing the resource stewardship strategy, the project team followed a five-step process established by a national NPS working group that formed to provide direction and oversight for RSS efforts nationwide. First, the team gathered and evaluated existing information about park resources to determine the current condition of resources and status of information. Next, they identified and assessed key issues, stressors, and threats that are impacting park resources or could do so in the future. The team then identified priority resources for this resource stewardship strategy. They subsequently set stewardship goals for each priority resource. Finally, the team identified stewardship activities aimed at achieving those goals and prioritized activities to implement within the next 3 to 5 years. The organization of this summary document parallels this RSS development process, which is described in more detail in internal NPS documents, including the RSS Development Guide prepared in 2017. Some key terms that are used throughout this summary document are defined on the following page.

Figure 2. Birdseye Perspective of the Reconstructed Trading Post



- | | | | | |
|-------------------------------------|---------------------|--------------------|---------------------------|-----------------------|
| 1 Main and Inner Gates, Strong Room | 5 Bell Tower | 9 Storage Range | 13 Powder Magazine | 17 Buffalo Robe Press |
| 2 Indian Trade House, East Side | 6 Palisade Walls | 10 Dwelling Range | 14 Small Sheds | |
| 3 Indian Trade House, West Side | 7 Northeast Bastion | 11 Ice House | 15 Flag Pole | |
| 4 Bourgeois House, Visitor Center | 8 Southwest Bastion | 12 Blacksmith Shop | 16 Painting Atop the Gate | |

DEFINITIONS OF KEY TERMS

Priority Resource: A cultural or natural resource or value that the National Park Service manages or monitors to maintain a park unit's purpose and significance, to address policy/law mandates, or to address scholarly and scientific research needs or findings.

Stewardship Goal: A description of what resource condition or information that managers are working to achieve for a particular priority resource. Stewardship goals guide the National Park Service in its aim to enhance information; improve or maintain resource conditions; address issues, stressors, or threats; or achieve other park stewardship needs related to the priority resource such as increasing collaboration with partners or expanding education, interpretation, and other programming.

Stewardship Activity: One or more initiatives that strive to achieve a short-term stewardship goal. On its own, a stewardship activity should produce a specific deliverable or outcome. Activities may include assessments, documentation, identification, maintenance, operations, resource protection, thematic studies, cataloging, evaluation, interpretation, planning, training, data recovery, education, inventory, monitoring, research, survey, treatment, restoration, or other types of management.

Strategy: A tactical path forward defined through achievable actions that maintain or improve aspects of a priority resource. Strategies start with a stewardship goal and include a comprehensive set of activities to achieve that goal. Strategies are logically organized, science/scholarship-based, well documented, and reviewed by subject-matter experts. Depending on a park's needs, the typical time frame for executing a strategy is short term, normally 3 to 5 years.

KEY PARK ISSUES, STRESSORS, AND THREATS

Fort Union Trading Post National Historic Site faces a variety of issues, stressors, and threats that affect park resources or may potentially affect park resources in the future. These include factors that are both related and unrelated to climate change. Key issues are management concerns that directly relate to park resources and their conditions. Stressors are factors that exacerbate change in resource conditions, while threats are immediate or potential factors that may negatively impact park resources in the future but do not currently affect park resources. The identification of key issues, stressors, and threats helped drive the selection of priority resources for this resource stewardship strategy. Furthermore, the National Park Service considered key issues, stressors, and threats when setting stewardship goals for priority resources and when developing and prioritizing stewardship activities that respond to those goals.

Table 1, which begins on the following page, summarizes key issues, stressors, and threats; their potential implications; and resource types affected.



Table 1. Key Issues, Stressors, and Threats; Potential Implications; and Affected Resources

ISSUE, STRESSOR, OR THREAT	POTENTIAL IMPLICATIONS	RESOURCE TYPES AFFECTED
<p>ONGOING IDENTIFICATION, DESCRIPTION, AND PRESERVATION OF ARCHEOLOGICAL AND ETHNOGRAPHIC RESOURCES, HISTORY, MUSEUM COLLECTION AND ARCHIVES, HISTORIC STRUCTURES, AND CULTURAL LANDSCAPE(S)</p>	<p>Ongoing research-, compliance-, and consultation-driven identification, description, and preservation of archeological and ethnographic resources, history, museum collection and archives, historic structures, and cultural landscape(s) is a top priority of the park. Not keeping up with ongoing preservation or identification activities could threaten to diminish the integrity of cultural resources or possibly lead to their loss.</p>	<p>Archeological and ethnographic resources, history, museum collection and archives, historic structures, and cultural landscape</p>
<p>DEVELOPMENT / ACTIVITIES SURROUNDING THE PARK</p>	<p>Because northwest North Dakota and northeast Montana are near the epicenter of the country's largest "oil boom" in recent memory (the "Bakken"), the park faces many challenges. Physical challenges include a reduction in air quality, increasing ambient noise levels, and loss of dark night skies.</p> <p>The Missouri River that was the transportation highway of the 1800s is dammed upstream and flows are regulated versus the historically free and natural flows. Increased truck traffic is hazardous to park staff and visitors; it also disrupts wildlife movements and is often fatal to individual animals.</p> <p>Intensive agricultural activities outside of the park boundary and oil drilling rigs negatively influence the integrity of the cultural landscape. Some work has been done to screen views using a naturalistic vegetation line.</p>	<p>Viewshed, cultural landscape (dark night skies, soundscape), wildlife, Missouri River and its banks</p>
<p>MISSOURI RIVER FLOW REGULATION</p>	<p>Flow regulation of the Missouri River (via upstream dams) is resulting in riverbank erosion and other unnatural geomorphic shifts in the river.</p> <p>Flow regulation also reduces regeneration of certain riparian vegetation species (e.g., cottonwoods). Thus, the extent and quality of the wooded riparian corridor is waning. The lack of seasonal flooding also limits the amount of sediment deposited and the transportation of seeds and nutrients.</p>	<p>Missouri River banks, Missouri River, native vegetation communities, wildlife, aquatic habitat, cultural landscape</p>

Table 1. Key Issues, Stressors, and Threats; Potential Implications; and Affected Resources (continued)

ISSUE, STRESSOR, OR THREAT	POTENTIAL IMPLICATIONS	RESOURCE TYPES AFFECTED
POINT AND NONPOINT WATER POLLUTION IN THE MISSOURI RIVER	Water pollution that originates from upstream of the park affects river water quality and vegetation conditions adjacent to the park. Point and nonpoint pollution sources of water contaminants include municipal discharge, agriculture, oil development, gravel mining, and surface runoff.	Missouri River, aquatic habitat, native vegetation communities, wildlife
INVASIVE PLANTS	<p>Invasive vegetation has had an impact on the appearance of the site. The most notable exotics at Fort Union are crested wheatgrass and smooth and Japanese brome on the transformed fort-level terrace. There are also notable issues with leafy spurge, Canada thistle, and yellow sweetclover. Measures have been taken to minimize and stop the spread of the invasive plants.</p> <p>Invasive species could change the visual appearance of the cultural landscape by impacting vegetative communities.</p>	Native vegetation communities, wildlife, cultural landscape
CLIMATE CHANGE	<p>Climate models predict that in the coming century Fort Union will experience warmer temperatures, potential precipitation changes ranging from slight decreases from mid-spring to early fall to modest increases in precipitation, and an increase in the number of large rainstorms. These changes will probably promote further invasion by exotic species, increase flood events, and may increase the growth of native woody species.</p> <p>Increased growth of plants and flooding could damage archeology or landscapes. Warmer temperatures and more intense storms and flooding also increase risks to historic structures and museum collections stored and exhibited in park facilities.</p>	Native vegetation communities, wildlife, Missouri River, archeological resources, cultural landscapes, historic structures, museum collections and archives
WEATHERING AND OTHER NATURAL THREATS THAT DEGRADE CULTURAL RESOURCES	Burrowing by small mammals and natural weathering and erosion (e.g., from high winds, storms, etc.) threaten the presence and integrity of archeological and reconstructed historic structures.	Archeological resources, historic structures

Table 1. Key Issues, Stressors, and Threats; Potential Implications; and Affected Resources (continued)

ISSUE, STRESSOR, OR THREAT	POTENTIAL IMPLICATIONS	RESOURCE TYPES AFFECTED
VISITOR USE	Social trailing, litter, graffiti, and vandalism can all degrade the physical condition of the cultural landscape, native vegetation communities, and historic resources. Illegal collecting at archeological sites also threatens the condition of archeological resources as well as the knowledge that could otherwise be gained from poached resources.	Cultural landscape, native vegetation communities, historic structures, archeological resources
LACK OF INFORMATION / DOCUMENTATION	Some level of information exists for reporting data recovery efforts. Gaps remain, however, in data management.	Cultural resources, native plant communities
LACK OF BASELINE DOCUMENTATION	Efforts to catalog the collection are ongoing, but as of March 2019, this work has not been completed. In addition to museum collection catalog records, FOUS lacks the following baseline documentation: a cultural landscape report, an up-to-date historic structures report that includes information about the fort reconstruction, and Section 110 inventories of ethnographic resources.	Museum collections, historic structures, cultural landscape, ethnography



CLIMATE CHANGE AND PARK RESOURCES

Fort Union Trading Post National Historic Site has already experienced significant and rapid, human-caused climate change. Since 1895, average temperatures in the park have increased at a rate of 2.5°F per century, and since 1970, the rate has accelerated to 3°F per century (figure 3). Increases in minimum temperatures have outpaced changes in average temperatures, particularly since 1970, with the rate of increase since then being a remarkable 4.3°F per century. The average minimum temperature of the coldest month at Fort Union Trading Post National Historic Site in recent decades has been 'extremely warm'—i.e., has exceeded 95% of the historical range of conditions from 1901–2012,¹—and average annual temperature has exceeded 75% of the range (Monahan and Fisichelli 2014). During this same period, annual precipitation has not changed. However, because hotter temperatures increase evaporation, aridity is increasing at this site.

All 40 combinations of 20 climate models (MACA, Abatzoglou 2013) and two divergent but plausible greenhouse gas emissions pathways² forecast increasing temperatures in the park of 1.4°F to 5.3°F by mid-century (2040; IPCC 2013). In contrast, precipitation projections are mixed. Five models project declining precipitation, but most (35) project increasing precipitation, and the range of projected change in annual precipitation across all models is -1.4 to +3.2 inches/year (relative to the 1950–1999 [for MACA data] average of 13.8 inches/year). However, calculations show that increasing temperature-driven evaporation will compensate for any additional precipitation and drier conditions will prevail. Water demand by plants will increase, and "drought" years will be more frequent. The character of precipitation is also projected to change, with more frequent extreme precipitation events and a greater proportion of annual precipitation occurring during heavy events (USGCRP 2017). The average number of days per year during which precipitation exceeds the historical 99th percentile (0.16 inch, based on the 1950–1999 reference period) is expected to increase by 500% to 600% (+20 to +23 days) by mid-century.

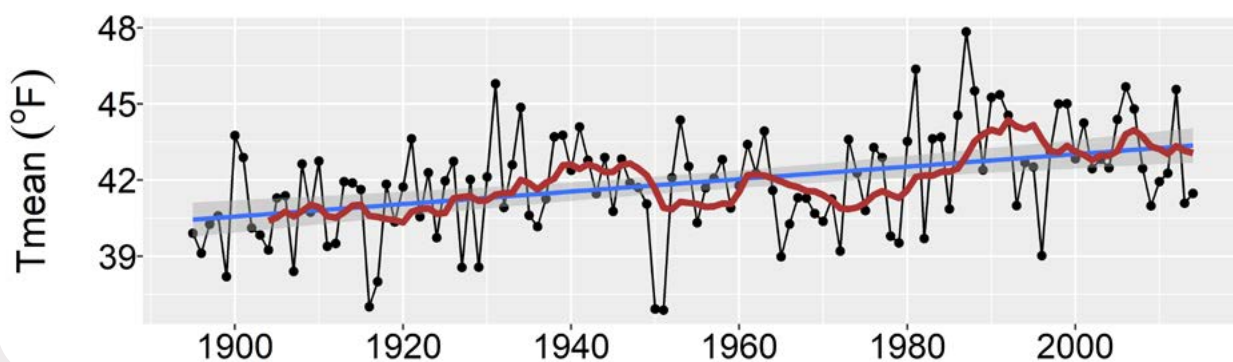
Climate change-driven changes are projected to affect many FOUS cultural and natural resources. Many of these impacts will be indirect and mediated through changes in disturbances (fires, intense rain and erosion, floods) or changes in species interactions (invasion, competition, predation, etc.) (Ockendon et al. 2014). Hotter conditions and changes in the precipitation regime will likely promote further invasion by exotic species and may promote changes in species composition and productivity (as well as increased growth of native woody species under some scenarios) that affect the park's ability to maintain native plant and wildlife communities and restore the prairie ecosystem. Increased overall precipitation (as projected by most climate models) and more frequent rainstorms will likely increase the frequency of floods. Fort Union Trading Post National Historic Site is important to numerous migratory and non-migratory birds, but because of their mobility, birds readily respond to environmental changes such that the species that occur in the park will likely change (Schuurman and Wu 2018). As climatic conditions change, climate suitability may worsen for some species or improve for others, creating potential for local extirpation or new colonization and reinforcing the need to improve knowledge of species range shifts and respond through management.

Changes in vegetation cover, flooding, and high winds could damage archeological artifacts or alter the landscape, affecting the park priority of ongoing preservation and understanding of archeological resources and the historical landscape. Warmer temperatures and more intense storms and flooding also increase risks to historic structures and museum collections stored and exhibited in park facilities. Weathering and erosion (e.g., from high winds, storms, etc.) also threaten the presence and integrity of reconstructed historic structures. Warming can increase visitation, which in turn can increase impacts to resources. Fisichelli and Zeisler (2015) estimate by mid-century a 19–47% increase in annual visitation; 10–31% increase in peak visitation; 54–98% increase in shoulder season visitation; and 59–90% decrease in low-season visitation.

¹ Based on a 10-, 20-, and 30-year moving-window analytical approach; see Monahan and Fisichelli 2014 for methodological details.

² RCP4.5 (Representative Concentration Pathway) and RCP8.5 represent the low and high extremes of plausible potential future greenhouse gas trajectories.

Figure 3. Average annual temperature (Tmean) at Fort Union Trading Post National Historic Site over the past century has increased significantly ($P < 0.001$; spatial data derived from weather stations and topography [data: PRISM, Daly et al. 2008. Analysis: NPS Climate Change Response Program]).



REFERENCES FOR CLIMATE CHANGE NARRATIVE

- Abatzoglou, J.T.
2013 Development of gridded surface meteorological data for ecological applications and modeling. *International Journal of Climatology* 33:121-131.
- Daly, C., M Halbleib, J.I. Smith, W.P. Gibson, M.K. Doggett, G.H. Taylor, J. Curtis, and P.P. Pasteris
2008 Physiographically sensitive mapping of climatological temperature and precipitation across the conterminous United States. *International Journal of Climatology* 28:2031-2064.
- Fisichelli, N. and P. Zeisler
2015 Fort Union Trading Post National Historic Site: How might future warming alter visitation? *Park Visitation and Climate Change: Park Specific Brief*. <https://www.nps.gov/subjects/climatechange/visitation.htm>.
- IPCC (Intergovernmental Panel on Climate Change)
2013 *Climate Change 2013: The Physical Science Basis*. Contribution of Working Group I to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change. Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA.
- Monahan, W.B. and N.A. Fisichelli.
2014 Climate exposure of US national parks in a new era of change. *PLoS ONE* 9(7): e101302. doi:10.1371/journal.pone.0101302.
- Ockendon, N, D.J. Baker, J.A. Carr, E.C. White, R.E.A. Almond, T. Amano, E. Bertram, R.B. Bradbury, C. Bradley, S.H.M. Butchart, N. Doswald, W. Foden, D.J.C. Gill, R.E. Green, W.J. Sutherland, E.V.J. Tanner, and J.W. Pearce-Higgins
2014 Mechanisms underpinning climatic impacts on natural populations: Altered species Interactions are more important than direct effects. *Global Change Biology* 20:2221-2229.
- Schuurman, G. and J. Wu
2018 Birds and climate change: Fort Union Trading Post National Historic Site: *Park Specific Brief*. <https://www.nps.gov/subjects/climatechange/birdsinparks.htm>
- USGCRP (United States Global Change Research Program)
2017 *Climate Science Special Report: Fourth National Climate Assessment, Volume I*. D.J. Wuebbles, D.W. Fahey, K.A. Hibbard, D.J. Dokken, B.C. Stewart, et al., editors. U.S. Global Change Research Program, Washington, DC, USA.





PRIORITY RESOURCES

Priority resources drive the entire RSS process by focusing attention on those park resources that are critical and could most benefit from management direction within the next 3 to 5 years. Typically, the priority resources for a resource stewardship strategy may include those that are defined in a foundation document as fundamental or other important resources, as well as additional resources that park staff believes are necessary to maintain the park’s purpose and significance, address policy or legal mandates, or address scholarly and scientific research needs

Table 2 includes a list of priority resources for the FOUS resource stewardship strategy. Each priority resource is described in greater detail in a summary narrative that follows the table. These brief narratives provide additional information regarding resource condition, relevant issues or threats, and past or current management.

Table 2. Priority Resources

PRIORITY RESOURCES
PARKWIDE RESOURCES
ARCHEOLOGICAL RESOURCES
MUSEUM COLLECTION AND ARCHIVES
RECONSTRUCTED TRADING POST
CULTURAL LANDSCAPE
ETHNOGRAPHIC RESOURCES
NATIVE VEGETATION COMMUNITIES AND WILDLIFE
IN SITU PALEONTOLOGICAL RESOURCES
HISTORY



PRIORITY RESOURCE SUMMARIES

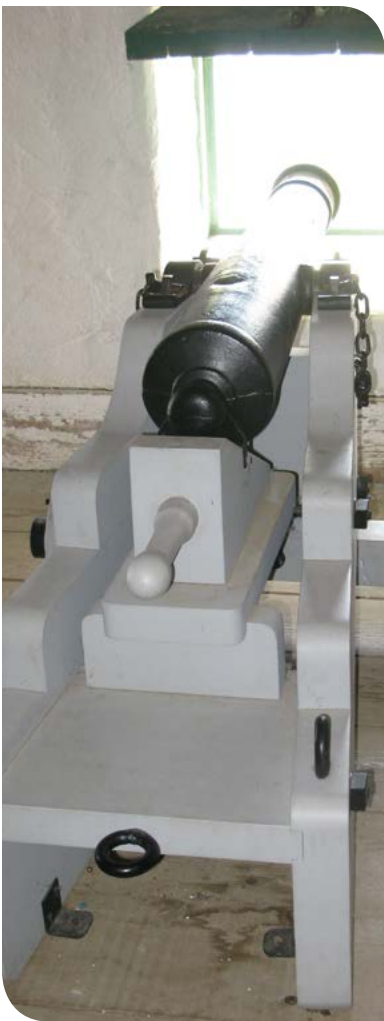
PARKWIDE RESOURCES

Some stewardship goals and strategies are not specific to any one priority resource and may collectively address several natural and cultural resources in the park. This “parkwide resources” priority resource category was created in the FOUS RSS database to assist park managers in using the database to track these cross-resource or “parkwide” goals and stewardship actions. Plans, inventories, and studies that were identified as relevant to multiple resources are included in this comprehensive resource. For example, stewardship activities such as climate adaptation planning, resource data management, and other cross-resource stewardship will be housed in this location.

ARCHEOLOGICAL RESOURCES

Archeological resources are recorded across the entire Fort Union terrace and in the area of the Bodmer Overlook. These sites provide tangible evidence of the park’s human landscape and occupations spanning thousands of years stretching back through time immemorial. Although numerous archeological investigations have identified many sites at the park, the only archeological resource listed in the National Register of Historic Places (National Register) are the ruins of the original trading post itself. Pre-parkland uses that included levelling the terrace to provide for irrigation negatively impacted the archeology in those areas.

Structural remains of Fort Union Trading Post that were entirely excavated in the 1980s (HS-1 through HS-7; HS-10 through HS-13, HS-19 and HS-23) are part of one archeological site that contributes to the Fort Union Trading Post National Historic Landmark designation (revised and updated in 2015). Another four archeological sites that were partially excavated are also part



of this one contributing archeological site (HS-8, HS-9, HS-11, and HS-30). Other elements of the historic fort's construction still exist undisturbed in the ground.

Some of the park's most important archeological sites that are determined eligible for listing in the National Register include the Original Trading Post Structures, Garden Coulee Site, Trading Post Cemeteries, Larpenteur's Post, Fort William, and the Town of Mondak.

In the past 20 years, approximately 25 archeological investigations have occurred for the purpose of inventory and evaluation aimed at documenting resources and actions to improve resource conditions and for cultural resource compliance in advance of park projects. These surveys have involved pedestrian surveys and geophysical investigations including a park-wide magnetometer survey. The park's Archeological Overview and Assessment was finalized in 2016.

MUSEUM COLLECTION AND ARCHIVES

Fort Union Trading Post's current (2018) Collections Management Report indicates that the park possesses some 575,000 archeological objects, most collected during seven major excavations and several smaller undertakings. Previously housed at the Midwest Archeological Center for laboratory processing and analysis, nearly all of the collection has been returned to the park for cataloging, study, and perpetual care. The 575,000 figure includes both cataloged objects and an estimated number of objects that remain to be cataloged; it is significantly smaller than what William Hunt, Jr. estimated after the 1986–1988 excavations because similar objects with a shared provenience (such as bone, nails, and glass) have been cataloged together as groups or lots.

The park also possesses about 500 historic or ethno-historic objects, many of which are in the permanent museum exhibits. These articles are fully accessioned and catalogued, and conditions are reported as good to excellent. The extensive archival collection, including the field records and reports associated with the archeological investigations, is 80% processed in the Interior Collection Management System (ICMS). The park possesses approximately 350 natural history voucher specimens, documenting floral and faunal inventories. The collection





of natural and cultural artifacts is managed on-site by the park curator. The 3,000-book research library and compiled reference materials are not part of the museum collection.

The park's extensive museum collections have not been evaluated for NAGPRA-related items of unassociated funerary objects, sacred objects, or objects of cultural patrimony in consultation with potentially culturally affiliated tribes. Nor has there been a comprehensive evaluation in consultation with the tribes to identify other items of cultural significance in the museum collections. Also refer to the priority resource description for "Ethnographic Resources," below.

RECONSTRUCTED TRADING POST

All of the buildings and structures associated with the original trading post were dismantled or demolished in 1867 with the exceptions of the rock-lined Fort Union Trading Post water well and a kiln. Between 1985 and 1991, the National Park Service recreated the Fort Union Trading Post through a partial reconstruction of the trading post's palisade, two stone bastions, flagstaff, bourgeois house, and Indian trade house on the site of the original trading post. Extensive historic records, artwork and drawings, and archeological evidence allowed NPS staff to accurately replicate the original fort to its 1851 period of operation. A 1968 historic structures report, 1979 reconstruction analysis, and series of archeological investigations and reports (1968-1988) provide a compilation of this body of knowledge.

Although much of the trading post was reconstructed, a number of structures inside the palisade wall were left unbuilt in this creation. These unbuilt structures include the trading post kitchen, dwelling range, icehouse, store range, and magazine. In lieu of the recreation of these supporting structures, the position, orientation, and footprint of these structures are indicated at the ground level to help interpret their history within the trading post. The outline of the trading post's kitchen walls and roofline was "ghosted" using a metal-framed gable roof to protect the structure's original stone foundation.



The trading post's dairy was also roofed to protect exposed flagstone flooring. Other major unexcavated and unreconstructed buildings were outlined with 10x10-inch timbers just above grade to outline the building footprints and walls and thus suggest interior spatial relationships within the fort walls. These timber building outlines are not eligible for listing in the National Register and are treated as conventional park structures for purposes of routine or cyclic maintenance.

Fort Union Trading Post was designated a National Historic Landmark (NHL) District in 1961. In its revised and updated 2015 NHL nomination, the fort's nine reconstructions (HS-1 through HS-7, HS-13, and HS-23) were determined to be meet NHL criteria under NHL Exception Criterion #6 for their extraordinary national significance, accurately executed reconstruction, and because no other buildings or structures with the same association have survived. Although the reconstructed fort buildings are described in the NHL nomination as "Reconstructed Interpretive Resources," because they meet the definition of NHL Exception #6, they are in fact listed as contributing resources to the NHL district. These reconstructed structures are thus included in the park's 2018 List of Classified Structures to reflect this and are managed as historic resources. Other archeological resources outside of the palisade area are listed in the updated NHL nomination as separate contributing resources, while the cultural landscape is one contributing site.

CULTURAL LANDSCAPE

The cultural landscape at Fort Union Trading Post was determined to be significant through a consensus determination between the National Park Service and the North Dakota State Historic Preservation Officer and was identified as a contributing site of the Fort's National Historic Landmark District in its revised and updated nomination in 2015. It is important to note that the NHL's cultural landscape boundary defined in this 2015 NHL update is 600 acres, which is larger than the park's congressionally authorized boundary and the cultural landscape the park manages within

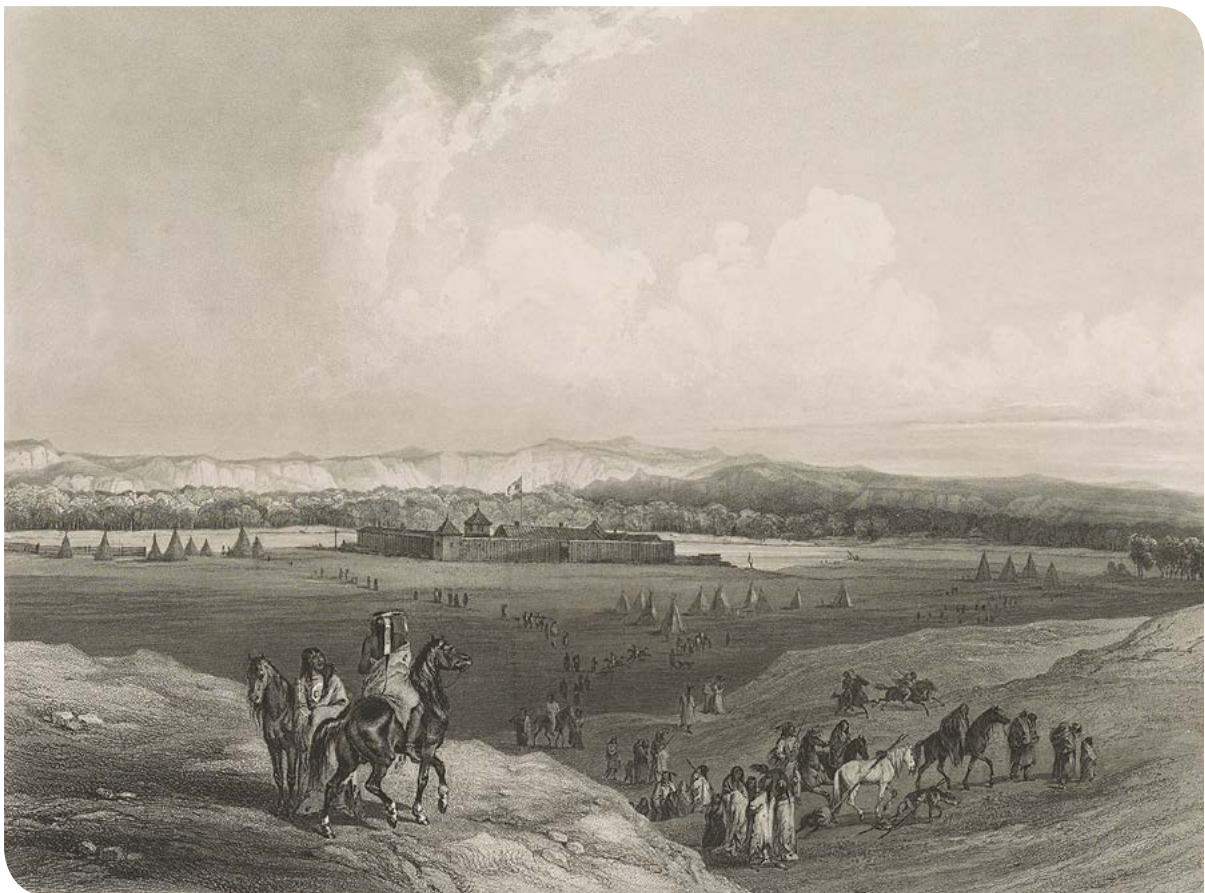


the historic site's legislated boundary. The larger NHL boundary corresponds to both the NPS property and state land below the high water mark on either side of, and including, the Missouri River. It also includes the riparian area south of the Missouri River.

The cultural landscape reflects how humans used and adapted to the natural environment in the broad expanse of rolling hills characteristic of the North Dakota prairie. This landscape is remarkably intact and is one of the park's most impressive cultural resources. It is remarkable in that the landscape setting is largely free of modern development and is very similar to the landscape present 200 years ago and retains many archeological resources associated with the fort, while archeological resources on the surrounding landscape date to multiple periods of significance tied to both American Indian and Euro-American history. It is the information yielded from the archeology of the Fort Union Trading Post and its surroundings that provides the cultural landscape with tangible evidence of human occupation supporting the cultural landscape's integrity and eligibility as a National Historic Landmark.

The landscape is considered to be in good condition; that value is defined in the NPS technical guidance for performance management (NPS 2001a:6-58). The landscape shows no clear evidence of major negative disturbance and deterioration by natural and/or human forces, and its natural and cultural values are as well preserved as can be expected under the current environmental conditions. The site is also significant in that the restoration treatments for the cultural landscape are compatible with the treatments preferred by natural resources, particularly the park management's restoration of its original mixed-grass prairie vegetation and the removal of exotic and invasive species.

An important management objective is restoration of the park's natural landscape appearance as a part of its developed cultural landscape. Regrettably, pre-park land use marginalized native prairie surrounding the trading post, particularly as exotic hay grasses were introduced. Similarly, the Missouri River, once the essential artery of the fur trade, was extremely altered in character by the Fort Peck Dam. Park management focuses its attention on character-defining features of cultural landscape including views, topography, spatial organization, vegetation, and circulation, which are essential to the landscape's cultural



Karl Bodmer's illustration, "Fort Union on the Missouri," shows the fort and landscape as it appeared in 1833.

integrity. Although the Missouri River is not named as a contributing resource in the 2015 NHL update, it is identified as a feature within the described cultural landscape.

The cultural landscape’s viewshed includes the prairie surrounding the fort and helps the visitor gain a sense of what the area was like in the 1800s. Fort Union’s rural landscape provides a sense of place for visualizing the past, recognizing the isolation of the area, and appreciating the wide-open spaces of the confluence of the Missouri and Yellowstone Rivers to both American Indians and European Americans during the fort’s period of significance. Unobstructed viewsheds to and from the fort are complemented by topography to the horizon, spatial and cluster arrangements of built elements based on archeological evidence, a defined relationship to the river, and vegetation types and compositions. Collectively, these characteristics convey the authenticity of the site, provide historic integrity to the context, and enhance visitor experience.

ETHNOGRAPHIC RESOURCES

Two studies addressing ethnographic resources at the park have been completed since 2006: a *Cultural Affiliation Statement and Ethnographic Resource Assessment* (2006) and the *Fort Union Ethnohistory* (2014). These studies documented that the park has a deep and complicated history of groups that traditionally used and/or inhabited the Middle Missouri, Northwestern Plains, and Northeastern Plains and frequented the location of the park throughout human history.

The strategic location at the confluence of the Yellowstone and Missouri Rivers and at the boundary of the tribal territories for several American Indian peoples—Assiniboine, Hidatsa, and Crow, for example—supported a human history that extended far beyond the trading post’s physical location and period of historic significance (1828-1867). Between 1828 and 1867, the site’s most well-documented period before the 20th century, Fort Union Trading Post served as a permanent place of contact and hub for myriad activities, including the fur and Indian trades, tribal gatherings, meetings with missionaries and Federal government representatives, annuities distribution, and a place for burying the deceased. Even after the post closed in 1867, indigenous peoples lived adjacent to and used the fort site until at least 1884.





Today, the park’s resources are used by the American Indians of the region. American Indian advisers have emphasized the importance of the traditional trading activities that took place at the Fort Union Trading Post and attracted people of various tribes (NPS 2015). Arikara, Assiniboine, Blackfeet and Blood, Crow, Dakota and Lakota, Hidatsa, Mandan, Plains Chippewa / Chippewa-Cree, and other tribes preserve oral traditions involving the site. Additionally, the park’s traditionally associated and affiliated tribes consider the entire confluence area, including the Fort Union Trading Post, to be a sacred landscape, and the trading post reconstruction was blessed by an Assiniboine. Ethnographic resources are integral to the park’s archeological resources, cultural landscape, museum collections, and the site’s interpretation/education about trade relationships and activities, and, therefore, they are managed in concert with these resources.

NATIVE VEGETATION COMMUNITIES AND WILDLIFE

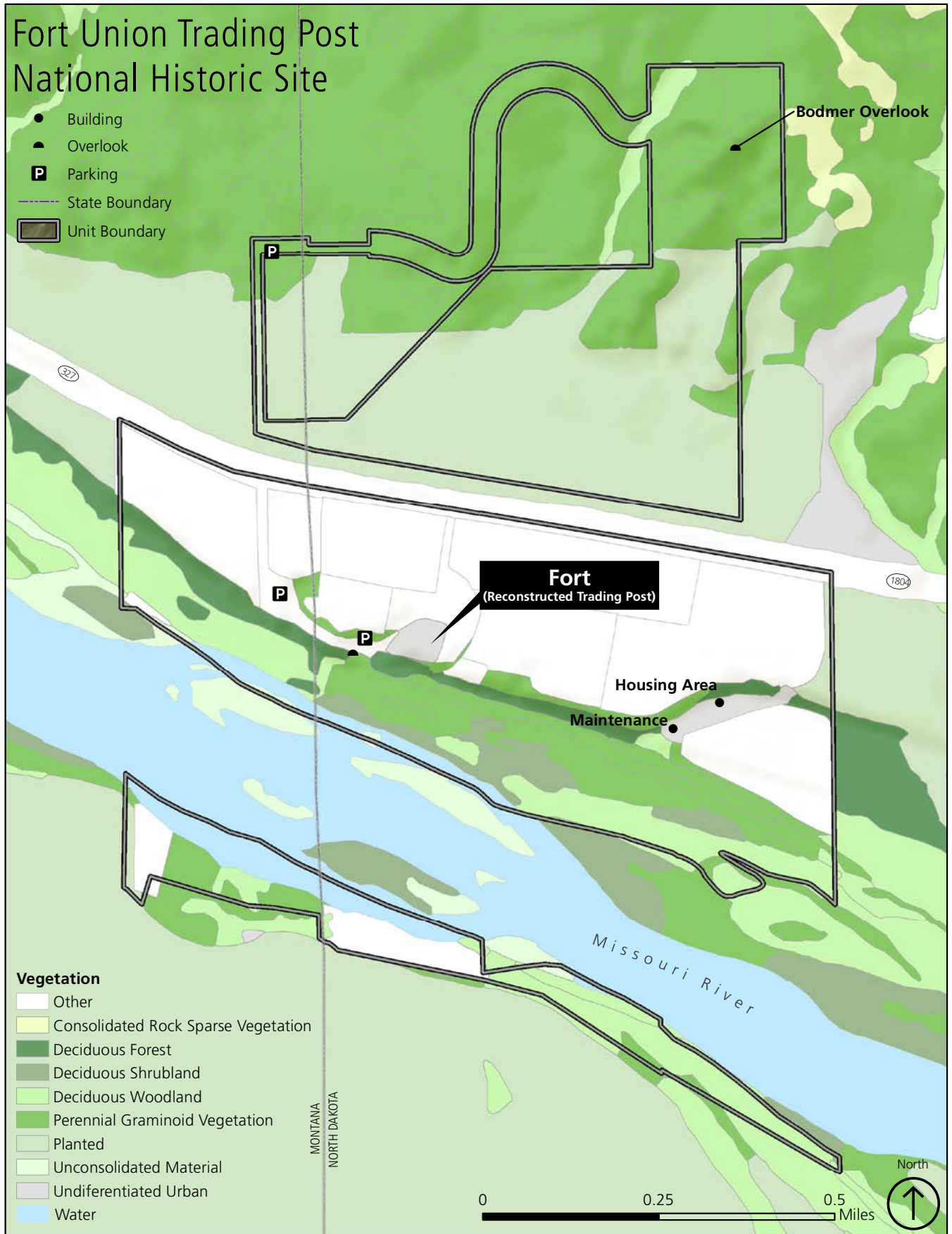
The 444-acre site generally consists of three physiographic units and is divided by the Missouri River, which traverses the park west to east. These units include the riparian floodplain along the Missouri River, the land surrounding the fort (the terrace), and the Bodmer Overlook in the northeast portion of the park. With the exception of the Bodmer Overlook, much of the area within the park’s boundaries was cultivated and used as a grazed pasture prior to the park’s establishment. Most notably, a portion of the terrace area was leveled to provide for agricultural irrigation, which not only altered the native prairie but also resulted in impacts to archeology in the area. These changes, combined with the long occupation and use of the site, have affected much of the vegetation in the park (Salas and Pucherelli 2002). Bodmer Overlook in the northeast corner of the park is the site from where Karl Bodmer painted what is perhaps the best-known view of the trading post in 1833. The Bodmer Overlook area has a considerably different history of human use than the terrace. Unlike the terrace, which has been substantially altered for agricultural use, the Bodmer Overlook landscape was minimally altered by a small amount of cultivation and grazing. As a result, the overlook contains the highest-quality surviving prairie within the park’s boundaries. Figure 4 shows the general vegetation coverage in and around the park.



More than half of the park’s vegetation consists of semi-natural (dominated by nonnative species) or more recently planted prairie reconstructions. Some native vegetation occurs in the Missouri River riparian zone, but small amounts (<25 acres) of natural prairie occur throughout the uplands. The restoration efforts, beginning in 1993, involved planting primarily native grasses in previously cultivated areas, but forbs have been planted in subsequent years. In 2012, a vegetation management plan was developed for the park (Symstad 2012). This plan identifies desired future conditions for the park’s plant communities, sets management guidelines for prairie restoration, and integrates these management goals with the park’s prominent cultural landscape values. This plan highlights several possible tools for managing vegetation at the park, including preventative measures for exotic plant control, native plantings, manual or mechanical treatments, prescribed fire, and grazing.

More specifically, the park lies within the Dry Domain, Temperate Steppe Division, Great Plains – Palouse Dry Steppe Province (Province 331), as found in the US Department of Agriculture’s ECOMAP. Local grasslands are typically made up of mixed-grass prairies. A wooded component of green ash (*Fraxinus pennsylvanica*), American elm (*Ulmus americana*), and plains cottonwood (*Populus deltoides ssp. Monilifera*) occurs in and near the riparian zones. The woody areas typically include a shrub species such as snowberry (*Symphoricarpos occidentalis*) and chokecherry (*Prunus virginiana*) (Salas and Pucherelli 2002).

Figure 4. Vegetation Cover and Land Use



Produced by NPS Denver Service Center Planning Division

April 2019

Much of the vegetation surrounding the trading post can be typified as northern Great Plains mixed-grass prairie occupying roughly 90% of the total surface. The native species composition varies and is reported differently in various park plans and documents, but western wheatgrass (*Pascopyrum smithii*), green needlegrass (*Nassella viridula*), blue grama (*Bouteloua gracilis*), prairie Junegrass (*Koeleria macrantha*), and buffalo grass (*Buchloe dactyloides*) appear characteristic. Various species of *Artemisia spp.*, *Ribes spp.* and *Symphoricarpos occidentalis* are shrub species mixed with this grassland type.

Exotic plants have altered the landscape, and many are artifacts of the prior land use. Most of the land was devoted to agricultural uses and grazed by domestic livestock between the late 1800s and the 1960s, contributing to invasive species problems. Primary species of concern are Canada thistle (*Cirsium arvense*), Russian olive (*Elaeagnus angustifolia*), leafy spurge (*Euphorbia esula*), smooth brome (*Bromus inermis*), Japanese brome (*Bromus japonicas*), kochia (*Kochia scoparia*), Kentucky bluegrass (*Poa pratensis*), and crested wheatgrass (*Agropyron cristatum*). Also, annual invasive grasses such as cheatgrass (*Bromus tectorum*) and medusahead (*Taeniatherum caput-medusae*) are emerging invasive plant threats, as the spread of these species are expanding in Montana and moving east toward the park. According to park staff, invasive plant management is a high-priority natural resource management objective. Two invasive grasses, crested wheatgrass and smooth brome, are a problem in reconstructed prairie areas, and exotic species are common in the understory of riparian woodlands.

The river corridor provides some wildlife movement from adjacent lands. Many of the park's 90 resident bird species are found in the riparian and wetland habitats of the Missouri River. The riparian area provides diverse habitat with cottonwood stands, emergent wetlands, willow thickets, seasonal impoundments, meadows, and remnant scrublands. There are no threatened or endangered wildlife species confirmed as resident in the park, though there is a high degree of confidence that the northern long-eared bat is present in the park. The park, as a result, should be managed as if the bat is present. The natural soundscape, of which native wildlife depend, is affected by noise impacts from the railroad, outboard motors on the river, aircraft fly-overs (crop dusters), and vehicle traffic from State Highways 1804 and 58.

The fire history records for the park are limited (Salas and Pucherelli 2002). Fires were likely a regular part of the landscape and helped to maintain the fire-dependent native prairies.

Unwanted wildland fires 10 miles south of the park in 1956, adjacent to the park in 1958, and north of the park in 1988 made park management aware of the potential for a devastating wildland fire that could damage the trading post. The park instituted a prescribed fire program in 2000 and has continued prescribed burning for wildland fire prevention purposes since then.

The information in this vegetation and wildlife narrative is drawn directly from the reports cited in the narrative as well as the park's natural resource condition assessment (Komp et al. 2014), its plant community composition and structure report (Ashton and Davis 2017), and the interagency vegetation plan for the park (Symstad 2012).



IN SITU PALEONTOLOGICAL RESOURCES

Per the NPS 2015 Geologic Resources Inventory for the park, a diverse assemblage of invertebrate, vertebrate, and plant fossils, including petrified wood, has been discovered from the Tongue River Member of the Fort Union Formation in or near the park. Fossil collecting for scientific study dates back to the fur trade in this region. Studies of freshwater mollusks collected more than 150 years ago have helped revise upper Paleocene chronology and understanding of the epoch's ecosystems. In addition to fossils from the Paleogene Period, fossils from the Quaternary Period have been discovered in the region. Fossils associated with cultural sites have also been found. Silicified peat, known as Knife River Flint, was an exceptional source of tools and projectile points and was traded throughout North America.

In the early days of the fur trade, the Chouteau family, managers of the American Fur Company's Western Division, greatly contributed to scientific study of fossils from the Upper Missouri River area. Fossils that the fur traders and explorers sent back east became part of the collections of the Academy of Natural Science in Philadelphia and the Smithsonian Institution in Washington, DC. The Chouteaus helped outfit the Lewis and Clark Expedition, also known as the "Corps of Discovery," and provided valuable information about the country beyond St. Louis.

In recent years, pieces of petrified wood were found in the Bodmer Overlook area, which is the source of most of the petrified wood reported from the Fort Union Trading Post National Historic Site (Tweet 2016). In addition to fossil snails, the off-white petrified wood is commonly found in the Fort Union Formation. At Theodore Roosevelt National Park, which is about 50 miles southeast of the Fort Union Trading Post National Historic Site, the Fort Union Formation preserves a "petrified forest," an indication of the petrified wood's abundance in the region.

All paleontological resources are non-renewable and subject to science-informed inventory, monitoring, protection, and interpretation as outlined by the 2009 Paleontological Resources Preservation Act. Thus, subject-matter experts in the NPS Geologic Resources Division have encouraged park staff to observe, document, and monitor any occurrence of fossils while conducting their usual duties in the park. Unless the fossils are subject to degradation (natural or human-caused), the fossils are left in situ. The park would seek paleontological expertise from the Geologic Resources Division to help document the in situ occurrence of fossils and conduct inventory and monitoring at significant sites.

The information in this paleontology narrative is drawn directly from NPS geologic resources inventory report for the park (Graham 2015) and a 2016 paleontology trip report submitted by Geologic Resources Division staff (Tweet 2016).



HISTORY

As described in the previous narratives, the park contains significant historic structures, archeological resources, ethnographic resources, a cultural landscape, and museum collections. The park was listed as a National Historic Landmark in 1961. It was then listed in the National Register in 1966 with the following significance statement:

“As the principal Upper Missouri fur trade depot, Fort Union Trading Post afforded northern plains tribes their first long contact with the alien white culture. Built in 1828, it marked the opening of John Jacob Astor’s campaign to secure the Upper Missouri and Rocky Mountain fur trade for the American Fur Company. The extensive, well-built post lasted until 1866 [sic], when the Army purchased it and used its materials to expand its nearby post, Fort Buford....”

Situated on the northern Great Plains near the confluence of the Missouri and Yellowstone rivers in present day North Dakota and Montana, Fort Union Trading Post National Historic Site was one of the largest and most important fur-trading posts in the upper Missouri River region from 1828 through 1867. Established in 1828 by Kenneth McKenzie, an executive with the American Fur Company, the trading post was an important focal point for Assiniboiné; Blackfeet and Blood; Crow; Mandan, Hidatsa, and Arikara; Plains Chippewa/Chippewa-Cree; Lakota; and Metis who came to gather, trade, and socialize. The financial success of the trading post depended upon the hunting and trapping efforts of these American Indians, who brought bison hides, other animal pelts, and foodstuffs for trade. Thus, the success of the trading post was directly related to the natural resources of the area in combination with the trading post’s extensive intercultural associations and, after 1851, role in annuities supply and distribution to at least the Assiniboiné and Crow tribes.

As little archeology had been undertaken at the time of designation as an National Historic Landmark, the district consisted of approximately 8 acres within which only cellar pits were confirmed to exist. No boundary was described, and no period of national significance established. The revised National Historic Landmark documentation in 2015 addressed the substantial increase in knowledge about the site, its resources, and development since 1961. The revised National Historic Landmark documentation established a boundary and a period of national significance. This documentation clarifies that the fort was one of the largest and most important fur-trading posts in the Upper Missouri River region from 1828 to 1867. It also identified the importance of the property’s archeology for its potential to yield information of major scientific importance by shedding light upon periods of occupation over large areas of the United States—specifically the early 19th century in the Trans-Mississippian West and Upper Missouri River.



STEWARDSHIP GOALS AND HIGH-PRIORITY ACTIVITIES

Based on the current status of information and condition of natural and cultural resources, as well as stressors and other management considerations (e.g., urgency to protect the priority resources, feasibility, sequencing order), park staff identified a wide array of stewardship goals and associated management activities to consider. While the RSS desktop application includes all of these goals and activities identified for each priority resource, the following tables present the stewardship goals and activities that staff determined to be high priority during this 3- to 5-year horizon. Medium and low priority activities are still valuable approaches for achieving resource objectives, but they are generally less urgent or represent secondary approaches. Many of the medium and low priority activities may rise to the level of high priority in the coming years. Note that appendix A of this summary document contains a comprehensive list of all stewardship goals and activities identified during the RSS development process, including those deemed to be medium and low priority.

Whenever possible, activities were designed with integrated resource stewardship in mind, both in terms of their potential to improve the condition or understanding of multiple resources and/or their potential for efficient deployment through the integrated efforts of multiple staff. At the Fort Union Trading Post National Historic Site, one of the most notable and pervasive examples of integrated resource stewardship in the resource stewardship strategy involves the park's cultural landscape and its native vegetation community. The stewardship of the native vegetation (a natural resource) is integral to the stewardship of the cultural values of the park's landscape (a cultural resource). Activities and goals that are directly intended to affect one will undoubtedly affect the other, and vice versa. Therefore, in managing both resources, it is important and more efficient to consider how stewardship activities can be integrated to improve the condition and knowledge base of both the vegetation and cultural landscape concurrently. In turn, it is also very important that the management of these two resources involve multiple disciplines of subject-matter expertise across the cultural and natural resource management spectrum. Of course, other examples of this type of integrated resource stewardship can be found throughout the RSS goals and activities. In addition, many of the activities developed include components that involve partnerships or coordination with regional NPS staff. The park made an effort to consider and document integrated resource management efforts within these activities and will seek to carry them out as described.

Tables 3a–3i include each priority resource, stewardship goals, and high-priority activities identified by park staff. Please note, all low, medium, and high-priority activities identified as of this publication date can be found in appendix A of this document.



Table 3a. High-Priority Stewardship Activities for Parkwide Resources

PRIORITY RESOURCE	STEWARDSHIP GOAL	HIGH-PRIORITY STEWARDSHIP ACTIVITIES
PARKWIDE RESOURCES	Issues and stressors that affect multiple resources parkwide are addressed through integrated management approaches.	<ul style="list-style-type: none"> - Prepare resource-specific climate change response strategies in coordination with interdisciplinary teams representing all parkwide resources.
PARKWIDE RESOURCES	Acquire and maintain up-to-date scholarship and science as required by law and policy, and through consultation and compliance processes to guide management decision making as well as interpretation and education.	<ul style="list-style-type: none"> - Ensure all field records generated during resource management actions and specimens that are collected and not destroyed in analysis are added to the park's museum collection, per NPS policy.
PARKWIDE RESOURCES	Adjacent landowners, planners, developers, and other stakeholders are engaged in cooperative conservation of resources across park boundaries.	<ul style="list-style-type: none"> - <i>No high-priority activities identified. See appendix A for associated activities with low and medium priorities.</i>

Table 3b. High-Priority Stewardship Activities for Archeological Resources

PRIORITY RESOURCE	STEWARDSHIP GOAL	HIGH-PRIORITY STEWARDSHIP ACTIVITIES
ARCHEOLOGICAL RESOURCES	Archeological resources are identified and evaluated for listing in the National Register of Historic Places.	<ul style="list-style-type: none"> - Conduct archeological inventories to develop complete archeological inventory dataset. - Develop comprehensive cultural resources basemap; compile and refine information databases in ASMIS and GIS. - Evaluate archeological significance and nominate remaining sites to the National Register of Historic Places.
ARCHEOLOGICAL RESOURCES	Archeological resources, including those that represent the only surviving original fabric of the trading post, are preserved and interpreted in accordance with law and NPS policy.	<ul style="list-style-type: none"> - Develop Archeological Resources Management Strategy. - Develop a Park-wide Inadvertent Discovery and NAGPRA Action Plan(s). - Conduct periodic monitoring of the archeological site condition. - Protect and stabilize threatened archeological resources.



Table 3c. High-Priority Stewardship Activities for Museum Collection and Archives

PRIORITY RESOURCE	STEWARDSHIP GOAL	HIGH-PRIORITY STEWARDSHIP ACTIVITIES
MUSEUM COLLECTION AND ARCHIVES	All museum collections and archives are preserved and maintained to museum standards and are available to inform and support park decision making, interpretation, education, and research.	<ul style="list-style-type: none"> - Prepare and submit PMIS statement to update collection storage plan. - Update collection storage plan. - Complete annual collections management reporting, including annual inventories, the Automated Checklist Program (ACP), and the national catalog submission (NCS). - Accession and catalog museum collections in a timely manner using the Interior Collection Management System (ICMS) or its successor. - Develop Museum Facility Protection Plan. - Update collection condition survey to prioritize the need to survey and conserve specific material types. - Develop and submit project funding requests to complete analysis and cataloging of bone material, including an inventory by a physical anthropologist to confirm no human remains are present.

Table 3d. High-Priority Stewardship Activities for Reconstructed Trading Post

PRIORITY RESOURCE	STEWARDSHIP GOAL	HIGH-PRIORITY STEWARDSHIP ACTIVITIES
RECONSTRUCTED TRADING POST	Fort Union’s historic buildings and structures were reconstructed based upon extensive archeological data and historical documentation and are maintained in a condition that preserves their historic integrity. These reconstructions play a vital role in conveying the trading post’s national significance and sense of place, while also supporting administrative and operational functions.	<ul style="list-style-type: none"> - Periodically, conduct a comprehensive investigation of the reconstructed trading post for signs of deterioration. - Continue to perform routine maintenance and address any preliminary deterioration immediately, while keeping good records. - Update the historic structure report for the entire fort.

Table 3e. High-Priority Stewardship Activities for Cultural Landscape

PRIORITY RESOURCE	STEWARDSHIP GOAL	HIGH-PRIORITY STEWARDSHIP ACTIVITIES
CULTURAL LANDSCAPE	The cultural landscape is managed as a native and restored prairie community that represents its appearance from the 1828-1867 period of significance, as defined in the national historic landmark documentation.	<ul style="list-style-type: none"> - Develop an abbreviated cultural landscape report (CLR) that focuses on “Part 2: Treatment Recommendations” and integrates management considerations for vegetation communities and other resources that contribute to the cultural landscape.
CULTURAL LANDSCAPE	Protect, improve and monitor condition of views important for the cultural landscape both within and across park boundaries, as feasible. Maintain or improve characteristics of openness and remoteness much like the 1833 Bodmer painting, including a visual connection between the trading post and the Missouri River.	<ul style="list-style-type: none"> - Identify views important to the 1828-1867 period of significance and visitor values. - Conduct a visual resource inventory using the NPS ARD process to establish baseline condition of selected views by documenting scenic quality and view importance.

Table 3e. High-Priority Stewardship Activities for Cultural Landscape (continued)

PRIORITY RESOURCE	STEWARDSHIP GOAL	HIGH-PRIORITY STEWARDSHIP ACTIVITIES
CULTURAL LANDSCAPE	The natural soundscape at the park is protected and maintained via a reduction in anthropogenic noise, and the impacts of noise on the park's cultural landscape are better understood.	- No high-priority activities identified. See appendix A for associated activities with low and medium priorities.
CULTURAL LANDSCAPE	The dark night skies at the park are protected and maintained through a reduction in artificial light pollution, and the impacts of light pollution on the park's cultural landscape is better understood.	- Collect baseline night sky data in the park.

Table 3f. High-Priority Stewardship Activities for Ethnographic Resources

PRIORITY RESOURCE	STEWARDSHIP GOAL	HIGH-PRIORITY STEWARDSHIP ACTIVITIES
ETHNOGRAPHIC RESOURCES	Establish and sustain relationships with American Indian tribes to conduct cultural anthropological research, as appropriate; collaboratively manage the park's ethnographic resources, including sacred sites; and integrate tribal perspectives and values into interpretation.	<ul style="list-style-type: none"> - Identify archeological resources and museum collections that are ethnographic resources by having a dialogue with interested tribes on the current cultural significance and meaning of cultural resources to the tribes. - Complete the ethnobotany project focusing on the Assiniboine. - Invite tribes to consult on all appropriate resource management and interpretation/ education projects/activities. - Provide staff with training in ethnographic resources and values.



Table 3g. High-Priority Stewardship Activities for Native Vegetation Communities and Wildlife

PRIORITY RESOURCE	STEWARDSHIP GOAL	HIGH-PRIORITY STEWARDSHIP ACTIVITIES
<p>NATIVE VEGETATION COMMUNITIES AND WILDLIFE</p>	<p>Native plant community composition, form, and function and associated native wildlife communities are sustained through the preservation of natural, ecological processes to the extent possible under climate change and regional development. The prairie ecosystem is restored (favoring plant species adapted to emerging/future climate conditions) and maintained in concert with the cultural landscape of the park and the Missouri River. Riparian vegetation is sustained to the extent possible under the regulated river flow regime.</p>	<ul style="list-style-type: none"> - Conduct regular monitoring of native and restored prairie vegetation community composition with assistance from the Northern Great Plains Network (NGPN). - Shape native vegetation structure by applying Manual and Mechanical Methods and other Management Tools per the 2012 “A Vegetation Management Plan for Fort Union Trading Post National Historic Site” (including, mowing, haying, prescribed fire, grazing, etc.), and confirm these management efforts integrate management considerations for the cultural landscape. - Regularly identify, update, and prioritize exotic weed species lists to inform weed control mgmt. actions (e.g., an evolving “Weeds of Concern List”) via working with NGPN, Exotic Plant Management Team (EPMT), and other information sources. - Regularly monitor species and extent of nonnative, invasive plants, with assistance from NGPN and the EPMT. - Regularly implement nonnative, invasive plant control with assistance from the EPMT and other available assistance as infestation data becomes available via monitoring. Control invasive plants by applying Manual and Mechanical Methods and other Management Tools per the 2012 “A Vegetation Management Plan for Fort Union Trading Post National Historic Site” (including mowing, haying, prescribed fire, grazing, etc.). - Meet annually with NGPN, EPMT, and Fire to evaluate efficacy and effects of nonnative, invasive plant management actions and adaptively adjust the prescribed actions as necessary. - Collect and maintain records of all vegetation management actions to inform future management (including plans, monitoring data, spatial data, photographs, field records [e.g., forms]) and to help ensure vegetation management integration with cultural landscape management.
<p>NATIVE VEGETATION COMMUNITIES AND WILDLIFE</p>	<p>The park has improved knowledge about the presence of federally listed species or potential range shifts because of climate change and will respond through management as appropriate.</p>	<ul style="list-style-type: none"> - <i>No high-priority activities identified. See appendix A for associated activities with low and medium priorities.</i>

Table 3h. High-Priority Stewardship Activities for In Situ Paleontological Resources

PRIORITY RESOURCE	STEWARDSHIP GOAL	HIGH-PRIORITY STEWARDSHIP ACTIVITIES
In Situ Paleontological Resources	Park continues to monitor for potential of in situ paleontological resources in the area of the Bodmer Overlook and takes appropriate action to document and protect when found.	<ul style="list-style-type: none"> - <i>No high-priority activities identified. See appendix A for associated activities with low and medium priorities.</i>

Table 3i. High-Priority Stewardship Activities for History

PRIORITY RESOURCE	STEWARDSHIP GOAL	HIGH-PRIORITY STEWARDSHIP ACTIVITIES
History	The park has access to adequate and current historical information to support resource management in accordance with law and NPS policy.	<ul style="list-style-type: none"> - Complete historic resource study (HRS). - Update National Register documentation as part of HRS project.



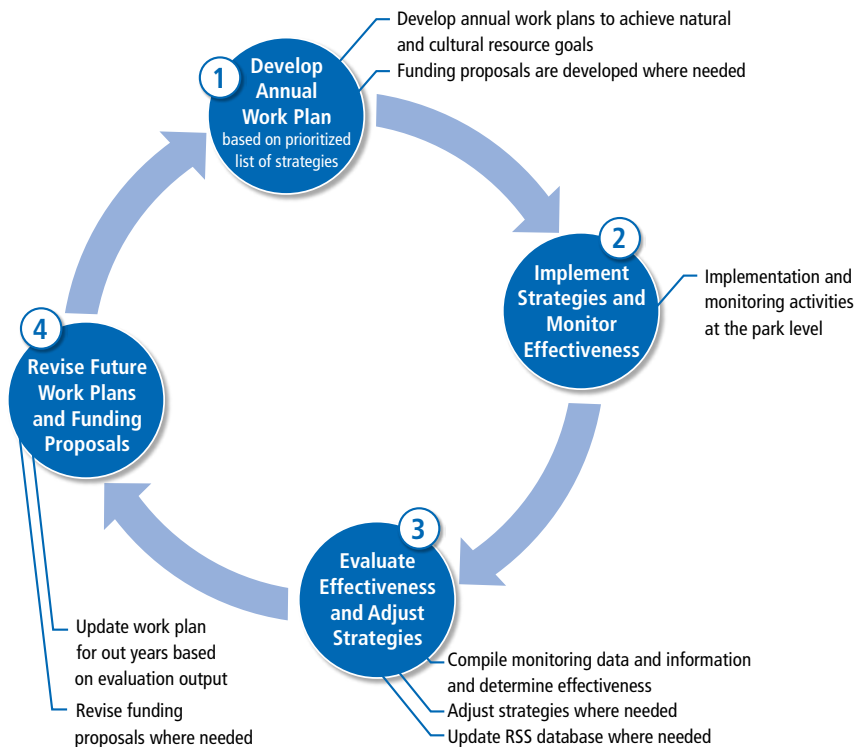


ONGOING IMPLEMENTATION OF THE RESOURCE STEWARDSHIP STRATEGY

The stewardship goals, activities, and other pertinent information of the resource stewardship strategy is managed and updated regularly using the RSS desktop application. This information will assist resource managers in determining what, how, when, and where resource management occurs in the park and will assist the park’s resource management staff in developing annual work plans. These work plans will be an important planning tool for park staff to determine what they will be able to realistically tackle over the coming years.

Long-term implementation of the resource stewardship strategy includes park managers monitoring resource information and conditions in order to evaluate the effectiveness of resource stewardship strategies over time. Regular monitoring of RSS progress will provide park managers an opportunity to evaluate whether the stewardship activities are making progress towards identified goals and consider whether adjustments are needed. See figure 5 for more information on the cyclical nature of this process. In addition, routine communication with the public is another important aspect of the implementation process. These outreach efforts are intended to improve public awareness about the science and strategies used to protect the park’s diverse resources and values over time.

Figure 5. RSS Implementation Process



REFERENCES

Ashton, I.W. and C.J. Davis

- 2017 *Plant Community Composition and Structure for Fort Union Trading Post National Historic Site: 2010 – 2016 Summary Report*. Natural Resource Report NPS/NGPN/NRR—2017/1406. National Park Service, Fort Collins, Colorado.

Graham, J.P.

- 2015 *Fort Union Trading Post National Historic Site: Geologic Resources Inventory Report*. Natural Resource Report NPS/NRSS/GRD/NRR—2015/1004. National Park Service, Fort Collins, Colorado.

Komp, M.R., E. Iverson, A.J. Nadeau, S. Amberg, L. Danielson, L. Danzinger, J. Sopcak, and B. Drazkowski

- 2014 *Fort Union Trading Post National Historic Site: Natural Resource Condition Assessment*. Natural Resource Report. NPS/FOUS/NRR—2014/774. National Park Service, Fort Collins, Colorado.

National Historic Landmark Nomination for Fort Union (Updated Documentation)

- 2015 *National Park Service, U.S. Department of the Interior, Washington, D.C.* Prepared by Emmons, Ann, Theodore Catton, Janene Caywood, Derek Beery, Historic Research Associates; Mark Harvey, North Dakota State University; Dena Sanford and Vergil Noble, National Park Service.

National Park Service

- 2013 *Foundation Document: Fort Union Trading Post National Historic Site*.
- 2015 *State of the Park Report for Fort Union Trading Post National Historic Site 2015*. State of the Park Series No. 43. National Park Service, Washington, D.C.
- 2017 *The Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings*. Prepared by Anne E. Grimmer, Technical Preservation Services.

Salas, D.E., and M.J. Pucherelli

- 2002 *USGS-NPS Vegetation Mapping, Fort Union Trading Post National Historic Site*. Technical Memorandum 8260-02-08. Bureau of Reclamation, Denver, Colorado. 128 pp.

Symstad, A.J.

- 2012 *A Vegetation Management Plan for Fort Union Trading Post National Historic Site: Final Report for Interagency Agreement Number F154910005 (April 2012)*. Natural Resource Report NPS/FOUS/NRR—2012/502. National Park Service, Fort Collins, Colorado.

Thompson, Erwin N.

- 1968 *Fort Union Trading Post Historic Structures Report, Part II, Historical Data Section*. Office of Archeology and Historic Preservation, Division of History, National Park Service, U.S. Department of the Interior, Washington, D.C.

Tweet, Justin

- 2016 *Trip Report – FOUS Technical Assistance Request #2214, 8/3/2016 to 8/6/2016*. Fort Union Trading Post National Historic Site (FOUS). NRSS – Geologic Resources Division.

Zedeno, Maria Nieves, Christopher Basaldu, Kacy Hollenback, and Vania Fletcher.

- 2006 *Cultural Affiliation Study and Ethnographic Resource Assessment: Knife River Villages National Historic Site, ND, Fort Union Trading Post National Historic Site, ND, and Theodore Roosevelt National Park, North Dakota*.

APPENDIX A: FORT UNION TRADING POST NHS RSS

Comprehensive List of Stewardship Strategies and the Respective Priorities

PRIORITY RESOURCE	STEWARDSHIP GOAL	STEWARDSHIP ACTIVITY	PRIORITY
PARKWIDE RESOURCES	Issues and stressors that affect multiple resources parkwide are addressed through integrated management approaches.	Prepare resource-specific climate change response strategies in coordination with interdisciplinary teams representing all parkwide resources.	High
PARKWIDE RESOURCES	Issues and stressors that affect multiple resources parkwide are addressed through integrated management approaches.	Prepare climate change response strategy for priority resources.	Medium
PARKWIDE RESOURCES	Issues and stressors that affect multiple resources parkwide are addressed through integrated management approaches.	Implement the actions identified by the climate change response strategy and integrate the prescribed climate change adaptation strategies into resource management for each resource with identified vulnerability.	Low
PARKWIDE RESOURCES	Issues and stressors that affect multiple resources parkwide are addressed through integrated management approaches.	Become a NPS Climate Friendly Park with action plan.	Low
PARKWIDE RESOURCES	Acquire and maintain up-to-date scholarship and science as required by law and policy, and through consultation and compliance processes, to guide management decision making as well as interpretation and education.	When completed, upload resource-related documents into accessible, shared repositories, including IRMA, eTIC, and park library.	Medium
PARKWIDE RESOURCES	Acquire and maintain up-to-date scholarship and science as required by law and policy, and through consultation and compliance processes, to guide management decision making as well as interpretation and education.	Ensure all field records generated during resource management actions and specimens that are collected and not destroyed in analysis are added to the park's museum collection, per NPS policy.	High
PARKWIDE RESOURCES	Adjacent landowners, planners, developers, and other stakeholders are engaged in cooperative conservation of resources across park boundaries.	Develop a park partner action strategy/land conservation plan, including scenic views, night sky, natural sounds, air quality, and climate change as cross boundary issues for collaboration.	Low
ARCHEOLOGICAL RESOURCES	Archeological resources are identified and evaluated for listing in the National Register of Historic Places.	Conduct archeological inventories to develop complete archeological inventory dataset.	High
ARCHEOLOGICAL RESOURCES	Archeological resources are identified and evaluated for listing in the National Register of Historic Places.	Develop comprehensive cultural resources basemap; Compile and refine information databases in ASMIS and GIS.	High
ARCHEOLOGICAL RESOURCES	Archeological resources are identified and evaluated for listing in the National Register of Historic Places.	Evaluate archeological significance and nominate remaining sites to the National Register of Historic Places.	High
ARCHEOLOGICAL RESOURCES	Archeological resources, including those that represent the only surviving original fabric of the trading post, are preserved and interpreted in accordance with law and NPS policy.	Develop Archeological Resources Management Strategy.	High

PRIORITY RESOURCE	STEWARDSHIP GOAL	STEWARDSHIP ACTIVITY	PRIORITY
ARCHEOLOGICAL RESOURCES	Archeological resources, including those that represent the only surviving original fabric of the trading post, are preserved and interpreted in accordance with law and NPS policy.	Develop a Parkwide Inadvertent Discovery and NAGPRA Action Plan(s).	High
ARCHEOLOGICAL RESOURCES	Archeological resources, including those that represent the only surviving original fabric of the trading post, are preserved and interpreted in accordance with law and NPS policy.	Conduct periodic monitoring of archeological site condition.	High
ARCHEOLOGICAL RESOURCES	Archeological resources, including those that represent the only surviving original fabric of the trading post, are preserved and interpreted in accordance with law and NPS policy.	Protect and stabilize threatened archeological resources.	High
ARCHEOLOGICAL RESOURCES	Archeological resources, including those that represent the only surviving original fabric of the trading post, are preserved and interpreted in accordance with law and NPS policy.	Prepare Synthetic Report and Material Culture Studies from 1986-1988 excavations.	Medium
ARCHEOLOGICAL RESOURCES	Archeological resources, including those that represent the only surviving original fabric of the trading post, are preserved and interpreted in accordance with law and NPS policy.	Promote Resource Stewardship Through Archeological Research and Interpretive Programming.	Medium
MUSEUM COLLECTION AND ARCHIVES	All museum collections and archives are preserved and maintained to museum standards and are available to inform and support park decision making, interpretation, education, and research.	Update collection management plan.	Medium
MUSEUM COLLECTION AND ARCHIVES	All museum collections and archives are preserved and maintained to museum standards and are available to inform and support park decision making, interpretation, education, and research.	Develop Collections Access and Use Policy.	Low
MUSEUM COLLECTION AND ARCHIVES	All museum collections and archives are preserved and maintained to museum standards and are available to inform and support park decision making, interpretation, education, and research.	Prepare and submit PMIS statement to update collection storage plan.	High
MUSEUM COLLECTION AND ARCHIVES	All museum collections and archives are preserved and maintained to museum standards and are available to inform and support park decision making, interpretation, education, and research.	Update collection storage plan.	High
MUSEUM COLLECTION AND ARCHIVES	All museum collections and archives are preserved and maintained to museum standards and are available to inform and support park decision making, interpretation, education, and research.	Implement collection storage plan.	Low
MUSEUM COLLECTION AND ARCHIVES	All museum collections and archives are preserved and maintained to museum standards and are available to inform and support park decision making, interpretation, education, and research.	Complete annual collections management reporting, including annual inventories, the Automated Checklist Program (ACP), and the national catalog submission (NCS).	High

PRIORITY RESOURCE	STEWARDSHIP GOAL	STEWARDSHIP ACTIVITY	PRIORITY
MUSEUM COLLECTION AND ARCHIVES	All museum collections and archives are preserved and maintained to museum standards and are available to inform and support park decision making, interpretation, education, and research.	Correct deficiencies identified during annual collections condition assessment known as the Automated Checklist Program.	Medium
MUSEUM COLLECTION AND ARCHIVES	All museum collections and archives are preserved and maintained to museum standards and are available to inform and support park decision making, interpretation, education, and research.	Accession and catalog museum collections in a timely manner using the Interior Collection Management System (ICMS) or its successor.	High
MUSEUM COLLECTION AND ARCHIVES	All museum collections and archives are preserved and maintained to museum standards and are available to inform and support park decision making, interpretation, education, and research.	Develop a Fort Union Digital Archive for Fur Trade Research.	Low
MUSEUM COLLECTION AND ARCHIVES	All museum collections and archives are preserved and maintained to museum standards and are available to inform and support park decision making, interpretation, education, and research.	Develop museum facility protection plan.	High
MUSEUM COLLECTION AND ARCHIVES	All museum collections and archives are preserved and maintained to museum standards and are available to inform and support park decision making, interpretation, education, and research.	Update collection condition survey to prioritize the need to survey and conserve specific material types.	High
MUSEUM COLLECTION AND ARCHIVES	All museum collections and archives are preserved and maintained to museum standards and are available to inform and support park decision making, interpretation, education, and research.	Maintain accuracy and currency of collections management records, including accession, cataloging, loan, and conservation records using ICMS and, as necessary, in paper formats.	Medium
MUSEUM COLLECTION AND ARCHIVES	All museum collections and archives are preserved and maintained to museum standards and are available to inform and support park decision making, interpretation, education, and research.	Collaborate on design, fabrication, and installation of new exhibits that reflect current scholarship and science, present tribal perspectives, and meet NPS exhibit conservation standards.	Low
MUSEUM COLLECTION AND ARCHIVES	All museum collections and archives are preserved and maintained to museum standards and are available to inform and support park decision making, interpretation, education, and research.	Acquire museum collections, objects, and archives that fill existing gaps identified in FOUS's Scope of Collections statement, especially those specified in current and future exhibit planning documents.	Low
MUSEUM COLLECTION AND ARCHIVES	All museum collections and archives are preserved and maintained to museum standards and are available to inform and support park decision making, interpretation, education, and research.	Collaborate with cultural and natural resources professionals to identify collections-related research needs and opportunities and develop project funding requests.	Medium
MUSEUM COLLECTION AND ARCHIVES	All museum collections and archives are preserved and maintained to museum standards and are available to inform and support park decision making, interpretation, education, and research.	Develop and submit project funding requests to complete analysis and cataloging of bone material, including an inventory by a physical anthropologist to confirm no human remains are present.	High

PRIORITY RESOURCE	STEWARDSHIP GOAL	STEWARDSHIP ACTIVITY	PRIORITY
MUSEUM COLLECTION AND ARCHIVES	All museum collections and archives are preserved and maintained to museum standards and are available to inform and support park decision making, interpretation, education, and research.	Provide staff with training in museum collections and archives resources and values, emergency operations, etc.	Medium
RECONSTRUCTED TRADING POST	Fort Union's historic buildings and structures were reconstructed based upon extensive archeological data and historical documentation and are maintained in a condition that preserves their historic integrity. These reconstructions play a vital role in conveying the trading post's national significance and sense of place while also supporting administrative and operational functions.	Update list of classified structures to reflect revised NHL documentation on its 6-year cycle (2024).	Low
RECONSTRUCTED TRADING POST	Fort Union's historic buildings and structures were reconstructed based upon extensive archeological data and historical documentation and are maintained in a condition that preserves their historic integrity. These reconstructions play a vital role in conveying the trading post's national significance and sense of place while also supporting administrative and operational functions.	Provide staff with training in historic preservation resources and values.	Medium
RECONSTRUCTED TRADING POST	Fort Union's historic buildings and structures were reconstructed based upon extensive archeological data and historical documentation and are maintained in a condition that preserves their historic integrity. These reconstructions play a vital role in conveying the trading post's national significance and sense of place while also supporting administrative and operational functions.	Periodically conduct a comprehensive investigation of the reconstructed trading post for signs of deterioration.	High
RECONSTRUCTED TRADING POST	Fort Union's historic buildings and structures were reconstructed based upon extensive archeological data and historical documentation and are maintained in a condition that preserves their historic integrity. These reconstructions play a vital role in conveying the trading post's national significance and sense of place while also supporting administrative and operational functions.	Continue to perform routine maintenance and address any preliminary deterioration immediately, while keeping good records.	High
RECONSTRUCTED TRADING POST	Fort Union's historic buildings and structures were reconstructed based upon extensive archeological data and historical documentation and are maintained in a condition that preserves their historic integrity. These reconstructions play a vital role in conveying the trading post's national significance and sense of place while also supporting administrative and operational functions.	Provide training to park staff on appropriate techniques to maintain and repair the historic reconstructions.	Medium

PRIORITY RESOURCE	STEWARDSHIP GOAL	STEWARDSHIP ACTIVITY	PRIORITY
RECONSTRUCTED TRADING POST	Fort Union’s historic buildings and structures were reconstructed based upon extensive archeological data and historical documentation and are maintained in a condition that preserves their historic integrity. These reconstructions play a vital role in conveying the trading post’s national significance and sense of place while also supporting administrative and operational functions.	Update the historic structure report for the entire fort.	High
CULTURAL LANDSCAPE	The cultural landscape is managed as a native and restored prairie community that represents its appearance from the 1828-1867 period of significance, as defined in the national historic landmark documentation.	Develop an abbreviated cultural landscape report that focuses on “Part 2: Treatment Recommendations” and integrates management considerations for vegetation communities and other resources that contribute to the cultural landscape.	High
CULTURAL LANDSCAPE	Protect, improve and monitor condition of views important for the cultural landscape both within and across park boundaries, as feasible. Maintain or improve characteristics of openness and remoteness much like the 1833 Bodmer painting, including a visual connection between the post and Missouri River.	Identify views important to the 1828-1867 period of significance and visitor values.	High
CULTURAL LANDSCAPE	Protect, improve and monitor condition of views important for the cultural landscape both within and across park boundaries, as feasible. Maintain or improve characteristics of openness and remoteness much like the 1833 Bodmer painting, including a visual connection between the trading post and Missouri River.	Conduct a visual resource inventory using the NPS ARD process to establish baseline condition of selected views by documenting scenic quality and view importance.	High
CULTURAL LANDSCAPE	Protect, improve and monitor condition of views important for the cultural landscape both within and across park boundaries, as feasible. Maintain or improve characteristics of openness and remoteness much like the 1833 Bodmer painting, including a visual connection between the trading post and Missouri River.	Repeat visual resource inventory every 5 to 10 years or as landscape changes are observed to monitor changes in condition.	Medium
CULTURAL LANDSCAPE	Protect, improve and monitor condition of views important for the cultural landscape both within and across park boundaries, as feasible. Maintain or improve characteristics of openness and remoteness much like the 1833 Bodmer painting, including a visual connection between the trading post and Missouri River.	Connect/join the conversation with THRO management to benefit from their method and relationship from working with oil and gas developers.	Low
CULTURAL LANDSCAPE	Protect, improve and monitor condition of views important for the cultural landscape both within and across park boundaries, as feasible. Maintain or improve characteristics of openness and remoteness much like the 1833 Bodmer painting, including a visual connection between the trading post and Missouri River.	Emphasize the importance of park views/sense of place for visualizing the past into interpretive themes.	Low

PRIORITY RESOURCE	STEWARDSHIP GOAL	STEWARDSHIP ACTIVITY	PRIORITY
CULTURAL LANDSCAPE	The natural soundscape at the park is protected and maintained via a reduction in anthropogenic noise, and the impacts of noise on the park's cultural landscape are better understood.	Monitor natural soundscape on a cyclic basis, including recommended activities from the 2016 Acoustic Monitoring Report.	Low
CULTURAL LANDSCAPE	The natural soundscape at the park is protected and maintained via a reduction in anthropogenic noise, and the impacts of noise on the park's cultural landscape are better understood.	Reduce noise from park activities through the use of quiet models of maintenance equipment.	Low
CULTURAL LANDSCAPE	The natural soundscape at the park is protected and maintained via a reduction in anthropogenic noise, and the impacts of noise on the park's cultural landscape are better understood.	Pursue opportunities to install quiet pavement alternatives on road surfaces that need repairs.	Low
CULTURAL LANDSCAPE	The dark night skies at the park are protected and maintained through a reduction in artificial light pollution, and the impacts of light pollution on the park's cultural landscape is better understood.	Collect baseline night sky data in the park.	High
CULTURAL LANDSCAPE	The dark night skies at the park are protected and maintained through a reduction in artificial light pollution, and the impacts of light pollution on the park's cultural landscape is better understood.	Repeat night sky data collection every 5 to 10 years or as changes are observed to monitor changes in condition.	Low
CULTURAL LANDSCAPE	The dark night skies at the park are protected and maintained through a reduction in artificial light pollution, and the impacts of light pollution on the park's cultural landscape is better understood.	Identify (assess light domes or glare sources that impact the park) and prioritize groups to work with to reduce light pollution originating outside the park boundary.	Low
CULTURAL LANDSCAPE	The dark night skies at the park are protected and maintained through a reduction in artificial light pollution, and the impacts of light pollution on the park's cultural landscape is better understood.	Achieve certification as an International Dark Sky Park.	Low
CULTURAL LANDSCAPE	The dark night skies at the park are protected and maintained through a reduction in artificial light pollution, and the impacts of light pollution on the park's cultural landscape is better understood.	Develop guidelines for lighting to ensure that future park development is consistent with protection of the park's dark night skies.	Low
CULTURAL LANDSCAPE	The dark night skies at the park are protected and maintained through a reduction in artificial light pollution, and the impacts of light pollution on the park's cultural landscape is better understood.	Ensure the park's lighting guidelines are applied to all new operational and/or facility development projects in the park.	Low
CULTURAL LANDSCAPE	The dark night skies at the park are protected and maintained through a reduction in artificial light pollution, and the impacts of light pollution on the park's cultural landscape is better understood.	Add information to the park website, and social media outlets that promote and educate about night skies and fully sustainable lighting practices.	Low
CULTURAL LANDSCAPE	The dark night skies at the park are protected and maintained through a reduction in artificial light pollution, and the impacts of light pollution on the park's cultural landscape is better understood.	Continue or begin to improve park night sky interpretive programming (star parties, annual astronomy festival).	Low

PRIORITY RESOURCE	STEWARDSHIP GOAL	STEWARDSHIP ACTIVITY	PRIORITY
ETHNOGRAPHIC RESOURCES	Establish and sustain relationships with American Indian tribes to conduct cultural anthropological research, as appropriate; collaboratively manage the park's ethnographic resources, including sacred sites; and integrate tribal perspectives and values into interpretation.	Identify archeological resources and museum collections that are ethnographic resources by having a dialogue with interested tribes on the current cultural significance and meaning of cultural resources to the tribes.	High
ETHNOGRAPHIC RESOURCES	Establish and sustain relationships with American Indian tribes to conduct cultural anthropological research, as appropriate; collaboratively manage the park's ethnographic resources, including sacred sites; and integrate tribal perspectives and values into interpretation.	Complete the ethnobotany project focusing on the Assiniboine.	High
ETHNOGRAPHIC RESOURCES	Establish and sustain relationships with American Indian tribes to conduct cultural anthropological research, as appropriate; collaboratively manage the park's ethnographic resources, including sacred sites; and integrate tribal perspectives and values into interpretation.	Update museum exhibits to include tribal perspectives and values.	Low
ETHNOGRAPHIC RESOURCES	Establish and sustain relationships with American Indian tribes to conduct cultural anthropological research, as appropriate; collaboratively manage the park's ethnographic resources, including sacred sites; and integrate tribal perspectives and values into interpretation.	Invite tribes to consult on all appropriate resource management and interpretation/education projects/activities.	High
ETHNOGRAPHIC RESOURCES	Establish and sustain relationships with American Indian tribes to conduct cultural anthropological research, as appropriate; collaboratively manage the park's ethnographic resources, including sacred sites; and integrate tribal perspectives and values into interpretation.	Complete an ethnographic inventory of cultural resources through tribal consultation.	Medium
ETHNOGRAPHIC RESOURCES	Establish and sustain relationships with American Indian tribes to conduct cultural anthropological research, as appropriate; collaboratively manage the park's ethnographic resources, including sacred sites; and integrate tribal perspectives and values into interpretation.	Provide staff with training in ethnographic resources and values.	High
NATIVE VEGETATION COMMUNITIES AND WILDLIFE	Native plant community composition, form, and function and associated native wildlife communities are sustained through the preservation of natural, ecological processes to the extent possible under climate change and regional development. The prairie ecosystem is restored (favoring plant species adapted to emerging/future climate conditions) and maintained in concert with the cultural landscape of the park and the Missouri River. Riparian vegetation is sustained to the extent possible under the regulated river flow regime.	Conduct regular monitoring of native and restored prairie vegetation community composition with assistance from the Northern Great Plains Network (NGPN).	High

PRIORITY RESOURCE	STEWARDSHIP GOAL	STEWARDSHIP ACTIVITY	PRIORITY
NATIVE VEGETATION COMMUNITIES AND WILDLIFE	Native plant community composition, form, and function and associated native wildlife communities are sustained through the preservation of natural, ecological processes to the extent possible under climate change and regional development. The prairie ecosystem is restored (favoring plant species adapted to emerging/future climate conditions) and maintained in concert with the cultural landscape of the park and the Missouri River. Riparian vegetation is sustained to the extent possible under the regulated river flow regime.	Begin small-scale planting activities (using seeds, plugs, or transplants) to enhance or repair problem areas identified by regular monitoring of past field-scale prairie restoration efforts.	Medium
NATIVE VEGETATION COMMUNITIES AND WILDLIFE	Native plant community composition, form, and function and associated native wildlife communities are sustained through the preservation of natural, ecological processes to the extent possible under climate change and regional development. The prairie ecosystem is restored (favoring plant species adapted to emerging/future climate conditions) and maintained in concert with the cultural landscape of the park and the Missouri River. Riparian vegetation is sustained to the extent possible under the regulated river flow regime.	Shape native vegetation structure by applying Manual and Mechanical Methods and other Management Tools per the 2012 "A Vegetation Management Plan for Fort Union Trading Post National Historic Site" (including, mowing, haying, prescribed fire, grazing, etc.), and confirm these management efforts integrate management considerations for the cultural landscape.	High
NATIVE VEGETATION COMMUNITIES AND WILDLIFE	Native plant community composition, form, and function and associated native wildlife communities are sustained through the preservation of natural, ecological processes to the extent possible under climate change and regional development. The prairie ecosystem is restored (favoring plant species adapted to emerging/future climate conditions) and maintained in concert with the cultural landscape of the park and the Missouri River. Riparian vegetation is sustained to the extent possible under the regulated river flow regime.	Regularly identify, update, and prioritize exotic weed species lists to inform weed control mgmt. actions (e.g., an evolving "Weeds of Concern List") via working with NGPN, the Exotic Plant Management Team (EPMT), and other information sources.	High
NATIVE VEGETATION COMMUNITIES AND WILDLIFE	Native plant community composition, form, and function and associated native wildlife communities are sustained through the preservation of natural, ecological processes to the extent possible under climate change and regional development. The prairie ecosystem is restored (favoring plant species adapted to emerging/future climate conditions) and maintained in concert with the cultural landscape of the park and the Missouri River. Riparian vegetation is sustained to the extent possible under the regulated river flow regime.	Regularly monitor species and extent of nonnative, invasive plants, with assistance from NGPN and the EPMT.	High

PRIORITY RESOURCE	STEWARDSHIP GOAL	STEWARDSHIP ACTIVITY	PRIORITY
<p>NATIVE VEGETATION COMMUNITIES AND WILDLIFE</p>	<p>Native plant community composition, form, and function and associated native wildlife communities are sustained through the preservation of natural, ecological processes to the extent possible under climate change and regional development. The prairie ecosystem is restored (favoring plant species adapted to emerging/future climate conditions) and maintained in concert with the cultural landscape of the park and the Missouri River. Riparian vegetation is sustained to the extent possible under the regulated river flow regime.</p>	<p>Regularly implement nonnative, invasive plant control with assistance from the EPMT and other available assistance as infestation data becomes available via monitoring. Control invasive plants by applying Manual and Mechanical Methods and other Management Tools per the 2012 "A Vegetation Management Plan for Fort Union Trading Post National Historic Site" (including mowing, haying, prescribed fire, grazing, etc.).</p>	<p>High</p>
<p>NATIVE VEGETATION COMMUNITIES AND WILDLIFE</p>	<p>Native plant community composition, form, and function and associated native wildlife communities are sustained through the preservation of natural, ecological processes to the extent possible under climate change and regional development. The prairie ecosystem is restored (favoring plant species adapted to emerging/future climate conditions) and maintained in concert with the cultural landscape of the park and the Missouri River. Riparian vegetation is sustained to the extent possible under the regulated river flow regime.</p>	<p>Meet annually with NGPN, EPMT, and Fire to evaluate efficacy and effects of nonnative, invasive plant management actions and adaptively adjust the prescribed actions as necessary.</p>	<p>High</p>
<p>NATIVE VEGETATION COMMUNITIES AND WILDLIFE</p>	<p>Native plant community composition, form, and function and associated native wildlife communities are sustained through the preservation of natural, ecological processes to the extent possible under climate change and regional development. The prairie ecosystem is restored (favoring plant species adapted to emerging/future climate conditions) and maintained in concert with the cultural landscape of the park and the Missouri River. Riparian vegetation is sustained to the extent possible under the regulated river flow regime.</p>	<p>Collect and maintain records of all vegetation management actions to inform future management (including plans, monitoring data, spatial data, photographs, field records [e.g., forms]) and to help ensure vegetation management integration with cultural landscape management.</p>	<p>High</p>
<p>NATIVE VEGETATION COMMUNITIES AND WILDLIFE</p>	<p>Native plant community composition, form, and function and associated native wildlife communities are sustained through the preservation of natural, ecological processes to the extent possible under climate change and regional development. The prairie ecosystem is restored (favoring plant species adapted to emerging/future climate conditions) and maintained in concert with the cultural landscape of the park and the Missouri River. Riparian vegetation is sustained to the extent possible under the regulated river flow regime.</p>	<p>Periodically update floristic inventory with assistance from NGPN.</p>	<p>Low</p>

PRIORITY RESOURCE	STEWARDSHIP GOAL	STEWARDSHIP ACTIVITY	PRIORITY
NATIVE VEGETATION COMMUNITIES AND WILDLIFE	Native plant community composition, form, and function and associated native wildlife communities are sustained through the preservation of natural, ecological processes to the extent possible under climate change and regional development. The prairie ecosystem is restored (favoring plant species adapted to emerging/future climate conditions) and maintained in concert with the cultural landscape of the park and the Missouri River. Riparian vegetation is sustained to the extent possible under the regulated river flow regime.	Periodically update baseline vegetation map.	Low
NATIVE VEGETATION COMMUNITIES AND WILDLIFE	Native plant community composition, form, and function and associated native wildlife communities are sustained through the preservation of natural, ecological processes to the extent possible under climate change and regional development. The prairie ecosystem is restored (favoring plant species adapted to emerging/future climate conditions) and maintained in concert with the cultural landscape of the park and the Missouri River. Riparian vegetation is sustained to the extent possible under the regulated river flow regime.	Regularly monitor erosion of active banks along Missouri River riparian corridor and supplement information with river channel monitoring data when available.	Low
NATIVE VEGETATION COMMUNITIES AND WILDLIFE	Native plant community composition, form, and function and associated native wildlife communities are sustained through the preservation of natural, ecological processes to the extent possible under climate change and regional development. The prairie ecosystem is restored (favoring plant species adapted to emerging/future climate conditions) and maintained in concert with the cultural landscape of the park and the Missouri River. Riparian vegetation is sustained to the extent possible under the regulated river flow regime.	Conduct regular monitoring of land birds during the breeding bird season through NGPN with cooperation from the Bird Conservancy of the Rockies and other partners.	Medium
NATIVE VEGETATION COMMUNITIES AND WILDLIFE	Native plant community composition, form, and function and associated native wildlife communities are sustained through the preservation of natural, ecological processes to the extent possible under climate change and regional development. The prairie ecosystem is restored (favoring plant species adapted to emerging/future climate conditions) and maintained in concert with the cultural landscape of the park and the Missouri River. Riparian vegetation is sustained to the extent possible under the regulated river flow regime.	Regularly monitor bats for white-nose syndrome with assistance from MWR wildlife biologist.	Low

PRIORITY RESOURCE	STEWARDSHIP GOAL	STEWARDSHIP ACTIVITY	PRIORITY
NATIVE VEGETATION COMMUNITIES AND WILDLIFE	Native plant community composition, form, and function and associated native wildlife communities are sustained through the preservation of natural, ecological processes to the extent possible under climate change and regional development. The prairie ecosystem is restored (favoring plant species adapted to emerging/future climate conditions) and maintained in concert with the cultural landscape of the park and the Missouri River. Riparian vegetation is sustained to the extent possible under the regulated river flow regime.	Update the park's fire management plan every five years, and ensure fire management is integrated with considerations for cultural landscape management.	Medium
NATIVE VEGETATION COMMUNITIES AND WILDLIFE	The park has improved knowledge about the presence of federally listed species, or potential range shifts due to climate change, and will respond through management as appropriate.	Routinely update park inventory lists of federal- and state-listed threatened and endangered, and species of concern, and track potential species range shifts that result from climate change.	Low
NATIVE VEGETATION COMMUNITIES AND WILDLIFE	The park has improved knowledge about the presence of federally listed species, or potential range shifts due to climate change, and will respond through management as appropriate.	Regularly track bat monitoring data for presence and trends of the threatened northern long-eared bat, with assistance from MWR wildlife biologist.	Low
NATIVE VEGETATION COMMUNITIES AND WILDLIFE	The park has improved knowledge about the presence of federally listed species, or potential range shifts due to climate change, and will respond through management as appropriate.	When park staff become aware of likely T&E species occurrence in/ near park, conduct active, regular monitoring in park for species presence, with assistance from MWR wildlife biologist.	Low
IN SITU PALEONTOLOGICAL RESOURCES	Park continues to monitor for potential of in situ paleontological resources in the area of the Bodmer Overlook and takes appropriate action to document and protect when found.	In the absence of an outcrop or outcrops to anchor monitoring efforts in the north part of FOUS, park staff to spot check for exposed paleontological resources around the Bodmer Overlook area when visiting for other purposes.	Low
HISTORY	The park has access to adequate and current historical information to support resource management in accordance with law and NPS policy.	Complete historic resource study (HRS).	High
HISTORY	The park has access to adequate and current historical information to support resource management in accordance with law and NPS policy.	Update National Register documentation as part of HRS project.	High
HISTORY	The park has access to adequate and current historical information to support resource management in accordance with law and NPS policy.	Complete Determinations of Eligibility (DOEs) as needed for districts, sites, buildings, structures, or objects that meet National Register criteria for evaluation.	Low
HISTORY	The park has access to adequate and current historical information to support resource management in accordance with law and NPS policy.	Complete a standalone architectural history of the reconstruction to preserve the information required to maintain the reconstruction's historic integrity.	Medium

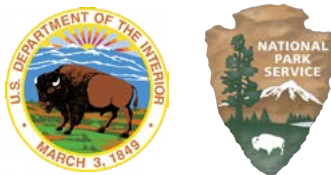
CONTACT INFORMATION

For more information about the Resource Stewardship Strategy for Fort Union Trading Post National Historic Site, contact:

Superintendent
Fort Union Trading Post National Historic Site
15550 Highway 1804
Williston, ND 58801

fous_superintendent@nps.gov





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 historic 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 US administration.

RSS

RESOURCE STEWARDSHIP STRATEGIES



BRIDGING SCIENCE AND MANAGEMENT FOR TODAY AND TOMORROW