



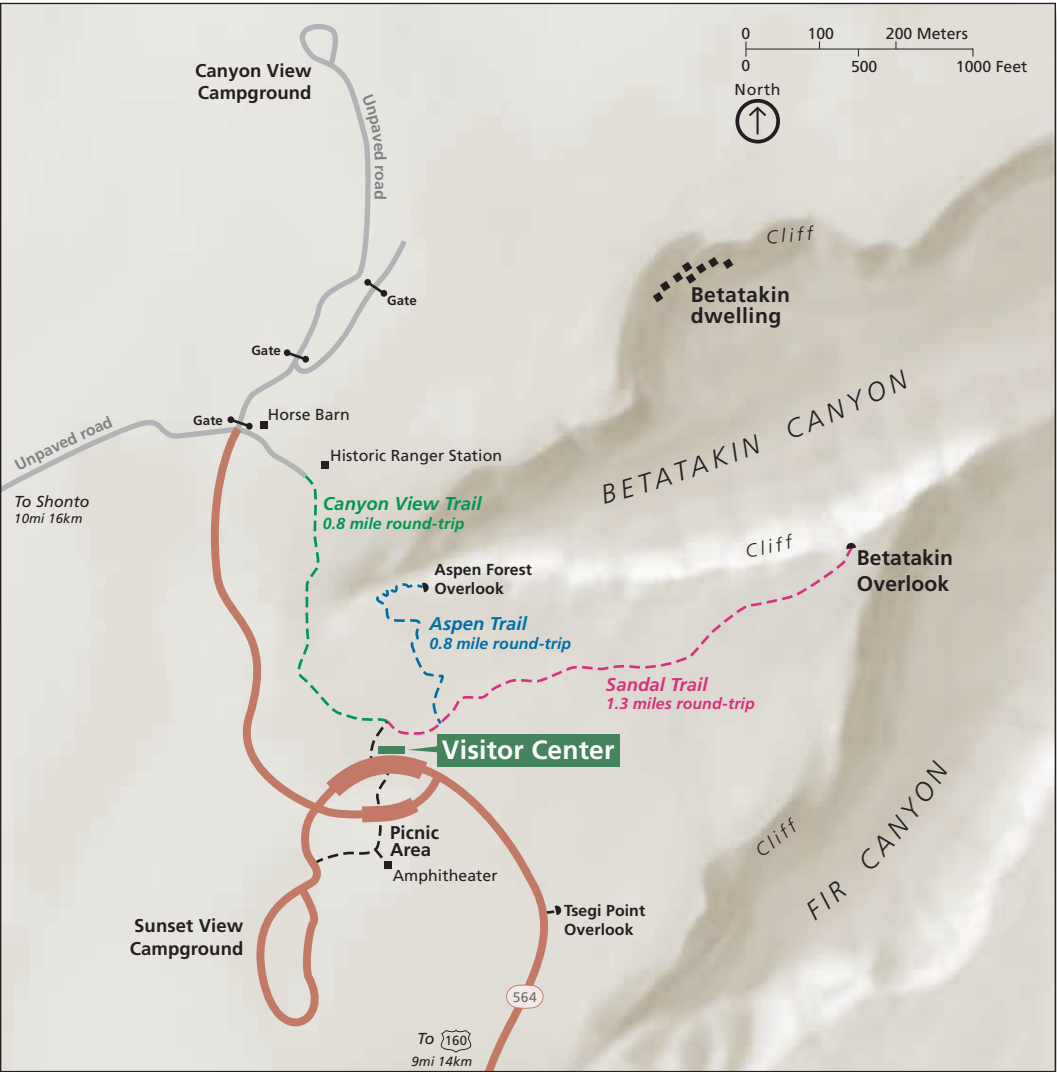
Foundation Document

Navajo National Monument

Arizona

August 2017





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Mission of the National Park Service

The National Park Service (NPS) preserves unimpaired the natural and cultural resources and values of the national park system for the enjoyment, education, and inspiration of this and future generations. The National Park Service cooperates with partners to extend the benefits of natural and cultural resource conservation and outdoor recreation throughout this country and the world.

The NPS core values are a framework in which the National Park Service accomplishes its mission. They express the manner in which, both individually and collectively, the National Park Service pursues its mission. The NPS core values are:

- **Shared stewardship:** We share a commitment to resource stewardship with the global preservation community.
- **Excellence:** We strive continually to learn and improve so that we may achieve the highest ideals of public service.
- **Integrity:** We deal honestly and fairly with the public and one another.
- **Tradition:** We are proud of it; we learn from it; we are not bound by it.
- **Respect:** We embrace each other's differences so that we may enrich the well-being of everyone.

The National Park Service is a bureau within the Department of the Interior. While numerous national park system units were created prior to 1916, it was not until August 25, 1916, that President Woodrow Wilson signed the National Park Service Organic Act formally establishing the National Park Service.

The national park system continues to grow and comprises more than 400 park units covering more than 84 million acres in every state, the District of Columbia, American Samoa, Guam, Puerto Rico, and the Virgin Islands. These units include, but are not limited to, national parks, monuments, battlefields, military parks, historical parks, historic sites, lakeshores, seashores, recreation areas, scenic rivers and trails, and the White House. The variety and diversity of park units throughout the nation require a strong commitment to resource stewardship and management to ensure both the protection and enjoyment of these resources for future generations.



The arrowhead was authorized as the official National Park Service emblem by the Secretary of the Interior on July 20, 1951. The sequoia tree and bison represent vegetation and wildlife, the mountains and water represent scenic and recreational values, and the arrowhead represents historical and archeological values.

Introduction

Every unit of the national park system will have a foundational document to provide basic guidance for planning and management decisions—a foundation for planning and management. The core components of a foundation document include a brief description of the park as well as the park’s purpose, significance, fundamental resources and values, other important resources and values, and interpretive themes. The foundation document also includes special mandates and administrative commitments, an assessment of planning and data needs that identifies planning issues, planning products to be developed, and the associated studies and data required for park planning. Along with the core components, the assessment provides a focus for park planning activities and establishes a baseline from which planning documents are developed.

A primary benefit of developing a foundation document is the opportunity to integrate and coordinate all kinds and levels of planning from a single, shared understanding of what is most important about the park. The process of developing a foundation document begins with gathering and integrating information about the park. Next, this information is refined and focused to determine what the most important attributes of the park are. The process of preparing a foundation document aids park managers, staff, and the public in identifying and clearly stating in one document the essential information that is necessary for park management to consider when determining future planning efforts, outlining key planning issues, and protecting resources and values that are integral to park purpose and identity.

While not included in this document, a park atlas is also part of a foundation project. The atlas is a series of maps compiled from available geographic information system (GIS) data on natural and cultural resources, visitor use patterns, facilities, and other topics. It serves as a GIS-based support tool for planning and park operations. The atlas is published as a (hard copy) paper product and as geospatial data for use in a web mapping environment. The park atlas for Navajo National Monument can be accessed online at: <http://insideparkatlas.nps.gov/>.



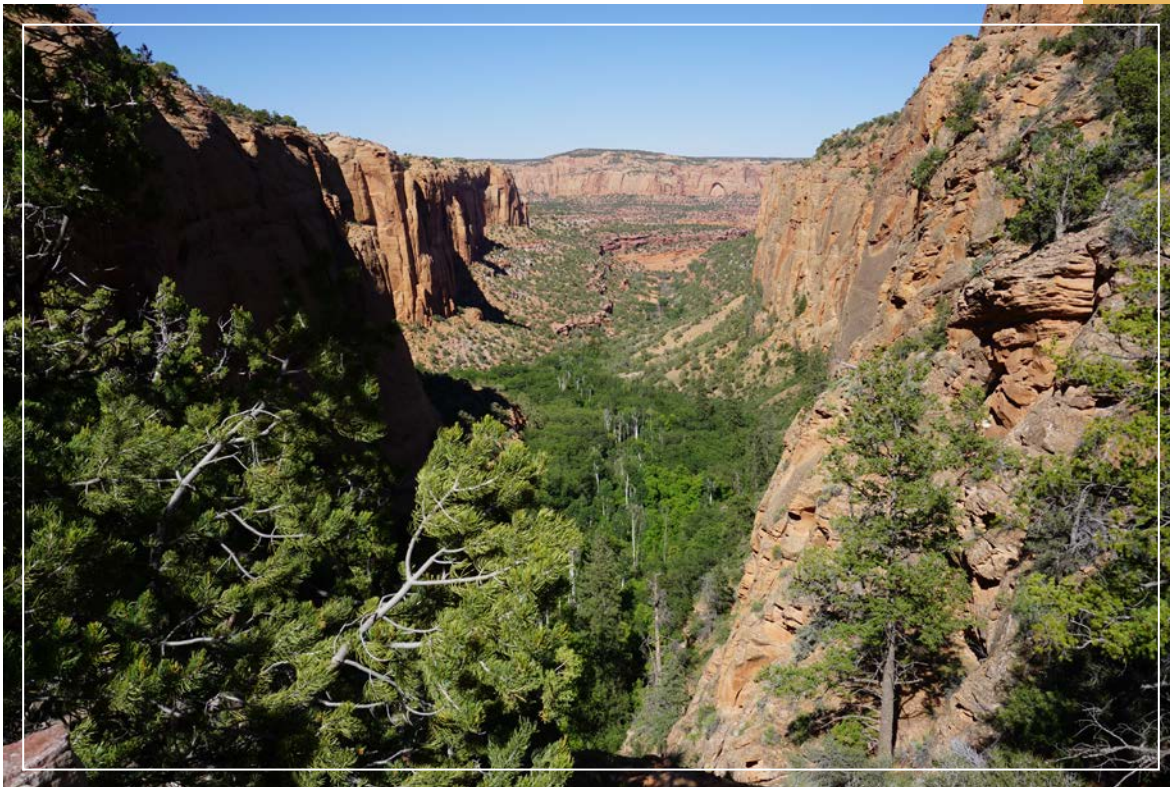
Part 1: Core Components

The core components of a foundation document include a brief description of the park, park purpose, significance statements, fundamental resources and values, other important resources and values, and interpretive themes. These components are core because they typically do not change over time. Core components are expected to be used in future planning and management efforts.

Brief Description of the Park

Navajo National Monument is in northeastern Arizona, about 50 miles northeast of Tuba City and 30 highway miles southwest of Kayenta. From U.S. Highway 160 (a main route between the Four Corners area and the Grand Canyon), the monument is accessed by turning north onto Arizona State Route 564 and continuing 9 miles to its terminus at the headquarters and visitor center area. The monument is in the heart of the western part of the Navajo Reservation and is surrounded by lands belonging to the Navajo Nation.

The cliff dwellings and other important resources of the monument are in Tsegi Canyon, a primary drainage of the eastern part of the Shonto Plateau. The canyon has three major branches and numerous side branches, all of which deeply cut into the Navajo sandstone that characterizes the area. The rock layers of the canyon, having varying degrees of erosion resistance, contribute to a more open and less vertical appearance of the canyon walls and cliff dwelling alcoves as compared with nearby places such as Canyon de Chelly. Pinyon-juniper forest dominates the canyon rims, whereas the warmer and wetter climate within the canyons supports scrub oak, boxelder, fir, and a wide variety of other plant and animal species. A relic aspen/fir forest in Betatakin Canyon can be viewed from an overlook at the end of the Aspen Trail north of the visitor center.





Though Keet Seel was long known to the area's American Indian inhabitants, in 1895 Richard Weatherill, a rancher and explorer/collector, drew the attention of museum collectors and others to the large cliff dwelling complex. Government officials recognized the pressing need to protect the site and other prehistoric sites in the vicinity from looting, damaging collecting practices, and other threats. President William H. Taft initially established the monument by presidential proclamation on March 20, 1909, under authority granted by the 1906 Antiquities Act. The monument initially comprised an unnecessarily large area of 160 square miles, a consequence of its designation prior to official government site assessments in the urgent haste to protect the cliff dwellings for public benefit. These isolated sites were described in the presidential proclamation as "... new to science and wholly unexplored," and "...of the very greatest ethnological, scientific and educational interest." Following subsequent site investigations, a presidential proclamation issued on March 14, 1912, substantially reduced the monument's original 160 square miles to three small noncontiguous tracts totaling 360 acres (Betatakin, 160 acres; Keet Seel, 160 acres; and Inscription House, 40 acres).

Although archeological evidence is limited, the area of the Colorado Plateau that includes today's Navajo National Monument was inhabited by small nomadic bands of Archaic Period hunters and gatherers from as early as 6000 BC and possibly earlier. Highly mobile bands of people from the Basketmaker Period (AD 100 to 700), who subsisted on a diverse resource base and domesticated plants such as flint corn and squash, later occupied the area. They constructed slab-lined and subterranean structures that were commonly located in caves or rock shelters. Following the Basketmaker Period, the earliest Puebloan people (AD 700 to 900) established agricultural communities in the vicinity of the national monument. These people settled in villages and built dwellings consisting of clustered masonry rooms. In addition to the cultivation of corn, beans, and squash, they hunted game animals and raised turkeys for food. They also grew cotton for use in woven articles and developed distinctive styles of pottery.

The three primary cliff dwellings at Navajo National Monument (Betatakin, Keet Seel, and Inscription House) were constructed by Ancestral Puebloan people during the final (Tsegi) phase of the Pueblo III Period (approximately AD 1250 to 1300). These sites are considered among the largest and most intact precontact structures in the southwestern United States. Various proportions of masonry and jacal walls were used in the construction of living quarters, storage rooms, ceremonial kivas, and other structural features. Local unshaped sandstone with clay mortar was used for the masonry, and some masonry walls were plastered with clay. The large pueblo complexes were developed in sheltered alcoves along the sides of the sandstone walls of the Tsegi Canyon system. These sheltered conditions have contributed to the remarkable preservation of the sites and their associated cultural materials and artifacts.

Although the Ancestral Puebloan occupants of the Tsegi Canyon cliff dwellings flourished for about five decades, they began to leave the area by about AD 1290 to 1300, perhaps in response to prolonged drought, erosion, social and religious pressures, conflict with outside tribes, and other factors. They may have joined other groups migrating through the region as described in traditional accounts of the Hopi, Zuni, and other Pueblos and tribes. The cliff dwellings and Tsegi Canyon represent a significant part of the long span of human habitation of the area. Some 700 years after the departure of the Ancestral Puebloans, the places and stories associated with their presence continue to hold profound cultural importance and meaning for contemporary people, particularly the Hopi, Zuni, Navajo, and San Juan Southern Paiute.

In large part because of the monument's remote location, the National Park Service and the Navajo Nation have maintained a long-standing tradition of mutual support that has developed through formal agreements and customary activities. The monument provides a range of services not otherwise available, as well as employment opportunities, to the Navajo people of the Shonto region. For instance, NPS road grading and snowplow operations help the Navajo access their hogans and regional community centers, and local Navajos provide much needed support to the monument. See appendix D for a summary of tribal input efforts conducted during the development of this document and appendix E for a list of traditionally associated tribes. Despite its overarching archeological mandate, the monument has a long history of interpreting both the prehistoric and historic pasts of the western part of the Navajo Reservation, and both Ancestral Puebloan and Navajo culture are represented in the monument's interpretive programs and exhibits.

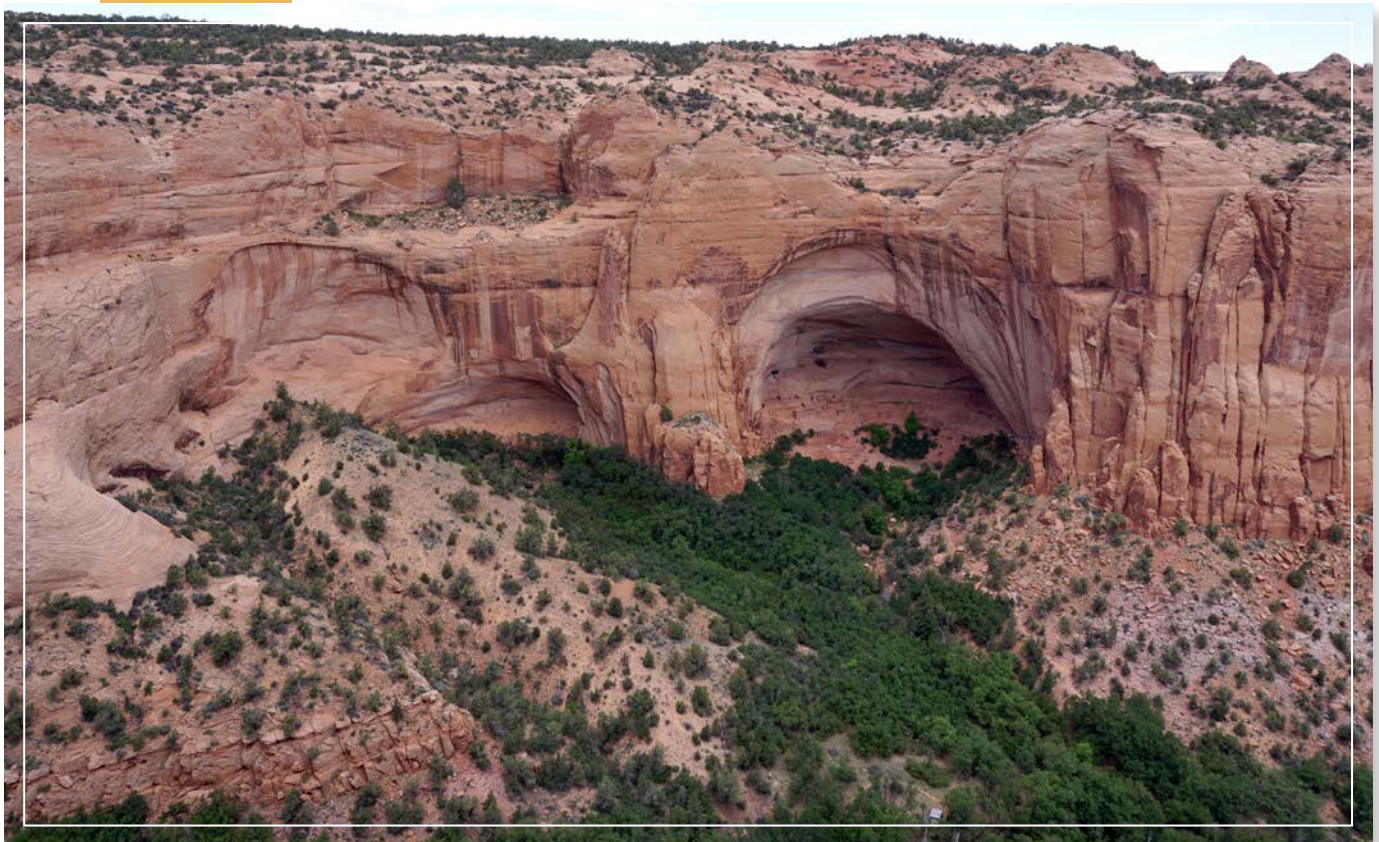
In addition to the Betatakin cliff dwelling site, the monument's main unit includes a 244-acre section of land on the rim of Betatakin Canyon used for NPS administrative and visitor use purposes under an agreement with the Navajo Nation. The visitor center provides information services, exhibits, videos, and sales items. The Navajo Arts and Crafts Enterprise operates a gift shop specializing in Navajo silverwork. The headquarters area also includes trails, overlooks, campground, picnic area, and administrative facilities. The Betatakin cliff dwelling is visible from the rim overlook, and visitors can access the site by taking a 5-mile-roundtrip guided hike into the canyon. The Keet Seel unit is 8 miles northeast of the headquarters area, and visitors generally must backpack and camp overnight to visit it. The campground near Keet Seel and parts of the access trail are on Navajo Nation land outside the boundary of the monument. Inscription House in Nitsin Canyon, more than 30 miles by road from the headquarters area, has been closed to visitors since 1968 to protect the fragile and unstable site. The cultural landscape at the monument is aided by relatively low levels of artificial light and noise pollution due to new developed areas being nearby. Visitors to Navajo National Monument currently number about 66,000 per year, and more than 95% of visitors stay on the rim at the headquarters area, within viewing distance of the Betatakin cliff dwelling.



Park Purpose

The purpose statement identifies the specific reason(s) for establishment of a particular park. The purpose statement for Navajo National Monument was drafted through a careful analysis of its enabling legislation and the legislative history that influenced its development. The monument was established by presidential proclamation on March 20, 1909 (see appendix A for presidential proclamation and subsequent amendment). The purpose statement lays the foundation for understanding what is most important about the park.

NAVAJO NATIONAL MONUMENT, in the rugged Tsegi Canyon system of northeastern Arizona, protects and preserves ancient cliff dwellings, associated resources, and surrounding environments that contribute to appreciation and understanding of the Ancestral Puebloan peoples who built the dwellings and inhabited the remote canyons.



Park Significance

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

The following significance statements have been identified for Navajo National Monument. (Please note that the sequence of the statements does not reflect the level of significance.)

1. Betatakin, Keet Seel, and Inscription House are among the best preserved Puebloan Period cliff dwellings in the southwestern United States. These remarkably intact 13th century structural complexes were constructed in recessed alcoves in sandstone cliff walls that provided shelter and protection. Well-preserved archeological and cultural material associated with these sites further contributes far-reaching insights into the lifeways of the Ancestral Puebloan people.
2. Journeying through Navajo National Monument's remote and rugged landscape provides visitors an unparalleled opportunity to envision the past. The limited extent of modern intrusions and conveniences at the monument, and the effort required to visit the sites of Betatakin and Keet Seel, heighten the appreciation of visitors for the challenges faced by ancestral communities to develop and occupy these remote places in a high desert environment.
3. The descendants of those who built and occupied the cliff dwellings and surrounding region continue to maintain strong traditional and spiritual connections to the resources and cultural landscape of Navajo National Monument. The monument's cultural and natural resources are central to the distinctive beliefs and practices of the modern Hopi, Zuni, Navajo, and San Juan Southern Paiute. Multiple generations of associated communities and families have helped protect monument resources and continue to play key stewardship roles in preserving these important places for the appreciation and education of future generations.
4. Betatakin/Talastima Canyon shelters a lush, relic aspen/fir forest that sustains habitat for a diverse array of plant and animal species, including the endangered Mexican spotted owl. The forest ecosystem, seemingly incongruous in the surrounding desert environment, a unique feature of the area, and its existence reinforces the enduring centuries-old connection between the monument's natural and cultural resources.



Fundamental Resources and Values

Fundamental resources and values (FRVs) are those features, systems, processes, experiences, stories, scenes, sounds, smells, or other attributes determined to warrant primary consideration during planning and management processes because they are essential to achieving the purpose of the park and maintaining its significance. Fundamental resources and values are closely related to a park's legislative purpose and are more specific than significance statements.

Fundamental resources and values help focus planning and management efforts on what is truly significant about the park. One of the most important responsibilities of NPS managers is to ensure the conservation and public enjoyment of those qualities that are essential (fundamental) to achieving the purpose of the park and maintaining its significance. If fundamental resources and values are allowed to deteriorate, the park purpose and/or significance could be jeopardized.

The following fundamental resources and values have been identified for Navajo National Monument:

- **Cliff Dwellings.** The monument's three primary cliff dwelling complexes (Betatakin, Keet Seel, and Inscription House) date from approximately AD 1250 to 1300. Betatakin means "ledge house" in the Navajo (Diné) language, and Keet Seel roughly translates to "broken pottery scattered around." The cliff dwellings were constructed by Ancestral Puebloan people who had moved to the area around AD 700 and settled in clustered villages. They farmed corn and other drought-resistant crops along the canyon rims and floors. The cliff dwellings, constructed in canyon wall alcoves of vibrant reddish-hued Navajo sandstone, represent well-preserved examples of Pueblo III Kayenta Anasazi architecture.
- **Betatakin.** Betatakin, the second largest of the cliff dwellings in Tsegi Canyon, is a rare example of the Tsegi phase of the Pueblo III Period. An estimated 75–100 people lived at the site in clan or family groups. The south-facing pueblo complex consists of 135 rooms, some of which have been destroyed by rock falls. Rooms were variously used for living spaces, food storage, and ceremonial activities conducted in the site's one or two kivas. The walls are of both masonry and jacal construction (clay applied over an internal framework of log poles and branches), and several roofs are intact. Although only one to two stories high, the cliff dwelling presents a terraced appearance because of the sloping nature of the alcove floors. Rock art is associated with the complex, and trails extend throughout the site.



- **Keet Seel.** Keet Seel is the monument's largest cliff dwelling site and one of the best preserved in the Southwest. The present pueblo complex was constructed during a surge in building activity that began around AD 1272. Keet Seel has 154 rooms, three major streets, and a retaining wall reinforced by horizontal logs imbedded in fill that is 180 feet long and more than 10 feet high. Keet Seel comprises 4 to 5 kivas and 25 distinct rooms; room walls are of masonry and jacal construction, and many of the rooms have intact roofs and clay floors. As many as 150 people are thought to have lived at Keet Seel before the settlement entered a period of decline and families began to leave around AD 1300. Entryways to many of the rooms were sealed by the departing occupants to protect caches of corn stored in pottery jars.
- **Inscription House.** Inscription House was permanently occupied from about AD 1250 to 1300. Archeological evidence suggests the existing dwelling complex may have been occupied longer than Betatakin or Keet Seel, having been developed during the Shonto Phase of the Pueblo III Period (AD 1210 to 1255) with occupation continuing into the Tsegi Phase. Inscription House's 77 rooms are of sandstone and limestone masonry, adobe-type bricks containing grass, and jacal construction. Inscription House has small plaza structures, kivas, and a street with controlled access. Other distinguishing features include hand and toe holds, associated rock art, shaped bedrock "tanks" situated alongside a water seep, and several intact roofs. The site is closed to the general public.
- **Other Precontact Sites.** Other smaller habitation and special-use sites associated with Ancestral Puebloan occupation are within the boundaries of Navajo National Monument. Archeological evidence indicates that these locations were occupied as early as AD 100 during the Basketmaker II Period, although the primary period of occupation was during the Tsegi Phase of the Pueblo III Period (AD 1250 to 1300). These sites include Turkey Cave, Kiva Cave, Owl House, and Snake House.





- Museum Collections and Artifacts.** The monument's museum collections consist of more than 160,000 items, including precontact and historic artifacts and objects, natural history specimens, works of art, and archival and manuscript materials (e.g., historic photographs, correspondence, field notes). About 50% of the collection has been cataloged. The collection items have great intrinsic value, but also provide cultural and scientific insight into processes, events, and interactions between people and the environment. The majority of the collections consist of organic and inorganic archeological objects and artifacts excavated from Keet Seel, Inscription House, and Betatakin during the 1930s and 1960s. Because of inadequate on-site museum storage facilities, only about 10% of the collections are stored at the monument; the majority of perishable prehistoric archeological materials, prehistoric and historic ceramics, stone objects, basketry, ethnographic material, and archives are stored off-site at either the NPS Western Archeological and Conservation Center in Tucson or the Museum of Northern Arizona in Flagstaff. Ethnographic material includes Navajo rugs, weaving implements, and jewelry. Items subject to provisions of the Native American Graves Protection and Repatriation Act (NAGPRA), such as human remains, funerary objects, sacred objects, and objects of cultural patrimony, are housed at either the NPS Western Archeological and Conservation Center or the Museum of Northern Arizona. Minor collections of paleontological and zoological specimens including herbarium specimens are stored at the Museum of Northern Arizona. The monument has a small entomological and uncatalogued herbarium collection on-site. Collections are exhibited only at the Navajo National Monument visitor center and Museum of Northern Arizona.
- Cultural Landscape.** The cultural landscape of Navajo National Monument dramatically reflects adaptations made by the Ancestral Puebloan inhabitants to the high desert environment and their innovative use of the area's available natural resources to sustain their agricultural way of life. Patterns of vegetation persist from the period of precontact occupation. Drought-tolerant pinyon-juniper forest is on the canyon rims. The warmer, wetter conditions inside the Tsegi Canyon system supported prehistoric agricultural activities and continue to sustain native vegetation species such as scrub oak, boxelder, and aspen. The minimal level of modern development in the area preserves the views, vistas, and setting of the cliff dwellings and reinforces the cultural landscape's ability to impart a high degree of feeling and association to visitors. In the context of ethnographic landscapes, the monument's cultural and natural resources retain profound importance for traditionally associated tribes and communities and contribute to the perpetuation of their cultural identities. Monument lands and resources also have cultural value for associated tribes as part of the much broader region to which they ascribe traditional significance.

- Continuing Cultural Connections.** For the Navajo, whose reservation lands encompass Navajo National Monument, and the Hopi, Zuni, Navajo, and San Juan Southern Paiute, the monument's resources and lands fundamentally connect them to their respective beliefs and cultural heritage. Other traditionally associated tribes also retain cultural connections to the monument. A strong ethic of stewardship for respecting and protecting the prehistoric sites, canyons, and natural world permeates the tribal communities and has been passed down through generations. The Navajo were thought to have entered the region in the 17th century, if not several hundreds of years earlier according to some traditional accounts. The Navajo have a long tradition of using the monument and adjacent lands for ceremonial and subsistence practices, and local Navajos played important roles in the monument's early history, development, and protection. They continue to collaborate with the National Park Service as stewards of the monument. Various Hopi and Zuni clans trace ancestral origins and associations with particular cliff dwelling sites, and these places figure prominently in their respective migration stories. Members of Hopi clans continue to visit the sites to make offerings and pay homage to their ancestors. The Hopi names for the cliff dwellings are Talastima (Betatakin), Kawestima (Keet Seel), Tsu'ovi (Inscription House). Beginning in the late 1600s and continuing through the 1800s, the San Juan Southern Paiute occupied areas on the Shonto Plateau, and the area of the monument continues to hold significance for modern-day Paiutes.
- Power of Place.** The cliff dwelling sites inspire a broad range of feelings and emotions among visitors. Because those venturing to Betatakin and Keet Seel must take fairly strenuous hikes, the effort required to reach the remote canyon sites accentuates the awe-inspiring experience for visitors both during their treks and upon arriving at their destinations. Participation in ranger-guided interpretive tours broadens visitor awareness and understanding of the sites and the people who built the cliff dwellings and then departed after brief periods of occupation. The sites and their surrounding settings, as well as the sights, sounds, and smells of the natural environment, can be transformative and renewing for many visitors. Visitors often experience deeply personal and spiritual connections to the sites that bridge time and cultures. The limited extent of modern development and intrusions on the setting of the monument further contributes to the sense of stepping back in time. Those hiking on the shorter self-guided overlook trails such as Sandal Trail, Aspen Trail, and Canyon View Trail are also presented with inspiring views that reinforce the monument's power and beauty.



Other Important Resources and Values

Navajo National Monument contains other resources and values that are not fundamental to the purpose of the park and may be unrelated to its significance, but are important to consider in planning processes. These are referred to as “other important resources and values” (OIRV). These resources and values have been selected because they are important in the operation and management of the park and warrant special consideration in park planning.

The following other important resources and values have been identified for Navajo National Monument:

- **Historic Cultural Landscape.** Many of the structures and buildings at Navajo National Monument were built as part of NPS administration and development activities. These include the ramada, ranger station, and maintenance headquarters that date from the 1930s and 1940s. Although determined ineligible for the National Register of Historic Places, the visitor center, campground comfort station, and employee houses were built during the NPS Mission 66 period of design and construction of the 1950s and 1960s. The Ranger Hogan, built between 1950 and 1951, is one of the earliest monument support buildings and was constructed by NPS day labor; it variously has served as a seasonal ranger residence and as a cultural interpretation exhibit where Navajo craftspeople demonstrated traditional rug weaving. The Ranger Hogan embodies elements of traditional Navajo architecture and was determined eligible for the national register. These resources can be considered elements of a historic cultural landscape that along with other structural and interpretive features such as access roads, overlooks, and signage were designed and placed to maximize the visitor experience. As part of the legacy of stewardship at the monument, NPS staff manages and preserves the integrity of these resources regardless of formal national register eligibility or designation.



Interpretive Themes

Interpretive themes are often described as the key stories or concepts that visitors should understand after visiting a park—they define the most important ideas or concepts communicated to visitors about a park unit. Themes are derived from, and should reflect, park purpose, significance, resources, and values. The set of interpretive themes is complete when it provides the structure necessary for park staff to develop opportunities for visitors to explore and relate to all park significance statements and fundamental and other resources and values.

Interpretive themes are an organizational tool that reveal and clarify meaning, concepts, contexts, and values represented by park resources. Sound themes are accurate and reflect current scholarship and science. They encourage exploration of the context in which events or natural processes occurred and the effects of those events and processes. Interpretive themes go beyond a mere description of the event or process to foster multiple opportunities to experience and consider the park and its resources. These themes help explain why a park story is relevant to people who may otherwise be unaware of connections they have to an event, time, or place associated with the park.

The following interpretive themes have been identified for Navajo National Monument:

- Navajo National Monument's spectacular cliff dwellings and unique habitats, embedded in a vast and remote natural landscape, inspire contemplation of our connection to the land—an increasingly rare experience.
- Navajo National Monument's well-preserved cliff dwellings and artifacts attest to the social complexity of 13th-century pueblo life and offer opportunities to explore cultural continuity and change.
- The connection of contemporary Navajo and San Juan Southern Paiute people and Zuni, Hopi, and other Pueblo nations to this place demonstrates the ongoing value of story, tradition, and place in human culture.



Part 2: Dynamic Components

The dynamic components of a foundation document include special mandates and administrative commitments and an assessment of planning and data needs. These components are dynamic because they will change over time. New special mandates can be established and new administrative commitments made. As conditions and trends of fundamental and other important resources and values change over time, the analysis of planning and data needs will need to be revisited and revised, along with key issues. Therefore, this part of the foundation document will be updated accordingly.

Special Mandates and Administrative Commitments

Many management decisions for a park unit are directed or influenced by special mandates and administrative commitments with other federal agencies, state and local governments, utility companies, partnering organizations, and other entities. Special mandates are requirements specific to a park that must be fulfilled. Mandates can be expressed in enabling legislation, in separate legislation following the establishment of the park, or through a judicial process. They may expand on park purpose or introduce elements unrelated to the purpose of the park. Administrative commitments are, in general, agreements that have been reached through formal, documented processes, often through memorandums of agreement. Examples include easements, rights-of-way, arrangements for emergency service responses, etc. Special mandates and administrative commitments can support, in many cases, a network of partnerships that help fulfill the objectives of the park and facilitate working relationships with other organizations. They are an essential component of managing and planning for Navajo National Monument.

For more information about the existing administrative commitments for Navajo National Monument, please see appendix B. There are no special mandates for Navajo National Monument at this time.

Assessment of Planning and Data Needs

Once the core components of part 1 of the foundation document have been identified, it is important to gather and evaluate existing information about the park's fundamental and other important resources and values, and develop a full assessment of the park's planning and data needs. The assessment of planning and data needs section presents planning issues, the planning projects that will address these issues, and the associated information requirements for planning, such as resource inventories and data collection, including GIS data.

There are three sections in the assessment of planning and data needs:

1. analysis of fundamental and other important resources and values
2. identification of key issues and associated planning and data needs
3. identification of planning and data needs (including spatial mapping activities or GIS maps)

The analysis of fundamental and other important resources and values and identification of key issues leads up to and supports the identification of planning and data collection needs.

Analysis of Fundamental Resources and Values

The fundamental resource or value analysis table includes current conditions, potential threats and opportunities, planning and data needs, and selected laws and NPS policies related to management of the identified resource or value.

Fundamental Resource or Value	Cliff Dwellings
Related Significance Statements	Significance statements 1, 2, and 3.
Current Conditions and Trends	<p>Conditions</p> <ul style="list-style-type: none"> • Betatakin. This site is in fair condition. One wall is beginning to lean, and differential fill is stressing the architecture. Rock fall has limited access to areas outside the alcove area. Sounds from groups shouting from overlook areas and loud vehicles approaching the park along the rim on Arizona State Route 564 are reflected off the canyon walls and amplified by the concave alcove, disturbing nesting wildlife and affecting structural stability. • Keet Seel. Rapid downcutting due to erosion, vegetation loss, and feral livestock endangers access to this site, thus hindering preservation activities and visitor and researcher access. • Inscription House. This site is currently closed to the public because of the site's fragility and the rapid erosion of access routes to the site. As a result, preservation activities are difficult. • Other precontact sites (Turkey Cave, Kiva Cave, Owl House, Snake House). Conditions of other precontact sites vary. Each site contributes to a greater understanding of the site as a whole. <p>Trends</p> <ul style="list-style-type: none"> • Betatakin. Illegal entry into this site has increased during the past 20 years. As information about the site has become more widespread, increasingly large numbers of people may become aware as to how the site can be accessed. The lack of a security presence causes concern given the rates of archeological resources crimes at similar sites across the nation. • Keet Seel. Erosion in the gully and surrounding area is causing human remains to become uncovered and will make access to the site increasingly difficult. • Inscription House. Visitor-related impacts are prevented because the site is closed to the public. Lack of access to the site resulting from rapidly increasing downcutting and erosion amplified by vegetation loss make preservation activities difficult. • Other precontact sites (Turkey Cave, Kiva Cave, Owl House, Snake House). The preservation needs for each of the other precontact sites varies; however, all require preservation work.
Threats and Opportunities	<p>Threats</p> <ul style="list-style-type: none"> • Universal Threats <ul style="list-style-type: none"> • Vandalism in the form of graffiti and attempts to remove objects from the site are concerns at any archeological site. However, the isolated location of the monument and its lack of security make the threat of vandalism and theft very high. • Looting and other site disturbances occur at Betatakin and Keet Seel. • Rodents are present at all sites, as indicated by displaced corn cobs. Both digging and relocation of existing in situ artifacts by rodents weaken structure walls and undermine the provenance of objects at the sites, and, as a result, opportunities for gathering meaningful information about the sites and the people who were there are reduced. • Invasive plant species are covering sites and cause degradation of architecture. • Hand and toe holds are eroding. • Wind erosion occurs at all three cliff dwellings. • Improper preservation work in the past, including inappropriate stabilization techniques in the 1930s, threatens the condition of site resources. • Increased fire frequency projected under climate change increases risk of spalling.

Fundamental Resource or Value	Cliff Dwellings
Threats and Opportunities	<p>Threats (continued)</p> <ul style="list-style-type: none"> • Betatakin <ul style="list-style-type: none"> • Animals such as cats and feral livestock can come near the site because there is no fence to keep them out. Digging, trampling, and grazing degrade primary and surrounding resources. • Rock spalling from sheltering alcove poses a threat to both the site and visitors. • Keet Seel <ul style="list-style-type: none"> • Erosion at the site threatens access to the site. Climate change is exacerbating erosion. • Grazing animals spread invasive seeds to the site. • Erosion of the midden increases the possibility of archeological information being lost. • Inscription House <ul style="list-style-type: none"> • Erosion threatens the site, particularly the lower terraces, and increases the difficulty of accessing the site for preservation or for visitor understanding. • The lack of revegetation after removal of invasive plant species leaves the site susceptible to reestablishment of invasive plants. • Difficulty in accessing the site makes it hard to monitor the site and to maintain an NPS presence. <p>Opportunities</p> <ul style="list-style-type: none"> • Tracking who and what enters the sites with the use of remote cameras or trail cameras would aid in understanding what management actions could be taken to avoid illegal entry or wildlife / domestic animal trampling. • Determining visitor patterns would aid in understanding the effects visitors may have on the sites. • Recommendations made as part of previous planning efforts should be implemented in order to improve conditions at the sites. • An understanding of the discovery of human remains and associated materials, including the requirements of the Native American Graves Protection and Repatriation Act of 1990, should be increased among monument staff and tribes. • The gap between what people see in the field and what is communicated back to park management should be decreased. Issues arising in the field should be articulated to management so that appropriate actions can be taken. • Allowing visitors to see and understand the sites from afar could be developed using models or other materials. Laser scanning and LiDAR data could be used. • Erosion at the sites could be proactively slowed through the introduction of native species.
Data and/or GIS Needs	<ul style="list-style-type: none"> • Erosion analysis. • Architectural mapping. • GIS data. • Archival legacy information. • Climate change vulnerability assessment. • Ethnographic overview and assessment (including oral histories). • Data collection for Inscription House. • Safety assessment for accessing sites. • Acoustical impact analysis. • Invasive species inventory. • Cultural landscape inventory for three cliff dwelling sites.

Fundamental Resource or Value	Cliff Dwellings
Planning Needs	<ul style="list-style-type: none"> • Cultural landscape report for three cliff dwelling sites. • Archeological resources management plan(s). • Self-evaluation and transition plan for accessibility. • Resource stewardship strategy. • Emergency data recovery plan.
Laws, Executive Orders, and Regulations That Apply to the FRV, and NPS Policy-level Guidance	<p>Laws, Executive Orders, and Regulations That Apply to the FRV</p> <ul style="list-style-type: none"> • American Indian Religious Freedom Act of 1978 • Antiquities Act of 1906 • Archeological and Historic Preservation Act of 1974 • Archaeological Resources Protection Act of 1979 • Federal Noxious Weed Act of 1974, as amended • Historic Sites Act of 1935 • Museum Properties Management Act of 1955, as amended • National Historic Preservation Act of 1966, as amended • National Invasive Species Act • Native American Graves Protection and Repatriation Act of 1990 • Paleontological Resources Preservation Act of 2009 • Executive Order 11593, "Protection and Enhancement of the Cultural Environment" • Executive Order 13007, "Indian Sacred Sites" • Executive Order 13112, "Invasive Species" • "Curation of Federally-Owned and Administered Archaeological Collections" (36 CFR 79) • "Protection of Historic Properties" (36 CFR 800) • Secretarial Order 3289, "Addressing the Impacts of Climate Change on America's Water, Land, and Other Natural and Cultural Resources" <p>NPS Policy-level Guidance (NPS Management Policies 2006 and Director's Orders)</p> <ul style="list-style-type: none"> • NPS Management Policies 2006 (chapter 5) "Cultural Resource Management" • NPS Management Policies 2006 (chapter 7) "Interpretation and Education" • NPS Management Policies 2006 (chapter 8) "Use of the Parks" • NPS Management Policies 2006 (chapter 9) "Park Facilities" • Director's Order 6: <i>Interpretation and Education</i> • Director's Order 24: <i>NPS Museum Collections Management</i> • Director's Order 28: <i>Cultural Resource Management</i> • Director's Order 28A: <i>Archeology</i> • NPS Museum Handbook, parts I, II, and III • <i>The Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation</i>

Fundamental Resource or Value	Museum Collections and Artifacts
Related Significance Statements	Significance statements 1 and 3.
Current Conditions and Trends	<p>Conditions</p> <ul style="list-style-type: none"> • Reporting on collection locations is done annually. • The majority of the collection is held at the Museum of Northern Arizona. Parts of the collection are stored at other repositories: University of New Mexico, Museum of Southwestern Biology; Deaver Herbarium at Northern Arizona University; University of Arizona Natural History Museum (Biology Building); Casa Grande Ruins National Monument; Glen Canyon National Recreation Area; Hopi Cultural Center; Hubbell Trading Post National Historic Site; Natural Bridges National Monument; NPS Western Archeological and Conservation Center; Wupatki National Monument. • The backlog of artifacts and items to be cataloged is considerable. <p>Trends</p> <ul style="list-style-type: none"> • The off-site location of the collections makes it difficult for monument staff to obtain information on the collections. • Visitor center displays are being updated and potentially expanded so that additional or different museum collection items can be displayed.
Threats and Opportunities	<p>Threats</p> <ul style="list-style-type: none"> • It is difficult to understand the full scope of the monument's museum collections because a clear record of all of the items and their locations does not exist. <p>Opportunities</p> <ul style="list-style-type: none"> • Many of the items have not yet been interpreted, and both a basic understanding and a higher level of interpretation of each item would promote stewardship of the collections. • In-house transitional objects and archives should be assessed and cataloged to ensure their proper care. • Museum exhibits currently on display at the monument should be updated so as to better communicate the importance of the objects and this place to visitors. • Objects should be made accessible to both on-site and off-site visitors through the use of virtual exhibits. • Public information brochures and other materials should be updated to include information about the collections. • The NAGPRA notice of inventory completion should be finalized in order to satisfy legal requirements. • Collections should be housed at one location insofar as appropriate. There may be some benefit to housing the collections at multiple locations; however, only if monument staff better understand where collection items are stored can they improve museum management accountability, protection, and use of museum objects. • Agreements with the various repositories should be investigated and updated as necessary to ensure that objects are curated appropriately. • Lessons can be learned by investigating and interpreting, where appropriate, the storage history of objects at the repositories. • Curators and researchers associated with the museum collections should be interviewed because their stories may suggest opportunities for partnerships.
Data and/or GIS Needs	<ul style="list-style-type: none"> • Archival legacy information. • Ethnographic overview and assessment (including oral histories). • Updated scope of collections statement.

Fundamental Resource or Value	Museum Collections and Artifacts
Planning Needs	<ul style="list-style-type: none"> • Exhibits plan. • Collections management plan. • Integrated pest management plan.
Laws, Executive Orders, and Regulations That Apply to the FRV, and NPS Policy-level Guidance	<p>Laws, Executive Orders, and Regulations That Apply to the FRV</p> <ul style="list-style-type: none"> • American Indian Religious Freedom Act of 1978 • Antiquities Act of 1906 • Archeological and Historic Preservation Act of 1974 • Archaeological Resources Protection Act of 1979 • Museum Properties Management Act of 1955, as amended • National Historic Preservation Act of 1966, as amended • Native American Graves Protection and Repatriation Act of 1990 • Paleontological Resources Preservation Act of 2009 • Executive Order 13175, "Consultation and Coordination with Indian Tribal Governments" • Executive Order 11593, "Protection and Enhancement of the Cultural Environment" • "Curation of Federally-Owned and Administered Archaeological Collections" (36 CFR 79) • "Protection of Historic Properties" (36 CFR 800) <p>NPS Policy-level Guidance (NPS <i>Management Policies</i> 2006 and Director's Orders)</p> <ul style="list-style-type: none"> • NPS <i>Management Policies</i> 2006 (§2.3.1.4) "Science and Scholarship" • NPS <i>Management Policies</i> 2006 (§4.1) "General Management Concepts" • NPS <i>Management Policies</i> 2006 (§4.1.4) "Partnerships" • NPS <i>Management Policies</i> 2006 (§4.2) "Studies and Collections" • NPS <i>Management Policies</i> 2006 (§4.4.1) "General Principles for Managing Biological Resources" • NPS <i>Management Policies</i> 2006 (chapter 5) "Cultural Resource Management" • NPS <i>Management Policies</i> 2006 (§5.1) "Research" • NPS <i>Management Policies</i> 2006 (chapter 7) "Interpretation and Education" • NPS <i>Management Policies</i> 2006 (§8.10) "Natural and Cultural Studies, Research, and Collection Activities" • Director's Order 6: <i>Interpretation and Education</i> • Director's Order 24: <i>NPS Museum Collections Management</i> • Director's Order 28: <i>Cultural Resource Management</i> • Director's Order 28A: <i>Archeology</i>, 4A(3), "Native American Graves Protection and Repatriation Act" • Director's Order 71A: <i>Relationship with American Indian Tribes</i> • NPS <i>Museum Handbook</i>, parts I, II, and III • NPS-75 <i>Natural Resources Inventory and Monitoring Guideline</i> • NPS <i>Natural Resource Management Reference Manual</i> 77





Fundamental Resource or Value	Cultural Landscape
Related Significance Statements	Significance statements 1, 2, 3, and 4.
Current Conditions and Trends	<p>Conditions</p> <ul style="list-style-type: none">• Both historic and modern trails are present within cultural landscapes.• Many of the cultural landscapes are accessed or visible from roads that are not maintained and cross private property.• Administrative areas managed by the National Park Service are fenced off in order to decrease illegal entry of visitors or entry by livestock. <p>Trends</p> <ul style="list-style-type: none">• Erosion continues to shape the landscape.• As a result of both climate change and a legacy of fire suppression policy, groundcover throughout the monument is changing.• The increase in recreational tourism is potentially displacing heritage tourism.

Fundamental Resource or Value	Cultural Landscape
Threats and Opportunities	<p>Threats</p> <ul style="list-style-type: none"> • Feral livestock in the canyon spread invasive plant species. • Development on neighboring lands could impact visual resources both during the day and night. • Noise from nearby activities and development could impact the integrity of the cultural landscape and people's experience of that landscape. • Vandalism and theft at the cliff dwellings are changing the landscape and threaten the integrity of those sites. • An increase in jeep tours (4x4 vehicles) in the canyon would both introduce a modern use and hasten damage from erosion, neither of which is in keeping with the cultural landscape. Vehicle tours have sudden effects on soundscapes, visual resources, and visitor experience. • Scenic views are sometimes obscured by pollution-caused haze but visibility is improving. Average natural visual range is reduced from about 175 miles (without the effects of pollution) to about 120 miles because of pollution at the park. The visual range is reduced to below 90 miles on high pollution days. At night, air pollution scatters artificial lights, increasing the effect of light pollution on the night sky. <p>Opportunities</p> <ul style="list-style-type: none"> • A dark night sky designation should be pursued, and monument staff should work with local communities to adopt night sky friendly practices. • Monument staff should pursue World Heritage Designation together with staff from Canyon de Chelly National Monument. • Monument staff should partner with local communities, the Bureau of Indian Affairs, and the Canyon Coalition to determine how to address problems resulting from livestock in the canyon. • Partner with tourism departments of the Navajo Nation to encourage tourism that is in keeping with the purpose of Navajo National Monument. • Partner with nearby landowners and the Navajo Nation to increase awareness and protection of the monument cultural landscape and scenic views. • Archeological investigations and/or other cultural resource research could be pursued to support the possibility that particular places and sightlines at the monument were used by early canyon residents for long-distance communication with outlying points, or for strategic hunting/defensive purposes within the canyons. The presence of culturally important viewsheds or sightlines could be incorporated into interpretive programs.
Data and/or GIS Needs	<ul style="list-style-type: none"> • Cultural landscape inventory for three cliff dwelling sites. • Cultural landscape inventory for administrative district. • GIS data. • Determination of eligibility statements for historic structures. • LiDAR data. • Erosion analysis. • Historic American Buildings Survey (HABS) / Historic American Engineering Record (HAER) surveys. • Ethnographic overview and assessment (including oral histories). • Baseline inventory of flora and fauna and avian resources. • Threatened and endangered species inventories. • Visual resource inventory. • Additional acoustic data (road related). • Additional night sky data and associated final report. • Climate change vulnerability assessment.

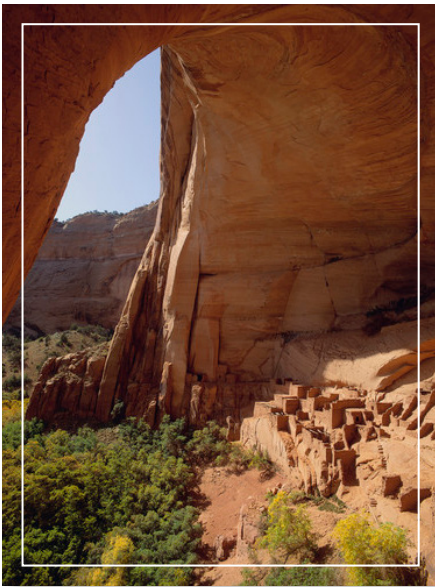
Fundamental Resource or Value	Cultural Landscape
Planning Needs	<ul style="list-style-type: none"> • Cultural landscape report for administrative district. • Cultural landscape report for three cliff dwelling sites. • Resource stewardship strategy. • Monument lighting plan. • Visual resource management plan.
Laws, Executive Orders, and Regulations That Apply to the FRV, and NPS Policy-level Guidance	<p>Laws, Executive Orders, and Regulations That Apply to the FRV</p> <ul style="list-style-type: none"> • American Indian Religious Freedom Act of 1978 • Antiquities Act of 1906 • Archeological and Historic Preservation Act of 1974 • Archaeological Resources Protection Act of 1979 • Clean Air Act • Federal Noxious Weed Act of 1974, as amended • Historic Sites Act of 1935 • National Historic Preservation Act of 1966, as amended • National Invasive Species Act • Native American Graves Protection and Repatriation Act of 1990 • Executive Order 11593, "Protection and Enhancement of the Cultural Environment" • Executive Order 13007, "Indian Sacred Sites" • Executive Order 13112, "Invasive Species" • "Curation of Federally-Owned and Administered Archaeological Collections" (36 CFR 79) • "Protection of Historic Properties" (36 CFR 800) • Secretarial Order 3289, "Addressing the Impacts of Climate Change on America's Water, Land, and Other Natural and Cultural Resources" <p>NPS Policy-level Guidance (NPS Management Policies 2006 and Director's Orders)</p> <ul style="list-style-type: none"> • NPS Management Policies 2006 (§1.4) "Park Management" • NPS Management Policies 2006 (§1.6) "Cooperative Conservation Beyond Park Boundaries" • NPS Management Policies 2006 (§3.1) "General" • NPS Management Policies 2006 (§4.10) "Lightscape Management" • NPS Management Policies 2006 (§4.7) "Air Resource Management" • NPS Management Policies 2006 (§4.9) "Soundscape Management" • NPS Management Policies 2006 (chapter 5) "Cultural Resource Management" • NPS Management Policies 2006 (§8.10) "Natural and Cultural Studies, Research, and Collection Activities" • Director's Order 24: <i>NPS Museum Collections Management</i> • Director's Order 28: <i>Cultural Resource Management</i> • Director's Order 28A: <i>Archeology</i> • Director's Order 47: <i>Soundscape Preservation and Noise Management</i> • <i>The Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation</i> • NPS Natural Resource Management Reference Manual 77



Fundamental Resource or Value	Continuing Cultural Connections
Related Significance Statements	Significance statements 2 and 3.
Current Conditions and Trends	<p>Conditions</p> <ul style="list-style-type: none"> • Monument staff regularly attends chapter house meetings for the Navajo Nation and coordinates with tourism department. • Relationships with local tribes are good. • The local community has a positive view of the monument and tribes come to the monument to participant in traditional plant collections. • Communication with the tribal historic preservation officer is good. <p>Trends</p> <ul style="list-style-type: none"> • The number of local people who visit the monument to collect traditional plants and visit special places is declining, in part because elderly community members are passing away.
Threats and Opportunities	<p>Threats</p> <ul style="list-style-type: none"> • Legacy and knowledge of traditional practices is being lost as community members age and pass away. <p>Opportunities</p> <ul style="list-style-type: none"> • As a result of economic depression in local communities, people are leaving the area. Heritage-focused tourism projects would involve and engage partners in preserving the cultural and natural values from which tourism and the local economy have historically benefitted and which provide incentives for not only preservation but for families to find value and heighten conservation-compatible opportunities in the existing area. • Monument staff could host training sessions and demonstrations on preservation and other efforts that could support job possibilities for local community members. • The monument could partner with local communities to support cultural resource knowledge and distance learning programs. • Oral histories of previous monument employees could help to inform management decisions that affect how resources are preserved and protected at the monument. • Oral histories could be gathered from local community members and these histories could be shared with the local communities to foster knowledge of traditional knowledge and practices. • Heritage-focused tourism projects could involve and engage partners in preserving the cultural and natural values from which tourism and the local economy have historically benefitted.

Fundamental Resource or Value	Continuing Cultural Connections
Data and/or GIS Needs	<ul style="list-style-type: none"> • Cultural landscape inventory for three cliff dwelling sites. • Ethnographic overview and assessment (including oral histories). • Traditional cultural property determination. • Participatory GIS mapping. • Update administrative history.
Planning Needs	<ul style="list-style-type: none"> • Community strategic plan. • Cultural landscape report for three cliff dwelling sites
Laws, Executive Orders, and Regulations That Apply to the FRV, and NPS Policy-level Guidance	<p>Laws, Executive Orders, and Regulations That Apply to the FRV</p> <ul style="list-style-type: none"> • American Indian Religious Freedom Act of 1978 • Archaeological Resources Protection Act of 1979 • Museum Properties Management Act of 1955, as amended • Native American Graves Protection and Repatriation Act of 1990 • Rehabilitation Act of 1973 • Executive Order 11593, "Protection and Enhancement of the Cultural Environment" • Executive Order 13007, "Indian Sacred Sites" • Executive Order 13175, "Consultation and Coordination with Indian Tribal Governments" • "Curation of Federally-Owned and Administered Archaeological Collections" (36 CFR 79) <p>NPS Policy-level Guidance (NPS Management Policies 2006 and Director's Orders)</p> <ul style="list-style-type: none"> • NPS Management Policies 2006 (§1.6) "Cooperative Conservation Beyond Park Boundaries" • NPS Management Policies 2006 (§2.3.1.4) "Science and Scholarship" • NPS Management Policies 2006 (§4.1) "General Management Concepts" • NPS Management Policies 2006 (§4.1.4) "Partnerships" • NPS Management Policies 2006 (§4.2) "Studies and Collections" • NPS Management Policies 2006 (chapter 5) "Cultural Resource Management" • NPS Management Policies 2006 (§8.10) "Natural and Cultural Studies, Research, and Collection Activities" • Director's Order 28: <i>Cultural Resource Management</i> • Director's Order 28A: <i>Archeology</i> • Director's Order 71A: <i>Relationship with American Indian Tribes</i>





Fundamental Resource or Value	Power of Place
Related Significance Statements	Significance statements 2 and 4.
Current Conditions and Trends	<p>Conditions</p> <ul style="list-style-type: none"> • The remoteness and ability to experience large tracts of land that have no modern developments is a valuable part of the visitor experience at the monument. • Visitors from all over the world come to the monument—50% of visitors are from foreign countries. • Many resources of the monument are difficult to access unless visitors are able and willing to traverse long distances. • Visitors can hike to Keet Seel and Betatakin from the visitor center. On these hikes visitors interact with monument staff and are provided with a high-quality guided experience, particularly at Betatakin. • At the visitor center, visitors can see exhibits and watch demonstrations and the monument film. • Inscription House has been closed to the public for the past 30 years, and, because of the instability of the site, there are no plans to open it to the public. • The Sunset View Campground is open year-round and Canyon View Campground is open seasonally. School groups commonly stay during the weekends and both campgrounds are often full during holiday weekends. • Visitors entering the backcountry are provided a briefing and orientation that includes safety information. <p>Trends</p> <ul style="list-style-type: none"> • The monument is increasingly used for healthy recreation by local community members. • Visitors tend to be younger than those in the past, and many come to the monument for recreational opportunities. • Many visitors are from the local area. School groups visit the monument. Outreach and presentations at local schools have increased the number of school groups. • More tour buses have been entering the monument in recent years. These tours spend several hours at the monument and appear to be part of a larger tour itinerary. • The number of requests for special use permits for events such as weddings has declined in recent years.

Fundamental Resource or Value	Power of Place
Threats and Opportunities	<p>Threats</p> <ul style="list-style-type: none"> • Off-road bicycle use is causing resource damage and raising safety concerns. • Erosion is resulting in downcutting in front of Keet Seel that threatens future access to the site. • Some visitors pick up pot sherds and other materials from archeological sites, although rangers provide education to visitors to prevent this loss. • Coal-fired power plants, vehicle exhaust, industrial processes, fire, and dust are contributors to air quality impacts regionally. Power plant and vehicle exhaust emission have reduced emissions significantly in the past decade to reduce ozone and fine particles, and these reductions have also improved air quality conditions in the monument. • Ground-level ozone sometimes reaches levels that can make breathing difficult for sensitive groups including children, the elderly, and people with existing health problems. • Development on neighboring lands threatens the ability of visitors to experience the canyon without modern intrusions. <p>Opportunities</p> <ul style="list-style-type: none"> • Trails are showing signs of impact from visitor use. Trail maintenance is required to allow continued access and preservation activities. • Social media could be used to reach new visitors and prepare visitors for the types of experiences they will find at the monument. • Accessibility to the sites could be improved by developing models or other materials for visitors who cannot physically reach the sites. • Evening and other interpretive programs that use the amphitheater should be developed. • Cultural demonstration programs at sites such as the Hogan and the historic corral should be developed. • Video showing the trail to Keet Seel could help visitors be advised of the magnitude of the trek to that site and would allow the site to be shared with visitors who do not want to or cannot make the journey. • Monument staff should share their stories on the monument's website. From these stories, visitors could gain a sense of what monument staff do and what the monument means to them. • Partner with nearby landowners and the Navajo Nation to increase awareness and protection of the monument cultural landscape and scenic views.
Data and/or GIS Needs	<ul style="list-style-type: none"> • Ethnographic overview and assessment (including oral histories). • Climate change vulnerability assessment. • Acoustical impact analysis. • Safety assessment for accessing the sites. • Visitor use and experience surveys. • Visual resource inventory. • HABS/HAER survey. • Cultural landscape inventory for three cliff dwelling sites.
Planning Needs	<ul style="list-style-type: none"> • Cultural landscape report for three cliff dwelling sites. • Self-evaluation and transition plan for accessibility. • Design concept plan for the amphitheater. • Monument lighting plan. • Visual resource management plan.

Fundamental Resource or Value	Power of Place
<p>Laws, Executive Orders, and Regulations That Apply to the FRV, and NPS Policy-level Guidance</p>	<p>Laws, Executive Orders, and Regulations That Apply to the FRV</p> <ul style="list-style-type: none"> • American Indian Religious Freedom Act of 1978 • Antiquities Act of 1906 • Archeological and Historic Preservation Act of 1974 • Archaeological Resources Protection Act of 1979 • Clean Air Act • Clean Water Act • Endangered Species Act of 1973, as amended • Federal Cave Resources Protection Act (1988) • Federal Noxious Weed Act of 1974, as amended • Historic Sites Act of 1935 • Museum Properties Management Act of 1955, as amended • National Historic Preservation Act of 1966, as amended • National Invasive Species Act • Native American Graves Protection and Repatriation Act of 1990 • Paleontological Resources Preservation Act of 2009 • Executive Order 13112, "Invasive Species" • Executive Order 11593, "Protection and Enhancement of the Cultural Environment" • Executive Order 13007, "American Indian Sacred Sites" • Executive Order 13175, "Consultation and Coordination with Indian Tribal Governments" • "Curation of Federally-Owned and Administered Archaeological Collections" (36 CFR 79) • "Protection of Historic Properties," 36 CFR 800 <p>NPS Policy-level Guidance (NPS <i>Management Policies</i> 2006 and Director's Orders)</p> <ul style="list-style-type: none"> • NPS <i>Management Policies</i> 2006 (§1.6) "Cooperative Conservation Beyond Park Boundaries" • NPS <i>Management Policies</i> 2006 (§4.1) "General Management Concepts" • NPS <i>Management Policies</i> 2006 (§4.1.4) "Partnerships" • NPS <i>Management Policies</i> 2006 (§4.7) "Air Resource Management" • NPS <i>Management Policies</i> 2006 (§4.9) "Soundscape Management" • NPS <i>Management Policies</i> 2006 (§4.10) "Lightscape Management" • NPS <i>Management Policies</i> 2006 (chapter 5) "Cultural Resource Management" • NPS <i>Management Policies</i> 2006 (chapter 7) "Interpretation and Education" • NPS <i>Management Policies</i> 2006 (chapter 8) "Use of the Parks" • NPS <i>Management Policies</i> 2006 (chapter 9) "Park Facilities" • Director's Order 28: <i>Cultural Resource Management</i> • Director's Order 47: <i>Soundscape Preservation and Noise Management</i> • Director's Order 71A: <i>Relationship with American Indian Tribes</i> • NPS <i>Natural Resource Management Reference Manual</i> 77

Analysis of Other Important Resources and Values

Other Important Resource or Value	Historic Cultural Landscape
Current Conditions and Trends	<p>Conditions</p> <ul style="list-style-type: none"> The historic cultural landscape includes the relatively modern structures that are part of the monument. This landscape is considered to be unique by NPS historic architects. Cecil B. Doty and Charles Richie were the main landscape architects who designed the visitor experience and sequence of buildings at the monument, and their work at the monument is remarkably intact. The landscape was very carefully designed to blend in with the natural environment and to not appear out of place. Climate change continues to be a factor for cultural and natural resources preservation needs. <p>Trends</p> <ul style="list-style-type: none"> Historic structures are used by NPS staff for offices and work space, and other structures are not being used.
Threats and Opportunities	<p>Threats</p> <ul style="list-style-type: none"> Water is damaging the barn due to soil piled against the base of the building. Soils in contact with the building siding regularly draw water up into the building and cause maintenance problems. Monument staff must ensure that stray animals, such as dogs, are not in inappropriate places. Stray animals prey on native species. A lack of guidance for maintaining historic structures threatens their integrity, and routine maintenance and cyclic maintenance activities could unknowingly impact historic structural features and character-defining elements. Damage to windows and structures has resulted from looting and vandalism in the monument. Rodents and other pest infestations in some of the historic buildings threaten their integrity. Wildland and structural fires pose significant threats to the historic cultural landscape. The ability of both monument staff and local fire departments to respond to fires is very limited. Electrical work should be done on some buildings to decrease the likelihood of structural fires. Wildfire threats are likely to be exacerbated by climate change. The importance of the structures and landscape components is not understood by monument visitors. <p>Opportunities</p> <ul style="list-style-type: none"> A community/cultural center at the monument where cultural demonstrations could be held would help educate local community members and visitors alike. Use the red hogan as a cultural demonstration space. Develop and alter existing trails so that they better blend in with the local landscape. Reestablish the use of intended paint schemes at the monument. This would be an opportunity for monument staff to research and understand the history of the historic landscape. Partner with local communities to provide training and other preparations for fires and fire prevention. Partner with the Peabody Mine and the Bureau of Indian Affairs on fire-related issues. Partner with universities to use the monument as a teaching environment and subject. Explore and pursue sustainable energy alternatives such as photovoltaic panels on roofs and horizontal turbines for the monument and local community.

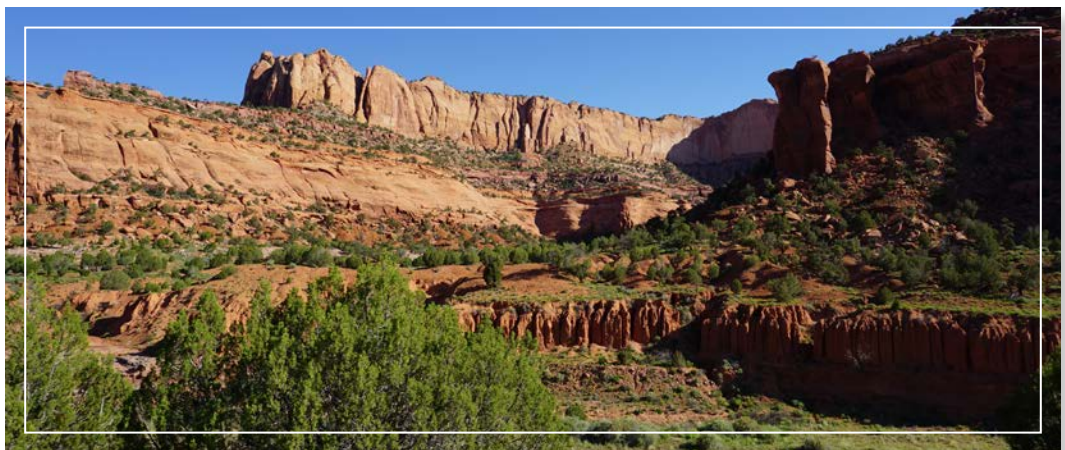
Other Important Resource or Value	Historic Cultural Landscape
Data and/or GIS Needs	<ul style="list-style-type: none"> • GIS data. • Cultural landscape inventory for administrative district. • Determination of eligibility statements for historic structures. • HABS/HAER surveys. • Update administrative history. • Climate change vulnerability assessment. • Update List of Classified Structures database.
Planning Needs	<ul style="list-style-type: none"> • Cultural landscape report for administrative district. • Self-evaluation and transition plan for accessibility. • Community strategic plan. • Historic structures report. • Monument lighting plan. • Integrated pest management plan.
Laws, Executive Orders, and Regulations That Apply to the OIRV, and NPS Policy-level Guidance	<p>Laws, Executive Orders, and Regulations That Apply to the OIRV</p> <ul style="list-style-type: none"> • Antiquities Act of 1906 • Historic Sites Act of 1935 • Museum Properties Management Act of 1955, as amended • National Historic Preservation Act of 1966, as amended • Executive Order 11593, "Protection and Enhancement of the Cultural Environment" • "Protection of Historic Properties" (36 CFR 800) • Secretarial Order 3289, "Addressing the Impacts of Climate Change on America's Water, Land, and Other Natural and Cultural Resources" <p>NPS Policy-level Guidance (NPS Management Policies 2006 and Director's Orders)</p> <ul style="list-style-type: none"> • NPS <i>Management Policies 2006</i> (chapter 5) "Cultural Resource Management" • NPS <i>Management Policies 2006</i> (chapter 7) "Interpretation and Education" • NPS <i>Management Policies 2006</i> (chapter 8) "Use of the Parks" • NPS <i>Management Policies 2006</i> (chapter 9) "Park Facilities" • NPS <i>Management Policies 2006</i> (chapter 10) "Commercial Visitor Services" • Director's Order 6: <i>Interpretation and Education</i> • Director's Order 24: <i>NPS Museum Collections Management</i> • Director's Order 28: <i>Cultural Resource Management</i> • Director's Order 42: <i>Accessibility for Visitors with Disabilities in NPS Programs, Facilities, and Services</i> • Director's Order 48A: <i>Concession Management</i> • Director's Order 18: <i>Wildland Fire Management</i> • NPS <i>Natural Resource Management Reference Manual 77</i> • NPS <i>Reference Manual 18: Wildland Fire Management</i>

Identification of Key Issues and Associated Planning and Data Needs

This section considers key issues to be addressed in planning and management and therefore takes a broader view over the primary focus of part 1. A key issue focuses on a question that is important for a park. Key issues often raise questions regarding park purpose and significance and fundamental and other important resources and values. For example, a key issue may pertain to the potential for a fundamental or other important resource or value in a park to be detrimentally affected by discretionary management decisions. A key issue may also address crucial questions that are not directly related to purpose and significance, but which still affect them indirectly. Usually, a key issue is one that a future planning effort or data collection needs to address and requires a decision by NPS managers.

The following are key issues for Navajo National Monument and the associated planning and data needs to address them:

- **Safety and Training.** Navajo National Monument is in a remote part of northern Arizona, and the cliff dwellings fundamental to the monument are in the backcountry, making them even more difficult to access. For monument staff, this remoteness poses specific challenges because they often must complete duties without backup. The monument has a backcountry management plan aimed at addressing these safety concerns. Training, field exercises, and agreements with neighboring landowners and emergency response partners are needed to implement this plan fully.
Associated planning and data needs:
 - GIS/ LiDAR data
 - Safety assessment for accessing sites
- **Accessibility.** The remote nature of the monument and its resources results in some visitors not being able to experience the cliff dwellings and surrounding landscape directly. Further, the rough terrain that must be traversed to reach the sites results in some visitors not feeling comfortable to hike to them. Interactive displays, videos, and online materials are needed to effectively share the important stories about the monument with audiences near and far. Accessibility directly influences how both local residents and visitors become stewards of the monument.
Associated planning and data needs:
 - Self-evaluation and transition plan for accessibility
 - Exhibits plan
 - Architectural mapping
 - GIS/ LiDAR data
 - Visitor use and experience surveys



- **Coordination with Navajo Nation.** The Navajo Nation is a critical partner for the monument. The monument's three parcels are located in a patchwork of individual landowners within the Navajo Nation. Many of the critical landscapes associated with the specific cliff dwellings are not on NPS-managed lands. In order to preserve and protect these critical landscapes and the resources they hold, meaningful and effective collaborations with local residents and the larger region constantly must be pursued and cultivated, particularly concerning external development. Many issues the monument faces, particularly light, air, and sound pollution, need to be addressed on a regional scale, and therefore these partnerships are vital.

Associated planning and data needs:

- Community strategic plan
 - Monument lighting plan
 - Visitor use and experience surveys
 - Ethnographic overview and assessment
 - Oral histories
 - Acoustical impact analysis
 - Additional acoustic data (road related)
 - Visual resource inventory
 - Participatory GIS mapping
 - Visual resource management plan
- **Climate Change.** In recent years erosion near the cliff dwellings has resulted in dramatic downcutting near the cliff dwellings. Although erosion is a natural process, the effects of climate change have the potential to exponentially increase the effects of erosion, and the very resources for which the monument was established are threatened. Work needs to be done with both the Navajo Nation and other federal agencies to identify effective strategies to combat erosion in key areas. Climate change considerations would be incorporated as appropriate into the following associated planning and data needs.

Associated planning and data needs:

- Cultural landscape report for three cliff dwelling sites
- Archeological resources management plan(s)
- Resource stewardship strategy
- Emergency data recovery plan
- Integrated pest management plan
- Erosion analysis
- Architectural mapping
- Archeological site assessment and site condition assessment
- Invasive species inventory
- Climate change vulnerability assessment

Planning and Data Needs

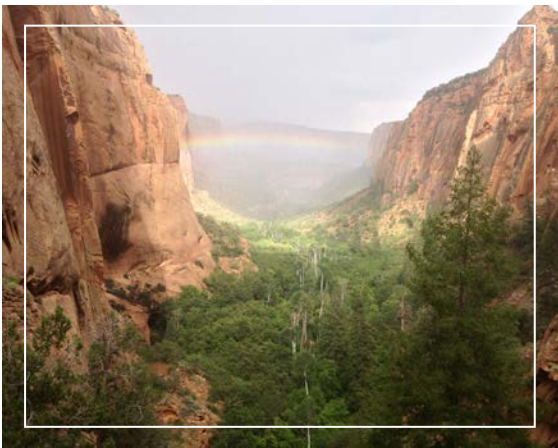
To maintain connection to the core elements of the foundation and the importance of these core foundation elements, the planning and data needs listed here are directly related to protecting fundamental resources and values, park significance, and park purpose, as well as addressing key issues. To successfully undertake a planning effort, information from sources such as inventories, studies, research activities, and analyses may be required to provide adequate knowledge of park resources and visitor information. Such information sources have been identified as data needs. Geospatial mapping tasks and products are included in data needs.

Items considered of the utmost importance were identified as high priority, and other items identified, but not rising to the level of high priority, were listed as either medium- or low-priority needs. These priorities inform park management efforts to secure funding and support for planning projects.

Planning Needs – Where A Decision-Making Process Is Needed			
Related to an FRV, OIRV, or Key Issue?	Planning Need	Priority (H, M, L)	Notes
Cultural Landscape, Historic Cultural Landscape	Cultural landscape report for administrative district	H	The administrative district of the monument includes many sensitive resources that do not have plans for management or preservation in place. This part of the monument has not received much attention in terms of preservation and is susceptible to being changed or inadvertently damaged due to the heavy use by monument staff. The report would include a comprehensive assessment of landscapes and architectural resources as well as power of place and visitor experience and would integrate climate change concerns as appropriate. As part of this effort previous development concept plans for the previous operations area (including the 1950s Hogan, horse corral, and barn) would need to be considered. Signage recommendations resulting from the assessment could form part of a future comprehensive sign and wayside exhibit plan.
Cliff Dwellings, Cultural Landscape, Continuing Cultural Connections, and Power of Place	Cultural landscape report for three cliff dwelling sites'	H	This report would provide an overarching understanding of the three cliff dwelling sites as well as specific management strategies. It would provide long-term guidance for the sites that would result in consistent actions being taken over time and would integrate climate change concerns where relevant. This resource is directly linked to the purpose, significance, and fundamental resources and values of the monument and therefore has high priority. For Inscription house specifically, the difficulty of accessing this site has caused it to receive less attention than the two other dwellings, therefore, making it a priority to develop preservation strategies for it.
Cliff Dwellings, Key Issue	Archeological resources management plan(s)	H	Either one comprehensive or three individual site condition assessment plans are needed for the three cliff dwellings. This plan would articulate the preservation needs for each site and management actions to protect these fundamental resources and identification of long-term management strategies and would integrate climate change concerns where relevant. It would be based on the cultural landscape reports but would provide guidance for 20+ years. The plan could address architectural preservation, rock art and middens, and climate response and stabilization strategies and would address key issues such as degradation caused by erosion and inadvertent discoveries relating to the Native American Graves Protection and Repatriation Act.
Cliff Dwellings, Power of Place, Historic Cultural Landscape, Key Issue	Self-evaluation and transition plan for accessibility	H	The three cliff dwellings and other resources that are integral to the fundamental resources and values of the monument are not accessible to many visitors. This plan would identify ways both to bring people to the resources where appropriate and to bring the resources to people. Increasing the ability for more visitors to appreciate the monument would also foster stewardship.
Cultural Landscape, Power of Place, Key Issue	Visual resource management plan	H	This plan would use the visual resource inventory as a baseline for developing goals, objectives, and management strategies for protection of scenic views, including those of cultural landscapes.

Planning Needs – Where A Decision-Making Process Is Needed			
Related to an FRV, OIRV, or Key Issue?	Planning Need	Priority (H, M, L)	Notes
Cliff Dwellings Cultural Landscape, Key Issue	Resource stewardship strategy	M	The effects of climate change have resulted in significant threats to the monument's resources. This strategy would identify management actions needed to limit resource loss as much as possible and identify sources of impact such as climate change as relevant. A project with Colorado State University currently is underway to conduct resource assessment, restoration, and erosion control research at the monument, and the findings of this project could inform this strategy.
Continuing Cultural Connections, Historic Cultural Landscape, Key Issue	Community strategic plan	M	This plan would gather local stakeholders to identify the issues and topics of mutual interest and to identify opportunities for collaboration and outreach. The monument and its resources are related to and influenced by events in neighboring communities and areas. The issues facing the monument should be addressed from both NPS and tribal perspectives. Issues covered by this plan could include emergency response coordination with neighboring landowners and strategies for scenery conservation. Although much of this community collaboration work has been and is being conducted by the monument, a more formal effort would provide consistency over time as NPS managers change.
Museum Collections and Artifacts, Key Issue	Exhibits plan	M	The majority of items in the collection now are not accessible to visitors. Items are directly linked to the purpose of the monument and being able to see and learn about them would foster stewardship of the monument and enrich interpretative efforts. The exhibits plan would identify ways for items to be displayed at the monument and ways objects could be displayed virtually.
Historic Cultural Landscape	Historic structures report	M	This report would collect information about structures in the monument of which little is known. Without a thorough understanding of structures such as the Hogan in the historic cultural landscape, proper preservation is difficult. This report would articulate the importance of these structures. Previous historic structures preservation guides may need to be updated as part of or following this effort.
Power of Place	Design concept plan for the amphitheater	L	The amphitheater is currently underused. A design concept plan would identify changes that could be made to make this space useable for interpretive programming.
Cliff Dwellings	Emergency data recovery plan	L	The three main cliff dwelling sites are being impacted by erosion. Erosional events uncover artifacts and other archeological deposits. An emergency data recovery plan is needed to provide guidance in the instance of significant erosional events and would prevent irretrievable loss of archeological data.
Museum Collections and Artifacts	Collections management plan	L	The plan would provide both short- and long-term guidance to monument staff for the management and care of museum and archival collections. The current collections management plan (2007) needs to be replaced to fully address housekeeping, catalog backlog, and collections condition assessment for both items on exhibit and archival materials. The plan would also assess museum collection displays to determine both their effectiveness and up-to-date preservation methods.

Planning Needs – Where A Decision-Making Process Is Needed			
Related to an FRV, OIRV, or Key Issue?	Planning Need	Priority (H, M, L)	Notes
Cultural Landscape, Power of Place, Historic Cultural Landscape, Key Issue	Monument lighting plan	L	This plan would include an assessment of how monument facilities influence the night as well as recommendations to improve the night sky. This effort could be undertaken as part of the cultural landscape inventories.
Museum Collections and Artifacts, Historic Cultural Landscape, Key Issue	Integrated pest management plan	L	The current integrated pest management plan (2007) should be updated to avoid damage to artifacts both in the collections and within the cultural landscapes. The plan would identify potential management actions to address injurious species. A variety of approaches would be analyzed including non-kill strategies for vertebrates, non-pesticide strategies, prevention strategies, and strategies recognizing natural processes. The plan would help ensure that pests are managed so as to maintain the integrity of collections, historic cultural landscapes, and healthy native biotic communities, protect naturally occurring biological controls, protect the value of landscape assets, and protect, preserve, and enhance the monument's environment and naturally sustainable ecosystems.



Data Needs – Where Information Is Needed Before Decisions Can Be Made			
Related to an FRV, OIRV, or Key Issue?	Data and GIS Needs	Priority (H, M, L)	Notes
Cliff Dwellings, Cultural Landscape, Historic Cultural Landscape, Key Issue	GIS data	H	GIS data are helpful for assessments and management decisions throughout the monument. Thorough, well-managed data are needed for resources ranging from archeology to trails. As part of this collection effort a GIS database needs to be designed and existing data added to it. Future resources projects and project submissions would target and address GIS needs throughout the monument.
Cliff Dwellings, Cultural Landscape, Continuing Cultural Connections, Historic Cultural Landscape	Cultural landscape inventory for three cliff dwelling sites	H	Cultural landscape inventories of all three parcels of the monument and the administrative area are needed. These would include viewsheds and soundscapes as well as a general inventory. A thorough understanding of the components of these resources is needed to ensure effective stewardship.
Cultural Landscape, Historic Cultural Landscape	Determination of eligibility statements for historic structures	H	A thorough understanding of the historic structures in the monument is needed to effectively preserve them. Determinations of eligibility would consider the administrative district.
Cultural Landscapes, Key Issue	LiDAR data	H	LiDAR data of the canyon would be useful for both park operations and visitor interpretation. These data would track resource changes over time and be useful during preventative search and rescue activities. In addition, a table model of the canyon and other interactive mapping platforms could help make the canyon accessible to those who cannot physically visit it.
Cliff Dwellings, Cultural Landscape, Key Issue	Erosion analysis	H	Erosion threatens the preservation of the three cliff dwellings for which the monument was established. The amount of soil loss is cumulative and exponential and changes can take place quickly and in large volumes. Erosion analysis would provide a better understanding of the rate of erosion and how features would be affected. It would also identify what measures could be taken to protect resources. Because the effects of grazing and climate change exacerbate erosion, immediate actions are needed.
Cliff Dwellings, Key Issue	Architectural mapping	H	Architectural mapping room by room and wall by wall in the cliff dwellings should be done. Laser scanning would aid detail and also allow visitors to see and learn about the sites without having direct access. This work also would support archeological site condition assessments.
Cliff Dwellings, Key Issue	Archeological site assessment and site condition assessment	H	As part of the overall archeological management plans, these detailed assessments would include detailed geospatial mapping and recommendations for identifying and prioritizing treatments and projects to ensure the long-term preservation of the primary resources for which the monument was set aside.
Power of Place, Cultural Landscape, Historic Cultural Landscape	HABS/HAER surveys	H	In order to avoid loss of historic structures and the integrity of cultural landscapes, detailed HABS/HAER surveys are needed to aid in identifying preservation measures. These surveys would be conducted for buildings throughout the monument. These data are needed to inform preservation efforts.

Data Needs – Where Information Is Needed Before Decisions Can Be Made			
Related to an FRV, OIRV, or Key Issue?	Data and GIS Needs	Priority (H, M, L)	Notes
Power of Place, Cultural Landscape, Key Issue	Visual resource inventory	M	Inventories would identify scenic quality characteristics and NPS/visitor values of important scenic views and would serve as the baseline for developing a visual resource management plan for protection of views.
Cliff Dwellings, Continuing Cultural Connections, Cultural Landscape, Museum Collections and Artifacts, Power of Place, Key Issue	Ethnographic overview and assessment (including oral histories)	M	By conducting an ethnographic overview and assessment, the traditional associations of the monument could be better understood. This knowledge is critical to monument resources and to efforts aimed at better understanding how contemporary peoples use and understand the cultural and natural resources within the monument. The assessment is directly tied to conducting oral histories as these would help identify a multigenerational family tree of groups and individuals tied to the monument and from whom oral histories should be collected. Elders with traditional stories and knowledge are disappearing daily, and collecting oral histories related to the three sites would help gather their knowledge before it is lost. Some information is available from efforts under the Native American Graves Protection and Repatriation Act, but more targeted information could reveal important information and context. Some components of this effort could be incorporated into a community history center or database.
Power of Place, Key Issue	Visitor use and experience surveys	L	Visitor use and experience surveys would help monument staff and planners understand how visitors experience the monument and identify their expectations and desires. This information would be used to inform management actions.
Cliff Dwellings, Museum Collections and Artifacts	Archival legacy information	L	Archived information related to the cliff dwellings should be collected in an organized and accessible format. This data review would establish a database of what is currently known about the sites. Some questions that could be answered through this effort include: What components make up each site? How do these sites tie into larger landscapes? What is the ethnographic importance of these sites?
Cliff Dwellings	Data collection for Inscription House	L	Because of the vulnerable architecture of Inscription House and the effects of erosion, data collection in the form of LIDAR and other means of documentation is needed to understand how the site can be monitored and virtually accessed by both monument staff and visitors. This study could be related to the GIS data collection effort depending on what technologies are employed.
Cliff Dwellings, Power of Place, Key Issue	Safety assessment for accessing sites	L	This assessment is needed to identify the safest ways for monument staff and visitors to access the cliff dwellings so that preservation and visitor access may be accomplished without destroying the fabric of the sites or endangering staff or visitors.
Cliff Dwellings, Power of Place, Key Issue	Acoustical impact analysis	L	This analysis would help monument staff and planners understand how noise (such as from visitors or overflights) affects the cliff dwellings and how adverse effects might be mitigated.

Data Needs – Where Information Is Needed Before Decisions Can Be Made			
Related to an FRV, OIRV, or Key Issue?	Data and GIS Needs	Priority (H, M, L)	Notes
Cliff Dwellings, Key Issue	Invasive species inventory	L	An inventory of invasive species within the monument, particularly near eroded areas, would help identify and prioritize management actions related to the control of invasive species that degrade resource conditions and affect the sustainability and integrity of the basic values for which the monument was set aside.
Museum Collections and Artifacts	Updated scope of collections statement	L	The current scope of collections statement was done in 2006, and according to NPS museum program requirements should be updated every five years. An updated statement would include all items that have been added since the site was NPS managed. Updating the scope of collections would assist in identifying those items that should be cared for and the means of their care.
Cultural Landscape	Baseline inventory of flora , fauna, and avian resources	L	This data collection would be conducted with the assistance of the NPS Southern Colorado Plateau Monitoring & Inventory Network and the NPS Southwest Exotic Plant Management Team. It would aid in sustaining a healthy landscape that would preserve the values, context, and, as appropriate, the continued accessibility of the primary resources of the monument, for the appreciation of future visitors.
Cultural Landscape	Threatened and endangered species inventory	L	Congress passed the Endangered Species Act in 1973, recognizing that our natural heritage is of “esthetic, ecological, educational, recreational, and scientific value to our Nation and its people.” In order to avoid extinction of these living resources, parks assess and take informed actions with regard towards long-term preservation of these species.
Cultural Landscape, Key Issue	Visual resource inventory	L	The overall objective of visual resource management is to manage public lands in a manner that will protect the quality of the visual (scenic) values in accordance with section 102(a)(8) of the Federal Land Policy and Management Act. This methodical approach to inventorying and managing the scenic resources of public lands provides a means of determining visual values. The inventory would comprise scenic quality evaluation, sensitivity level analysis, and delineation of distance zones.
Cultural Landscape, Key Issue	Additional acoustic data (road related)	L	Sound intrusion from the modern world makes acoustic resources in the monument even rarer. Additional baseline acoustic data are needed to identify trends over time and to identify strategies to preserve the unique visitor experience and effects on varied species of concern at the monument. This analysis would help park staff and planners understand how noise (such as from visitors or overflights) affects the cliff dwellings and how adverse effects might be mitigated.
Cultural Landscape	Additional night-sky data	L	Dark skies are disappearing rapidly as a result of increasing development. Opportunities for enjoying the original nature of night sky viewing take us farther from this profoundly authentic generational experience. Additional baseline night sky data are needed to identify trends over time and to identify strategies to preserve the unique visitor experience at the monument.

Data Needs – Where Information Is Needed Before Decisions Can Be Made			
Related to an FRV, OIRV, or Key Issue?	Data and GIS Needs	Priority (H, M, L)	Notes
Continuing Cultural Connections	Traditional cultural property determination	L	The monument is a sacred location for a number of tribes and is probably a traditional cultural property. Such a determination would inform appropriate future management of the monument and might make the monument eligible for inclusion in the national register. “Traditional” in this context refers to those beliefs, customs, and practices of a living community of people that have been passed down through the generations, usually orally or through practice. The traditional cultural significance of a historic property therefore is significance derived from the role the property plays in a community’s historically rooted beliefs, customs, and practices.
Continuing Cultural Connections, Key Issue	Participatory GIS mapping	L	Working with local community members to map where families and partners are located on the landscape would provide valuable information for the monument as partnership opportunities are explored and in case of emergencies.
Continuing Cultural Connections, Historic Cultural Landscape	Update administrative history	L	The National Park Service Organic Act creates the context within which its mission is carried out. Knowledge of how the monument has developed, particularly from multiple generations of NPS staff who are from the local area, could be captured as part of this effort. The goal of updating the administrative history would be to inform monument planning, management, and interpretation and to understand the values associated with its preservation.
Cultural Landscape, Cliff Dwellings, Power of Place, Historic Cultural Landscape	Climate change vulnerability assessment	L	As climate conditions and ecological relationships change, effective decision making will require a flexible approach for incorporating new and relevant science. A climate change vulnerability assessment would inform efforts to preserve the cliff dwellings from climate change-related erosion and other effects. Climate change causes significant erosion and plant community transitions that affect the basic cultural landscape, as well as access to the site.
Historic Cultural Landscape	Update List of Classified Structures database	L	The List of Classified Structures is an NPS database of buildings, roads, monuments, artifacts, and other objects at or near national parks. The database classifies the structures by location, type, historical contribution, and so forth and identifies each by structure and database record number. This information allows management to help prioritize, fund, and track actions to maintain all of the park system’s structures. Updating the monument’s list would help monument staff avoid unintentional damage or changes to these structures and better proactively manage them.

Part 3: Contributors

Navajo National Monument

Alden Miller, Superintendent (former)
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 Casey Thomas, Maintenance Mechanic
 Kenneth Manheimer, Maintenance Mechanic
 Alfred Smith, Laborer

Southern Four Corners Group of Parks

Lyn Carranza, Superintendent, Southern Four Corners group of parks (Canyon de Chelly National Monument, Hubbell Trading Post National Historic Site, and Navajo National Monument)
 Fernando M. Jones, Chief Ranger
 Keith Lyons, Integrated Resource Manager
 Nancy Mahaney, Curator
 Lola Henio, Interpretive Projects Coordinator

Canyon de Chelly National Monument

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 Fernando M. Jones, Chief Ranger
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 Rose M. Cortez, Facilities Operations Supervisor

Hubbell Trading Post National Historic Site

Llyod Masayumptewa, Superintendent

NPS Intermountain Region

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 Steve Whissen, Cultural Resource Specialist
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 Judith Stoesser, Contract Editor
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Appendixes

Appendix A: Presidential Proclamation and Subsequent Amendment

BY THE PRESIDENT OF THE UNITED STATES OF AMERICA,

March 20, 1909.

A PROCLAMATION

WHEREAS, a number of prehistoric cliff dwellings and pueblo ruins, situated within the Navajo Indian Reservation, Arizona, and which are new to science and wholly unexplored, and because of their isolation and size are of the very greatest ethnological, scientific and educational interest, and it appears that the public interest would be promoted by reserving these extraordinary ruins of an unknown people, with as much land as may be necessary for the proper protection thereof;

Navajo National Monument, Ariz. Preamble.

Now, therefore, I, William H. Taft, President of the United States of America, by virtue of the power in me vested by Section two of the Act of Congress approved June 8, 1906, entitled, "An Act for the Preservation of American Antiquities", do hereby set aside as the Navajo National Monument all prehistoric cliff dwellings, pueblo and other ruins and relics of prehistoric peoples, situated upon the Navajo Indian Reservation, Arizona, between the parallels of latitude thirty-six degrees thirty minutes North, and thirty-seven degrees North, and between longitude one hundred and ten degrees West and one hundred and ten degrees forty-five minutes West from Greenwich, more particularly located along the arroyas, canyons and their tributaries, near the sources of and draining into Laguna

National Monument, Ariz. Vol. 34, p. 225.

Description.

Creek, embracing the Bubbling Spring group, along Navajo Creek and along Moonlight and Tsagt-at-sosa canyons, together with forty acres of land upon which each ruin is located, in square form, the side lines running north and south and east and west, equidistant from the respective centers of said ruins. The diagram hereto attached and made a part of this proclamation shows the approximate location of these ruins only.

Warning is hereby expressly given to all unauthorized persons not to appropriate, excavate, injure or destroy any of the ruins or relics hereby declared to be a National Monument, or to locate or settle upon any of the lands reserved and made a part of said Monument by this proclamation.

IN WITNESS WHEREOF, I have hereunto set my hand and caused the seal of the United States to be affixed.

Done at the City of Washington, this 20th day of March in the year of our Lord one thousand nine hundred and nine, and [SEAL.] of the Independence of the United States the one hundred and thirty-third.

WM H TAFT

By the President:

P C KNOX

Secretary of State.

BY THE PRESIDENT OF THE UNITED STATES OF AMERICA,

March 14, 1912.

A PROCLAMATION

WHEREAS, the Navajo National Monument, Arizona, created by proclamation dated March 20, 1909, after careful examination and survey of the prehistoric cliff dwelling pueblo ruins, has been found to reserve a much larger tract of land than is necessary for the protection of such of the ruins as should be reserved, and therefore the same should be reduced in area to conform to the requirements of the act authorizing the creation of National Monuments;

Navajo National Monument, Ariz.
Preamble.
Vol. 36, p. 2491.

Vol. 34, p. 225.

Now, therefore, I, William H. Taft, President of the United States of America, by virtue of the power in me vested by Section two of the act of Congress entitled, "An Act for the Preservation of American Antiquities", approved June 8, 1906, do hereby set aside and reserve, subject to any valid existing rights, as the Navajo National Monument, within the Navajo Indian Reservation, two tracts of land containing one hundred and sixty acres each, and within which are situated prehistoric ruins known as "Betata Kin" and "Keet Seel", respectively, and one tract of land, containing forty acres, and within which is situated a prehistoric ruin known as "Inscription House". The approximate location of these tracts is shown upon the diagram which is hereto attached and made a part of this proclamation.

Area diminished.

Warning is hereby expressly given to all unauthorized persons not to appropriate, excavate, injure or destroy any of the ruins or relics hereby declared to be a National Monument, or to locate or settle upon any of the lands reserved and made a part of this Monument by this proclamation.

IN WITNESS WHEREOF, I have hereunto set my hand and caused the seal of the United States to be affixed.

Done at the city of Washington this 14th day of March, in the year of our Lord one thousand nine hundred and twelve, and
[SEAL.] of the Independence of the United States the one hundred and thirty-sixth.

WM H TAFT

By the President:

HUNTINGTON WILSON
Acting Secretary of State.

Appendix B: Inventory of Administrative Commitments

Title / Agency / Organization	Purpose / Description	Expiration Date	Responsible Party
Memorandums of Understanding			
Land use agreement with Navajo Nation	Agreement is for facilities around Betatakin such as picnic area, campground, and other structures in administrative area of monument. Current memorandum of understanding was written about 1961 and stipulates that facilities will be available for Navajo Nation to conduct business such as arts and craft demonstration. Part of this memorandum of understanding involves concessions for Navajo arts and crafts enterprises to sell goods.	Unspecified	Navajo National Monument and Navajo Nation
Structural fire-fighting assistance	There is currently an agreement with the Kayenta Fire Department for fire services at the monument.	2014–2019 unless terminated by either party	Navajo National Monument and Kayenta Fire Department
Emergency services fire and rescue	Structural, vehicle, wildland, and hazardous material fire-fighting services and equipment will be provided for prevention/suppression of structural and wildland fires for the park and for other emergency services.	2015–2020 unless terminated by either party	Navajo National Monument and Peabody Western Coal Company – Kayenta Mine Clinic
Interagency Agreements			
U.S. Forest Service – fire	There are no agreements in place for fire response and services, but they are needed.		Navajo National Monument, U.S Forest Service, and Navajo Nation
Cooperative Agreements			
Cooperative Agreement #P15AC01079, Project: MNA-74	Colorado Plateau Cooperative Ecosystem Studies Unit (CPCESU) cooperative agreement with Museum of Northern Arizona for an archeological resurvey of Navajo National Monument.	Extended through September 2017	Navajo National Monument and Museum of Northern Arizona
NAVA YCC P15AC01063 MOD 1	Work to maintain and improve trails in the Monument.	Annually renewed	Navajo National Monument and American Conservation Experience
Cooperative Agreement #P14AC00921	CPCESU cooperative agreement with Colorado State University for resources assessment, restoration, and erosion control to mitigate the effects of climate change at the Monument.	September 2018	Navajo National Monument and Colorado State University

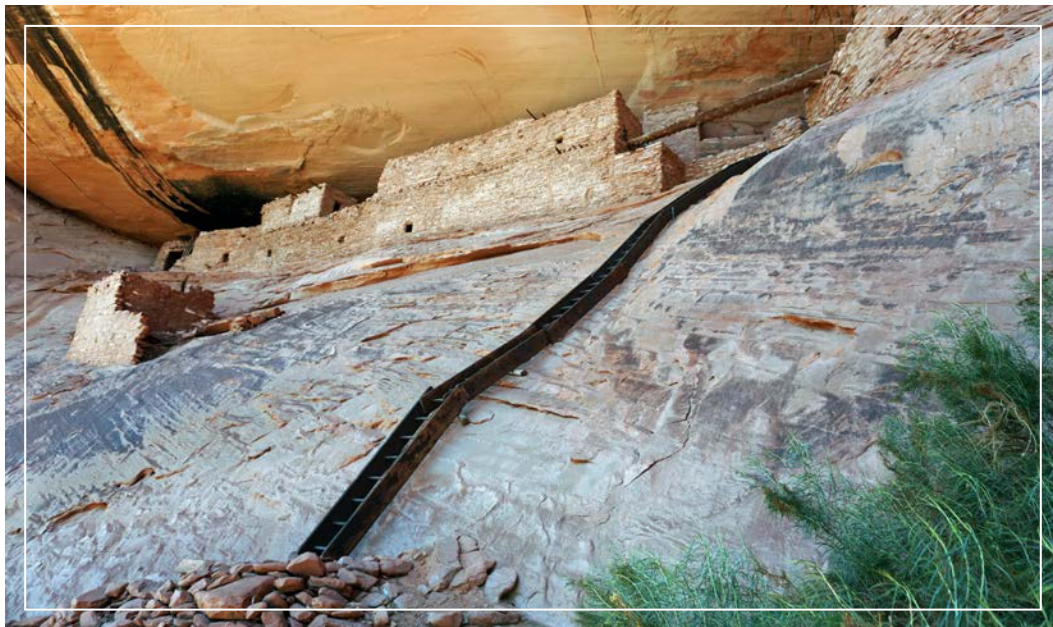
Title / Agency / Organization	Purpose / Description	Expiration Date	Responsible Party
General Agreements			
NPS land access	Verbal agreements with local residents currently allow NPS staff to access the three sites as well as spring water locations.	Unspecified	Navajo National Monument and Navajo Nation
Museum collections storage	Majority of museum collections are housed at the Museum of Northern Arizona, and an agreement describes the responsibilities of each entity.	Unspecified	Museum of Northern Arizona and Navajo National Monument
Highway access and maintenance	The monument currently has verbal agreements in place with the Arizona Department of Transportation (ADOT) to ensure that both parties are informed of development and work that is being done in the area. Arizona State Route 564 is maintained by ADOT; however, it is not routinely plowed by ADOT in the winter, only as needed.	Unspecified	Navajo National Monument and Arizona Department of Transportation
Navajo Nation law enforcement	There are no written agreements with the Navajo Nation for law enforcement. The National Park Service has proprietary jurisdiction, so in general Navajo Nation law applies.		Navajo National Monument and Navajo Nation Law Enforcement
Arizona state law enforcement	There is currently no agreement for law enforcement and emergency services at the monument, but such agreements are needed.		Navajo National Monument and Arizona State Police
Town of Kayenta law enforcement	There is currently no agreement for law enforcement with Kayenta. A general agreement with the Navajo Nation exists, but a specific one with the city is needed as a backup to other law enforcement agencies.		Navajo National Monument, Navajo Nation, Town of Kayenta Law Enforcement
Inscription House emergency services	There is currently no agreement for emergency services in this area and one is needed, particularly because Inscription House has a helipad that would be useful for backcountry emergencies.		
Utilities/electric services	There are no agreements in place.		Navajo National Monument and Navajo Tribal Utility Authority
Phone service	There are no agreements in place, but they are needed.		Navajo National Monument and Frontier Communications
Interpark Agreements			
Information technology agreement	Grand Canyon National Park provides IT services to Navajo National Monument.	Annually renewed	Navajo National Monument and Grand Canyon National Park
Search and rescue helicopter services	Verbal agreements are in place with Glen Canyon National Recreation Area (GLCA) / Grand Canyon National Park (GRCA) for helicopter services, but written agreements are needed.	Annually reviewed	Navajo National Monument and GLCA /GRCA helicopter services

Title / Agency / Organization	Purpose / Description	Expiration Date	Responsible Party
Interpark Agreements			
Wildland fire agreement	The fire management officer at Mesa Verde National Park serves as the fire management officer for Navajo National Monument.	Annually renewed	Navajo National Monument and Mesa Verde National Park
Museum collections not housed at Northern Arizona University	Some of the museum collection is housed at the NPS Western Archeological and Conservation Center (WACC). WACC is identified as a facility for the NAVA collections in the "Intermountain Region Museum Collection Facilities Strategy" (2005) and this will be continued in the "Intermountain Region Museum Facility Management Plan: (2016).	Ongoing	Navajo National Monument and Western Archeological and Conservation Center
NPS law enforcement	Written agreements between Canyon de Chelly National Monument and Glen Canyon National Recreation Area to provide law enforcement at Navajo National Monument are not in place.		Navajo National Monument and Canyon de Chelly National Monument and Glen Canyon National Recreation Area
Southern Four Corners Group (SOFO)	An administrative agreement forms a park group (SOFO) that includes Canyon de Chelly National Monument, Hubbell Trading Post National Historic Site, and Navajo National Monument. The group aims to share resources and expertise among the three units.	Ongoing	Navajo National Monument and Canyon de Chelly National Monument and Hubbell Trading Post National Historic Site
Communications coordination	Agreements are in place for the monument to use the public information officer, dispatch, and telecommunications officer at Glen Canyon National Recreation Area.	Ongoing	Navajo National Monument and Glen Canyon National Recreation Area
Cooperating Association Agreement			
Western National Parks Association (WNPA)	National cooperating association agreement with WNPA to provide support and assistance to the interpretive, educational and research activities of the National Park Service and provide interpretive and educational materials to visitors.	February 24, 2011, to February 24, 2016	NPS WASO coordinator for cooperating associations; regional coordinators for cooperating associations; park coordinators; and WNPA executive director and/or on-site WNPA manager
Commercial Services			
Concession Contract	CC-IMFA001-13: Western National Parks Association.	February 22, 2013, to December 31, 2022	Category III concession contract for sale of visitor convenience items by Western National Parks Associations The contract is managed by IMR Concessions and IMR Concessions is the recipient of the franchise fee paid on an annual basis

Appendix C: Past Planning and Data Collection Efforts

Planning Document	Year
Navajo National Monument Historic Structures Preservation Guide	1982
Navajo National Monument Road Inventory and Needs Study	1986
Navajo National Monument National Register of Historic Places Nomination Form	1988
Navajo National Monument Administrative History	1991
Navajo National Monument Strategic Plan	1997
AutoCAD and GIS Mapping for Multiple Archeological Sites	1999
Inscription House Condition Assessment	1999
Navajo National Monument Visitor Survey	2000
Navajo National Monument Aspen Forest Trail Relocation Feasibility Study	2000
Navajo National Monument Traditional History Study—Ethnographic Literature Review	2001
Southern Colorado Plateau Network Biological Inventory	2001
Navajo National Monument Traditional History Study—Ethnographic Literature Review	2001
Navajo National Monument Final General Management Plan	2003
Navajo National Monument General Management Plan Summary	2003
Navajo National Monument Historic Preservation Report—Rehab of Historic Visitor Contact Station	2003
Navajo National Monument Inventory of Amphibians and Reptiles	2004
Navajo National Monument Vascular Plant Inventory	2004
Kohut R.J. 2004. Ozone risk assessment for Southern Colorado Plateau Network. National Park Service. Fort Collins, Colorado	2004
Southern Colorado Plateau Network Weather and Climate Inventory	2006
Navajo National Monument Cultural Uses and Traditional Management of Plants in Shonto Region	2006
Southern Colorado Plateau Network Weather and Climate Inventory	2006
Navajo National Monument Geologic Resource Evaluation Report	2007
Navajo National Monument Collection Management Plan	2007
Navajo National Monument Historic Preservation Report—Rehab of Historic Visitor Contact Station	2007
Navajo National Monument New Deal Resources	2007
Navajo National Monument Consensus Determination of Eligibility for Navajo National Monument Archeological District	2008
Navajo National Monument Determination of Eligibility for Ranger Hogan B-02	2008
Navajo National Monument Consensus Determination of Eligibility for Navajo National Monument Archeological District	2008

Planning Document	Year
Navajo National Monument Vegetation Classification and Distribution Mapping Report	2010
Navajo National Monument Mammal Inventory	2010
Navajo National Monument Architectural Condition Assessment of the Betatakin and Kiva Cave Alcove Sites	2011
Condition Assessment for Betatakin	2011
Navajo National Monument Paleoethnobotany of Inscription House	2011
Navajo National Monument Final Report—Archival Re-housing of Perishable Artifacts	2011
Navajo National Monument Baseline Ambient Acoustical Report	2011
Navajo National Monument Paleoethnobotany of Inscription House	2011
Pardo, L.D., M.J. Robin-Abbott, C.T. Driscoll, eds. 2011. Assessment of nitrogen deposition effects and empirical critical loads of nitrogen for ecoregions of the United States. Gen. Tech. Rep. NRS-80. Newtown Square, PA: U.S. Department of Agriculture, Forest Service, Northern Research Station	2011
Sullivan, T.J., G.T. McPherson, T.C. McDonnell, S.D. Mackey, D. Moore. 2011d. Evaluation of the sensitivity of inventory and monitoring national parks to nutrient enrichment effects from atmospheric nitrogen	2011
Navajo National Monument Climate Change Resource Brief	2014
National Park Service, Air Resources Division. "Air Quality Conditions & Trends by NPS Units: For Navajo NM." National Park Service. Denver, CO	2015
Cultural Affiliation Study for NAGPRA	2016
Annual inventories of museum properties	Annual
Ongoing nearby air quality monitoring at Grand Canyon NP providing updated visibility condition in the monument	Ongoing



Appendix D: Summary of Tribal Input Efforts for Foundation Development

On Wednesday, May 27, 2015, Navajo National Monument held a tribal and community listening session in support of the foundation document and invited the participation of representatives from traditionally associated tribes. A questionnaire was sent to invitees before the listening session, so although all individuals were not able to attend, all were able to submit input and provide valuable information and feedback to the National Park Service.

Foundation Document Questions

1. Why is Navajo National Monument special to you?
2. What do you value most about the monument?
3. Are there specific areas or features of the monument that you feel need special care?
4. What are the issues you feel need special consideration by National Park Service staff?
5. What opportunities do you see for increased collaboration between the Navajo Nation, other tribes, and the National Park Service?
6. What do you think should be the top planning priorities for the monument?
7. What key points of information are the most important to communicate to monument visitors?

Recurring Themes

1. Navajo National Monument is very important to the local community in terms of heritage, tourism, and employment. Preserving the sites for both the Navajo and other associated tribes is an important responsibility. The local community feels that the National Park Service is a positive influence.
2. The “unchanged” experience of Navajo National Monument is significant, and the monument should be managed to preserve that experience. The monument is not overly developed and has not changed very much over the years. This allows people to experience the ancient landscape.
3. Erosion and climate change are significant issues for the monument. A resource stewardship strategy could be a potential avenue for addressing the threats to significant archeological sites resulting from erosion.
4. There are many opportunities for partnering with the local community and the Navajo Nation to further mutual health, tourism, education, and economic goals.

Appendix E: Traditionally Associated Tribes

Traditionally associated tribes refer to those groups that have had a significant connection to a place that has endured for two generations or more. The following list was derived from the National Park Service Intermountain Region's tribal contact database.

Hopi Tribe of Arizona

Kaibab Band of Paiute Indians of the Kaibab Indian Reservation, Arizona

Kewa Pueblo, New Mexico

Las Vegas Tribe of Paiute Indians of the Las Vegas Indian Colony, Nevada

Moapa Band of Paiute Indians of the Moapa River Indian Reservation, Nevada

Navajo Nation, Arizona, New Mexico & Utah

Ohkay Owingeh, New Mexico

Paiute Indian Tribe of Utah

Pueblo of Acoma, New Mexico

Pueblo of Cochiti, New Mexico

Pueblo of Isleta, New Mexico

Pueblo of Jemez, New Mexico

Pueblo of Laguna, New Mexico

Pueblo of Nambe, New Mexico

Pueblo of Picuris, New Mexico

Pueblo of Pojoaque, New Mexico

Pueblo of San Felipe, New Mexico

Pueblo of San Ildefonso, New Mexico

Pueblo of Sandia, New Mexico

Pueblo of Santa Ana, New Mexico

Pueblo of Santa Clara, New Mexico

Pueblo of Taos, New Mexico

Pueblo of Tesuque, New Mexico

Pueblo of Zia, New Mexico

San Juan Southern Paiute Tribe of Arizona

Southern Ute Indian Tribe of the Southern Ute Reservation, Colorado

Ute Mountain Tribe of the Ute Mountain Reservation, Colorado, New Mexico, and Utah

Zuni Tribe of the Zuni Reservation, New Mexico

Intermountain Region Foundation Document Recommendation Navajo National Monument

June 2017

This Foundation Document has been prepared as a collaborative effort between park and regional staff and is recommended for approval by the Intermountain Regional Director.

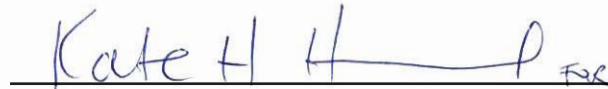


RECOMMENDED

Lyn Carranza, Superintendent, Southern Four Corners Group

6/29/2017

Date



APPROVED

Sue E. Masica, Regional Director, Intermountain Region

8/4/2017

Date



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 U.S. administration.

NAVA 312/138155

August 2017

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