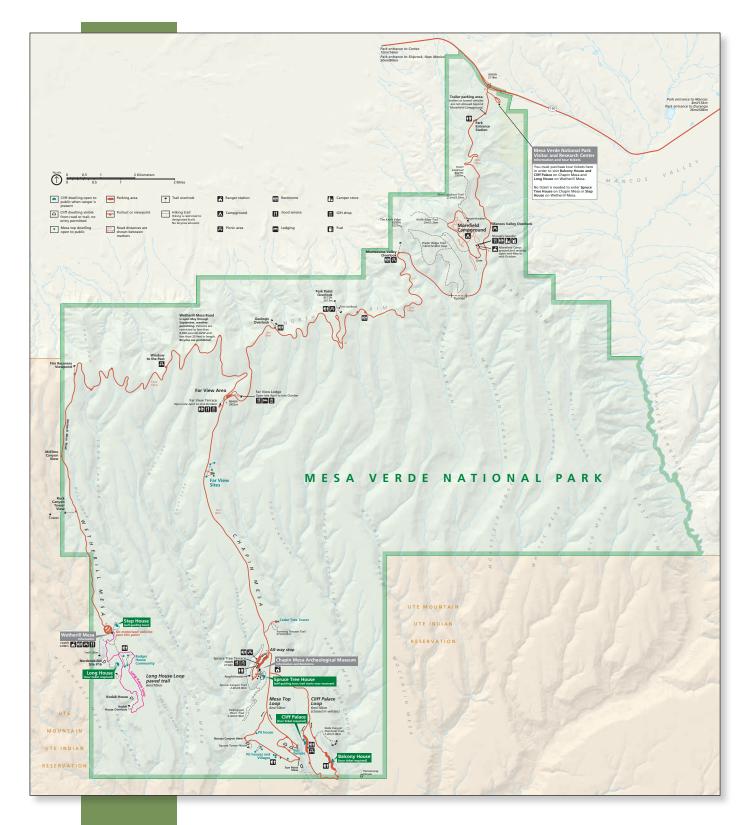
Foundation Document Mesa Verde National Park

Colorado

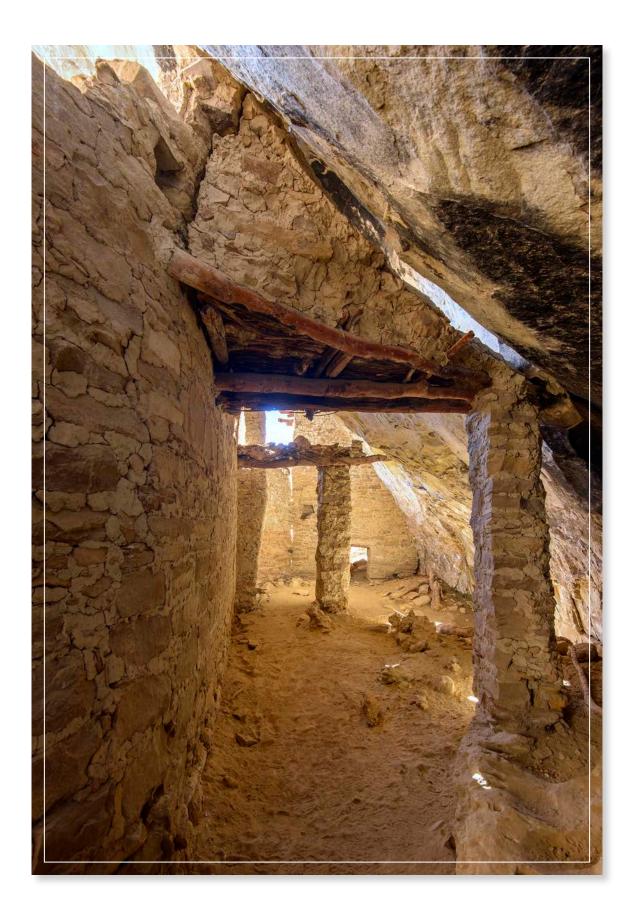
October 2015





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Mission of the National Park Service

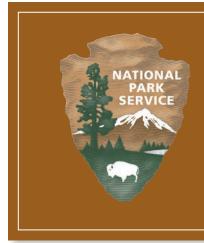
The National Park Service (NPS) preserves unimpaired the natural and cultural resources and values of the national park system for the enjoyment, education, and inspiration of this and future generations. The National Park Service cooperates with partners to extend the benefits of natural and cultural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



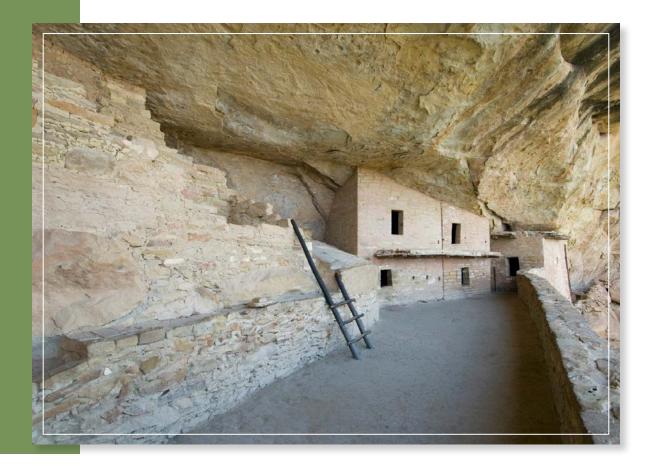
The arrowhead was authorized as the official National Park Service emblem by the Secretary of the Interior on July 20, 1951. The sequoia tree and bison represent vegetation and wildlife, the mountains and water represent scenic and recreational values, and the arrowhead represents historical and archeological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

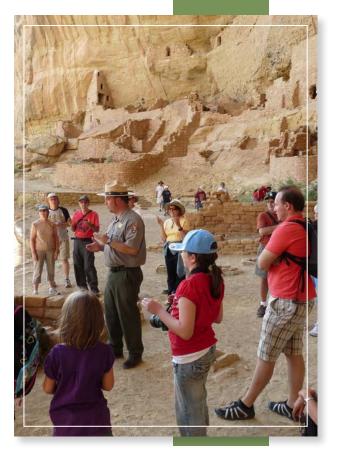
Brief Description of the Park

Mesa Verde National Park was established by an act of Congress (34 Stat. 616), signed by President Theodore Roosevelt on June 29, 1906, to preserve "from injury or spoliation of the ruins and other works and relics of prehistoric or primitive man," the first national park of its kind. Mesa Verde National Park is located near the Four Corners region of southwestern Colorado, where the states of Colorado, Utah, Arizona, and New Mexico meet. This land, inhabited by Ancestral Pueblo people from approximately AD 550 to 1300, included the most extensive concentration of well-preserved prehistoric cliff dwellings in the United States. Through its establishment, Mesa Verde National Park was charged with the preservation of the archeological sites and other works and relics of prehistoric inhabitants within its boundaries. By 1916, a museum was displaying artifacts from the cliff dwellings and was one of the first in the National Park Service.

Additional lands were added to Mesa Verde National Park on June 20, 1913, through an act of Congress that modified the park's boundary to include a number of the larger cliff dwellings that had been left out of the original park bill. Additional modifications to the park boundary occurred in 1932, 1963, and 2007. To protect certain areas of the park in a wilderness status, in 1976 Congress set aside 8,500 acres known as Mesa Verde Wilderness (PL 94-567, 90 Stat. 2692) under the provisions of the Wilderness Act (78 Stat. 890). This area of designated wilderness has been closed to the public for many years for the protection of prehistoric sites,

making this perhaps the only wilderness within the national park system closed to public use. On September 8, 1978, Mesa Verde National Park was among the first sites designated a United Nations Educational, Scientific and Cultural Organization (UNESCO) World Heritage Cultural Site in recognition of the park resource's outstanding value and importance to all humankind. The park includes a Class I air shed, the highest standards set by Congress under the Clean Air Act. Park Mesa, in the southeast section of the park, has been designated a "Research Natural Area."

The park's primary physical feature is a plateau called the Mesa Verde, Spanish for "green table," which is surrounded by deep canyons. Within the park boundary are more than 5,000 known archeological sites, including 600 cliff dwellings and the mesa top sites of pithouses, pueblos, masonry towers, and farming structures. The dwellings and the objects associated with them document the culture of the Ancestral Pueblo people who lived on the mesa and offer insights into the lives of the Ancestral Pueblo people who made Mesa Verde their home for more than 700 years. They and their descendants lived and flourished here, eventually building elaborate stone communities in the sheltered alcoves of the canyon walls. Then, in the late AD 1200s, in the span of a generation or two, they left their homes and continued on their journey. Mesa Verde National Park preserves a spectacular reminder of this ancient culture. The rich archeological record preserved in the park and in the surrounding Four Corners area offers significant insights into this chapter of North America's human history.





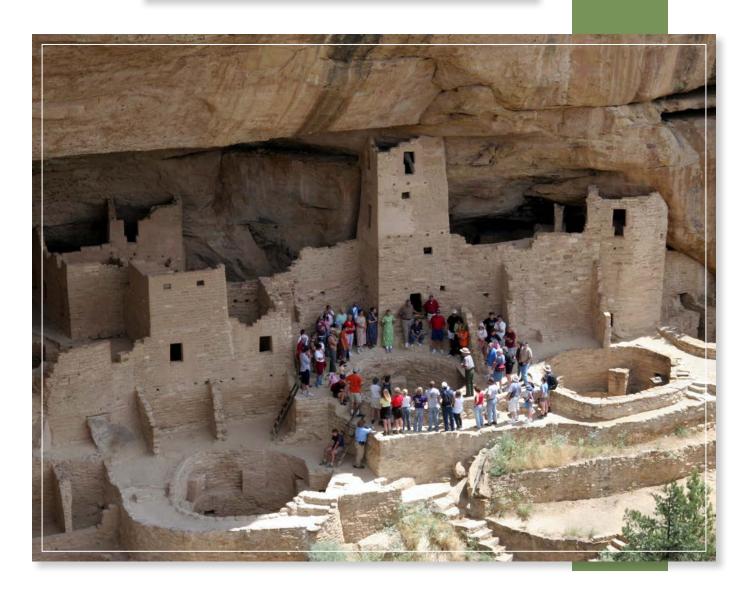
Mesa Verde occupies just more than 52,000 acres of the Colorado Plateau. Elevations in the park range from about 6,000 feet in the canyon bottoms near the southern park boundary to 8,572 feet at Park Point, about 10 miles north. Mesa Verde lies in the transition zone between the arid scrublands to the south and the forested montane environment of the Rocky Mountains to the north. With a semi-arid climate, the park supports four major plant communities: shrub-steppe, pinyon-juniper forests, mountain shrub, and Douglas fir and Ponderosa pine. These communities support a diversity of wildlife including resident and migratory mammals, birds, reptiles, amphibians, fishes, and invertebrates. Many plant and animal species that have disappeared or are rarely seen in the region still exist at the park. Some rare plants, such as the Schmoll's milkvetch (*Astragalus schmolliae*), are endemic to Mesa Verde and are not known to exist elsewhere.

Visitors of Mesa Verde National Park have a wide variety of opportunities to explore and learn about the natural and cultural wonders of the park. The park offers many sites that provide insights into the lives of the Ancestral Pueblo people including Far View Sites, the Mesa Top Loop, Step House, and the Badger House Community at Wetherill Mesa. In summer, rangerguided tours of three cliff dwellings, Cliff Palace, Balcony House, and Long House are offered, while self-guided options exist for Spruce Tree House and Step House. About 20 miles of hiking trails are scattered throughout the park. In December 2012, the park opened the Visitor and Research Center, a state-of-the art environmentally sustainable building that received LEED Platinum certification by the US Green Building Council. The Visitor and Research Center serves a dual function. The Visitor Center is the primary facility for orienting visitors to opportunities within the park and surrounding area. The Research Center houses the park's 3 million object museum collection in two climate-controlled repositories and includes rooms for conservation, exhibit preparation, and processing. There is also ample space for researchers to examine collections from the park's research library, museum collection, and archive.

Park Purpose

The purpose statement identifies the specific reason(s) for establishment of a particular park. The purpose statement for Mesa Verde National Park was drafted through a careful analysis of its enabling legislation and the legislative history that influenced its development. The park was established when the enabling legislation adopted by Congress was signed into law on June 29, 1906 (see appendix A for enabling legislation and subsequent amendments). The purpose statement lays the foundation for understanding what is most important about the park. The park purpose is:

MESA VERDE NATIONAL PARK protects, preserves, researches, and interprets an archeological landscape including more than 600 cliff dwellings, wilderness values, and remarkable scenic resources in southwest Colorado.



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 Mesa Verde National Park, 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 Mesa Verde National Park. (Please note that the sequence of the statements does not reflect the level of significance.)

- Mesa Verde National Park is an example of thousands of years of human interaction with the environment, reflected in a remarkable density and variety of sites related to the Ancestral Pueblo occupation of the Southwest.
- Mesa Verde National Park is important in the history and heritage of the tribes and pueblos of Mesa Verde, and to many others for whom multigenerational ties exist.
- Mesa Verde National Park protects and preserves more than 5,000 archeological sites. These include more than 600 alcove sites, some of the best known and most accessible cliff dwellings in North America.
- In the early 1900s, visitors to the Mesa Verde area were captivated by the remarkable cliff dwellings they observed, and became vocal advocates for park establishment. This began a tradition of local and global stewardship of archeological resources that continues to this day.
- Mesa Verde National Park was designated in 1906 in a process that paralleled the establishment of the 1906 Antiquities Act. Mesa Verde National Park's significance and worldwide value was further recognized by the 1978 designation as one of the eight original "World Cultural Heritage Sites."
- The Mesa Verde Administrative District exemplifies a regionally significant Pueblo revival architectural style that influenced the development of a design aesthetic for southwestern national parks.
- As the first national park dedicated to the works of prehistoric cultures, Mesa Verde has played a key developmental role in the science of conservation archeology. This rich legacy dates to the early history of the national park system, with seminal works by preeminent researchers, and continues to be an essential part of park operations.
- Mesa Verde National Park supports outstanding wilderness values, clean air, night skies, and scenic views of the mountains, canyons, and mesas of the Four Corners Region.



Fundamental Resources and Values

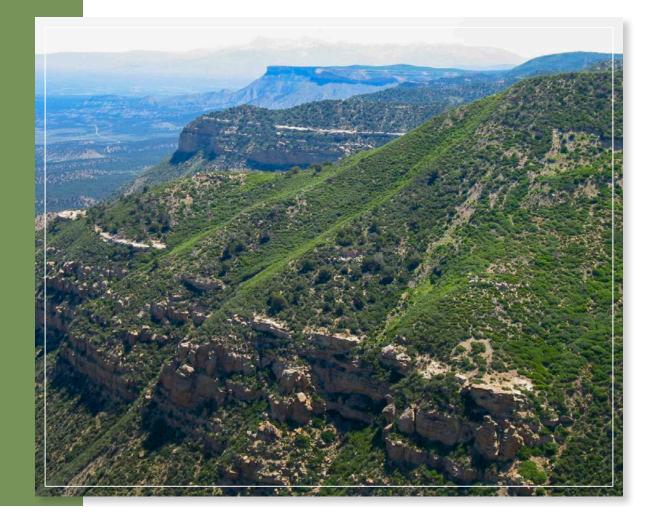
Fundamental resources and values (FRVs) are those features, systems, processes, experiences, stories, scenes, sounds, smells, or other attributes determined to warrant primary consideration during planning and management processes because they are essential to achieving the purpose of the park and maintaining 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 Mesa Verde National Park:

- Mesa Verde Archeological Landscape. The Mesa Verde archeological landscape consists of an assemblage of prehistoric alcove cliff dwellings; partially intact masonry structures (e.g., towers, bi-wall structures, small villages, and extensive community centers); earth and rubble mound sites; ephemeral field structures and associated agricultural terraces; rock art; isolated subsurface structures, e.g., kivas; middens and artifact scatters; trails, bedrock toe and handholds; markers or shrines; and water control features. Although individually these archeological sites and features reflect considerable variability, the overall prehistoric landscape exhibits a distinctive form or structure based on functional necessity, social organization, proximity to key natural resources, defensive and ideological systems, networks of trading partners, transportation, and the gradual emergence of large-scale community centers. Included in the archeological landscape are the "Maintained Archeological Sites," which are those resources essential to maintaining the authenticity and integrity of the overall archeological landscape. They are linked to the park's interpretive mission, and are often described as the most recognizable places visited by the public, such as Cliff Palace, Spruce Tree House, Balcony House, Square Tower House, and Long House. While park resources and attention are often focused on these more visible sites, the vast majority of archeological resources distributed throughout the park comprise elements of the broader archeological landscape.
- Mesa Verde Museum Collection and Archives. The museum collection is one of the largest in the Intermountain Region with more than 3 million objects and archives. The collection's scope includes prehistoric specimens (c. AD 500–1275) illustrating the lifeways of the Ancestral Pueblo people who inhabited the Mesa Verde region; ethnographic objects associated with Mesa Verde's pueblos and tribes; historical objects related to Civilian Conservation Corps (CCC) activities and the park's development; and natural history collections documenting the flora and fauna of the region. The park's archival records document the management of the park's cultural and natural resources. One of the well-known facets of the museum collection is architect Mary Jane Colter's donation of her personal jewelry, pueblo pottery, and books.
- Scenic Resources. Collectively, the viewshed of Mesa Verde National Park encompasses both a majestic natural landscape—consisting of mountains, nearby and distant canyons, escarpments, and valley floors—and much of the Ancestral Pueblo landscape. Although fragmented by modern development and periodically obscured by reduced visibility from dust and air pollution, this landscape retains tangible evidence of habitation, defense, farming, and ceremony, and provides a physical, historical, and spiritual context for Mesa Verde.

- Mesa Verde Administrative District. Beginning in 1921, the Mesa Verde Administrative District (now a national historic landmark) began construction of the first buildings in the National Park Service based on regional cultural traditions. Constructed of native sandstone, pine, and mud plaster broadly reminiscent of Ancestral Pueblo structures, these buildings established a design template that continued to be used until the mid-20th century.
- Traditional and Contemporary Cultural Connections. Traditional and contemporary cultural connections include ongoing subsistence, ethno-botanical use of plants, oral traditions and historical memory, use of ceremonial locales and sites; structures, objects, and view sheds; and landscapes, and natural features. At Mesa Verde, some tribal governments have requested and received access to certain sites and objects by traditional cultural practitioners for the continuance of their lifeways.
- Archeological Preservation and Investigation. Since its establishment in 1906, Mesa
 Verde National Park has served as an archeological laboratory devoted to research,
 conservation, and innovative field methods. While some of these methods included the
 use of materials and techniques no longer accepted, much of what has been learned
 over time—particularly native materials and construction methods—remains in use.
 Through these efforts Mesa Verde National Park fundamentally contributed to the
 development of conservation archeology in the American Southwest and beyond.
- Wilderness Landscape. Sixteen percent of Mesa Verde is designated wilderness that is largely undeveloped with no maintained trails, campsites, or structures. The area is managed in accordance with the Wilderness Act to protect the wilderness character of the landscape.



Other Important Resources and Values

Mesa Verde National Park 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 Mesa Verde National Park:

- National Park Developmental Period 1906–1966. These resources include national register eligible or listed resources not contained within the Mesa Verde Administrative District National Historic Landmark (NHL) District. This includes ranches and agricultural properties acquired when the park was designated, early NPS structures, roads, and trails, Depression Era structures, roads and trails constructed by the Civilian Conservation Corps, and Mission 66 developments.
- Water Resources. The availability of water for current and future park operations is a concern. The design and construction of the park's current water system was completed in 1950. Today 17 miles of pipeline bring raw water from the West Mancos River to a water treatment facility near the park entrance where it is processed and pumped to the top of the cuesta. From there water is delivered through 22 miles of pipelines for domestic and operational uses and for fire suppression.

Water rights from the Mancos River, Jackson Gulch Reservoir, and in-park sources grant 240 acre-feet of water for park uses. Approximately 20 million gallons or roughly 62 acre-feet are currently processed and used each year.

- Rare and Endemic Plants. Thirteen plant species known to occur in the park have been assigned a special status at the federal or state level. Six of the 13 special status plant species have been given a Colorado S1 ranking meaning these species are critically imperiled in Colorado because of extreme rarity (5 or fewer occurrences), or very few remaining individuals, or because of some factor of its biology making it especially vulnerable to extirpation from the state. One Colorado S1 plant species found in the park, Schmoll's milkvetch, also is a candidate for the federal list of threatened and endangered species.
- **Paleontological / Geological Resources.** The cliff dwellings for which the park is famous were built into naturally formed alcoves within the Cretaceous Cliff House Sandstone Formation. These features showcase the unique ties of the geologic formations and their associated geologic weathering processes. Mesa Verde is considered to be a cuesta because the mesa has a gentle slope to the south and a 2,000 foot escarpment on the north side. Alcoves formed in the Cliff House Sandstone by the percolation of slightly acidic groundwater through the porous sandstone, dissolving any cement material that held the grains together. These grains were then removed through erosional processes that included wind, water, and frost weathering. Without this geologic process, there probably would be no dwellings here.

Mesa Verde is geographically situated in a highly fossiliferous region of North America once submerged by the Western Interior Seaway until the end of the Cretaceous. Paleontological resources are documented from three units at the park: Mancos Shale (Cretaceous), Mesa Verde Group: Point Lookout Sandstone (Upper Cretaceous), and Mesa Verde Group: Menefee Formation (Upper Cretaceous). Fossil specimens found within Mesa Verde include plant remains, ammonites, pyritized clams, gastropods, bivalves, foraminifera, shark teeth, fish bones and teeth, and trace fossils. Fossils at Mesa Verde are known from within a cultural resource context including Holocene insect fossils associated with coprolites and food storage containers.

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 important 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 Mesa Verde National Park:

- Interaction Between the Ancestral Pueblo People and the Social and Natural Environment. The interaction between the Ancestral Pueblo people and environment revealed in the archeological record offers an opportunity to understand how environment shapes culture and how culture shapes environment.
- Establishment of Mesa Verde National Park and World Heritage Designation. Grassroots concern about site destruction and artifact removal from the Mesa Verde served as a catalyst for passage of the 1906 Antiquities Act and the establishment of Mesa Verde National Park. Designated a World Heritage Site in 1978, the park continues to inspire present and future generations to become stewards and offers global collaborative opportunities in preservation and learning.
- A Living Link Between Past and Present Ways of Life. Mesa Verde National Park is a living link between the past and present that reflects the diversity of the human experience.
- Natural Landscapes, Systems, and Processes. Mesa Verde's natural landscapes provide an outdoor laboratory for investigating the park's dynamic biotic communities, natural setting, and formation and physical processes, while protecting wilderness values and scenic views.
- Archeology. A continuing desire to understand Mesa Verde's past has shaped and continues to shape the discipline and practice of archeology.



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, Administrative Commitments, and Special Designations

Many management decisions for a park unit are directed or influenced by special designations 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 designations 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 Mesa Verde National Park. Special designations are official recognitions that can include certain administrative commitments, such as reporting or monitoring.

Special Mandates

Mesa Verde National Park must manage the Mesa Verde Wilderness, designated on October 20, 1976 (Public Law 94-567), according to the 1964 Wilderness Act, as well as NPS *Management Policies 2006* and NPS Director's Order 41: *Wilderness Stewardship*.

The park is designated a class I area under the Clean Air Act, providing an additional measure of protection from the adverse effects of air pollution. This designation bestows an "affirmative responsibility" on the National Park Service to actively protect the air quality and resources sensitive to air pollution within the park.

The Mancos River and its tributaries within the park are designated Outstanding Resource Waters under the Clean Water Act, providing an additional measure of protection from the adverse effects of water pollution. This designation bestows an "affirmative responsibility" on the National Park Service to actively protect the water quality and resources sensitive to water pollution within the park.

Administrative Commitments and Special Designations

For the inventory of existing administrative commitments and special designations for Mesa Verde National Park, please see appendix C.



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 and Other Important Resources and Values

The fundamental and other important resource and value analysis tables include 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. Please see appendix B for the analysis tables for Mesa Verde National Park's fundamental resources and values and other important resources and values.

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 Mesa Verde National Park and the associated planning and data needs to address them:

- **Optimizing Water Resources.** A prolonged drought, climate change, and increased demand for water in the Southwest make it imperative that the park has a comprehensive understanding of internal and external water resources and water rights. The development of a water resources management plan to effectively conserve and manage the park's water resources is critical for the long-term operation of the park.
- Addressing Aging Infrastructure. The majority of park facilities are more than 75 years old. These structures and utility systems have been periodically upgraded over the years. Early construction techniques and materials, inadequate building foundations and site drainage, coupled with piecemeal repairs and upgrades, have complicated the management of these facilities. The development of a facility management strategy, along with targeted historic structure reports and a cultural landscape report for the Mesa Verde Administrative District NHL District, to address the maintenance, repair, and replacement of park infrastructure is needed.
- **Maximizing Information for Management.** More than 100 years of data collection has resulted in a substantial information asset for the park. At present this information asset is not fully used because it is not readily accessible, is in different formats and media, and is not well organized. There is a need to integrate, analyze, and synthesize the park's data and to develop and implement an information support system reflecting all relevant information using a variety of technologies to assemble, communicate, and share multidimensional information. Improved use and application of the park's information assets in a technology and information management plan will enhance operational efficiencies and decision making.
- **Reimagine the Visitor Experience.** The last comprehensive planning process for how visitors use Mesa Verde National Park occurred as part of Mission 66 planning. Many of the recommendations from that effort were not implemented and subsequent changes and accommodations to increasing visitor pressures have occurred piecemeal rather than as part of a comprehensive assessment and plan. A planning process to reimagine the visitor experience has started with the development of a long-range interpretative plan that includes input from associated tribes, park partners, and local stakeholders. This process will continue with an interpretive media plan for media, digital media, and content planning to create experiences that are relevant to visitors.
- Exploring Opportunities Associated with the New Research Center. The construction of the new Visitor and Research Center with the 17,000-square-foot Research Center provides an opportunity to access the park's museum collection. How the Research Center will function as a curatorial facility, how it interfaces with and supports park operations, and what its role will be as a partner in the community and with other museums/institutions needs to be defined in a collection management plan.

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 or OIRV?	Planning Needs	Priority (H, M, L)	Rationale		
Mesa Verde Museum Collection and Archives	Collection management plan	Н	With the relocation of the park's collection, archives, and library to the new Visitor and Research Center increased use of the collections by researchers, partners, and the public is anticipated and a comprehensive plan is needed to inform future decisions.		
Mesa Verde Administrative District Mesa Verde Archeological Landscape National Park Developmental Period 1906–1966 Water Resources	Facility management strategy	Н	The park's complex infrastructure requires a comprehensive analysis of condition, component renewal, and repair and replacement needs with short-, mid-, and long-range goals.		
Parkwide	Climate change scenario planning	Н	To describe and explore characteristics of plausible climate change futures and to consider how to define and meet park goals (desired conditions) under changing, and new circumstances. Climate change scenario planning is a living process to organize the understanding from climate observations/projections, condition assessments and climate change vulnerability assessments for priority resources into a new way of strategically planning and managing within the context of uncertain climate futures. This understanding can be brought into a range of planning and management needs at the park.		
Mesa Verde Archeological Landscape	Archeological landscape conservation plan	Н	To facilitate development of empirically based decision- making foundation for effective understanding, management, and conservation of archeological resources throughout the park landscape. This plan would also incorporate the outcomes from the climate change scenario planning effort.		
Mesa Verde Administrative District	Targeted historic structure reports	Н	Provide detailed, comprehensive information regarding structural integrity, condition of character-defining elements, history of previous treatments, and alternative approaches to addressing accessibility concerns for specific park structures for use in the facility management strategy.		
Mesa Verde Administrative District National Park Developmental Period 1906–1966	Cultural landscape reports	Н	To repair and maintain the constructed landscape features and address accessibility while maintaining the historical integrity of cultural landscapes and historic districts.		
Water Resources	Water resources management plan	Н	A prolonged drought, climate change, Colorado water law, and increased demand for water in the Southwest necessitate a comprehensive understanding of water resources and rights and a plan to manage this resource.		
Mesa Verde Archeological Landscape	Archeological site plan for the full range of maintained sites	Μ	Provide a consistent design for the management and conservation of those resources that are actively visited, viewed from established overlooks, and/or included in cyclic preservation efforts.		

Planning Needs – Where A Decision-making Process Is Needed					
Related to an FRV or OIRV?	Planning Needs	Priority (H, M, L)	Rationale		
Parkwide	Technology and information management plan	М	To improve access and application of information and implement technologies that support and enhance park operations, the visitor experience, and resource protection.		
Archeological Preservation and Investigation	Digital media and content plan	М	Provide digital data with differing levels of complexity to multiple users that can be acquired, analyzed, and visualized using a variety of devices.		
Mesa Verde Museum Collection and Archives	Scope of collections statement	М	To define the scope of the park's present and future museum collections. Policy requires review and update of scope of collections statements every five years at a minimum.		
Mesa Verde Museum Collection and Archives	Update integrated pest management plan to include the Visitor and Research Center	М	Update the existing plan to include the Visitor and Research Center to prevent and manage pests that may pose a threat to the collections housed in this facility.		
Mesa Verde Administrative District Mesa Verde Museum Collection and Archives	Chapin Mesa museum rehabilitation plan	М	To determine the functions of the Chapin Mesa Archeological Museum to meet operational and 21st century visitor needs.		
Mesa Verde Administrative District	Accessibility plan	М	To improve accessibility of structures and the associated landscape within the national historic landmark district.		
Scenic Resources Wilderness Landscape	Scenery conservation plan	М	To identify scenic conservation goals and strategies to achieve them.		
Scenic Resources Wilderness Landscape	Soundscape management plan	L	To define and develop strategies to maintain and manage the natural soundscapes within the park.		
Scenic Resources Wilderness Landscape	Night sky management plan	L	To define and develop strategies to maintain and manage the natural lightscapes within the park.		
Wilderness Landscape	Wilderness stewardship plan	L	To determine compatible experience or use opportunities while preserving the character of the Mesa Verde wilderness.		
Parkwide	Interpretive media plan	L	To assess interpretive opportunities parkwide and ensure that interpretive story, audience, material, and delivery are congruent.		
Parkwide	Educational strategy	L	To assess and recommend educational opportunities in conjunction with local school districts and other education providers in the region.		
Scenic Resources Wilderness Landscape Mesa Verde Archeological Landscape	Land protection plan	L	To define and develop strategies to address developments and uses adjacent to and within the park.		
Parkwide	Physical security plan	L	To ensure the safety of employees, volunteers, and visitors, and protect park resources and facilities.		

Data Needs – Where Information Is Needed Before Decisions Can Be Made				
Related to an FRV or OIRV?	Data and GIS Needs	Priority (H, M, L)	Rationale, Including Which Planning Need This Data Need Relates To	
Mesa Verde Archeological Landscape Rare and Endemic Plants Paleontological / Geological Resources National Park Developmental Period 1906–1966	Archeological landscape synthesis	Η	This data need relates to the archeological landscape conservation plan. Evaluation of existing archeological data is needed to determine the overall validity and reliability of our present understanding of the parkwide archeological landscape. These data are needed for archeological landscape conservation planning.	
All FRVs and OIRVs	Technology study of how to stabilize the entrance road	Н	This study supports the facility management strategy. The study would identify technology that may extend the life and durability of pavement and improve the stability of the underlying soils.	
All FRVs and OIRVs	LiDAR data and coincident high-resolution, multispectral imagery	Н	These data support all planning needs. These data would provide baseline topographic data and imagery needed for improved analysis and modeling.	
Mesa Verde Administrative District	Historic American Building Survey-level documentation and condition assessment for national historic landmark district	Н	Develop baseline documentation for the national historic landmark district. These data will support facility management strategy and the targeted historic structure reports.	
Mesa Verde Administrative District	Stormwater management assessment	Н	These data will support the targeted historic structure reports and the cultural landscape report because the information is needed to remediate effects of water on buildings within the administrative national historic landmark district.	
Mesa Verde Archeological Landscape National Park Developmental Period 1906–1966	Architectural documentation and condition assessments of sites	Н	Provide a standardized, baseline condition for developmental period resources. This information supports the facility management strategy and the archeological landscape conservation plan.	
Scenic Resources	Air quality monitoring	Н	Continued air quality monitoring is needed, especially due to the potential for expanded energy development. Continuation of all air monitoring currently being conducted in the park would include: atmospheric deposition (nitrogen, sulfur, mercury), ozone, visibility, and dust.	
Rare and Endemic Plants	Plant surveys / density	Н	Surveys are needed to determine populations and trends and accurately map the distribution of rare and endemic plants.	
Paleontological / Geological Resources	Groundwater studies	Н	Provide further understanding of groundwater systems, recharge areas, infiltration routes, conductivity, and any potential endemic species that may be associated with springs or seeps.	

Data Needs – Where Information Is Needed Before Decisions Can Be Made				
Related to an FRV or OIRV?	Data and GIS Needs	Priority (H, M, L)	Rationale, Including Which Planning Need This Data Need Relates To	
All FRVs and OIRVs	Climate change vulnerability assessments	Н	Provide resource vulnerability assessments to inform climate change scenario planning.	
Parkwide	Weather data monitoring	н	Continuous monitoring of credible weather data and ecological responses to track which climate change scenario is becoming a reality, making adjustments when warranted as new information is collected.	
Scenic Resources Wilderness Landscape Traditional and Contemporary Cultural Connections Rare and Endemic Plants	Traditional ecological knowledge study on climate change	Н	This study would provide alternate and complimentary indigenous knowledge about plant and animal species and biophysical characteristics of the park's ecosystem. This information would be used in climate change scenario planning. It would also inform wilderness stewardship and land protection planning, and rare and endemic plant surveys.	
Mesa Verde Museum Collection and Archives	Conservation assessment of historic display cases	Μ	Provide comprehensive assessment of historic display cases and methods to conserve these resources. Data will be used in the development of the collection management plan.	
Mesa Verde Administrative District	Energy efficiency study	М	Provide detailed information and methods to improve the energy efficiency of the buildings within the district. Information will support the targeted historic structure reports and facility management strategy.	
Mesa Verde Administrative District	Update national historic landmark nomination	М	Evaluate other structures and landscape features that may be contributing that were not included in the initial nomination. Existing cultural landscape inventory data and analysis would be used in this update. Information will support targeted historic structure reports, cultural landscape report, and facility management strategy.	
Mesa Verde Archeological Landscape National Park Developmental Period 1906–1966	Complete National Register of Historic Places nominations	М	Evaluate resources that have become eligible or may be eligible. This information supports the facility management strategy and the archeological landscape conservation plan.	
National Park Developmental Period 1906–1966	Historic preservation guides	M	Provide detailed guidelines for maintenance and rehabilitation of developmental period resources. These data support the facility management strategy and the archeological landscape conservation plan.	
National Park Developmental Period 1906–1966	Document existing trail system and trail condition assessment	М	Provide baseline inventory/condition assessment of trail system, associated trail features, and spatial data that will support preservation of historic features and long- range monitoring.	

Data Needs – Where Information Is Needed Before Decisions Can Be Made				
Related to an FRV or OIRV?	Data and GIS Needs	Priority (H, M, L)	Rationale, Including Which Planning Need This Data Need Relates To	
Scenic Resources Wilderness Landscape	Visual resource inventory	М	This information will support the wilderness stewardship and land protection plans. The study will provide an inventory of visual values including scenic quality, sensitivity level, and distance zones.	
Archeological Preservation and Investigation	Archeological studies/ research	М	To synthesize legacy and history of archeology at the park including contributions to development of archeology as a discipline.	
Scenic Resources	Energy development potential assessment	М	Provide information related to the potential for energy development on lands adjacent to the park. Information will be used to support night sky, soundscape, water resources management, wilderness stewardship, and land protection plans.	
Scenic Resources	Special studies to examine pollution dose-response relationships in sensitive park ecosystems	М	Provide data on dose-response necessary to develop estimates of the pollution being deposited in sensitive park ecosystems to avoid adverse effects on water quality and biota. This information supports water resources management, wilderness stewardship, and land protection plans, and climate change scenario planning.	
Scenic Resources Wilderness Landscape	Night sky study	L	This study would establish baseline natural lightscape conditions. This study will support the wilderness stewardship and the land protection plans.	
Scenic Resources Wilderness Landscape	Soundscape assessment	L	Provide baseline assessment of park soundscapes to support a soundscape management plan.	
Paleontological / Geological Resources	Paleontological / geological monitoring	L	Provide baseline information on park paleontological and geological resources. These data would support multiple plans including the facility management strategy, archeological landscape conservation plan, and wilderness stewardship plan.	
Traditional and Contemporary Cultural Connections	Oral history	L	Obtain information from individuals and groups associated with the park that support the scope of collections statement, collection management plan, interpretive media plan, facility management strategy, and the archeological landscape conservation plan.	
Traditional and Contemporary Cultural Connections	GIS data related to ethnographic resources	L	These data support archeological landscape conservation planning and provide the baseline spatial data needed to manage ethnographic resources.	
Traditional and Contemporary Cultural Connections	Traditional use study	L	This study would be used in the preparation of the archeological landscape conservation plan, the wilderness stewardship plan, and the collection management plan. It would provide data about cultural and natural resources and places in the park that have traditional uses.	

Part 3: Contributors

Mesa Verde National Park

Cliff Spencer, Superintendent Bill Nelligan, Deputy Superintendent Allan Loy, Project Manager-Planning and GIS Carol Sperling, Chief of Interpretation and Visitor Services Tara Travis, Curator-Ethnohistorian Scott Travis, Chief of Research/Resource Management Frank Cope, Facility Manager Jessie Farias, Chief of Resources and Visitor Protection Sue Johnson-Erner, Concessions Management Specialist Betty Lieurance, Management Specialist

NPS Intermountain Region

Wendy Berhman, Regional Liaison (IMR/WASO) Erica Cole, Primary Regional Liaison Michele D'Arcy, Regional Liaison

Other NPS Staff

Carrie Miller, Project Manager (Denver Service Center, Planning) Brenda Todd, Project Specialist (Denver Service Center, Planning) Scott Babcock, Project Specialist (Denver Service Center, Planning) Ericka Pilcher, Project Specialist (Denver Service Center, Planning) Kelly Donahue, Project Specialist (Denver Service Center, Planning) Kelly Hatton, Contract Editor (Denver Service Center, Planning) John Paul Jones, Visual Information Specialist (Denver Service Center, Planning) Laura Pernice, GIS Specialist (Denver Service Center, Planning) Rebecca Corning, Contract Librarian (Denver Service Center, Planning) Pam Holtman, Quality Control and Quality Assurance (Park Planning and Special Studies Program)

Appendixes

Appendix A: Enabling Legislation and Legislative Acts for Mesa Verde National Park

House of Representatives Report No. 4944 on the creation of Mesa Verde National Park, June 15, 1906.

MESA VERDE NATIONAL PARK.

JUNE 15, 1906.—Committed to the Committee of the Whole House on the state of the Union and ordered to be printed.

Mr. McCARTHY, from the Committee on the Public Lands, submitted the following

REPORT.

[To accompany H. R. 5998.]

The Committee on the Public Lands, to whom was referred the bill (H. R. 5998) creating the Mesa Verde National Park, having had the same under consideration respectfully submit the following report:

Amend by adding the following proviso at the end of section 2:

Provided, That all prehistoric ruins that are situated within five miles of the boundaries of said park, as herein described, on Indian lands not on lands alienated by patent from the ownership of the United States, are hereby placed under the custodianship of the Secretary of the Interior and shall be administered by the same service that is established by the custodianship of the park.

The various archæological societies of the United States have for a number of years strongly advocated measures calculated to preserve the many very interesting relics of prehistoric times which are found to a considerable number in the Southwest. Notable among these are those found in the southwest corner of Colorado and situate upon what is known as Mesa Verde, adjoining the Southern Ute Reservation. The lands sought to be embraced in a national park by this bill are situate upon a high mesa, and are wholly unfit for any agricultural or mining purposes; nor is the land valuable for grazing, owing to the want of water.

The establishment of this park has heretofore had the favorable notice of the Interior Department. Letters bearing upon the subject being hereto appended. Reference is also made to the hearings had before this committee January 11, 1905.

Resolutions unanimously adopted at the regular meeting of the Davenport Academy of Sciences. Davenport, Iowa, January 29, 1906.

Whereas the Mesa Verde Cliff Dwellings, situated in Montezuma County, Colo., are a group of prehistoric structures of great importance to the study of American archaeology; are acknowledged by travelers and eminent scholars to be among the most interesting and instructive objects of our country; and

Whereas these ancient works are suffering greatly from want of protection and care, and are constantly in danger of being despoiled by private collectors: Therefore, be it *Resolved*, That we, the members of the Davenport Academy of Sciences, urge the passage of the bill purposing to create the Mesa Verde National Park, a bill prepared by the Hon. W. A. Richards, Commissioner of the General Land Office, and recommended to the favorable consideration of Congress by the Hon. Ethan Allen Hitchcock, Secretary of the Interior, in his annual report to the Fifty-ninth Congress, and recently introduced by the Hon. H. M. Hogg, Representative from the Second district of the State of Colorado; also the passage of any other bills that may be introduced and having for their purpose the protection of these cliff dwellings or of American antiquities in general, especially H. R. 11016; and be it further

Resolved, That a copy of these resolutions be sent to Hon. J. C. Cannon, Speaker of the House of Representatives; to Hon. John F. Lacey, chairman of Public Lands Committee of the House of Representatives; to Hon. Henry C. Hansbrough, chairman of the Public Lands Committee of the United States Senate; to the Hon. W. B. Allison, United States Senate; to the Hon. J. P. Dolliver, United States Senate; to the Hon. A. F. Dawson, Congressman from the Second district.

C. A. FICKE, President. S. G. F. SHELDON, Corresponding Secretary.

PUEBLO BUSINESS MEN'S ASSOCIATION, Pueblo, Colo., February 1, 1906.

DEAR SIR: This is to certify that at a regular meeting of the Pueblo Business Men's Association, held January 5, 1906, the following resolutions were unanimously adopted:

Whereas there are in the southwestern part of the State of Colorado relics of a long extinct type of civilization, known as the Cliff Dwellings of the Mesa Verde; and

Whereas there is a danger that these wonderful ruins, which have attracted the attention of scholars from all over the world, through neglect and spoliation will suffer in their value to this country and also to the scientific world: Therefore be it

Resolved, That the Pueblo Business Men's Association heartily favors and indorses the bill prepared by the honorable Commissioner of the General Land Office, recommended by the honorable Secretary of the Interior, and introduced by the Hon. H. M. Hogg, a Representative from this State, setting asside a certain tract of land comprising a greater part of the ruins already referred to and known as the Mesa Verde National Park, and protecting it in the interest of science; and be it further

Resolved, That a copy of these resolutions be sent to Hon. Theodore Roosevelt, President of the United States; to Hon. Ethan Allen Hitchcock, Secretary of the Interior; to Hon. W. A. Richards, Commissioner of the General Land Office; to Hon. J. G. Cannon, Speaker of the House of Representatives; to Hon. Henry C. Hansbrough, chairman of the Public Lands Committee of the Senate; to Hon. John F. Lacey, chairman of the Public Lands Committee of the House of Representatives, and to Colorado's Senators and Representatives in Congress at Washington.

Very sincerely, yours,

THE PUEBLO BUSINESS MEN'S ASSOCIATION, By E. W. PALMER, Secretary.

Hon. J. G. CANNON,

Speaker of the House of Representatives.

THE IOWA ANTHROPOLOGICAL ASSOCIATION,

Iowa City, Iowa, February, 1906.

Whereas there has become a widespread interest in the preservation of all those evidences which may aid in the understanding of the previous inhabitants of this continent;

Whereas many labors have already been put forth by individuals and institutions for the obtainment of this information; and

Whereas there is now before the Congress of the United States a bill for the preservation of ancient archæological remains, especially in the Mesa Verde of Colorado: Therefore

Resolved, That the Iowa Anthropological Association views with greatest interest this movement and anxiously adds its voice to the request from other sources that immediate legal measures be instituted to save from vandalism, greed, and unnecessary natural decay the numerous stone, brick, adobe, and other works found in the Colorado and other regions.

Adopted unanimously.

DUREN J. H. WARD, Secretary.

SEATTLE, WASH., April 24, 1906

[†] DEAR MR. LACEY: Your invitation to call upon you is now availed of to enlist your good offices in passing the Mesa Verde National Park bill.

I am assured through reports of Prof. E. L. Hewitt, with whom I am personally acquainted, of the desirability of this measure to bring under the control of the United States these interesting and valuable prehistoric structures.

States these interesting and valuable prehistoric structures. It is hoped that you may lend your efforts to this measure and, I assure you that after visiting many of them myself I can ask this with considerable personal knowledge of the benefit to be derived if the Mesa Verde National Park bill is passed.

As the student of these ethnological treasures I beg your active support. Yours, very sincerely,

Tours, very sincerery

W. A. GLASSFORD, Lieutenant-Colonel. U. S Army.

Hon. JNO. F. LACEY, House of Representatives, Washington, D. C.

Public Law 59-353 creating Mesa Verde National Park, June 29, 1906

FIFTY-NINTH CONGRESS. SESS. I. CHS. 3606, 3607. 1906.

June 29, 1906. [H. R. 130.]

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CHAP. 3606.-An Act Authorizing the extension of Kalorama road northwest.

[Public, No. 352.] District of Columbia. Kalorama road. Condemnation of land for extension of. *Ante*, p. 151.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That, under and in accord-ance with the provisions of sections four hundred and ninety-one a to

of four hundred and ninety-one n, both inclusive, of subchapter one of chapter fifteen of the Code of Law for the District of Columbia, within thirty days after the passage of this Act, the Commissioners of the District of Columbia be, and they are hereby, authorized and directed to institute in the supreme court of the District of Columbia, a proceeding in rem to condemn the land that may be necessary for the extension of Kalorama road from Eighteenth street to Champlain street with a width of fifty feet.

Appropriation for expenses.

ete

SEC. 2. That the sum of three hundred dollars, or so much thereof as may be necessary, is hereby appropriated out of the revenues of the District of Columbia to provide the necessary funds for the costs and expenses of the condemnation proceedings taken pursuant hereto, to be repaid to the District of Columbia from the assessment for Payment of awards, benefits when the same are collected, and a sufficient sum to pay the amounts of all judgments and awards is hereby appropriated out of the revenues of the District of Columbia.

Approved, June 29, 1906.

June 29, 1906. [H. R. 5998.]

CHAP. 3607 .- An Act Creating the Mesa Verde National Park.

[Public, No. 353.] Mesa Verde National ark, colo. Establishment of.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled. That there is hereby reserved from settlement, entry, sale, or other disposal, and set apart as a public reservation, all those certain tracts, pieces, and parcels of land lying and being situate in the State of Colorado, and within the boundaries particularly described as follows: Beginning at the northwest corner of section twenty-seven, township thirty-five north, range sixteen west, New Mexico principal meridian; thence easterly along the sec-tion lines to the southwest corner of the southeast quarter of section twenty, township thirty-five north, range fifteen west; thence northerly to the northwest corner of the southeast quarter of said section; thence easterly to the northeast corner of the southeast quarter of said section; thence northerly to the northwest corner of section twenty-one, said township; thence easterly to the northeast corner of the northwest quarter of said section; thence northerly to the northwest corner of the southeast quarter of section sixteen, said township; thence easterly to the northeast corner of the southeast quarter of section fifteen, said township; thence southerly to the southeast corner of said section; thence easterly to the southwest corner of section thirteen, said township; thence northerly to the northwest corner of the southwest quarter of said section; thence easterly to the northeast corner of the southwest quarter of said section; thence northerly to the northwest corner of the northeast quarter of said section; thence easterly to the northeast corner of said section; thence northerly to the northwest corner of the southwest quarter of section seven, township thirty-five north, range fourteen west; thence easterly to the northeast corner of the southwest quarter of said section; thence northerly to the northwest corner of the southeast quarter of section six, said township; thence easterly to the northeast corner of the southwest quarter of section four, said township; thence southerly to the northwest corner of the southeast quarter of section nine, said township; thence easterly to the northeast corner of

Description.

FIFTY-NINTH CONGRESS. SESS. I. CH. 3607. 1906.

the southeast quarter of said section; thence southerly to the northwest corner of section twenty-two, said township; thence easterly to the northeast corner of the northwest quarter of said section; thence southerly to the northwest corner of the southeast quarter of said section; thence easterly to the northeast corner of the southeast quarter of said section; thence southerly to the northwest quarter of section twenty-six, said township; thence easterly to the northeast corner of the northwest quarter of said section; thence southerly to the southeast corner of the southwest quarter of section thirty-five, said township; thence easterly to the northeast corner of section two, township thirty-four north, range fourteen west; thence southerly along the section line between sections one and two and between sections eleven and twelve to the northern boundary of the southern Ute Indian Reservation; thence westerly along the northern boundary of said reservation to the center of section nine, township thirty-four north, range sixteen west; thence northerly along the quarter-section lines to the northwest corner of the southeast quarter of section twenty-eight, township thirty-five north, range sixteen west; thence easterly to the northeast corner of the southeast quarter of said section; thence northerly to the northwest corner of section twenty-seven, said township, the place of beginning.

SEC. 2. That said public park shall be known as the Mesa Verde National Park, and shall be under the exclusive control of the Secretary of the Interior, whose duty it shall be to prescribe such rules and regulations and establish such service as he may deem necessary for the care and management of the same. Such regulations shall provide specifically for the preservation from injury or spoliation of the ruins and other works and relics of prehistoric or primitive man within said park: *Provided*, That all prehistoric ruins that are situated within five miles of the boundaries of said park, as herein described, on Indian lands and not on lands alienated by patent from the ownership of the United States, are hereby placed under the custodianship of the Secretary of the Interior, and shall be administered by the same service that is established for the custodianship of the park.

SEC. 3. That the Secretary of the Interior be, and he is hereby, authorized to permit examinations, excavations, and other gathering of objects of interest within said park by any person or persons whom he may deem properly qualified to conduct such examinations, excavations, or gatherings, subject to such rules and regulations as he may prescribe: *Provided always*, That the examinations, excavations, and gatherings are undertaken only for the benefit of some reputable museum, university, college, or other recognized scientific or educational institution, with a view to increasing the knowledge of such objects and aiding the general advancement of archeological science.

SEC. 4. That any person or persons who may otherwise in any manner willfully remove, disturb, destroy, or molest any of the ruins, mounds, buildings, graves, relics, or other evidences of an ancient civilization or other property from said park shall be deemed guilty of a misdemeanor, and upon conviction before any court having jurisdiction of such offenses shall be fined not more than one thousand dollars or imprisoned not more than twelve months, or such person or persons may be fined and imprisoned, at the discretion of the judge, and shall be required to restore the property disturbed, if possible.

Approved, June 29, 1906.

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Name.

Regulations.

Proviso. Prehistoric ruins.

Excavations, etc.

Proviso. Restriction.

Penalty for destroy ng ruins, etc.

House of Representatives Report No. 784 on revising the boundaries of Mesa Verde National Park, October 1, 1963.

88TH CONGRESS 1st Session	}	HOUSE	OF	REPRESENTATIVES	{	Report No. 784
100 0000000)				(110.784

REVISING THE BOUNDARIES OF MESA VERDENATIONAL PARK, COLO.

OCTOBER 1, 1963.—Committed to the Committee of the Whole House on the State of the Union and ordered to be printed

Mr. MORRIS, from the Committee on Interior and Insular Affairs, submitted the following

REPORT

[To accompany H.R. 6756]

The Committee on Interior and Insular Affairs, to whom was referred the bill (H.R. 6756) to revise the boundaries of Mesa Verde National Park, Colo., and for other purposes, having considered the same, report favorably thereon with an amendment and recommend that the bill as amended do pass.

The amendment is as follows:

Page 3, line 2, after "sums" add ", but not more than \$125,000,".

PURPOSE

The purpose of H.R. 6756, by Congressman Aspinall, is to enlarge the boundaries of the Mesa Verde National Park, Colo., and thus to add approximately 740 acres to the park.

NEED

Mesa Verde National Park was established by act of Congress in 1906 to preserve a remarkable collection of ruins representative of successive stages of development of Pueblo Indians. The area was continuously inhabited by them from the 1st to the 14th centuries, anno Domini. The park now includes about 51,000 acres and attracts over a quarter of a million visitors a year.

Opportunity has arisen to add to the park the 740 acres of land covered by the bill. About 260 acres are already in Federal ownership; the remainder are privately owned. The opportunity is one that should be taken. The lands to be added lie along the entrance road to the park. Their inclusion within its boundaries will not only protect against possible unsightly or incompatible intrusions but will permit removal of the administrative headquarters site to a better location than that it now occupies and reduce the travel distance between the headquarters and the nearest local communities by 22 miles. The removal is part of a program to reduce the congestion at Spruce Tree Point caused by the presence there not only of the park headquarters but also of most of the accommodations for visitors which the park contains. Another part of the program consists of the relocation from Spruce Tree Point to Navajo Hill of the overnight cabins and certain other facilities which a concessionaire now maintains at the former location.

COST AND COMMITTEE AMENDMENT

Independent appraisals made for the National Park Service indicate that the 481 acres of private land which are to be acquired under the bill have a value of not more than \$125,000. The committee recommends an amendment which will limit the amount authorized to be appropriated to this figure.

DEPARTMENT RECOMMENDATION

The favorable report of the Department of the Interior is set forth below in full:

> U.S. DEPARTMENT OF THE INTERIOR, OFFICE OF THE SECRETARY, Washington, D.C., August 22, 1963.

HON. WAYNE N. ASPINALL,

Chairman, Committee on Interior and Insular Affairs, House of Representatives, Washington, D.C.

DEAR MR. ASPINALL: Your committee has requested a report on H.R. 6756, a bill, to revise the boundaries of the Mesa Verde National Park, Colo., and for other purposes.

We recommend early enactment of the bill.

H.R. 6756 revises the boundaries of the Mesa Verde National Park in the State of Colorado by adding approximately 740 acres of land to the park. Of this addition, 481 acres are in private ownership, and 259 acres are federally owned and administered by the Bureau of Land Management. The public lands affected are located in sections 29 and 32, township 36 north, range 14 west, New Mexico Principal Meridian, Colo. and are more particularly described as follows:

Meridian, Colo. and are more particularly described as follows: In sec. 29, those portions of the SE¼NW¼ and the W½SE¼ lying south of U.S. Highway 160;

In sec. 32, SW $\frac{1}{4}$ NE $\frac{1}{4}$, E $\frac{1}{2}$ NW $\frac{1}{4}$, W $\frac{1}{2}$ SW $\frac{1}{4}$, N $\frac{1}{4}$ SW $\frac{1}{4}$, SW $\frac{1}{4}$ NE $\frac{1}{4}$ SW $\frac{1}{4}$.

The above-described public lands are presently included in a withdrawal application, Colorado 017977, filed by the National Park Service for the use of the lands as an administrative site in connection with the administration of the Mesa Verde National Park. While the withdrawal of these lands can be accomplished by administrative action, this legislation is needed to authorize the acquisition of the privately owned lands and to redesignate the boundaries of the park.

The addition of these lands will afford space for administrative offices, maintenance facilities, and employees' quarters, provide for future expansion of these and other facilities, and insure a permanently protected entrance to the national park.

Mesa Verde National Park contains the ruins of hundreds of prehistoric Indian dwellings built on mesa tops and in caves of many rugged canyons. It is the responsibility of this Department to preserve these priceless and fragile resources and at the same time make them accessible for the benefit and enjoyment of present and future generations.

Existing facilities for park administration, maintenance, and employee quarters are located at Spruce Tree Point on Chapin Mesa 22 miles from the park entrance. This small area also includes all of the overnight and day-use accommodations for visitors. This concentration was practical in early years when ultimate maximum visitor use was forecast at about 50,000 per year; however, visitor use exceeded 260,000 in 1962, and continued increases are expected in the future. Congestion and confusion, which are detrimental to effective park management and to visitor enjoyment and appreciation of park features, now exist and will become greater unless steps are taken to distribute facilities on a more practicable basis. Moreover, scientific and archeological values will be jeopardized if corrective measures are not taken.

To correct the present unsatisfactory conditions and permit future operation and growth of facilities and services in an orderly and effective manner, we propose to relocate administrative and maintenance facilities and employee quarters in the vicinity of the north entrance of the park upon land which H.R. 6756 would authorize the Secretary to acquire. This location affords (1) more effective admin-istrative control and direction over all park programs; (2) opportunities for greater efficiency and economy in construction and in operations; (3) increased accessibility between park headquarters and local communities-the distance between the two points will be reduced by about 22 miles; (4) space for probable future expansion of facilities without danger of intrusion upon park features; and (5) a permanently protected entrance. There are no sites within the present park boundaries that can fulfill these requirements and offer the same advantages for a headquarters location. Acquisition of land at the north entrance is considered essential to successful operation of the park.

As a part of the program to relieve congestion at Chapin Mesa, overnight cabins, the campground, and related facilities at Spruce Tree Point will be relocated at Navajo Hill. This new location is strategically situated on existing park lands and conveniently accessible to all park visitors. This phase of the program is neither dependent upon the proposed acquisition of additional lands nor upon construction of the administrative unit at the north entrance.

About 481 of the approximate 740 acres that would be added to the park are privately owned. It is estimated that these private lands could be acquired for approximately \$100,000. The other lands proposed for acquisition at the north entrance are federally owned.

The Bureau of the Budget has advised that there is no objection to the presentation of this report from the standpoint of the administration's program.

Sincerely yours,

JOHN M. KELLY, Assistant Secretary of the Interior.

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Calendar No. 759

88th Congress 1st Session SENATE

Верорт No. 778

REVISING THE BOUNDARIES OF MESA VERDE NATIONAL PARK, COLO.

DECEMBER 13, 1963.—Ordered to be printed

Mr. BIBLE, from the Committee on Interior and Insular Affairs, submitted the following

REPORT

[To accompany H.R. 6756]

The Committee on Interior and Insular Affairs, to whom was referred the bill (H.R. 6756) to revise the boundaries of Mesa Verde National Park, Colo., and for other purposes, having considered the same, report favorably thereon and recommend that the bill do pass.

PURPOSE

The purpose of H.R. 6756, by Congressman Aspinall, is to enlarge the boundaries of the Mesa Verde National Park, Colo., and thus to add approximately 740 acres to the park.

NEED

Mesa Verde National Park was established by act of Congress in 1906 to preserve a remarkable collection of ruins representative of successive stages of development of Pueblo Indians. The area was continuously inhabited by them from the 1st to the 14th centuries, anno Domini. The park now includes about 51,000 acres and attracts over a quarter of a million visitors a year.

Opportunity has arisen to add to the park the 740 acres of land covered by the bill. About 260 acres are already in Federal ownership; the remainder are privately owned. The opportunity is one that should be taken.

The lands to be added lie along the entrance road to the park. Their inclusion within its boundaries will not only protect against possible unsightly or incompatible intrusions but will permit removal of the administrative headquarters site to a better location than that it now occupies and reduce the travel distance between the headquarters and the nearest local communities by 22 miles. The removal

99-010

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BOUNDARIES OF MESA VERDE NATIONAL PARK, COLO.

is part of a program to reduce the congestion at Spruce Tree Point caused by the presence there not only of the park headquarters but also of most of the accommodations for visitors which the park contains. Another part of the program consists of the relocation from Spruce Tree Point to Navajo Hill of the overnight cabins and certain other facilities which a concessionaire now maintains at the former location.

 \mathbf{COST}

Independent appraisals made for the National Park Service indicate that the 481 acres of private land which are to be acquired under the bill have a value of not more than \$125,000, which is the appropriation authorized by the bill.

DEPARTMENT RECOMMENDATION

The favorable report of the Department of the Interior is set forth below in full:

U.S. DEPARTMENT OF THE INTERIOR,

OFFICE OF THE SECRETARY, Washington, D.C., August 22, 1963.

Hon. WAYNE N. ASPINALL,

Chairman, Committee on Interior and Insular Affairs, House of Representatives, Washington, D.C.

DEAR MR. ASPINALL: Your committee has requested a report on H.R. 6756, a bill, to revise the boundaries of the Mesa Verde National Park, Colo., and for other purposes.

We recommend early enactment of the bill.

H.R. 6756 revises the boundaries of the Mesa Verde National Park in the State of Colorado by adding approximately 740 acres of land to the park. Of this addition, 481 acres are in private ownership, and 259 acres are federally owned and administered by the Bureau of Land Management. The public lands affected are located in sections 29 and 32, township 36 north, range 14 west, New Mexico Principal Meridian, Colo., and are more particularly described as follows:

In sec. 29, those portions of the $SE\frac{1}{4}NW\frac{1}{4}$ and the $W\frac{1}{2}SE\frac{1}{4}$ lying south of U.S. Highway 160;

In sec. 32, $SW'_{4}NE'_{4}$, $E'_{2}NW'_{4}$, $W'_{4}SW'_{4}$, $N'_{2}NE'_{4}SW'_{4}$, $SW'_{4}NE'_{4}$ SW'_{4} .

The above-described public lands are presently included in a withdrawal application, Colorado 017977, filed by the National Park Service for the use of the lands as an administrative site in connection with the administration of the Mesa Verde National Park. While the withdrawal of these lands can be accomplished by administrative action, this legislation is needed to authorize the acquisition of the privately owned lands and to redesignate the boundaries of the park.

The addition of these lands will afford space for administrative offices, maintenance facilities, and employees' quarters, provide for future expansion of these and other facilities, and insure a permanently protected entrance to the national park.

Mesa Verde National Park contains the ruins of hundreds of prehistoric Indian dwellings build on mesa tops and in caves of many rugged canyons. It is the responsibility of this Department to preserve these priceless and fragile resources and at the same time

3

BOUNDARIES OF MESA VERDE NATIONAL PARK, COLO.

make them accessible for the benefit and enjoyment of present and future generations.

Existing facilities for park administration, maintenance, and employee quarters are located at Spruce Tree Point on Chapin Mesa 22 miles from the park entrance. This small area also includes all of the overnight and day-use accommodations for visitors. This concentration was practical in early years when ultimate maximum visitor use was forecast at about 50,000 per year; however, visitor use exceeded 260,000 in 1962, and continued increases are expected in the future. Congestion and confusion, which are detrimental to effective park management and to visitor enjoyment and appreciation of park features, now exist and will become greater unless steps are taken to distribute facilities on a more practicable basis. Moreover, scientific and archeological values will be jeopardized if corrective measures are not taken.

To correct the present unsatisfactory conditions and permit future operation and growth of facilities and services in an orderly and effective manner, we propose to relocate administrative and maintenance facilities and employee quarters in the vicinity of the north entrance of the park upon land which H.R. 6756 would authorize the Secretary to acquire. This location affords (1) more effective administrative control and direction over all park programs; (2) opportunities for greater efficiency and economy in construction and in operations; (3) increased accessibility between park headquarters and local communities—the distance between the two points will be reduced by about 22 miles; (4) space for probable future expansion of facilities without danger of intrusion upon park features; and (5) a permanently protected entrance. There are no sites within the present park boundaries that can fulfill these requirements and offer the same advantages for a headquarters location. Acquisition of land at the north entrance is considered essential to successful operation of the park.

As a part of the program to relieve congestion at Chapin Mesa, overnight cabins, the campground, and related facilities at Spruce Tree Point will be relocated at Navajo Hill. This new location is strategically situated on existing park lands and conveniently accessible to all park visitors. This phase of the program is neither dependent upon the proposed acquisition of additional lands nor upon construction of the administrative unit at the north entrance.

About 481 of the approximate 740 acres that would be added to the park are privately owned. It is estimated that these private lands could be acquired for approximately \$100,000. The other lands proposed for acquisition at the north entrance are federally owned.

The Bureau of the Budget has advised that there is no objection to the presentation of this report from the standpoint of the administration's program.

Sincerely yours,

JOHN M. KELLY, Assistant Secretary of the Interior.

Public Law 94-567 designating the Mesa Verde Wilderness, October 20, 1976.

Public Law 94-567 designating the Mesa Verde Wilderness, October 20, 1976.

90 STAT. 2692

PUBLIC LAW 94-567-OCT. 20, 1976

Public Law 94–567 94th Congress

An Act

Oct. 20, 1976 [H.R. 13160] To designate certain lands within units of the National Park System as wilderness; to revise the boundaries of certain of those units; and for other purposes.

Wilderness areas. Designation. 16 USC 1132 note. Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That in accordance with section 3(c) of the Wilderness Act (78 Stat. 890; 16 U.S.C. 1132(c)), the following lands are hereby designated as wilderness, and shall be administered by the Secretary of the Interior in accordance with the applicable provisions of the Wilderness Act:

(h) Mesa Verde National Park, Colorado, wilderness comprising Mesa Verde eight thousand one hundred acres, depicted on a map entitled "Wilderness Plan, Mesa Verde National Park, Colorado", numbered 307-20,007-A and dated September 1972, to be known as the Mesa Verde Wilderness.

Mesa Verde National Park, Colorado

Mesa Verde is a particularly outstanding archaeological area of the National Park System, and is the only area of park designation which has been set aside primarily for its historic and archaeological values.

Approximately 8,100 acres of the park's 52,036 total acres are proposed for designation as wildernes. Specific language is provided authorizing the Secretary to undertake such minimum activity within the wilderness as is necessary to investigate and stabilize sites of archaeological interest.

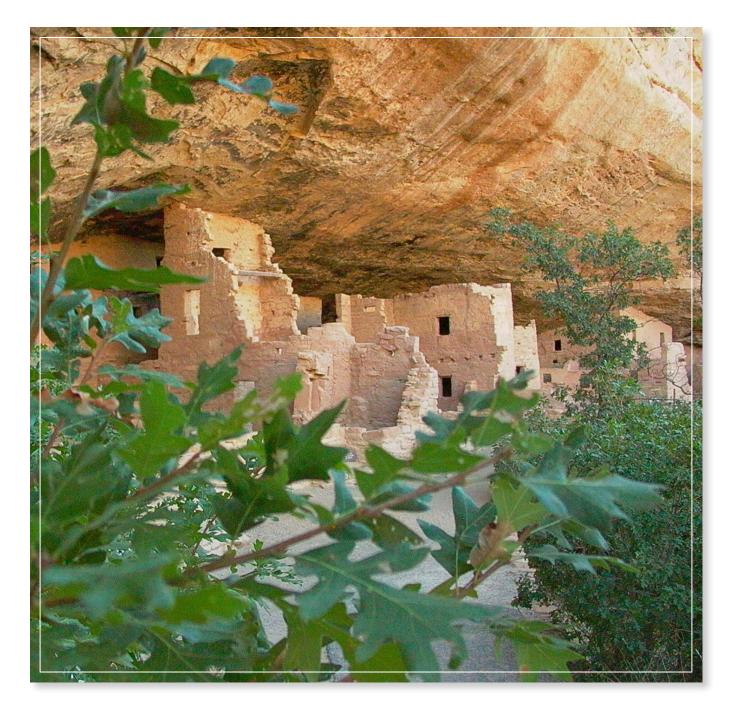
The Committee adopted the acreage figure recommended by the National Park Service, although it was recognized that there are other areas within the park which would qualify for wilderness designation. It is understood that there is additional archaeological work to be undertaken on these lands, and the Committee anticipates that at some future time when these resources are more fully understood, the National Park Service should make further recommendations for wilderness designation.

Appendix B: Analysis of Fundamental Resources and Values and Other Important Resources and Values

Fundamental Resource or Value	Mesa Verde Archeological Landscape
Related Significance Statements	 Mesa Verde National Park is an example of thousands of years of human interaction with the environment, reflected in a remarkable density and variety of sites related to the Ancestral Pueblo occupation of the Southwest. Mesa Verde National Park protects and preserves more than 5,000 archeological sites. These include more than 600 alcove sites, some of the best known and most accessible cliff dwellings in North America.
Current Conditions and Trends	 Conditions Archeological site condition varies significantly and is often driven by fire activity in the park. Fires have fundamentally impacted site formation processes and are a major factor in the management of archeological sites. Physical processes that occur after fires (such as erosion) can also impact the condition of the archeological landscape. Maintained archeological sites (with exception of those viewed from a distance) have all had episodes of excavation, stabilization, etc. at some point in time. Many of the alcove sites are not very safe, even if they have been stabilized. The stabilization crew focuses much of its effort on the maintained sites. The park has partnerships with the University of Pennsylvania School of Conservation (doing documentation and preservation of plaster, etc.). This is expanding to include the full scope of archeological site conservation strategies, including reburying sites. The park works with many partners that are individuals or small organizations, such as the Getty Conservation Institute, architecture students, and historians to preserve and document archeological sites throughout park. The park's partnership with the tribal community has been very valuable. Partnership activities can include lengthy trips to the backcountry with tribal members. Stabilization is ongoing for all of the maintained sites. Average annual temperature for the region increased 1.4°F in the 20th century, contributing to wildfire intensity and frequency.
Threats	 Threats Air quality is impacting Basketmaker III rock art. Surface collecting is a threat in certain areas of the park. Inherent character of the sites themselves. The structure of some of the prehistoric buildings is beginning to fail. Some stabilization efforts (use of concrete), etc. negatively affects the buildings. Vandalism of archeological sites. Intrinsic geological character of alcoves. For example, water is a key factor in site formation processes, and it continues to flow and affect the archeological sites. Slope movement impacts the sites. Visitor use patterns. Many have been mitigated, but it is a need to continue maintenance. There is a question of allowing an increased visitor footprint, and making sites stable for this to reduce potential impacts. Unstable cliff faces on some sites. (Square Tower House has had three major rock falls in the last 10 years.) Array of faunal impacts, such as birds and mammals making habitat out of alcove sites. Climate change is a significant issue that the park is facing. Continued desertification of the mesa leads to more fires, pinyon die-off, and expansion of invasive species territories. Fire is the biggest threat to the archeological record.

Fundamental Resource or Value	Mesa Verde Archeological Landscape
Opportunities	 Opportunities Understand current condition of the archeological landscape on a broad scale beyond the park's developed corridor. Current understanding of vulnerability, current conditions, etc. to inform the management response post-fire, post-flood. Building a model for long-term management and intervention across the board and using extant data to do this. Provide more data and information digitally so that visitors can design their own experience. In-field seminars where visitors could talk to archeologists in the field to communicate the conservation aspect of the archeological work. Internships with Fort Lewis College and working with Crow Canyon Archaeological Center on future projects. Opportunity to add to the archeological body of knowledge information about community centers, and to develop interpretation around these community centers. Trails around the park's Far View Area could interpret these community centers.
Existing Data and Plans Related to the FRV	 Mesa Verde National Park archeological site database (recently converted from Access to web-based resource) is available. Integrated site files for all archeological sites that have been excavated. These are linked to any museum collections that came from each site. One hundred-plus years of archeological excavations allowing park staff to understand the archeological landscape from a historical perspective to design a conservation model for the park. This model is not designed to address archeological problems, but is more focused on conservation.
Data and/or GIS Needs	 Archeological landscape synthesis. Detailed architectural documentation and condition assessments of sites. Complete National Register of Historic Places nominations. Climate change vulnerability assessments.
Planning Needs	 Archeological landscape conservation plan. Archeological site plans for the full range of maintained sites. Climate change scenario plan. Land protection plan.
Laws, Executive Orders, and Regulations That Apply to the FRV	 Laws, Executive Orders, and Regulations That Apply to the FRV Antiquities Act of 1906 Historic Sites, Buildings and Antiquities Act of 1935 National Historic Preservation Act of 1966, as amended (16 USC 470) Executive Order 11593, "Protection and Enhancement of the Cultural Environment" American Indian Religious Freedom Act of 1978 Archaeological Resources Protection Act of 1979 Native American Graves Protection and Repatriation Act of 1990 Curation of Archeological Collections (36 CFR 79) Protection of Historic Properties (36 CFR 800) Executive Order 13107, "Indian Sacred Sites" Executive Order 13175, "Consultation and Coordination with Indian Tribal Governments" Secretarial Order 3289, "Addressing the Impacts of Climate Change on America's Water, Land, and Other Natural and Cultural Resources"

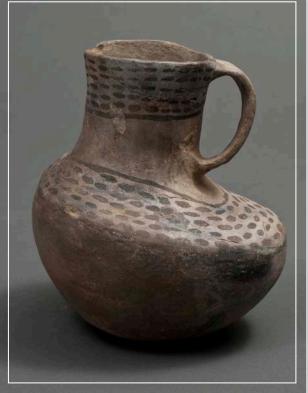
Fundamental Resource or Value	Mesa Verde Archeological Landscape
NPS Policy-level Guidance	 NPS Policy-level Guidance (NPS Management Policies 2006 and Director's Orders) The Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation NPS Management Policies 2006 (§5.3.5.2, §5.3.5.5) Director's Order 28: Cultural Resource Management Director's Order 28A: Archeology 2008 Programmatic Agreement among the National Park Service, the Advisory Council on Historic Preservation, and the National Conference of State Historic Preservation Officers



Fundamental Resource or Value	Mesa Verde Museum Collection and Archives
Related Significance Statements	• As the first national park dedicated to the works of prehistoric cultures, Mesa Verde has played a key developmental role in the science of conservation archeology. This rich legacy dates to the early history of the national park system, with seminal works by preeminent researchers, and continues to be an essential part of park operations.
Current Conditions and Trends	 Conditions The collection condition survey states that the collection is in fair condition. The collection has legacy issues due to its age. Many parts of the collection were originally catalogued with incomplete information that does not meet current standards. Many objects have been exhibited for long periods of time; some as long as 70 years. Some objects have been conserved using conservation treatments that have reached their lifespan (e.g., glues used to reconstruct ceramic vessels). The park has a new collection storage facility that addresses most of the deficiencies, as defined by the museum collection checklist. Trends For objects in storage, the trend is positive; the collection is housed in a stable environment. For greater use and accessibility of the objects and archive, the trend is improving. Digitization and 3D scanning of the archival collection is ongoing; the trend is improving. The majority of the collection will have more finding aids in the future, resulting in a positive trend. The new Visitor and Research Center has resulted in an increase in research requests.
Threats and Opportunities	 Threats Failing glues used by the park historically on the ceramic collection. Continual display of select objects on exhibit causes deterioration of those objects. Opportunities Rotate objects more to limit display duration of objects. A long-range interpretive plan would identify ways to improve display of objects. Evaluate the continuing use of historical display cases. Partnerships with universities for student volunteer opportunities for the archives, library, and museum collection, including conservation, documentation, and cataloging in the Visitor and Research Center. Increased use of the archives and collection for research and public education. Space is commodious and facilitates appropriate access to collections. Decide how to best maximize this feature of the building.
Existing Data and Plans Related to the FRV	Structural fire plan.
Data and/or GIS Needs	Conservation assessment of the historic display cases.
Planning Needs	 Collection management plan. Scope of collections statement. Chapin Mesa museum rehabilitation plan. Update integrated pest management plan to include Visitor and Research Center.

Fundamental Resource or Value	Mesa Verde Museum Collection and Archives
Laws, Executive Orders, and Regulations That Apply to the FRV, and NPS Policy-level Guidance	 Laws, Executive Orders, and Regulations That Apply to the FRV Museum Act of 1955, as amended National Historic Preservation Act of 1966, as amended (16 USC 470) Antiquities Act of 1906 Archeological and Historic Preservation Act of 1974 Archaeological Resources Protection Act of 1979 American Indian Religious Freedom Act of 1978 Historic Sites, Buildings, and Antiquities Act of 1935 Native American Graves Protection and Repatriation Act of 1990 Paleontological Resources Protection Act of 1988 Executive Order 11593, "Protection and Enhancement of the Cultural Environment" Executive Order 13007, "American Indian Sacred Sites" Curation of Federally Owned and Administered Archeological Collections (36 CFR 79) Protection of Historic Properties (36 CFR 800) NPS Policy-level Guidance (NPS Management Policies 2006 and Director's Orders) Director's Order 24: NPS Museum Collections Management NPS Management Policies 2006 (§2.3.1.4, 4.2, 5.1, 8.10, 1.6, 4.1, 4.1.4, 4.4.1, 4.7.2, 5.3.5.5) Director's Order 28A: Archeology, section 4A(3), "Native American Graves Protection and Repatriation Act"





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Fundamental Resource or Value	Scenic Resources
Related Significance Statements	 Mesa Verde National Park supports outstanding wilderness values, clean air, night skies, and scenic views of the mountains, canyons, and mesas of the Four Corners Region.
Current Conditions and Trends	 Conditions Condition of scenic resources range from nearly pristine to modified by the existence of roads, utilities, and development visible from some viewpoints. The park offers 360 degree views with vistas that have varied scenery visible from long distances. From a cultural perspective, the scenic viewshed offers glimpses of important landscape features (La Sals, La Platas, Abajo Mountains, Shiprock, etc.) important to the Ancestral Pueblo landscape. Air quality indicator conditions, including visibility, warrant moderate concern and are unchanging. Vistas are sometimes obscured by haze caused by fine particles in the air. Visibility, ozone, and wet nitrogen deposition conditions are not meeting the Natural Resource Stewardship and Science Air Resources Division's recommended benchmark conditions. There are ample opportunities to view scenery including: cultural resources (including views of landforms in the Four Corners states), wildflower/plant communities, and physical resources such as geology. Trends There is no statistically significant trend for air quality indicators, and therefore air quality is considered to be stable at this time. Invasive plants expand over previously burned areas, changing the visual character of the ground surfaces.
Threats	 Threats Currently, visibility conditions, ozone conditions, and wet nitrogen deposition conditions are not meeting the Natural Resource Stewardship and Science Air Resources Division's recommended benchmark conditions, and are a moderate concern. The park is downwind from coal-fired power plants in the Four Corners region, nearby mining, and urban and industrial pollutants from the Southwest US and Mexico. Railway connectivity to Farmington could lead to increasing development in the Cortez area (including oil/gas development in the Mancos formation and solar development on Bureau of Land Management [BLM] lands). Light pollution from population growth in and around Cortez. Air pollution in the park scatters artificial light, increasing the impact of light pollution. Wildland fire effects on cultural and natural resources. Several fires that occurred since 2000 burned approximately 40% of the park. Dust issues could increase due to climate change. Energy and mineral development outside of park boundaries threatens the visual quality of the landscapes surrounding the park. Nitrogen deposition has impacted native vegetation, while increasing noxious weed distribution. Climate change and fire activity are expected to continue to impact the plant communities' visual character.

Fundamental Resource or Value	Scenic Resources
Opportunities	 Opportunities Ongoing opportunities through the regional haze and other air quality programs to work with state and federal air regulatory agencies and other stakeholders to address air quality impacts in Mesa Verde National Park from sources of air pollution. Potential to work more closely with county and municipal governments on implementing stricter ordinances related to limiting light pollution. Expand interpretative and educational tools to communicate the connections between scenic resources/landscape changes, climate change, air quality/pollution, wilderness, night sky, sensitive natural and cultural resources, human health, and other associated resources. More informative signage and amenities around overlooks and along trails could be
	 Improve park sustainability and environmental leadership by becoming a Climate Friendly Park and implement a park Environmental Management System.
Existing Data and Plans Related to the FRV	 Historic photographs of park landscapes provide documentation of what the landscape looked like previously and how it has changed over time. Fire management plan (underway). Archeological research management plan. Invasive plant management plan (underway). Visibility monitoring.
Data and/or GIS Needs	 Energy development potential assessment for the surrounding region. Night sky study. Air quality monitoring. Climate change vulnerability assessments. Visual resource inventory. Special studies to examine pollution dose-response relationships in sensitive park ecosystem.
Planning Needs	 Night sky management plan. Climate change scenario planning. Scenery conservation plan. Soundscape management plan. Land protection plan.
Laws, Executive Orders, and Regulations That Apply to the FRV, and NPS Policy-level Guidance	 Laws, Executive Orders, and Regulations That Apply to the FRV The Clean Air Act (42 USC 7401 et seq.) gives federal land managers the responsibility for protecting air quality and related values, including visibility, plants, animals, soils, water quality, cultural resources, and public health, from adverse air pollution impacts Secretarial Order 3289, "Addressing the Impacts of Climate Change on America's Water, Land, and Other Natural and Cultural Resources" NPS Policy-level Guidance (NPS Management Policies 2006 and Director's Orders) NPS Management Policies 2006 (§1.4, 1.6, 3.1, 4.7) Director's Order 13A: Environmental Management Systems

Fundamental Resource or Value	Mesa Verde Administrative District
Related Significance Statements	• The Mesa Verde Administrative District exemplifies a regionally significant Pueblo revival architectural style that influenced the development of a design aesthetic for southwestern national parks.
Current Conditions and Trends	 Conditions National historic landmark district buildings range in condition from good to poor (circa 1920s). Deterioration is caused by failing infrastructure: storm drainage issues, sewage collection systems, plumbing contributing to foundation problems. Exterior of buildings is eroding in many areas – some repointing/stone replacement is necessary. Deterioration of the woodwork. Interior space in the museum does not meet climate control standards. Rodent infestation. Accessibility issues. The design of the NHL district and buildings within results in contemporary operational inefficiencies.
Threats and Opportunities	 Threats Rodent infestation. Deterioration and loss of original fabric. Storm drainage, sewage collection systems, and plumbing contribute to foundation problems. Compounding this threat is the climate change projection for an increase in extreme precipitation events. Lack of climate control. Opportunities Rehabilitation and enhanced interpretation of the NHL district.
Existing Data and Plans Related to the FRV	 Architectural plans and drawings. Cultural landscape inventories. Maps. NHL district nomination (1987). National Register of Historic Places nomination. Stabilization and repair histories.
Data and/or GIS Needs	 Energy efficiency study. Update NHL nomination. Cultural landscape report. Stormwater management assessment. Climate change vulnerability assessments.
Planning Needs	 Targeted historic structure reports. Accessibility plan. Chapin Mesa museum rehabilitation plan. Climate change scenario planning. Facility management strategy.

Fundamental Resource or Value	Mesa Verde Administrative District
Laws, Executive Orders, and Regulations That Apply to the FRV, and NPS Policy-level Guidance	 Laws, Executive Orders, and Regulations That Apply to the FRV Americans with Disabilities Act of 1990 (28 CFR 36) Architectural Barriers Act of 1968 Architectural Barriers Act Accessibility Standards of 2006 Rehabilitation Act of 1973 National Park Service Concessions Management Improvement Act of 1998 National Historic Preservation Act of 1966, as amended (16 USC 470) Executive Order 13175, "Consultation and Coordination with Indian Tribal Government" Curation of Federally-Owned and Administered Archaeological Collections (36 FR 79) Management of Museum Properties Act of 1955, as amended Secretarial Order 3289, "Addressing the Impacts of Climate Change on America's Wate Land, and Other Natural and Cultural Resources" NPS Management Policies 2006 (chapters 1, 2, 4, 5, 7, 8, 9, and 10) Director's Order 42: Accessibility for Visitors with Disabilities in National Park Service Programs and Services The Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation Director's Order 24: NPS Museum Collections Management Director's Order 28A: Archeology NPS Museum Handbook, parts I, II, and III



Fundamental Resource or Value	Traditional and Contemporary Cultural Connections
Related Significance Statements	• Mesa Verde National Park is important in the history and heritage of the tribes and pueblos of Mesa Verde, and to many others for whom multigenerational ties exist.
Current Conditions and Trends	 Conditions The condition of the park's facilitation of cultural connections is good. The park is moving toward a regional multi-park approach to consultation and tribal engagement to include Chaco Culture National Historical Park and Aztec Ruins National Monument. 26 tribes claim traditional association with Mesa Verde National Park. Ute Mountain Ute tribe shares a boundary with Mesa Verde National Park. Trends Specific tribal groups visit Mesa Verde National Park on a regular basis (see appendix D for a list of traditionally associated tribes). For the past 10 years, the park consulted with tribes on the design and completion of the Visitor and Research Center. Park held conceptual meetings about the development of a Tribal Culture Center. Many tribes continue to be actively engaged and provide comments related to the park's conservation practices and natural and cultural resource management. The number of tribes claiming traditional association with Mesa Verde National Park is increasing.
Threats and Opportunities	 Threats Turnover in tribal government leaders presents a challenge to consultation. Tribes not having the internal staff to fully participate in consultation. Opportunities The park could encourage more tribal visits. More tribes have been engaged with the park, resulting in support for additional research and understanding. Tribes have expressed interest in interagency consultation agreements, such as memorandums of understanding and agreement.
Existing Data and Plans Related to the FRV	 Ethnographic overview (to be completed in 2014). Multi-park inadvertent discovery agreement. The park supported the Bureau of Indian Affairs' publication of a Notice of Inventory Completion under the Native American Graves Protection and Repatriation Act for objects and human remains from Ute lands.
Data and/or GIS Needs	 GIS data related to ethnographic resources. Oral history. Traditional use study. Climate change vulnerability assessments.
Planning Needs	Climate change scenario planning.

Fundamental Resource or Value	Traditional and Contemporary Cultural Connections
Laws, Executive Orders, and Regulations That Apply to the FRV, and NPS Policy-level Guidance	 Laws, Executive Orders, and Regulations That Apply to the FRV Antiquities Act of 1906 National Historic Preservation Act of 1966, as amended (16 USC 470) Executive Order 11593, "Protection and Enhancement of the Cultural Environment" Archaeological Resources Protection Act of 1979 Native American Graves Protection and Repatriation Act of 1990 Curation of Archeological Collections (36 CFR 79) Protection of Historic Properties (36 CFR 800) Executive Order 13107, "Indian Sacred Sites" Executive Order 13175, "Consultation and Coordination with Indian Tribal Governments" American Indian Religious Freedom Act of 1978 Secretarial Order 3289, "Addressing the Impacts of Climate Change on America's Water, Land, and Other Natural and Cultural Resources" Department of the Interior Policy on Consultation with Indian Tribes of 2011 NPS Policy-level Guidance (NPS Management Policies 2006 and Director's Orders) The Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation NPS Management Policies 2006 (§5.3.5.2, 5.3.5.5) Director's Order 28: Cultural Resource Management Director's Order 28: Archeology 2008 Programmatic Agreement among the National Park Service, the Advisory Council on Historic Preservation, and the National Conference of State Historic Preservation Officers

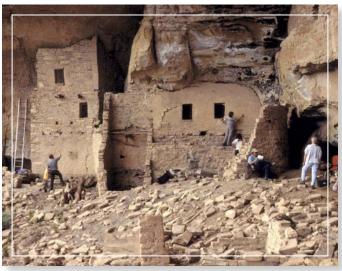


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Fundamental Resource or Value	Archeological Preservation and Investigation
Related Significance Statements	• In the early 1900s, visitors to the Mesa Verde area were captivated by the remarkable cliff dwellings they observed and became vocal advocates for park establishment. This began a tradition of local and global stewardship of archeological resources that continues to this day.
	• As the first national park dedicated to the works of prehistoric cultures, Mesa Verde has played a key developmental role in the science of conservation archeology. This rich legacy dates to the early history of the national park system, with seminal works by preeminent researchers, and continues to be an essential part of park operations.
	Conditions
	• The condition is good overall. The park has finding aids for all archives at the park. This is a tremendous resource that is accessible to the public.
	 Digital data are complemented by the Archeological Sites Management and Information System and Colorado State University databases.
	There is variability in data from previous archeological research/investigation, etc.
Current Conditions	Some archival records awaiting processing are currently unavailable.
and Trends	Trends
	 There is increasing integration of paper files and historical documents, including photography, into the archives.
	 Park receives a substantial number of research requests. Many are small, but this will probably increase.
	• The visitor profile is changing. These visitors want access to more complex ideas and information.
	ThreatsDiminishing fiscal resources.
	 The idea that research is no longer necessary and all the questions have been answered. Need to move beyond current assumptions.
	• Aged and failing infrastructure, which represents a small footprint, is located in areas with high concentrations of archeological resources.
	 Repair and/or replacement of existing park infrastructure may inadvertently impact adjacent archeological resources.
	Opportunities
Threats and	 Get to a point where very specific questions can be identified and methods can be established to preserve and investigate archeological resources.
Opportunities	 Develop an array of different types of questions that could be addressed.
	 National opportunities for collaboration (e.g., with the University of Pennsylvania). A paper was presented at the headquarters of the United Nations Educational, Scientific and Cultural Organization in Paris on conserving earthen architecture around the world specifically looking at conflict and climate change in an effort to get ahead of the curve.
	• Opportunities for involvement on the national and international scale.
	Opportunity internally to provide process data to visitors through digital media.
	• Opportunity to alter our interpretive and visitation strategy through the construction of a digital portfolio of, for example, Cliff Palace. People would be able to explore and access data on their own. This would be based on supplying information in a different way.
	• Opportunity to transition to an interpretive model that provides information at multiple levels by a variety of means to meet the broadest range of visitor interests.
Existing Data and Plans Related to the FRV	Existing data incorporated in archives and published materials.

Fundamental Resource or Value	Archeological Preservation and Investigation
Data and/or GIS Needs	 Archeological landscape synthesis. Detailed architectural documentation and condition assessments of sites. National Register of Historic Places. Climate change vulnerability assessments. Archeological studies/research.
Planning Needs	 Archeological landscape conservation plan. Archeological site plans for the full range of maintained sites. Climate change scenario plan. Land protection plan. Digital media and content plan.
Laws, Executive Orders, and Regulations That Apply to the FRV, and NPS Policy-level Guidance	 Laws, Executive Orders, and Regulations That Apply to the FRV Antiquities Act of 1906 Historic Sites, Buildings and Antiquities Act of 1935 National Historic Preservation Act of 1966, as amended (16 USC 470) Executive Order 11593, "Protection and Enhancement of the Cultural Environment" American Indian Religious Freedom Act of 1978 Archaeological Resources Protection Act of 1979 Native American Graves Protection and Repatriation Act of 1990 Curation of Archeological Collections (36 CFR 79) Protection of Historic Properties (36 CFR 800) Executive Order 13007, "Indian Sacred Sites" Executive Order 13175, "Consultation and Coordination with Indian Tribal Governments" NPS Policy-level Guidance (NPS Management Policies 2006 and Director's Orders) The Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation NPS Management Policies 2006 (§5.3.5.2, 5.3.5.5) Director's Order 28: Cultural Resource Management Director's Order 28A: Archeology 2008 Programmatic Agreement among the National Park Service, the Advisory Council on Historic Preservation, and the National Conference of State Historic Preservation Officers





Fundamental Resource or Value	Wilderness Landscape
Related Significance Statements	• Mesa Verde National Park supports outstanding wilderness values, clean air, night skies, and scenic views of the mountains, canyons, and mesas of the Four Corners Region.
Current Conditions and Trends	 Conditions The overall condition of the wilderness is good. The Mesa Verde Wilderness is currently closed to the public. The Mesa Verde Wilderness consists of three units (A, B, and C). Sixty-one percent of the total wilderness area in the park has experienced wildland fire in the past 20 years (5,165 of 8,500 acres). Air quality indicator conditions, including visibility, warrant moderate concern and are unchanging or stable. Vistas are sometimes obscured by haze caused by fine particles in the air. Visibility, ozone, and wet nitrogen deposition conditions are not meeting the Natural Resource Stewardship and Science Air Resources Division's recommended benchmark conditions. Mercury in wet deposition in the park is among the highest of western US sites (NADP-MDN site ID: CO99) and dry deposition can be 2.4 times greater than wet only. Primarily sources are emissions from nearby and regional coal-burning power plants. Mercury deposition requires further investigation to assess impact of mercury and other toxics on biota, including invertebrate insects and fish, and better understand the ecosystem characteristics that affect mercury methylation at the park. Trends Air quality indicators that are unchanging or stable. Vegetation recovery in areas formerly dominated by montane shrublands is relatively quick and of the same cover types because many of these shrubs resprout after fire. In areas burned that were once dominated by pinyon-juniper woodlands the returning vegetation is a herbaceous mix including invasive species. Average annual temperature for the region increased 1.4°F in the 20th century contributing to wildfire intensity and frequency and impacting the wilderness landscape (e.g., replacement of pinyon-juniper woodlands with an herbaceous mix including invasive species). For 2003–2012, the trend in wet mercury concentrations in rain and snow at Mesa Verde National Park deterio
Threats	 Threats Illegal hunting in units A, B, and portions of C. Trespass livestock. Illegal entrance to these areas. Unauthorized off-road vehicle use. Invasive plant species. Potential impacts from oil and gas if leases on adjacent public lands occur. Potential development on lands between US Highway 160 and adjacent to units A and B. Due to steep topography and unstable soils, no fence has been constructed along the exterior boundaries of the wilderness units, making boundary management difficult. Light pollution from population growth in and around Cortez. Development and air pollution are affecting air quality and air quality related values including visibility and scenic resources. Average annual temperature is projected to increase 5°F to 8.5°F by 2100 which is likely to further change the existing wilderness landscape (e.g., increase in fire frequency and intensity, increase in invasive species, and changes in native vegetation and water resources).

Fundamental Resource or Value	Wilderness Landscape					
Opportunities	 Opportunities Potential trail and backcountry camping use. North of units A and B there is a mix of BLM, private, and state parcels that the park may be able to secure, providing a buffer to the wilderness. The park's unique biological and physiological composition provide opportunities for climate change research, including plant migration, invasive species trends, changes in wildfire behavior and changes in hydrological systems. Improve park sustainability and environmental leadership by becoming a Climate Friendly Park and implement a park Environmental Management System. Expand interpretative and educational tools to communicate the connections between wilderness, climate change, air quality/pollution, scenic resources/landscape changes, night sky, sensitive natural and cultural resources, human health, and other associated resources. 					
Existing Data and Plans Related to the FRV	 Mesa Verde Wilderness Building Blocks. Invasive plant management plan for entire park (includes wilderness) is in progress. Long-range interpretive plan. Visibility monitoring. 					
Data and/or GIS Needs	 Higher resolution LiDAR data and high resolution multispectral imagery. Visual resource inventory. Night sky study. Soundscape assessment. Special studies to examine pollution dose-response relationships in sensitive park ecosystem, including an effort to better understand ecosystem risk to the park's high mercury wet deposition. Air quality monitoring. Climate change vulnerability assessments. Weather data monitoring. 					
Planning Needs	 Wilderness stewardship plan. Soundscape management plan. Night sky management plan. Scenery conservation plan. Climate change scenario plan. Land protection plan. 					
Laws, Executive Orders, and Regulations That Apply to the FRV, and NPS Policy-level Guidance	 Laws, Executive Orders, and Regulations That Apply to the FRV Wilderness Act of 1964 Secretarial Order 3289, "Addressing the Impacts of Climate Change on America's Water, Land, and Other Natural and Cultural Resources" Executive Order 13175, "Consultation and Coordination with Indian Tribal Governments" Lacey Act, as amended NPS Policy-level Guidance (NPS Management Policies 2006 and Director's Orders) NPS Management Policies 2006 (chapters 4 and 6) Director's Order 13A: Environmental Management Systems Director's Order 41: Wilderness Stewardship NPS Reference Manual 41: Wilderness Stewardship NPS Keeping It Wild in the National Park Service: A User Guide to Integrating Wilderness Character into Park Planning, Management, and Monitoring 					

Analysis of Other Important Resources and Values

Other Important Resource or Value	National Park Developmental Period 1906–1966						
Current Conditions and Trends	 Conditions Overall condition of developmental period resources ranges from good to poor. Trends There are ongoing maintenance issues and deteriorating infrastructure. There is a lack of public use/access of period resources. 						
Threats and Opportunities	 Threats Deterioration of the structures has a potential for an incremental loss of historic character. Funding constraints. Wildland fire. Lack of use and/or maintenance. Severe weather. Erosion. Overgrowth by vegetation. Climate change projection suggests an increase in mean annual temperatures and an increase in extreme temperature and precipitation events. Opportunities Interpretation/education of public about past, current and future investments in infrastructure that supports park mission, visitation, etc. There are opportunities for additional research, education, and interpretation of developmental period resources in the park. Rehabilitate and reuse of select developmental period resources. 						
Existing Data and Plans Related to the OIRV	 National Register of Historic Places nominations. Maps. Drawings. Photos. 						
Data and/or GIS Needs	 Update National Register of Historic Places nominations. Condition assessments. Develop historic preservation guides for each building/resource type. Archeological landscape synthesis. Document existing trail system and trail condition assessment. Climate change vulnerability assessments. 						
Planning Needs	Facility management strategy.Cultural landscape report.Climate change scenario planning.						

Other Important Resource or Value	National Park Developmental Period 1906–1966							
Laws, Executive Orders, and Regulations That Apply to the OIRV, and NPS Policy-level Guidance	 Laws, Executive Orders, and Regulations That Apply to the OIRV Americans with Disabilities Act of 1990 (28 CFR 36) Architectural Barriers Act of 1968 Architectural Barriers Act Accessibility Standards of 2006 Rehabilitation Act of 1973 NPS Concessions Management Improvement Act of 1998 National Historic Preservation Act of 1966, as amended (16 USC 470) Executive Order 11593, "Protection and Enhancement of the Cultural Environment" Secretarial Order 3289, "Addressing the Impacts of Climate Change on America's Water, Land, and Other Natural and Cultural Resources" NPS Policy-level Guidance (NPS Management Policies 2006 and Director's Orders) NPS Management Policies 2006 (chapters 5, 7, 8, 9, and 10) Director's Order 42: Accessibility for Visitors with Disabilities in National Park Service Programs and Services The Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation Director's Order 28: Cultural Resource Management Director's Order 28A: Archeology 							



Other Important Resource or Value	Water Resources						
Current Conditions and Trends	 Conditions There are approximately 5.2 miles of perennial stream/river within or adjacent to Mesa Verde National Park (i.e., the Mancos River) as well as 214 miles of intermittent and/or ephemeral streams based on the US Geological Survey National Hydrography Dataset. None of these water bodies appear on the State of Colorado's 2012 Clean Water Act Integrated Report 303(d) impairment list, meaning they currently attain their state-designated beneficial uses or have not been assessed. The tributaries of the Mancos River within the park are designated as "Colorado Outstanding Waters." The Mancos River upstream of US 160 (and Mesa Verde National Park) is listed as impaired by the State of Colorado due to elevated copper and manganese and low dissolved oxygen. Two state-based surface water rights provide up to 240 acre-feet of water per year for park administrative use. Mesa Verde National Park has federal reserved water rights for instream flow in the Mancos River, in situ uses of springflow within the park boundary, and an additional 70 acre-feet of water, which could include groundwater, for administrative uses if the two state-based surface water rights are not sufficient to meet park needs. Trends The volume of water in the watershed is decreasing due to drought conditions. Demand is not decreasing. Calls on the Mancos River to meet downstream priorities are increasing and occurring sooner in the year. Average annual temperature for the region increased 1.4°F in the 20th century with a 						
Threats	 continued increase projected in the 21st century. Threats Long-term climate forecasts project that there may be less water flowing through the Mancos River watershed in future years due to diminishing winter snowpack accumulation. Reduced supply or volume of water may result in water shortages and additional restrictions. Lower priority appropriations will receive less of their decreed appropriation of water or—worst case—may not receive any water because of a junior priority. While the park does have a federal reserved water right for instream flow in the Mancos River, it is junior to many other upstream water rights on the Mancos River and other tributary streams. There is often very little water in the stream to support park purposes. If the park desires more water in the Mancos River within the park boundary, the National Park Service may have to acquire senior water rights by purchase or lease. This situation may become more critical if low flows continue in this area. Increased concentration of pollutants due to decreased volume of water. New studies have detected the presence of endocrine-disrupting chemicals in the Mancos River within the park. These compounds include hormones, pesticides, pharmaceuticals, and wastewater compounds from human waste streams and from air pollution fallout. Studies of these chemicals indicate effects on aquatic and nonaquatic species, including humans. Average annual temperature is projected to increase 5°F to 8.5°F by 2100, with increased frequency in extreme temperature events, which will impact both surface water and groundwater resources in the region. (e.g., changes in seasonal flows, decrease in aquifer water tables, changes in water quality, etc.). An increase in pollutant runoff, increase in sedimentation). 						

Other Important Resource or Value	Water Resources						
Opportunities	 Opportunities Water conservation. Repair or replace aging infrastructure to include Jackson Gulch Reservoir outlet canal. Increase water storage capacity and modify treatment process to reduce costs. 						
Existing Data and Plans Related to the OIRV	 Water rights decree. Baseline water quality data inventory and analysis. Plans and designs of systems: Mesa Verde water system construction drawings. Maps. 						
Data and/or GIS Needs	Climate change vulnerability assessments.						
Planning Needs	 Water resources management plan. Facility management strategy. Climate change scenario planning. 						
Laws, Executive Orders, and Regulations That Apply to the OIRV, and NPS Policy-level Guidance	 Laws, Executive Orders, and Regulations That Apply to the OIRV Clean Water Act The Clean Air Act (42 USC 7401 et seq.) gives federal land managers the responsibility for protecting air quality and related values, including visibility, plants, animals, soils, water quality, cultural resources, and public health, from adverse air pollution impacts Rivers and Harbors Act NPS General Authorities Act: all water resources of the park are protected by the federal government. Only an act of Congress can change this fundamental responsibility of the National Park Service Safe Drinking Water Act Resource Conservation and Recovery Act Executive Order 11990, "Protection of Wetlands" Executive Order 11900, "Protection of Wetlands" Secretarial Order 3289, "Addressing the Impacts of Climate Change on America's Water, Land, and Other Natural and Cultural Resources" NPS Management Policies 2006 (§4.6.1, 4.6.2, 4.6.4 and 4.8.1.1) Director's Order 77-2: Floodplain Management NPS Natural Resource Management Reference Manual 77 Special Directive 93-4 "Floodplain Management, Revised Guidelines for National Park Service Floodplain Compliance" (1993) 						

Other Important Resource or Value	Rare and Endemic Plants					
Current Conditions and Trends	 Conditions The State of Colorado does not list rare plant species. Thirteen species found in the park have been identified as imperiled or critically imperiled in Colorado by the Colorado Natural Heritage Program. Six of these species are designated as critically imperiled because of extreme rarity (five or fewer occurrences), or very few remaining individuals, or because of some factor of its biology making it especially vulnerable to extirpation from the state. One species identified by the Colorado Natural Heritage Program as critically imperiled, Schmoll's milkvetch (<i>Astragalus schmolliae</i>), is a candidate for federal listing. Many of these rare and endemic plants within the park are associated with unique soils, creating soil-flora relationships that are still not fully understood. Two hundred twenty-six species have been identified as sensitive by park staff and may be rare within the park, but are abundant in other areas of their range. Populations of these species vary but are stable overall. Trends For 2003–2012, the trend in wet mercury concentrations in rain and snow at Mesa Verde National Park deteriorated – wet mercury deposition increased. Frequency of wildland fires appears to be increasing. 					
Threats and Opportunities	 In post-fire landscapes the composition of species tends to be more nonnative, invasive forbs and grasses. Threats Wildland fire poses a direct effect but the indirect effect of invasion of habitats and competition from nonnative plant species after a wildland fire may be more of a threat on the long-term viability of the existing rare plant populations. Long-range forecasts suggest continuing drought conditions. Average annual temperature is projected to increase 5°F to 8.5°F by 2100 with increased frequency in extreme temperature events. The use of herbicides to control nonnative invasive plants may affect rare plant populations. Development and other disturbances may pose direct and indirect effects such as invasion of rare plant habitats and competition from nonnative plant species. Deposition of air pollution alters plant communities, increases invasive nonnative species, and reduces biodiversity and may cause additional risk and stress on rare and endemic plants. Mercury in wet deposition in the park is among the highest of western US sites (NADP-MDN site ID: CO99) and dry deposition can be 2.4 times greater than wet only. Mercury deposition requires further investigation to assess impact of mercury and other toxics on biota, including invertebrate insects and fish, and better understand the ecosystem characteristics that affect mercury methylation at the park. 					
	 phenology. Educate the public about the rare and endemic plants in the park and their role in the ecosystem. Incorporate more information about rare and endemic plants and management activities into interpretive programs and publications. 					

Other Important Resource or Value	Rare and Endemic Plants					
Existing Data and Plans Related to the OIRV	Plant survey data.Photos.Maps.					
Data and/or GIS Needs	 Plant surveys/density. Archeological landscape synthesis. Traditional ecological knowledge study on climate change. Climate change vulnerability assessments. 					
Planning Needs	Climate change scenario planning.					
Laws, Executive Orders, and Regulations That Apply to the OIRV, and NPS Policy-level Guidance	 Laws, Executive Orders, and Regulations That Apply to the OIRV Wilderness Act of 1964 Endangered Species Act of 1973, as amended National Invasive Species Act Lacey Act, as amended Federal Noxious Weed Act of 1974, as amended Clean Water Act The Clean Air Act (42 USC 7401 et seq.) gives federal land managers the responsibility for protecting air quality and related values, including visibility, plants, animals, soils, water quality, cultural resources, and public health, from adverse air pollution impacts Executive Order 13175, "Consultation and Coordination with Indian Tribal Governments" Executive Order 13112, "Invasive Species" Secretarial Order 3206: "American Indian Tribal Rights, Federal-Tribal Trust Responsibilities, and the Endangered Species Act" Secretarial Order 3289, "Addressing the Impacts of Climate Change on America's Water, Land, and Other Natural and Cultural Resources" Department of the Interior Policy on Consultation with Indian Tribes of 2011 NPS Policy-level Guidance (NPS Management Policies 2006 and Director's Orders) NPS Management Policies 2006 (§1.6, 4.1, 4.1.4, 4.4.1, 4.7.2) NPS Natural Resource Management Reference Manual 77 					





Other Important Resource or Value	Paleontological / Geological Resources
Current Conditions and Trends	 Conditions The vistas at Mesa Verde are highly treasured and showcase the unique landscape and geologic history of the surrounding area. Several overlooks provide visitors opportunities to view such features as the volcanic San Juan Mountains, the silhouette of Sleeping Ute Mountain, the La Plata Mountains, and a complete sequence of the sedimentary rocks of Mesa Verde. The sandstone cliffs are susceptible to ongoing frost weathering and erosion, which can lead to unstable cliffs. The siltstone, mudstone, and shale slopes beneath the cliffs are not resistant to erosional forces. There is oil and gas development on public, tribal, and private lands in the northern portion of the San Juan Basin near the park. Based on available information, current condition of the alcoves are stable, although more information is needed to understand the location of springs and seeps because they have the potential to cause rockfall hazards that may result in damage to the archeological structures. Hazards such as rockfalls, slumps and landslides, flood erosion, and deposition and debris flows are present in the park. The park is closed to mineral entry. Coal seams occur mainly in the Menefee Formation of the Mesaverde Group. The paleontological resources include a rich invertebrate fossil and paleobotanical record and some vertebrate fossils.
Threats and Opportunities	 Threats Rockfall is one of the major hazards to the park, visitor safety, and cultural artifacts. Average annual temperature is projected to increase 5°F to 8.5°F by 2100 with increased frequency in extreme temperature events that could increase wildfire frequency and intensity and erosion of paleontological and geological resources. Compounding the threat is the projection for more frequent extreme precipitation events. Wildfires in the park can cause coal seams to ignite, which are extremely difficult to extinguish. With the addition of water the bentonite (altered volcanic ash) beds of the Mancos and Menefee Formations swell and shrink when dried, leading to unstable slopes and slope failure. The single major road in the park crosses the Mancos and Menefee Formations, which can be prone to landslides and major slumps. Oil and gas development near the park may impact air resources (specifically mononitrogen oxide emissions), dust, night sky and viewshed, threatened and endangered species, wildlife corridors, water quality, and visitor safety. Opportunities Research including stratigraphic sequence analysis, stratotype locations, Cretaceous fossils, groundwater hydrogeology, fire recurrence studies and charcoal dating, and Quaternary studies, especially debris flows. Educate the public about the geological resources in the park and how human activities at Mesa Verde are linked to these resources. Incorporate more information about geologic and paleontological resources and management activities into interpretive programs and publications.

Other Important Resource or Value	Paleontological / Geological Resources							
Existing Data and Plans Related to the OIRV	 "Surficial Geologic Map of Mesa Verde National Park, Montezuma County, Colorado." "Preliminary Map of landslide deposits in the Mesa Verde National Park Area, Colorado." NPS Geologic Resources Inventory Program digital geologic maps. "Mesa Verde National Park Geologic Resource Evaluation Report." "Paleontological Resource Inventory and Monitoring – Southern Colorado Plateau Network." Natural Resource Technical Report – 2009/245. NPS soil resources inventory. 							
Data and/or GIS Needs	 Archeological landscape synthesis. Paleontological/geological monitoring. Groundwater studies. Climate change vulnerability assessments. 							
Planning Needs	Climate change scenario planning.							
Laws, Executive Orders, and Regulations That Apply to the OIRV, and NPS Policy-level Guidance	 Laws, Executive Orders, and Regulations That Apply to the OIRV Archaeological Resources Protection Act of 1979 Paleontological Resources Preservation Act of 1990 Secretarial Order 3289, "Addressing the Impacts of Climate Change on America's Water, Land, and Other Natural and Cultural Resources" Executive Order 13175, "Consultation and Coordination with Indian Tribal Governments" NPS Policy-level Guidance (NPS Management Policies 2006 and Director's Orders) NPS Management Policies 2006 (§5.3.5.5) 							



Appendix C: Inventory of Administrative Commitments and Special Designations

Administrative Commitments

Agreement Name	Type of Agreement	Start Date – Expiration Date	Stakeholders	Purpose	Notes
Tract 01-112	Non-NPS water right	Prior to 06/29/1906	Private	Provide water under valid water right	No water rights associated with this tract have been acquired.
West Mancos Water Supply System for Mesa Verde National Park (RAP No. 1962-14)	Water right	3/22/1963	State of Colorado and Mancos Water Conservancy District	Provide water under valid water right	Point of diversion and storage outside park, piped to places of use and storage inside the park. Priority date is 10/31/1936.
Reserved Water Rights (W-1633- 76)	Water right	7/31/1997	State of Colorado	Provide water under valid water right	Decrees in situ use of reserved springs, in-stream flows of the Mancos River within the park, and additional reserved water right. Priority date for in- stream flow is 1/1/1995 and for springs is based on legislative date.
West Mancos Water Supply System for Mesa Verde National Park (USFS DOL 104)	Special use permit	2002 – 2031	US Forest Service	Provide water under valid water right	Permit with US Forest Service for exterior water diversion 17 miles from park on West Mancos River.
West Mancos Water Supply System for Mesa Verde National Park (COC- 53566)	Special use permit	1992	Bureau of Land Management	Provide water under valid water right	Permit for waterline crossing BLM-managed lands from exterior diversion.
West Mancos Water Supply System for Mesa Verde National Park (882-8)	Right-of-way	2008	State of Colorado	Provide water under valid water right	Right-of-way for waterline crossing State of Colorado lands from exterior diversion.
West Mancos Water Supply System for Mesa Verde National Park	Right-of-way	1947	Montezuma County, Colorado	Provide water under valid water right	Right-of-way for waterline crossing county lands from exterior diversion.
Use of Water From Jackson Gulch Reservoir	Memorandum of understanding	5/19/1977	Town of Mancos, Mancos Rural Water, Lake Mancos Guest Ranch, Mancos Water Conservancy District	Provide terms for the use of water from Jackson Gulch Reservoir	

Agreement Name	Type of Agreement	Start Date – Expiration Date	Stakeholders	Purpose	Notes
Mancos River stream gauge at Anita Flats	Water right (W-1633-76)	7/18/2000	State of Colorado	Monitoring necessary to curtail junior water right(s) that may affect decreed in- stream flows	Gauge operated by US Geological Survey since 10/1/2007.
Water source monitoring	Water right (W-1633-76)	12/15/2000	State of Colorado	Monitoring necessary to curtail junior water right(s) that may affect decreed in-situ flows	Reporting of in-situ water use by springs (119) and other water sources (12) listed in 1997 decree. A different subset of the 131 water sources are reported annually until all reported and then start over.
Jackson Gulch Reservoir water use	Cooperative agreement	2003 – 2013	Town of Mancos and Mancos Water Conservancy District	Provides operational guidelines for the use of the reservoir and the amount and flow of water from the reservoir by subject parties	Expired and may or may not need to be renewed.
State Outstanding Waters and Outstanding National Resource Waters	Clean Water Act and Colorado Water Quality Control Act	10/18/1972	Environmental Protection Agency and Colorado Water Quality Control Commission	Prevent any degradation in high quality waters that constitute an outstanding national resource, such as waters of national parks	Applies to Mancos River and all tributaries within Mesa Verde National Park.
Tract 01-102, 105, 106, 107, 118,119, 120,121,122, 135, and 136	Non-NPS mineral right	Reference deed	Private	Provide mineral right under valid subsurface estate right	Primarily oil and gas reservations and also some tracts include coal and other mineral reservations.
Life Estate (RN- 552851)	Non-NPS occupancy right	2007	Private	Allows stakeholder to continue to occupy house, and associated grounds and out buildings	In effect for the life of the stakeholders.
Tract 01-116 and 128	Non-NPS property right	Prior to 6/29/1906	Private	Provide property right for owner	Two remaining privately owned tracts within the authorized boundary.
North water line road access	Right-of-way	2003 – 2008	Bureau of Land Management	Provide BLM use of the North Escarpment water line access road for administrative purposes	Renewal in process.
Life estate access road	Right-of-way	2007	Private	Provide road access to life estate within the park	In effect for life of the stakeholders.

Agreement Name	Type of Agreement	Start Date – Expiration Date	Stakeholders	Purpose	Notes
Life estate secondary access road	Right-of-way	2007	Private	Provide access from life estate road to other private property	
Electric service	Right-of-way		Electric power cooperative (Empire Electric)	Provide access for electric power transmission lines and equipment	Underground service to Visitor and Research Center, overhead service in entrance and Morefield, underground service in 2007 boundary addition, and North Escarpment to Chapin Mesa.
Telecomm service	Right-of-way		Telecomm provider (CenturyLink)	Provide access for telecommunication transmission lines and equipment	Underground service to Visitor and Research Center, overhead service in entrance, long line in Morefield, underground service in 2007 boundary addition, and CO and long line transmitter at Navajo Hill and underground service to Chapin Mesa.
Rural Water Service	Right-of-way		Mancos Rural Water Company	Provide access for domestic water line and equipment	Life estate domestic tap.
Pipeline crossing (IMR MEVE 6000 06	Special use permit	2012 – 2022	Enterprise Products Partners	Provide use of existing right-of-way for another utility to cross	Gas transmission line that crosses park water line.
WiFi Service	Concession contract	1981 – 2001 (operating under extensions since that time)	Concessionaire (ARAMARK)	Operation of WiFi at concession locations	No permits issued.

Agreement Name	Type of Agreement	Start Date – Expiration Date	Stakeholders	Purpose	Notes
ARAMARK Mesa Verde Company	Concession contract	1981 – 2001 (operating under extensions since that time)	ARAMARK Mesa Verde Company	Contract provides for required and authorized visitor services within the assigned areas of the park. Required services include: - lodge and overnight accommodations - food and beverage (5) - retail outlets (5) - camping - laundry - showers - fuel sales - interpretive bus tours - tram operation at Wetherill Mesa - Authorized services include: miscellaneous services (i.e., sporting equipment, maps, books, pictures, kennels, taxi service, etc.	Contract Number CC-MEVE0001-82 Category I type concession contract Will eventually need a plan (and associated National Environmental Policy Act compliance) for updating the lodge.
Mesa Verde Museum Association	Cooperating association agreement	12/13/10 – 12/13/15	Mesa Verde Museum Association	To work together with the National Park Service to provide park visitors with valuable interpretive and educational materials to facilitate an expanded appreciation of the National Park Service	
Mesa Verde Museum Association	Supplemental to cooperating association agreement	9/30/2011 – 12/13/2015	Mesa Verde Museum Association	To administer grant activities on behalf of the National Park Service	
Commercial use authorizations	Commercial use authoriza- tions	01/1/2014 – 12/31/2014	Private companies providing commercial services	Provide commercial tour operations within the park under a one- year authorization	Five commercial use authorizations were issued in 2014.

Agreement Name	Type of Agreement	Start Date – Expiration Date	Stakeholders	Purpose	Notes
Special use permit	Special use permit	Reference permit		Authorizes a short- term activity that takes place in the park.	Six film/photo, four special events issued in 2014, and seven 1st Amendment permits issued in 2014.
Loan	NPS loan	2001 – Loan renewal in progress	State Colorado State University, C.P. Gillette Museum of Arthropod Diversity, Department of Bioagricultural Sciences and Pest Management, Fort Collins, CO	Curate natural history collections from Mesa Verde National Park	Non-bureau facility agreement / memorandum of understanding under consideration.
Loan	NPS loan	6/15/2001 – 8/1/2014	State – Denver Museum of Nature and Science	Curate natural history collections from Mesa Verde National Park	Non-bureau facility agreement / memorandum of understanding under consideration.
Agreement	National repository agreement	5/16/2008 – Extended indefinitely	State – University of Arizona, Laboratory of Tree Ring Research	Curate natural and cultural collections from Mesa Verde National Park	
Loan	NPS loan	10/2/2005 – 10/2/2015	State – University of New Mexico, Museum of Southwestern Biology	Curate natural history collections from Mesa Verde National Park	Intermountain Region working on non-bureau facility agreement for all IMR parks with collections here.
Loan	NPS loan	7/28/2011 – 7/31/2014	State – Northern Arizona University, Deaver Herbarium	Curate natural history collections from Mesa Verde National Park	Intermountain Region working on non-bureau facility agreement for all IMR parks with collections here.
Mesa Verde Foundation	Fund raising agreement	4/16/2013 – 4/16/2015	Mesa Verde Foundation	Provide between \$2,500 and \$100,000 of nonfederal funding for specific projects	Agreement expired and new 5-year agreement in process.
Montezuma County wildland fire annual operating plan	Cooperative agreement	1/1/2014 – 12-31-2014	Federal, state, county land managers and private landowners	Provide standard operating procedures, agreed procedures, and responsibilities to implement cooperative wildland fire protection on all lands within Montezuma County	Cooperators agree to coordinate their wildland fire management activities in adherence with the annual operating plan.

Agreement Name	Type of Agreement	Start Date – Expiration Date	Stakeholders	Purpose	Notes
Emergency dispatching service	Contract	2/1/2014 – 2/1/2015	Cortez Police Department	Provide 24 hour dispatching services for the park	Annual contract.
Power generating agreements - net metering agreement	Utility inter- connection	4/24/2012	Electric power cooperative (Empire Electric)	Provide grid interconnection for power generating system.	For grid connected solar and hydro power generating systems.
Brunot Agreement	Hunting rights and access	4/29/1874	Ute Indian Tribes, primarily Ute Mountain Ute and Southern Ute	Hunting rights within the San Juan Cession or what is also known as the Brunot Area of Southwest Colorado	Hunting is not allowed in the park but access to Brunot Area lands and tribal lands through the park is permitted on a case-by-case basis.
Mexican spotted owl	Proposed protected activity center	N/A	US Fish and Wildlife Service	Provide protected and breeding habitat for the threatened Mexican spotted owl	Two protected activity centers with three breeding core areas totaling 5,312 acres.
Four Corners Air Quality MOU	Memorandum of under- standing	2005	New Mexico Environment Department, Colorado Department of Public Health and Environ- ment, Utah Department of Environmental Quality, Environ- mental Protec- tion Agency, Bureau of Land Management, National Park Service, Mexico State Offices BLM, Forest Service. Stake- holders also include envi- ronmental and other citizen groups; coal, oil, and gas industry representatives, and academia.	To collaboratively manage air quality in the Four Corners region.	Mesa Verde has participated in this group since its inception.

Special Designations

Designation	Date of Designation	Purpose	Notes
UNESCO World Heritage Site	8/9/1978	Identify and recognize heritage sites that are globally significant, irrespective of the territory on which they are located	Reporting to UNESCO required every seven years.
National Register of Historic Places	8/15/1966	Identify and encourage the long-range preservation of nationally significant historic and archeological properties	The entire park as of 1966 is listed as an archeological district.
National Historic Landmark – Mesa Verde Administrative District	5/28/1987	Encourage the long-range preservation of nationally significant properties that illustrate or commemorate the history and prehistory of the United States	Five buildings and the associated landscape features within the park headquarters area.
Park Mesa Research Natural Area	11/22/1966	Identify examples of natural ecosystems for the purposes of scientific study and education, and for maintenance of biological diversity	1,500 acres of Park Mesa with no defined boundary.
Colorado Natural Area — Park Mesa Natural Area	N/A	Identify and recognize areas that contain at least one unique or high-quality natural feature of statewide significance	Park Mesa Research Natural Area was designated in 1966 but the boundaries of this 1,500-acre area were never defined. Park Mesa includes one of the few minimally disturbed pinyon/juniper stands remaining in the park. Park Mesa has been registered but not designated as a "Colorado Natural Area."
Colorado Important Bird Area	2000	Identify and recognize im- portant places for birds and locations to focus conservation efforts	Audubon Society designation.
Colorado Network of Conservation Areas	3/11/1999	Identify and recognize a mostly intact, lightly fragmented landscape that supports wide- ranging species and a diversity of species	Colorado Natural Heritage Program and Nature Conservancy designation of the entire park as of 1999.

Appendix D: Traditionally Associated Tribes

The following is the *Federal Register* list of American Indian tribes with traditional associations with Mesa Verde National Park.

Hopi Tribe of Arizona Kewa Pueblo, New Mexico (formerly the Pueblo of Santo Domingo) Ohkay Owingeh, New Mexico (formerly the Pueblo of San Juan) Pueblo of Cochiti, New Mexico Pueblo of Isleta, New Mexico Pueblo of Nambe, New Mexico Pueblo of Pojoaque, New Mexico Pueblo of San Ildefonso, New Mexico Pueblo of Santa Ana, New Mexico Pueblo of Taos, New Mexico Pueblo of Zia, New Mexico Ute Indian Tribe of the Uintah & Ouray Reservation, Utah Ysleta Del Sur Pueblo of Texas Jicarilla Apache Nation, New Mexico Navajo Nation, Arizona, New Mexico & Utah Pueblo of Acoma, New Mexico Pueblo of Jemez, New Mexico Pueblo of Laguna, New Mexico Pueblo of Picuris, New Mexico Pueblo of San Felipe, New Mexico

Pueblo of Sandia, New Mexico

Pueblo of Santa Clara, New Mexico

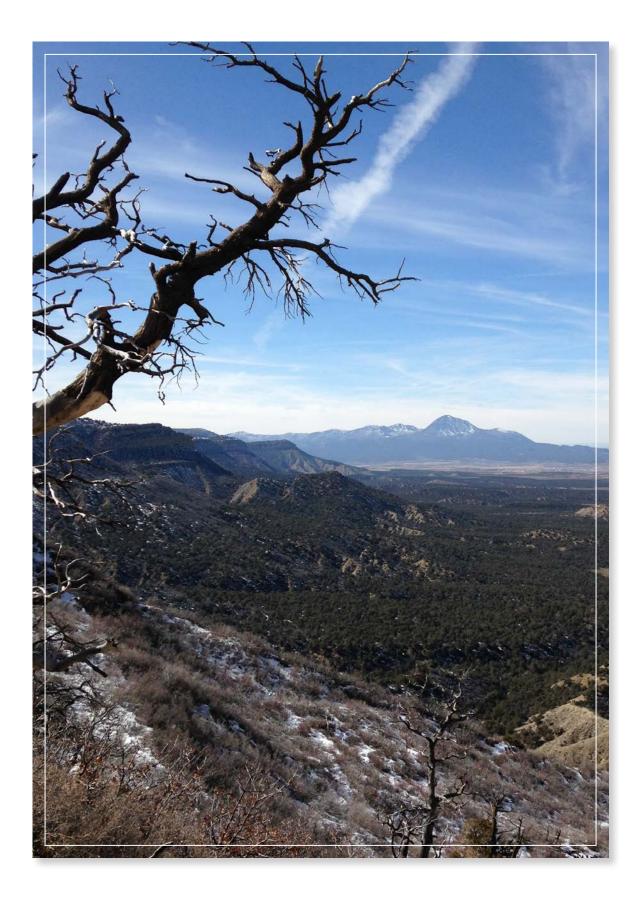
Pueblo of Tesuque, New Mexico

Southern Ute Indian Tribe of the Southern Ute Reservation, Colorado

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

Zuni Tribe of the Zuni Reservation, New Mexico





Intermountain Region Foundation Document Recommendation Mesa Verde National Park

September 2015

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 Cliff Spencer, Superintendent, Mesa Verde National Park

1. E. Masic

APPROVED Sue E. Masica, Regional Director, Intermountain Region

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.

MEVE 307/129507 October 2015

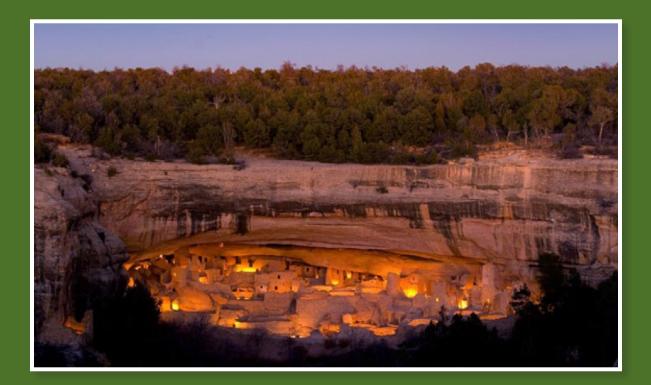
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Date

10/27/15

Date

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