

Foundation Document Tule Springs Fossil Beds National Monument

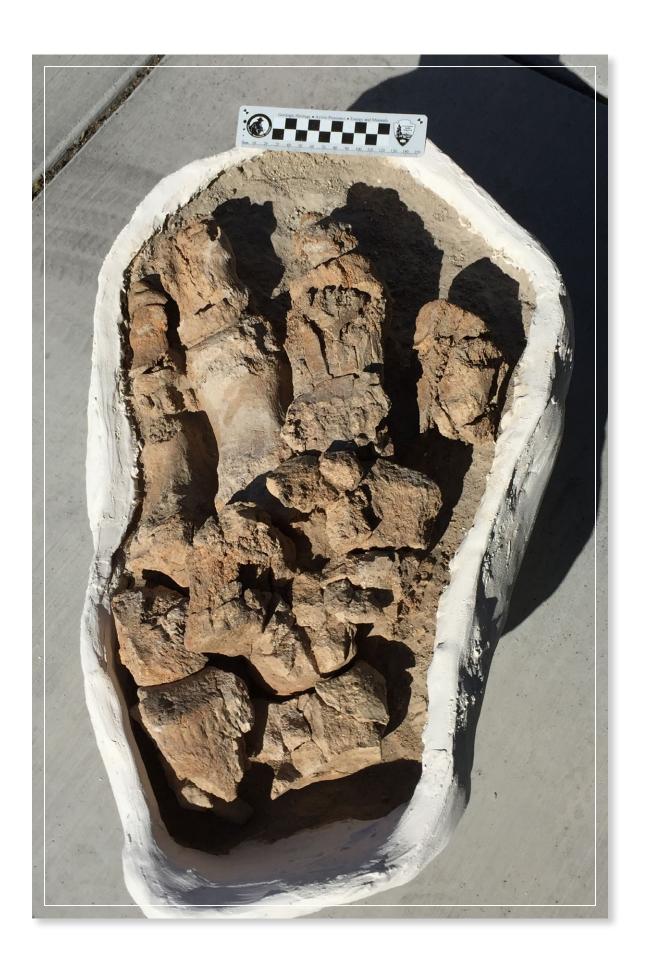
Nevada June 2019





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Mission of the National Park Service

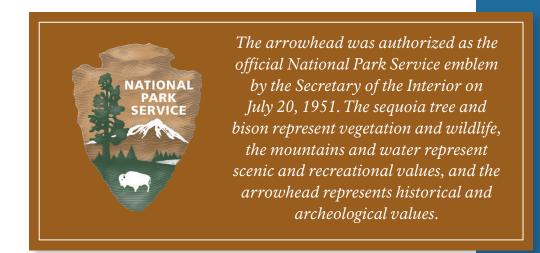
The National Park Service (NPS) preserves unimpaired the natural and cultural resources and values of the national park system for the enjoyment, education, and inspiration of this and future generations. The National Park Service cooperates with partners to extend the benefits of natural and cultural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



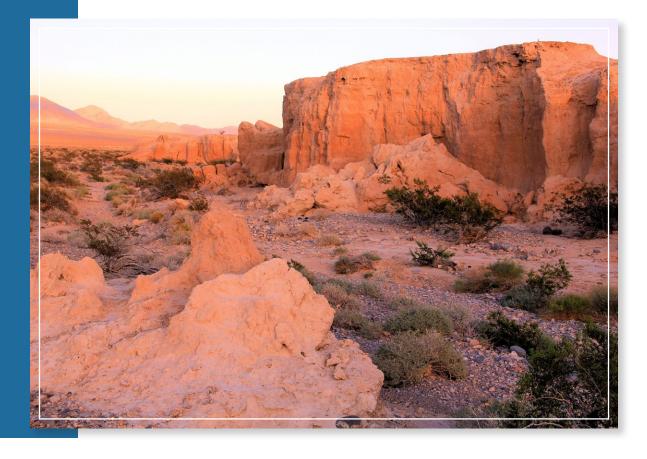
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Introduction

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

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

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



Part 1: Core Components

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

Brief Description of the Park

The Tule Springs Fossil Beds National Monument was established as the 405th unit of the national park system on December 19, 2014, through the National Defense Authorization Bill and the transfer of 22,650 acres of land from the Bureau of Land Management to the National Park Service. The monument is located in the upper Las Vegas Wash, north of the cities of Las Vegas and North Las Vegas, Nevada, and is bounded on the northeast by the Sheep and Las Vegas Ranges. Neighbors of the monument include the cities of Las Vegas and North Las Vegas, Clark County, tribal lands owned by the Las Vegas Paiute Tribe, federal lands managed by the Bureau of Land Management and the U.S. Fish and Wildlife Service, lands owned by the State of Nevada, and Nellis and Creech Air Force Bases, which use the monument's airspace for training missions.

Pleistocene deposits contain paleontological and paleoecological resources such as fossilized plants, animals, and their traces that were deposited in spring-fed ponds, meadows, marshes, and streams during periods of abundant rainfall in the Pleistocene Epoch. These fine-grained paleospring deposits are known as the Las Vegas Formation. The paleontological record represented at the monument ranges from approximately 100,000 to 12,500 years ago, part of a geologic formation that spans multiple important global climate cooling and warming episodes during at least the last 500,000 years. The monument is rich with paleontological resources, including a vertebrate fossil assemblage known as the Tule Springs local fauna comprising

mammoth, horse, camel, bison, ground sloth, dire wolf, saber-toothed cat, and North American lion. In addition to vertebrate fossils, invertebrates, plant macrofossils, and pollen are found at Tule Springs. The spring deposits from Tule Springs help to tell an important story regarding how the region's climate varied. The composition of the modern fauna and flora that now dominate the North American landscape are evidence of those animals that survived the last Ice Age.

In addition to the abundance of fossils, the monument contains an important desert ecosystem with multiple habitats that support a variety of plants and animal populations. The area sustains four unique and imperiled plants (Las Vegas bearpoppy, Merriam's bearpoppy, Las Vegas buckwheat, and halfring milkvetch), as well as Joshua trees and several species of cacti. Furthermore, it serves as habitat for threatened desert tortoises, kit foxes, Le Conte's Thrasher, and burrowing owls, as well as important territory for other raptors such as kestrels, barn owls, and great horned owls. More than 52 mammals and 31 species of reptiles and amphibians can be found within the monument's boundaries. The monument helps protect an important wildlife corridor from urbanization, spanning multiple federal land units.



Park Purpose

The purpose statement identifies the specific reason(s) for establishment of a particular park. The purpose statement for Tule Springs Fossil Beds National Monument 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 December 19, 2014 (see appendix A for enabling legislation). The purpose statement lays the foundation for understanding what is most important about the park.

Tule Springs Fossil Beds National Monument conserves, protects, enhances, and interprets late Pleistocene fossils, their geologic context, and other scientific values in the upper Las Vegas Wash through education, research, community collaboration, and appropriate public use.



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 Tule Springs Fossil Beds National Monument, and are supported by data, research, and consensus. Statements of significance describe the distinctive nature of the park and why an area is important within a global, national, regional, and systemwide context. They focus on the most important resources and values that will assist in park planning and management.

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

- 1. Fossils. Tule Springs Fossil Beds National Monument encompasses one of the largest and most diverse late Pleistocene vertebrate fossil assemblages in the southern Great Basin and Mojave Deserts. The Tule Springs local fauna includes large mammals and other vertebrates and dates from approximately 100,000 to 12,500 years ago. Invertebrates, plant microfossils, and pollen also are present in these deposits.
- 2. Geologic Context. The extensive and complex paleospring deposits of Tule Springs Fossil Beds National Monument record vast desert wetland ecosystems that covered much of the Las Vegas Valley during the late Pleistocene. The depositional history of these marsh, wet meadow, and flowing stream environments provides the baseline climate record that serves as a standard of comparison for similar deposits throughout the American Southwest.
- 3. Evidence of a Fluctuating Climate. The Pleistocene deposits at Tule Springs Fossil Beds National Monument provide the first record demonstrating that desert wetland ecosystems expanded and contracted repeatedly in response to abrupt climatic fluctuations and that this response was in step with the warm and cold cycles documented in global climate records. The continued study of these responses has current and future implications for understanding how modern wetland ecosystems respond to changes in climate.
- 4. Scientific Discovery at Tule Springs. Tule Springs Fossil Beds National Monument has been a place of significant scientific research and discovery since the early 1900s. As a part of the Tule Springs Expedition, the monument became the first site in North America where radiocarbon dating was used on a large scale. Research at the monument has provided a solid base for future studies, new discoveries, and the use of new technologies.





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 Tule Springs Fossil Beds National Monument:

• Pleistocene Fossils. Tule Springs Fossil Beds National Monument contains a precisely dated sequence of sediments that entomb the Tule Springs local fauna, one of the most significant late Pleistocene vertebrate assemblages in the American Southwest. The Tule Springs local fauna is both prolific and diverse and includes a large mammal assemblage dominated by mammoth and camel. Horse, bison, North American lion, saber-toothed cat, dire wolf, and ground sloth are also prominent, as well as micromammals, birds, snakes, and amphibians. Invertebrates, plant macrofossils, and pollen are also present in the deposits. These fossils are found in extensive paleospring deposits that record significant hydrologic changes that occurred in the Las Vegas Valley during the recent geologic past in response to rapid climate change events.



- Scientific Research. Scientific inquiry in Tule Springs Fossil Beds National Monument has been ongoing since the early 1900s. The 1933 discovery of Pleistocene fossils and human cultural artifacts in apparent association led to intense scrutiny of Tule Springs as to the possible coexistence of humans and Pleistocene megafauna. With the advent of the radiocarbon dating technique, this hypothesis could finally be tested. In 1962–1963, a multidisciplinary team of scientists gathered in what was known as the Tule Springs Expedition, or later as the "Big Dig." Geologists dug extensive trenches through the difficult terrain to investigate and radiocarbon-date the fossil- and artifactbearing layers. Ultimately, the hypothesis of human-megafaunal interaction was not substantiated with this research, but the framework created for the Las Vegas Formation stood the test of time. More than 40 years later, scientists reinvestigated the deposits at Tule Springs. Their work expanded the framework and, with new dating techniques, extended the chronology as far back as at least 500,000 years, tying these deposits to climate fluctuations during the late Pleistocene. Future research in Tule Springs Fossil Beds National Monument has tremendous potential to investigate the megafauna, paleoclimate, and paleoenvironments of the Las Vegas Formation.
- Museum Collections. Tule Springs Fossil Beds National Monument's museum collection comprises artifacts, archives, and natural history specimens. The collection is critical in understanding late Pleistocene flora and fauna of the Las Vegas Valley as well as local paleoecosystems, geologic context, climate change, and traditional land use. The collection provides education and outreach opportunities such as educational programs, research, and both virtual and on-site/off-site exhibition. The monument plays a role in furthering knowledge of paleontology in the Great Basin through cooperation with institutions holding related collections and others vested in interdisciplinary studies.







- Paleoecosystem. The paleoecosystem of the late Pleistocene deposits in Tule Springs Fossil Beds National Monument represents a complex mosaic of desert wetland depositional environments. Reconstructing these spring paleoenvironments, combined with detailed stratigraphy and chronologic control, reveals a synchronous ecosystem response to northern hemispheric abrupt climate change. This result can be used to model and anticipate future climate and environmental changes in desert wetland ecosystems worldwide. Faunal responses to these climatic fluctuations are a topic for current and future research.
- Geologic Processes and Features. Past and current geologic processes and their resultant scenic features are important resources in Tule Springs Fossil Beds National Monument. Past spring discharge is directly related to faults and past ground water table levels. Fluvial (river) features including erosion and other processes are present in the fossil deposits. They are a predominant feature of the active watershed, the upper Las Vegas Wash. The stratigraphically complex Las Vegas Formation is exposed along the upper Las Vegas Wash and, through erosion and deposition, forms a highly dissected undulating topography. Other geologic features in Tule Springs Fossil Beds National Monument include significant tufa deposits, alluvial fans, inverted topography, aeolian features (dunes), and faults. These natural processes continue to shape the current landscape and provide an important opportunity for visitors to experience geological processes.
- Public Understanding and Education. The rich paleontologic and geologic record of Tule Springs Fossil Beds National Monument and its proximity to a large metropolitan area with more than 2 million residents and more than 42–43 million visitors per year make it an ideal location to conduct resource education and build stewards. Linking past, present, and future, the monument provides opportunities to understand how research can inform both scientists and the general public as they seek to learn how the world they see today came to be and to look to the future with greater wisdom.

Other Important Resources and Values

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

The following other important resources and values have been identified for Tule Springs Fossil Beds National Monument:

- Partnerships. Tule Springs Fossil Beds National Monument possesses unparalleled opportunities for collaboration and outreach. Because of its proximity to the Las Vegas urban core, the monument and its partners can reach diverse audiences including those from adjacent communities and visitors from around the world. In addition, the monument's boundaries with multiple state, federal, tribal, military, and city entities provide multiple opportunities for community and partner involvement, as well as important recreation and conservation linkages. Support from multiple levels of government, community leaders, nonprofits, and other entities was essential to the creation of Tule Springs Fossil Beds National Monument and is critical for its long-term sustainability. Collaboration with the local community is crucial for the protection of important resources.
- Modern Ecosystems. Tule Springs Fossil Beds National Monument is a living desert landscape of native wash habitats that are home to abundant plants and animals, including rare species such as the bearpoppy and desert tortoise. Its location provides vital contiguous habitat with surrounding protected lands, amplifying the individual benefit of each. The upper Las Vegas Wash runs directly through the core of the monument and, as the only drainage system in the Las Vegas hydrologic basin, provides critical flood control for the valley during heavy rains.
- Human History. Archeological sites throughout the monument are valued for their
 association with, and representation of, the cultural heritage of early humans, Native
 Americans, and European Americans who traveled through and resided in the area.
 Natural springs have attracted people to the Las Vegas Valley for more than 10,000
 years, including the Southern Paiutes as early as A.D. 700 and Spanish explorers and
 Mormons in the 1800s.



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 Tule Springs Fossil Beds National Monument:

- The remarkable collection of fossils preserved within the monument allows us to peer into the distant past, to explore worlds of plants and animals that no longer exist, and to observe the effects of climate and habitat changes on species and ecosystems.
 - An abundant diversity of Ice Age animals once roamed the Las Vegas Valley and the story of their lives remains as fossils preserved within Tule Springs Fossil Beds National Monument. These fossils provide a touchstone to ancient ecosystems, inspiring personal discovery and reflection upon this history of life on Earth, including deep time, change, adaptation, survival, evolution, and extinction.
- For thousands of years, people with diverse worldviews, cultures, and technologies have connected with the landscapes of Tule Springs National Monument in vastly different ways.
 - Tule Springs has sustained people culturally, spiritually, and intellectually for thousands of years. The Southern Nevada community recognized its value as a unique resource that deserved to be protected for future generations. Collaboration among these diverse stakeholders led to its designation as a national monument and continues to frame discussion over the use and stewardship of public lands.
- The monument is both a historic and living laboratory that continues to reveal secrets of the past that help us to look to the future with greater wisdom.
 - The discovery of prehistoric artifact scatters in the Tule Springs area led to important advances in archeological methods and analysis, including the first large-scale field test of the newly developed radiocarbon dating technique. Preservation of this world-class laboratory continues to spark the spirit of human curiosity.
- The power of water, interacting with climate, continues to remake the landscape and local ecology, as it has for millennia.
 - Processes that have shaped the landscape at Tule Springs first preserved the fossils, and are now exposing them, providing scientists, staff, and visitors with the ability to view, study, and understand its remarkable Pleistocene ecosystem and fossil record.

Part 2: Dynamic Components

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

Special Mandates and Administrative Commitments

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





Special Mandates

In December of 2014, the Carl Levin and Howard P. "Buck" McKeon National Defense Authorization Act for Fiscal Year 2015 (Public Law 113-291, 128 Stat. 3861, § 3092) established Tule Springs Fossil Beds National Monument and included a number of mandates for management of the park.

- Management Plan. Within three years after funds are made available for this purpose, a management plan will be developed that provides for the long-term protection and management of the monument. It will allow for continued scientific research, consider existing management plans, involve public and stakeholder engagement, and consider the potential to link to regional trail systems.
- Interpretation, Education, and Research. Interpretation, education, and scientific
 research will be provided on the paleontological resources of the monument, with
 priority for on-site exhibition and curation where possible.
- Renewable Energy Transmission Facilities. Upon a complete application
 from a qualified electric utility, a 400-foot-wide right-of-way will be issued to a
 qualified electric utility for the construction and maintenance of high-voltage
 transmission facilities.
- Water Conveyance Facilities. Upon a complete application from a public water
 agency, a 100-foot-wide right-of-way will be issued to a public water agency for the
 construction, maintenance, repair, and replacement of a buried water conveyance
 pipeline and associated facilities within a specified corridor. Also, a 100-foot-wide
 right-of-way will be issued to a unit of local government or public water agency for
 the construction, operation, maintenance, repair, and replacement of a buried water
 conveyance pipeline.
- Advisory Council. An advisory council will be formed and will last at least six years to provide guidance for the management of the monument. The council will have 10 members, appointed by the Secretary of Interior, with one nominated representative (either a member or nominated by the members) from each of the following entities: Clark County Commission, Las Vegas City Council, North Las Vegas City Council, Las Vegas Paiute Tribe, southern Nevada conservation community, Nellis Air Force Base, State of Nevada, a county resident with a background that reflects the monument's purposes, and two individuals from the same or adjacent counties with paleontology experience.

Administrative Commitments

For more information about the existing administrative commitments for Tule Springs Fossil Beds National Monument, 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:

- analysis of fundamental and other important resources and values (see appendix B)
- identification of key issues and associated planning and data needs
- identification of planning and data needs (including spatial mapping activities or GIS maps)

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

Analysis of Fundamental Resources and Values

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

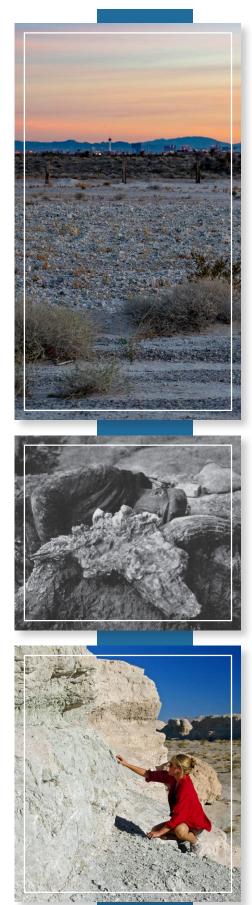
The following are key issues for Tule Springs Fossil Beds National Monument and the associated planning and data needs to address them:

• Changes in Visitor Use. The monument is located at a wildland-urban interface adjacent to a main U.S. highway making it easily accessible to the public. The Bureau of Land Management managed the area prior to becoming a unit of the National Park Service. At that time, activities such as the use of firearms, off-highway vehicles, and the collection of rocks were authorized. These activities need to be redirected to suitable locations because they are not permitted within National Park Service law and policy. The fact that monument designation occurred by act of Congress and signing into law by the president is important to garnering local support for these changes, as it reflects the will of Clark County residents. Environmental degradation and contamination also occur in the form of lead from bullets, mercury from improperly disposed-of electronics, and a variety of pollutants associated with trash dumping. Furthermore, some hazards are innate to the area, such as flooding and wildfire. Community collaboration and engaging stakeholders will be essential to changing public perceptions of appropriate access and use. Increasing public stewardship of the monument will require time. Effective educational messages, implementation of engineering solutions, and selective enforcement will need to complement the efforts to clear and recover the landscape.

- Associated planning and data needs: Environmental contaminant remediation plan, visitor use management plan, outreach and communications plan, environmental contaminant survey, visitor use survey and data
- Collaboration on Visitor Services. As a new park unit, Tule Springs Fossil Beds National Monument has a rich desert landscape, but no facilities or infrastructure. Adopting a co-production of services model provides the most likely opportunity for meeting the needs of the visitor. The monument provides visitor services at the U.S. Fish and Wildlife Service Corn Creek Visitor Center, the Nevada State Museum, at schools, and through scheduled guided tours. A general management plan or visitor use management plan, along with an interpretive plan, will help determine the suitable infrastructure needs for the monument. Co-location of staffing and services provides the built environment visitors come to expect when traveling to a park. Utilization of partner facilities provides the basic needs such as restrooms, water, and shade. Traditional programs and services including virtual and actual wayfinding, interpretation, monument brand identification, and other opportunities would appeal and attract local residents and Las Vegas visitors. Focused attention to increase awareness of the National Park Service and the monument through consistent branding in monument publications and materials, as well as additional outreach marketing with local businesses, schools, and tourism outlets will be necessary. Establishing, strengthening, and improving partner collaboration, agreements, and other tools will be core to providing a new hybrid of visitor services. These instruments can express solutions for boundary marking, roads and trails, dispersed visitor use patterns, resource protection, signage, and other monument, program, or visitor service elements. Without clearly defined transportation infrastructure, the monument is porous, and people disperse widely throughout the property, which may lead to unintended damages to important resources. Adding signage for wayfinding, interpretation, and boundary demarcation will reduce these consequences. Because there is no infrastructure, there are no on-site accessible options for individuals with disabilities. However, the monument takes accessibility standards into consideration where possible, such as through online content and off-site events. All of these needs will require additional capital investment and partner collaboration.
 - Associated planning and data needs: General management plan, visitor use management plan, comprehensive interpretive plan, outreach and communications plan



- Complex Land Management Issues. Both opportunities and challenges are presented by the monument's location on the edge of a major urban area and tourist destination and by its diversity of neighbors. The development of infrastructure and housing continues to intensify on the monument's southern boundary, changing the viewshed and increasing impacts on the monument. Neighboring lands are managed with differing missions and objectives by diverse entities including the U.S. Air Force, Las Vegas Paiute Tribe, Bureau of Land Management, U.S. Fish and Wildlife Service, State of Nevada, Clark County, and Cities of Las Vegas and North Las Vegas. Despite the differences, however, these entities support the protection of the monument lands and serve as partners when nearby development is proposed. Local government oversight of construction and development can facilitate protection of monument resources. As with all public lands in Southern Nevada, without clearly marked boundaries and ample information, the distinctions between management regulations are difficult for the public to understand. Furthermore, 49 rights-of-way exist within monument boundaries, ranging from utility corridors and road maintenance agreements to water control infrastructure and recreation interests. These land encumbrances all have different authorities and mandates and must be managed separately. Adjoining neighborhood site planning and construction, road alignment, and utility corridor maintenance can have a complementary role in defining and buffering the monument. Finally, the Las Vegas Wash cuts through the heart of the monument and is the only drainage system in the Las Vegas hydrologic basin. It drains stormwater and runoff from the Las Vegas Valley toward Lake Mead, giving the monument a critical role in regional flood management. A great deal of planning, collaboration, and outreach will be necessary to address these diverse and complex issues.
 - Associated planning and data needs: Outreach and communications plan
- Fossil Information, Collection, Storage, and Management. The fossil resources at Tule Springs Fossil Beds National Monument are its highest priority and the primary purpose for establishment of the monument. More than 100 years of research and collection of fossils prior to national monument designation led to a great volume of widely dispersed information, artifacts, specimens, and partners. The full distribution and nature of research and collections from the Las Vegas Wash are not fully understood or documented, nor is the potential for any of the collections to be returned to the monument. At this time, the monument does not have an on-site repository for these collections, and thus reacquisition is not yet an option despite wording in the enabling legislation that "...priority (be) given to the onsite exhibition and curation of the resources, to the extent practicable." The volume of material and the number of institutions involved in caring for the collection make this a large and complex undertaking. In addition, new fossil sites are frequently discovered, and approximately 40% of the monument has not been surveyed for paleontologic resources. Without a baseline inventory and a plan for monitoring and management of these resources that meets the rate of exposure and erosion, the value of fossils and their stratigraphic context is at risk.
 - Associated planning and data needs: Collections management plan, collections storage plan, paleontological survey, paleontological resource map



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.

Criteria and Considerations for Prioritization. The following criteria were used to evaluate the priority of each planning or data need:

- Emergency or urgency of the issue
- · Prevention of resource degradation or impairment
- Ability of the plan to address multiple or interrelated issues
- · Ability to impact visitor use and experience
- · Potential funding availability
- · Feasibility of completion
- Leverage opportunities, including interagency partnership or other assistance
- Community desires

High Priority Planning Needs

General Management Plan.

Rationale — As a newly designated unit of the national park system, Tule Springs Fossil Beds National Monument does not yet have a plan that addresses management holistically, sets long-term goals, creates a shared vision through public engagement, and provides programmatic direction for resource preservation and visitor use. A broad framework for decision-making is a valuable asset for new park units, and a variety of implementation plans may tier off of the overarching plan. A management plan is mandated by the monument's enabling legislation, which states, "Not later than 3 years after the date on which funds are made available to carry out this subparagraph, the Secretary shall develop a management plan that provides for the long-term protection and management of the Monument."

Scope — The general management plan could be a single stand-alone plan or a series of plans making up a management planning portfolio. Under the portfolio approach, some of the high-priority plans listed here, such as a visitor use management plan, could be combined with other plans to fulfill legal management planning requirements. In either case, the planning process would require interdisciplinary input and public involvement. Monument managers, stakeholders, and the public would define the desired natural and cultural resource conditions to be achieved and maintained over time that are necessary for visitors to understand, enjoy, and appreciate the monument. The plan would identify the types of management activities, visitor use, and development appropriate for maintaining these desired conditions.

Comprehensive Interpretive Plan.

Rationale — As a new park unit, informing the public about the existence of the monument and communicating the value of its resources are top priorities. A comprehensive interpretive plan would provide a long-term vision for interpretation, education, visitor experience opportunities, and facilities at Tule Springs Fossil Beds National Monument as required by Director's Order 6: *Interpretation and Education*. The plan would identify and analyze interpretation, education, and visitor experience issues and goals, provide direction for staff to engage the public through programming and projects, clearly communicate issues and management priorities to visitors and partners, promote more effective use of limited fiscal and staff resources, and increase resource protection.

Scope — A comprehensive interpretive plan would identify the monument's target audiences, refine the monument's interpretive themes, describe visitor experience goals, clarify research efforts and goals, assess infrastructure requirements, and recommend a wide variety of personal (programs, personal contacts) and nonpersonal (interpretive media and facilities) interpretive services and outreach activities that best communicate the monument's purpose, significance, and key messages and stories. The interpretive planning process would distinguish which resource experiences could be made accessible to visitors and should encourage active stewardship while minimizing negative impacts. Specific components in the planning effort could include wayside planning, a media strategy, site-specific interpretive planning (e.g., Aliante Parkway, North Durango Drive, and Corn Creek Road kiosk sites), outreach to youth and diverse audiences in Southern Nevada, communicating research and monitoring results, curricula for local schools, and the best ways to incorporate technology, such as virtual museums, podcasts and other mobile applications, and a robust social media program. An interim interpretive plan may be necessary if funding is not yet available. The plan would serve as a broad governing document, and would be followed by implementation plans detailing interpretive methods that reinforce priority messages and ensure that the resulting products work well individually and collectively.

Environmental Contaminant Remediation Plan.

Rationale — There is likely a half-century of trash dumping and gun debris scattered throughout the monument, mostly along the northern portion. Removing the debris is an important step toward making the monument safer and more enjoyable for staff, volunteers, researchers, and visitors. Along with education, enforcement, and fencing, improving the viewscape and providing a positive example of stewardship are a part of the monument's strategy to end illegal and destructive uses of these lands. Through cleanup efforts, precautions will be taken to protect ground surface layers that may contain important natural and cultural resources.

Scope — An interdisciplinary planning team of natural and cultural resource specialists would be established, including those with expertise in environmental engineering, toxicology, biology, geology, paleontology, and archeology. The plan would begin with an assessment of contamination across the monument and a subsequent prioritization of sites based on intended future uses. Highest priority would be given to areas that are planned for development, visitor use, and intensive research, and to sites that pose the greatest threats to human health, wildlife, water resources, and important natural and cultural resources. If appropriate or possible, the plan would identify parties responsible for contamination and request assistance in the cleanup. Given the magnitude of the issues, identifying funding opportunities and partnerships would be a critical aspect of the planning effort.

Resource Stewardship Strategy.

Rationale — The monument contains important natural and cultural resources of scientific value, particularly vast paleontological resources. Because of ongoing natural weathering, erosion, and human-caused damage, there is an urgent need to protect these resources. Surveys, research, and other data exist but are not comprehensive in scope and provide few management prescriptions. The resource stewardship strategy, supported by the natural resource condition assessment and cultural resource stewardship assessment, would identify the resources the monument is managing, evaluate their current conditions, and define desired future conditions. It would then prioritize resource projects and identify implementation strategies to meet management targets.

Scope — The resource stewardship strategy is an analytical tool focused on identifying and tracking indicators of desired conditions, recommending comprehensive strategies to achieve and maintain desired conditions over time, and assessing and updating these strategies periodically based on new information and the results of completed activities. Existing baseline resource condition data would be used to develop potential resource management actions. The strategy would be a dynamic, adaptive management resource that would identify resource management priorities and be used to track the effectiveness of these actions over time.

Site Development and Management Plan for Aliante Parkway, North Durango Drive, and Corn Creek Road Kiosk Sites.

Rationale — The monument would benefit from broad, comprehensive management guidance, but this type of effort will require multiple years of planning and public engagement. In the interim, three sites have been identified as initial locations to engage the public and provide visitor services. These sites would introduce the public to the monument and offer basic information and infrastructure. Establishing a physical presence on the landscape is an important step in increasing public awareness of the monument and educating visitors about its important resources. In addition, it is a preliminary step in changing perceptions about appropriate uses of the monument and would help reduce resource damage and loss. Two of the sites are located at the south end of the monument where housing developments share a common boundary with the monument; these would provide an opportunity to inform local residents and strengthen neighbor relations. The third site is at the intersection of a major highway (U.S. Highway 95) with the monument's only paved road, one of the primary entrance points to the North Unit.

Scope — The site development and management plan would provide a comprehensive design for some of the monument's first visitor infrastructure sites. In addition to site-specific planning considerations such as accessibility and security, the effort would take into account potential long-term goals for monument and regional infrastructure. Kiosks, interpretive panels, signage, lighting, fencing, shade, trails, and parking are among the items that would be considered at these locations. It is not anticipated that major infrastructure such as a visitor center, museum, curation facility, offices, or maintenance building would be considered through this effort. The planning process would solicit input from stakeholders and the public and would seek opportunities to collaborate with partners.

Visitor Use Management Plan.

Rationale — With a Las Vegas Valley population of more than 2 million people and an annual visitation of more than 40 million tourists, potential visitation to the monument could grow rapidly as public awareness increases. Currently, very little infrastructure exists to inform and direct visitors and to provide guidance on proper uses. Substantial resource damage could result without a solid framework for managing visitation. A visitor use management plan would develop long-term strategies for providing access, connecting visitors with key visitor experiences, protecting fundamental resources and values, and managing visitor use.

Scope — A visitor use survey could be conducted in advance of the plan to evaluate current visitor demographics, characteristics, and use patterns. The visitor use management plan would (1) examine current visitor access and use, (2) explore and evaluate alternatives for new, expanded, reduced, or altered visitor activities, and (3) establish the most effective and efficient methods to manage those activities. The plan would take into account the quality of visitor experience, flow dynamics, potential conflicts between user groups, health and safety considerations, indicators and standards for resource conditions, and potential impacts on employee safety, morale, and well-being. The interagency visitor use management framework would help guide the planning process as the monument engages neighbors, partners, and local communities that could be affected by changes in the monument. As stated previously, a visitor use management plan could be completed as part of a planning portfolio to help satisfy general management planning requirements. Alternatively, a comprehensive stand-alone general management plan that includes the components listed above could satisfy the need for a visitor use management plan.

Park Partner Action Strategy.

Rationale — As a new unit of the National Park Service, the monument is at the beginning stages of developing partnerships with existing organizations, defining and developing visitor services, and creating interpretive media. A number of groups and organizations played a role in the designation of this new national monument. Many of these entities (like Protectors of Tule Springs) plan to remain involved in the monument's future. However, not all have the same expectations for the monument, management goals for surrounding properties, and potential collections, nor the same capabilities as potential partners.

With a large number of potential partners and limited staffing, it will be necessary to clearly define roles and responsibilities for all parties regarding management, communication, and coordination. The monument's goal is to have a large network of support, and simple structures to complete work efficiently and effectively. The way this monument will thrive is through active collaboration efforts among the federal, state, and local partners as well as non-governmental organizations, and tribes. Many actions will depend on partner engagement, collaboration, and shared resources. Tule Springs Fossil Beds National Monument shall form cooperative partnerships with existing and future organized groups and government agencies. This will be fundamental for telling the story and preserving the related resources.

Scope — The Park Partner Action Strategy would identify and define the relationships among federal, state, and local partners including visitor services, collections, land use, research, and protection. It would also identify potential partnership opportunities based on mutual interests and include criteria for prioritizing activities and programs among potential partners. Overall, the strategy would provide direction for forming new partnerships and structuring a network for preserving resources.

High Priority Data Needs

Archeological Survey.

Rationale — As a newly established NPS unit, the monument is still gathering data to determine what resources are present on site. Knowledge of existing archeological resources will also be an important precursor to facility and site planning in order to understand what sensitive resources may be located on site.

Scope — The archeological survey would identify existing baseline archeological information as well as identify data gaps that can be used to inform future surveys. The information gathered and guidance provided as part of this process will inform future planning processes and core archeological data products, such as the archeological overview and assessment, and would also contribute to the baseline cultural resources information for the monument's resource stewardship strategy.

Cultural Resources Stewardship Assessment.

Rationale — A cultural resources stewardship assessment is a requirement for all parks, and provides a baseline evaluation of cultural resource management practices. As a new NPS unit, the monument does not currently have a cultural resources stewardship assessment in place.

Scope — The cultural resources stewardship assessment would provide baseline information on the condition of the monument's known cultural resources. It would examine cultural resources and cultural resource management in the monument and prioritize cultural resources management needs and actions, as well as informing the resource stewardship strategy.

Natural Resources Condition Assessment.

Rationale — As a new NPS site, the monument lacks baseline information on the condition of its natural resources, including both vegetation and wildlife species.

Scope — The natural resources condition assessment would address both wildlife and vegetation in the monument, including special-status species, providing baseline information on the current status of these resources that would subsequently inform the resource stewardship strategy and other natural resources management guidance.

See appendix D for recently completed and ongoing planning and data collection efforts that address monument issues.





Table 1.1 / Natural and Cultural Resources - Summary of Planning Needs		
Planning Need	Priority	Notes
Environmental contaminant remediation plan	Н	-
Resource stewardship strategy	Н	-
Collections management plan	М	-
Collection storage plan	М	Streamline fossil curation system and document all off-site specimens, artifacts, and archives to be included in monument resource "finder's guide."
Wildlife management plan	L	-

Data Need	Priority	Notes
Archeological survey	Н	-
Cultural resources stewardship assessment	Н	-
Natural resources condition assessment	Н	-
Environmental contaminant survey	М	-
Ethnographic research and oral histories	М	-
Ethnographic overview and assessment	М	-
Finder's guide for archives, specimens, and artifacts	М	Comprehensive and consistently documented inventory and ownership reference for all Tule Springs archives, specimens, and artifacts.
Geologic map	М	Large-scale and comprehensive geospatial resources.
Hydrologic study	М	Include a flood risk assessment and coordinate in partnership with the U.S. Fish and Wildlife Service.
Natural resource map	М	Geospatial resource that includes plant and animal populations, sensitive areas requiring protection, and wildland fire susceptibility.
Paleontological resource map	М	Geospatial resource with comprehensive coverage of localities and fossil excavation sites. The most recent update of the fossil locality data was conducted in 2016.
Paleontological survey	М	-
Rare plant survey	М	-
Archeological overview and assessment	М	Conduct assessment at a landscape scale and partner with agencies controlling adjacent lands, such as U.S. Fish and Wildlife Service.

Table 1.2 / Natural and Cultural Resources - Summary of Data Needs and Studies		
Data Need	Priority	Notes
Research and geospatial data inventory	М	Database of all past and current research done in the monument.
Sediment sample data	М	U.S. Geological Survey.
Scope of collections statement	М	-
Stratigraphic profiles and chronology sampling	М	Include both radiocarbon and luminescence dating methods.
Tule Springs local faunal dynamics analysis	М	Study changes in animal populations over time, including evolution, immigration, and extinction.

Table 1.3 / Natural and Cultural Resources - Other Park Strategies and Actions		
Strategy or Action	Priority	Notes
Consolidate geospatial data from various sources	М	-
Cyclic field collection	М	-
Research permittee annual reports	M	Mandatory, standardized annual reporting tool for all monument researchers, including data and publications, for entry into the monument's research database.
Park atlas	L	-

Table 2.1 / Administration and Operations - Summary of Planning Needs		
Planning Need	Priority	Notes
General management plan	Н	Could be undertaken as a single plan or a portfolio of smaller plans.
Park partner action strategy	Н	Partnership plan that would identify potential new collaborators, strengthen existing relationships, find mutual goals and objectives between entities, and leverage resources and capital efficiently for the highest management priorities.
Outreach and communications plan	М	-
Position management plan	М	-
Research management plan	М	Develop a statement of research needs, research and collection permit administration criteria, annual reporting format from permittees, research database, and fossil locality database.
Safety / security plan	М	-

Table 2.2 / Administration and Operations - Data Needs and Studies		
Data Need	Priority	Notes
Community/partner assessment	М	-

Table 2.3 / Administration and Operations - Other Park Strategies and Actions		
Strategy or Action	Priority	Notes
Develop volunteer program	М	Create docent program.
Digitization of archives and reference documents	М	Add to Integrated Resource Management Applications Portal.

Table 3.1 / Visitor Experience - Summary of Planning Needs		
Planning Need	Priority	Notes
Comprehensive interpretive plan	Н	An interim plan may be necessary if funding is not available.
Site development and management plan for Aliante Parkway, North Durango Drive, and Corn Creek Road kiosk sites	Н	-
Visitor use management plan	Н	-
Accessibility transition plan	М	-
Transportation management plan	М	Roads, parking, mass transit / shuttles, bike paths, hiking trails, and overall visitor flow relative to adjacent residential development.

Table 3.2 / Visitor Experience - Summary of Data Needs and Studies		
Data Need	Priority	Notes
Audience analysis	М	-
Visitor use survey and data	М	Include needs assessment and collect data on existing access site and social trails.

Table 3.2 / Visitor Experience - Other Park Strategies and Actions		
Strategy or Action	Priority	Notes
Park atlas	М	-
Translate park brochures and information into Spanish and other languages	М	-
Unigrid map	М	-

Part 3: Contributors

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Appendixes

Appendix A: Enabling Legislation for Tule Springs Fossil Beds National Monument

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54 USC 320301

SEC. 3092. MISCELLANEOUS ISSUES RELATED TO LAS VEGAS VALLEY PUBLIC LAND AND TULE SPRINGS FOSSIL BEDS NATIONAL MONUMENT.

(a) TULE SPRINGS FOSSIL BEDS NATIONAL MONUMENT.—

(1) DEFINITIONS.—In this subsection:

(A) COUNCIL.—The term "Council" means the Tule Springs Fossil Beds National Monument Advisory Council established by paragraph (6)(A).

(B) COUNTY.—The term "County" means Clark County,

Nevada.

(C) LOCAL GOVERNMENT.—The term "local government" means the City of Las Vegas, City of North Las Vegas, or the County.

(D) MANAGEMENT PLAN.—The term "management plan" means the management plan for the Monument developed

under paragraph (3)(E).

- (E) MAP.—The term "Map" means the map entitled "Tule Springs Fossil Beds National Monument Proposed Boundary", numbered 963/123,142, and dated December 2013
- (F) MONUMENT.—The term "Monument" means the Tule Springs Fossil Beds National Monument established by paragraph (2)(A).
- (G) PUBLIC LAND.—The term "public land" has the meaning given the term "public lands" in section 103 of the Federal Land Policy and Management Act of 1976 (43 U.S.C. 1702).
- (H) PUBLIC WATER AGENCY.—The term "public water agency" means a regional wholesale water provider that is engaged in the acquisition of water on behalf of, or the delivery of water to, water purveyors who are member agencies of the public water agency.
- (I) QUALIFIED ELECTRIC UTILITY.—The term "qualified electric utility" means any public or private utility determined by the Secretary to be technically and financially capable of developing the high-voltage transmission facilities described in paragraph (4).

ties described in paragraph (4).

(J) SECRETARY.—The term "Secretary" means the Secretary of the Laterian secretary.

retary of the Interior.

(K) State.—The term "State" means the State of Nevada.

(2) Establishment.—

(A) IN GENERAL.—In order to conserve, protect, interpret, and enhance for the benefit of present and future generations the unique and nationally important paleontological, scientific, educational, and recreational resources and values of the land described in this paragraph, there is established in the State, subject to valid existing rights, the Tule Springs Fossil Beds National Monument.

(B) BOUNDARIES.—The Monument shall consist of approximately 22,650 acres of public land in the County identified as "Tule Springs Fossil Beds National Monument", as generally depicted on the Map.

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(C) Map; Legal description.—

(i) IN GENERAL.—As soon as practicable after the date of enactment of this section, the Secretary shall prepare an official map and legal description of the boundaries of the Monument.

(ii) Legal effect.—The map and legal description prepared under clause (i) shall have the same force and effect as if included in this subsection, except that the Secretary may correct any clerical or typographical errors in the legal description or the map.

graphical errors in the legal description or the map.
(iii) AVAILABILITY OF MAP AND LEGAL DESCRIPTION.—The map and legal description prepared under clause (i) shall be on file and available for public inspection in the appropriate offices of the Bureau of Land Management and the National Park Service.

(D) Acquisition of Land.—

(i) IN GENERAL.—Subject to clause (ii), the Secretary may acquire land or interests in land within the boundaries of the Monument by donation, purchase from a willing seller with donated or appropriated funds, exchange, or transfer from another Federal agency.

(ii) Limitations.—

(I) ACQUISITION OF CERTAIN LAND.—Land or interests in land that are owned by the State or a political subdivision of the State may be acquired under clause (i) only by donation or exchange.

(II) PROHIBITION OF CONDEMNATION.—No land or interest in land may be acquired under clause

(i) by condemnation.

(E) WITHDRAWALS.—Subject to valid existing rights and paragraphs (4) and (5), any land within the Monument or any land or interest in land that is acquired by the United States for inclusion in the Monument after the date of enactment of this section is withdrawn from—

(i) entry, appropriation, or disposal under the

public land laws;

(ii) location, entry, and patent under the mining

laws; and

(iii) operation of the mineral leasing laws, geothermal leasing laws, and minerals materials laws.
(F) RELATIONSHIP TO CLARK COUNTY MULTI-SPECIES

HABITAT CONSERVATION PLAN.—

(i) AMENDMENT TO PLAN.—The Secretary shall credit, on an acre-for-acre basis, approximately 22,650 acres of the land conserved for the Monument under this section toward the development of additional non-Federal land within the County through an amendment to the Clark County Multi-Species Habitat Conservation Plan.

(ii) EFFECT ON PLAN.—Nothing in this section otherwise limits, alters, modifies, or amends the Clark County Multi-Species Habitat Conservation Plan.

(G) TERMINATION OF UPPER LAS VEGAS WASH CONSERVA-TION TRANSFER AREA.—The Upper Las Vegas Wash Conservation Transfer Area established by the Record of Decision dated October 21, 2011, for the Upper Las Vegas Wash Conservation Transfer Area Final Supplemental Environmental Impact Statement, is terminated.
(3) ADMINISTRATION OF MONUMENT.—

(A) TRANSFER OF ADMINISTRATIVE JURISDICTION.—Administrative jurisdiction over the approximately 22,650 acres of public land depicted on the Map as "Tule Springs Fossil Bed National Monument" is transferred from the Bureau of Land Management to the National Park Service.

(B) ADMINISTRATION.—The Secretary shall administer the Monument—

(i) in a manner that conserves, protects, interprets, and enhances the resources and values of the Monument: and

(ii) in accordance with—
(I) this subsection;

(II) the provisions of laws generally applicable to units of the National Park System (including the National Park Service Organic Act (16 U.S.C. 1 et seq.)); and

(III) any other applicable laws.

- (C) BUFFER ZONES.—The establishment of the Monument shall not—
 - (i) lead to the creation of express or implied protective perimeters or buffer zones around or over the Monument;

(ii) preclude disposal or development of public land adjacent to the boundaries of the Monument, if the disposal or development is consistent with other applicable law; or

(iii) preclude an activity on, or use of, private land adjacent to the boundaries of the Monument, if the activity or use is consistent with other applicable law

(D) AIR AND WATER QUALITY.—Nothing in this section alters the standards governing air or water quality outside the boundary of the Monument.

(E) MANAGEMENT PLAN.—

(i) IN GENERAL.—Not later than 3 years after the date on which funds are made available to carry out this subparagraph, the Secretary shall develop a management plan that provides for the long-term protection and management of the Monument.

(ii) COMPONENTS.—The management plan—

(I) shall—

(aa) be prepared in accordance with section 12(b) of the National Park System General Authorities Act (16 U.S.C. 1a-7(b)); and

(bb) consistent with this subsection and the purposes of the Monument, allow for continued scientific research at the Monument; and

(II) may—

(aa) incorporate any appropriate decisions contained in an existing management or activity plan for the land designated as the Monument under paragraph (2)(A); and

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(bb) use information developed in any study of land within, or adjacent to, the boundary of the Monument that was conducted before the date of enactment of this section.

(iii) PUBLIC PROCESS.—In preparing the manage-

ment plan, the Secretary shall-

(I) consult with, and take into account the comments and recommendations of, the Council;

(II) provide an opportunity for public involvement in the preparation and review of the management plan, including holding public meetings;

(III) consider public comments received as part of the public review and comment process of the

management plan; and

- (IV) consult with governmental and non-governmental stakeholders involved in establishing and improving the regional trail system to incorporate, where appropriate, trails in the Monument that link to the regional trail system.
- (F) Interpretation, education, and scientific research.—
 - (i) IN GENERAL.—The Secretary shall provide for public interpretation of, and education and scientific research on, the paleontological resources of the Monument, with priority given to the onsite exhibition and curation of the resources, to the extent practicable.

(ii) COOPERATIVE AGREEMENTS.—The Secretary may enter into cooperative agreements with the State, political subdivisions of the State, nonprofit organizations, and appropriate public and private entities to carry out clause (i).

(4) RENEWABLE ENERGY TRANSMISSION FACILITIES.—

(A) IN GENERAL.—On receipt of a complete application from a qualified electric utility, the Secretary, in accordance with applicable laws (including the National Environmental Policy Act of 1969 (42 U.S.C. 4321 et seq.) and title V of the Federal Land Policy and Management Act of 1976 (43 U.S.C. 1761 et seq.)), shall issue to the qualified electric utility a 400-foot-wide right-of-way for the construction and maintenance of high-voltage transmission facilities depicted on the map entitled "North Las Vegas Valley Overview" and dated November 5, 2013, as "Renewable Energy Transmission Corridor" if the high-voltage transmission facilities do not conflict with other previously authorized rights-of-way within the corridor.

(B) REQUIREMENTS.—

(i) IN GENERAL.—The high-voltage transmission facilities shall—

(I) be used—

- (aa) primarily, to the maximum extent practicable, for renewable energy resources; and
- (bb) to meet reliability standards set by the North American Electric Reliability Corporation, the Western Electricity Coordinating

Council, or the public utilities regulator of the

(II) employ best management practices identified as part of the compliance of the Secretary with the National Environmental Policy Act of 1969 (42 U.S.C. 4321 et seq.) to limit impacts on the Monument.

(ii) CAPACITY.—The Secretary shall consult with the qualified electric utility that is issued the right-of-way under subparagraph (A) and the public utilities regulator of the State to seek to maximize the capacity

of the high-voltage transmission facilities.

(C) TERMS AND CONDITIONS.—The issuance of a notice to proceed on the construction of the high-voltage transmission facilities within the right-of-way under subparagraph (A) shall be subject to terms and conditions that the Secretary (in consultation with the qualified electric utility), as part of the compliance of the Secretary with the National Environmental Policy Act of 1969 (42 U.S.C. 4321 et seq.), determines appropriate to protect and conserve the resources for which the Monument is managed.

(D) EXPIRATION OF RIGHT-OF-WAY.—The right-of-way issued under subparagraph (A) shall expire on the date that is 15 years after the date of enactment of this section if construction of the high-voltage transmission facilities described in subparagraph (A) has not been initiated by that date, unless the Secretary determines that it is in

the public interest to continue the right-of-way.

(5) Water conveyance facilities.-

(A) WATER CONVEYANCE FACILITIES CORRIDOR.—

(i) IN GENERAL.—On receipt of 1 or more complete applications from a public water agency and except as provided in clause (ii), the Secretary, in accordance with applicable laws (including the National Environmental Policy Act of 1969 (42 U.S.C. 4321 et seq.) and title V of the Federal Land Policy and Management Act of 1976 (43 U.S.C. 1761 et seq.)), shall issue to the public water agency a 100-foot-wide right-of-way for the construction, maintenance, repair, and replacement of a buried water conveyance pipeline and associated facilities within the "Water Conveyance Facilities Corridor" and the "Renewable Energy Transmission Corridor" depicted on the map entitled "North Las Vegas Valley Overview" and dated November 5, 2013.

(ii) LIMITATION.—A public water agency right of

way shall not be granted under clause (i) within the portion of the Renewable Energy Transmission Corridor that is located along the Moccasin Drive alignment, which is generally between T. 18 S. and T. 19 S., Mount Diablo Baseline and Meridian.

(B) BURIED WATER CONVEYANCE PIPELINE.—On receipt of 1 or more complete applications from a unit of local government or public water agency, the Secretary, in accordance with applicable laws (including the National Environmental Policy Act of 1969 (42 U.S.C. 4321 et seq.) and title V of the Federal Land Policy and Management Act of 1976 (43 U.S.C. 1761 et seq.)), shall issue to the

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unit of local government or public water agency a 100-foot-wide right-of-way for the construction, operation, maintenance, repair, and replacement of a buried water conveyance pipeline to access the existing buried water pipeline turnout facility and surge tank located in the $NE^{1/4}$ sec. 16 of T. 19 S. and R. 61 E.

(C) REQUIREMENTS.—

(i) BEST MANAGEMENT PRACTICES.—The water conveyance facilities shall employ best management practices identified as part of the compliance of the Secretary with the National Environmental Policy Act of 1969 (42 U.S.C. 4321 et seq.) to limit the impacts of the water conveyance facilities on the Monument.

(ii) CONSULTATIONS.—The water conveyance facilities within the "Renewable Energy Transmission Corridor" shall be sited in consultation with the qualified electric utility to limit the impacts of the water conveyance facilities on the high-voltage transmission facili-

ties.

- (D) TERMS AND CONDITIONS.—The issuance of a notice to proceed on the construction of the water conveyance facilities within the right-of-way under subparagraph (A) shall be subject to any terms and conditions that the Secretary, in consultation with the public water agency, as part of the compliance of the Secretary with the National Environmental Policy Act of 1969 (42 U.S.C. 4321 et seq.), determines appropriate to protect and conserve the resources for which the Monument is managed.
- (6) Tule springs fossil beds national monument

ADVISORY COUNCIL.—

(A) ESTABLISHMENT.—To provide guidance for the management of the Monument, there is established the Tule Springs Fossil Beds National Monument Advisory Council.

(B) Membership.—

(i) COMPOSITION.—The Council shall consist of 10 members, to be appointed by the Secretary, of whom—

(I) 1 member shall be a member of, or be

nominated by, the County Commission;

- (II) 1 member shall be a member of, or be nominated by, the city council of Las Vegas, Nevada;
- (III) 1 member shall be a member of, or be nominated by, the city council of North Las Vegas, Nevada;
- (IV) 1 member shall be a member of, or be nominated by, the tribal council of the Las Vegas Paiute Tribe;
- (V) 1 member shall be a representative of the conservation community in southern Nevada;
- (VI) 1 member shall be a representative of Nellis Air Force Base;
- (VII) 1 member shall be nominated by the State;
- (VIII) 1 member shall reside in the County and have a background that reflects the purposes for which the Monument was established; and

(IX) 2 members shall reside in the County or adjacent counties, both of whom shall have experience in the field of paleontology, obtained through higher education, experience, or both.

(ii) INITIAL APPOINTMENT.—Not later than 180 days after the date of enactment of this section, the Secretary shall appoint the initial members of the Council in accordance with clause (i).

(C) DUTIES OF COUNCIL.—The Council shall advise the Secretary with respect to the preparation and implementation of the management plan.

(D) COMPENSATION.—Members of the Council shall receive no compensation for serving on the Council.

(E) CHAIRPERSON.—

- (i) IN GENERAL.—Subject to clause (ii), the Council shall elect a Chairperson from among the members of the Council.
- (ii) LIMITATION.—The Chairperson shall not be a member of a Federal or State agency.

(iii) TERM.—The term of the Chairperson shall be 3 years.

(F) TERM OF MEMBERS.—

(i) IN GENERAL.—The term of a member of the

Council shall be 3 years.

- (ii) Successors.—Notwithstanding the expiration of a 3-year term of a member of the Council, a member may continue to serve on the Council until—
 - (I) the member is reappointed by the Secretary; or

(II) a successor is appointed.

(G) VACANCIES.—

- (i) IN GENERAL.—A vacancy on the Council shall be filled in the same manner in which the original appointment was made.
- (ii) APPOINTMENT FOR REMAINDER OF TERM.—A member appointed to fill a vacancy on the Council—

(I) shall serve for the remainder of the term

for which the predecessor was appointed; and (II) may be nominated for a subsequent term.

- (H) Termination.—Unless an extension is jointly recommended by the Director of the National Park Service and the Director of the Bureau of Land Management, the Council shall terminate on the date that is 6 years after the date of enactment of this section.
- (7) WITHDRAWAL.—Subject to valid existing rights, the land identified on the Map as "BLM Withdrawn Lands" is withdrawn from—

(A) entry under the public land laws;

- (B) location, entry, and patent under the mining laws; and
- (C) operation of the mineral leasing, geothermal leasing, and mineral materials laws.

(b) Addition of Land to Red Rock Canyon National Conservation Area.—

16 USC 460ccc-4 note.

(1) DEFINITIONS.—In this subsection:

(A) CONSERVATION AREA.—The term "Conservation Area" means the Red Rock Canyon National Conservation

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Area established by the Red Rock Canyon National Conservation Area Establishment Act of 1990 (16 U.S.C. 460ccc et seq.).

(B) MAP.—The term "Map" means the map entitled "North Las Vegas Valley Overview" and dated November

5, 2013

(C) Secretary.—The term "Secretary" means the Secretary of the Interior, acting through the Bureau of Land Management.

(2) Addition of Land to Conservation Area.—

- (A) IN GENERAL.—The Conservation Area is expanded to include the land depicted on the Map as "Additions to Red Rock NCA".
- (B) Management plan.—Not later than 2 years after the date on which the land is acquired, the Secretary shall update the management plan for the Conservation Area to reflect the management requirements of the acquired land.

(C) MAP AND LEGAL DESCRIPTION.—

(i) IN GENERAL.—As soon as practicable after the date of enactment of this section, the Secretary shall finalize the legal description of the parcel to be conveyed under this subsection.

(ii) MINOR ERRORS.—The Secretary may correct

any minor error in-

(I) the Map; or

(II) the legal description.

- (iii) AVAILABILITY.—The Map and legal description shall be on file and available for public inspection in the appropriate offices of the Bureau of Land Management.
- (c) Conveyance of Bureau of Land Management Land to North Las Vegas.—

(1) DEFINITIONS.—In this subsection:

- (A) MAP.—The term "Map" means the map entitled "North Las Vegas Valley Overview" and dated November 5, 2013.
- (B) NORTH LAS VEGAS.—The term "North Las Vegas" means the city of North Las Vegas, Nevada.

(C) Secretary.—The term "Secretary" means the Secretary of the Interior, acting through the Bureau of Land

Management.

(2) CONVEYANCE.—As soon as practicable after the date of enactment of this section and subject to valid existing rights, upon the request of North Las Vegas, the Secretary shall convey to North Las Vegas, without consideration, all right, title, and interest of the United States in and to the land described in paragraph (3).

(3) DESCRIPTION OF LAND.—The land referred to in paragraph (2) consists of the land managed by the Bureau of Land Management described on the Map as the "North Las Vegas

Job Creation Zone" (including the interests in the land).

(4) MAP AND LEGAL DESCRIPTION.—

(A) IN GENERAL.—As soon as practicable after the date of enactment of this section, the Secretary shall finalize the legal description of the parcel to be conveyed under this subsection.

(B) MINOR ERRORS.—The Secretary may correct any minor error in—

(i) the Map; or

(ii) the legal description.

(C) AVAILABILITY.—The Map and legal description shall be on file and available for public inspection in the appropriate offices of the Bureau of Land Management.

(5) Use of land for nonresidential development.—
(A) In general.—North Las Vegas may sell any portion of the land described in paragraph (3) for nonresiden-

tial development.

(B) METHOD OF SALE.—The sale of land under subparagraph (A) shall be carried out—

(i) through a competitive bidding process; and

(ii) for not less than fair market value.

- (C) FAIR MARKET VALUE.—The Secretary shall determine the fair market value of the land under subparagraph (B)(ii) based on an appraisal that is performed in accordance with—
 - (i) the Uniform Appraisal Standards for Federal Land Acquisitions;

(ii) the Uniform Standards of Professional

Appraisal Practices; and

(iii) any other applicable law (including regulations)

- (D) DISPOSITION OF PROCEEDS.—The gross proceeds from the sale of land under subparagraph (A) shall be distributed in accordance with section 4(e) of the Southern Nevada Public Land Management Act of 1998 (Public Law 105–263; 112 Stat. 2345; 116 Stat. 2007; 117 Stat. 1317; 118 Stat. 2414; 120 Stat. 3045).
- (6) Use of land for recreation or other public purposes.—
 - (A) IN GENERAL.—North Las Vegas may retain a portion of the land described in paragraph (3) for public recreation or other public purposes consistent with the Act of June 14, 1926 (commonly known as the "Recreation and Public Purposes Act") (43 U.S.C. 869 et seq.) by providing written notice of the election to the Secretary.

(B) REVOCATION.—If North Las Vegas retains land for public recreation or other public purposes under subpara-

graph (A), North Las Vegas may—

(i) revoke that election; and

- (ii) sell the land in accordance with paragraph
- (7) ADMINISTRATIVE COSTS.—North Las Vegas shall pay all appraisal costs, survey costs, and other administrative costs necessary for the preparation and completion of any patents for, and transfers of title to, the land described in paragraph (3).

(8) REVERSION.—

(A) IN GENERAL.—If any parcel of land described in paragraph (3) is not conveyed for nonresidential development under this subsection or reserved for recreation or other public purposes under paragraph (6) by the date that is 30 years after the date of enactment of this section,

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the parcel of land shall, at the discretion of the Secretary, revert to the United States.

(B) INCONSISTENT USE.—If North Las Vegas uses any parcel of land described in paragraph (3) in a manner that is inconsistent with this subsection—

(i) at the discretion of the Secretary, the parcel shall revert to the United States; or

(ii) if the Secretary does not make an election under clause (i), North Las Vegas shall sell the parcel of land in accordance with this subsection.

(d) Conveyance of Bureau of Land Management Land to Las Vegas.—

(1) DEFINITIONS.—In this subsection:

(A) Las vegas.—The term "Las Vegas" means the city

of Las Vegas, Nevada.

(B) MAP.—The term "Map" means the map entitled "North Las Vegas Valley Overview" and dated November 5, 2013.

(C) Secretary.—The term "Secretary" means the Secretary of the Interior, acting through the Bureau of Land

Management.

- (2) CONVEYANCE.—As soon as practicable after the date of enactment of this section, subject to valid existing rights, and notwithstanding the land use planning requirements of sections 202 and 203 of the Federal Land Policy and Management Act of 1976 (43 U.S.C. 1712, 1713), the Secretary shall convey to Las Vegas, without consideration, all right, title, and interest of the United States in and to the land described in paragraph (3).
- (3) DESCRIPTION OF LAND.—The land referred to in paragraph (2) consists of land managed by the Bureau of Land Management described on the Map as "Las Vegas Job Creation Zone" (including interests in the land).

(4) MAP AND LEGAL DESCRIPTION.—

- (A) IN GENERAL.—As soon as practicable after the date of enactment of this section, the Secretary shall finalize the legal description of the parcel to be conveyed under this subsection.
- (B) MINOR ERRORS.—The Secretary may correct any minor error in—

(i) the Map; or

(ii) the legal description.

- (C) AVAILABILITY.—The Map and legal description shall be on file and available for public inspection in the appropriate offices of the Bureau of Land Management.
 (5) USE OF LAND.—
- (A) IN GENERAL.—Las Vegas may sell any portion of the land described in paragraph (3) for nonresidential development.
- (B) METHOD OF SALE.—The sale of land under subparagraph (A) shall be carried out, after consultation with the Las Vegas Paiute Tribe—

(i) through a competitive bidding process; and

(ii) for not less than fair market value.

(C) FAIR MARKET VALUE.—The Secretary shall determine the fair market value of the land under subparagraph

(B)(ii) based on an appraisal that is performed in accordance with—

(i) the Uniform Appraisal Standards for Federal Land Acquisitions;

(ii) the Uniform Standards of Professional Appraisal Practices; and

(iii) any other applicable law (including regulations)

- (D) DISPOSITION OF PROCEEDS.—The gross proceeds from the sale of land under subparagraph (A) shall be distributed in accordance with section 4(e) of the Southern Nevada Public Land Management Act of 1998 (Public Law 105–263; 112 Stat. 2345; 116 Stat. 2007; 117 Stat. 1317; 118 Stat. 2414; 120 Stat. 3045).
- (6) Use of land for recreation or other public purposes.—
 - (A) IN GENERAL.—Las Vegas may retain a portion of the land described in paragraph (3) for public recreation or other public purposes consistent with the Act of June 14, 1926 (commonly known as the "Recreation and Public Purposes Act") (43 U.S.C. 869 et seq.) by providing written notice of the election to the Secretary.

(B) REVOCATION.—If Las Vegas retains land for public recreation or other public purposes under subparagraph (A), Las Vegas may—

(i) revoke that election; and

(ii) sell the land in accordance with paragraph

(7) Administrative costs.—Las Vegas shall pay all appraisal costs, survey costs, and other administrative costs necessary for the preparation and completion of any patents for, and transfers of title to, the land described in paragraph (3).

(8) REVERSION.—

- (A) IN GENERAL.—If any parcel of land described in paragraph (3) is not conveyed for nonresidential development under this subsection or reserved for recreation or other public purposes under paragraph (6) by the date that is 30 years after the date of enactment of this section, the parcel of land shall, at the discretion of the Secretary, revert to the United States.
- (B) INCONSISTENT USE.—If Las Vegas uses any parcel of land described in paragraph (3) in a manner that is inconsistent with this subsection—

(i) at the discretion of the Secretary, the parcel shall revert to the United States; or

(ii) if the Secretary does not make an election under clause (i), Las Vegas shall sell the parcel of land in accordance with this subsection.

(e) Expansion of Conveyance to Las Vegas Metropolitan Police Department.—Section 703 of the Clark County Conservation of Public Land and Natural Resources Act of 2002 (Public Law 107–282; 116 Stat. 2013) is amended by inserting before the period at the end the following: "and, subject to valid existing rights, the parcel of land identified as 'Las Vegas Police Shooting Range' on the map entitled 'North Las Vegas Valley Overview' and dated November 5, 2013".

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(f) Spring Mountains National Recreation Area With-DRAWAL.—Section 8 of the Spring Mountains National Recreation Area Act (16 U.S.C. 460hhh-6) is amended-

(1) in subsection (a), by striking "for lands described" and

inserting "as provided"; and

(2) by striking subsection (b) and inserting the following: "(b) EXCEPTIONS.

"(1) In general.—Notwithstanding subsection (a), $W^{1/2}E^{1/2}$ and $W^{1/2}$ sec. 27, T. 23 S., R. 58 E., Mt. Diablo Meridian is not subject to withdrawal under that subsection.

"(2) EFFECT OF ENTRY UNDER PUBLIC LAND LAWS.—Notwith-standing paragraph (1) of subsection (a), the following are not

subject to withdrawal under that paragraph:

"(A) Any Federal land in the Recreation Area that qualifies for conveyance under Public Law 97-465 (commonly known as the 'Small Tracts Act') (16 U.S.C. 521c et seq.), which, notwithstanding section 7 of that Act (16

U.S.C. 521i), may be conveyed under that Act.

"(B) Any Federal land in the Recreation Area that the Secretary determines to be appropriate for conveyance by exchange for non-Federal land within the Recreation Area under authorities generally providing for the exchange

of National Forest System land."

(g) Southern Nevada Public Land Management Act of 1998 AMENDMENTS.—Section 4 of the Southern Nevada Public Land Management Act of 1998 (Public Law 105–263; 112 Stat. 2344; 116 Stat. 2007) is amended-

(1) in the first sentence of subsection (a), by striking "dated October 1, 2002" and inserting "dated September 17, 2012";

and

- (2) in subsection (g), by adding at the end the following: "(5) Notwithstanding paragraph (4), subject to paragraphs (1) through (3), Clark County may convey to a unit of local government or regional governmental entity, without consideration, land located within the Airport Environs Overlay District, as identified in the Cooperative Management Agreement described in section 3(3) of the Southern Nevada Public Land Management Act of 1998 (Public Law 105–263; 112 Stat. 2343), if the land is used for a water or wastewater treatment facility or any other public purpose consistent with uses allowed under the Act of June 14, 1926 (commonly known as the 'Recreation and Public Purposes Act') (43 U.S.C. 869 et seq.).".
- (h) CONVEYANCE OF LAND TO THE NEVADA SYSTEM OF HIGHER

EDUCATION.-

(1) Definitions.—In this subsection:

(A) BOARD OF REGENTS.—The term "Board of Regents" means the Board of Regents of the Nevada System of Higher Education.

(B) CAMPUSES.—The term "Campuses" means the Great Basin College, College of Southern Nevada, and University of Las Vegas, Nevada, campuses.

(C) FEDERAL LAND.—The term "Federal land" means—

(i) the approximately 40 acres to be conveyed for the College of Southern Nevada, identified as "Parcel to be Conveyed", as generally depicted on the map entitled "College of Southern Nevada Land Conveyance" and dated June 26, 2012;

(ii) the approximately 2,085 acres to be conveyed for the University of Nevada, Las Vegas, identified as "UNLV North Campus", as generally depicted on the map entitled "North Las Vegas Valley Overview" and dated November 5, 2013; and

(iii) the approximately 285 acres to be conveyed for the Great Basin College, identified as "Parcel to be Conveyed", as generally depicted on the map entitled "College of Southern Nevada Land Conveyance"

and dated June 26, 2012.
(D) SECRETARY.—The term "Secretary" means the Secretary of the Interior.

(E) STATE.—The term "State" means the State of

(F) System.—The term "System" means the Nevada System of Higher Education.

(2) CONVEYANCES OF FEDERAL LAND TO SYSTEM.—

(A) CONVEYANCES.—Notwithstanding section 202 of the Federal Land Policy and Management Act of 1976 (43 U.S.C. 1712) and section 1(c) of the Act of June 14, 1926 (commonly known as the "Recreation and Public Purposes Act") (43 U.S.C. 869(c)), and subject to all valid existing rights and such terms and conditions as the Secretary determines to be necessary, the Secretary shall-

(i) not later than 180 days after the date of enactment of this section, convey to the System, without consideration, all right, title, and interest of the United

States in and to-

(I) the Federal land identified on the map entitled "Great Basin College Land Conveyance" and dated June 26, 2012, for the Great Basin

College; and

- (II) the Federal land identified on the map entitled "College of Southern Nevada Land Conveyance" and dated June 26, 2012, for the College of Southern Nevada, subject to the requirement that, as a precondition of the conveyance, the Board of Regents shall, by mutual assent, enter into a binding development agreement with the City of Las Vegas that—
 - (aa) provides for the orderly development of the Federal land to be conveyed under this item; and

(bb) complies with State law; and

(ii) convey to the System, without consideration, all right, title, and interest of the United States in and to the Federal land identified on the map entitled "North Las Vegas Valley Overview" and dated November 5, 2013, for the University of Nevada, Las Vegas, if the area identified as "Potential Utility Schedule" on the map is reserved for use for a potential 400-foot-wide utility corridor of certain rights-of-way for transportation and public utilities.

(B) Conditions.

(i) IN GENERAL.—As a condition of the conveyance under subparagraph (A), the Board of Regents shall agree in writing-

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(I) to pay any administrative costs associated with the conveyance, including the costs of any environmental, wildlife, cultural, or historical resources studies;

(II) to use the Federal land conveyed for edu-

cational and recreational purposes; and

(III) to release and indemnify the United States from any claims or liabilities that may arise from uses carried out on the Federal land on or before the date of enactment of this section by the United States or any person.

(ii) AGREEMENT WITH NELLIS AIR FORCE BASE.—
(I) IN GENERAL.—The Federal land conveyed to the System under subparagraph (A)(ii) shall be used in accordance with the agreement entitled the "Cooperative Interlocal Agreement between the Board of Regents of the Nevada System of Higher Education, on Behalf of the University of Nevada, Las Vegas, and the 99th Air Base Wing, Nellis Air Force Base, Nevada" and dated June 19, 2009.

(II) Modifications.—Any modifications to the agreement described in subclause (I) or any related master plan shall require the mutual assent of

the parties to the agreement.

(III) LIMITATION.—In no case shall the use of the Federal land conveyed under subparagraph (A)(ii) compromise the national security mission or navigation rights of Nellis Air Force Base.

(C) Use of federal land.—The System may use the Federal land conveyed under subparagraph (A) for any public purposes consistent with uses allowed under the Act of June 14, 1926 (commonly known as the "Recreation" and Public Purposes Act") (43 U.S.C. 869 et seq.).

(D) REVERSION.-

(i) IN GENERAL.—If the Federal land or any portion of the Federal land conveyed under subparagraph (A) ceases to be used for the System, the Federal land, or any portion of the Federal land shall, at the discretion of the Secretary, revert to the United States.

- (ii) University of Nevada, las vegas.—If the System fails to complete the first building or show progression toward development of the University of Nevada, Las Vegas campus on the applicable parcels of Federal land by the date that is 50 years after the date of receipt of certification of acceptable remediation of environmental conditions, the parcels of the Federal land described in paragraph (1)(C)(ii) shall, at the discretion of the Secretary, revert to the United States.
- (iii) College of Southern Nevada.—If the System fails to complete the first building or show progression toward development of the College of Southern Nevada campus on the applicable parcels of Federal land by the date that is 12 years after the date of conveyance of the applicable parcels of Federal land to the College of Southern Nevada, the parcels of the Federal land described in paragraph

(1)(C)(i) shall, at the discretion of the Secretary, revert to the United States.

(i) Land Conveyance for Southern Nevada Supplemental Airport.—

(1) FINDINGS.—Congress finds that—

(A) flood mitigation infrastructure is critical to the safe and uninterrupted operation of the proposed Southern Nevada Supplemental Airport authorized by the Ivanpah Valley Airport Public Lands Transfer Act (Public Law 106–362; 114 Stat. 1404); and

(B) through proper engineering, the land described in this subsection for flood mitigation infrastructure for the Southern Nevada Supplemental Airport may be consistent

with the role of the Bureau of Land Management-

(i) to protect and prevent irreparable damage to—(I) important historic, cultural, or scenic values;

(II) fish and wildlife resources; or

(III) other natural systems or processes; or (ii) to protect life and safety from natural hazards in the County and nearby areas.

(2) DEFINITIONS.—In this subsection:

- (A) COUNTY.—The term "County" means Clark County, Nevada.
- (B) MAP.—The term "Map" means the map entitled "Land Conveyance for Southern Nevada Supplemental Airport" and dated June 26, 2012.
- (C) SECRETARY.—The term "Secretary" means the Secretary of the Interior.

(3) LAND CONVEYANCE.—

(A) AUTHORIZATION OF CONVEYANCE.—

(i) IN GENERAL.—As soon as practicable after the date described in subparagraph (B), subject to valid existing rights and subparagraph (C), and notwithstanding the land use planning requirements of sections 202 and 203 of the Federal Land Policy and Management Act of 1976 (43 U.S.C. 1712, 1713), the Secretary shall convey to the County, without consideration, all right, title, and interest of the United States in and to the land described in paragraph (4), subject to such terms and conditions as the Secretary determines to be necessary.

(ii) Costs.—The County shall be responsible for all costs associated with the conveyance under clause

(i).

(B) Date on which conveyance may be made.—The Secretary shall not make the conveyance described in subparagraph (A) until the later of the date on which the Administrator of the Federal Aviation Administration has—

(i) approved an airport layout plan for an airport to be located in the Ivanpah Valley; and

(ii) with respect to the construction and operation of an airport on the site conveyed to the County pursuant to section 2(a) of the Ivanpah Valley Airport Public Lands Transfer Act (Public Law 106–362; 114 Stat. 1404), issued a record of decision after the preparation

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of an environmental impact statement or similar analysis required under the National Environmental Policy Act of 1969 (42 U.S.C. 4321 et seq.).

- (C) RESERVATION OF MINERAL RIGHTS.—In conveying the public land under subparagraph (A), the Secretary shall reserve the mineral estate, except for purposes related to flood mitigation (including removal from aggregate flood events).
- (D) WITHDRAWAL.—Subject to valid existing rights, the public land to be conveyed under subparagraph (A) is withdrawn from—
 - (i) location, entry, and patent under the mining laws; and

(ii) operation of the mineral leasing and geo-

thermal leasing laws.

- (E) USE.—The public land conveyed under subparagraph (A) shall be used for the development of flood mitigation infrastructure for the Southern Nevada Supplemental Airport.
 - (F) REVERSION AND REENTRY.—

(i) IN GENERAL.—If the land conveyed to the County under the Ivanpah Valley Airport Public Lands Transfer Act (Public Law 106–362; 114 Stat. 1404) reverts to the United States, the land conveyed to the County under this subsection shall revert, at the option of the Secretary, to the United States.

(ii) USE OF LAND.—If the Secretary determines that the County is not using the land conveyed under this subsection for a purpose described in subparagraph (D), all right, title, and interest of the County in and to the land shall revert, at the option of the

Secretary, to the United States.

(4) DESCRIPTION OF LAND.—The land referred to in paragraph (3) consists of the approximately 2,320 acres of land managed by the Bureau of Land Management and described on the Map as the "Conveyance Area".

(5) MAP AND LEGAL DESCRIPTION.—

- (A) IN GENERAL.—As soon as practicable after the date of enactment of this section, the Secretary shall prepare an official legal description and map of the parcel to be conveyed under this subsection.
- (B) MINOR ERRORS.—The Secretary may correct any minor error in—

(i) the map prepared under subparagraph (A); or

(ii) the legal description.

(C) AVAILABILITY.—The map prepared under subparagraph (A) and legal description shall be on file and available for public inspection in the appropriate offices of the Bureau of Land Management.

(j) Nellis Dunes Off-Highway Vehicle Recreation Area.—
(1) Definitions.—In this subsection:

(A) CITY.—The term "City" means the city of North Las Vegas, Nevada.

(B) CLARK COUNTY OFF-HIGHWAY VEHICLE RECREATION PARK.—The term "Clark County Off-Highway Vehicle Recreation Park" means the approximately 960 acres of

16 USC 460aaaa.

land identified on the Map as "Clark County Off-Highway Vehicle Recreation Park".

- (C) COUNTY.—The term "County" means Clark County, Nevada.
- (D) MAP.—The term "Map" means the map entitled "Nellis Dunes OHV Recreation Area" and dated December 17, 2013.
- (E) Nellis Dunes Off-Highway Recreation Area.—The term "Nellis Dunes Off-Highway Recreation Area" means the approximately 10,035 acres of land identified on the Map as "Nellis Dunes OHV Recreation Area".

(F) SECRETARY.—The term "Secretary" means the Sec-

retary of the Interior.

(G) State.—The term "State" means the State of Nevada.

(2) CONVEYANCE OF FEDERAL LAND TO COUNTY.—

(A) IN GENERAL.—As soon as practicable after the date of enactment of this section, the Secretary shall convey to the County, subject to valid existing rights and subparagraph (B), without consideration, all right, title, and interest of the United States in and to the Clark County Off-Highway Vehicle Recreation Park.

(B) RESERVATION OF MINERAL ESTATE.—In conveying the parcels of Federal land under subparagraph (A), the Secretary shall reserve the mineral estate, except for purposes related to flood mitigation (including removal from

aggregate flood events).

(Č) USE OF CONVEYED LAND.—

- (i) IN GENERAL.—The parcels of land conveyed under subparagraph (A) may be used by the County for any public purposes described in clause (ii), consistent with the Act of June 14, 1926 (commonly known as the "Recreation and Public Purposes Act") (43 U.S.C. 869 et seq.).
- (ii) AUTHORIZED USES.—The land conveyed under subparagraph (A)—

(I) shall be used by the County—

(aa) to provide a suitable location for the establishment of a centralized off-road vehicle

recreation park in the County;

(bb) to provide the public with opportunities for off-road vehicle recreation, including a location for races, competitive events, training and other commercial services that directly support a centralized off-road vehicle recreation area and County park;

(cc) to provide a designated area and facilities that would discourage unauthorized use of off-highway vehicles in areas that have been identified by the Federal Government, State government, or County government as containing environmentally sensitive land; and

(II) shall not be disposed of by the County.
(iii) REVERSION.—If the County ceases to use any parcel of land conveyed under subparagraph (A) for

the purposes described in clause (ii)—

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(I) title to the parcel shall revert to the Secretary, at the option of the Secretary; and

(II) the County shall be responsible for any reclamation necessary to revert the parcel to the United States.

- (iv) MANAGEMENT PLAN.—The Secretary of the Air Force and the County, may develop a special management plan for the land conveyed under subparagraph (A)—
 - (I) to enhance public safety and safe off-highway vehicle recreation use in the Nellis Dunes Recreation Area;
 - (II) to ensure compatible development with the mission requirements of the Nellis Air Force Base: and

(III) to avoid and mitigate known public health risks associated with off-highway vehicle use in the Nellis Dunes Recreation Area.

(D) AGREEMENT WITH NELLIS AIR FORCE BASE.—

- (i) IN GENERAL.—Before the Federal land may be conveyed to the County under subparagraph (A), the Clark County Board of Commissioners and Nellis Air Force Base shall enter into an interlocal agreement for the Federal land and the Nellis Dunes Recreation Area—
 - (I) to enhance safe off-highway recreation use; and

(II) to ensure that development of the Federal land is consistent with the long-term mission requirements of Nellis Air Force Base.

(ii) LIMITATION.—The use of the Federal land conveyed under subparagraph (A) shall not compromise the national security mission of Nellis Air Force Base.

- (E) ADDITIONAL TERMS AND CONDITIONS.—With respect to the conveyance of Federal land under subparagraph (A), the Secretary may require such additional terms and conditions as the Secretary considers to be appropriate to protect the interests of the United States.
- (3) Designation of nellis dunes off-highway vehicle recreation area.—
 - (A) IN GENERAL.—The approximately 10,035 acres of land identified on the Map as the "Nellis Dunes OHV Recreation Area" shall be known and designated as the "Nellis Dunes Off-Highway Vehicle Recreation Area".
 - (B) MANAGEMENT PLAN.—The Secretary may develop a special management plan for the Nellis Dunes Off-Highway Recreation Area to enhance the safe use of off-highway vehicles for recreational purposes.
- (k) WITHDRAWAL AND RESERVATION OF LAND FOR NELLIS AIR FORCE BASE EXPANSION.—
 - (1) WITHDRAWALS.—Section 3011(b) of the Military Lands Withdrawal Act of 1999 (Public Law 106–65; 113 Stat. 886) is amended—

(A) in paragraph (4)—

(i) by striking "comprise approximately" and inserting the following: "comprise—"(A) approximately";

16 USC 460ccc-4

(ii) by striking the period at the end and inserting a semicolon; and

(iii) by adding at the end the following:

"(B) approximately 710 acres of land in Clark County, Nevada, identified as 'Addition to Nellis Air Force Base' on the map entitled 'Nellis Dunes Off-Highway Vehicle Recreation Area' and dated June 26, 2012; and

"(C) approximately 410 acres of land in Clark County, Nevada, identified as 'Addition to Nellis Air Force Base' on the map entitled 'North Las Vegas Valley Overview' and dated November 5, 2013."; and
(B) by adding at the end the following:

"(6) EXISTING MINERAL MATERIALS CONTRACTS.—

"(A) APPLICABILITY.—Section 3022 shall not apply to any mineral material resource authorized for sale by the Secretary of the Interior under a valid contract for the duration of the contract.

"(B) Access.—Notwithstanding any other provision of this subtitle, the Secretary of the Air Force shall allow adequate and reasonable access to mineral material resources authorized for sale by the Secretary of the

Interior under a valid contract for the duration of the contract.".

(2) Conforming amendment.—Section 3022 of the Military Lands Withdrawal Act of 1999 (Public Law 106–65; 113 Stat. 897) is amended by striking "section 3011(b)(5)(B)" and inserting "paragraphs (5)(B) and (6) of section 3011(b)". (1) MILITARY OVERFLIGHTS.-

(1) FINDINGS.—Congress finds that military aircraft testing

and training activities in the State of Nevada—

(A) are an important part of the national defense

system of the United States; and

(B) are essential in order to secure an enduring and viable national defense system for the current and future generations of people of the United States.

(2) Overflights.—Nothing in this section restricts or pre-

cludes any military overflight, including-

(A) low-level overflights of military aircraft over the Federal land;

(B) flight testing and evaluation; and

(C) the designation or creation of new units of special airspace, or the use or establishment of military flight training routes, over-

(i) the Tule Springs Fossil Beds National Monu-

ment established by subsection (a)(2)(A); or

(ii) the Red Rock Canyon National Conservation Area established by the Red Rock Canyon National Conservation Area Establishment Act of 1990 (16 U.S.C. 460ccc et seq.) (as modified by subsection (b)).

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

Analysis of Fundamental Resources and Values

Fundamental Resource or Value	Pleistocene Fossils
Related Significance Statements	Significance statement 1.
Current Conditions and Trends	 Conditions Park collections are located at off-site repositories, including many outside the state of Nevada. Some park collections are owned by other institutions. Many fossils in the ground await discovery or processing. Known sites require consistent monitoring. Trends Known fossil localities increasing. Collection continues.
Threats and Opportunities	 Threats Looting. Erosion. Weathering. Noncompatible recreation. Development within monument. Off-road vehicles. Opportunities Education and outreach. Continued research. Return of all Tule Springs collections to the National Park Service for centralized curation. Increase body of knowledge associated with site to demonstrate its global significance. Communicate significance of the site to inspire advocacy, support, and stewardship. Cyclic prospecting and surveys of entire 22,640 acres. Locality stewardship program.
Data and/or GIS Needs	 Comprehensive paleontological resource map (GIS). Finder's guide for archives, specimens, and artifacts. Large-scale geologic map for park (GIS). Natural resources condition assessment. Paleontological survey. Routine updates of fossil locality GIS layer (last revision in 2016).

Fundamental Resource or Value	Pleistocene Fossils
Planning Needs	 Comprehensive interpretive plan. Collections management plan. Collection storage plan. General management plan. Research management plan. Resource stewardship strategy. Site development and management plan for Aliante Parkway, North Durango Drive, and Corn Creek Road kiosk sites. Visitor use management plan. Outreach and communications plan. Scope of collections statement.
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 Paleontological Resources Preservation Act of 2009 Secretarial Order 3289, "Addressing the Impacts of Climate Change on America's Water, Land, and Other Natural and Cultural Resources" "Paleontological Resources Preservation" (36 CFR 291) Superintendent's Compendium NPS Policy-level Guidance (NPS Management Policies 2006 and Director's Orders) NPS Management Policies 2006 (§4.7.2) "Weather and Climate" NPS Management Policies 2006 (§4.8.2.1) "Paleontological Resources and Their Contexts" NPS Management Policies 2006 (§5.3.5.5) "Museum Collections" NPS Natural Resource Management Reference Manual 77







Fundamental Resource or Value	Scientific Research
Related Significance Statements	Significance statements 1, 2, 3, and 4.
Current Conditions and Trends	 Current research partners include the University of Nevada, Las Vegas, and U.S. Geological Survey. Research extends beyond fossils to include geologic mapping, stratigraphy, and chronology of the deposits (by USGS), as well as animals, plants, and cultural resources. Research results are published regularly. Research builds on a base of more than 50 years of research. The monument is a nexus for studying the paleontology and geology of desert wetlands and their response to climate change. Trends New fossil localities are continuously identified. Interest in conducting research in the monument is increasing among academic institutions.
Threats and Opportunities	 Threats Fossil theft. Site looting / destruction. Loss of research data. Lack of access to research. Opportunities Education programs, both on-site and through distance-learning technologies, as science is happening. Finder's guide for monument archives and specimens owned/curated by others. Monument website that promotes research needs. Increase involvement with local higher education programs. Establish science advisory council. Global collaboration, shared training, and reciprocal agreements because similar deposits occur worldwide. Use technology to develop nontraditional education and interpretive programs to reach larger and more diverse audiences.
Data and/or GIS Needs	 Annual reports from research permittees (data and publications). Consolidated GIS data from researchers who have worked in monument. Database of past and current research done in monument. Finder's guide for archives, specimens, and artifacts. Archeological overview and assessment. Ethnographic overview and assessment.
Planning Needs	 General management plan. Safety / security plan. Site development and management plan for Aliante Parkway, North Durango Drive, and Corn Creek Road kiosk sites. Park partner action strategy. Research management plan. Resource stewardship strategy.

Fundamental Resource or Value	Scientific Research
	Laws, Executive Orders, and Regulations That Apply to the FRV American Indian Religious Freedom Act of 1978 Archaeological Resources Protection Act of 1979 Archeological Resources Protection Act of 1979 Archeological and Historic Preservation Act of 1974 Endangered Species Act of 1973, as amended Federal Noxious Weed Act of 1974, as amended Individual Freedom Act of 1980 Migratory Bird Treaty Act of 1918 Museum Properties Management Act of 1955, as amended National Environmental Policy Act of 1969 National Historic Preservation Act of 1966, as amended National Invasive Species Act of 1996 Native American Graves Protection and Repatriation Act of 1990 Paleontological Resources Preservation Act of 2009 Executive Order 13112, "Invasive Species" Executive Order 11593, "Protection and Enhancement of the Cultural Environment" "Curation of Federally-Owned and Administered Archaeological Collections" (36 CFR 79) 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 (§1.6) "Cooperative Conservation Beyond Park Boundaries" NPS Management Policies 2006 (§3.3.1.4) "Science and Scholarship" NPS Management Policies 2006 (§4.1.4) "Partnerships" NPS Management Policies 2006 (§4.2.) "Studies and Collections" NPS Management Policies 2006 (§4.7.2) "Weather and Climate" NPS Managemen

Fundamental Resource or Value	Museum Collections
Related Significance Statements	Significance statements 1, 2, and 4.
Current Conditions and Trends	 Nevada State Museum currently houses more than 9,700 specimens. Archival donations and monument operational archives are growing rapidly. Since the monument's establishment, 6 linear feet of park operational archives have been cataloged as part of the museum collection and are currently stored at Lake Mead National Recreation Area. Specimens collected between 2001 and 2014 were curated at the San Bernardino County Museum, including more than 21,000 specimens collected between 2008 and 2014. These specimens were moved to the Las Vegas Natural History Museum in 2018. Specimens from the 1955 Harrington Expedition and several from the Tule Springs Expedition (1962–1963) are located at the Autry Museum of the American West in Los Angeles, California. Tule Springs collections are also located at the American Museum of Natural History; University of California Museum of Paleontology, Berkeley, California; Canadian Museum of Nature, Ottawa, Ontario; Nevada State Museum, Carson City; Natural History Museum of Los Angeles County; and Santa Barbara Museum of Natural History. Trends Continue management of current collections at the Nevada State Museum and in the archives at Lake Mead National Recreation Area. Collections are growing beyond current monument management capabilities.
Threats and Opportunities	 Threats Theft and the associated loss of geological context for specimens. Ownership and documentation of the collection across multiple agencies and institutions inconsistent and difficult to track. Costly (and increasing) off-site curatorial fees. Opportunities Develop on-site repository to house all known artifacts and specimens, with associated interpretation, education, and outreach. Return San Bernardino County Museum collection to Las Vegas; return collections from other museums and institutions to the monument. Return all records to monument curatorial staff. Create virtual museum with online exhibits and "field trips." Develop and share teacher curriculum for grades K-12, including online resources. Create museum interpretation program using Tule Springs objects and specimens. Digitize monument archives and references and upload these resources to Integrated Resource Management Applications (IRMA).
Data and/or GIS Needs	 Annual reports from research permittees (data and publications). Consolidated GIS data from researchers who have worked in monument. Database of past and current research done in monument. Finder's guide for archives, specimens, and artifacts. Hydrologic study (including flood risk).

Fundamental Resource or Value	Museum Collections
Planning Needs	 Collections management plan. Collections storage plan. Comprehensive interpretive plan. General management plan. Resource stewardship strategy. Scope of collections statement.
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 Archeological and Historic Preservation Act of 1974 Museum Properties Management Act of 1955, as amended "Curation of Federally-Owned and Administered Archaeological Collections" (36 CFR 79) Paleontological Resources Preservation Act of 2009 NPS Policy-level Guidance (NPS Management Policies 2006 and Director's Orders) NPS Management Policies 2006 (§5.3.5.5) "Museum Collections" Director's Order 11D: Records and Electronic Information Management Director's Order 24: NPS Museum Collections Management Director's Order 28: Cultural Resource Management NPS Museum Handbook, parts I, II, and III







Fundamental Resource or Value	Paleoecosystem
Related Significance Statements	Significance statements 1, 2, 3, and 4.
Current Conditions and Trends	 New research on pre-historic climate change and desert wetland ecosystem response to abrupt climate change conveys important information regarding modern land ecosystems given the current warming trend. Current research focuses on using novel techniques to discern paleoenvironment, plant communities, water temperatures, moisture / water sources, and faunal change through time. Multiple collaborations with researchers nationwide are underway. Trends Future research on invertebrate faunas, tufa (indicator of paleoenvironment), and climate is being devised.
Threats and Opportunities	 Threats Loss of fossil resources through erosion and vandalism. Development within and adjacent to monument. Opportunities Use Tule Springs as testing ground for questions regarding terminal Pleistocene extinction event. Fill gaps in current understanding of site's stratigraphy and chronology. Enable students to conduct field, lab, and research work, including partnerships with area schools and academic institutions. Define what makes paleoecosystem in monument complete and the characteristics needed to retain its integrity.
Data and/or GIS Needs	 Analysis of Tule Springs local fauna through time (faunal dynamics). Finder's guide for archives, specimens, and artifacts. Large-scale geologic map for monument (GIS). Paleontological survey. Park atlas. Stratigraphic profiles and chronology sampling (radiocarbon, luminescence). U.S. Geological Survey sediment sampling data.
Planning Needs	 Comprehensive interpretive plan. General management plan. Resource stewardship strategy. Research management 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 Museum Properties Management Act of 1955, as amended Paleontological Resources Preservation Act of 2009 NPS Policy-level Guidance (NPS Management Policies 2006 and Director's Orders) NPS Management Policies 2006 (§1.6) "Cooperative Conservation Beyond Park Boundaries" NPS Management Policies 2006 (§4.1.4) "Partnerships" NPS Management Policies 2006 (§4.7.2) "Weather and Climate" NPS Natural Resource Management Reference Manual 77

Fundamental Resource or Value	Geologic Processes and Features
Related Significance Statements	Significance statements 2 and 4.
Current Conditions and Trends	Conditions Although large areas of the monument have not been affected by human development, some have been altered. The monument provides scenic vistas in many directions. Trends Increasing development is affecting natural processes.
Threats and Opportunities	 Threats Potential for increased drought. Potential for severe storms, flash flooding, and large-scale erosion. Illegal activities including off-highway vehicle use, shooting, dumping/littering, and theft of fossils. Mining. Horseback riding (horse traffic can damage fossils). Opportunities Respond to public demand for undeveloped open space. Protect adjacent lands to help preserve and protect geologic landscape and natural processes. Provide interpretive signage to help visitors understand and respect the resources and processes. Control access to protect resources. Define geologic character to increase protection.
Data and/or GIS Needs	 Large-scale geologic map for monument (GIS). Park atlas. Stratigraphic profiles and chronology sampling (radiocarbon, luminescence). U.S. Geological Survey sediment sampling data.
Planning Needs	 Accessibility transition plan. Comprehensive interpretive plan. Environmental contaminant remediation plan. General management plan. Resource stewardship strategy. Safety / security plan (including fire and flooding). Site development and management plan for Aliante Parkway, North Durango Drive, and Corn Creek Road kiosk sites. Transportation management plan. Visitor use management plan.

Fundamental Resource or Value	Geologic Processes and Features
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 Endangered Species Act of 1973, as amended Federal Noxious Weed Act of 1974, as amended Paleontological Resources Preservation Act of 2009 Migratory Bird Treaty Act of 1918 National Environmental Policy Act of 1969 National Invasive Species Act of 1996 Executive Order 13112, "Invasive Species" 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 (§1.6) "Cooperative Conservation Beyond Park Boundaries" NPS Management Policies 2006 (§4.1.4) "Partnerships" NPS Management Policies 2006 (§4.4.1) "General Principles for Managing Biological Resources" NPS Management Policies 2006 (§4.7.2) "Weather and Climate" NPS Management Policies 2006 (§4.8) "Geologic Resource Management" Director's Order 18: Wildland Fire Management NPS Natural Resource Management Reference Manual 77



Fundamental Resource or Value	Public Understanding and Education
Related Significance Statements	Significance statements 1, 2, 3, and 4.
Current Conditions and Trends	 Conditions Strong connections have been made with Clark County School District and Protectors of Tule Springs. Programs with local nongovernment organizations and other partners exist. School programs and educational videos have been produced. Strong support has been provided by the University of Nevada, Las Vegas. Direct programming for two seasonal rangers is provided using temporary funding under the Southern Nevada Public Land Management Act. Existing exhibits and information are available through a number of organizations and facilities (e.g., Desert National Wildlife Refuge). Trends The research program continues to inform the interpretive program's content. Results of scientific research are being used to create field guides for public use. Next Generation Science Standards and Common Core are being incorporated (e.g., curriculum-driven field trips). National Center for Science Education highlights climate change and evolution for students in grades K-12.
Threats and Opportunities	 Threats Clark County School District could be divided into smaller districts. Lack of staff to meet demands for education/interpretation. Tendency to focus on fossils and neglect other resources. Possible reduction or elimination of education about evolution, extinction, and climate change. Opportunities Increase formal programming. Develop virtual high school with 15,000 students. Organize field trips and virtual field trips with Clark County School District. Develop docent program. Increase involvement with large community of nongovernment organizations and other partners. Take advantage of Las Vegas tourism, which brings many potential visitors and audiences. Develop online curriculum materials (virtual classroom). Develop transportable exhibits. Partner with Floyd Lamb and Centennial Hills Parks.
Data and/or GIS Needs	 Audience analysis. Community/partner assessment. Environmental contaminant survey. Visitor services needs assessment. Visitor use survey and data.

Fundamental Resource or Value	Public Understanding and Education
Planning Needs	 Accessibility transition plan. Comprehensive interpretive plan. General management plan. Outreach and communications plan. Park partner action strategy. Position management plan. Safety / security plan. Site development and management plan for Aliante Parkway, North Durango Drive, and Corn Creek Road kiosk sites. Visitor use management plan.
Laws, Executive Orders, and Regulations That Apply to the FRV, and NPS Policy-level	 Laws, Executive Orders, and Regulations That Apply to the FRV Americans with Disabilities Act of 1990 Architectural Barriers Act of 1968 "Accessibility Standards" (36 CFR 1191.1) NPS Policy-level Guidance (NPS Management Policies 2006 and Director's Orders) NPS Management Policies 2006 (chapter 7) "Interpretation and Education" NPS Management Policies 2006 (chapter 8) "Use of the Parks" NPS Management Policies 2006 (chapter 9) "Park Facilities"
Guidance	 Director's Order 6: Interpretation and Education Director's Order 7: Volunteers in Parks Director's Order 42: Accessibility for Visitors with Disabilities in National Park Service Programs and Services Director's Order 77: Natural Resource Protection



Analysis of Other Important Resources and Values

Other Important Resource or Value	Partnerships
Current Conditions and Trends	 Conditions Partners come from government (tribal, federal, state, county, city), nongovernment, corporate, and private sectors. Partnerships include University of Nevada, Las Vegas; North Las Vegas; Las Vegas Chamber of Commerce; Las Vegas Convention and Visitors Authority; Las Vegas Paiute Tribe; The Nature Conservancy; Opportunity Village; National Parks and Conservation Association; Get Outdoors Nevada; U.S. Geological Survey, and the United States Air Force. Partners are positive, active, and engaged. Partnership with U.S. Fish and Wildlife Service provides critical infrastructure. Southern Nevada Agency Partnership (SNAP) supports collaborative efforts for cultural resource protection, data management and mapping, education, law enforcement, recreation management, restoration, science and research, volunteer engagement, and wilderness stewardship. Protectors of Tule Springs plays a key role in interpretation, education, and volunteer programming. Trends Partnerships are increasing as awareness of the monument grows. Partnerships are maturing, but work is still needed.
Threats and Opportunities	 Threats Uncertain federal budgets. Limited volunteer education and training. Slow pace of progress causing partners to lose interest. Underfunded nongovernment organizations. Opportunities Increase volunteerism. Develop traditional "friends group" and philanthropic partnerships to aid in fundraising. Grow the site steward program. Encourage internships and other opportunities for students from local universities. Set example as model partnership park. Collaborate with developers on monument's boundary. Establish partnerships with other Las Vegas area chambers of commerce.
Data and/or GIS Needs	 Audience analysis. Community/partner assessment. Data on existing access sites and social trails. Hydrologic study (including flood risk). Visitor services needs assessment. Visitor use survey and data.

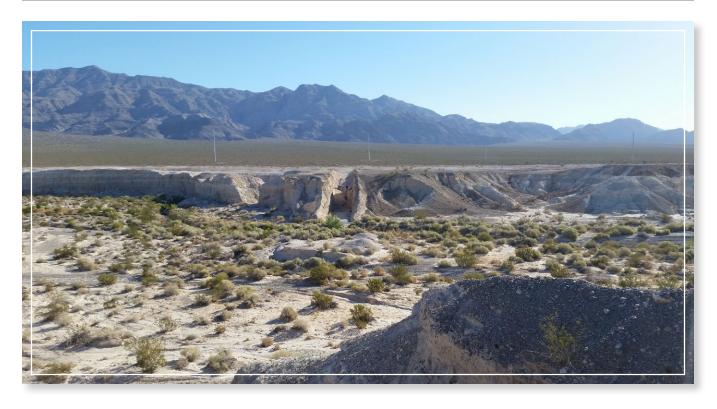
Other Important Resource or Value	Partnerships			
Planning Needs	 Comprehensive interpretive plan. General management plan. Outreach and communications plan. Park partner action strategy. Safety / security plan. Site development and management plan for Aliante Parkway, North Durango Drive, and Corn Creek Road kiosk sites. Transportation management plan. Visitor use management plan. 			
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 Architectural Barriers Act of 1968 Museum Properties Management Act of 1955, as amended National Environmental Policy Act of 1969 "Accessibility Guidelines" (36 CFR 1191.1) NPS Policy-level Guidance (NPS Management Policies 2006 and Director's Orders) NPS Management Policies 2006 (§1.6) "Cooperative Conservation Beyond Park Boundaries" NPS Management Policies 2006 (chapter 5) "Cultural Resource Management" NPS Management Policies 2006 (chapter 7) "Interpretation and Education" NPS Management Policies 2006 (chapter 8) "Use of the Parks" NPS Management Policies 2006 (chapter 9) "Park Facilities" Director's Order 6: Interpretation and Education Director's Order 7: Volunteers in Parks Director's Order 21: Donations and Philanthropic Partnerships Director's Order 24: NPS Museum Collections Management Director's Order 28: Cultural Resource Management Director's Order 42: Accessibility for Visitors with Disabilities in National Park Service Programs and Services Director's Order 77: Natural Resource Protection The Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation 			





Other Important Resource or Value	Modern Ecosystems			
Current Conditions and Trends	 Conditions The monument's contiguity with other protected lands allows for broader ecosystem conservation. Habitat is in fair condition—impacted, but restorable. Threatened and endangered species are present in the monument. Erosion continues in the Las Vegas Wash. Trends Negative impacts from illegal uses continue, but NPS management has a strategy to decrease it. Drought frequency, duration, and severity may be increasing. 			
Threats and Opportunities	 Threats Habitat loss from residential development. Extreme weather and drought. Illegal uses including shooting, trash dumping, and off-highway driving. Vandalism. Collection/theft of fossils. Poaching. Opportunities Partner with neighbors to increase habitat quality and connectivity. Educate neighbors and visitors on resource protection and stewardship. Continue research to assess species conservation status and inform management. 			
Data and/or GIS Needs	 Environmental contaminant survey. Hydrologic study (including flood risk). Natural resource condition assessment. Natural resource map (GIS) of plant and animal populations, sensitive areas requiring protection, and wildland fire susceptibility. Rare plant survey. 			
Planning Needs	 Comprehensive interpretive plan. Environmental contaminant remediation plan. General management plan. Park partner action strategy. Research management plan. Resource stewardship strategy. Transportation management plan. Visitor use management plan. Wildlife management plan. 			

Other Important Resource or Value	Modern Ecosystems				
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 Bald and Golden Eagle Protection Act of 1940 Clean Air Act of 1977 Clean Water Act of 1972 Endangered Species Act of 1973, as amended Federal Noxious Weed Act of 1974, as amended Lacey Act of 1900, as amended Migratory Bird Treaty Act of 1918 National Environmental Policy Act of 1969 National Invasive Species Act of 1996 Executive Order 11514, "Protection and Enhancement of Environmental Quality" Executive Order 13112, "Invasive Species" 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 (§1.6) "Cooperative Conservation Beyond Park Boundaries" NPS Management Policies 2006 (§4.1.4) "Partnerships" NPS Management Policies 2006 (§4.4.1) "General Principles for Managing Biological Resources" NPS Management Policies 2006 (§4.7.2) "Weather and Climate" Director's Order 13A: Environmental Management NPS Wildland Fire Management Reference Manual 18 NPS Natural Resource Management Reference Manual 77				



Other Important Resource or Value	Human History			
Current Conditions and Trends	 Conditions The monument contains the upper Las Vegas Wash, which was used by the Las Vegas Paiute Tribe as a trade and migration route as part of the larger Salt Song Trail system and is spiritually significant to the tribe. There is no comprehensive evaluation of current conditions and other baseline documentation for the monument's archeological sites. Ongoing erosion in the upper Las Vegas Wash may be contributing to degradation of archeological and historical sites. 			
	 Trends Negative impacts from looting and other illegal uses are likely to continue for many years but will be reduced over time through baseline documentation, monitoring, and NPS management. An awareness of types and importance of archeological and historic resources is increasing in the area. 			
Threats and Opportunities	 Threats Illegal uses including shooting, trash dumping, looting, and off-highway vehicles that can damage important historical and archeological resources. Vandalism. Illegal collection / theft of artifacts. Loss and damage from natural geomorphological processes, including erosion. Growth and development in the Las Vegas Valley bringing new residents who are unaware of the local history. Opportunities The monument's contiguity with other protected lands offers opportunities for collaborative cultural resources conservation. The Las Vegas Paiute Tribe has a strong connection with the land and its members could serve as partner and protector. A site stewardship program would provide public outreach opportunities. Education of neighbors and visitors could increase resource protection and stewardship. 			
Data and/or GIS Needs	 Audience analysis. Archeological survey. Community/partner assessment. Cultural resource stewardship assessment. Database of past and current research in monument. Ethnographic research and oral histories. Archeological overview and assessment. Ethnographic overview and assessment. 			
Planning Needs	 Comprehensive interpretive plan. General management plan. Research management plan. Resource stewardship strategy. 			

Other Important Resource or Value	Human History			
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 Archeological and Historic Preservation Act of 1974 American Indian Religious Freedom Act of 1978 Antiquities Act of 1906 Historic Sites Act of 1935 National Environmental Policy Act of 1969 National Historic Preservation Act of 1966, as amended National Trust Act Native American Graves Protection and Repatriation Act of 1990 Religious Freedom Restoration Act of 1993 Executive Order 11593, "Protection and Enhancement of the Cultural Environment" Executive Order 13007, "Indian Sacred Sites" Executive Order 1375, "Consultation and Coordination with Indian Tribal Governments" "Protection of Historic Properties" (36 CFR 800) Secretarial Order 3289, "Addressing the Impacts of Climate Change on America's Water, Land, and Other Natural and Cultural Resources" NPS Policy-level Guidance (NPS Management Policies 2006 and Director's Orders) NPS Management Policies 2006 (§1.6) "Cooperative Conservation Beyond Park Boundaries" NPS Management Policies 2006 (§8.2.2.) "Recreational Activities" NPS Management Policies 2006 (§8.2.2.) "Recreational Activities" NPS Management Policies 2006 (§8.2.2.1) "Management of Recreational Use" NPS Management Policies 2006 (§8.2.2.1) "Management of Recreational Use" NPS Management Policies 2006 (§8.2.2.1) "Management of Recreational Use" NPS Management Policies 2006 (§8.2.2.1) "Management of Recreational Use" Director's Order 28: Cultural Resource Management Director's Order 28: Archeology Director's Order 28: Archeology Director's Order 28: Archeology Director's Order 42: Accessibility for Visitors with Disabilities in National Park Service Programs and Services "Department of the Interior's Standards and Guidelines for Archeology and Historic Preservation The Secretary of the Interior's Standards for Archeological Documentation			

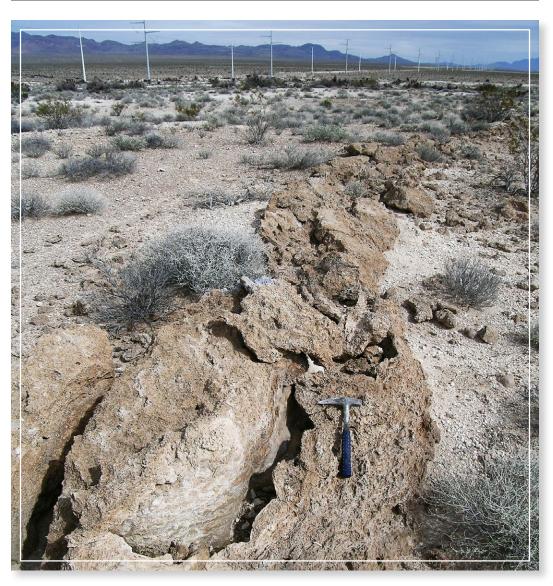
Appendix C: Inventory of Administrative Commitments

Name	Agreement Type	Start Date – Expiration Date	Stakeholders	Purpose
General Agreement for Interpretation and Education Services	General agreement	2/27/2016 – 2/27/2020	Protectors of Tule Springs Tule Springs Fossil Beds National Monument	To establish a partnership and provide the public with interpretation and education services consistent with the standards established in Director's Order 6: Interpretation and Education; to define the role of the Protectors of Tule Springs; and to encourage an increased understanding and appreciation of park resources through training opportunities for the Protectors of Tule Springs and NPS staff.
-	Memorandum of intent	2/27/2016 – 2/27/2020	Protectors of Tule SpringsTule Springs Fossil Beds National Monument	To document mutual understanding about needs, roles, responsibilities, and protocols regarding fundraising activities associated with the monument.
Service First Mutual Assistance Agreement for Shared Office Space	Service First agreement	2/27/2016 – Perpetuity	 National Park Service, Tule Springs Fossil Beds National Monument U.S. Fish and Wildlife Service, Desert National Wildlife Refuge 	To facilitate the sharing, consistent with applicable laws, of office space and personnel to meet the mission of each agency and to provide a new model for multiagency cooperation, efficient management, and seamless service to the public. Notes: This agreement establishes a mechanism for NPS staff to occupy office space at Desert National Wildlife Refuge.

Name	Agreement Type	Start Date – Expiration Date	Stakeholders	Purpose
Southern Nevada Cooperative Weed Management Memorandum of Understanding	Memorandum of understanding	1/31/2015 – Perpetuity	 Bureau of Land Management Bureau of Reclamation Eastern Nevada Landscape Coalition Fort Mojave Tribe Las Vegas Paiute Tribe Lincoln County Conservation District Moapa Band of Paiutes Muddy River Regional Environmental Impact Alleviation Committee Clark County National Park Service State of Nevada U.S. Fish and Wildlife U.S. Forest Service, U.S. Natural Resources Conservation Service University of Nevada 	To establish the Southern Nevada Cooperative Weed Management Area (CWMA) and define the terms and conditions under which the participants will cooperate, coordinate activities, and (if appropriate) share resources necessary for the prevention and control of invasive plants (including noxious weeds) within the Southern Nevada CWMA.
Rights-of-way	Rights-of-way	Start dates range from 1930s to 2000s – Duration from 20 years to perpetuity	A range of public and private entities, including the Bureau of Land Management, City of North Las Vegas, and numerous public utility providers.	Forty-nine rights-of way agreements originating from the BLM management period overlay the monument. The interests include roads, utility corridors, water management infrastructure, and recreational use. Notes: The Bureau of Land Management and the National Park Service are in the process or improving the documentation of a number of the monument's rights-of-way. It is expected that a complete list of rights-of-way will be included in a future planning document, such as a general management plan, land protection plan, or partnership plan.
Clark County	Interlocal agreement	4/28/17 – Perpetuity	Clark County Conservation Program	Collaboration on projects and resource work. Fencing in the North Unit.

Appendix D: Past Park Planning and Data Collection Efforts

Plan/Data	Date	Status	Notes
Air Quality Conditions and Trends – Tule Springs Fossil Beds National Monument	11/2016	Complete	National resource stewardship and science summary
Climate Change Trends, Vulnerabilities, and Paleontology – Tule Springs Fossil Beds National Monument, Nevada	06/2016	Complete	Gonzalez and Reiner
Geology and Paleontology Explorations and Resources at Tule Springs Fossil Beds National Monument	11/2015	Complete	Santucci, Hardy, and Bonde
Geologic Resources Inventory Scoping Summary – Tule Springs Fossil Beds National Monument, Nevada	10/2015	Complete	Port
Analysis of Nevada Energy Transmission Corridor Request	01/2011	Complete	-



Pacific West Region Foundation Document Recommendation Tule Springs Fossil Beds National Monument

May 2019

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

RECOMMENDED

Diane Keith, Superintendent, Tule Springs Fossil Beds National Monument

Date

5.23.19

APPROVED

Stan Austin, Regional Director, Pacific West Region

Date





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

Foundation Document • Tule Springs Fossil Beds National Monument

