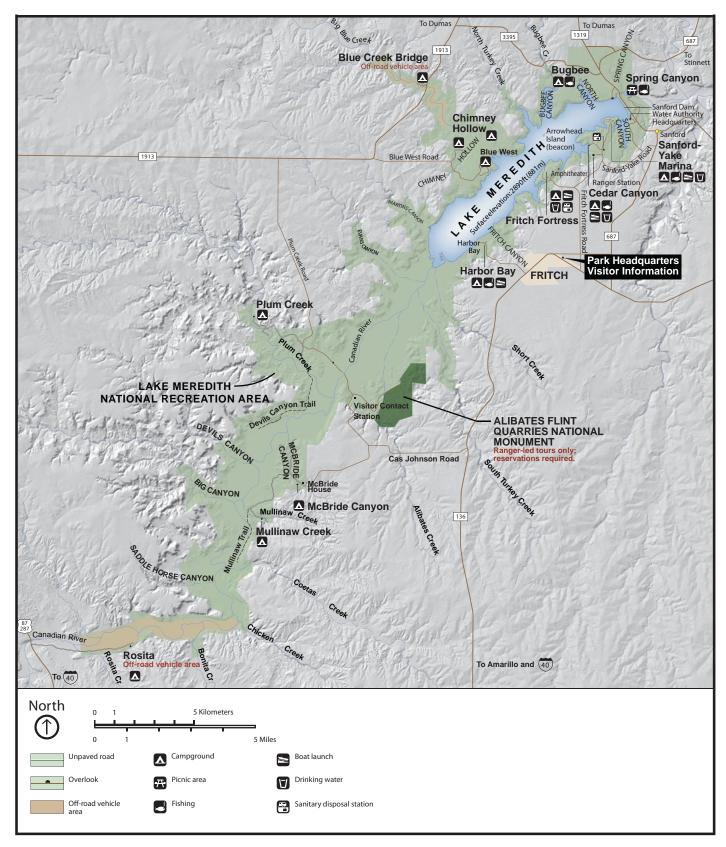


# **Foundation Document**

Lake Meredith National Recreation Area Alibates Flint Quarries National Monument

Texas April 2014





Lake Meredith National Recreation Area and Alibates Flint Quarries National Monument

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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 401 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 in order to ensure both the protection and enjoyment of these resources for future generations.



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

### Introduction

Every unit of the national park system is to have a foundational document that will provide basic guidance for planning and management decisions. 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, 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 Lake Meredith National Recreation Area and Alibates Flint Quarries National Monument can be accessed online at: <a href="http://insideparkatlas.nps.gov/">http://insideparkatlas.nps.gov/</a>.



### **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, 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 Jointly Managed Park Units**

Lake Meredith National Recreation Area and Alibates Flint Quarries National Monument are NPS units in the western extension of the rolling plains and semiarid central panhandle of Texas. The Canadian River flows eastward into the western part of the national recreation area and into Lake Meredith. The river carved the narrow canyon, which is a considerable landscape feature in the region. Between this canyon and the caprock of the high plains, many tributary streams have caused a rough and broken topography, known as the Canadian River breaks, that dominates the scenery in both parks.

#### **Brief Description of Lake Meredith National Recreation Area**

Lake Meredith National Recreation Area is just east of U.S. Highway 287 approximately 40 miles north of Amarillo, Texas. It consists of 44,978 acres of federally owned land. The Canadian River carved a narrow, steep-walled canyon from 200 to 300 feet deep and up to 2 miles wide. The resulting exposed geologic features, known as the Canadian River breaks, are a dominant landscape feature in the national recreation area. Construction of Sanford Dam, which began in 1962 on the Canadian River between the canyon walls, created Lake Meredith, which began to fill in 1965.



The Canadian River Municipal Water Authority operates and maintains the dam and water supply infrastructure in addition to managing lake levels. Because Lake Meredith is primarily a water supply reservoir, its water levels fluctuate according to municipal and industrial water demands, rainfall in the watershed, and releases from upstream reservoirs. Recreation is one of the other intended uses listed in its establishing legislation.

Popular recreation activities include boating, fishing, camping, hunting, off-road vehicle driving, hiking, swimming, and sightseeing. Peak visitor use occurs from May through August.

Nonfederal oil and gas production occurs within the national recreation area. Currently, there are 168 active well sites and associated infrastructure.

Natural resources of special interest include wetland and riparian areas associated with the floodplains of the Canadian River and its tributaries. In addition, the Arkansas River shiner, a small fish that is federally listed as threatened, is present in the Canadian River near Rosita. Several other species of federal or state concern also are known or are likely be present in the national recreation area.

A cultural resource of special interest is the McBride Ranch House, which was built in the early 1900s. This house represents the early ranching era in the panhandle and is believed to be the oldest standing home in Potter County, Texas. The house is listed in the National Register of Historic Places and the NPS List of Classified Structures and it is a Texas historic site.



#### **Brief Description of Alibates Flint Quarries National Monument**

Alibates Flint Quarries National Monument is about 5 miles southwest of Fritch, along the southeastern edge of Lake Meredith National Recreation Area between Bates Canyon and Harbor Bay. The visitor contact station for this NPS unit is in Lake Meredith National Recreation Area outside the national monument boundary. The visitor contact station includes exhibits depicting the lifestyle, history, and culture of the American Indians who occupied the area and quarried the flint outcrops to acquire raw material for tools.

The national monument totals about 1,371 acres, which includes about 292 acres of private inholding, in Potter County, Texas. The national monument shows evidence of human habitation for 13,000 years, and it is noted for the more than 700 flint quarries that were used to provide raw materials for the manufacture of tools and weapons. It also contains the only known remaining village type-site for the Antelope Creek people and a series of petroglyphs.

The dominant landscape features of the national monument are upland hills, ridges, and canyons. There are no water features on the site. Predominant vegetation cover types include yucca grasslands, vegetated cliffs, mixed grasslands, and mesquite grasslands.

Because of the need to protect the resource, access to the national monument is limited to guided tours of the flint quarries. Special guided tours are given during the month of October. Annually, the national monument receives about 3,000 to 4,000 visits. Popular recreation activities include visiting the interpretive facilities at the nearby contact station and attending the guided tours. Peak visitor use occurs from mid-April through mid-June and September through October. There are no camping facilities and hunting is not allowed on the national monument.

Natural resources of special interest include the Texas horned lizard (a state-listed threatened species). Cultural resources of special interest include the flint quarries, petroglyphs, and village ruins.





# **Park Purpose**

The purpose statement identifies the specific reason(s) for establishment of a particular park. The purpose statements for Lake Meredith National Recreation Area and Alibates Flint Quarries National Monument were drafted through a careful analysis of their enabling legislation and the legislative history that influenced their development. Lake Meredith National Recreation Area was established when the enabling legislation adopted by Congress was signed into law on November 28, 1990 (see appendix A). Alibates Flint Quarries National Monument was established when the enabling legislation adopted by Congress was signed into law on August 31, 1965 (see appendix B). The purpose statement lays the foundation for understanding what is most important about the park.

### **Park Purpose for Lake Meredith National Recreation Area**

The purpose of Lake Meredith National Recreation Area is to provide public access to diverse land- and water-based recreational opportunities in the Canadian River breaks of the Texas panhandle, consistent with the protection of the area's scenic, scientific, and cultural resources and with other values that contribute to public enjoyment.



# Park Purpose for Alibates Flint Quarries National Monument

The purpose of Alibates Flint Quarries National Monument is to provide for the preservation, protection, interpretation, and scientific study of Alibates flint deposits associated with the activities and cultural resources of the indigenous peoples.





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 purposes of Lake Meredith National Recreation Area and Alibates Flint Quarries 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.

# Recreation The following Recreation Are

# Significance Statements for Lake Meredith National Recreation Area

The following significance statements have been identified for Lake Meredith National Recreation Area. (Please note that the sequence of the statements does not reflect the level of significance.)

- 1. Lake Meredith National Recreation Area is the largest area of public lands in the Texas panhandle, providing opportunities for access to diverse, affordable, outdoor, land- and water-based recreation activities.
- Lake Meredith and the Canadian River basin within the national recreation area feature
  aquatic, wetland, and riparian habitats, as well as one of the few areas in the region with
  trees. These habitats and the surrounding landscape support diverse plant and animal
  species, including migratory waterfowl.
- 3. The natural and geologic resources of the national recreation area have enabled human survival, subsistence, and adaptation resulting in a continuum of human presence in the Texas panhandle for more than 13,000 years. Cultural sites in Lake Meredith National Recreation Area and the adjacent Alibates Flint Quarries National Monument offer pathways to past cultures.
- 4. The exposed geologic features of the Canadian River breaks in the national recreation area reveal active geologic processes that are easily visible to an extent not present elsewhere in the region. The topography and geography of the Canadian River breaks create a divergence from the surrounding landscape that offers scenic values and opportunities not found elsewhere in the region.

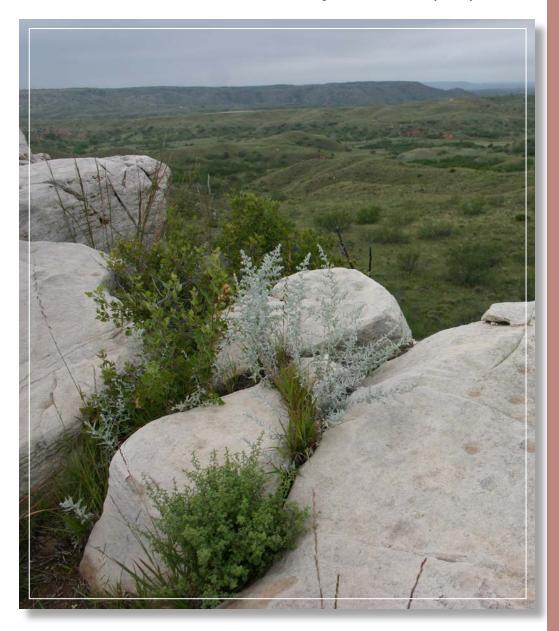
# Significance Statements for Alibates Flint Quarries National Monument

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

- 1. Alibates flint is only found in a small section of the Canadian River valley in the Texas panhandle. The national monument contains part of the only known exposed bedrock source of Alibates flint, and the flint is present in the national monument in high concentrations.
- 2. The physical characteristics of the Alibates flint made it highly desirable for tool-making. It is very hard but also glass-like, so it holds an edge and can be worked. Additionally, its distinctive color pattern makes it identifiable even when it is away from the source, so the movement of the flint can be documented.



- 3. Alibates Flint Quarries National Monument contains evidence of more than 13,000 years of lithic resource detection, extraction, manipulation, and use, evidenced in features such as the village site and approximately 700 quarry pits. The national monument was listed in the National Register of Historic Places on October 15, 1966.
- 4. An unusually high number and variety of artifacts representing the entire spectrum of flint extraction and manufacturing have been recovered from the national monument, providing opportunities for scientific research and knowledge of aboriginal quarrying techniques. Alibates Flint Quarries National Monument, together with Lake Meredith National Recreation Area, manages approximately 748,396 collected objects and archives associated with the area.
- 5. The Plains Village archeological sites in the national monument include the only protected, and best remaining, type-site for the Antelope Creek people, who occupied the area between AD 1150 and 1450. The national monument also contains petroglyphs, which are rare in the Texas panhandle. Together with sites in the adjacent Lake Meredith National Recreation Area, these ruins document a prehistoric sedentary lifestyle.



### **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.

# Fundamental Resources and Values for Lake Meredith National Recreation Area Only

The following fundamental resources and values have been identified for Lake Meredith National Recreation Area only:

- **Public Land.** Lake Meredith National Recreation Area consists of 44,978 acres of federally owned land and is the largest area of public land in the region. Within the state, there is very little public land where citizens can engage in activities such as camping, hiking, biking on trails, nature study, horseback riding, cultural resource interpretation, and hunting.
- Recreation Opportunities. Opportunities at the national recreation area provide diverse, affordable experiences for visitors of different interests and abilities.
   Examples of facilities that support these opportunities include boat ramps, horseback riding trails, and picnic areas.
- Exposed Geological Features of the Canadian River Breaks. The features in the national recreation area provide value in the topographic and scenic variety they create and the active geologic processes associated with them.

# **Fundamental Resources and Values for Alibates Flint Quarries National Monument Only**

The following fundamental resources and values have been identified for Alibates Flint Quarries National Monument only:

- Alibates Flint. The flint found within the national monument is a hard, sedimentary form of the mineral quartz. The exact mode of flint formation is not yet clear, but it is thought that it occurs as a result of chemical changes in compressed sedimentary rock formations. The flint is easily accessible on the surface, highly concentrated, and exposed in the national monument; it represents about 25% of the Alibates flint formation. Its physical characteristics, including hardness and glass-like qualities, made it desirable for use in tools by prehistoric peoples. Alibates flint has a distinctive color that makes it very identifiable and, on that basis, allows it to be easily tracked, such as along trade routes, from the national monument.
- **Alibates Ruin Archeological Site.** This archeological site from the Plains Village period is one of two remaining type-sites for the Antelope Creek Phase. This site is

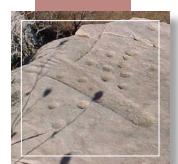
the first site named and is the type-site that provides a description to which others are compared.

- **Quarries.** The flint quarries within the national monument contain evidence of more than 300 years of extraction (active mining) of flint from more than 700 quarries.
- Museum Collection. The extensive museum collection from Alibates Flint Quarries National Monument provides an excellent opportunity for study and research of 13,000 years of human use. The collection is stored at the Panhandle-Plains Historical Museum in Canyon, Texas.

# Fundamental Resources and Values Common Both to Lake Meredith National Recreation Area and Alibates Flint Quarries National Monument

Because these NPS units are adjacent, it was determined that Lake Meredith National Recreation Area and Alibates Flint Quarries National Monument share the following fundamental resources and values.

- Diverse Habitats and Ecological Transition Zones. The parks have an unusually high diversity of flora and fauna for the region. According to the 2004 through 2006 vegetation classification report (BOR 2007), the area in Lake Meredith National Recreation Area and Alibates Flint Quarries National Monument can be divided into 12 communities that have supported indigenous peoples for 13,000 years. The more prominent among these are
  - honey mesquite shrubland complex, which is dominated by mesquite and is densely vegetated with a variety of short grasses
  - upland slopes / rolling hills, where the upland slopes are sparsely vegetated with grasses and the rolling hills are more densely vegetated with mixed grasses and small woody vegetation
  - cottonwood / mesic grass complex (Lake Meredith only), with the dominant components being cottonwood galleries interspersed with smaller tree species
  - bottomlands (Lake Meredith only), which are dominated by grasses and herbaceous vegetation
  - wetlands (Lake Meredith only), which are areas occasionally inundated with fresh water from rain events or from fluctuations in lake levels and are dominated by cattail, common reed, rushes, and bulrushes
- Wide Range of Sites and Artifacts. The sites and artifacts in both parks document cultural use of the area by native peoples over thousands of years. Archeological evidence suggests the presence of early Paleoindian hunters and gatherers approximately 13,000 years ago. Evidence of later inhabitants (notably the people associated with the Antelope Creek culture from approximately AD 1150 to AD 1450) is reflected in the archeological record. Artifacts from early ranching also are preserved within the parks' boundaries.
- **Opportunity for Scientific Research.** The unique resources present at both parks provide an opportunity for research. These resources include
  - the 13,000 years of continuous human use of lithic resources
  - the poorly understood geological processes associated with the formation of Alibates flint
  - ecological zones and habitats





# **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 of the park significance statements and fundamental 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. They go beyond a mere description of the event or process to foster multiple opportunities to experience and consider the park and its resources. Themes help to 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.



# **Interpretive Themes for Lake Meredith National Recreation Area**

The following interpretive themes have been identified for Lake Meredith National Recreation Area:

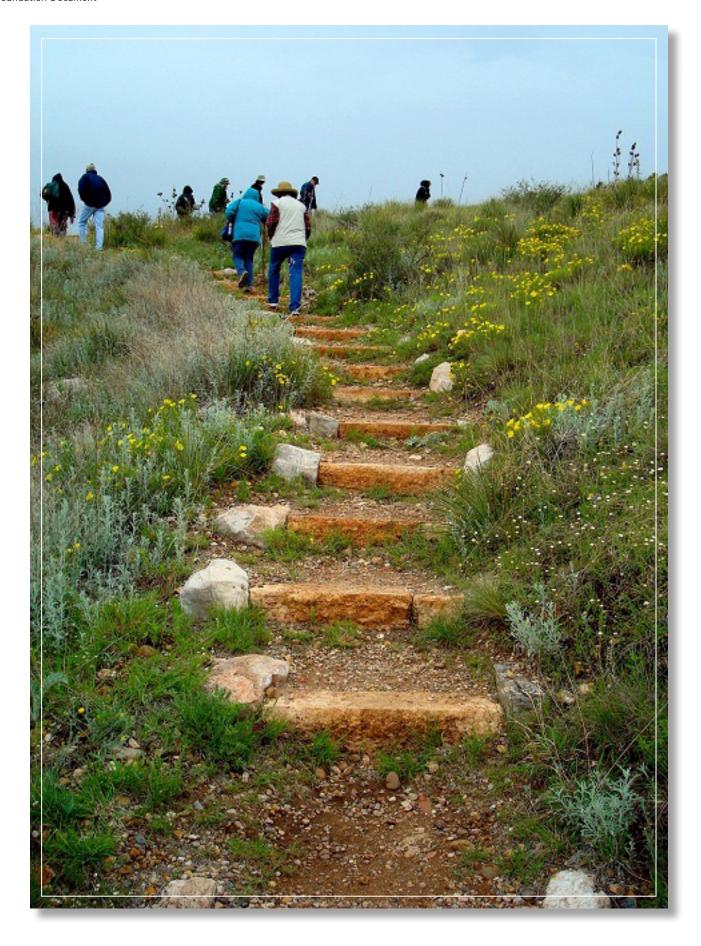
- Sanford Dam was built by a consortium of 11 Texas panhandle cities to provide a water source for the long-term sustainability of urban life on the Texas high plains and it provides a variety of recreational activities.
- The Canadian River and its tributaries, which are the water sources for Lake Meredith, have long provided a critical resource to sustain human existence and success in the Texas panhandle.
- Lake Meredith National Recreation Area provides rare public access to landscapes that have been the stage for dramatic events in the history of the American southwest.
- The variety of habitats found at Lake Meredith National Recreation Area weaves a rich tapestry of biodiversity, affording opportunities for discovery and understanding.
- The exposed geologic features of the Canadian River breaks tell the story of ongoing geologic processes that continue to shape life in the panhandle.
- The confluence of the oasis environment of the Canadian River breaks with the semiarid grasslands of the high plains has attracted people and wildlife for thousands of years and exemplifies how landscapes shape and influence human societies.

# **Interpretive Themes for Alibates Flint Quarries National Monument**

The following interpretive themes have been identified for Alibates Flint Quarries National Monument:

- The geologic conditions that occurred here created a unique, hard, fine-grained, multicolored stone that has attracted people for millennia and demonstrates the value that people place on uncommon things.
- The selection and use of Alibates flint for more than 13,000 years by a variety of peoples illustrates the sophistication of early cultures, the crafting of tools to improve quality of life, and that people's basic needs have not changed—only the means to achieve them.
- The ongoing study of Alibates flint and its importance to the lives of those who used it provides insights into the ways that knowledge is acquired, interpreted, updated, shared, and preserved.





### **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 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 of the 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 memoranda 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 Lake Meredith National Recreation Area and Alibates Flint Quarries National Monument.



#### Special Mandates for Lake Meredith National Recreation Area

• **Hunting and Fishing.** Hunting and fishing were recognized as important activities on the public lands around Lake Meredith in Public Law 88-536 (1964). The 1990 establishing legislation for the national recreation area specifically allows hunting and

fishing except where and when it would not be appropriate "for reasons of public safety, administration, fish and wildlife management, or public use and enjoyment." The National Park Service and Texas Parks and Wildlife Department have a master memorandum of understanding that identifies the state as having the responsibility for managing hunting and fishing.

- Oil and Gas Production. This industry dates to 1918, with the lease of land in the Panhandle West Field to oil and gas companies. In 1923, J. C. Whittington completed the No. 1 Sanford well in Hutchinson County. Hydrocarbon production has been an important industry since then and there are 168 active well sites and associated roads and pipelines in the national recreation area. In the national recreation area, the National Park Service regulates surface disturbance associated with oil and gas development, such as pipelines, well pads, power lines, and access roads. These are managed by the oil and gas management plan (2002) in conformance with regulations in 36 Code of Federal Regulations 9B.
- Off-road Vehicle Use. The off-road use of vehicles in two defined areas of Lake Meredith National Recreation Area is mandated by Congress and predates the establishment of the national recreation area. These areas include a 275-acre area at Blue Creek and a 1,500-acre area at Rosita. Management of these areas is addressed in the national recreation area's off-road vehicle management plan (2014).

#### Special Mandates for Alibates Flint Quarries National Monument

The only special mandates or administrative commitments for Alibates Flint Quarries National Monument relate to oil and gas production. There is one active gas well on the national monument. The national monument has been designated as a special management area under the oil and gas management plan and due to this designation, future development of petroleum resources under the national monument would require directional drilling from outside the national monument boundary.

#### **Administrative Commitments**

For more information about the existing commitments for the parks, please see the inventory of administrative commitments in 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 resources and values, and develop a full assessment of the park's planning and data needs. The assessment of planning and data needs section presents planning issues, the planning projects that will address these issues, and the associated information requirements for planning, such as resource inventories and data collection, including GIS data.

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

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

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

Fundamental Resource or Value	Public Land (Lake Meredith National Recreation Area Only)
Related Significance Statements	<ul> <li>Lake Meredith National Recreation Area is the largest area of public lands in the Texas panhandle, providing opportunities for access to diverse, affordable, outdoor, land- and water-based recreation activities.</li> </ul>
	<ul> <li>Lake Meredith and the Canadian River basin within the national recreation area feature aquatic, wetland, and riparian habitats, as well as one of the few areas in the region with trees. These habitats and the surrounding landscape support diverse plant and animal species, including migratory waterfowl.</li> </ul>
Current Conditions	Conditions
and Trends	<ul> <li>Drought conditions over the past several years have hampered vegetation regrowth and significantly lowered lake levels.</li> </ul>
	Trees are becoming stressed due to water table depth decreasing.
	Drought conditions limit the carrying capacity of habitats, resulting in reduced wildlife populations.
	Trends
	Drought is predicted to last several more years.
	Tree root growth cannot keep up with water table dropping and more trees are expected to die.
	Drought restricts use of prescribed fire, as vegetation will not recover.
	Increased visitor demand for recreational vehicle (RV) campsites with full RV hook- ups.
Threats and	Threats
Opportunities	A warmer and dryer climate is projected for the region.
	Stressed trees and vegetation will not revive rapidly or possibly at all after a wildfire.
	As native vegetation becomes stressed, nonnative, invasive plants become more dominant, further stressing native vegetation through competition for resources.
	Wildfire intensity and severity may have negative effects while in long-term drought conditions.
	Opportunities
	<ul> <li>Inform the public about their local National Park Service units and opportunities available in their backyard.</li> </ul>
	Educational exposure to the public to increase stewardship and appreciation of resources.
	Build campsites with RV hookups to attract more diverse user groups.
	Reduction of duplicate roads in the park will reduce habitat fragmentation.
	<ul> <li>Perform prescribed burns when conditions are favorable, to reduce fuels and lower fire risk.</li> </ul>
	<ul> <li>Improve land-based recreation opportunities by building more hiking, horseback riding, and biking trails.</li> </ul>
	Implement a visitor use fee for park activities.

Fundamental Resource or Value	Public Land (Lake Meredith National Recreation Area Only)
Existing Information About the Resource or Value	<ul> <li>Resource management plan (1996).</li> <li>Climate data from Stratford, Texas, weather station 418692.</li> <li>Final Environmental Impact Statement/Oil and Gas Management Plan for Lake Meredith National Recreation Area and Alibates Flint Quarries National Monument, Potter, Hutchinson, and Moore Counties, Texas (2002).</li> <li>Lake Meredith National Recreation Area and Alibates Flint Quarries National Monument Fire Management Plan Environmental Assessment (2013).</li> <li>Lake Meredith National Recreation Area Multi-use Trail Environmental Assessment (2010).</li> </ul>
Data and/or GIS Needs	<ul> <li>To protect park GIS data, all needs to be organized and copies stored at the regional office.</li> <li>LIDAR mapping of terrain.</li> <li>Cadastral survey of the boundary.</li> </ul>
Planning Needs	<ul> <li>Natural resource condition assessment for Lake Meredith National Recreation Area and Alibates Flint Quarries National Monument.</li> <li>Road consolidation plan.</li> <li>Trail system management plan for the entire national recreation area.</li> <li>Site plan to improve and delineate camping sites in McBride Canyon.</li> <li>Site plan for RV campsites – Sanford-Yake, Bates Canyon, and Fritch Fortress.</li> <li>Commercial visitor services plan.</li> <li>Fee plan, which would include determination of appropriate fees, for the new RV campground at Bates Canyon, RV sites at Fritch Fortress, Sanford-Yake.</li> <li>Siting study for the new consolidated headquarters, visitor contact station, and operations facility in the national recreation area.</li> <li>Construction plan for the new consolidated headquarters, visitor contact station, and operations facility in the national recreation area.</li> <li>Complete plans necessary to develop outdoor interpretive materials focusing on an Antelope Creek-style ruin outside of the Alibates Flint Quarry National Monument visitor contact station.</li> <li>Resource stewardship strategy.</li> </ul>

#### **Fundamental Resource** Public Land (Lake Meredith National Recreation Area Only) or Value Laws, Executive Orders, and Regulations That Apply to the FRV Laws, Executive Orders, Endangered Species Act of 1973, as amended and Regulations That Apply to the FRV, and NPS National Invasive Species Act **Policy-level Guidance** Lacey Act, as amended Federal Noxious Weed Act of 1974, as amended The Clean Water Act The Clean Air Act (42 USC 7401 et seq.) gives federal land managers the responsibility for protecting air quality and related values, including visibility, plants, animals, soils, water quality, cultural resources, and public health, from adverse air pollution impacts Executive Order 13112, "Invasive Species" Executive Order 11988, "Floodplain Management" Executive Order 11990, "Protection of Wetlands" 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 (§3.2, 3.3, 3.4) Director's Order18: Wildland Fire Management NPS Natural Resource Management Reference Manual 77 NPS Wildland Fire Management Reference Manual 18



Fundamental Resource or Value	Recreation Opportunities (Lake Meredith National Recreation Area Only)
Related Significance Statements	<ul> <li>Lake Meredith National Recreation Area is the largest area of public lands in the Texas panhandle, providing opportunities for access to diverse, affordable, outdoor, land- and water-based recreation activities.</li> </ul>
Current Conditions and Trends	<ul> <li>Conditions</li> <li>Boater traffic is low as a result of low water level, high gasoline prices, and the overall decreased ownership of boats by younger people.</li> <li>Drought-related vegetation stress will eventually have an effect on wildlife habitat, particularly the deer, quail, and pheasant populations. This may result in fewer deer, quail, and pheasant to hunt.</li> <li>Upland game birds, particularly quail, have all but vanished in the panhandle. Pheasant have also declined in population. This may result in fewer game birds to hunt.</li> <li>Because it has been dry and the lake continues to recede, many people think the lake will never rise again. For long-term planning purposes, it is important to remember the lake can rise dramatically in a short period of time if a significant weather event occurs in the watershed.</li> <li>The park provides visitors great opportunities to view a dark night sky.</li> <li>The park provides visitors a large amount of open space to recreate in, including canyons, live water, and a diverse amount of flora and fauna.</li> <li>Trends</li> <li>Drought in the area is predicted to last several more years, and lower levels of water-based recreation, as well as general visitation to the park, have been observed.</li> <li>Many visitors and residents of local communities mistake NPS staff from Lake Meredith National Recreation Area for game wardens or state park employees.</li> <li>The park struggles to be relevant in many people's lives, especially younger people.</li> <li>Off-road vehicle (ORV) areas continue to see increased use.</li> <li>Horse groups have shown an interest in expanding the trail system in the park.</li> <li>Spring Canyon visitation has been increasing over the last five years.</li> <li>While boats and recreational vehicles have become more expensive to own and operate, visitors still request camping opportunities with full hook-ups and showers, though no RV hook-ups currently exist in the park.</li> <li>Due to a stressed economy, more residents of lo</li></ul>
	The park is seeing use from more first-time hunters who are looking for cheaper sources of meat.

Fundamental Resource or Value	Recreation Opportunities (Lake Meredith National Recreation Area Only)
Threats and Opportunities	<ul> <li>Water-based recreation activities could totally disappear at Lake Meredith National Recreation Area due to low lake levels, but not at Stilling Basin. Decreased visitation also decreases collection of recreation use fees and hinders park operations.</li> <li>With more wind farms being developed around the park, the dark night sky may be polluted by these new sources of light.</li> <li>Reduced visitation by out-of-town visitors has been observed. This may be tied to trash and debris on land adjacent to the park, which makes several entrances to the park uninviting.</li> <li>No enforcement of or nonexistent zoning rules and regulations allow property adjacent to the park to remain trashy and junky. This creates a negative impression on visitors.</li> <li>A continuation of the drought may reduce vegetation in the ORV areas, causing erosion and blowing sand.</li> </ul>
	<ul> <li>Opportunities</li> <li>Increased opportunities for hiking, biking, camping, horseback riding, bird watching, SCUBA diving, and ORV recreation.</li> <li>Minimize the decrease of water-based activities by providing more opportunities at the Stilling Basin, including stocking additional fish and providing a better swimming area.</li> <li>Additional land-based recreation opportunities could be provided by establishing additional hiking and biking trails and hosting annual recreational events through friends groups.</li> <li>Thoroughly clean the lake shore and remove hazards while the lake water level is</li> </ul>
	<ul> <li>Urge the surrounding counties/cities to use any local or state clean-up laws, rules, or regulations that may exist to clean up the area in order for the local communities to better compete for tourist dollars and avoid an outbreak of the plague or Hantavirus.</li> <li>Podcasts, Facebook, and Twitter programs, pages, and accounts are needed to increase communication about the park to a variety of user groups.</li> <li>Manage wildlife habitat to improve hunting opportunities.</li> <li>Visitation and recreational fees would be restored if full-service campgrounds could be established with showers. Most area parks are fully booked on all holidays, and the overflow from these parks would be enough to double visitation at the park.</li> </ul>
Existing Information About the Resource or Value	<ul> <li>Resource management plan (1996).</li> <li>Climate data from Stratford, Texas, weather station 418692.</li> <li>Final Environmental Impact Statement/Oil and Gas Management Plan for Lake Meredith National Recreation Area and Alibates Flint Quarries National Monument, Potter, Hutchinson, and Moore Counties, Texas (2002).</li> <li>Lake Meredith National Recreation Area and Alibates Flint Quarries National Monument Fire Management Plan Environmental Assessment (2013).</li> </ul>

Fundamental Resource or Value	Recreation Opportunities (Lake Meredith National Recreation Area Only)
Data and/or GIS Needs	<ul> <li>Monitor drought conditions and changes in vegetation patterns.</li> <li>Complete viewshed analysis from inside park looking out.</li> <li>Locate (georeference) sites within the park that need to be cleaned up (e.g., old oil and gas pads, dump sites, carbon black plant) and prepare plan to recover / remove / remediate the sites.</li> </ul>
Planning Needs	<ul> <li>Natural resource condition assessment for Lake Meredith National Recreation Area and Alibates Flint Quarries National Monument.</li> <li>Road consolidation plan.</li> <li>Trail system management plan for the entire national recreation area.</li> <li>Site plan for RV campsites – Sanford-Yake, Bates Canyon, and Fritch Fortress.</li> <li>Commercial visitor services plan.</li> <li>Site plan to improve and delineate camping sites in McBride Canyon.</li> <li>Siting study for the new consolidated headquarters, visitor contact station, and operations facility in the national recreation area.</li> <li>Construction plan for the new consolidated headquarters, visitor contact station, and operations facility in the national recreation area.</li> <li>Fee plan, which would include determination of appropriate fees for the new RV campground at Bates Canyon, RV sites at Fritch Fortress, Sanford-Yake.</li> <li>Complete plans necessary to develop outdoor interpretive materials focusing on an Antelope Creek style ruin outside of the Alibates Flint Quarries National Monument visitor contact station.</li> <li>Restoration plan to open the McBride Ranch House for guided tours during special events.</li> <li>Siting study to determine appropriate locations for camping on the west side of the national recreation area.</li> </ul>
Laws, Executive Orders, and Regulations That Apply to the FRV, and NPS Policy-level Guidance	<ul> <li>Laws, Executive Orders, and Regulations That Apply to the FRV</li> <li>NPS Concessions Management Improvement Act of 1998</li> <li>Resource Protection, Public Use and Recreation: Fishing (36 CFR 2.3)</li> <li>Americans with Disabilities Act of 1990 (28 CFR 36)</li> <li>Architectural Barriers Act of 1968</li> <li>Architectural Barriers Act Accessibility Standards 2006</li> <li>Rehabilitation Act of 1973</li> <li>Secretarial Order 3289, "Addressing the Impacts of Climate Change on America's Water, Land, and Other Natural and Cultural Resources"</li> <li>NPS Policy-level Guidance (NPS Management Policies 2006 and Director's Orders)</li> <li>NPS Management Policies 2006 (chapters 7, 8, 9, and 10)</li> <li>Director's Order 6: Interpretation and Education</li> <li>Director's Order 42: Accessibility for Visitors with Disabilities in National Park Service Programs and Services</li> <li>NPS Transportation Planning Guidebook</li> </ul>

Fundamental Resource or Value	Exposed Geological Features of the Canadian River Breaks (Lake Meredith National Recreation Area Only)
Related Significance Statements	• The exposed geologic features of the Canadian River breaks in the national recreation area reveal active geologic processes that are easily visible to an extent not present elsewhere in the region. The topography and geography of the Canadian River breaks create a divergence from the surrounding landscape that offers scenic values and opportunities not found elsewhere in the region.
Current Conditions and Trends	<ul> <li>Conditions</li> <li>The natural process of rotational slumping continues.</li> <li>Fluvial processes have been altered due to nonnative / invasive vegetation, urbanization, and small and large dams upstream from the park.</li> <li>Erosion due to rutting and vegetation damage continues in ORV areas.</li> <li>Trends</li> <li>The Canadian River watershed continues to be altered.</li> </ul>
Threats and Opportunities	<ul> <li>Threats</li> <li>Urbanization around park boundaries alters the sheet flow and distribution of rain events, affecting geologic stability.</li> <li>The decreasing water table stresses the vegetation communities, reducing the number of healthy vegetation roots holding down the soil.</li> <li>ORV use outside legislated areas adds to ruts and erosion problems.</li> </ul>
	<ul> <li>Opportunities</li> <li>Inform area residents of the beauty of landscapes protected in the park.</li> <li>Programs that emphasize the geology of the area.</li> <li>Cooperate with oil and gas operators to remove and consolidate roads.</li> <li>Work with gateway communities to lessen the impacts of urban runoff.</li> </ul>
Existing Information About the Resource or Value	<ul> <li>Resource management plan (1996).</li> <li>Final Environmental Impact Statement/Oil and Gas Management Plan for Lake Meredith National Recreation Area and Alibates Flint Quarries National Monument, Potter, Hutchinson, and Moore Counties, Texas (2002).</li> <li>Lake Meredith National Recreation Area Multi-use Trail Environmental Assessment (2010). General management plan (2014).</li> <li>Off-road vehicle management plan / environmental impact statement (2014).</li> </ul>
Data and/or GIS Needs	LIDAR mapping of terrain.
Planning Needs	<ul> <li>Natural resource condition assessment.</li> <li>Resource stewardship strategy.</li> <li>Road consolidation plan.</li> <li>Trail system management plan for the entire national recreation area.</li> </ul>
Laws, Executive Orders, and Regulations That Apply to the FRV, and NPS Policy-level Guidance	<ul> <li>Laws, Executive Orders, and Regulations That Apply to the FRV</li> <li>Paleontological Resources Protection Act</li> <li>Clean Water Act</li> <li>NPS Policy-level Guidance (NPS Management Policies 2006 and Director's Orders)</li> <li>NPS Management Policies 2006 (§4.6.1, 4.6.2, 4.6.4 and 4.8.1.1)</li> <li>NPS Natural Resource Management Reference Manual 77</li> </ul>

Fundamental Resource or Value	Diverse Habitats and Ecological Transition Zones (Both Lake Meredith National Recreation Area and Alibates Flint Quarries National Monument)
Related Significance Statements	<ul> <li>Lake Meredith and the Canadian River basin within the national recreation area feature aquatic, wetland, and riparian habitats, as well as one of the few areas in the region with trees. These habitats and the surrounding landscape support diverse plant and animal species, including migratory waterfowl.</li> </ul>
Current Conditions and Trends	<ul> <li>Conditions</li> <li>Drought conditions have negatively impacted aquatic, wetland, and riparian habitats, creating hardships on both plants and animals.</li> <li>Migratory waterfowl find little to no vegetation in the water or water's edge for feeding.</li> <li>Increasing demand on the aquifers of the area from surrounding communities and local agriculture is increasing the distance for plant roots to reach the water table.</li> <li>According to the State of Texas 2012 Clean Water Act Integrated Report, Lake Meredith has been identified as an impaired water body because of the presence of mercury in fish tissue, chloride, sulfate, and total dissolved solids. The state will continue to monitor water quality. In the meantime, signs have been posted at all docks still in use with suggested rates of consumption.</li> <li>Trends</li> <li>The drought is predicted to continue, creating the potential for even more negative impacts on plants and animals.</li> <li>Salt cedar eradication has been successful in some areas, and eradication attempts</li> </ul>
Threats and	are expected to continue.  Threats
Opportunities	<ul> <li>Lack of water conservation in the Panhandle area threatens not only the parks, but also the Ogallala Aquifer. Groundwater depletion outside the boundary of the parks might also impact individual springs and base river flows within the parks.</li> <li>A warmer and dryer climate could permanently affect seasonal rainfall patterns and reduce overall discharge into the Canadian River watershed.</li> <li>Nonnative plants (including Russian thistle and cheatgrass) are a threat to natural plant communities. Impacts on natural plant communities result in broader impacts on wildlife habitats and native ecosystems and alter fire regimes.</li> <li>As the lake size diminishes, new invasive salt cedar plants emerge on its fringes.</li> </ul>
	<ul> <li>Zebra and quagga mussels are present in surrounding lakes and continue to present a threat to Lake Meredith should lake levels rise.</li> <li>Feral pigs have made their way into the parks and will continue to be a threat to native habitats.</li> </ul>
	<ul> <li>Opportunities</li> <li>Establish partnerships with universities and the cooperative ecosystem studies unit to support research.</li> <li>Continue to build positive relationships with adjacent landholders and to reach out to property owners on topics such as nonnative plant control.</li> <li>The parks lead by example, highlighting projects or practices to conserve water and the benefits to the community.</li> <li>Introduce water conservation into interpretive programs.</li> </ul>

Fundamental Resource or Value	Diverse Habitats and Ecological Transition Zones (Both Lake Meredith National Recreation Area and Alibates Flint Quarries National Monument)
Existing Information About the Resource or Value	<ul> <li>Documents and photos located at Panhandle-Plains Historical Museum.</li> <li>Studies performed by the Southern Plains Network.</li> <li>Secretarial Order 3289, "Addressing the Impacts of Climate Change on America's Water, Land, and Other Natural and Cultural Resources"</li> <li>Lake Meredith National Recreation Area, Alibates Flint Quarries National Monument, Texas 2004-2006 Vegetation Classification and Mapping, Bureau of Reclamation report 2006.</li> <li>Climate data from Stratford, Texas, weather station 418692.</li> </ul>
Data and/or GIS Needs	<ul> <li>Locate (georeference) sites within the park that need to be cleaned up (e.g., old oil and gas pads, dump sites, carbon black plant) and prepare plan to recover / remove / remediate the sites.</li> <li>Bio Blitz documentation of flora and fauna in the parks.</li> <li>Nonnative plant survey.</li> </ul>
Planning Needs	<ul> <li>Natural resource condition assessment.</li> <li>Road consolidation plan.</li> <li>Trail system management plan for the entire national recreation area.</li> <li>Terrestrial invasive species plan.</li> <li>Aquatic invasive species plan.</li> <li>Resource stewardship strategy.</li> </ul>
Laws, Executive Orders, and Regulations That Apply to the FRV, and NPS Policy-level Guidance	<ul> <li>Resource stewardship strategy.</li> <li>Laws, Executive Orders, and Regulations That Apply to the FRV</li> <li>Endangered Species Act of 1973, as amended</li> <li>National Invasive Species Act</li> <li>Lacey Act, as amended</li> <li>Federal Noxious Weed Act of 1974, as amended</li> <li>The Clean Water Act</li> <li>The Clean Air Act (42 USC 7401 et seq.) gives federal land managers the responsibility for protecting air quality and related values, including visibility, plants, animals, soils, water quality, cultural resources, and public health, from adverse air pollution impacts</li> <li>Executive Order 13112, "Invasive Species"</li> <li>Executive Order 11988, "Floodplain Management"</li> <li>Executive Order 11990, "Protection of Wetlands"</li> <li>Secretarial Order 3289, "Addressing the Impacts of Climate Change on America's Water, Land, and Other Natural and Cultural Resources"</li> <li>NPS Policy-level Guidance (NPS Management Policies 2006 and Director's Orders)</li> <li>NPS Management Policies 2006 (§1.6, 4.1, 4.1.4, 4.4.1, 4.7.2) provide general direction for managing park units from an ecosystem perspective</li> <li>NPS Director's Order 18: Wildland Fire Management</li> <li>NPS Natural Resource Management Reference Manual 77</li> <li>NPS Wildland Fire Management Reference Manual 18</li> </ul>

#### **Fundamental Resource** Wide Range of Sites and Artifacts (Both Lake Meredith National Recreation Area and Alibates Flint Quarries National Monument) or Value The natural and geologic resources of the national recreation area have enabled **Related Significance** human survival, subsistence, and adaptation that have resulted in a continuum of Statements human presence in the Texas panhandle for more than 13,000 years. Cultural sites in Lake Meredith National Recreation Area and the adjacent Alibates Flint Quarries National Monument offer views of lifeways in every cultural period that has been identified. Alibates Flint Quarries National Monument contains evidence of more than 13.000 years of lithic resource detection, extraction, manipulation, and use, evidenced in features such as a village site and approximately 700 quarry pits. The national monument was listed in the National Register of Historic Places on October 15, 1966. • An unusually high number and variety of artifacts representing the entire spectrum of flint extraction and manufacturing have been recovered from the national monument, providing opportunities for scientific research and knowledge of aboriginal quarry techniques. Alibates Flint Quarries National Monument, together with Lake Meredith National Recreation Area, manages approximately 748,396 collected objects and archives associated with the area. • The Plains Village archeological sites in the national monument include the only protected, and best remaining, type-site for the Antelope Creek people, who occupied the area between AD 1150 and AD 1450. The national monument also contains petroglyphs, which are rare in the Texas panhandle. Together with sites in the adjacent Lake Meredith National Recreation Area, these ruins document a prehistoric sedentary lifestyle. **Conditions Current Conditions** • The Alibates flint guarries are fairly stable; they have filled in over the years with and Trends plants, rocks, and dirt that protect them from exposure. The flint debitage on the ground around the quarries lies on the surface and is therefore exposed to weathering from the elements. • The Alibates Ruin site consists of a number of building stones lying on the ground at the village location, along with some associated artifacts. • The building stones appear randomly strewn about the site; it is unknown at this time what remains in situ and what has been disturbed. It is unknown what buildings and/or cultural artifacts lay underground, and whether or not they remain in situ. • The ruins are becoming more weathered and the building stones scattered due to the elements and animal activity, making the site less recognizable as a village location. • The petroglyphs have become very weathered, and some are barely visible now. Many cultural sites were surveyed and recorded before the lake was filled; as lake levels drop, these sites will no longer be under water, but may be covered in mud or silt. **Trends** • As long as the guarry pits remain filled with dirt and debris, their condition should remain fairly stable. • The exposed flint debitage will continue to weather and will be subject to theft. The ruins will continue to weather, and plants and grasses will eventually cover the • The petroglyphs will eventually weather away. Sites previously under the lake will continue to be exposed as lake levels continue to

Fundamental Resource or Value	Wide Range of Sites and Artifacts (Both Lake Meredith National Recreation Area and Alibates Flint Quarries National Monument)
Threats and Opportunities	<ul> <li>Threats</li> <li>Cultural sites will be damaged or destroyed by natural elements and by animal or rodent activity.</li> <li>Looters or vandals will remove artifacts and damage or destroy cultural sites; some flint will be lost to park visitors, despite the park's best efforts to protect it.</li> <li>Flint from adjacent ranches is being sold on eBay, which may encourage theft from the park sites.</li> <li>The petroglyphs will be lost due to weathering and exposure.</li> <li>A warmer and dryer climate is projected for the region.</li> <li>Opportunities</li> <li>Sites and petroglyphs need to be fully documented before they disappear.</li> <li>Digital imaging of petroglyphs can be used for documentation and to measure the effects of weathering.</li> <li>Archaeological testing and/or excavation can provide additional information about the Antelope Creek peoples and their lifestyle, as well as provide further documentation of their cultural remains.</li> <li>Interpretive talks, brochures, and waysides can help visitors understand the importance of leaving cultural sites intact and in situ.</li> </ul>
Existing Information About the Resource or	<ul> <li>Continuing to hold the annual FlintFest will help visitors understand and appreciate this resource.</li> <li>The Panhandle-Plains Historical Museum houses historical documents, photographs, and the park's cultural artifacts.</li> </ul>
Value  Data and/or GIS Needs	<ul> <li>Climate data from Stratford, Texas, weather station 418692.</li> <li>Sites and petroglyphs need to be fully documented and plotted using GIS and other many before they disappear. The data from the patroglyphs with sites and other sites.</li> </ul>
	<ul> <li>means before they disappear. The data from the petroglyphs, ruin site, and other sites should be recorded so that as much information as possible is preserved before the sites fade away.</li> <li>A database should be created and maintained on the weathering and deterioration of the petroglyphs and the ruin site.</li> </ul>
Planning Needs	<ul> <li>Update the comprehensive interpretive plan to address information technologies, opportunities, and increased outreach education and interpretation.</li> <li>Cultural resources management plan, including long-term plans for preservation of the sites and petroglyphs.</li> <li>Visitor use management plan would help preservation of the resource with recreation opportunities for the public, such as visitation at the petroglyphs/ruins site.</li> <li>Land protection plan to review and update previous land acquisition plans.</li> <li>Plan to excavate around ruins site.</li> <li>Resource stewardship strategy.</li> </ul>

Fundamental Resource or Value	Wide Range of Sites and Artifacts (Both Lake Meredith National Recreation Area and Alibates Flint Quarries National Monument)
Laws, Executive Orders, and Regulations That Apply to the FRV, and NPS Policy-level Guidance	<ul> <li>Laws, Executive Orders, and Regulations That Apply to the FRV</li> <li>The Antiquities Act of 1906</li> <li>Historic Sites, Buildings, and Antiquities Act of 1935</li> <li>National Historic Preservation Act of 1966, as amended (16 USC 470)</li> <li>American Indian Religious Freedom Act of 1978</li> <li>Archaeological Resources Protection Act of 1979</li> <li>Museum Act of 1955, as amended</li> <li>Native American Graves Protection and Repatriation Act of 1990</li> <li>Executive Order 11593, "Protection and Enhancement of the Cultural Environment"</li> <li>Executive Order 13007, "Indian Sacred Sites"</li> <li>Secretarial Order 3289, "Addressing the Impacts of Climate Change on America's Water, Land, and Other Natural and Cultural Resources"</li> <li>36 CFR 79 "Curation of Archeological Collections"</li> <li>36 CFR 800 "Protection of Historic Properties"</li> <li>The Secretary of the Interior's Standards for Archeological Documentation</li> <li>The Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation</li> <li>The Secretary of the Interior's Standards for the Treatment of Historic Properties</li> <li>Programmatic Agreement among the National Park Service, the Advisory Council on Historic Preservation, and the National Conference of State Historic Preservation Officers (2008)</li> <li>NPS Policy-level Guidance (NPS Management Policies 2006 and Director's Orders)</li> <li>NPS Management Policies 2006 (chapter 5)</li> <li>NPS Museum Handbook, Parts I, II, and III</li> </ul>
	<ul> <li>Director's Order 24: Museum Collections</li> <li>Director's Order 28: Cultural Resource Management (1998)</li> <li>Director's Order 28A: Archeology (2004)</li> </ul>
	- Director's Order 20M. Artheology (2004)

Fundamental Resource or Value	Opportunities for Scientific Research (Both Lake Meredith National Recreation Area and Alibates Flint Quarries National Monument)
Related Significance Statements	Related to all significance statements for both Lake Meredith National Recreation Area and Alibates Flint Quarries National Monument.
Current Conditions and Trends	<ul> <li>Conditions</li> <li>Currently there is some scientific research being undertaken, such as a bird study, salt cedar/beetle study, and some archeological and flint studies.</li> <li>Artifacts, photographs, excavation records, etc. are held at the Panhandle-Plains Historical Museum and are available for study/research.</li> <li>The exposed geology of the Canadian River breaks is a unique feature of Lake Meredith National Recreation Area.</li> <li>Trends</li> <li>The number of ongoing research/study projects in the parks has remained relatively stable.</li> <li>Drought is predicted to last several more years and is causing some active geology on some of the exposed cliffs.</li> <li>The petroglyphs in Alibates have deteriorated over the years and will eventually weather away.</li> </ul>
Threats and Opportunities	<ul> <li>Threats</li> <li>Archeological/cultural sites are threatened by the elements and by possible looters.</li> <li>Over time, there is the possibility that historic/archival documents could be lost or misplaced.</li> <li>Limited funding may impact the parks' ability to pay the Panhandle-Plains Historical Museum for continued storage and cataloguing.</li> <li>Opportunities</li> <li>The variety of cultural and natural resources in the parks provides multiple opportunities for study and research.</li> <li>Nearby colleges and universities should encourage graduate students to undertake research at the parks, which could serve as the basis for masters theses or doctoral dissertations. An agreement could be developed with local universities for these projects.</li> <li>The NPS Geologist-in-the-Parks program could provide additional NPS study and research.</li> <li>Research could be conducted on climates change in relation to existing area conditions as compared to past drought years.</li> <li>Sites and petroglyphs have not been fully documented.</li> <li>Scientific study could reveal more about the dispersal and trade patterns of Alibates flint.</li> <li>Archaeological testing and/or excavation of site at Alibates can provide additional information about the Antelope Creek peoples and their lifestyle, as well as provide further documentation of their cultural remains.</li> <li>The Plains Village archeological sites at Alibates contain the only protected type-site for the Antelope Creek people, who occupied the area between AD 1150 and AD 1450.</li> <li>Catalogue of artifacts will be completed and made available by Panhandle-Plains Historical Museum. This makes the collection accessible to researchers for study.</li> </ul>

Fundamental Resource or Value	Opportunities for Scientific Research (Both Lake Meredith National Recreation Area and Alibates Flint Quarries National Monument)
Existing Information About the Resource or Value	<ul> <li>Documents and photos located at Panhandle-Plains Historical Museum.</li> <li>Climate data from Stratford, Texas, weather station 418692.</li> </ul>
Data and/or GIS Needs	<ul> <li>LIDAR mapping of terrain.</li> <li>Georeferencing artifacts to ascertain usage of particular sites (Antelope Creek phase).</li> <li>Research regarding experimental archeology to determine quarry techniques.</li> <li>Create and maintain a database on the weathering and deterioration of the petroglyphs and the ruin site.</li> <li>Study to determine the boundaries/edges of the Alibates flint formation.</li> <li>Statistical data from the quarries should be recorded so that as much information as possible is preserved.</li> <li>Archeological testing and/or excavations at the ruins site.</li> </ul>
Planning Needs	Plan to excavate around ruins site.



Fundamental Resource or Value	Opportunities for Scientific Research (Both Lake Meredith National Recreation Area and Alibates Flint Quarries National Monument)
Laws, Executive Orders, and Regulations That Apply to the FRV, and NPS Policy-level Guidance	<ul> <li>Laws, Executive Orders, and Regulations That Apply to the FRV</li> <li>National Historic Preservation Act of 1966, as amended (16 USC 470)</li> <li>Antiquities Act of 1906</li> <li>Archeological and Historic Preservation Act of 1974</li> <li>Archaeological Resources Protection Act of 1979</li> <li>American Indian Religious Freedom Act of 1978</li> <li>Historic Sites, Buildings, and Antiquities Act of 1935</li> <li>Museum Act of 1955, as amended</li> <li>Native American Graves Protection and Repatriation Act of 1990</li> <li>Paleontological Resources Protection Act</li> <li>1988 Federal Cave Resources Protection Act</li> <li>Endangered Species Act of 1973, as amended</li> <li>National Invasive Species Act</li> <li>Lacey Act, as amended</li> <li>Federal Noxious Weed Act of 1974, as amended</li> <li>The Clean Water Act</li> <li>The Clean Water Act</li> <li>The Clean Air Act</li> <li>Executive Order 13112, "Invasive Species"</li> <li>Executive Order 11593, "Protection and Enhancement of the Cultural Environment"</li> <li>Executive Order 13007, "American Indian Sacred Sites"</li> <li>36 CFR 79 "Curation of Federally Owned and Administered Archeological Collections"</li> <li>Secretarial Order 3289, "Addressing the Impacts of Climate Change on America's Water, Land, and Other Natural and Cultural Resources."</li> <li>36 CFR 800 "Protection of Historic Properties"</li> <li>NPS Policy-level Guidance (NPS Management Policies 2006 and Director's Orders)</li> <li>NPS Management Policies 2006 (§2.3.1.4, 4.2, 5.1, 8.10, 1.6, 4.1, 4.1.4, 4.4.1, 4.7.2)</li> <li>Director's Order 6: Interpretation and Education</li> </ul>
	<ul> <li>Director's Order 24: Museum Collections</li> <li>Director's Order 28: Cultural Resource Management</li> <li>Director's Order 28A: Archeology, 4A(3) Native American Graves Protection and Repatriation Act</li> <li>NPS Museum Handbook, parts I, II, and III</li> <li>Natural Resources Inventory and Monitoring Guideline (NPS-75)</li> <li>NPS Natural Resource Management Reference Manual 77</li> </ul>

Fundamental Resource or Value	Combined FRV Analysis Table for Alibates Flint and Quarries (Alibates Flint Quarries National Monument Only)
Related Significance Statements	<ul> <li>Alibates flint is only found in a small section of the Canadian River valley in the Texas panhandle. The national monument contains part of the only known exposed bedrock source of Alibates flint, and the flint is present in the national monument in high concentrations.</li> <li>The physical characteristics of the Alibates flint made it highly desirable for tool-making. It is very hard but also glass-like, so it holds an edge and can be worked. Additionally, its distinctive color pattern makes it identifiable even when it is away from the source, so the movement of the flint can be documented.</li> <li>Alibates Flint Quarries National Monument contains evidence of more than 13,000 years of lithic resource detection, extraction, manipulation, and use, evidenced in features such as a village site and approximately 700 quarry pits. The national monument was listed in the National Register of Historic Places on October 15, 1966.</li> </ul>
Current Conditions and Trends	<ul> <li>Conditions</li> <li>The Alibates flint quarries are fairly stable; they have filled in over the years with plants, rocks, and dirt, and remain protected from exposure to the elements.</li> <li>The flint debitage on the ground around the quarries lies on the surface and is therefore exposed to weathering from the elements.</li> <li>Exposed flint from the quarries is potentially subject to theft by visitors.</li> <li>Trends</li> <li>As long as the quarry pits remain filled with dirt and debris their condition should remain fairly stable.</li> <li>The exposed flint debitage will continue to weather.</li> </ul>
Threats and Opportunities	<ul> <li>Threats</li> <li>Quarry sites can be damaged or destroyed by natural elements and by animal or rodent activity.</li> <li>Some flint will be lost to looters and visitors, despite the park's best efforts to protect it.</li> <li>Opportunities</li> <li>Interpretive talks, brochures, and waysides can help visitors understand the importance of leaving cultural sites intact and in situ.</li> <li>Continuing to hold informational events such as the annual FlintFest will help visitors understand and appreciate this resource.</li> <li>Further scientific study could reveal more about the dispersal and trade patterns of Alibates flint.</li> <li>Excavation of a quarry pit could increase understanding of the Antelope Creek Peoples, plus provide additional interpretive opportunity for visitors.</li> <li>When the opportunity arises, purchase inholding within the monument's boundaries.</li> <li>Implement oral history documentation of historic park knowledge from long-time employees, current and retired.</li> </ul>
Existing Information About the Resource or Value	The Panhandle-Plains Historical Museum houses historical documents, photographs, and the park's cultural artifacts dealing with the Alibates flint quarries.

Fundamental Resource or Value	Combined FRV Analysis Table for Alibates Flint and Quarries (Alibates Flint Quarries National Monument Only)					
Data and/or GIS Needs	<ul> <li>Track the disappearance/removal of surface flint from the quarry site (ongoing).</li> <li>Photo documentation, GIS data, and/or LIDAR of quarry sites.</li> <li>LIDAR mapping of terrain.</li> </ul>					
Planning Needs	<ul> <li>Visitor use management plan to balance preservation of the resource with recreation opportunities for the public.</li> <li>Cultural resources management plan for long-term preservation of the quarry sites.</li> <li>A land protection plan is needed prior to acquiring the inholding.</li> <li>Plans are being developed for the archeological excavation of a quarry pit near the Alibates trail, which would increase interpretive opportunities for park visitors and help them understand and appreciate the resource.</li> <li>Plan to excavate around ruins site.</li> </ul>					
Laws, Executive Orders, and Regulations That Apply to the FRV, and NPS Policy-level Guidance	<ul> <li>Laws, Executive Orders, and Regulations That Apply to the FRV</li> <li>The Antiquities Act of 1906</li> <li>Historic Sites, Buildings, and Antiquities Act of 1935</li> <li>National Historic Preservation Act of 1966, as amended (16 USC 470)</li> <li>American Indian Religious Freedom Act of 1978</li> <li>Archaeological Resources Protection Act of 1979</li> <li>Native American Graves Protection and Repatriation Act of 1990</li> <li>Executive Order 11593, "Protection and Enhancement of the Cultural Environment"</li> <li>Executive Order 13007, "Indian Sacred Sites"</li> <li>Secretarial Order 3289, "Addressing the Impacts of Climate Change on America's Water, Land, and Other Natural and Cultural Resources"</li> <li>36 CFR 79 "Curation of Archeological Collections"</li> <li>36 CFR 800 "Protection of Historic Properties"</li> <li>The Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation</li> <li>Programmatic Agreement among the National Park Service, Advisory Council on Historic Preservation, and the National Conference of State Historic Preservation Officers (2008)</li> <li>NPS Policy-level Guidance (NPS Management Policies 2006 and Director's Orders)</li> <li>NPS Management Policies 2006 (chapter 5)</li> <li>Director's Order 28: Cultural Resource Management (1998)</li> <li>Director's Order 28A: Archeology (2004)</li> </ul>					

Fundamental Resource or Value	Alibates Ruin Archeological Site (Alibates Flint Quarries National Monument Only)
Related Significance Statements	<ul> <li>The Plains Village archeological sites in the national monument include the only protected, and best remaining, type-site for the Antelope Creek people, who occupied the area between AD 1150 and AD 1450. The national monument also contains petroglyphs, which are rare in the Texas panhandle. Together with sites in the adjacent Lake Meredith National Recreation Area, these ruins document a prehistoric sedentary lifestyle.</li> </ul>
Current Conditions and Trends	<ul> <li>Conditions</li> <li>The Alibates Ruin site consists of a number of building stones lying on the ground at the village location, along with some associated artifacts.</li> <li>The building stones appear randomly strewn about the site; it is unknown at this time what remains in situ and what has been disturbed.</li> <li>It is unknown what buildings and/or cultural artifacts lay underground, and whether or not they remain in situ.</li> <li>The ruins are becoming more weathered and the building stones scattered due to the elements and animal activity, making the site less recognizable as a village location.</li> <li>The petroglyphs have become very weathered, and some are now barely visible.</li> <li>Trends</li> <li>The ruins will continue to weather, and plants and grasses will eventually cover the site.</li> <li>The petroglyphs will eventually weather away.</li> </ul>
Threats and Opportunities	<ul> <li>Threats</li> <li>The village sites will be damaged or destroyed by natural elements and by animal activity.</li> <li>The petroglyphs will be lost due to weathering and exposure.</li> <li>Looters or vandals may remove artifacts and damage or destroy cultural sites.</li> <li>Opportunities</li> <li>Sites and petroglyphs need to be fully documented before they disappear.</li> <li>Digital imaging of petroglyphs can be used for documentation and to measure the effects of weathering.</li> <li>Archeological testing and/or excavation can provide additional information about the Antelope Creek peoples and their lifestyle, as well as provide further documentation of their cultural remains.</li> <li>Visitation at the petroglyphs/ruins site should be managed to balance preservation of the resource with recreation opportunities for the public.</li> <li>Interpretive talks, brochures, and waysides can help visitors understand the importance of leaving cultural sites intact and in situ.</li> <li>Tribal consultation needs to be initiated to determine tribal customs and beliefs regarding petroglyph preservation.</li> </ul>

Fundamental Resource or Value	Alibates Ruin Archeological Site (Alibates Flint Quarries National Monument Only)
Existing Information About the Resource or Value	<ul> <li>References books and materials are located in the park bookstore and park library.</li> <li>Authoritative online information is located on such sites as the Texas State Historical Association and Texas Beyond History.</li> <li>The Panhandle-Plains Historical Museum houses historical documents, photographs, and the park's cultural artifacts.</li> <li>Archaeological Excavations of Antelope Creek Ruins and Alibates Ruins Panhandle Aspect 1938-1941, Baker &amp; Baker, Panhandle Archaeological Society publication No. 8.</li> </ul>
Data and/or GIS Needs	The data from the petroglyphs, ruin site, and other sites should be recorded (including photo documentation, GIS data, and/or LIDAR) so that as much information as possible is preserved before the sites fade away.
Planning Needs	<ul> <li>Cultural resource management plan, including long-term plans for preservation of the sites and petroglyphs.</li> <li>Update to the comprehensive interpretive plan, including development of waysides, site bulletins, podcasts, etc. as an alternative method of allowing visitors to learn about these sites.</li> </ul>
Laws, Executive Orders, and Regulations That Apply to the FRV, and NPS Policy-level Guidance	<ul> <li>Laws, Executive Orders, and Regulations That Apply to the FRV</li> <li>The Antiquities Act of 1906</li> <li>Historic Sites, Buildings, and Antiquities Act of 1935</li> <li>National Historic Preservation Act of 1966, as amended (16 USC 470)</li> <li>American Indian Religious Freedom Act of 1978</li> <li>Archaeological Resources Protection Act of 1979</li> <li>Native American Graves Protection and Repatriation Act of 1990</li> <li>Executive Order 11593, "Protection and Enhancement of the Cultural Environment"</li> <li>Executive Order 13007, "Indian Sacred Sites"</li> <li>Secretarial Order 3289, "Addressing the Impacts of Climate Change on America's Water, Land, and Other Natural and Cultural Resources"</li> <li>36 CFR 79 "Curation of Archeological Collections"</li> <li>36 CFR 800 "Protection of Historic Properties"</li> <li>The Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation</li> <li>Programmatic Agreement among the National Park Service, Advisory Council on Historic Preservation, and the National Conference of State Historic Preservation Officers (2008)</li> <li>NPS Policy-level Guidance (NPS Management Policies 2006 and Director's Orders)</li> <li>NPS Management Policies 2006 (chapter 5)</li> <li>Director's Order 28: Cultural Resource Management (1998)</li> <li>Director's Order 28A: Archeology (2004)</li> </ul>

Fundamental Resource or Value	Museum Collection (Alibates Flint Quarries National Monument Only)
Related Significance Statements	<ul> <li>An unusually high number and variety of artifacts representing the entire spectrum of flint extraction and manufacturing have been recovered from the national monument, providing opportunities for scientific research and knowledge of aboriginal quarrying techniques.</li> <li>Alibates Flint Quarries National Monument, together with Lake Meredith National Recreation Area, manages approximately 748,396 collected objects and archives associated with the area.</li> </ul>
Current Conditions and Trends	<ul> <li>Conditions</li> <li>Artifacts and archives associated with the two parks are being curated in a secure, temperature- and humidity-regulated area by the Panhandle-Plains Historical Museum.</li> <li>Resource management records in the park have not been cataloged.</li> <li>Trends</li> <li>Artifacts and archives from the parks will continue to be curated by the Panhandle-Plains Historical Museum.</li> <li>Some of the original artifacts will be displayed in the new Alibates exhibits.</li> </ul>
Threats and Opportunities	<ul> <li>Threats</li> <li>Lack of funding could hamper the Panhandle-Plains Historical Museum's ability to catalogue and curate the parks' artifacts.</li> <li>Change of management at either the Panhandle-Plains Historical Museum or the parks could impact the agreement between the two entities.</li> <li>Opportunities</li> <li>Enhance information exchange between researchers, park staff, and the public.</li> </ul>
Existing Information About the Resource or Value	<ul> <li>Various books located in park bookstore and park library.</li> <li>Park brochures and site bulletins.</li> <li>Online information.</li> <li>Documents and photos located at Panhandle-Plains Historical Museum.</li> <li>Archeological assessment of all documented archaeological sites. This document makes comparing the various numbering schemes possible.</li> </ul>
Data and/or GIS Needs	<ul> <li>Plot various artifacts on the archeological sites map, showing where they were discovered. This correlation may provide clues to artifact usage during the Antelope Creek phase.</li> <li>A project to complete the cataloging of archival material is scheduled for Fiscal Year 2015.</li> </ul>
Planning Needs	None identified.

Fundamental Resource or Value	Museum Collection (Alibates Flint Quarries National Monument Only)
Laws, Executive Orders, and Regulations that Apply to the FRV, and NPS Policy-level Guidance	<ul> <li>Laws, Executive Orders, and Regulations that Apply to the FRV</li> <li>The Antiquities Act of 1906</li> <li>Historic Sites, Buildings, and Antiquities Act of 1935</li> <li>National Historic Preservation Act of 1966, as amended (16 USC 470)</li> <li>American Indian Religious Freedom Act of 1978</li> <li>Archaeological Resources Protection Act of 1979</li> <li>Museum Act of 1955, as amended</li> <li>Native American Graves Protection and Repatriation Act of 1990</li> <li>Executive Order 11593, "Protection and Enhancement of the Cultural Environment"</li> <li>Executive Order 13007, "Indian Sacred Sites"</li> <li>Secretarial Order 3289, "Addressing the Impacts of Climate Change on America's Water, Land, and Other Natural and Cultural Resources"</li> <li>36 CFR 79 "Curation of Archeological Collections"</li> <li>36 CFR 800 "Protection of Historic Properties"</li> <li>The Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation</li> <li>Programmatic Agreement among the National Park Service, Advisory Council on Historic Preservation, and the National Conference of State Historic Preservation Officers (2008)</li> </ul>
	<ul> <li>NPS Policy-level Guidance (NPS Management Policies 2006 and Director's Orders)</li> <li>NPS Management Policies 2006 (chapter 5)</li> <li>NPS Museum Handbook, parts I, II, and III</li> <li>Director's Order 24: Museum Collections</li> <li>Director's Order 28: Cultural Resource Management (1998)</li> <li>Director's Order 28A: Archeology (2004)</li> </ul>

## **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 resources and values. For example, a key issue may pertain to the potential for a fundamental resource or value in a park to be detrimentally affected by discretionary management decisions. A key issue may also address crucial questions not directly related to purpose and significance, but still indirectly affects them. Usually a key issue is one that a future planning effort or data collection needs to address and requires a decision by NPS managers.

There are two key issues that the parks are working to address:

**Drought and water-based recreation.** Lake Meredith was created as a drinking water storage reservoir and by law this is its priority purpose. The National Park Service manages other uses on Lake Meredith. Within the national recreation area, the lake is used primarily for water-based recreation, providing opportunities for activities that include fishing, boating, waterskiing, sailing, scuba diving, and swimming. Land-based recreation also occurs, but much of this is associated with the lake, including campgrounds near or overlooking the reservoir and hunting for waterfowl on or near shallow waters in the upper part of the lake.

A drought in the Canadian River drainage and much of Texas began around 2001, and since then, the water level in Lake Meredith has dropped to less than 1% of the available storage capacity. Data from the long-term weather station in Stratford, Texas, helps researchers project that the region will continue to become warmer and dryer. This projected change in climate will mean a decrease in water resources, both surface water and groundwater. Because recreation at Lake Meredith National Recreation Area is so strongly tied to the lake, in addition to the rising costs of boats and fuel, visitation decreased by about 40% as the lake levels dropped. In discussions with park staff, some visitors indicated that activities not tied to the lake are limited and that they probably would continue to visit the park if there were other recreational opportunities. A warming climate may necessitate innovations to continue to accommodate visitors (e.g., installation of shade structures, education on the changing climate and sustainability, and alternative water supplies).

Additionally, drought in the area is also linked to an increase in nonnative species; decline of cottonwood trees; general stressing of native vegetation, bird, and mammal species; and an increased potential for wildland fire activity.

Planning needs to address this issue include the visitor use management plan; commercial visitor services plan; trail system management plan; terrestrial and aquatic invasive species plans; resource stewardship strategy; and natural resource condition assessment. Additionally, climate change considerations will be integrated into the process for park planning and management to bring appropriate climate change adaptation into planning and management documents.

Data needs to address this issue include monitoring drought conditions and vegetation patterns; nonnative plant survey; and Bio Blitz documentation of flora and fauna.

Relevance of the parks to the public. Lake Meredith National Recreation Area and Alibates Flint Quarries National Monument are struggling to find ways to connect with the changing demographics of the communities in their area as well as visitors from all over the world, particularly younger people. Due to the stressed economy, more residents of local communities are staying closer to home and visiting the park since it is in their own backyard. The parks strive to continue to provide opportunities to accommodate the way that different visitors use the park, whether as a day-use or overnight destination, a single family to large extended family outing, water- to land-based recreation, hands-on to virtual experiences.

Planning needs to address this issue include the visitor use management plan; commercial visitor services plan; trail system management plan; site plan to improve camping sites in McBride Canyon and RV campsites at Sanford-Yake, Bates Canyon, and Fritch Fortress; siting study and construction plan for new consolidated headquarters, visitor contact station, and operations facility; and an updated comprehensive interpretive plan.

# **Planning and Data Needs**

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

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

## Planning Needs – Where a Decision-making Process Is Needed

Related to an FRV?	Related to LAMR, ALFL, or both?	Planning Need	Priority (H, M, L)	Rationale for Need and Priority
Public Land, Recreation Opportunities	LAMR	Commercial visitor services plan H		Needed to implement other activities, as appropriate.
Public Land, Recreation Opportunities	LAMR	Site plan to improve and delineate camping sites in McBride Canyon	Н	Changing visitation pattern to the area and changing visitor experience; protecting resources from current risks.
Public Land, Recreation Opportunities, Geology, Diverse Habitats	LAMR	Trail system management plan for the entire national recreation area	Н	Monitoring of trails for resource protection and defining management actions, including closure, with monitoring for success.
Public Land, Recreation Opportunities	LAMR	Siting study for the new consolidated headquarters, visitor contact station, and operations facility in the national recreation area	Н	High level of safety and efficiency concerns for constructing new infrastructure.
Public Land, Recreation Opportunities	LAMR	Construction plan for the new consolidated headquarters, visitor contact station, and operations facility in the national recreation area		High level of safety and efficiency concerns for constructing new infrastructure.
Public Land, Recreation Opportunities	LAMR	Fee plan, which would include determination of appropriate fees, for the new RV campground at Bates Canyon, RV sites at Fritch Fortress, Sanford-Yake	Н	Parkwide amenity fee study to provide more services to visitors.
Public Land, Recreation Opportunities	LAMR	Complete plans necessary to develop outdoor interpretive materials focusing on an Antelope Creek-style ruin outside of the Alibates Flint Quarry National Monument visitor contact station	Н	A year-round educational tool that helps develop visitor interest in those people who harvested Alibates Flint. Close proximity to the visitor center will make it accessible to more visitors. This will be located within Lake Meredith National Recreation Area, but will interpret the resources of Alibates Flint Quarries National Monument.
Sites and Artifacts, Ruin Site	ALFL	Update the comprehensive interpretive plan to address information technologies opportunities and increased outreach education and interpretation	Н	Draw more interest in the parks by addressing a new diverse demographic. Development of waysides, site bulletins, podcasts, etc. could be considered as an alternative method of allowing visitors to learn about cultural sites and artifacts.

Related to an FRV?	Related to LAMR, ALFL, or both?	Planning Need	Priority (H, M, L)	Rationale for Need and Priority
Flint	ALFL	Plan for archeological excavation of a quarry pit	Н	Plans are being developed for the archeological excavation of a quarry pit near the Alibates trail, which would increase interpretive opportunities for park visitors and help them understand and appreciate the resource.
Sites and Artifacts, Quarries, Ruin Site	Both	Cultural resources management plan	Н	Resources are currently at risk; this plan would incorporate long-term preservation of petroglyphs, ruins, quarries, and Alibates flint.
Diverse Habitats	Both	Terrestrial invasive species plan	Н	Resources are currently at risk and with receding lake levels, invasive species are increasing.
Sites and Artifacts, Flint	Both	Visitor use management plan	Н	Manage visitor use to protect resources and reduce visitor use conflicts.
Public Land, Recreation Opportunities	LAMR	Site plan for RV campsites – Sanford-Yake, Bates Canyon, and Fritch Fortress	Н	Visitors to the park are requesting additional services for RVs.
Public Land, Recreation Opportunities, Geology, Diverse Habitats	Both	Natural resource condition assessment	Н	This plan would be completed prior to the resource stewardship strategy. (Funded—will be completed in 2015)
Public Land, Recreation Opportunities, Geology, Diverse Habitats	Both	Road consolidation plan	М	Restoration and development concept plan to reduce the dirt road network within the national recreation area; this plan would help reduce impacts on resources and improve habitats.
Recreation Opportunities	LAMR	Restoration plan to open the McBride Ranch House for guided tours during special events	М	Improve visitor experience of a historic feature.
Recreation Opportunities	LAMR	Siting study to determine appropriate locations for camping on the west side of the national recreation area	Ĺ	Protect resources by reducing visitor impacts with designated camp sites.
Sites and Artifacts, Flint	Both	Land protection plan	L	Protect park resources. Previous land acquisition plans should be reviewed and possibly updated.
Diverse Habitats, Public Lands, Geology, Sites and Artifacts	Both	Resource stewardship strategy	L	This plan would be completed following completion of the natural resources condition assessment.
Diverse Habitats	LAMR	Aquatic invasive species plan	L	Protection of resources from possible long-term threat.

Related to an FRV?	Related to LAMR, ALFL, or both?	Planning Need	Priority (H, M, L)	Rationale for Need and Priority
Sites and Artifacts, Flint, Scientific Research	ALFL	Plan to excavate around ruins site	L	Desired research list.

## Data Needs – Where Information Is Needed Before Decisions Can Be Made

Related to an FRV?	Related to LAMR, ALFL, or both?	Data and GIS Needs	Priority (H, M, L)	Rationale for Need and Priority
Sites and Artifacts, Quarries, Ruin Site	Both	Photo documentation / GIS / LIDAR of cultural sites, quarries, and petroglyphs	Н	Sites and petroglyphs need to be fully documented and plotted using GIS and other means before they disappear.
Diverse Habitats, Recreation Opportunities	LAMR	Locate (georeference) sites within the park that need to be cleaned up (e.g., old oil and gas pads, dump sites, carbon black plant) and prepare plan to recover / remove / remediate the sites	Н	These sites are visual eyesores that affect the visitor experience of the park.
Public Land	Both	Cadastral survey of the boundary	Н	Increase operational efficiency and protect park resources.
Public Land	LAMR	To protect park GIS data, all needs to be organized and copies stored at the regional office	Н	Increase park efficiency and protect park data.
Recreation Opportunities	LAMR	Monitor drought conditions and changes in vegetation patterns	Н	Increase park efficiency and protect park data.
Diverse Habitats	Both	Nonnative plant survey	Н	Increase park efficiency and protect park resources.
Sites and Artifacts, Scientific Research	Both	Create and maintain a database on the weathering and deterioration of the petroglyphs and the ruin site	Н	Opportunity for research.
Scientific Research	ALFL	Cataloging archival material	Н	Consistent with "NPS-28, Cultural Resource Management Guideline"
Scientific Research	ALFL	Study to determine the boundaries/edges of the Alibates flint formation	М	Increase knowledge base.
Recreation Opportunities	Both	Complete viewshed analysis (from inside park looking out)	М	Improve the visitor experience.

Related to an FRV?	Related to LAMR, ALFL, or both?	Data and GIS Needs	Priority (H, M, L)	Rationale for Need and Priority
Public Lands, Scientific Research, Geology, Flint, Quarries	Both	LIDAR mapping of terrain	М	Use for ORV areas, as well as archeological sites at Alibates Flint Quarries National Monument.
Scientific Research	ALFL	Archeological testing and/or excavations at the ruins site	М	Increase knowledge base.
Scientific Research	ALFL	Georeferencing artifacts to ascertain usage of particular sites (Antelope Creek phase)	L	Desired research list.
Scientific Research	ALFL	Research regarding experimental archeology to determine quarrying techniques	L	Desired research list.
Diverse Habitats	Both	Bio Blitz documentation of flora and fauna in the parks	L	Increase knowledge base.
Scientific Research	ALFL	Statistical data from the quarries should be recorded so that as much information as possible is preserved	L	Increase knowledge base.



## **Part 3: Contributors**

# Lake Meredith National Recreation Area Alibates Flint Quarries National Monument

Robert Maguire, Superintendent

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Roceythia Pollard, Administrative Officer

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# **Intermountain Region**

Skip Meehan, Planning Liaison

### **Other NPS Staff**

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# **Appendixes**

# **Appendix A:**

# **Enabling Legislation and Legislative Acts for Lake Meredith National Recreation Area**

Three pieces of legislation, described below, resulted in the establishment of Lake Meredith National Recreation Area. The initial legislation relating to the site that would become Lake Meredith National Recreation Area was the 1950 authorization by Congress, in Public Law 81-898, of the Canadian River reclamation project. The project was "for the purposes of irrigating land, delivering water for industrial and municipal use, controlling floods, providing recreation and fish and wildlife benefits, and controlling and catching silt."

By 1964, construction of the dam was underway and the lake, then known as Sanford Reservoir, would soon start filling. That year, Congress passed Public Law 88-536, which provided for the establishment and administration of "basic public outdoor recreational facilities" around the reservoir. The law charged the Secretary of the Interior to acquire "such adjacent lands or interests therein as are necessary for present or future public recreation use, and to provide for the public use and enjoyment of project lands, facilities, and water areas in a manner coordinated with other project purposes."

Public Law 101-628, passed by Congress on November 28, 1990, established Lake Meredith National Recreation Area as a unit of the national park system. Except as described below, the federal lands, waters, and interests within the recreation area were transferred to the National Park Service. The Bureau of Reclamation was to continue in its role of "operation, maintenance, and replacement of the Canadian River Project facilities and its purposes of providing for municipal and industrial water supply and flood control." Congress reiterated the primacy of the lake's water supply function, stating that, "Nothing in this Act shall be construed to affect or interfere with . . . the Act of December 29, 1950 . . . to operate Sanford Dam and Lake Meredith in accordance with and for the purposes set forth in that Act."



Public Law 101-628, Enabling Legislation for Lake Meredith National Recreation Area, 1990.

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NATIONAL RECREATION AREAS

#### 8. Lake Meredith

104 STAT, 4469

PUBLIC LAW 101-628-NOV. 28, 1990

Public Law 101-628 101st Congress

#### An Act

Nov. 28, 1990 [H.R. 2570]

To provide for the designation of certain public lands as wilderness in the State of Arizona.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

104 STAT. 4492 Natural resources.

TITLE V-NATIONAL PARK SYSTEM UNITS IN TEXAS

16 USC 460eee.

104 STAT, 4493

SEC. 502. LAKE MEREDITH NATIONAL RECREATION AREA

(a) ESTABLISHMENT.—In order to provide for public outdoor recreation use and enjoyment of the lands and waters associated with Lake Meredith in the State of Texas, and to protect the scenic. scientific, cultural, and other values contributing to the public enjoyment of such lands and waters, there is hereby established the Lake Meredith National Recreation Area (hereafter in this Act referred to as the "recreation area").

(b) AREA INCLUDED.—The recreation area shall consist of the lands, waters, and interests therein within the area generally depicted on the map entitled "Lake Meredith National Recreation Area Boundary Map, 'Fee-Take Line'", numbered SWRO–80,023–A, and dated September 1990. The map shall be on file and available for public inspection in the offices of the National Park Service, Department of the Interior. The Secretary of the Interior (hereafter in this Act referred to as the "Secretary") may from time to time

make minor revisions in the boundary of the recreation area.

(c) TRANSFER.—(1) Except as provided in paragraph (2), the Federal lands, waters, and interests therein within the recreation

area are hereby transferred to the National Park Service.
(2) Those lands depicted on the map referred to in subsection (b) that are necessary for the continued operation, maintenance, and replacement of the Canadian River Project facilities and its purposes of providing for municipal and industrial water supply and flood control shall remain under the jurisdiction of the Bureau of Reclamation.

16 USC 460eee-1. SEC. 503. ADMINISTRATION.

(a) IN GENERAL.—The Secretary shall administer the recreation area in accordance with this Act and the provisions of law generally applicable to units of the national park system, including the Act entitled "An Act to establish a National Park Service, and for other purposes", approved August 25, 1916 (39 Stat. 535; 16 U.S.C. 1, 2-4),

#### PUBLIC LAW 101-628-NOV. 28, 1990

104 STAT. 4493

and the Act of August 7, 1946 (60 Stat. 885). In the administration of such recreation area, the Secretary may utilize such statutory authority as may be available to him for the protection of natural and cultural resources as he deems necessary to carry out the purposes of this Act.

(b) OPERATION OF CANADIAN RIVER PROJECT.—Nothing in this Act shall be construed to affect or interfere with the authority of the Secretary under the Act of December 29, 1950 (Public Law 81–898; 43 U.S.C. 600b et seq.), to operate Sanford Dam and Lake Meredith in accordance with and for the purposes set forth in that Act.

(c) LAND ACQUISITION.—Within the boundary of the recreation area, the Secretary may acquire lands and interests in lands by purchase with donated or appropriated funds, exchange, or transfer without reimbursement from any Federal agency.

(d) CULTURAL RESOURCES.—The Secretary shall conduct a survey of the cultural resources in the immediate vicinity of the recreation area. The Secretary is authorized to enter into cooperative agreements with public or private entities, including landowners, for the purpose of conducting the survey required by this subsection. Not later than three years after the date on which funds have been made available, the Secretary shall submit a report to the Committee on Interior and Insular Affairs of the House of Representatives and the Committee on Energy and Natural Resources of the Senate on the results of the survey required by this subsection.

(e) HUNTING AND FISHING.—(1) The Secretary shall permit hunting and fishing on lands and waters under the Secretary's jurisdiction within the recreation area in accordance with applicable Federal and State law. The Secretary may designate zones where, and establish periods when, hunting or fishing will not be permitted for reasons of public safety, administration, fish and wildlife management, or public use and enjoyment.

(2) Except in emergencies any regulations issued by the Secretary under this subsection shall be put into effect only after consultation with the appropriate State agencies responsible for hunting and fishing activities.

(f) COOPERATIVE AGREEMENTS.—For purposes of administering the recreation area, the Secretary may enter into cooperative agreements with any Federal agency, the State of Texas, or any political subdivision thereof, including the Canadian River Municipal Water Authority, for the rendering, on a reimbursable basis, of rescue, firefighting, law enforcement, fire preventive assistance, and other needs. The Secretary may enter into a cooperative agreement with the city of Fritch, Texas, to develop and operate a joint venture information center. Federal funds may be expended on non-Federal lands and improvements through cooperative agreements for the purpose of this section on a 50–50 matching basis.

SEC. 504. AUTHORIZATION OF APPROPRIATIONS.

Act.

There are authorized to be appropriated such sums as may be necessary to carry out the purposes of sections 502 and 503 of this

Approved November 28, 1990.

Reports.

104 STAT, 4494

16 USC 460eee-2.

Public Law 88-536, Establishment of Recreational Facilities at Sanford Reservoir Area, Texas, 1964.

Public Law 88-536

August 31, 1964 [H. R. 8135] AN ACT

To provide for the establishment and administration of public recreational facilities at the Sanford Reservoir area, Canadian River project, Texas, and for other purposes.

Texas.
Sanford Reservoir area, recreational facilities.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the Secretary of the Interior is hereby authorized to investigate, plan, construct, operate and maintain, or otherwise provide for basic public outdoor recreation facilities at the Sanford Reservoir area, Canadian Federal reclamation project, to acquire or otherwise include within the project area such adjacent lands or interests therein as are necessary for present or future public recreation use, and to provide for the public use and enjoyment of project lands, facilities, and water areas in a manner coordinated with other project purposes: Provided, That this Act shall not provide the Secretary with a basis for allocation to recreation of water, reservoir capacity, or joint project costs of the Canadian River project nor affect the priority for municipal use of water stored in Sanford Reservoir, or the priority of use for municipal purposes of the capacity of said reservoir. The Secretary is authorized to enter into agreements with Federal agencies or State or local public bodies for the operation, maintenance, or additional development of project lands or facilities, or to dispose of project lands or facilities to Federal agencies or State or local public bodies by lease, transfer, conveyance or exchange upon such terms and conditions as will best promote the development and operation of such lands or facilities in the public interest for recreation purposes. The cost of providing basic recreation facilities shall be nonreimbursable. In carrying out the aforesaid activities the Secretary shall take cognizance of the effect of the fish and wildlife plan approved by the President December 19, 1962, pursuant to the Act of December 29, 1950 (64 Stat. 1124) in providing facilities at the Canadian River project which have general recreation

Operation, maintenance, etc.; agreements.

43 USC 600b, 600c.

Appropriation.

SEC. 2. There are authorized to be appropriated such amounts, but not more than \$1,100,000, as may be necessary for the investigation, preparation of plans, construction and acquisition of lands authorized in this Act.



Approved August 31, 1964.

# **Appendix B:**

# **Enabling Legislation and Legislative Acts for Alibates Flint Quarries National Monument**

Enabling legislation for Alibates Flint Quarries National Monument is provided in Public Law 89-154, passed August 31, 1965. This NPS unit was designated "Alibates Flint Quarries and Texas Panhandle Pueblo Culture National Monument." The legislation included the requirements that it should be administered, protected, and developed subject to the Organic Act of 1916 (16 USC 1) and Historic Sites Act of 1935 (Public Law 74-292).

On November 10, 1978, Public Law 95-625 clarified the boundaries of the national monument through reference to a map, allowing minor boundary adjustments by the Secretary of the Interior. It also renamed this NPS unit "Alibates Flint Quarries National Monument."

Public Law 95-625, Alibates Flint Quarries and Texas Panhandle Pueblo Culture, 1978.

#### **PUBLIC LAW 95-625**

**November 10, 1978** 

#### 2. Alibates Flint Quarries and Texas Panhandle Pueblo Culture

An Act to authorize additional appropriations for the acquisition of lands and interests in lands within the Sawtooth National Recreation Area in Idaho. (92 Stat. 3467) (P.L. 95-625)

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

#### TITLE III - ALIBATES FLINT QUARRIES AND TEXAS PANHANDLE PUEBLO CULTURE NATIONAL MONUMENT

- SEC. 321. (a) The first section of the Act of August 31, 1965 (79 Stat. 587) is amended by adding at the end thereof the following: "The national monument shall comprise the area generally depicted on the map entitled 'Boundary Map Alibates Flint Quarries', numbered 432-80,021, and dated November 1976. Minor boundary adjustments may be made from time to time by the Secretary."
- (b) Section 3 of such Act is amended by deleting "\$260,000" and inserting "\$4,291,000" in lieu thereof.
- (c) The Act of August 31, 1965 (79 Stat. 587) is hereby amended to redesignate the Alibates Flint Quarries and Texas Panhandle Pueblo Culture National Monument as the Alibates Flint Quarries National Monument.

Approved November 10, 1978

Public Law 89-154, Enabling Legislation for Alibates Flint Quarries National Monument, 1965.

# Enabling Legislation for Alibates Flint Quarries National Monument Public Law 89-154

PUBLIC LAW 89-154 79 Stat. 587 August 31, 1965

2. Alibates Flint Quarries and Texas Panhandle Pueblo Culture

An Act to authorize the establishment of the Alibates Flint Quarries and Texas Panhandle Pueblo Culture National Monument. (79 Stat. 587)

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled. That the Secretary of the Interior may designate, acquire and administer as a national monument lands and interests in lands comprising the Alibates Flint Quarries and the Texas Panhandle Pueblo Culture sites, together with any structures and improvements thereon, located in and around Potter County, Texas.

SEC. 2.(a) The property acquired under the provisions of the first section of this Act shall be set aside as a national monument for the benefit and enjoyment of the people of the United States and shall be designated as the Alibates Flint Quarries and Texas Panhandle Pueblo Culture national Monument. The Secretary of the Interior shall administer, protect, and develop such monument, subject to the provisions of the Act entitled "An Act to establish a National Park Service, and for other purposes", approved August 25, 1916, as amended and supplemented, and the Act entitled "An Act to provide for the preservation of historic American sites, buildings, objects, and antiquities of national significance, and for other purposes", approved August 21, 1935, as amended.

(b) In order to provide for the proper development and maintenance of such national monuments, the Secretary of the Interior is authorized to construct and maintain therein such markers, buildings, and other improvements, and such facilities for the care and accommodation of visitors, as he may deem necessary.

SEC. 3. There is hereby authorized to be appropriated not to exceed \$5,000 for the acquisition of land and not to exceed \$260,000 for the development of the area.

Approved August 31, 1965.

#### Legislative History

House Report No. 148 (Committee on Interior and Insular Affairs). Senate Report No. 581 (Committee on Interior and Insular Affairs). Congressional Record, Vol. 111 (1965):

Apr. 5: Considered and passed House.

August 16: Considered and passed Senate, amended. August 17: House concurred in Senate amendment.

# Appendix C: Inventory of Administrative Commitments

Name	Agreement Type	Start Date	Expiration Date	Stakeholders	Purpose
Tri-City Youth (TCY) Public Lands Corp.	Cooperative Agreement and Task Agreement	6/02/10	6/02/15	Marvin Dickson (TCY Director)	Task agreement to authorize projects at ALFL/LAMR to promote education, job training, and community involvement.
The Student Conservation Association (SCA)	Cooperative Agreement	Annual		Sarah Miller, (SCA Agreements Coordinator)	Placement of high school or college students and other qualified persons who volunteer thru SCA for training in resources management and conservation programs.  Only task agreement in the cooperative agreement.
San Antonio Missions National Historical Park (SAAN)	Agreement in Principle	9/24/10	9/24/15	Scott Bentley (SAAN Superintendent)	Mutual support for FMSS position located at SAAN.
Dr. Michael Nash and Dr. Dustin Hawley	General Agreement	4/10/12	4/10/17	Dr. Michael Nash and Dr. Dustin Hawley	Establish park's medical directors for the emergency medical technician program.
City of Fritch, Texas	Agreement	4/20/10	4/2015	Calvin Michell (Fire Chief) and Ric Walton (City Manager)	Establish terms and conditions to provide mutual firefighting assistance in and parks and city.
City of Borger, Texas	Agreement	10/30/09	4/2015	Jeff Brain (Mayor of Borger)	Provide public safety and health through municipal police and fire departments as outlined in city protocol or law.  Agreement No. 7542-03-0005
City of Stinnett, Texas	Agreement	7/26/10	7/26/15	Fire Chief, City of Stinnett	Establish terms and conditions under which the parties will provide mutual firefighting assistance in and near the park and city.  Agreement No. 7542-03-0006
Stinnett Fire Department	Agreement	7/20/10	7/26/15	Allan Wells (Fire Chief)	Provide public safety and health through municipal police and fire departments as outlined in city protocol or law.

Name	Agreement Type	Start Date	Expiration Date	Stakeholders	Purpose
Panhandle- Plains Historical Museum (PPHM) under Texas A&M University System	Cooperative Agreement	1/11/11	1/11/16	Guy Van der Pool (PPHM Director)	Provides for the professional care, management, maintenance, and conservation of collections from the parks.  Agreement No.  H7544110001
Hutchinson County, Texas	Agreement	7/26/10	7/26/15	Danny Richards (Fire Chief)	Provide public safety and health through municipal police and fire departments as outlined in city protocol or law.  Agreement No. 7542-03-0007
Hutchinson County, Texas, Sheriff's Office	General Agreement	6/3/13	6/3/18		Establishes the terms and conditions under which the parties will provide mutual law enforcement assistance in and near LAMR.
Moore County, Texas, Sheriff's Office	General Agreement	6/5/13	6/5/18		Establishes the terms and conditions under which the parties will provide mutual law enforcement assistance in and near LAMR.
Potter County, Texas, Sheriff's Office	General Agreement	6/4/13	6/4/18		Establishes the terms and conditions under which the parties will provide mutual law enforcement assistance in and near LAMR.
Bureau of Land Management (BLM), Amarillo Field Office	Memorandum of Understanding	12/15/08	12/15/13	Leslie A. Theiss (Field Manager, Amarillo Field Office, BLM)	Cooperative fire suppression for BLM and NPS lands common to Amarillo Field Office and LAMR. BLM MOU LLNM-0060000- 2009-001 NPS No. G1274090001

Name	Agreement Type	Start Date	Expiration Date	Stakeholders	Purpose
Albuquerque Zone Fire Management Partnership	Memorandum of Understanding	5/10/10	5/10/15	Bureau of Land Management – Rio Puerco Field Office BIA S. Pueblos, Laguna, Zuni Rama Navajo Agencies; National Park Service – LAMR, EI Malpais NM, EI Morro NM, Petroglyph NM, Southern Albuquerque Protection Unit (SALPU); State of New Mexico & U.S. Forest Service – Cibola National Forest and National Grasslands	Operation of a coordinated, interagency fire management program for the Albuquerque Zone Fire Management Area.
Southern Plains Fire Group	Interpark Agreement	5/15/13	5/15/18	LAMR, Chickasaw NRA, Washita Battlefield NHS, Capulin Volcano NM, Sand Creek Massacre NHS, Bent's Old Fort NHS	Define fire management responsibilities of LAMR Fire Management Officer (FMO) and staff from Southern Plains Fire Group.
Western National Parks Association	Cooperating Association (Regional)	2/01/11	2/01/16	Western National Parks Association	Terms of support and assistance to the interpretive, educational, and research activities of the National Park Service.
Friends of LAMR /ALFL	Friends Group	5/30/13	5/30/18	Paul Katz (President, Friends of LAMR /ALFL)	Legal and policy framework for the work done by LAMR/ ALFL and friends groups and to encourage innovation and creativity to meet mutual goals. Agreement G 7540130001
BLM	Interagency Agreement (IAA) L13PG00222	7/01/13	7/01/18	LAMR and BLM	Agreement for LAMR law enforcement to patrol BLM lands adjacent to LAMR one day a pay period.







# Intermountain Region Foundation Document Recommendation Lake Meredith National Recreation Area / Alibates Flint Quarries National Monument

#### April 2014

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

RECOMMENDED

Robert J. Maguire, Superintendent, Lake Meredith NRA / Alibates Flint Quarries NM

Date

APPROVED /

Sue E. Masica, Regional Director, Intermountain 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.

NPS/LAMR/618/124162A

APRIL 2014



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# Foundation Document Lake Meredith National Recreation Area Alibates Flint Quarries National Monument

