



Calico Basin Recreation Area Management Plan and Draft Environmental Assessment



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- A Approved Commercial, Competitive, and Organized Use Permits

ACRONYMS AND ABBREVIATIONS

Full Phrase

BLM	United States Department of the Interior, Bureau of Land Management
Calico Basin	Calico Basin Recreation Area
CFR	Code of Federal Regulations
EA	environmental assessment
EIS	environmental impact statement
EO	executive order
FO	field office
GIS	geographic information system
IDT	interdisciplinary team
MEA	management emphasis area
MRDG	minimum requirement decision guide
NDOW	Nevada Department of Wildlife
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
NLCS	National Landscape Conservation System
NRHP	National Register of Historic Places
OHV	off-highway vehicle
OPLMA	Omnibus Public Land Management Act
PFYC	Potential Fossil Yield Classification
RAMP	recreation area management plan
RMP	resource management plan
ROD	record of decision
ROW	right-of-way
RRCNCA	Red Rock Canyon National Conservation Area
RRHMA	Red Rock Herd Management Area
RRSFO	Red Rock/Sloan Field Office
SRP	special recreation permit
TCP	traditional cultural property
US	United States
USFWS	US Fish and Wildlife Service
VRM	visual resource management

Chapter I. Introduction and Background

I.1 INTRODUCTION

The Bureau of Land Management (BLM) Red Rock/Sloan Field Office (FO) is preparing this recreation area management plan (RAMP) concurrently with an environmental assessment (EA) to guide the agency's overall management of recreation in the Calico Basin, which is in the Red Rock Canyon National Conservation Area (RRCNCA). The RRCNCA is approximately 17 miles west of Las Vegas and is known as the premier outdoor recreation area in the vicinity. The combined EA and RAMP includes the following sections:

- Chapter 1 identifies the project background, context, early planning, and issues for consideration.
- Chapter 2 is the proposed Calico Basin RAMP.
- Chapter 3 describes the monitoring, enforcement, and adaptive management associated with implementing the RAMP.
- Chapter 4 describes the affected environment and analyzes the environmental consequences.
- Chapter 5 documents the BLM's consultation and coordination relative to the RAMP and EA.

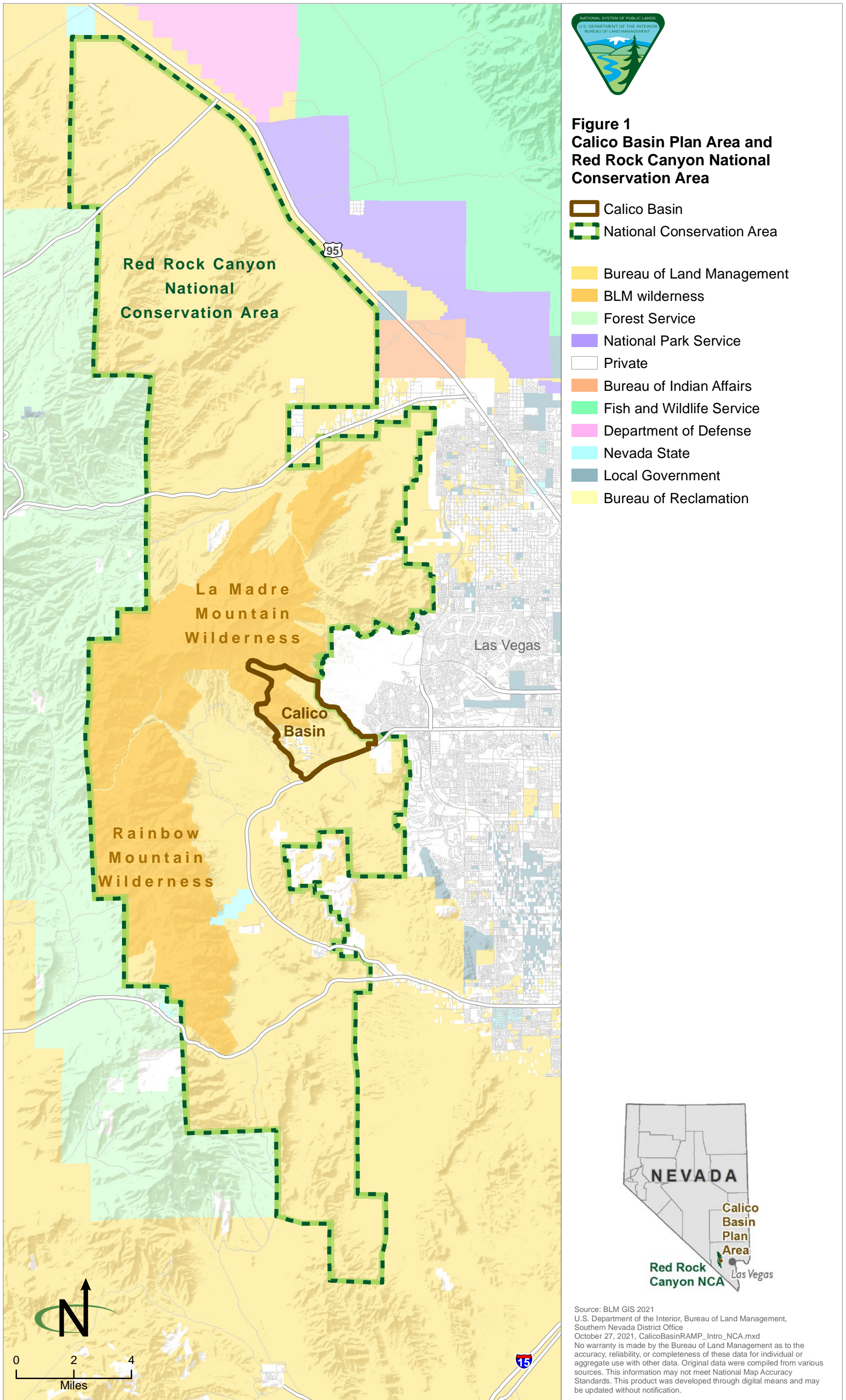
I.2 BACKGROUND AND PLAN AREA

The Calico Basin occupies approximately 5,190 acres within the 201,617-acre RRCNCA. The area is comprised of BLM-administered lands (4,980 acres) and private lands (210 acres). Approximately 1,660 acres in the northwest portion of the Calico Basin are within the La Madre Mountain Wilderness (see **Figure 1**). The Calico Basin is accessible from State Route 159 via Calico Basin Road. Typical recreation includes, but is not limited to, hiking, rock climbing, horseback riding, picnicking, viewing of archaeological and cultural sites, and photography. The Red Spring Boardwalk provides a small platform for events and educational outings. This area is popular for group events, particularly wedding ceremonies, which increased more than 200 percent from 2019 to 2020.

The Calico Basin is surrounded by BLM-administered lands and is part of the congressionally designated RRCNCA. Inholdings within the Calico Basin consist of approximately 40 private residential homes, 80 residents, and various county, state, and private land use authorizations; all of these authorizations hold rights-of-way (ROWs) from the BLM and serve the private residents (see **Figure 2**). The area is home to several rare and protected species of plants and animals, including alkali mariposa lily (*Calochortus striatus*), white bear poppy (*Arctomecon merriamii*), desert tortoise (*Gopherus agassizii*), Gila monster (*Heloderma suspectum*), and Spring Mountains springsnail (*Pyrgulopsis deaconi*). Cultural resources and sites include petroglyphs, roasting pits, and historic homesteads.

- The RRCNCA, including the Calico Basin, is experiencing a rapidly growing demand for outdoor recreation. The RRCNCA is the most visited national conservation area in the nation, with over 3.5 million visitors in 2020. Visitation in the RRCNCA is projected to exceed 4 million visitors by 2022 and 5 million by 2024. In 2019, approximately 700,000 people visited the Calico Basin. By 2024, the BLM expects visitation to the Calico Basin to reach 1 million people (BLM 2021a). Demand for recreation at the Calico Basin and other areas in the RRCNCA is largely the result of population growth in nearby Las Vegas.

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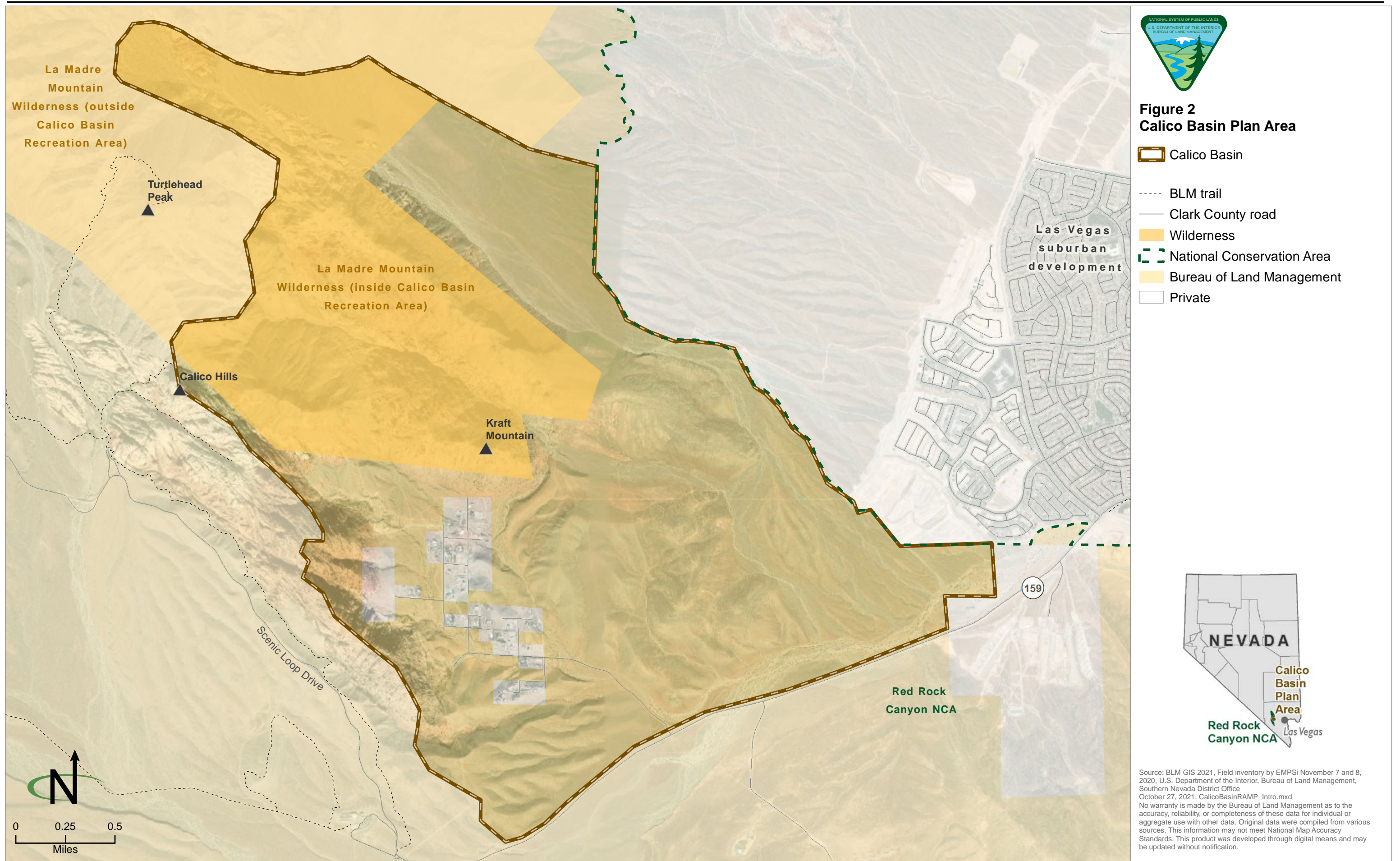


Figure 2
Calico Basin Plan Area

- Calico Basin
- BLM trail
- Clark County road
- Wilderness
- National Conservation Area
- Bureau of Land Management
- Private



Source: BLM GIS 2021, Field inventory by EMPSI November 7 and 8, 2020, U.S. Department of the Interior, Bureau of Land Management, Southern Nevada District Office
 October 27, 2021, CalicoBasinRAMP_Intro.mxd
 No warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data for individual or aggregate use with other data. Original data were compiled from various sources. This information may not meet National Map Accuracy Standards. This product was developed through digital means and may be updated without notification.

I.3 PURPOSE AND NEED

The BLM's RRCNCA resource management plan (RMP) identifies the Calico Basin as an area with unique recreation opportunities, experiences, and settings. Recreation use in the Calico Basin has increased by 30–35 percent in the past decade, with current use at 700,000 visitors annually. With the expanding population in Las Vegas, increasing trends in tourism and visitation to the RRCNCA, and the proximity of the Calico Basin to metropolitan Las Vegas, the Calico Basin is expected to continue to see significant increases in visitation.

The Calico Basin management plan and EA, signed in 2003, no longer provide adequate guidance to address the resource impacts and operational issues now facing Red Rock Canyon management for the Calico Basin. Current recreation management actions in the Calico Basin are taking place without a detailed, long-term comprehensive plan in place. The purpose of developing a RAMP for the Calico Basin is to provide coordinated management and identification of necessary facilities and infrastructure to support targeted day-use recreational activities within the area, specifically rock climbing, bouldering, hiking, horseback riding, casual nature viewing, and picnicking or group events, while protecting the scenic, biological, and cultural resources in the area. Providing focused management for these recreation opportunities would reduce impacts on natural and cultural resources while facilitating more desirable recreational experiences and settings for this popular outdoor recreation destination near Las Vegas.

There is a need to provide management systems and recreational infrastructure that will enable the BLM to manage current and anticipated future levels of recreational use in this area, while avoiding, minimizing, or mitigating the potential for recreational user conflicts, resource impacts, and undesirable conditions for the residents of the Calico Basin community and other stakeholders.

I.4 DECISIONS TO BE MADE

The BLM Red Rock/Sloan FO manager would make the decision whether to adopt an alternative or whether to modify the action based on the environmental analysis and any other factors identified during public review of this RAMP/EA and unsigned finding of no significant impact. The decision-maker would make the decision based on the analysis of the issues and how well the alternatives respond to the project's purpose and need.

I.4.1 Decision Factors

When considering an alternative, the decision-maker would consider how the alternatives meet the purpose of and need for the project. Additionally, the decision-maker would:

- Consider how the alternatives contribute to the economics of the regional area and the BLM Red Rock/Sloan FO; and
- Decide whether the analysis reveals a likelihood of significant adverse effects from the selected alternative that cannot be mitigated and if an environmental impact statement (EIS) would be needed.

I.5 RELATIONSHIP TO STATUTES, REGULATIONS, AND OTHER PLANS

I.5.1 Red Rock Canyon National Conservation Area Resource Management Plan

The proposed RAMP/EA is consistent with the management direction in Appendix A of the record of decision (ROD) and approved RMP (April 20, 2005) for the entire RRCNCA; it also conforms to the

regulations or guidance listed below. The goals and objectives for the RRCNCA are described in greater detail below.

The RRCNA RMP provides management guidance for biodiversity, recreation, commercial uses, cultural resources and Native American concerns, air quality, and vegetation. The primary direction for the RMP is to conserve, protect, and enhance the RRCNCA's natural resources. Environmental safeguards adopted in the RMP are designed to provide recreation opportunities, allowing the public to enjoy and appreciate Red Rock Canyon's unique natural setting.

1.5.2 Other Laws, Regulations, Policies, and Plans

In preparing this RAMP/EA, the BLM evaluated the proposed management relative to the following relevant laws, regulations, policies, and plans as they apply to the proposed RAMP.

Laws and Regulations

American Religious Freedom Act—This act protects the rights of Native Americans to exercise their traditional religions by ensuring access to sites, use and possession of sacred objects, and the freedom to worship through ceremonial and traditional rites.

Archaeological Resources Protection Act of 1979—This act protects archaeological resources and sites on federally administered lands. It imposes criminal and civil penalties for removing archaeological items from federal lands without a permit.

Clean Air Act of 1990—This act provides the framework for national, state, and local efforts to protect air quality.

Clean Water Act of 1987—This act establishes objectives to restore and maintain the chemical, physical, and biological integrity of the nation's water.

Endangered Species Act of 1973—This act directs federal agencies to ensure their actions do not jeopardize threatened and endangered species.

Executive Order (EO) 13175—This EO establishes regular and meaningful consultation and collaboration with tribal officials in the development of federal policies that have tribal implications, and it strengthens the United States (US) government-to-government relationships with Indian tribes.

Federal Land Policy and Management Act of 1976—This act provides the basic policy guidance for the BLM's management of public lands.

Federal Land Recreation Enhancement Act—This act authorizes the BLM to charge standard amenity fees in areas or circumstances where a certain level of visitor service is available, and enhanced amenity fees for specialized facilities and services, such as for group activities. The BLM retains the fees primarily for on-site improvements.

Federal Noxious Weed Act (Public Law 93-629, November 28, 1990)—This act provides for the management of undesirable plants on federal lands.

Fish and Wildlife Improvement Act of 1978—This act authorizes the Secretaries of the Interior and Commerce to establish, conduct, and assist with national training programs for state fish and wildlife law enforcement personnel. It also authorizes funding for research and development of new or improved methods to support fish and wildlife law enforcement.

Migratory Bird Act of 1918—This act implements the convention for the protection of migratory birds between the US and Great Britain (acting on behalf of Canada). The statute makes it unlawful without a waiver to pursue, hunt, take, capture, kill, or sell birds listed as migratory birds.

National Environmental Policy Act (NEPA) of 1969—This act requires the preparation of EAs or EISs for federal actions. These documents describe the environmental effects of these actions and determine whether the actions have a significant effect on the human environment.

National Historic Preservation Act (NHPA) 1966, as amended—This act provides for the management, protection, and enhancement of historic properties (that is, those districts, sites, buildings, structures, and objects that are eligible to the National Register of Historic Places), as well as consultation procedures with the local State Historic Preservation Officer or Tribal Historic Preservation Officer, tribes, consulting parties, and the public.

Secretarial Order 3376 on Electronic Bicycles (e-bikes)—On August 29, 2019, the Secretary of the Interior issued Secretarial Order 3376, which states, “This Order is intended to increase recreational opportunities for all Americans, especially those with physical limitations, and to encourage the enjoyment of lands and waters managed by the Department of the Interior (Department). This Order simplifies and unifies regulation of electric bicycles (e-bikes) on Federal lands managed by the Department and decreases regulatory burden.”

Wilderness Act of 1964—This act preserves and protect certain lands “in their natural condition” and thus “secure for present and future generations the benefits of wilderness.” It recognizes the value of preserving “an area where the earth and its community of life are untrammelled by man, where man himself is a visitor who does not remain.”

Clark County Conservation of Public Land and Natural Resources Act of 2002—This act establishes wilderness areas, promotes conservation, improves public land, and provides for high-quality development in Clark County, Nevada, and for other purposes.

Policies

BLM Handbook H-2930-1 (Recreation Permit and Fee Administration)—This handbook provides policy and guidance for administering key elements of the BLM Recreation Fee Program, including special recreation permits (SRPs) and recreation use permits; the National Parks and Federal Recreational Lands Pass Program; and recreational commercial services.

BLM Manual 6220 (National Monuments, National Conservation Areas, and Similar Designations)—This manual provides guidance for BLM management of public lands that are components of the BLM’s National Landscape Conservation System (NLCS) and that have been designated by Congress or the President as national monuments, national conservation areas, and similar designations. The NLCS was established in order to “conserve, protect, and restore nationally significant landscapes that have outstanding cultural, ecological, and scientific values for the benefit of current and future generations.”

BLM Manual 6340 (Management of Designated Wilderness Area)—This manual provides guidance for BLM management of BLM-administered lands that have been designated by Congress as part of the National Wilderness Preservation System. The BLM’s objectives for implementing the policy are to manage BLM wilderness areas to preserve wilderness character, while providing for recreational,

scenic, scientific, educational, conservation, and historic uses, and to manage permitted uses under Sections 4c and 4d of the Wilderness Act of 1964.

BLM Manual 6840 (Special Status Species) - provides policy and guidance for the conservation of BLM special status species and the ecosystems upon which they depend on BLM-administered lands. The manual defines BLM special status species as: (1) species listed or proposed for listing under the Endangered Species Act, and (2) species requiring special management consideration to promote their conservation and reduce the likelihood and need for future listing under the Endangered Species Act, which are designated as Bureau sensitive by the State Director.

BLM Manual 8320 (Planning for Recreation and Visitor Services)—This manual provides policy, direction, and guidance for planning for recreation resources as part of the land use planning process required under BLM Manual 1601 (Land Use Planning). The BLM’s recreation planning process is an outcome-focused management approach that stresses the management of recreation settings to provide opportunities that allow visitors and local communities to achieve a desired set of individual, social, economic, and environmental benefits. Planning for recreation resources focuses on fulfilling the BLM’s mission to sustain the health, diversity, and productivity of the public lands for the use and enjoyment of present and future generations. While the Calico Basin RAMP does not apply an outcome-focused management approach, it incorporates many of the recreation planning concepts from this manual.

BLM Handbook H-8320-I (Planning for Recreation and Visitor Services)—This handbook aids in the planning and management of recreation and visitor services on public lands and adjacent waters. This handbook provides planning guidance at the land use plan and implementation level, and also supports the policies in BLM Manual 8320 (Planning for Recreation and Visitor Services). While the Calico Basin RAMP does not apply an outcome-focused management approach, it incorporates many of the recreation planning concepts from this handbook.

Plans

Clark County Comprehensive Master Plan—This plan is the long-term, general policy plan for the physical development of unincorporated Clark County, satisfying the requirements of Nevada Revised Statutes 278.160. The plan is a living document, and its elements are updated according to the planning process.

La Madre Mountain Wilderness and Rainbow Mountain Wilderness Management Plan—This plan provides specific, updated, and consistent management direction for the La Madre Mountain and Rainbow Mountain Wildernesses, which are situated on federal public lands managed by the US Forest Service and the BLM.

1.6 EARLY PLANNING AND INFORMATION GATHERING

The BLM completed a variety of early planning and information gathering—both internal and external—for the Calico Basin RAMP/EA. This included a meeting with the BLM interdisciplinary team (IDT) on November 18, 2020, wherein the IDT was briefed on the proposed action, purpose and need, and overall goals for the RAMP/EA. Based on this meeting, the BLM IDT developed preliminary issues of concern and relevant data needs that helped inform the RAMP/EA and public outreach. The BLM completed public outreach as part of the early planning and information gathering comment period that ran from February 23 to March 25, 2021. The BLM conducted this public comment period to identify issues to be addressed and to help determine the appropriate scope of the NEPA analyses.

During the public comment period, the BLM published a project website (<https://www.virtualpublicmeeting.com/calicobasinramp>) to provide project context for the public. The BLM also held two virtual meetings with stakeholders on March 8 and 9, and conducted a virtual meeting with the public on March 11, 2021. During these meetings, the BLM presented an overview of the proposed RAMP/EA and requested input. To summarize the comments received during the 30-day comment period, the BLM developed a comment report (BLM 2021a) for the public with early planning and information gathering. The comment report identified preliminary issues that the BLM used to help formulate a reasonable range of alternatives and the scope of analyses for the EA, which are discussed in **Section 1.6.1**, below.

1.6.1 Preliminary Issues Identified during Early Planning

Topic 1—Recreation Use

- The BLM should determine if mountain biking should be allowed in the plan area. If so, on which trails should it be allowed?
- The BLM needs to determine how the RAMP will manage climbing. Will there be designated climbing areas?
- The BLM should determine if the plan will identify additional recreation infrastructure.

Topic 2—Fees and Administration

- The BLM needs to determine whether it will implement a fee collection system and controlled entry for visitor use in the Calico Basin via a defined fee area and the installation of a fee booth.
- The BLM should consider transferring the road ROWs providing access to key BLM recreation sites in the plan area from Clark County to the BLM. If those ROWs are transferred, how will the BLM manage them?
- The BLM should conduct in-depth tribal consultation given the fee area/controlled access to be put into place. Through consultation, establish whether the tribes will/do use any areas within the RAMP for purposes outlined in the American Indian Religious Freedom Act.

Topic 3—Biological Resources

- The BLM should analyze some potential minor adjustments to the Red Spring area, as it has springsnail, a BLM sensitive species. Adjustments would address soil compaction and sedimentation from visitors trampling on the sides of the spring.
- The BLM should attempt to increase plant diversity in the Red Spring riparian area by continuing treatments to Russian olive and other invasive plants.
- The BLM should include management to respond to newly listed or petitioned federal or state endangered species, particularly a newly described species of sunflower known from Calico Spring.
- The BLM should determine impacts from increased recreation on the following sensitive plant species in the plan area: Spring Mountain milkvetch (*Astragalus remotus*), white bear poppy, big root blue-eyed grass (*Sisyrinchium radicum*), pinto beardtongue (*Penstemon bicolor*), and alkali mariposa lily.
- The BLM should address the impacts of increased recreation on the spread of invasive and noxious weeds, primarily red brome and Sahara mustard, in the plan area.

Topic 4—Cultural and Paleontological Resources

- The area has an incredibly significant and dense collection of pre-contact and historic sites. These sites are in constant threat of being adversely impacted by current and future unfettered access by the public. How will the RAMP better manage, preserve, and protect the sites?
- There are known paleontological resources in the plan area. How will the plan ensure the protection of these resources?

Topic 5—Soils and Hydrology, Including Riparian Areas

- The BLM should pay special attention to several springs and riparian areas in the plan area, particularly Red Spring, Ash Spring, and Calico Spring, as well as any unknown or unnamed springs.
- Ash Spring has a network of social trails¹ crisscrossing through the spring and wash. These trails are affecting the riparian vegetation in places. The BLM should reroute or consolidate trails in this area to potentially help address those impacts.

Topic 6—Wilderness Areas

- The RAMP also will need to comply with the Wilderness Act of 1964. This is because the La Madre Mountain Wilderness is within the Calico Basin plan area. It appears a mountain bike was illegally ridden inside of the La Madre Mountain Wilderness. This is a prohibited wilderness use inside of wilderness. This demonstrates how the BLM needs to address management of this area in the RAMP.
- The BLM should not recommend retaining the mountain bike trails that are leading to the Brownstone Canyon portion of the La Madre Mountain Wilderness. The trails in that area come all the way to the wilderness boundary; retaining them makes it difficult for the BLM to adhere to its congressional mandate of preserving wilderness character.
- The BLM should address access to the Brownstone Canyon. It appears the land is private property up to the Calico Basin plan area boundary.
- The BLM has a wilderness management handbook (Manual 6340 [BLM 2012]) and must follow the law outlined in the Wilderness Act.
- The BLM needs to determine whether this RAMP will address climbing bolts in wilderness.

1.7 INTERDISCIPLINARY TEAM AND REFINED RAMP ISSUES

Following the early planning and information gathering process, the BLM IDT conducted an internal process to identify management considerations and potential goals or strategies for the RAMP. This process resulted in a further refinement of the preliminary issues for the RAMP that synthesized input from the public, stakeholders, and the IDT. The BLM is using the three issues below to structure the proposed RAMP (**Section 2.1**) and focus the analyses of environmental consequences in **Section 3.3**.

- **Issue 1: Recreational uses, experiences, and setting.** What recreation uses should be allowed within the Calico Basin and how should the BLM manage those uses?
- **Issue 2: Fees, administration, and infrastructure.** How would a reservation system for visitor use help the BLM manage increasing visitation to the Calico Basin, and how would a fee

¹ Undesignated trails created by foot traffic and subsequent soil erosion.

collection system contribute to infrastructure or facilities management and enforcement in the Calico Basin?

- **Issue 3: Consistency with the management considerations in the RRCNCA.** How will the proposed recreation management in the RAMP/EA conserve, protect, and enhance the natural, cultural, social, and other resource conditions in the Calico Basin portion of the RRCNCA?

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Chapter 2. Recreation Area Management Plan

2.1 INTRODUCTION

The Calico Basin RAMP (Chapters 2 and 3 of this RAMP/EA) identifies the goals, strategies, and decisions for the BLM's management of recreation in the Calico Basin, and identifies processes for monitoring, enforcement, and adaptive management. The BLM prepared this RAMP as directed by the RRCNCA RMP, and to establish management direction that is specific to the Calico Basin. This specific direction will assist the BLM to implement the overarching directives in the RRCNCA and prioritize government resources to manage recreation while conserving, protecting, and enhancing the area's natural and cultural resources.

While the plan identifies potential implementation-level projects, such as adding signage to trailheads or modifying existing facilities (see **Figure 3**), it does not analyze these projects in detail. Most future implementation-level projects would require separate analyses under NEPA. Further information on the priorities for implementation-phase projects is provided below in **Section 2.5.4**.

2.2 BLM RECREATION MANAGEMENT FRAMEWORK

2.2.1 RRCNCA RMP

The 2005 RRCNCA RMP guides the BLM's management of the Calico Basin and the broader RRCNCA. The RMP's primary direction for the RRCNCA is to conserve and protect the natural resources of the NCA. The RMP also identifies the need to provide recreation opportunities, so the public can enjoy and appreciate the RRCNCA's unique natural setting. While the RMP identifies some specific management for the Calico Basin, such as "provide a trail in Calico Basin to access Kraft Rocks and Gateway Canyon, while alleviating visitor traffic problems in the Calico Basin Community," it does not provide specific goals or strategies for managing recreation in the Calico Basin.

The ROD for the RRCNCA RMP states "Management Emphasis Areas were incorporated that assigned a land classification value, which in the future, determines what actions/changes are appropriate and in which areas of the NCA they may occur" (BLM 2005). The RRCNCA was divided into the management emphasis areas (MEAs) described below and in **Table 2-1** as a planning tool for establishing desired conditions for proposed and future actions (see the management emphasis map on page 26 in the RRCNCA RMP [BLM 2005]).

The RRCNCA RMP identifies the standards for desired future conditions and notes that proposed management actions that are not consistent with these standards will not be permitted (BLM 2005). The BLM, therefore, evaluates proposed actions for consistency with the RRCNCA RMP's desired future conditions for resources and the standards for the MEA in which the actions are proposed. In this manner, the RRCNCA RMP guides future recreation actions.

Table 2-1. Management Emphasis Areas in the Calico Basin

RRCNCA RMP MEA	Examples in the RRCNCA and Calico Basin
Roaded Developed	<i>RRCNCA</i> : Scenic Drive, Visitor Center, and the parking locations and facilities near those areas <i>Calico Basin</i> : Calico Basin Road, Calico Drive, Assisi Drive, Sandstone Drive, and the parking lot and facilities at Red Spring
Roaded Natural	<i>RRCNCA</i> : Areas south of Little Red Rocks to Brownstone Basin, east of the La Madre Mountain Wilderness, north of State Route 159, and east of the Calico Basin
Nonmotorized	<i>Calico Basin</i> : Areas north of the Calico Basin and south of Brownstone Basin
Primitive	<i>RRCNCA</i> : Rainbow Mountain Wilderness Area <i>Calico Basin</i> : La Madre Mountain Wilderness

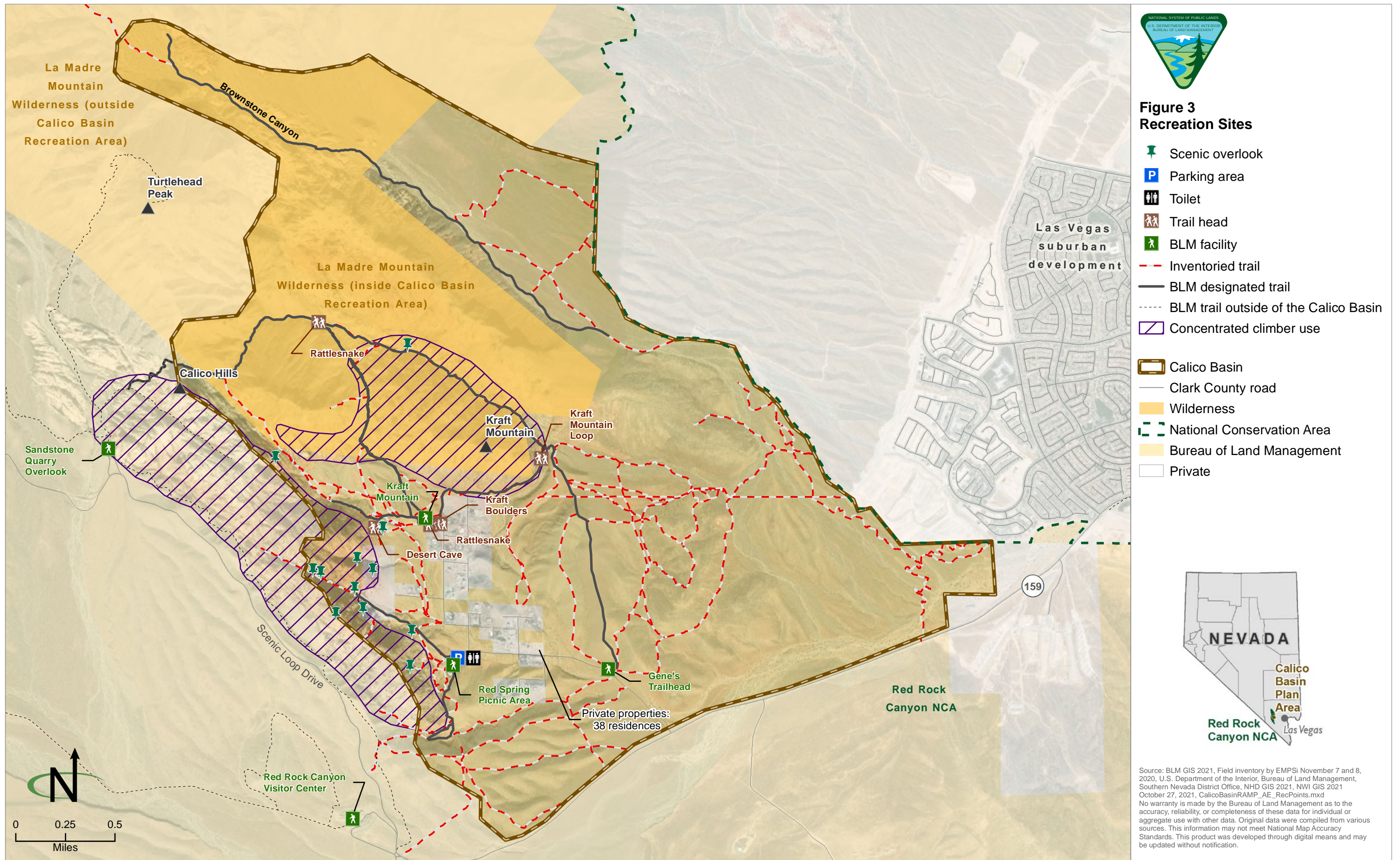
Sources: BLM 2005, 2011

MEAs also guide the nature and type of any future monitoring and associated adaptive management needed to implement the proposed RAMP. The BLM would implement adaptive management strategies in response to monitoring results and consistent with the MEA. The BLM's proposed monitoring and adaptive management approach for the Calico Basin RAMP is in **Chapter 4**.

2.2.2 BLM National Recreation Planning Policy

In developing the Calico Basin RAMP, the BLM also incorporated concepts from BLM Manual 8320, Planning for Recreation and Visitor Services (BLM 2011), and BLM Handbook H-8320-1, Planning for Recreation and Visitor Services (BLM 2014a). These national-level policy documents guide the BLM's recreation planning process, particularly when the agency identifies recreation management areas through the resource management planning process. When developing RMP-level management or a RAMP for a specific recreation management area, the manual and handbook direct the BLM to incorporate management that considers the beneficial outcomes gained from engaging in recreation experiences. This outcome-focused management approach relies on an understanding of the desired experiences and opportunities of those visiting the area. It also considers the physical, social, and managerial settings within which visitors recreate.

For the Calico Basin RAMP, the BLM considered the recreation settings as described in the MEAs, the need to provide recreation opportunities and experiences focused on the Calico Basin's unique physical setting, and the BLM's ability to protect and enhance the area's natural resources. The RMP does not specifically identify the Calico Basin as a recreation management area. As a result, this RAMP/EA does not discuss recreational setting characteristics or outcome-focused management; instead, it uses the terms and characteristics described in the RRCNCA RMP.



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2.3 PROPOSED CALICO BASIN RECREATION AREA MANAGEMENT PLAN

The proposed Calico Basin RAMP's purpose is to be a planning document that guides how the BLM manages recreation on BLM-administered lands in the Calico Basin, consistent with the values of the RRCNCA. The Calico Basin plan area includes the approximately 5,190 acres used as a popular rock climbing, hiking, and equestrian use destination within the larger RRCNCA west of Las Vegas, Nevada (see **Section 1.1**, Background and Plan Area, for more detail). The RAMP includes a combination of broad direction and specific strategies to inform the future implementation of BLM recreation facilities, programs, and enforcement. Proposed management in the RAMP is in response to the current and anticipated demand for recreation opportunities and experiences in the Calico Basin and the need to manage that demand to avoid impacting the unique natural resources in the Calico Basin and RRCNCA.

The RAMP also reflects issues raised by the public, Calico Basin residents, and other key stakeholders during the public information gathering phase (see **Section 1.7**). Proposed plan direction would allow the BLM to meet the needs of present and expected future visitor demand while maintaining and enhancing the natural resource values that contribute to the area's unique recreation setting. The BLM has prepared this RAMP based on national and state BLM direction and policy, existing conditions, resource issues, and a thorough consideration of public input received during the early information gathering process.

The RAMP consists of a mission, guiding principles, goals, strategies, and decisions. The BLM recognizes that achieving the mission, goals, strategies, and decisions of the RAMP would require continued coordination with the public and key stakeholders. Plan monitoring would inform the need for any future plan updates and associated adaptive management. The RAMP's mission provides a broad vision for management; guiding principles provide direction for consistency with the values of the RRCNCA; goals explain the aspirations for desired conditions toward which the BLM would like to move; strategies define the methods the BLM would use to achieve those goals; and decisions reflect the specific, detailed management BLM would employ to achieve the mission and goals for the RAMP. The degree to which these specific management decisions are carried out depends on priorities, available personnel, funding levels, and completion of further environmental analyses and decision-making, as appropriate.

There are specific projects identified in the goals or strategies that the BLM would evaluate as subsequent implementation-level actions. The BLM would analyze these projects under a separate NEPA process and apply the NHPA and other relevant federal regulations, including public notice and opportunities for comment, as appropriate.

2.3.1 The BLM's Mission for the Calico Basin

The BLM's mission for the Calico Basin is to provide an increasing number of visitors of diverse interests and abilities with sustainable, safe access to unique nonmotorized and nonmechanized recreation opportunities and experiences on BLM-administered lands, while protecting and enhancing the area's natural and cultural resources and respecting the interests of private inholdings.

2.3.2 Guiding Principles

Guiding principles provide overarching direction for the BLM in implementing the Calico Basin's mission consistent with the values of the RRCNCA. The BLM will consider the fundamental principles outlined in the RRCNCA RMP—protection of resources and values—in managing visitor use by aligning visitor activities, services, and experiences with the Calico Basin's purpose to determine visitor opportunities

for safe use, experience, and enjoyment (BLM 2005). The following principles will guide the BLM's visitor use management in the Calico Basin:

1. **Resource Protection**—Protect ecologic, scenic, cultural, other natural resources; wilderness; and recreation resources for present and future generations.
2. **Recreation Opportunities**—Provide safe, sustainable, and accessible opportunities in the Calico Basin for locals and visitors.
3. **Economic Sustainability**—Manage recreation and visitor use in a manner that sustains the maintenance and operations of the Calico Basin while contributing to the economic growth of Clark County and the Las Vegas metropolitan area.

2.3.3 Management Goals, Strategies, and Decisions

Goals provide high-level direction for managing and administering visitor use and infrastructure in the Calico Basin. They reflect the guiding principles of the RRCNCA RMP but are more focused on the management issues and concerns at the Calico Basin (BLM 2005). Goals are aspirational in nature and describe the general conditions toward which the BLM intends to allocate resources during implementation. Strategies are more detailed steps the BLM proposes in order to implement the goals. Decisions are specific actions the BLM would take to achieve the goals and strategies. Goals, strategies, and decisions align with the guiding principles and achieve the mission for the Calico Basin.

The BLM is proposing recreation area management goals, strategies, and decisions in two general categories. This management direction is guided by the need to conserve, protect, and enhance natural resources. The two categories are:

- Recreational uses, experiences, and settings
- Fees, administration, and infrastructure

Management for recreational uses, experiences, and settings is focused on visitor experiences and incorporates themes from the outcome-focused management approach in BLM Handbook H-8320-1, *Planning for Recreation and Visitor Services* (BLM 2014a). It considers the MEA characteristics that contribute to positive recreation outcomes, visitor safety, and natural resource protection. Management related to fees, administration, and infrastructure is geared toward site utilization, administration, accessibility, and safety.

RECREATIONAL USES, EXPERIENCES, AND SETTINGS

The following goals, strategies, and decisions for recreational uses, experiences, and settings guide the BLM's management of specific uses in the Calico Basin with a consideration of how those uses influence and are influenced by the area's natural resources and MEA characteristics.

Goal 1.1 (Resource Protection)

Emphasize the protection of resources and the area's highly valued scenic viewing opportunities that attract the highest percentage of visitors to the RRCNCA, while improving the quality and diversity of outdoor recreation opportunities and experiences in the Calico Basin.

The Calico Basin is home to a diversity of natural and cultural resources; these, along with the visual qualities of the area and remarkable geologic formations (see **Figure 4**), attract high visitation. There is the potential for visitor use to impact natural resources, such as disturbance of vegetation through the proliferation of social trails and off-trail hiking, bouldering and climbing, introduction of nonnative species, and littering. Recreation use in Calico Basin will be balanced through the following strategies and decisions to protect resources.



Figure 4: The Calico Basin is known for its visual resource values.

Resource Protection Strategy 1

With adaptive management, prioritize rapid solutions to resource impacts from visitor use or other stressors.

Resource Protection Strategy 2

Restore areas with native plant materials that are appropriate for use within the Calico Basin.

Resource Protection Strategy 3

Restore burned areas or degraded habitats to improve wildlife habitat and visitor enjoyment of the Calico Basin.

Resource Protection Strategy 4

Consider acquiring undeveloped in-holdings and edge-holdings within the NCA through exchange, donation, purchase, or transfer.

Resource Protection Decision 1

Develop a tiered programmatic NEPA analysis to address potential resource protection or mitigation needs that may arise within the Calico Basin, such as basic route restoration, fencing, habitat restoration, and weed treatment.

Resource Protection Decision 2

With trail designation or creation, prioritize avoidance of sensitive resources.

Resource Protection Decision 3

Develop a staffing plan as part of the RRCNCA Business Plan revision to provide adequate staffing for monitoring and management of resources as described in the RAMP/EA.

Goal 1.2 (Recreation Use)

Facilitate visitor participation in uses that are compatible with the overarching mission for the Calico Basin. Also, work with recreational user groups to minimize conflicts between recreational user groups and potential impacts from recreation on natural and cultural resources by minimizing, mitigating, or prohibiting noncompatible recreational activities in certain areas or at certain times.

Compatible recreational uses in the Calico Basin can include nonmotorized and nonmechanized uses, such as hiking, rock climbing and bouldering (see **Figure 5**), horseback riding, picnicking, and photography. The following strategies and decisions are intended to further these opportunities while protecting and enhancing the area's natural resources.

Recreation Use Strategy 1

Address visitor health and safety, resource protection and use, and user conflicts by closing areas to camping, target shooting, and other uses.

Recreation Use Strategy 2

Maintain current management of climbing, bouldering, and slack lining in the Calico Basin, per the RRCNCA RMP.

Recreation Use Decision 1

Continue managing the Calico Basin for the following recreation uses:

- Hiking
- Climbing (including roped climbing and bouldering)
- Horseback riding (on designated trails)
- General day use at Red Spring Boardwalk and Picnic Area and Kraft Mountain. This use will be managed consistent with the same hours at the RRCNCA Scenic Drive, which are as follows:

November to February	6:00 a.m. to 5:00 p.m.
March	6:00 a.m. to 7:00 p.m.
April to September	6:00 a.m. to 8:00 p.m.
October	6:00 a.m. to 7:00 p.m.

Recreation Use Decision 2

Continue to prohibit the following uses in the Calico Basin:

- Camping
- Off-highway vehicle (OHV) use
- Mountain biking
- Shooting

Recreation Use Decision 3

Develop a climbing management plan for the RRCNCA. This plan would include a comprehensive approach to how climbing and access to climbing will be managed in the RRCNCA. Individual decisions



Figure 5: Climbing and bouldering opportunity in the Calico Basin.

will be deferred in the RAMP and developed in the climbing management plan for future application in the Calico Basin.

Goal 1.3 (Special Recreation Permits)

Provide opportunities for commercial and noncommercial group events and filming that are compatible with the area's natural resources.

The BLM issues SRPs and recreation use permits (for example, filming, weddings, or other activities) per the relevant BLM criteria at 43 Code of Federal Regulations (CFR) 2930 and policy in BLM Manual 2930 (Recreation Permits and Fees; BLM 2007) and BLM Handbook H-2930-1 (Recreation Permit Administration; BLM 2014b). SRPs are authorizations that allow for commercial, competitive, and group recreational uses of the public lands. They are issued to control visitor use, protect recreational and natural resources, and provide for the health and safety of visitors.

The BLM usually issues noncommercial group permits and SRPs in high-use areas or where recreation use requires special BLM management. It also issues SRPs as a mechanism to provide fair market value to the United States for the recreational use of public lands. Applications for an SRP may be denied based on many factors, including nonconformance with land use plans or designations; a moratorium on permits issued as part of a planning process; state licensing requirements; the results of an environmental analysis; other resource values, including the environment and endangered species or antiquities; an allocation system; public health and safety concerns; the applicant's past performance, including previous convictions for violating federal or state laws or regulations concerning the conservation or protection of natural resources; or the inability of the managing office to issue, manage, and monitor the proposed use. If the FO is unable to fulfill or complete all the necessary steps of issuing and managing an SRP authorization, then the BLM will not issue an SRP.

Authorization for commercial, competitive, or group activities is an integral part of the management of the Calico Basin. These activities not only provide revenue that is used to manage the Calico Basin, they also provide the public with services that enhance the enjoyment of the area. Such activities may include guided hikes and climbs, family events, weddings, filming and photography, poker runs, yoga tours, artistic events and activities, foot races, scooter tours, and other activities.

SRP Strategy 1

Consider the setting of the recreation site when evaluating SRP applications. Other factors that may determine whether an SRP is issued include recreation conflicts in the proposed area of operations, the diversity of services provided to the public, the number of similar services already offered, and whether the public land area available is sufficient to accommodate the proposed use.

SRP Strategy 2

Allow commercial activities in wilderness only to the extent necessary for activities that are proper for realizing the recreational or other wilderness purposes. The issuance of SRPs in wilderness would be subject to separate NEPA analysis.

SRP Decision 1

Continue the current process for issuing SRPs and recreation use permits.

SRP Decision 2

Continue to manage to the current level of designated approved commercial, competitive, and organized group use of sites within the core area of the RRCNCA,² which includes the Calico Basin. See **Appendix A** for current levels of use.

SRP Decision 3

Improve management of SRPs and film and photography compliance. Identify and resolve conflicts between permit holders, unauthorized commercial and group use, and RRCNCA values.

The BLM Lands and Realty Program reviews and approves film permits, including for still photography and video. The BLM processes land use authorizations on a case-by-case basis as proposals are received. The authorization process involves an analysis of potential impacts on the environment that could result from the proposed action. An EA or an EIS, if appropriate, is prepared and resource protection stipulations are developed prior to the approval of such uses. The BLM does not issue film/photo permits in the La Madre Mountain Wilderness at Calico Basin.

Film Decision 1

Continue the current process for issuing film permits.³

Film Decision 2

Continue to manage to the current level of designated approved film permits in the core area of the RRCNCA.

Goal 1.4 (Trails and Access)

Maintain a designated trail system that protects natural resources and provides nonmotorized access to diverse recreation opportunities in the Calico Basin.

Trails are the primary means of access within the Calico Basin. The following strategies and decisions are intended to enhance trail-based recreation opportunities while protecting and enhancing the area's natural resources through strategies that keep visitors on designated trails (see **Figure 6**).

Trails and Access Strategy 1

Develop a trail sign plan and provide signs on designated trails that clearly communicate trail information and appropriate trail uses, and encourage users to stay on designated trails.

Trails and Access Strategy 2

Define and protect the intended use of the trails and maintain designated trails to BLM trail standards.

² The core area of the RRCNCA that the BLM manages for SRPs is defined as the system of trails and roads (Scenic Drive, Red Spring, and the Calico Basin area) and facilities (Dedication Overlook, Scenic Drive Exit, Old Oak Creek, First Creek, and Moenkopi Road) along State Route 159. The core area also includes the La Madre Mountain Wilderness and Rainbow Mountain Wilderness for some, but not all, approved SRP activities.

³ The BLM issues film permits through the Lands and Realty Program in accordance with the requirements of the Federal Land Policy and Management Act.

Trails and Access Strategy 3

Maintain and improve existing trail access points at Red Spring Boardwalk and Picnic Area and Kraft Mountain. Designate, maintain, and improve Gene's Trailhead, Calico Spring Trailhead, and Brownstone Trailhead, while ensuring the trail alignments do not impact endemic species' habitat or riparian areas; if necessary, reroute trails to avoid these impacts.

Trails and Access Strategy 4

Close and restore undesigned social trails; prioritize restoration of trails through sensitive species' habitat or historic properties.

Trails and Access Strategy 5

Prevent new user-created trails using signs, barriers, and other infrastructure. At the Red Spring Boardwalk, enforce visitor use of designated trails, and consider projects to protect the sensitive areas around the boardwalk.

Trails and Access Strategy 6

Consider future restrictions on off-trail use to protect sensitive natural and cultural resources.

Trails and Access Strategy 7

Ensure any proposed new trails provide important linkages to the Calico Basin and Summerlin or Little Red Rocks, while also being built to BLM trail design standards and emphasizing cultural and resource protection.

Trails and Access Strategy 8

Work with neighboring landowners, such as in Howard Hughes and Summerlin, in areas of new development to ensure all access to the Calico Basin is from authorized locations.

Trails and Access Strategy 9

Continue to work with volunteers, organizations, and BLM staff to maintain the trail network.

Trails and Access Strategy 10

Consider seasonal or temporary closures following weather events to reduce trail impacts from visitor use.

Trails and Access Strategy 11

Partner with equestrian groups for trail maintenance or to fund any equestrian-related construction projects.

Trails and Access Strategy 12

Consider maintenance costs, benefits, impacts, and other concerns (for example, not designating new trails through locally endemic species' habitats) when evaluating the need for a new trail.

Trails and Access Decision 1

Do not evaluate or authorize the construction of any new trails with this RAMP.



Figure 6: Gene's Trail, a designated hiking trail in the Calico Basin

Trails and Access Decision 2

Design all trails in the Calico Basin for pedestrian uses. See **Figure 7 and Table 4-2** for trails designated for equestrian use. Do not allow motorized and mechanized use of trails.

Trails and Access Decision 3

As part of a separate climbing management plan, inventory trails that provide access to popular climbing areas and routes in the RRCNCA, and work to designate an appropriate travel network that supports access to climbing areas.

Trails and Access Decision 4

Continue current trail designations as shown in **Figure 7**, including trails open to equestrian use. Evaluate trail designations and adjust them as needed to reflect resource needs and visitation preferences.

Trails and Access Decision 5

Develop annual coordinated trail maintenance plans.

Goal 1.5 (Safety)

Provide enjoyable and safe experiences for visitors while recognizing there are limitations on the capability of the RRCNCA and its staff, volunteers, partners, and contractors to eliminate all hazards.

Throughout the peak season (October through May), at the Calico Basin there are numerous law enforcement issues, such as vehicle break-ins, assisting the Las Vegas Metropolitan Police Department with service calls to residents, unauthorized commercial use permits, resource violations (littering, natural feature destruction, garbage dumping, etc.), and search and rescue. Typically, October and November, Christmas to January 1, and March to May attract extremely large crowds to the Calico Basin. The following safety strategies address these issues:

Safety Strategy 1

Strive to protect human life and provide for injury-free visits. The recreational activities of some visitors may pose a personal risk to participants, which the BLM cannot totally control. RRCNCA visitors must assume a substantial degree of responsibility for their own safety when visiting areas that are managed and maintained as natural, cultural, or recreational environments.

Safety Strategy 2

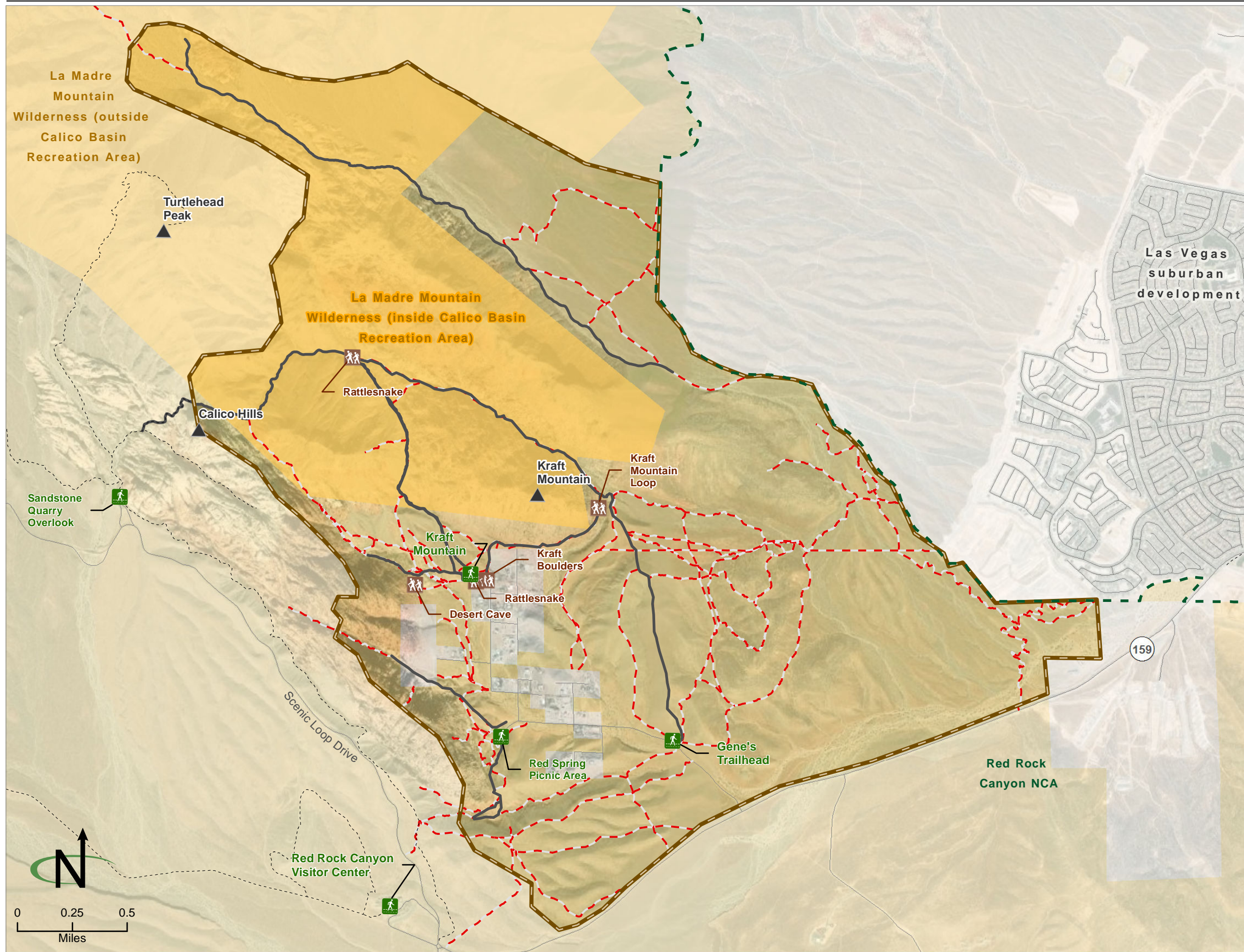
Prioritize saving human life over all other management actions.

Safety Strategy 3

Ensure public safety, protect federal land resources, and continue to create an environment to promote the health and safety of visitors, staff, and nearby residents by working with local, state, and federal agencies. These are the BLM's primary responsibilities.

Safety Strategy 4

Improve public safety through efficient use of BLM law enforcement in coordination with Clark County and the Las Vegas Metropolitan Police.



**Figure 7
Designated Trails in the
Calico Basin**

- - - Inventoried trail
- BLM designated trail
- Trail head
- BLM facility
- - - BLM trail outside of the Calico Basin
- Calico Basin
- Clark County road
- National Conservation Area
- Bureau of Land Management
- Private



Source: BLM GIS 2021, Field inventory by EMPSI November 7 and 8, 2020, U.S. Department of the Interior, Bureau of Land Management, Southern Nevada District Office, NHD GIS 2021, NWI GIS 2021 October 27, 2021, CalicoBasinRAMP_AE_DesignatedTrails.mxd
No warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data for individual or aggregate use with other data. Original data were compiled from various sources. This information may not meet National Map Accuracy Standards. This product was developed through digital means and may be updated without notification.

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Goal 1.6 (Wilderness)

Maintain or enhance the MEA characteristics, including the primitive recreation setting and wilderness character of the La Madre Mountain Wilderness.

In 1964, Congress established the National Wilderness Preservation System through the Wilderness Act (Public Law 88-577; 16 US Code 1131–1136). This law was created to “... assure that an increasing population, accompanied by expanding settlement and growing mechanization, does not occupy and modify all areas within the United States.” Wilderness designation is intended to preserve and protect certain lands in their natural state. Only Congress, with presidential approval, may designate lands as wilderness. The Wilderness Act of 1964 defines wilderness character, the uses of wilderness, and the activities prohibited within its boundaries.

The proximity of the Calico Basin to the La Madre Mountain Wilderness requires the BLM to carefully manage the recreation, natural, and cultural resources, and corresponding resource values (such as scenic values) within the plan area to reduce potential impacts on these areas and in a manner consistent with the existing La Madre Mountain Wilderness and Rainbow Mountain Wilderness Management Plan. For example, the wilderness management plan indicates that visitor-worn hiking paths will be evaluated on a case-by-case basis and may either be designated, rerouted, or restored.

Wilderness Strategy 1

Continue to manage the La Madre Mountain Wilderness by upholding the existing La Madre Mountain Wilderness and Rainbow Mountain Wilderness Management Plan.

Wilderness Decision 1

Per the *Federal Register* notice published November 30, 1998 (Volume 63, Number 229), continue the prohibition on recreational motorized and mechanized access in the Las Vegas Valley off-highway closure area near Brownstone Canyon Wilderness, to maintain the character of the wilderness.

Wilderness Decision 2

Within the wilderness portions of the designated trail system, consider placing trail marking signs alongside the Kraft Mountain Loop Trail. This is one of three designated trails that exist within the La Madre Mountain Wilderness (the others are Rattlesnake and Brownstone Trails). Placing trail marking signs would be supported with a detailed minimum requirement decision guide (MRDG).⁴

Wilderness Decision 3

Continue management of the wilderness as a high priority.

⁴ The MRDG is the tool that wilderness-managing agencies use to conduct a minimum requirements analysis, as required by legislation, to determine whether a prohibited use is necessary in wilderness and, if so, what the minimum amount of prohibited use would be. For example, a MRDG is the first step toward making a decision about installing signs (prohibited uses and installations), followed by a minimum requirements analysis; then a further NEPA analysis would be necessary for the BLM to be able to authorize the installation of signs in the wilderness.

Goal 1.7 (Education)

Expand visitor understanding and appreciation of the Calico Basin by providing diverse educational and interpretive opportunities.

Education Strategy 1

Encourage positive visitor behavior through interpretive signage and visitor information, such as trail courtesy and etiquette or Leave No Trace™ techniques, at parking areas, trailheads, and other activity locations.

Education Strategy 2

Educate visitors about the allowed recreational uses of trails.

Education Strategy 3

Provide interpretation opportunities that are focused on the unique resources that exist at the Calico Basin and within the RRCNCA.

Education Strategy 4

Engage BLM staff, volunteers, and partners from multiple disciplines when developing interpretation materials.

Education Strategy 5

Continue to work with partners, such as Friends of Red Rock Canyon, Get Outdoors Nevada, Southern Nevada Conservancy, and other organizations, to develop, coordinate, and facilitate quality educational programming, interpretation, and media to utilize the unique environmental education components, management, and conservation of the Calico Basin.

Education Strategy 6

Continue BLM staff and partner outreach to educational institutions and work with these institutions for environmental education.

Education Strategy 7

Develop an environmental education plan for schools to use when they are at the recreation site.

Education Strategy 8

Continue to encourage SRP operators to provide their clients with educational materials and information regarding the need to protect natural and cultural resources in the Calico Basin and to maintain wilderness character in the La Madre Mountain Wilderness.

Education Decision 1

Use the SRP process to review applications from state-certified schools to use the recreation site(s) for education-related activities. Determine if a letter of authorization or SRP will be necessary, or if any fees will be assessed.

Education Decision 2

Install interpretive materials at key locations for education and impact reduction, with particular emphasis where impacts are occurring, such as in riparian areas or in endemic species habitat.



Figure 8: Interpretive signage at Red Spring

FEES, ADMINISTRATION, AND INFRASTRUCTURE

In the Calico Basin there is a need to provide site utilization management, fee collections, accessibility, safety, availability of amenities, and site environmental education and interpretation programs in a managed natural environment, to provide for high-quality recreation experiences while enhancing or protecting resources. The authority to collect and retain recreation fees is specified in the Federal Lands Recreation Enhancement Act of 2004. Through this RAMP, the BLM seeks to provide the management framework to enhance the existing fee structure established at the Calico Basin in the 2018 Red Rock Canyon Business Plan (BLM 2018). Any change in the fee structure would require a presentation to the Recreation Resource Advisory Committee and request for a recommendation of approval before going to the BLM State Director for concurrence and final approval prior to implementing. The BLM is working to update the 2018 Red Rock Canyon Business Plan to include Red Spring Boardwalk and Picnic Area, Calico Spring Trailhead, and Kraft Mountain Trailhead. **Table 2-2** contains the current and proposed fee structure for the RRCNCA.

Goal 2.1 (Visitation Management)

Ensure the number of visitors to the Calico Basin is within the area's capacity to sustain the level of visitation while protecting and enhancing natural resource conditions and the associated recreation setting.

Visitation Management Strategy 1

Evaluate the use of an online reservation system to allow the BLM to control the number of visitors within the Calico Basin with a service that is easy for both the staff and visitors. The number of vehicles allowed into the Calico Basin would be based on the capacity of designated parking at Red Spring, Kraft Mountain, and the areas designated for parking along the four BLM roads providing access to the Calico Basin.

Visitation Management Strategy 2

Update the Calico Basin visitor use carrying capacity using indicators and thresholds for natural resource impacts.

Visitation Management Decision 1

Following implementation of a fee collection process, regulate visitation numbers with a reservation system based on environmental conditions, recreation uses, and facilities/infrastructure, such as parking capacity in the lots and designated ROWs in the Calico Basin.

Goal 2.2 (Fee Management)

Achieve the mission of the RRCNCA of conserving, protecting, enhancing, and managing the area's natural and recreational resources by ensuring that 100 percent of fee receipts go toward the recreation facilities, services, and programs that affect visitors and natural resource values, such as maintenance and enhancement projects, interpretation and signage, and direct costs related to the site where the fee is collected. Fees collected at the Calico Basin would supplement allocated recreation funds to maintain and operate the recreation site, or to design and install any recreation amenities.⁵

Fee Management Strategy 1

Make necessary administrative changes to the RRCNCA Business Plan to clarify that the Red Spring area identified in the Business Plan includes all areas in the Calico Basin Plan Area. Ensure fees would be designated for the Calico Basin, to the extent possible (the current business plan does not specify where collected fees would be used in the RRCNCA).

Fee Management Strategy 2

Emphasize maintenance and operations over new capital improvements when using any potential collected fees.

Fee Management Decision 1

Implement a site-specific fee for the Calico Basin to address specific maintenance, operational, or capital improvement needs. This would include modifying the standard amenity fee (see **Table 2-2**) so that it includes all developed recreation areas within the Calico Basin, including Red Spring, Kraft Mountain, and parking on roads within the recreation area.

The proposed amenity fees would complement those for the Scenic Drive; with a receipt from the Calico Basin, visitors would also be able to access the Scenic Drive and vice versa. However, visitor management tools like the Scenic Drive Reservation System may be used in the future and will require visitors to know what tools have been implemented before they arrive. Revenue generated at this site would be reinvested into the area through increased resource protection, law enforcement patrols, additional programming, increased signage, and renovated facilities.

Table 2-2. Current and Proposed RRCNCA Amenity Fees

Amenity Type	Fiscal Year 2018 Approved Fees	Fiscal Year 2023 Proposed Fees
Scenic Drive Daily Fees*		
Vehicle	\$15.00	\$20.00
Bicyclist	\$5.00	\$8.00
Pedestrian	\$5.00	No change
Motorcycle	\$10.00	\$15.00
Commercial Tour Vehicle**	\$5.00***	No change
Red Rock Annual Support Pass	\$30.00	\$60.00
Other Areas		

⁵ No more than an average of 15 percent of the total revenue collected may be used for administration, overhead, and indirect costs related to fee collection (BLM H-2930-1, Chapter 2, III Expenditures [BLM 2014a]). The 2018 RRCNCA Business Plan proposed standard and expanded amenity fees for Red Spring Picnic Area and Boardwalk. The BLM used the information from the business plan to determine fees and revenue projections for the Scenic Drive and Red Spring Picnic Area and Boardwalk.

Amenity Type	Fiscal Year 2018 Approved Fees	Fiscal Year 2023 Proposed Fees
Red Spring (New)*	\$15.00***	\$20.00
Campground Daily Fee	\$20.00	\$25.00
Campground—Walk-in Site	\$10.00	\$12.00
Campground Group Rate	\$60.00	\$80.00
Day-use Picnic Area	\$40.00	No change

Source: BLM 2018 (Red Rock Canyon Business Plan with slight modifications)

* A receipt for either the Scenic Drive or the Red Spring area can be used to access the other.

** Ride share users are charged the same per person rate as a commercial tour vehicle.

*** Per person plus entry

**** Fee structure follows the Scenic Drive's structure for "other vehicles"

Fee Management Decision 2

Construct a fee system with gates on Calico Basin Road, and gates at developed recreation sites and parking areas to collect day-use fees from visitors in automobiles and from walk-up or bike-in visitors. Additionally, construct a turnaround area at a safe distance before the fee booth area for visitors who do not wish to pay an amenity fee.

Goal 2.3 (Partnerships)

Work with partner organizations, such as Get Outdoors Nevada, Southern Nevada Conservancy, Southern Nevada Climbers Coalition, and the Southern Nevada Mountain Bikers Association, to provide educational programming.

Partnership Strategy 1

Continue to seek partnerships with nonprofits, other agencies, and school districts to improve management and the delivery of information on the recreation area.

Partnership Decision 1

Continue working with the Calico Basin working group—an informal working group of residents within the Calico Basin community—to identify common goals and management strategies for shared concerns or resources.

Partnership Decision 2

Continue working with partner groups, such as the Friends of Red Rock Canyon, Southern Nevada Climbers Coalition, and Nevada All-State Trail Riders, that are focused on issues specific to their recreational activities.

Goal 2.4 (Facilities)

Prioritize the maintenance of existing facilities and infrastructure. In the future, as funding allows and subject to feasibility study results and subsequent NEPA analyses, construct new facilities and infrastructure to protect natural resources, manage visitor use, and improve recreation experiences.

Facility Strategy 1

Consider the cost of operating and maintaining proposed facilities and upgrades as the primary consideration when evaluating funding that comes available for new facilities or other improvements. Also consider other factors such as:

- The benefits of reducing adverse effects on resources and the natural environment
- Maintaining or improving public safety
- Complying with the management for the area

Facility Strategy 2

Consider providing parking, toilets, informational and interpretive displays, and other facilities at all Calico Basin trailheads.

Facility Strategy 3

Pursue grants and partnerships⁶ to augment funding for facilities planning, operations, maintenance, and development.

Facility Strategy 4

Design and construct a visitor entrance station adjacent to Calico Basin Road near Red Spring (or at Gene's Trail) to provide recreation information and to collect site fees (see **Fee Management Decision 2**).

Facility Strategy 5

Base potential future facilities and infrastructure improvements on current needs and available funding. This could include the following:

- Adding restrooms at Kraft Mountain, Brownstone Canyon, and Gene's Trailheads
- Adding more large group picnic shelters at Red Spring at a distance adequate to separate the use by large parties from the other use in the smaller picnic shelters

This RAMP does not evaluate or authorize the construction of any new facilities or infrastructure projects.

Goal 2.5 (Roads and Parking)

Manage BLM-administered roads and parking areas in the Calico Basin to provide safe and reliable access to recreation sites, with an emphasis on conserving, protecting, and restoring the ecological, cultural, and recreational resource values and minimizing conflicts between recreational users and Calico Basin residents.

Roadways in the Calico Basin provide access to both private inholdings and the BLM-managed Red Spring Picnic Area, Calico Spring, and the Kraft Mountain parking area. Concurrent with developing this RAMP, the BLM worked closely with Clark County to coordinate the relinquishment of county ownership of the roadway segments identified below. The BLM assumed ownership and maintenance responsibilities for these segments:

- Calico Basin Road (1.20 miles)
- Calico Drive (0.12 miles)
- Assisi Canyon Avenue (0.12 miles)

⁶ For example, the Friends of Red Rock Canyon secured a grant from Clark County to fund the preparation of the Cottonwood Valley RAMP/EA.

- Sandstone Drive (0.51 miles)

Remaining roadways in the Calico Basin providing access to private inholdings will be privately owned and maintained.

Roads and Parking Strategy 1

Consider maintenance costs, benefits, impacts, and other concerns when evaluating the need for a new road.

Roads and Parking Strategy 2

Evaluate opportunities for a new bike lane along Calico Basin Road that would connect the new Legacy Trail on State Route 159 with recreation sites in the Calico Basin.

Roads and Parking Strategy 3

Base potential future parking area improvements on current needs and available funding; this could include the following:

- Widening the Kraft Mountain parking lot by a minimum of 10 feet on each side or more to allow the current capacity of vehicles to safely pull in and out of the parking lot. The parking lot should be asphalted to improve the safety and the sustainability of the facility.
- Developing a more sustainable parking area at Calico Spring and Brownstone Canyon trailheads. Build both trailheads to discourage and stop motorized access passed the entrance to the trailheads. Calico Spring is a popular trailhead, but until infrastructure is developed, parking at the intersection of Assisi Canyon Avenue and Sandstone Drive will continue to be prohibited.
- Creating a parking lot for equestrian use with possible amenities such as a corral, hitch post, mounting ramp, and restroom.
- Adding new parking areas or parking area improvements.

Roads and Parking Decision 1

Continue to work with Clark County in the process of relinquishing county ROWs back to the BLM for the primary access in the Calico Basin and for access to private roads accessing private inholdings. Pursue a memorandum of agreement with Clark County to provide road maintenance support when needed.

Roads and Parking Decision 2

Continue primary access using Calico Basin Road, Calico Drive, Assisi Canyon Avenue, and Sandstone Drive. Maintain the existing primary access roads with the RRCNCA and the southern Nevada BLM maintenance program.

Roads and Parking Decision 3

Allow parking in designated parking areas. In coordination with Clark County, the BLM will develop a map of designated parking areas in the Calico Basin. Vehicles parking along Calico Basin Road, Calico Drive, Assisi Canyon Avenue, and Sandstone Drive must park on the shoulder side of the white line. Subject to monitoring results, the BLM may restrict parking in certain areas to achieve resource objectives.

Roads and Parking Decision 4

Prohibit public parking on private property.

2.4 ALTERNATIVES

The BLM conducted an early information gathering process (see **Section 1.6**), which included public and stakeholder meetings and a 30-day public comment period, to help identify issues associated with this planning effort (see **Section 1.7**). These issues frame the analysis of potential environmental effects associated with the proposed RAMP and aid in the BLM's decision-making process. The alternatives analyzed in this EA are the proposed action alternative and a no action alternative. The proposed action is the proposed RAMP, as described in **Section 2.3**. The no action alternative would reflect a continuation of existing management without a RAMP.

2.4.1 Proposed Action (Calico Basin RAMP)

Under the proposed action, the BLM would adopt the Calico Basin RAMP with the management direction in **Section 2.3.3**.

2.4.2 No Action

Under the no action alternative, the BLM would not adopt the Calico Basin RAMP and would continue to manage the Calico Basin according to the overarching direction in the RRCNCA RMP.

2.4.3 Alternatives Considered but Eliminated from Detailed Analysis

During the early information gathering period for this RAMP and EA, the BLM considered several alternatives, but determined not to carry them forward for detailed analysis in this document. Alternatives considered, but eliminated from detailed analysis, are the following:

- **Including fully completed implementation plans, such as a climbing management plan or trail maintenance plan, with the RAMP.** The RAMP is an overarching plan for managing the Calico Basin; it directs future implementation (see **Section 2.5.4** for more details on implementation-phase undertakings).
- **Opening the Calico Basin to mechanized use.** The Calico Basin is not suitable for motorized or mechanized use. Mountain biking is not compatible with the area's sensitive natural resources. It would also conflict with the area's pedestrian and equestrian uses.
- **Not implementing a reservation system.** Without implementing a reservation system, visitation to the Calico Basin would reach levels that the natural systems, resources, facilities, and trails could not support. A reservation system would allow the BLM to manage visitor use to protect the area's natural resources, minimize user conflicts, and maintain the relevant MEA characteristics.
- **Not adding a fee system.** If the BLM did not implement a system to collect fees for entry to the Calico Basin and ensure those fees would specifically benefit the Calico Basin, there would be insufficient funding to implement the monitoring and protection of resources necessary to maintain the relevant MEA characteristics given the visitation levels anticipated in the future.
- **Creating a new access road to the Calico Basin.** The BLM is working with Clark County to ensure there is controlled public access via the existing roadway network to BLM-administered lands in the Calico Basin and access to private inholdings. The BLM considered the need for an additional access road to the Calico Basin, but determined through initial study that it was not feasible.

2.4.4 Implementation-phase Projects

As described in **Section 2.1**, the Calico Basin RAMP provides high-level guidance on recreation and suggestions on potential implementation-phase projects, while acknowledging additional NEPA analyses would be required for these undertakings. Management identified in the RAMP focuses on resource protection and consistency with the mission of the RRCNCA. Similarly, the BLM will prioritize those implementation-phase undertakings that also focus on resource protection. For example, implementation of a fee and reservation system at the Calico Basin will limit the number of visitors per day and reduce the potential for resource impacts due to excessive numbers. Further, the proposed fee implementation and change to the RRCNCA Business Plan to ensure fees collected at the Calico Basin are used at the Calico Basin could prioritize the use of those funds for resource protection, such as weed treatment, trails restoration, habitat restoration, restoration of burned areas, fuels reduction, seasonal technicians, monitoring, cultural inventory and monitoring, or rare species inventories. **Figure 9**, below, illustrates the relationship of the RAMP with subsequent implementation, monitoring, and adaptive management.

Figure 9. Planning and Implementation



¹ CX refers to a categorical exclusion, which is a type of NEPA compliance

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Chapter 3. Monitoring, Enforcement, and Adaptive Management

3.1 MONITORING

3.1.1 RRCNCA Monitoring Requirements

The RRCNCA RMP identifies several actions and programs that include monitoring, such as wildlife, ecosystem management, commercial uses, and wild horses and burros. The BLM also regularly monitors wilderness areas for wilderness character. Monitoring is integral to all actions and programs in the RMP to measure the effectiveness of actions implemented or to record the impacts on the natural resources. While specific details are not provided, the RMP considers the key resources for the RRCNCA (biodiversity, air quality, vegetation, recreation, commercial use, and cultural resources) as appropriate for monitoring to record impacts and to seek to reverse or mitigate those impacts.

Whenever monitoring shows impacts that are considered significant or that surpass the limits of acceptable change, the RMP suggests mitigation be taken to reverse the situation. This could include a reduction in or elimination of the action or situation causing the impact. The RMP provides flexibility in how the monitoring is implemented; however, some monitoring details are provided, as shown below:

- The BLM will conduct an ongoing program of population monitoring for threatened and endangered species, candidate species (blue diamond cholla [*Cylindropuntia multigeniculata*]), and other special status species (Charleston Mountain angelica [*Angelica scabrida*], alkali mariposa lily, Mojave milkvetch [*Astragalus mohavensis* var. *hemigyris*], peregrine falcon [*Falco peregrinus*] and Spring Mountains springsnail).
- Recreational activities can spread weeds and impact sensitive plants, animals, and cultural resources. If impacts from recreational use are documented during general monitoring, seasonal or temporary restrictions in specific areas or other mitigation may be implemented to reduce user impacts on resources.
- The BLM will collect further information or data for sites, trails, and destinations where more information on visitor use patterns, levels, and behaviors could further inform thresholds. This information will be used to refine thresholds before taking actions to manage visitor use levels more directly.
- The BLM will monitor cumulative recreation use impacts on biological resources.
- The BLM will monitor commercial use and evaluate permit totals as necessary.
- The BLM will enhance partnerships using volunteers to conduct photo monitoring and patrolling of sites to monitor recreational use.
- The BLM will monitor the existing designated trails and implement mitigation measures as needed to avoid excessive impacts.
- The BLM will monitor wilderness character per the La Madre Mountain Wilderness and Rainbow Mountain Wilderness Management Plan.

The programs listed above have monitoring systems developed or in place; others would need to have monitoring techniques developed and tested to determine how to best evaluate conditions and

implementation results. Issues specific to the Calico Basin that may require developing specific monitoring protocols include:

- Rock writings and other cultural and paleontological resources
- Riparian communities associated with springs
- Appropriate trail use and conditions

Monitoring practices will be developed by selecting indicators that are used to track trends in resource and experiential conditions. Established thresholds will be used to clearly define when conditions are becoming unacceptable for the selected indicators, thus alerting managers that a change in management action(s) is required. Management action in response to monitoring will be implemented as necessary (see **Section 3.3.2**, Implementation, Monitoring, Evaluation, and Adjustment).

3.1.2 Additional Proposed Monitoring

In addition to the monitoring requirements in the RRCNCA, the BLM is proposing the following additional monitoring measures to understand progress toward meeting the goals and strategies in the RAMP and to inform subsequent adaptive management (see **Section 4.3**, below):

- Monitor trail conditions to protect their integrity
- Monitor vegetation cover and soil conditions at Red Spring, Ash Spring, and other riparian areas
- Monitor trail conditions where there is equestrian use to identify any ongoing impacts (see **Section 2.3.3** for additional detail)
- Monitor routes to popular climbing, bouldering, and other areas and consider trail access needs to popular recreation areas
- Monitor unauthorized mountain bike use
- Monitor the creation of unauthorized roads, trails, or access points
- Monitor vegetation cover and soil stability near climbing routes or boulder problems
- Monitor for the creation of multiple points of entry to the Calico Basin at this plan's implementation
- Monitor effectiveness of management activities in minimizing visitor impacts
- Monitor if signage and other site information provide effective guidance to encourage appropriate user behavior
- Monitor if cultural and recreation sites are vandalized or damaged
- Monitor and track where destruction or removal of natural resources is occurring and at what rate
- Monitor for impacts on private inholdings to demonstrate trends
- Monitor for public safety concerns, as well as emergency service responses or search and rescue operations
- Monitor areas of high use near sensitive resources to determine the potential need for additional barriers or management actions in areas where resource impacts can be significant when pedestrian traffic is not limited to existing trails or boardwalks. For example, photographers that repeatedly encourage people to leave the Red Springs boardwalk for a better picture could have their SRPs revoked.

As described above, additional monitoring efforts should not be limited to BLM staff and managers. The BLM should implement strategies to work with partners and the public to also monitor certain activities. For example, the BLM should provide an easy process for visitors to report unauthorized trail use or a way to educate partner organizations, so they can recognize poor trail conditions and report these issues to BLM staff. With this information, Red Rock Canyon managers will work to set standards that define the conditions sought for the wide range of recreation opportunities, identify management actions desired to achieve these conditions, and adjust management accordingly. The BLM should also consider using a variety of technological approaches, such as game cameras and drones.

3.1.3 Data Collection and Management

Existing Data

The RRCNCA RMP (BLM 2005) provides summary data on visitation to the RRCNCA compiled from a survey completed in 1992. The demographic results are described in greater detail in **Section 4.2.7**, Public Health and Safety and **Section 4.2.8**, Environmental Justice and Socioeconomics. Key takeaways on the visitor demographics include:

- 40 percent of visitors were 25–44 years of age
- 46 percent completed some college
- 44 percent work full-time
- 35 percent make from \$25,000 to \$50,000 annually
- Slightly over 2 percent had some type of impairment, with half involving mobility and the other half having hearing, visual, or mental impairment
- 55 percent of visitors were from Nevada, with most residing in Clark County; 45 percent of visitors were from outside of Nevada

These data are nearly 30 years old, and it is likely the demographics of local visitors to the RRCNCA have shifted in ways similar to the changes in Clark County since 1992 (see **Section 4.2.7**, Public Health and Safety and **Section 4.2.8**, Socioeconomics and Environmental Justice). Visitation numbers have also changed, as described in **Section 4.2.1**, Recreation. There were 1,022,207 visitors to the RRCNCA in 2012 and 3,218,149 visitors in 2020; this is a 215 percent increase.

The Calico Basin, however, saw visitation increase over the same period by 25,970 percent from 2,828 in 2012 to 737,251 in 2020. Many people in the early information gathering process for this project attributed that growth in Calico Basin visitation to people using the area as an easy overflow for those who are unable to access the Scenic Drive. The RRCNCA capacity assessment for the Scenic Drive also noted that “visitation at the Calico Basin Road noticeably increases when the Loop closes” (Kooistra et al. 2019). Several developments may be key factors in the asymmetry of growth between the overall RRCNCA and the Calico Basin, including:

- The fees associated with use of the Scenic Drive
- Implementation of the reservation system and timed entry for the Scenic Drive
- The increasing popularity of bouldering in the climbing community and the ease of access for bouldering at Kraft Boulders, when compared with the bouldering elsewhere in the RRCNCA
- Potential methodological issues with the Calico Basin visitation data for 2012
- The population growth in Las Vegas, which has increased 14.35 percent since the 2010 census

Proposed Data Collection and Management

The BLM proposes the following additional data management measures to inform future management:

- Focus on tracking and gaining a better understanding on visitation, fee collection, and fee compliance in data management protocols.
- Develop data collection procedures to include best management practices and strategies for improving data quality while emphasizing improvements to fee collection and staffing efficiencies.

3.2 LAW ENFORCEMENT ROLE

The BLM will continue to maintain its current law enforcement processes, including a contract with Clark County for additional law enforcement services. Most of the crime response in the Calico Basin near the homes and parking, however, is handled by the Las Vegas Metropolitan Police (see **Table 4-6** in **Section 4.2.7**, Public Health and Safety). As described above in **Section 2.2.3**, Goals, if a fee system is implemented at the Calico Basin, that revenue would be reinvested and used at the Calico Basin with increased law enforcement and patrols, additional programming, increased signage, and renovated facilities.

Law enforcement and patrols fill a key role in responding to emergencies and developing situations as needed; however, Kooistra et al. (2019) also noted there is public support for an increased presence of BLM law enforcement, officials, and designated volunteers across the RRCNCA; that increased presence could improve visitor experiences and may mitigate negative or unsafe behaviors (for example, theft and graffiti). These behaviors are among the most common crimes reported in the Calico Basin (see **Table 4-6** in **Section 4.2.7**, Public Health and Safety).

3.3 ADAPTIVE MANAGEMENT

The adaptive management proposed in this RAMP/EA framework is divided into four major elements:

1. Build the foundation with the broad management in the RRCNCA RMP (BLM 2005);
2. Define specific visitor use management direction for the Calico Basin in the RAMP/EA;
3. Identify adaptive monitoring and management strategies; and
4. Implement, monitor, evaluate, and adjust.

These elements provide increasingly detailed management direction from the RRCNCA RMP (BLM 2005) to the in-field monitoring and mitigation to move resources toward the desired characteristics of the relevant MEA (see **Figure 10** and **Figure 11**). Further, this process of adaptive management is intended to be flexible, iterative, and adaptable while including the application of relevant laws and regulations, agency guidance, and public involvement. This process is modeled on the Interagency Visitor Use Management Council's Visitor Use Management Framework. This council is comprised of six federal agencies: the BLM, National Park Service, US Fish and Wildlife Service (USFWS), US Forest Service, National Oceanic and Atmospheric Administration, and US Army Corps of Engineers (IVUMC 2016).

Figure 10. Adaptive Management Framework

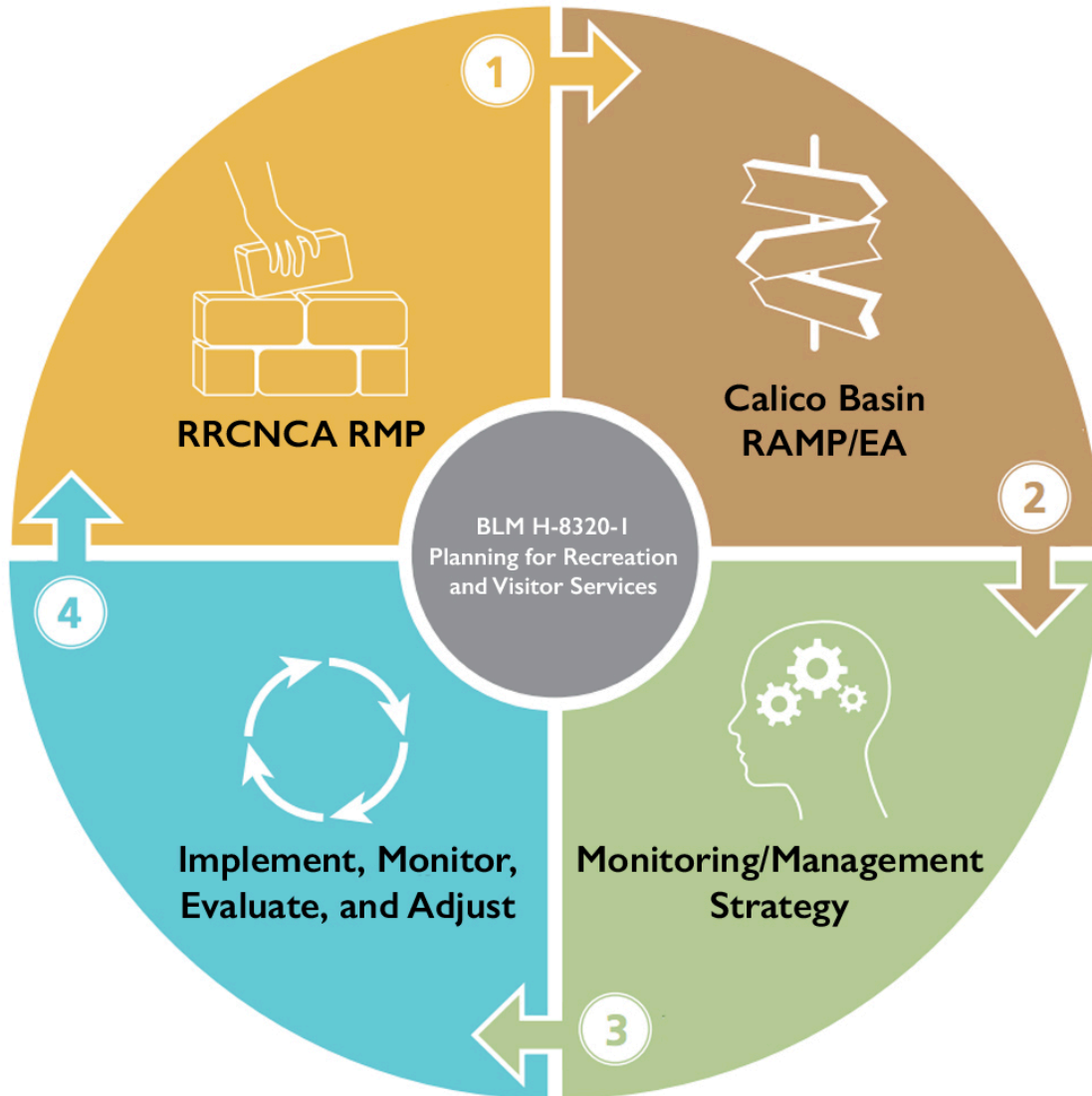
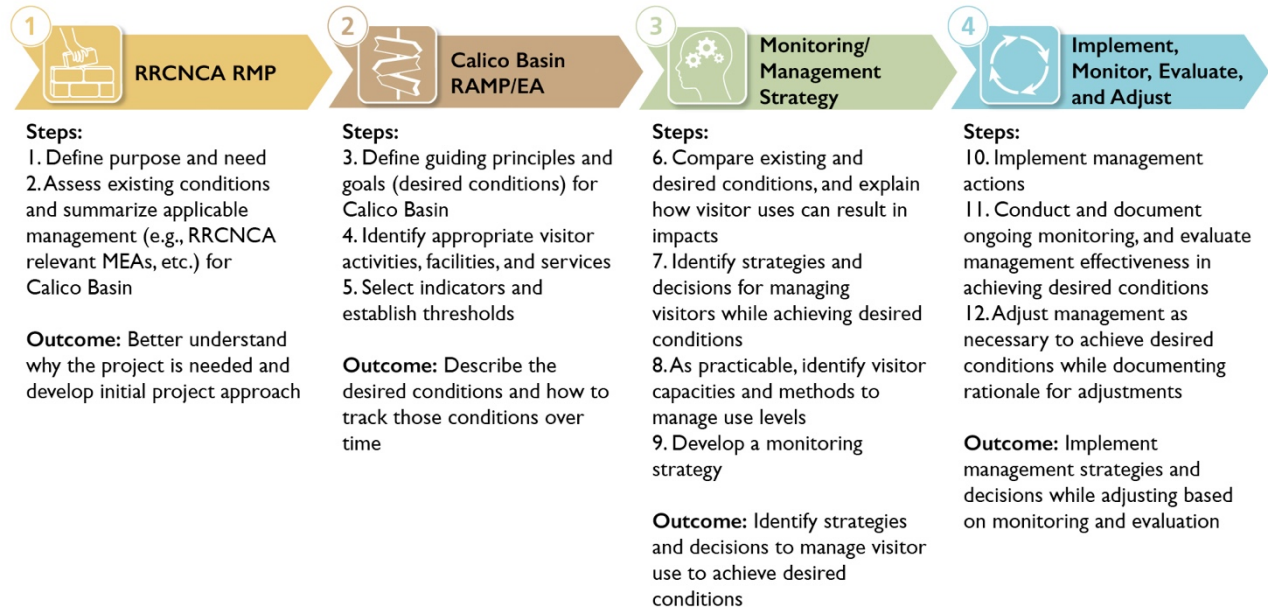


Figure 11. Components of Adaptive Management

Each of the steps described in **Figure 11** are considered in this RAMP/EA as follows:

1. The project purpose and need, along with the three project issues, are defined respectively in **Section 1.3**, Purpose and Need and **Section 1.7**, Interdisciplinary Team and Refined RAMP Issues.
2. Existing conditions are described in **Section 4.2**, Affected Environment. Applicable laws, regulations, guidance, and management are provided in **Section 1.5**, Relationship to Statutes, Regulations, and Other Plans; **Section 2.1**, The BLM's Recreation Management Framework; and **Section 2.2**, RRCNCA RMP Management Emphasis Areas.
3. Guiding principles and goals are described in **Section 2.3.2**, Guiding Principles and **Section 2.3.3**, Management Goals, Strategies, and Decisions.
4. Appropriate uses and facilities are included in **Section 2.3.3**, Management Goals, Strategies, and Decisions.
5. Indicators are described in detail below in **Section 3.3.1**, Management Indicators.
6. Existing and desired conditions are compared in **Section 3.3.2**, Implementation, Monitoring, Evaluation, and Adjustment.
7. Strategies for managing visitors while achieving desired conditions are compared in **Section 3.3.2**, Implementation, Monitoring, Evaluation, and Adjustment.
8. Visitor capacities are discussed in **Access Decision 3**; methods to manage use levels are described in **Section 3.3.2**, Implementation, Monitoring, Evaluation, and Adjustment.
9. Ongoing and proposed monitoring efforts are summarized above in **Sections 3.1.1**, RRCNCA Monitoring Requirements and **3.1.2**, Additional Proposed Monitoring, while the plan for

monitoring and mitigation is considered in **Section 3.3.2**, Implementation, Monitoring, Evaluation, and Adjustment.

10. Implementing management actions is discussed below in **Section 3.3.2**, Implementation, Monitoring, Evaluation, and Adjustment.
11. Step 11 is discussed below in **Section 3.3.2**, Implementation, Monitoring, Evaluation, and Adjustment.
12. Adjusting management, as necessary, is discussed below in **Section 3.3.2**, Implementation, Monitoring, Evaluation, and Adjustment.

3.3.1 Management Indicators

Each management indicator below corresponds to the issues and topics discussed in **Section 2.3.3**, Management Goals, Strategies, and Decisions. These indicators are also described under the relevant resource categories in **Section 4.3**, Environmental Effects.

Recreational Uses, Experiences, and Settings

- Resource protection
 - Indicator: Programmatic NEPA analyses adequate for efficient tiered undertakings such as resource protection or mitigation
 - Indicator: Funding for staff to monitor and manage resources
- Visitor safety
 - Indicator: Frequency of emergency service responses
- General recreational uses
 - Indicator: Incidence of inappropriate use of the Calico Basin (for example, camping, motorized or mechanized use, shooting, unauthorized events, or vendors without permits)
- Rock climbing, bouldering, and slack lining⁷
 - Indicator: Trail conditions with the potential for secondary erosion
 - Indicator: Vegetation cover near rock climbs or boulder problems
- Trail uses
 - Indicator: Inappropriate trail use in the Calico Basin (that is, any use other than pedestrians or equestrians)
 - Indicator: Width, erosion, and braiding of trails
- Access
 - Indicator: Incidence of user-created, unauthorized trails
 - Indicator: Trail conditions with the potential for secondary erosion, such as those that would follow high-intensity rain

⁷ Other management and indicators for rock climbing will be developed in a climbing management plan for the RRCNCA for future application in the Calico Basin.

- Partnerships
 - Indicator: Incidence of coordination with partners, such as cooperative projects and periodic meetings
- Education and interpretation
 - Indicator: Incidence of educational events such as school visits
 - Indicator: Amount of new or updated interpretive materials and signage at key locations for education and impact reduction
- SRPs
 - Indicator: Conformance with the number or frequency for SRPs considered in the BLM's Programmatic EA for Special Recreation Permits (BLM 2010) and described in **Table 4-3**, SRP Management in the RRCNCA Core Area.

Fees, Administration, and Infrastructure

- Fee management and administration
 - Indicator: Following implementation of a site-specific fee for the Calico Basin, the amount of funding adequate for increased law enforcement, additional programming, and increased signage
 - Indicator: Following implementation of a method for fee implementation and regulation of visitor capacity, the number of daily visitors to the area
- Facilities and infrastructure
 - Indicator: Following implementation of a site-specific fee for the Calico Basin, the amount of funding that is adequate for facilities maintenance, improvements, or new facilities
 - Indicator: Number and types of facilities and infrastructure in the Calico Basin
- Roads and parking
 - Indicator: Incidence of inappropriate uses of roads, such as parking in ROWs not designated for that purpose
 - Indicator: Incidence of inappropriate uses of parking lots, such as overnight camping or double parking
 - Indicator: Available parking capacity in the Calico Basin relative to the number of visitors

3.3.2 Implementation, Monitoring, Evaluation, and Adjustment

Adaptive management will allow the BLM to consider how its management actions are implemented and how to adjust management based on the results of monitoring. The management proposed for implementation under this RAMP/EA is described in the decisions discussed in **Section 2.3.3**, Management Goals, Strategies, and Decisions. Some of these decisions would be in immediate effect following issuance of the RAMP/EA, such as continuing to only allow equestrian and pedestrian use on trails in the Calico Basin. Other decisions are for implementation-phase projects that will require additional NEPA and other analyses, such as installing a fee management process and fee collection station on Calico Basin Road or installation of additional signage and educational material at trailheads and other locations.

While the implementation-phase projects would require additional NEPA and other analyses, once those efforts had been completed, the BLM managers using this RAMP/EA would follow the same adaptive management process for their decisions. This adaptive management process includes steps 10–12 of Element 4, described above in **Figure 11**, Components of Adaptive Management. What happens in the final element and steps of adaptive management are as follows:

10. Implement management actions

- a. Prepare for implementing a decision by ensuring BLM staff is equipped to make this change and that the required resources are available.
- b. Implement the management and inform BLM staff, relevant partners, and members of the public of the new management.
- c. Ensure adequate staff are available on-site to gauge reactions from visitors and respond to any questions or concerns.

11. Conduct and document ongoing monitoring, and evaluate the effectiveness of management actions in achieving desired conditions.

- a. Conduct monitoring (per **Section 3.1**, Monitoring) with BLM staff using consistent indicators, such as those described in **Section 3.3.1**, Management Indicators.
- b. Ensure consistency and the ability to track change over time by documenting monitoring and the impact indicators.
- c. When appropriate, empower partners and the public to also monitor the same indicators and create a process to document their results.
- d. Following an adequate period to observe and monitor changes resulting from management actions, evaluate the effectiveness of the changes and determine if the management is moving that resource or setting toward the goals for the Calico Basin (see **Section 2.3.3**, Management Goals, Strategies, and Decisions) and the appropriate MEA characteristics (**Table 3-1**) for a given area.

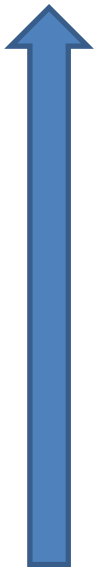
12. Adjust management to achieve desired conditions and document why management is being changed.

- a. If indicators show there are impacts and there is movement away from desired conditions, analyze the potential cause(s).
- b. Consider how to adjust management and work with BLM staff to ensure the change(s) for a particular resource would not affect another resource.
- c. Change the management strategy with the following documentation to demonstrate rationale for the modification:
 - i. Summary of the original action and its implementation (step 10)
 - ii. Summary of monitoring data and analyses suggesting the need for an adjustment (step 11)
 - iii. Reasoning for the selection of the new actions, including the supporting analysis and evidence

Table 3-1. Management Emphasis Areas Development Spectrum

MEA	Description
Developed	<ul style="list-style-type: none"> • There is substantial modification of the natural environment. • There is intensified motorized use, and parking is available. • The human interaction level is moderate to high. • On-site controls are obvious, and facilities are widely available. • Law enforcement is moderately visible.
Roaded Developed	<ul style="list-style-type: none"> • Recreational activities rely on and are consistent with the natural environment. • These areas may include paved roads and buildings, but the design should blend with the natural environment. • The human interaction level is moderate to high in more developed portions and low to moderate elsewhere. • On-site controls, facilities, and law enforcement are noticeable.
Roaded Natural	<ul style="list-style-type: none"> • Developments are limited to improved access and those consistent with the natural environment. • The recreational experience is based on the natural setting. • These areas may include roads, trails, and camping areas (new improvements for resource protection only). • The human interaction level is low to moderate; it is more often on the low side. • On-site controls are present but subtle. • Roaded natural includes areas with existing dirt roads.
Nonmotorized	<ul style="list-style-type: none"> • Area(s) may not necessarily be remote and access may be easy, but the human interaction level would be low. • Opportunities provided could include trails for mountain biking, horseback riding, and hiking. • Existing roads are closed and converted to trails; motorized use is prohibited. • Off-site controls are preferred. • Facilities are avoided, but they may be provided for resource protection or user safety.
Primitive	<ul style="list-style-type: none"> • More risk is assumed and self-reliance is necessary. • Remote areas are not on primary travel routes or easily accessed. • Access is by hiking and horseback; no mechanized vehicles (including mountain bikes) are allowed. • Human interaction is rare to low, and evidence of other users is minimal. • No on-site controls or facilities are provided except those required for resource protection.

Development



Source: BLM RRCNCA approved RMP and ROD (BLM 2005)

- i. Demonstrations of what will change, how it will change, and the resources needed to make the change
 - ii. Explanations of how the changed management will move this resource toward improved, desired conditions.
- d. Change management, including any required NEPA documentation or analysis. Return to step 10 and repeat as necessary.

Adaptive Management Scenarios

Below are two hypothetical scenarios describing how the BLM would conduct adaptive management in accordance with this RAMP and by implementing selected proposed management direction in Section 2.3.3, Management Goals, Strategies, and Decisions.

Adaptive Management Example 1: Trail Use Decision 1

Step 10. Continue pedestrian and equestrian activities as the only approved trail uses in the Calico Basin.

- Continue trail management with horseback riding and hiking being the only approved trails uses (Trail Use Decision 1).
- Inform the staff, partners, and the public that horseback riding and hiking will continue to be the acceptable trail uses in the Calico Basin and ensure staff are ready to respond to feedback from mountain biking and OHV communities or other members of the public.

Step 11. Conduct monitoring and evaluate the effectiveness of limiting trail use at the Calico Basin to just horseback riders and hikers.

- Use ongoing trail use monitoring, which should already have been occurring, to establish baseline conditions. Include consistent impact indicators and evidence of any unapproved uses in the monitoring records by BLM staff (or partners and the public).
- Following an adequate period to observe and monitor changes, consider if unauthorized trail use is continuing and causing the conditions away from the relevant goals, desired conditions, and appropriate characteristics for given MEAs (see Section 2.3.3, Management Goals, Strategies, and Decisions and **Table 3-1**). An example would be evidence of ongoing mountain bike use on any trails in the Calico Basin, particularly within wilderness.

Step 12. Adjust management to achieve desired conditions and explain the change.

- If there is movement away from desired conditions despite the continued trail use regulation, consider why and how the BLM could adjust management, such as adding more signage at trailheads or hardening entry points to move toward desired conditions. Also consider how these changes could affect other resources and uses.
- If necessary, adjust management or visitation regulations with adequate documentation (including any required NEPA documentation or analyses) as described above under the adaptive process in step 14.
- Repeat, as necessary, following this process.

Example 2: Fee Management Decisions 1–3

Step 10. Implement a site-specific fee for the Calico Basin.

- Implement a site-specific fee for the Calico Basin to address specific maintenance, operational, or capital improvement needs; install a fee station; and regulate visitation numbers based on environmental conditions, recreation uses, and facilities/infrastructure (**Fee Management Decisions 1–3**). Note that the construction of a fee station is an implementation-phase project that would require additional NEPA analyses.
- Inform the staff, partners, and the public of the fee implementation and ensure staff are ready to respond to feedback.

Step 11. Conduct monitoring and evaluate the effectiveness of the site-specific fee at the Calico Basin.

- Use monitoring, which should already have been occurring across multiple resources prior to implementation of **Fee Management Decisions 1–3**, to establish baseline conditions with the extensive visitation before regulating visitation numbers. Include consistent impact indicators in the monitoring records by BLM staff (or partners and the public).
- Following an adequate period to observe and monitor changes resulting from visitation regulations—for example, 1 year may be required to allow vegetation to regrow or soils to stabilize—consider if reducing the number of visitors at the Calico Basin has moved resource conditions toward the relevant goals, desired conditions, and appropriate characteristics for given MEAs (see **Section 2.3.3**, Management Goals, Strategies, and Decisions and the appropriate MEA [**Table 3-1**]).

Step 12. Adjust management to achieve desired conditions and explain the change.

- If there is movement away from desired conditions despite the regulation of visitation numbers, consider why and how the BLM could adjust management or visitation further to move toward desired conditions. Also consider how these changes could affect other resources and uses.
- If necessary, adjust management or visitation regulations with adequate documentation (including any required NEPA documentation or analyses) as described above under the adaptive process in step 14.
- Repeat, as necessary, following this process.

Chapter 4. Affected Environment and Environmental Effects

4.1 INTRODUCTION

This chapter describes the affected environment, which is the existing or baseline conditions relevant to each resource or resource use. Following the affected environment is a description of the environmental effects relative to each issue. The Council on Environmental Quality regulations under 40 CFR 1500 and the BLM NEPA handbook require the BLM to identify significant issues for analysis and focus only on those issues. The BLM NEPA handbook defines an issue as “a point of disagreement, debate, or dispute with a proposed action based on some anticipated environmental effect” (BLM 2008, page 40). In addition, an issue “has a cause and effect relationship with the proposed action and alternatives; is within the scope of analysis; has not be [sic] decided by law, regulation, or previous decision; and is amenable to scientific analysis rather than conjecture” (BLM 2008, page 40).

4.2 AFFECTED ENVIRONMENT

4.2.1 Recreation

Recreation Activities and Visitation

The RRCNCA provides a variety of recreation opportunities for visitors and is the most visited national conservation area in the nation, with over 3.5 million visitors in 2020. Visitation in the RRCNCA is projected to break 4 million visitors by 2022 and 5 million by 2024 (BLM 2021a). Located 17 miles west of Las Vegas, the Calico Basin within the RRCNCA is a premier outdoor recreation destination in the area. Typical recreation in the Calico Basin includes hiking, rock climbing, bouldering, horseback riding, picnicking, viewing of archaeological and cultural sites, and photography. Visitation has increased dramatically in the Calico Basin over recent years due to the increasing popularity of the site, the lack of entrance fees, the close proximity to a growing Las Vegas population, and increases in participation and interest in outdoor activities (**Table 4-1**). Peak visitation is from October to April; visitation is less during the summer months when temperatures frequently exceed 100 degrees Fahrenheit. Some of the busiest times of the year in the Calico Basin are during the weeks of Thanksgiving and Christmas.⁸

The Calico Basin is a premier destination for rock climbing and bouldering, and the RRCNCA is considered one of the best places in the world to climb. There are 32 designated climbing crags and 550 acres of concentrated climbing use in the RRCNCA (see **Figure 3**). Several popular rock climbs and bouldering sites, such as Kraft Boulders, are accessible from both the Red Spring and Kraft Mountain parking areas. Other predominant recreational uses in the Calico Basin include hiking and horseback riding on trails and sightseeing along the Red Spring Boardwalk and at Calico Hills.

At the Red Spring Picnic Area, there is a platform for events and educational outings, including film and photography, commercial climbing and hiking, and wedding ceremonies. The BLM issues SRPs for these

⁸ Joshua Travers, BLM Red Rock/Sloan Assistant FO Manager and recreation subject matter expert, personal communication on May 14, 2021, with Peter Gower from EMPSi.

events. During non-summer months, there are typically three to six weddings per day; weddings increased more than 200 percent from 2019 to 2020, even given the COVID-19 pandemic.⁹

Table 4-1. Visitation Trends

Year	Visitation in the Calico Basin (people)	Visitation in the RRCNCA (people)
2012	2,828	1,022,207
2013	5,560	1,016,802
2014	13,124	1,753,250
2015	241,012	1,203,089
2016	116,658	1,324,009
2017	137,272	2,218,286
2018	708,613	3,119,029
2019	383,857	3,563,596
2020	737,251	3,218,149

Source: BLM RMIS 2021

The Red Spring area is part of the fee area for the RRCNCA. The business plan refers to the Calico Basin as the Red Spring area. The BLM has the authority to charge standard and expanded amenity fees pursuant to the Federal Lands Recreation Enhancement Act (Public Law 108-447). Although Calico Basin is within the fee area, the BLM has not implemented fee collection to date (BLM 2018).

Approximately 1,660 acres in the northwest portion of the Calico Basin are within the La Madre Mountain Wilderness (see **Section 4.2.2**, Conservation Lands). Recreation in the wilderness area is mostly the same as that taking place in the non-wilderness areas in the Calico Basin; the exceptions are there are no developed facilities and commercial filming; also, other activities are prohibited in the wilderness as defined in the Wilderness Act of 1964 and BLM Manual 6340 (Management of Designated Wilderness Area). Group sizes in the wilderness area are notably smaller than elsewhere in the Calico Basin, especially compared with Red Spring and Kraft Mountain.

Camping, target shooting, hunting, mountain biking, and OHV use are restricted in the Calico Basin. The BLM has witnessed visitors illegally camping at the climbing areas or in their vehicles in the parking lots, and unauthorized mountain biking.

Access

Motorized access to BLM-administered lands and private inholdings in the Calico Basin is via Calico Basin Road. In the Calico Basin, there is a small road network that provides access to public lands and private inholdings. Before 2021, Clark County owned and maintained all the road ROWs in the Calico Basin. The BLM and Clark County recently negotiated the relinquishment of approximately 2 miles of road ROWs associated with Calico Basin Road, Calico Drive, Assisi Canyon Avenue, and Sandstone Drive. Per the terms of the agreement, the BLM will obtain ownership and maintenance responsibilities for the ROWs. Private landowners will obtain ownership and maintenance responsibilities for the remaining roads in the Calico Basin.

⁹ Joshua Travers, BLM Red Rock/Sloan Assistant FO Manager and recreation subject matter expert, personal communication on May 14, 2021, with Peter Gower from EMPSi.

Nonmotorized and nonmechanized trails in the Calico Basin connect with private inholdings in the Calico Basin and with communities, such as Summerlin, east of the Calico Basin. The Legacy Trail will also provide pedestrian and bicycle access via a dedicated pathway along State Route 159 from the Las Vegas metropolitan area to Calico Basin Road. The Legacy Trail is under construction with a planned completion date in 2023. Cyclists currently ride along the narrow shoulders of State Route 159 and Calico Basin Road.

Facilities

The two primary facilities in the Calico Basin are the Kraft Mountain Trailhead and parking area and the Red Spring Picnic Area. The parking area at the Kraft Mountain Trailhead has a gravel surface with approximately 80 spots; it is located adjacent to a private inholding and accessible via Sandstone Drive. On busy days, there can be over 100 vehicles in the parking lot with vehicles overflowing onto the adjacent street network, which poses potential safety concerns and conflicts with homeowners. The Kraft Mountain Trailhead provides trail access to the Kraft Rocks for rock climbing, and to the Rattlesnake Trail, Desert Cave Trail, and Kraft Mountain Loop Trail for hiking (see **Figure 3**). There are no restrooms, picnic areas, or other facilities at the Kraft Mountain Trailhead.



Figure 12: Red Spring Picnic Area

The Red Spring Picnic Area is the most developed recreation site in the Calico Basin. It is accessible via Calico Basin Road and has a paved parking lot with approximately 125 spots. The site includes five small picnic areas under shade structures (see **Figure 12**), one group picnic area with a pavilion shade structure, interpretive signs, a bike rack, animal-proof waste receptacles, two restroom facilities, and a raised wooden boardwalk (see **Figure 13**). The group picnic area is frequently reserved for special events, such as weddings. The Red Spring site also provides access to many miles of trails, including the 1-mile Red Spring Boardwalk loop.

Trails

The Calico Basin has approximately 38 miles of designated trails for hiking, running, accessing climbing crags, horseback riding, and nature viewing and photography. Although the area is closed to mountain bike use, trail observations indicate mountain biking does occur, especially on trails connecting the Calico Basin with nearby residential areas. During a trail inventory conducted in November 2020, approximately 23 miles of the trails exhibited evidence of use by mountain bikers (see **Table 4-2**). Trails in the Calico Basin are designed for hiking or equestrian use. Unauthorized mountain biking conflicts with other nonmechanized recreational uses. Motorized use is not allowed on trails in the Calico Basin.



Figure 13: Red Spring Boardwalk

In addition to the trailheads at Kraft Mountain and Red Spring, Gene's Trailhead is another popular access point for trail-based recreation. The trailhead is an unpaved parking area pull-off on the side of Calico Basin Road (see **Figure 3** and **Figure 8**). This trailhead parking area is not maintained by the

BLM, but it provides access for a variety of BLM-managed trails and trailheads in the southern portion of the Calico Basin.

Table 4-2. Miles of Designated Trails in the Calico Basin

Inventoried Designated Trails	Miles
Ash Spring	1
Boardwalk	0
Brownstone Canyon	1
Calico Basin Trail	0
Gene's Trail	1
Kraft Mountain Loop Trail	3
attlesnake	1
Bad Bunny	1
Bernie Mac	0
Brownstone Canyon	2
Calico Causeway	1
Calico Inner Circle	1
CB Middle	1
David Flowie	1
East Calico	1
Into the Sun	2
Santeria	1
Steve Wander	1
Unnamed	19
Total	38

Source: BLM 2020

Special Recreation Permits

The BLM manages SRPs programmatically within the Calico Basin for both commercial and organized group activities and events (BLM 2010). The Calico Basin is within the core area that the BLM manages in the RRCNCA for SRPs (BLM 2010). The core area is defined as the system of trails and roads, including the Scenic Drive; Red Spring; the Calico Basin area; and facilities along State Route 159, including the Dedication Overlook, Scenic Drive Exit, Old Oak Creek, First Creek, and Moenkopi Road. The core area also includes the La Madre Mountain Wilderness and Rainbow Mountain Wilderness for some, but not all, approved SRP activities.

Table 4-3 summarizes the SRP management outlined in the programmatic EA for commercial guide and special event services, including the types of SRPs that could be issued and the maximum number based on historical use of the conservation area (BLM 2010). Additional details are provided in the BLM's programmatic EA for SRPs (BLM 2010).

Table 4-3. SRP Management in the RRCNCA Core Area

SRP Type	Number of Permits	Number of Tours/Events	Maximum Participation
<i>Ongoing Commercial SRPs</i>			
4 X 4 (OHV) guided tours (Rocky Gap Road)	4 per day	2 per day	5 vehicles per tour
Mountain bike/road bike guided tours	4 per day	2 per day	12 bicycles per tour
Bus tours	Not described	No limit	Undefined
Motorcycle/scooter tours	4 per day	2 per day	20 persons per tour
Rock Climbing—"Guest" (limited to two 5-day or one 10-day period per year)	8 per day	2 per area	12 persons per tour
Rock climbing—Full-time	5 per day	2 per area	12 persons per tour
Hiking guided tours	5 per day	2 per day	12 hikers per tour
Hunting	Not defined	1	Only permitted in areas above 5,000 feet with permit
Equestrian—Full-time	3 per day	8 per day	40 riders per tour
Equestrian—Guest permits (Scenic Drive exit)	1 per month	1 per month	40 riders per tour
Yoga/fitness groups	2 per day	1 per day	12 participants per event
Weddings (State Route 159 Overlook, Red Spring Boardwalk, and Sandstone Quarry)	2 full-time	5 per day	50 or less per event depending on location
Artistic	2 per day	1 per day	12 participants per event
Camping—Commercial use of group camp	2 per day	2 group sites; limit 14 days two times per year	50 depending on site
<i>Competitive Event SRPs</i>			
Foot races	5 per year	N/A	500 individuals
Rock climbing	1 per year	N/A	1,000 individuals participating or spectating
Poker runs	5 per year	N/A	50 individuals
Duel sport—Rocky Gap	2 per year	N/A	50 individuals
Equestrian—Rocky Gap	1 per year	N/A	50 individuals
Vehicle—Mountain bike/motorcycle (not speed event)	2 per year	N/A	100 individuals
<i>Noncompetitive Event SRPs</i>			
Foot—On Scenic Drive	5 per year	N/A	500 individuals
Foot—Trails and unpaved roads	2 per year	N/A	300 individuals
Hiking—Organized groups not educational	10 per year	N/A	50 individuals per group, divided into sections of 15 with 20-minute spacing between sections
Mountain climbing—Organized groups/educational	5 per year	N/A	10 days per permit total, 50 individuals per permit
Bicycle	5 per year	N/A	500 bicycles
Motorized—Scenic Drive and developed sites only	5 per year	N/A	300 individuals
4x4 organized group (street legal only)	2 per day	N/A	10 vehicles per day (limited to 5 per group area)
Equestrian	5 per year	N/A	50 individuals

SRP Type	Number of Permits	Number of Tours/Events	Maximum Participation
Group use picnic—Other (Willow Spring, Red Rock Canyon Overlook, off-season campground)	24 per year	N/A	50 individuals
Group use picnic—Red Spring	300 per year	N/A	50 individuals
Group camping—Off-season use of campgrounds	2 per day	N/A	Maximum of 2 sites per permit (group size limited to the available parking at the site)
Vehicle—Educational	50 per year	N/A	75 individuals
Wedding	12 per month	N/A	50 individuals

Source: BLM 2010

4.2.2 Conservation Lands

NCA

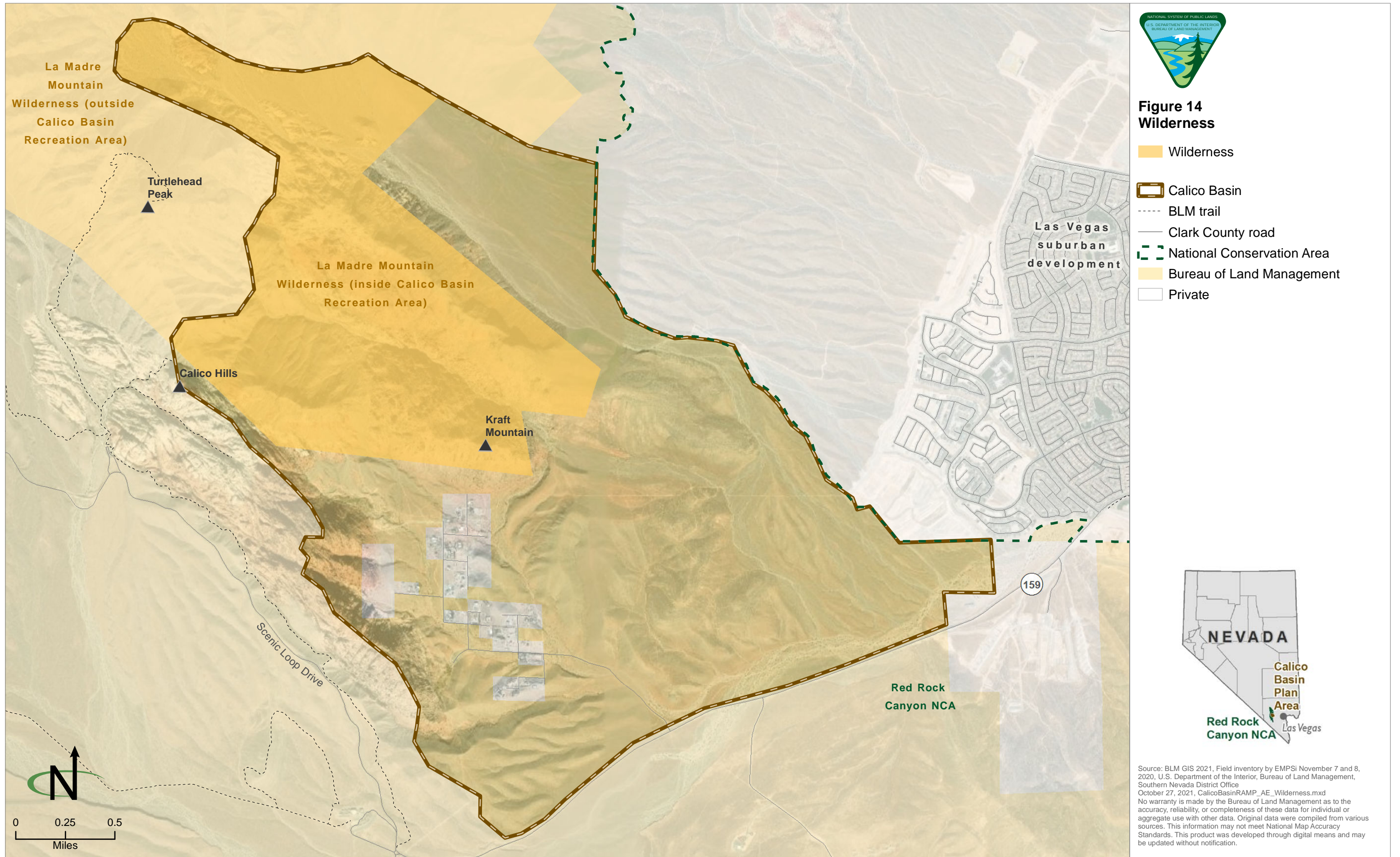
Section 2002 of the Omnibus Public Land Management Act (OPLMA) of 2009 withdraws the RRCNCA from the multiple-use and sustained-yield directive for management of public lands. Under the OPLMA, the RRCNCA is managed for conservation of cultural, ecological, and scientific values for the benefit of current and future generations, through the establishment of the NLCS.

Wilderness

Approximately 1,660 acres in the northwest portion of the Calico Basin are within the La Madre Mountain Wilderness (see **Figure 14**). The La Madre Mountain Wilderness was designated as wilderness by the Clark County Conservation of Public Land and Natural Resources Act of 2002. It offers opportunities for solitude and recreation and protects habitat for numerous wildlife species. While this wilderness area is jointly managed by the US Forest Service and the BLM in certain parts of its range, the acres within the Calico Basin are administered solely by the BLM. The La Madre Mountain Wilderness and Rainbow Mountain Wilderness Management Plan (BLM and Forest Service 2013) summarizes the qualities of wilderness character within the La Madre Mountain Wilderness.

The geology of the La Madre Mountain Wilderness features canyons, ridges, and mountain peaks (BLM 2021b). With an elevation range spanning 6,000 feet, the La Madre Mountain Wilderness supports a variety of plant and animal life. The higher elevations of the wilderness provide crucial summer habitats for bighorn sheep, mule deer, and elk. Additionally, the La Madre Mountain Wilderness provides opportunities for hiking, rock climbing, horseback riding, wildlife viewing, hunting, and camping.

The wilderness is highly scenic and offers excellent views of classic basin and range formations, including the Keystone Thrust formation above Brownstone Basin, where older limestone has been pushed over younger sandstone. There are pre-contact sites throughout the area, including rock writing (pictographs and petroglyphs), agave roasting pits, and rock shelters. Within the wilderness, Brownstone Canyon is listed on the National Register of Historic Places (NRHP; Forest Service 2021).



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4.2.3 Wild Horses and Burros

The BLM maintains a wild horse and burro program, which protects wild horses and burros on 26.9 million acres of public lands across 10 western states as part of its mission to administer public lands for a variety of uses; however, these lands are not considered conservation lands, such as the NCA or wilderness. The wild horse and burro program's goal is to manage healthy wild horses and burros on healthy public rangelands. The RRCNCA includes the Red Rock Herd Management Area (RRHMA), which is managed by the BLM. There are 970 acres of the RRHMA located in the Calico Basin, and more acres of the RRHMA are to the south, west, and north. During the hot months of the year, the wild burros occupy areas characterized by ravines, which supply shade, while the wild horses tend to occupy the open country. During the cooler season, wild horses and burros use all the RRHMA (BLM 2021b).

4.2.4 Cultural Resources

The readily available water at Red Spring, Calico Spring, and Ash Spring made the area attractive to Indigenous groups who occupied the area as early as 13,000 years before present. The archaeological record of the Calico Basin provides evidence of use and intermittent occupancy by the Patayan, Ancestral Puebloan, and Southern Paiute people. Pre-contact sites, features, and artifacts found in the Calico Basin include rock writing panels, rock shelters, roasting pits, burned bone, milling sites, lithic scatters, and ceramics (Myhrer 1991).

Southern Paiute peoples resided in and around the Calico Basin in 1829 at the time of initial European contact with emigrants, fur trappers, and settlers who were traveling the Old Spanish Trail or the nearby Mormon Trail (BLM 2005). Of note is the Brownstone Canyon District, which is listed on the NRHP and located in the northern portion of the Calico Basin, with resources including extensive rock writing, roasting pits, and historic Civilian Conservation Corps water projects (Myhrer 1991).

4.2.5 Biological Resources

Vegetation, Invasive Species, and Noxious Weeds

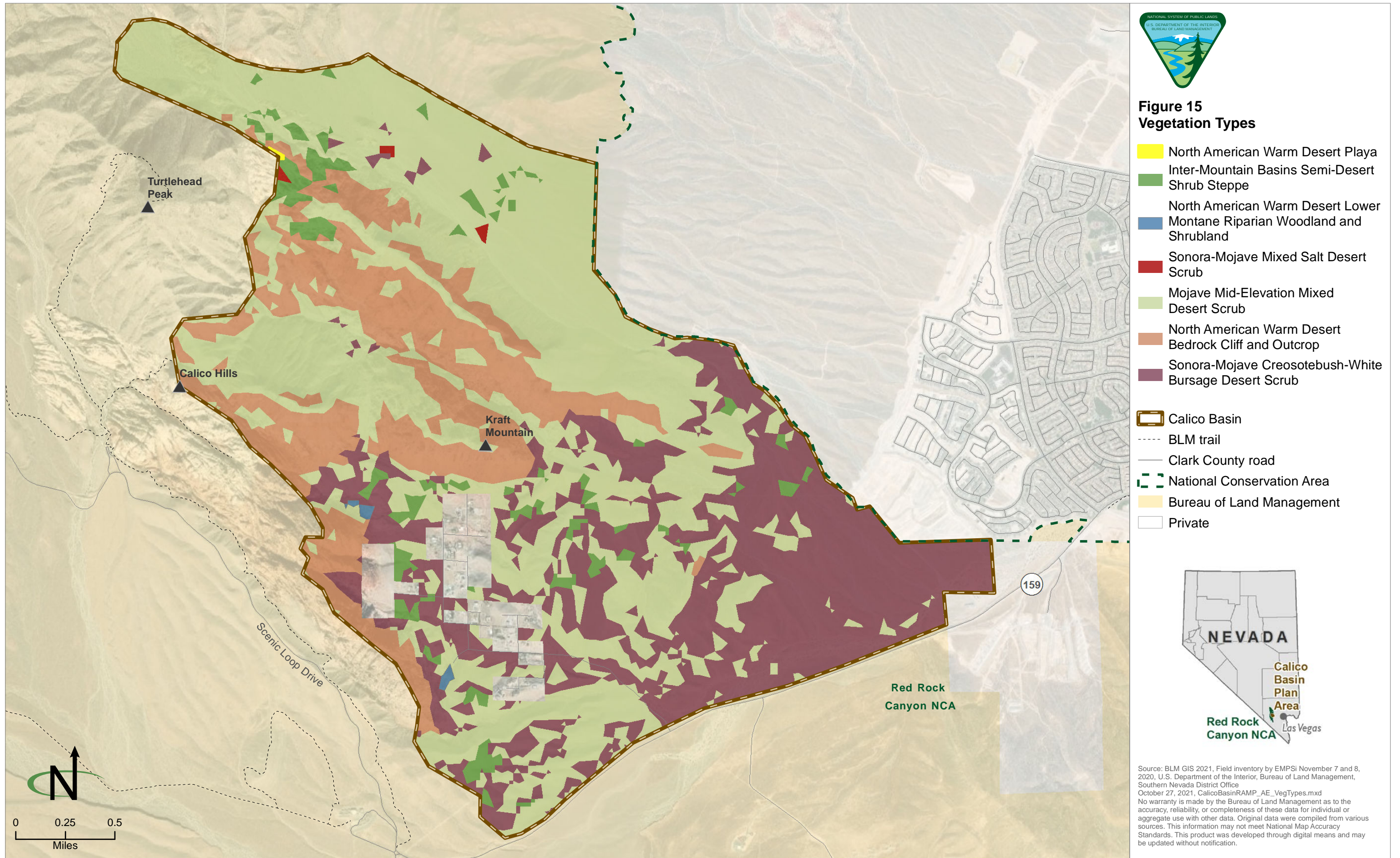
General Vegetation

Vegetation types on BLM-administered lands within the Calico Basin are characterized mostly by Mojave Mid-Elevation Mixed Desert Scrub (2,520 acres), Sonora-Mojave Creosote Bush-White Bursage Desert Scrub (1,390 acres), and North American Warm Desert Bedrock Cliff and Outcrop (880 acres). Vegetation varies with the topography, soil type, and elevation. These vegetation communities are illustrated in **Figure 15** and summarized below in **Table 4-4**.

The Mid-Elevation Mixed Desert Scrub ecological system is a transition zone found above the lower-elevation Creosote Bush Scrub system and below the montane woodlands system. In the Calico Basin, the Joshua tree (*Yucca brevifolia*) and Mojave yucca (*Yucca schidigera*) are among the notable species in the Mid-Elevation Mixed Desert Scrub ecological system. Other species include banana yucca (*Yucca baccata*) and the century plant (*Agave americana*).

The Sonora-Mojave Creosote Bush-White Bursage Desert Scrub ecological system is characterized by a moderately dense layer (less than 50 percent cover) comprised of shrubs and cacti, including creosote bush (*Larrea tridentata*), barrel cactus (*Echinocactus grusonii*), beavertail cactus (*Opuntia basilaris*), silver cholla (*Cylindropuntia echinocarpa*), and hedgehog cactus (*Echinocereus engelmannii*).

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Table 4-4. Vegetation Types on BLM-Administered Lands in the Calico Basin

Vegetation Type	Acres
Mojave Mid-Elevation Mixed Desert Scrub	2,520
Sonora-Mojave Creosote Bush-White Bursage Desert Scrub	1,390
North American Warm Desert Bedrock Cliff and Outcrop	880
Inter-Mountain Basins Semi-Desert Shrub Steppe	170
North American Warm Desert Lower Montane Riparian Woodland and Shrubland	10
Sonora-Mojave Mixed Salt Desert Scrub	10
Total	4,980

Source: BLM GIS 2021

The Calico Basin has three springs—Red Spring, Calico Spring, and Ash Spring—characterized by riparian vegetation types. Riparian areas are the transition zones between permanently saturated wetlands and dry uplands. Of the three springs in the Calico Basin, Ash Spring has average vegetation diversity. Calico Spring has comparatively high biodiversity compared with Ash Spring, and the white bear poppy is found on the slopes surrounding the spring. There is also an aquatic lichen (*Dermatocarpon luridum*) that has been found in Calico Spring; this lichen has not been recorded anywhere else in Nevada. Red Spring is characterized by both wet and saline meadows, and the alkali mariposa lily thrives in the alkaline soils of this area (see **Special Status Species**, below, for more details about the white bear poppy, alkali mariposa lily, and other sensitive plant species in the plan area).

A newly described plant species in the *Helianthus* genus of the Asteraceae family grows in alkaline outcrops along two riparian drainages in the Calico Basin area; these drainages are fed by Calico Spring and an unnamed spring. Little is known about this species at this time.

Invasive and Noxious Weeds

Invasive and noxious weeds in the plan area include Russian olive (*Salsola tragus*), red brome (*Schismus barbatus*), Sahara mustard (*Brassica tournefortii*), salt cedar/tamarisk (*Tamarix* spp.), Russian thistle (*Salsola* ssp.), species of grasses (*Schismus* spp.), cheatgrass (*Bromus tectorum*), and species of flowering plants in the *Erodium* genus (*Erodium* spp.). There is the potential for other invasive mustards, including London rocket (*Sisymbrium irio*), to be present in the plan area; however, this has not been confirmed. In the larger RRCNCA, puncturevine (*Tribulus terrestris*) and Malta starthistle (*Centaurea melitensis*) are known to exist; small wild populations of elephant grass (*Arundo donax*) also exist in the RRCNCA and developed areas adjacent to the Calico Basin.

Most species exist in disturbed and high-traffic areas such as roads, trails, trailheads, campgrounds, group areas, and parking lots. The invasive annual grasses, such as red brome, cheatgrass, and *Erodium* species, are more widespread and ubiquitous and not necessarily associated with a specific disturbance, other than wildfire. Tamarisk and Russian olive are typically associated with riparian areas or adjacent to riparian areas. No weed surveys have been completed in the plan area. Weed management in the plan area is guided by the RRCNCA RMP and ROD (BLM 2005) as well as the Las Vegas Field Office Noxious Weed Plan (BLM 2006).

Wildlife

The Calico Basin is within the habitat range for bighorn sheep (*Ovis canadensis*). Other common mammal wildlife species known to exist in the Calico Basin are the coyote (*Canis latrans*), desert cottontail (*Sylvilagus audubonii*), black-tailed jackrabbit (*Lepus californicus*), and kit fox (*Vulpes macrotis*) (BLM 2003).

Common reptilian wildlife expected to exist within the plan area include the western whiptail (*Aspidoscelis tigris*), zebra-tail lizard (*Callisaurus draconoides*), side-blotched lizard (*Uta stansburiana*), long-nose leopard lizard (*Gambelia wislizenii*), Great Basin collard lizard (*Crotaphytus insularis bicinctores*), red coachwhip (*Masticophis flagellum piceus*), gopher snake (*Pituophis catenifer*), and speckled rattlesnake (*Crotalus mitchelli*).

Common avifauna in the plan area include the black-throated sparrow (*Amphispiza belli*), black-tailed gnatcatcher (*Polioptila nigriceps*), northern mockingbird (*Mimus polyglottos*), common raven (*Corvus corax*), and red-tailed hawk (*Buteo jamaicensis*) (BLM 2003).

Migratory Birds

Migratory bird species commonly known to exist in the plan area are Bendire's thrasher (*Toxostoma bendirei*), black-chinned sparrow (*Spizella atrogularis*), Costa's hummingbird (*Calypte costae*), golden eagle (*Aquila chrysaetos*), gray vireo (*Vireo vicinior*), Le Conte's thrasher (*Toxostoma lecontei*), rufous hummingbird (*Selasphorus rufus*), and rufous-winged sparrow (*Aimophila carpalis*) (USFWS 2021).

Special Status Species

The USFWS Information, Planning, and Conservation, queried on April 12, 2021, identified three federally endangered species and one federally threatened species to have the potential to exist within the plan area. The three federally endangered species are the southwestern willow flycatcher (*Empidonax traillii extimus*), Yuma Ridgway's rail (*Rallus obsoletus yumanensis*), and Pahrump poolfish (*Empetrichthys latos*); the federally threatened species is the desert tortoise. There are no federally threatened or endangered plant species in the Calico Basin. No critical habitats were identified (USFWS 2021).

There are many BLM Nevada sensitive species that have the potential to exist in the Calico Basin (Table 4-5). Some unique species to note include the Spring Mountains springsnail, the alkali mariposa lily, and the white bear poppy. The Spring Mountains springsnail is a rare species, endemic to only four springs in the Spring Mountains of Nevada, including Red Spring in the Calico Basin.

Table 4-5. Special Status Species

Common Name	Scientific Name	Status ¹
<i>Birds</i>		
Golden eagle	<i>Aquila chrysaetos</i>	S
Bald eagle	<i>Haliaeetus leucocephalus</i>	S, SB
Peregrine falcon	<i>Falco peregrinus</i>	S, EB
Ferruginous hawk	<i>Buteo regalis</i>	S
Swainson's hawk	<i>Buteo swainsoni</i>	S
Northern goshawk	<i>Accipiter gentilis</i>	S, SB
Loggerhead shrike	<i>Lanius ludovicianus</i>	S, SB
Lewis's woodpecker	<i>Melanerpes lewis</i>	S
Pinyon jay	<i>Gymnorhinus cyanocephalus</i>	S
Phainopepla	<i>Phainopepla nitens</i>	S
Crissal thrasher	<i>Toxostoma crissale</i>	S

Common Name	Scientific Name	Status¹
Bendire's thrasher	<i>Toxostoma bendirei</i>	S
LeConte's thrasher	<i>Toxostoma lecontei</i>	S
Sage thrasher	<i>Oreoscoptes montanus</i>	S, SB
Southwestern willow flycatcher	<i>Empidonax traillii extimus</i>	E, S, EB
Brewer's sparrow	<i>Spizella breweri</i>	S, SB
Yuma Ridgway's rail	<i>Rallus obsoletus yumanensis</i>	E, S, EB
<i>Invertebrates</i>		
Monarch butterfly	<i>Danaus plexippus</i>	C
Spring Mountains springsnail	<i>Pyrgulopsis deaconi</i>	S
<i>Mammals</i>		
Desert bighorn sheep	<i>Ovis canadensis nelsoni</i>	S
Canyon bat	<i>Parastrellus hesperus</i>	S
Mexican free-tailed bat	<i>Tadarida brasiliensis</i>	S, PM
Big brown bat	<i>Eptesicus fuscus</i>	S
California myotis	<i>Myotis californicus</i>	S
Western small-footed myotis	<i>Myotis ciliolabrum</i>	S
Fringed myotis	<i>Myotis thysanodes</i>	S, PM
Hoary bat	<i>Lasiurus cinereus</i>	S
Pallid bat	<i>Antrozous pallidus</i>	S, PM
<i>Fish</i>		
Pahrump poolfish	<i>Empetrichthys latos</i>	E, S, EF
<i>Reptiles</i>		
Banded Gila monster	<i>Heloderma suspectum cinctum</i>	S, PR
Desert tortoise	<i>Gopherus agassizii</i>	T, S, TR
Desert collared lizard	<i>Crotaphytus bicinctores</i>	S
Desert iguana	<i>Dipsosaurus dorsalis</i>	S
Long-nosed leopard lizard	<i>Gambelia wislizenii</i>	S
Desert horned lizard	<i>Phrynosoma platyrhinos</i>	S
Common chuckwalla	<i>Sauromalus ater</i>	S
Glossy snake	<i>Arizona elegans</i>	S
Regal ringneck snake	<i>Diadophis punctatus regalis</i>	S
<i>Plants</i>		
Mojave thistle	<i>Cirsium mohavense</i>	S
Pinto beardtongue	<i>Penstemon bicolor</i>	S
White bear poppy	<i>Arctomecon merriamii</i>	S
Big root blue-eyed grass	<i>Sisyrinchium radicans</i>	S
Alkali mariposa lily	<i>Calochortus striatus</i>	S
Spring Mountain milkvetch	<i>Astragalus remotus</i>	S

Source: BLM 2017. See source for habitat requirements.

¹Status Key:

- E: USFWS endangered
- T: USFWS threatened
- C: USFWS candidate
- S: BLM Nevada sensitive species
- SB: Nevada Department of Wildlife (NDOW) sensitive bird
- EB: NDOW endangered bird
- PM: NDOW protected mammal
- PR: NDOW protected reptile
- TR: NDOW threatened reptile
- EF: NDOW endangered fish

The alkali mariposa lily thrives in the alkaline soils of the Red Spring area. The species is extremely rare in both Nevada and California, and the population in Red Spring is the largest population found in Clark County (BLM 2003). The alkali mariposa lily's habitat in Red Spring is currently stable within the fenced

area and almost denuded out of the fenced area. Suitable habitat for the alkali mariposa lily outside of the fenced area has been subject to grazing by burros and heavy recreational traffic from hikers and picnickers.

The white bear poppy is a perennial plant found in flat desert scrub and Mojave Desert scrub habitats. It prefers shallow gravelly soil, rocky slopes, and less often valley bottoms. The white bear poppy has been found on the banks of Calico Spring (BLM 2003).

Forestry—Cacti and Yucca

In Nevada, all cacti and yucca plants are protected under 2009 Nevada Code, Title 47—Forest Products and Flora, Chapter 5270: Protection and Preservation of Timbered Lands, Trees and Flora, Protection of Christmas Trees, Cacti and Yucca (State of Nevada 2019).

No surveys for cacti or yucca species have been conducted in the plan area. However, species likely to be present include silver cholla (*Cylindropuntia echinocarpa*), diamond cholla (*Cylindropuntia ramosissima*), cottontop cactus (*Echinocactus polycephalus*), Engelmann's hedgehog cactus (*Echinocereus engelmannii*), desert pincushion (*Escobaria chlorantha*), desert barrel cactus (*Ferocactus cylindraceus*), matted cholla (*Grusonia parishii*), beavertail cactus (*Opuntia basilaris*), and plains prickly pear (*Opuntia polyacantha*).

4.2.6 Native American Concerns

The Calico Basin is a region traditionally used by the Nuwu, or Southern Paiute peoples, with significance to their culture that extends to the present (UNLV 2021). It is unknown if there are traditional cultural properties (TCPs) or sacred sites in the Calico Basin, but there are areas of traditional cultural practice. The BLM follows multiple regulations and guidelines when considering these types of resources and uses, including the NHPA (for example, Section 101(d) of the NHPA requires that federal agencies consult with Native American tribes who historically occupied the area of an undertaking or who may attach significance to resources in the region); the American Indian Religious Freedom Act; and EO 13007, Indian Sacred Sites.

The BLM has reached out to many federally recognized tribes in the region. As part of the Section 106 process of the NHPA and pursuant to regulations under NEPA and the Federal Land Policy and Management Act, the BLM currently maintains ongoing consultation with the Moapa Band of Paiutes, Twenty-Nine Palms Band of Mission Indians, Paiute Indian Tribe of Utah, and San Juan Southern Paiute Tribe regarding the Calico Basin RAMP/EA.

4.2.7 Paleontological Resources

Paleontological resources (fossils) found in the decision area consist of remains or traces of plants and animals that existed during the 600-million-year geological history of southern Nevada. Fossils are unique, nonrenewable resources that provide clues to the history of life on earth and, as such, are considered to have scientific value. A minimal amount of paleontological research has been conducted in this region.

Most fossils recorded in the RRCNCA are from the Paleozoic and Mesozoic eras. The fossil record representing these eras include brachiopods, gastropods, crinoids, corals, sponges, and petrified wood. The BLM uses the Potential Fossil Yield Classification (PFYC) system to assess the relative paleontological resource sensitivity of geological units that may be affected by implementation-level actions in the plan area. The PFYC system is a helpful planning tool for determining the probability of

fossils; however, it is not an adequate replacement for on-the-ground paleontological surveys, inventories, and requirements under the Paleontological Resource Preservation Act.

4.2.8 Public Health and Safety

Public health and safety management is intended to protect the public on BLM-administered lands, to comply with applicable federal and state laws, to prevent waste contamination, and to minimize physical hazards due to any BLM-authorized actions, recreation, or illegal activities on public lands. Maintaining a safe environment encompasses various resources that are discussed in greater detail under relevant sections in this RAMP/EA, such as recreation (see **Section 4.2.1**), water quality (see **Section 4.2.11**), and roads (see **Section 4.2.12**).

During the early information gathering outreach, the public expressed concerns about:

- the BLM having a greater law enforcement and ranger presence in the Calico Basin to reduce the incidence of drug use and illegal activities;
- better cellular service and ranger dispatch in case of an emergency;
- surveillance cameras at parking lots to reduce crime;
- improved ingress and egress for the public and residents in emergencies;
- ensuring proper traffic flow and adequate parking to reduce accidents, as current access to the Calico Basin is unsafe during peak traffic volume;
- reducing human and canine waste to improve conditions; and
- the Calico Basin roads washing out during periods of high rainfall, causing flash floods and unsafe driving conditions.

These concerns cover the range of issues for public health and safety that are not addressed elsewhere in the RAMP/EA for specific activities such as rock climbing and equestrian use (see **Section 4.2.1**, Recreation). The information presented in **Table 4-6**, below, provides details on the reported crimes in the Calico Basin for February through July 2021.

Table 4-6. Recent Reported Crime in the Calico Basin

Description of Crime Incidents in the Calico Basin*	Incident Number	Location	Responding Agency	Date/Time
406V—Auto Burglary	LLV210200006336	1200 Block Sandstone Dr.	Las Vegas Metropolitan Police	2/2/21 12:59 p.m.
406V—Auto Burglary	LLV210200093729	14000 Block Calico Basin Rd.	Las Vegas Metropolitan Police	2/21/21 4:23 p.m.
416B—Other Disturbance	LLV210300036283	1900 Block Moreno Rd.	Las Vegas Metropolitan Police	3/8/21 2:45 p.m.
406V—Auto Burglary	LLV210300069990	14000 Block Calico Basin Rd.	Las Vegas Metropolitan Police	3/15/21 3:02 p.m.
406V—Auto Burglary	LLV210400126327	Calico Dr./Heyer Way	Las Vegas Metropolitan Police	4/28/21 2:35 p.m.

Description of Crime Incidents in the Calico Basin*	Incident Number	Location	Responding Agency	Date/ Time
44I—Malicious Destruction of Property	LLV210500087482	1800 Block Sandstone Dr.	Las Vegas Metropolitan Police	5/19/21 9:53 a.m.
415—Assault/Battery	LLV210600007574	1400 Block Sandstone Dr.	Las Vegas Metropolitan Police	6/2/21 4:18 p.m.
406V—Auto Burglary	LLV210600077916	1200 Block Sandstone Dr.	Las Vegas Metropolitan Police	6/17/21 2:41 p.m.

Source: Crime Mapping 2021

*Data are from February 1 to July 30, 2021

4.2.9 Socioeconomics and Environmental Justice

Socioeconomics

Data on population demographics, income, and poverty status were collected for the State of Nevada, Clark County, and census tract 58.23, where the Calico Basin is located (**Table 4-7**). Census tract 58.23 is a large area covering more than just the Calico Basin; therefore, it may not be representative of the demographics specific to the Calico Basin. Clark County, including the greater Las Vegas metropolitan area, has been one of the nation's fastest growing areas in recent decades. From the 2010 census to 2019, the population of Clark County grew by an estimated 16.2 percent (USCB 2021).

Table 4-7. Regional Calico Basin Demographics

Demographics	Nevada	Clark County, Nevada	Census Tract 58.23, Clark County, Nevada
Population	2,972,382	2,182,004	8,177
Race (population)			
White alone	1,949,707	1,312,652	5,883
Hispanic or Latino, percent	29.2%	31.6%	Not available*
White alone, not Hispanic or Latino, percent	48.2%	41.7%	Not available*
Black or African American alone	271,005	255,174	88
American Indian and Alaska Native alone	38,026	18,693	0
Asian alone	242,267	212,385	1,448
Native Hawaiian and Other Pacific Islander alone	20,022	16,407	11
Some other race alone	304,947	249,921	360
Two or more races	146,408	116,772	387
Median annual income (dollars)	\$60,365	\$59,340	\$142,140
Income in the past 12 months below poverty level (population)	384,690	295,030	398
Male:	177,291	135,402	145
Under 18 years	63,871	50,946	0
18 to 24 years	18,435	12,754	29
25 to 34 years	21,366	16,490	22
35 to 44 years	17,851	13,876	6
45 to 54 years	17,626	13,621	27

Demographics	Nevada	Clark County, Nevada	Census Tract 58.23, Clark County, Nevada
55 to 64 years	20,725	15,255	48
65 to 74 years	11,142	7,959	0
75 years and over	6,275	4,501	13
Female:	207,399	159,628	253
Under 18 years	58,059	45,883	96
18 to 24 years	23,418	16,624	30
25 to 34 years	33,218	26,218	19
35 to 44 years	26,497	21,717	40
45 to 54 years	22,015	16,994	13
55 to 64 years	21,181	15,880	30
65 to 74 years	13,448	9,541	13
75 years and over	9,563	6,771	12

Sources: American Community Survey 2019a, 2019b, 2019c

*The detailed data are not available for census tract 58.23 in the 2019 American Community Survey.

Detailed information on Calico Basin residents cannot be determined from census tract data. Clark County staff estimates there are 40 residences within the Calico Basin occupied by 70 adults and 5 to 10 children.¹⁰

The RRCNCA RMP provides summary data on demographics of visitors to the RRCNCA compiled from a survey completed in 1992 (BLM 2005). The survey indicated that 55 percent of visitors were male and 45 percent were female; 40 percent were 25 to 44 years of age and 25 percent were 45 to 64 years of age. Age groups 11 and younger, 12 to 14, and 65 and older each represented approximately 10 percent of survey respondents. Of all survey respondents, 87 percent were white, 8 percent were Hispanic, and the remainder were other minorities. The most visitors (35 percent) indicated an average annual household income of \$25,000 to \$50,000. Those earning less than \$10,000, \$10,000 to \$24,000, \$50,000 to \$75,000, and more than \$75,000 each respectively represented 10 percent of all survey respondents. The median household income in Clark County in the 2015–2019 period was \$59,340 (US Census 2020).

Of all visitors surveyed in 1992, 14 percent had a bachelor's degree or equivalent, 46 percent had some college, 26 percent had a high school diploma, and 14 percent did not receive a high school diploma; this is nearly the same as the 2019 census data for Clark County, which indicate 86 percent of people 25 and older have a high school degree or higher (US Census 2020). Visitors that work full-time accounted for 44 percent of respondents in 1992; 16 percent were retired; others were not employed, were students, were self-employed, or worked part time. Slightly over 2 percent had some type of impairment; half of those involved mobility and the other half had a hearing, visual, or mental impairment. Approximately 55 percent of visitors were from Nevada, with most residing in Clark County; 45 percent were from outside of Nevada.

¹⁰ Meggan Holzer, Clark County community liaison, personal communication with William Penner from EMPSi, in 2021.

Environmental Justice

Environmental justice populations consist of individuals and families with incomes below the national poverty level and people who self-identify as belonging to one or more ethnic or racial minority group. Impacts on these populations from proposed federal actions would normally be the same as those considered for the entire population of a plan area. If, however, some impacts would have an adverse and disproportionate impact on identified environmental justice populations, then environmental justice impacts would be assessed. EO 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, requires federal agencies to identify and address any disproportionately high and adverse human health or environmental impacts of their programs, policies, and activities on minority and low-income populations.

Minority Populations

Minorities are defined as individuals who identify as one or more of the following population groups:

- American Indian or Alaskan Native
- Asian or Pacific Islander
- Black, not of Hispanic/Latino origin
- Hispanic/Latino of any race

Table 4-7 provides details from 2019 on what portions of the population in census tract 58.23 are minorities. Based on the best available data, which do not include information on the population in census tract 58.23 who identified as White and identified as Hispanic or Latino, the minority population is 28 percent. In comparison, Nevada had a minority population of 54 percent (including those who identified as belonging to two or more races). In Clark County, approximately 56 percent of the population identifies as a minority. There are no data to determine whether Calico Basin residents have a predominately minority population.

Low-Income Populations

Low-income populations are defined by the US Census Bureau as persons living below the poverty level, based on a total income of \$12,490 for an individual and \$25,750 for a family of four for 2019 data. However, the BLM, Council on Environmental Quality, and Environmental Protection Agency guidance do not provide a quantitative threshold¹¹ for determining whether a population should be considered low income. For this analysis, the percentage of persons in poverty in census tract 58.23 is compared with that of the state. As described in **Table 4-7**, Nevada in 2019 included 13 percent of its population living below the poverty level; census tract 58.23 had only 5 percent of its population under the poverty level. Further, the median family income in Nevada was \$60,365. In census tract 58.23, the median family income was more than double that with \$142,140.

4.2.10 Soils

Soils in the plan area range from loamy to sandy textures. This means they are mostly silt and sand particles and few clay particles. Most soils have high percentages of rock fragments, which means they are very porous and drain water easily. The climate of the Calico Basin and surrounding RRCNCA is arid with extreme heat, low and infrequent precipitation, and evaporation rates that exceed

¹¹ A limit on the percentage of persons in poverty

precipitation rates (BLM 2005). This climate does not allow permanently moist soils. Some saline soils are present near riparian areas, which provide alkaline conditions for endemic and rare riparian vegetation (see **Section 4.2.4**, Biological Resources).

Designated Trails

Trails that are near riparian areas in the area are the most susceptible to soil erosion. Within the decision area, 4,390 acres contain soils within 0.25 miles of trails. Soil orders include calcium- and calcium carbonate-rich Aridisols, Entisols, and Mollisols that have dry soil moisture regimes and are poorly developed (USDA GIS 2021). The Natural Resources Conservation Service defines these soil orders in its *Keys to Soil Taxonomy, 12th edition* (NRCS 2014):

- Aridisols are characterized by a surface horizon that is not well-developed and is low in organic matter. Water deficiency is a major limiting characteristic of these soils.
- Entisols are very young soils with little to no subsurface soil development. In general, these soils exist in settings where erosion or deposition happens at rates faster than needed for soil formation.
- Mollisols have a dark-colored surface horizon and are relatively high in organic matter.

The Natural Resources Conservation Service uses a soil erosion hazard rating to estimate the hazard of soil loss from roads and trails. It is based on soil erosion factor K (a measure of soil erosion susceptibility to water), slope, and the content of rock fragments. A rating of slight indicates that little or no erosion is likely; moderate indicates that some erosion is likely and that simple erosion-control measures are needed; severe indicates that significant erosion is expected, and intensive erosion-control measure are needed (NRCS 2021). **Table 4-8** and **Figure 16** show erosion hazard ratings for soils near trails in the Calico Basin.

Table 4-8. Erosion Hazard Ratings near Trails

Erosion Hazard Rating	Acres within 0.25 Miles of Trails	Percentage of Plan Area¹
Slight	1,410	27.1
Moderate	1,510	29.0
Severe	410	7.9
Not Rated	1,060	20.4
Total	4,390	84.4

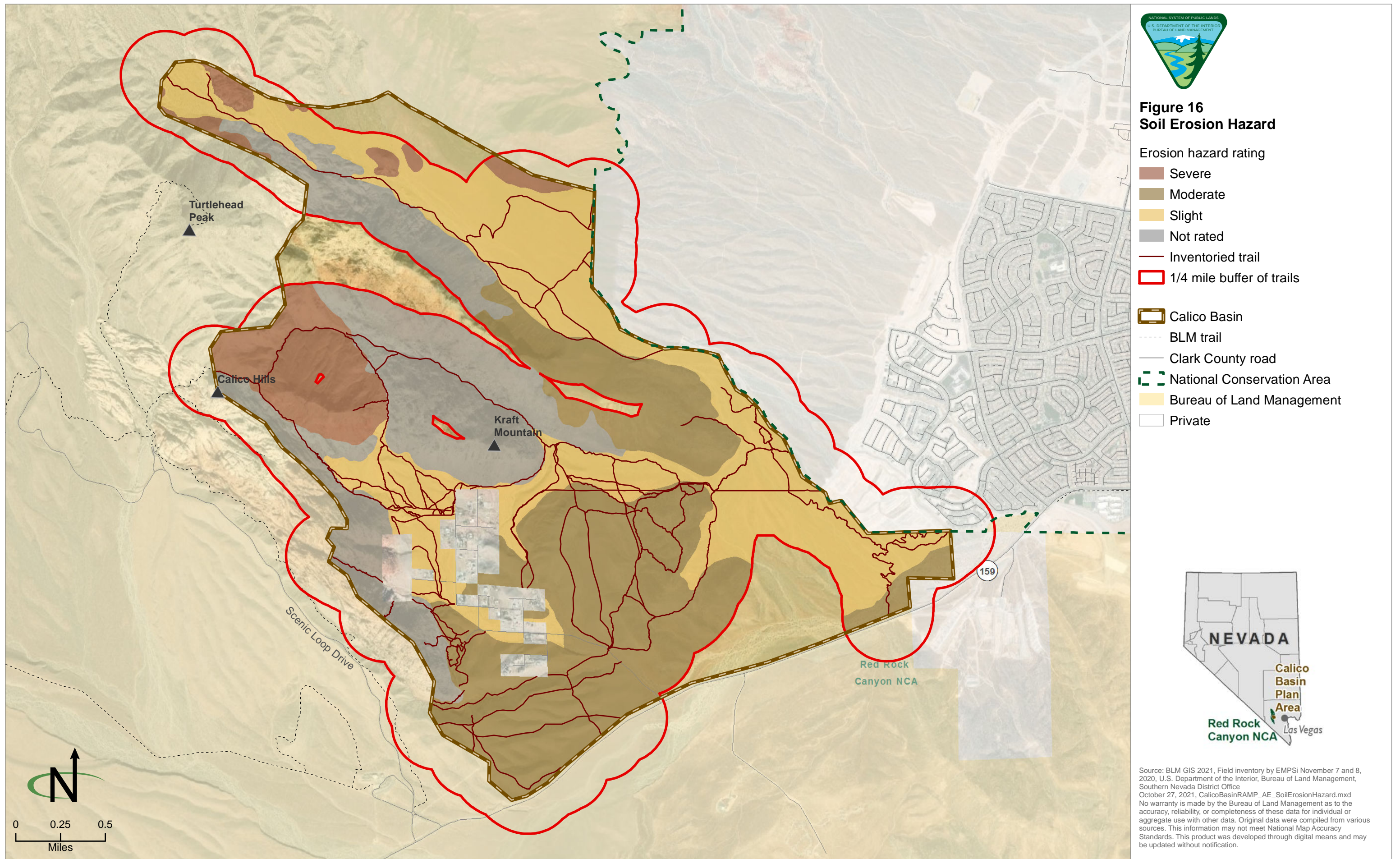
Sources: BLM GIS 2021; USDA GIS 2021

¹Plan area is approximately 5,190 acres

Compacted soils can also contribute to erosion hazard by reducing water infiltration (NRCS 2001). Compaction occurs when force is applied to the surface of a soil that pushes soil particles together and decreases the available space for air and water in the soil (NRCS 2001).

Another indicator for soil erosion susceptibility is the slope (or gradient) of the landscape. The higher percent slope, or the steeper the gradient, the more susceptible soils are to erosion, especially to water erosion. Most soils (54.7 percent) are on gentle to rolling slopes (0–20 percent), but about 36.2 percent of soils in the decision area are on very steep slopes (greater than 80 percent; see **Table 4-9**).

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Table 4-9. Slope Percent Intervals near Trails

Slope Percent Interval	Acres within 0.25 Miles of Trails	Percentage of Decision Area
0%–20%	2,400	54.7
21%–40%	360	8.2
41%–60%	50	1.1
61%–80%	0	0
Greater than 80%	1,590	36.2
Total	4,390	100

Sources: BLM GIS 2021; USDA GIS 2021

Wind erodibility is greatest for sandy soils and for soils with minimal rock fragments. These soils correspond with wind erodibility groups 1 through 5. Most soils in the decision area are in wind erodibility groups 6 and 8, which have low susceptibility to wind erosion.

Table 4-10. Wind Erodiability Groups for Soils near Trails

Wind Erodiability Group	Erosion Susceptibility	Acres within 0.25 Miles of Trails	Percentage of Decision Area
1	High	0	0
2	High	60	1.4
3	Moderate	0	0
4	Moderate	0	0
5	Moderate	50	1.1
6	Low	2,280	52.0
7	Low	50	1.1
8	Low	1,420	32.3
No Data ¹	N/A	530	12.1
Total	N/A	4,390	100

Sources: BLM GIS 2021; USDA GIS 2021

¹Rock outcrop that is not rated as a wind erodibility group.

Climbing Areas

Rocks and soils in climbing areas and near the associated social trails are also susceptible to erosion. Affected soils near social trails have similar impacts as those near designated trails; however, social trails are often not maintained and can negatively affect soils in riparian areas that are more sensitive to erosion. Rock types in the Calico Basin are predominantly sandstone and limestone. The oldest rocks, limestones and dolomites, are found at the highest elevations of the basin due to fault displacement (BLM 2005). Several caves are present in these rocks. Recent deposits are made up of alluvial gravel and cemented sedimentary rocks (BLM 2005).

Climbing mostly affects vegetation abundance on cliff faces (Adams and Zaniewski 2012; Clark and Hessel 2015). Erosion can happen on cliff faces where there is loose gravel or sand. Climbing equipment such as ropes, which can cut into rocks from the weight and friction of climbers, and bolts, which are drilled into rocks for protection, can permanently damage rock faces.

4.2.11 Visual Resources

The Calico Basin consists of 5,190 acres (4,980 acres are BLM-administered surface lands and 210 acres are private inholdings) within the 201,617-acre RRCNCA. The BLM's responsibility to manage scenic resources on public lands is established under the Federal Land Policy and Management Act, which states "... public lands will be managed in a manner which will protect the quality of the scenic (visual) values of these lands."

The characteristic landscape within the Calico Basin is determined by the relationships between four basic elements: color, form, line, and texture. The dominant colors in the area are the browns, tans, oranges, reds, and grays of soils and rocks, along with the greens and browns of vegetation. The Calico Basin consists of jagged, mountainous terrain and steep canyon topography, along with rolling hills and broad, flat valleys. The rolling hills and valleys form gently, undulating horizontal lines, while the mountainous terrain and steep canyons create stark, vertical lines across the landscape. Horizontal lines are also distinct in the changes in soil and rock layers along the canyon walls and mountainous terrain.

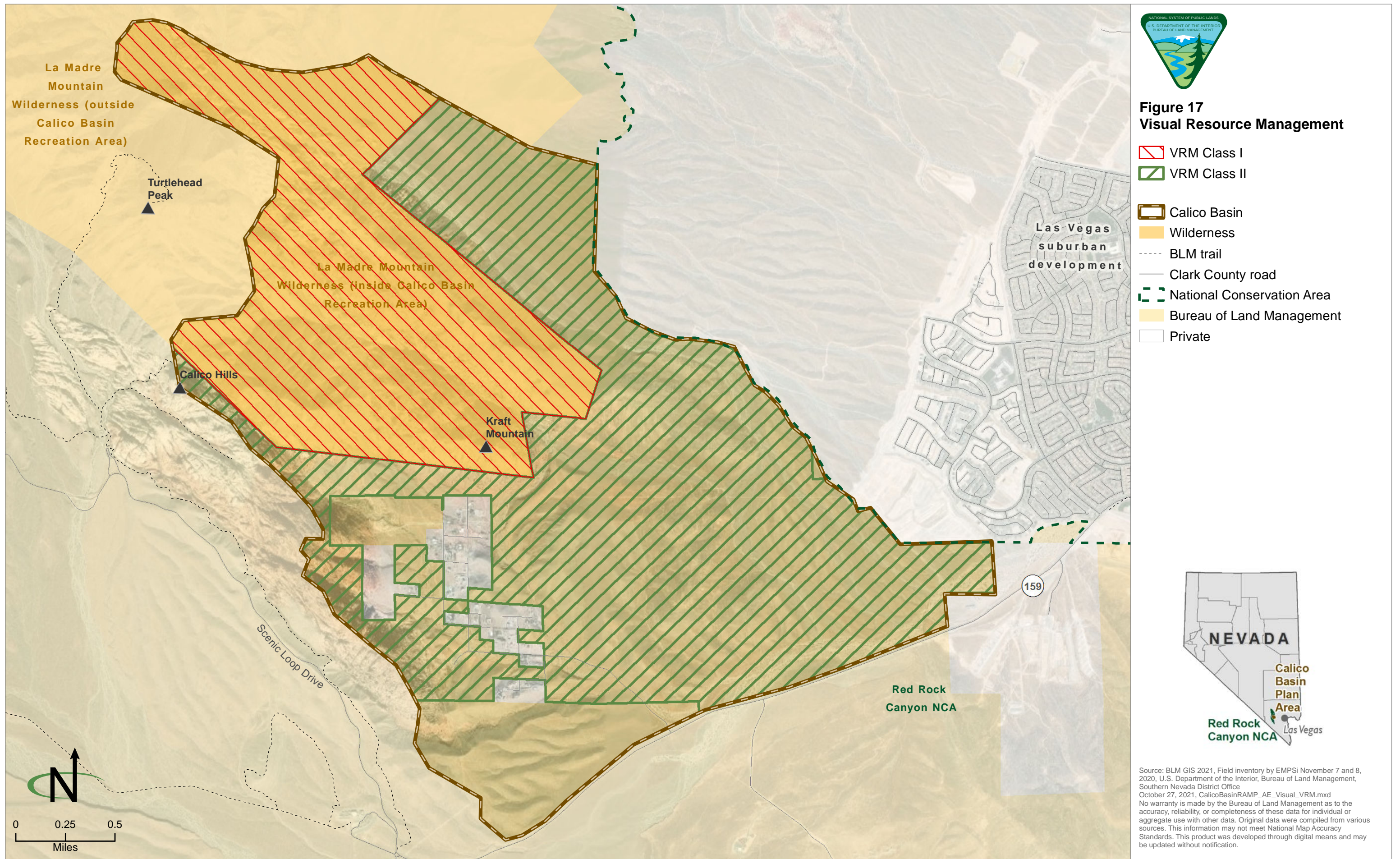
Texture results from the different vegetation types and erosion patterns. The texture of the terrain is rough and rocky, while the texture of the vegetation is coarse and patchy, mainly consisting of low shrubs and bushes scattered across the landscape. Roads and trails within the Calico Basin consist of horizontal lines and introduce artificial, smooth textures to the natural environment due to clearance of vegetation.

The Calico Basin also has several cultural modifications due to the development of private inholdings and several BLM-managed facilities, which cause varying degrees of contrast with the natural environment. Structures introduce gray and white colors to the visual character of the landscape, along with straight lines, rectangular forms, and artificial textures that interrupt the landscape's natural topography. Residences and headlights from passenger vehicles are the primary light sources in the Calico Basin.

The portion of the La Madre Mountain Wilderness within the Calico Basin is designated as visual resource management (VRM) Class I (see **Figure 17**). The objective of this class is to preserve the existing character of the landscape. This class provides for natural ecological changes; however, it does not preclude very limited management activity. The level of change to the characteristic landscape should be very low and must not attract attention (BLM 1984; BLM 1986).

The remaining BLM-administered lands in the Calico Basin (3,300 acres) are designated VRM Class II (see **Figure 17**). The objective of this class is to retain the existing character of the landscape. The level of change to the characteristic landscape should be low. Management activities may be seen, but they should not attract the attention of the casual observer. Any changes must repeat the basic elements of form, line, color, and texture found in the predominant natural features of the characteristic landscape (BLM 1984; BLM 1986).

Residents and visitors are the primary viewers throughout the Calico Basin. These viewer groups typically view the area from roads and trails inside and outside the recreation area. The mixed landownership pattern limits the BLM's ability to manage the area as a contiguous viewshed.



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4.2.12 Water Resources

Wetlands

The BLM classifies wetlands as being inundated or saturated by surface water or groundwater at a frequency and duration necessary to support a prevalence of vegetation typically adapted to saturated soil conditions. There are approximately 108 acres of wetlands in the Calico Basin; approximately 26 acres are of the freshwater pond type and approximately 82 acres are of the riverine type (BLM GIS 2021; USFWS GIS 2021). Their locations within the Calico Basin are shown in **Figure 18**.

Streams and Springs

The BLM defines riparian areas as a form of wetland transition between permanently saturated wetlands and dry upland areas. There are 82 acres of these areas within the Calico Basin. These areas exhibit vegetation or physical features that demonstrate the influence of permanent surface or subsurface water common to lands adjacent to perennially or intermittently flowing springs or streams (BLM 2005). There are approximately 35.8 miles of streams within the Calico Basin; approximately 2.1 miles are intermittent streams and approximately 33.7 miles are ephemeral streams (BLM GIS 2021; USGS 2021). The intermittent streams are the likely source for springs, which are often the only source of available water in the arid desert environment of the Calico Basin. These riparian areas attract and sustain higher concentrations of life than comparable lands that are without persistent surface waters (BLM 2005).

There are six notable springs in the Calico Basin: Red Spring, Ash Spring, Calico Spring, Tinaja Spring, and two springs associated with two Civilian Conservation Corps dams (BLM GIS 2021; USGS GIS 2021). **Figure 18** shows the locations of springs and streams within the Calico Basin.

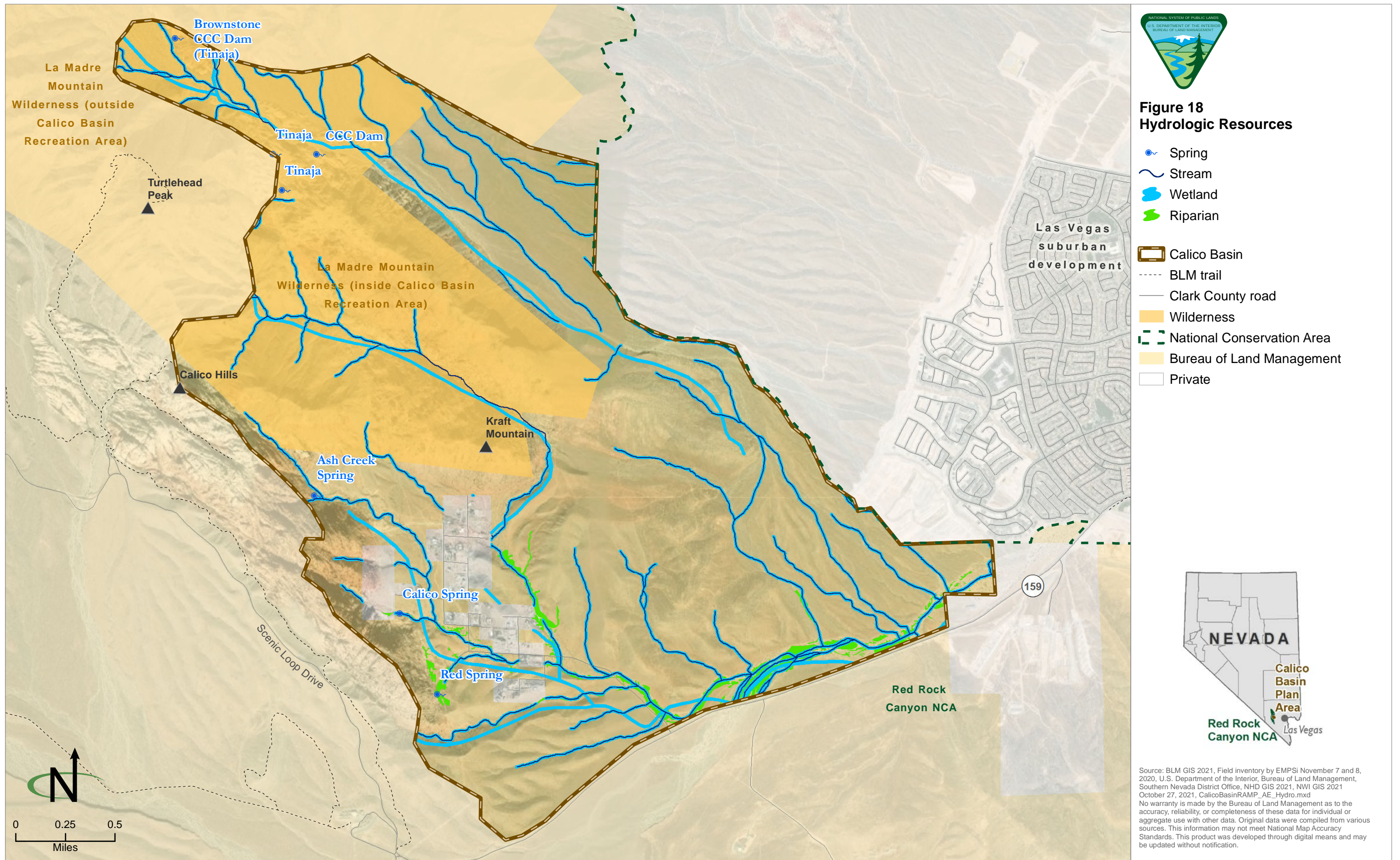
Since the 1970s, Red Spring has been used as a picnic area and recreation area. A road that leads from Calico Basin Road terminates at the Red Spring source. The road and picnic area (and the associated parking) cut through portions of the wet and saline meadows of this riparian area (BLM 2003). Red Spring has saline soils that provide essential alkalinity for the alkali mariposa lily (see **Section 4.2.4**, Biological Resources).

Ash Spring is small, and it can be dry during droughts (BLM 2003). Burros use portions of the spring as a water source (BLM 2003). There are no designated trails near the spring and riparian area, but there are many social trails. These trails are popular hiking and running trails and access trails to rock climbing areas (BLM 2003).

Calico Spring is a small spring that is adjacent to a popular parking area and hiking trail. An endemic aquatic lichen and white bear poppy have been found within the spring's riparian area (BLM 2003). In addition, an endemic species that only grows in the Calico Basin has been found near this spring (see **Section 4.2.4**, Biological Resources).

The Tinaja Spring and the two springs associated with the Civilian Conservation Corps dams are in the northern portion of the Calico Basin in the La Madre Mountain Wilderness. There is one other associated spring, but it is just outside the plan area (see **Figure 18**). Like the other three, these springs are considered unique riparian habitat that is affected by trails within and surrounding its riparian area.

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4.3 ENVIRONMENTAL EFFECTS

The issues identified during the early information gathering process (see **Section 1.7**) and carried forward for analysis include those elements of the proposed RAMP that would cause or have the potential to cause significant environmental effects. This chapter provides an analysis of the environmental effects relevant to each of the three issue categories identified during the early information gathering period.

4.3.1 Issue 1: What recreation uses should be allowed within the Calico Basin and how should the BLM manage those uses?

Proposed Action

Under the proposed action, the recreation management described in **Section 2.3.3** would influence the recreation experience and setting. Impacts on recreation related to Issue 1 are described below.

Recreation

Under the proposed action, the BLM would continue to manage recreation in the Calico Basin consistent with the RRCNCA RMP, but with the additional direction from the RAMP that is specific to the recreation opportunities and resource considerations in the Calico Basin. The proposed action emphasizes the protection of resources while improving the quality of outdoor pedestrian, equestrian, climbing, and specially permitted recreation opportunities and experiences in the Calico Basin; minimizing environmental damage and conflict between recreational user groups; and providing enjoyable and safe visitor experiences.

As a way to balance natural resource protection and recreation use, the proposed action would define allowed trail uses. This would continue to provide opportunities for pedestrian-based and equestrian use on designated trails (**Trails and Access Strategy 2**). There would be no opportunities for legal motorized or mechanized trail-based recreation opportunities. Implementing a climbing management plan in the future (see **Recreation Use Decision 3**) would better define climbing routes and access points.

Providing additional educational and interpretive opportunities, including through the development of a trail signage plan (**Education Strategy 1**), would improve the communication of important trail safety and resource protection information to visitors. Signage, education, and other information would convey appropriate trail uses to visitors at parking areas, trailheads, and other activity locations, which would reduce the potential for user conflicts on trails. The proposed action would also authorize the development of annual coordinated trail maintenance plans (see **Trails and Access Decision 5**), which would maintain and improve trail conditions and contribute to positive outcomes for trail users. Efficient use of BLM staff and law enforcement would enforce recreation management decisions, which would improve public safety, reduce conflicts, and contribute to positive visitor experiences and outcomes.

Improving trail access points, particularly at Red Spring, Kraft Mountain, Gene's Trailhead, and Brownstown Trailhead (**Trails and Access Strategy 3**), would contribute to improved visitor experiences. This is because visitors would have a more defined point of access with applicable information and interpretive information. Closing and restoring undesigned social trails and preventing new social trails (**Trails and Access Strategies 4 and 5**) would improve the soil, vegetation, and visual resources conditions that contribute to the characteristics of the MEAs and positive recreation outcomes. Directing visitors to existing designated trails and any new trails developed in the future would ensure visitors use trails that are designed to accommodate the desired use. Implementing the

RAMP, including the monitoring and adaptive management strategies in **Section 3.1** and **3.3**, would ensure the trail network is maintained and supports the intended trail-based uses in the Calico Basin.

The anticipated increased fiscal capacity resulting from the proposed fee structure would contribute to the BLM's ability to enforce designated trail use in the Calico Basin. This would minimize conflicts from unauthorized recreational use and improve the overall recreation experience for hikers, climbers, equestrian users, and other authorized uses in the Calico Basin.

Increasing educational opportunities for recreational users, including school-age visitors (see **Education Strategy 6**), via interpretive signage and visitor information would improve visitors' understanding of the factors that contribute to the desired recreation setting and positive recreation experiences. This enhanced understanding through educational and interpretive opportunities would lead to positive visitor behavior in the Calico Basin. These management actions would improve the overall visitor experience by reducing incidents of vandalism or illegal use that degrades the recreation setting and detracts from the desired experience. There would be fewer user conflicts and improved compatibility of recreation uses with the area's natural and cultural resources.

Under the proposed action, there would be opportunities for specially permitted recreational activities, including commercial, competitive, and organized events and other group activities. The BLM would evaluate SRP requests on a case-by-case basis in accordance with BLM Manual 2390, the RRCNCA RMP, and the proposed RAMP. Specifically, implementing **SRP Decision 3** would reduce the potential for conflicts between SRP holders and other users; it also would avoid the potential for unauthorized commercial and group activities to detract from the overall desired experience and setting of other users.

No Action

Recreation

Under the no action alternative, the BLM would continue managing recreation uses in the Calico Basin consistent with the RRCNCA RMP. Without a RAMP specific to the Calico Basin, the BLM would not have adequate planning-level direction to implement the necessary projects and programs to ensure the desired recreation settings and experiences are achieved. Increasing visitor use would result in new social trails, continued unauthorized uses, user conflicts, and resource damage that would degrade the recreation setting. Over time, this trend could necessitate temporary or permanent closures of trails or areas to recreation use to achieve the area's top guiding principle of protecting ecological, cultural, and scenic resources. This would decrease or eliminate opportunities for some or all recreation uses.

The BLM would not implement a monitoring and adaptive management program under the no action alternative. While data would be collected where possible to inform future management, the BLM would implement adaptive management on a case-by-case basis to respond to high-priority needs.

4.3.2 Issue 2: How would a reservation system for visitor use help the BLM manage increasing visitation to the Calico Basin, and how would a fee collection system contribute to infrastructure or facilities management and enforcement in the Calico Basin?

Proposed Action

Under the proposed action, the recreation management described in **Section 2.3.3** for fees, administration, and facilities would influence the extent of visitation in the Calico Basin. Impacts on recreation related to Issue 2 are described below.

Recreation

As described in **Section 4.2.1**, Recreation, common recreational activities in the Calico Basin include hiking, bouldering, roped climbing, horseback riding, picnicking, viewing of archaeological and cultural sites, and photography. These activities occur in a setting with limited management controls, especially in areas outside the Red Spring Picnic Area and Kraft Mountain Trailhead. There has been a rapid increase in the number of visitors to the Calico Basin to participate in these activities (see **Table 4-1**). The nature and types of impacts of this increasing visitation on other resources are described in **Section 4.3.3**.

Expanding the reservation system (**Visitation Management Strategy I**) currently in place for other parts of the RRCNCA to the Calico Basin would enable the BLM to control the number of visitors entering the Calico Basin. Limiting the number of visitors in the Calico Basin at one time would contribute to a safer, more sustainable, and enjoyable recreation experience for visitors. This is because limiting the number of visitors would minimize recreational user conflicts and reduce the potential for rapidly increasing visitor use to degrade the natural and cultural resources that contribute positively to the physical and social recreation setting. It would enable the BLM to achieve the characteristics needed to be consistent with the RRCNCA RMP MEAs, as identified in **Table 2-1** and **Table 3-1**.

Implementing a reservation system and limiting the number of reservations to the amount of available parking in the Calico Basin (**Visitation Management Decision I**) would limit the days and times when visitors could enter the Calico Basin to participate in a particular activity. During periods of peak visitation, some visitors would not be able to obtain a reservation and would not be able to enter the Calico Basin. Compared with current management, visitors would have less flexibility to enter the Calico Basin on short notice and there would be fewer opportunities, especially on holidays and weekends, to access desired recreation areas. Overall, compared with current management, the management would shift to a more controlled setting.

Implementing a site-specific fee for the Calico Basin (**Fee Management Decision I**) would directly fund recreation facility maintenance and improvements, new facilities, services, programs, and other amenities that would implement the other goals and strategies in the RAMP. Fees would also be used to fund the efficient use of BLM law enforcement, which would provide increased public safety in the Calico Basin compared with the no action alternative. Implementing the RAMP would result in management systems and recreational infrastructure that would allow the BLM to accommodate current and anticipated demand for recreational use in the Calico Basin, while protecting natural resources and contributing to the area's economic sustainability.

Compared with current management, the direct cost for a visitor to the Calico Basin to recreate in an area other than Red Spring would increase. This is because implementing a proposed fee booth on

Calico Basin Road (**Fee Management Decision 2**) would result in a mandatory fee collection for all public (non-resident) visitors to the Calico Basin regardless of their destination in the recreation area. A fee booth would also more effectively collect fees for Red Spring Picnic Area visitors, compared with the current fee collection system for that site, which allows visitors to pay by placing money in an envelope and depositing it in a pay collection vault.

Implementing the RAMP would focus on maintaining existing facilities and infrastructure (**Facility Strategy 1**). A sustainable funding source through the fee program would also contribute to the implementation of other RAMP strategies, such as parking improvements, toilets, information and interpretive displays (**Facility Strategy 2**), a visitor entrance station (**Facility Strategy 4**), and other improvements (**Facility Strategy 5**) designed to achieve the mission for the Calico Basin.

No Action

Recreation

Under the no action alternative, the RRCNCA fee system would only apply to the Red Spring Picnic Area, there would be no fee collection booth, and there would be no reservation system for the Calico Basin. Without a RAMP, the BLM would not have adequate planning-level direction to implement a comprehensive recreation management strategy to address rapidly growing visitor use in the Calico Basin. Continuing current management would lead to increasingly severe overcrowding on access roads, trails, climbing routes, and recreation sites in the Calico Basin. The BLM would be unable to maintain the desired social settings in most areas; this is because overcrowding and resource degradation would lead to a steady and potentially irreversible decline in the area's characteristics for the relevant MEAs.

Without a fee management structure specific to the Calico Basin, the BLM would need to rely on other funding mechanisms to implement maintenance and improvement projects. Combined with increasing visitation, deferred maintenance on facilities and infrastructure could necessitate the temporary or permanent closure of areas. This would further exacerbate overcrowding in areas that remain open.

4.3.3 Issue 3: How will the proposed recreation management in the RAMP/EA conserve, protect, and enhance the natural, cultural, social, and other resource conditions in the Calico Basin portion of the RRCNCA?

Proposed Action

Resource protection is the BLM's foremost guiding principle for managing the Calico Basin (see **Section 2.3.3**). Under the proposed action, the recreation management described in **Section 2.3.3** would impact other resources the BLM manages in the Calico Basin. These impacts are described below.

Conservation Lands

NCA

Due to the unique nature of the natural and cultural resources in the Calico Basin, its proximity to developed areas, and the expected increase in visitation rates, there is a need to effectively manage the natural and cultural resources on conservation lands in the Calico Basin, specifically within the La Madre Mountain Wilderness. In general, outcomes of the proposed action would result in recreation use that occurs concurrently with, but not at the expense of, the natural and cultural resource objects and values being protected and enhanced in the NCA. The proposed recreation management would help the BLM to accommodate current and anticipated future levels of recreational use in the area while avoiding,

minimizing, or mitigating the potential for recreational user conflicts, resource impacts, and undesirable conditions on conservation lands in the plan area.

Wilderness

Compared with current management, the proposed recreation management would minimize the potential for visitor use to alter the untrammeled, natural, and undeveloped character of the La Madre Mountain Wilderness. Strategies and decisions would provide opportunities for unconfined recreation and solitude in a primitive recreation setting. For example, installing trail marking signs along the Kraft Mountain Loop Trail (**Wilderness Decision 2**) would ensure recreation use in the La Madre Mountain Wilderness is consistent with the area's designation. Supporting recreation use decisions in the wilderness with a MRDG (**Wilderness Decision 2**) and associated NEPA analysis would support the BLM's ability to make informed, defensible decisions that comply with the Wilderness Act.

Implementing a reservation system (see **Visitation Management Decisions 1**) would limit peak visitor use in the Calico Basin, thereby maintaining appropriate visitation levels to the wilderness area. This would result in the protection of the natural and cultural resources in this area while still providing for unconfined recreation in the wilderness with high-quality primitive recreation experiences. Similarly, considering the setting of the recreation site when evaluating SRPs (**SRP Strategy 1**) would maintain wilderness character by ensuring competitive and commercial uses are consistent with the primitive, undeveloped, and untrammeled character of the La Madre Mountain Wilderness.

Additionally, compared with current management, the proposed recreation management activities would allow the BLM to better facilitate implementation of monitoring programs, which would help protect and preserve wilderness character in the long term. Additionally, implementing educational programs would foster visitors' appreciation and understanding of the natural and cultural resources—as well as the recreational opportunities—in the La Madre Mountain Wilderness. This would help to protect the La Madre Mountain Wilderness's sensitive natural resources and wilderness character while maintaining opportunities for unconfined recreation.

Wild Horse and Burro Program

The outcomes of implementing the RAMP, as described for the La Madre Mountain Wilderness, would also apply to the RRHMA. Proposed recreation use and fee management strategies would reduce the potential for recreation use to conflict with wild horses and burros. This is because recreation use would be confined to designated areas, visitors would be informed of the management considerations in the recreation area, and the timed entry and reservation system would limit the number of visitors that could encounter wild horses and burros.

Overall, compared with the no action alternative, the proposed recreation management would help reduce the potential for rapidly increasing visitor use to degrade the resource values that the BLM manages per the NCA designation, Wilderness Act, and RRHMA designation. Therefore, the proposed recreation management would effectively comply with the intent of the OPLMA in establishing the NLCS and the RRCNCA by managing for the conservation of cultural, ecological, and scientific values.

Cultural Resources

Due to the Calico Basin's proximity to developed areas and the expected increase in visitation rates, there is a need to effectively preserve and protect cultural resources in the Calico Basin portion of the RRCNCA to avoid potential adverse, local impacts on important cultural and historic properties.

Implementing the management direction in the proposed RAMP would allow the BLM to control visitor access, which, compared with the no action alternative, would reduce the potential for rapidly increasing visitor use to degrade cultural resources. Adverse, local impacts on cultural resources include looting, vandalism, inadvertent damage, and unauthorized collection of artifacts or other cultural resources. Because cultural resources are nonrenewable resources, most effects on cultural resources are permanent or long term, although there can be some short-term effects on the setting or access.

The potential for these adverse effects on cultural resources increases when there is an increase in population, when there is a change in recreation that alters the visual or audible character of the setting, or when recreation is concentrated in sensitive areas (Nyaupane et al. 2006; Pinter and Kwas 2005). With the expanding population in southern Nevada, increasing trends in tourism and visitation to the RRCNCA, and the proximity of the Calico Basin to Las Vegas, the proposed timed entry and reservation system (**Visitation Management Strategy 1 and Decision 1**) would help the BLM accommodate current and anticipated demand for recreation use in this area while avoiding, minimizing, or mitigating the potential for adverse impacts on cultural resources. Clarifying allowed uses (**Recreation Use Decision 1**) and ensuring appropriate enforcement (see **Section 3.2**) would avoid the inadvertent damage to cultural resources from unauthorized uses. Providing more educational and interpretive opportunities for visitors (**Education Strategies 1–8**) would help foster greater understanding, preservation ethics, and appreciation of cultural resources, which would minimize looting, vandalism, and unauthorized collection of cultural resources.

No foreseeable adverse effects on cultural resources are expected due to actions proposed in the RAMP/EA. The BLM would comply with NHPA Section 106 requirements for implementation-phase undertakings contemplated in the RAMP/EA.

Biological Resources

Designating specific trails for particular uses (see **Trails and Access Strategy 2 and Decision 4**), clarifying allowed uses (**Recreation Use Decision 1**), and managing visitor volume in the Calico Basin via a reservation system (**Visitation Management Strategy 1 and Decision 1**) would help avoid user conflicts, limit the overall user density on designated trails, and reduce the potential for new social trails. Implementing these management strategies and decisions would decrease impacts on wildlife and birds by decreasing the potential for human interaction and harassment. It would also decrease the potential for trampling or removal of vegetation and assist in minimizing the likelihood of noxious or invasive weeds being introduced to new areas. Prioritizing avoidance of sensitive resources when designating or creating new trails (**Resource Protection Decision 2**) would further avoid disturbance and habitat degradation.

Most plant and animal species are not located on rock faces that are used for rock climbing activities; therefore, impacts from rock climbing, such as vegetation trampling or nest removal, are not anticipated for most species. Ongoing rock climbing has the potential to disturb bat roosting areas. Developing a climbing management plan would (**Recreation Use Decision 3**) would comprehensively evaluate climbing activities in the Calico Basin, including impacts on bats and other natural resources. This would minimize future impacts.

Social trails leading to and within climbing areas have the highest potential to impact biological resources. Implementing the RAMP would cause access routes to climbing areas to be clearly marked (**Trail Use Strategy 2 and Trail Use Decision 2**), and non-designated access routes would be

blocked and reclaimed (**Access Strategies 4 and 5**). This would minimize the potential for new impacts on biological resources.

Resource protection, trails and access, and education strategies and decisions would protect and enhance sensitive species' habitats, including those at Red Spring. Specifically, preventing new user-created trails (**Trails and Access Strategy 5**) would avoid trampling of species' habitats and closing and restoring undesignated social trails (**Trails and Access Strategy 4**) would reduce the potential for future disturbance compared with existing conditions. Implementing monitoring (see **Section 3.1**) and adaptive management (see **Section 3.3** and **Resource Protection Strategy 1**) would identify potential impacts on sensitive species and inform new or modified management strategies to protect the species.

Implementing a timed entry and reservation system for the Calico Basin (**Visitation Management Strategy 1 and Decision 1**) would limit visitor use and access to this area to manageable levels. Combined with other management strategies that clarify and enforce allowed visitor uses, improve education, and improve funding for new programs and projects, the fee management program would help minimize the potential for human interaction with wildlife and trampling of vegetation.

Designating parking areas along roadways (**Roads and Parking Decision 3**) and improving existing parking areas (**Facility Strategies 2 and 5**) would decrease impacts on biological resources, specifically vegetation. Constant crushing of plants by car tires and the introduction of nonnative or invasive plants can change the species composition along access roads, which may expand into the surrounding landscape. The BLM would continue to monitor and treat areas currently infested with noxious or invasive weeds in accordance with the RRCNCA RMP and ROD (BLM 2005) as well as the Las Vegas Field Office Noxious Weed Plan (BLM 2006). Additional monitoring described in **Chapter 3** would inform the need for any adaptive management to address potential impacts from recreation use.

Providing educational opportunities for visitors and local recreationists (**Education Strategies 1–8**) would educate users on the importance of staying on designated trails and picking up litter. These strategies would inform visitors about the consequences of harassing wildlife or trampling sensitive vegetation and soils. Better-informed visitors would be less likely to impact biological resources in the Calico Basin.

Native American Concerns

The proposed RAMP would allow the BLM to control visitor access (**Visitation Management Strategy 1**). Compared with current management, this would reduce the potential for a rapidly growing number of visitors to degrade resources potentially important to Indigenous communities with ties to the plan area. Protecting cultural resources and vegetation communities that can have special significance in American Indian cultures by effectively managing the surging visitation numbers in the Calico Basin under management actions proposed in the RAMP would be beneficial for preserving areas and resources important to affected tribes. Implementing the RAMP, combined with the monitoring and enforcement described in **Sections 3.1** and **3.2**, would help avoid impacts from erosion, effects on the setting of historic properties, vandalism, and unauthorized collection of cultural resources. Avoiding these impacts would protect sensitive Native American resources, sites, and uses. Furthermore, several tribes with cultural affiliation to the region have discussed management opportunities during BLM consultation including educational and interpretive opportunities for subsequent implementation-level

projects outlined in the RAMP/EA. Implementing these recommendations would result in expanded interpretive opportunities and protections of Native American resources.

Paleontological Resources

Adverse, local impacts on paleontological resources could include inadvertent damage and unauthorized collection of fossils. Because paleontological resources are nonrenewable resources, adverse impacts on them are generally permanent or long term. The proposed timed entry and reservation system (**Visitation Management Strategy 1 and Decision 1**) would help the BLM accommodate current and anticipated demand for recreation use in this area while avoiding, minimizing, or mitigating the potential for adverse impacts on paleontological resources. Emphasizing and providing educational and interpretative experiences (**Education Strategies 1–8**) would foster greater understanding, preservation ethics, and appreciation of paleontological resources. These strategies would educate users on the importance of staying on designated trails to avoid inadvertently damaging paleontological resources.

No foreseeable adverse impacts on paleontological resources are expected as a result of implementing the proposed management strategies and decisions in the RAMP. Paleontological resource consideration, surveys, and analyses would continue to be a prerequisite for implementing projects, plans, and programs in the RAMP. If the necessary mitigation cannot be accomplished, the corresponding proposed implementation-level action would not take place (BLM 2005).

Public Health and Safety

Clarifying in the RAMP that trail use is restricted to pedestrian and equestrian use (**Trails and Access Decision 2**), closing and restoring undesignated social trails (**Trails and Access Strategy 4**), and preventing new user-created trails (**Trails and Access Strategy 5**) would ensure recreation use occurs on trails that are maintained to BLM standards with appropriate safety considerations for the users.

Implementing a timed entry system (**Visitation Management Strategy 1 and Decision 1**) that would limit visitor density, and establishing a fee management program that would contribute to a greater law enforcement presence and ranger patrols (**Fee Management Strategies 1 and 2 and Decision 1**) would limit the types of crimes commonly experienced in the Calico Basin (see **Table 4-6**, Recently Reported Crime in the Calico Basin). The timed entry system would contribute to safer travel conditions on roadways in the Calico Basin; this is because the number of vehicles on the roadways would be appropriate for the design capacity of the roadways. Further increases in traffic safety would also result from the establishment of clearly designated, approved parking locations on the major access roads (**Roads and Parking Decision 3**).

Socioeconomics and Environmental Justice

Closing and restoring user-created trails (**Trails and Access Strategy 4**), maintaining existing trails (**Trails and Access Strategy 3**), limiting the number of visitors to the area at one time (**Visitation Management Decision 1**), and enhancing educational signage at trailheads or other key locations (**Education Decision 2**) would minimize the potential for impacts on the Calico Basin homeowners and promote responsible recreation near the exiting residential neighborhood. Enhanced signage and coordination with neighboring landowners (**Trails and Access Strategy 8**) would also help avoid impacts on area residents from visitors using trails that access the Calico Basin from Summerlin or other neighborhoods. Enhancing trail connectivity and expanding bicycle infrastructure on Calico Basin Road

(**Trails and Access Strategy 7 and Roads and Parking Strategy 2**) would also provide multimodal access to recreation opportunities, including for those without access to a vehicle. **Roads and Parking Decisions 3 and 4** would avoid impacts from visitors parking on private property. Consideration of the residential setting in the issuance of SRPs (**SRP Strategy 1**) would also minimize the potential for large group events to disturb Calico Basin residents and nearby neighborhoods.

Compared with current management, local residents would encounter fewer conflicts with visitors. The decision for Clark County to relinquish its ROWs to the BLM on the primary access roads into the Calico Basin and have the secondary roads be privately maintained (**Roads and Parking Decision 1**) would maintain access for local residents while avoiding conflicts with visitors parking in front of their homes.

The proposed fee management strategies and decisions, including the fee collection, reservation system, and cap on the number of visitors in the Calico Basin at one time, would limit the number of people able to enter the Calico Basin on a daily basis. The Calico Basin is within the RRCNCA fee area. The fee collection system, which would require visitors to pay the fee, could make it difficult for lower-income populations to afford access to the area. This could cause a disproportionate impact on lower-income populations. The BLM's RRCNCA Business Plan (BLM 2018) analyzes the social and economic impacts of the RRCNCA fee program on various visitor groups, including members of minority populations, people living in poverty, and families living in poverty who have children under 18 years of age living at home. The business plan estimates that approximately 17 percent of all visitors to the RRCNCA are members of one of these groups and could be disproportionately impacted (BLM 2018).

Requiring the mandatory collection of fees per the adopted RRCNCA fee program would not result in a change to visitor spending. For the majority of visitors, the payment of an amenity fee would not deter visitation to the area (BLM 2018). Also, there are no data to suggest that a fee collection system implemented for the Scenic Drive in the RRCNCA has affected visitor spending. Similarly, the collection system for the Scenic Drive has not impacted the ability of commercial operators to successfully provide specially permitted recreation opportunities in the RRCNCA.

Private road maintenance could impact those Calico Basin residents who may be low-income populations; however, only 5 percent of the families in census tract 58.23, which includes the Calico Basin, live below the poverty level. This percentage is significantly lower than it is for Nevada or other portions of Clark County. Further, the population in census tract 58.23 appears to have fewer minorities as compared with Clark County or Nevada, although the lack of available census data on those self-identifying as both Hispanic and White makes exact conclusions difficult. In summary, it appears that the proposed action would not have a disproportionate impact on environmental justice populations.

Soils

Clarifying in the RAMP that trail use is restricted to pedestrian and equestrian use (**Trails and Access Decision 2**), closing and restoring undesignated social trails (**Trails and Access Strategy 4**), and preventing new user-created trails (**Trails and Access Strategy 5**) would limit the potential for future soil erosion from recreation users. In addition, the consideration of seasonal or temporary closures following weather events (**Trails and Access Strategy 10**) would prevent soil compaction and subsequent water erosion from runoff, especially for soils with moderate or severe erosion hazard ratings and for soils on slopes greater than 20 percent.

Under the proposed action, climbing would still have the potential to degrade rock faces and cause sediment or rock erosion, particularly when climbing too soon after rain, which can damage the rock and associated climbing routes. Unconsolidated landings under bouldering routes can cause increased erosion. Closing undesignated social trails (**Trails and Access Strategy 4**) would prevent future soil erosion. Creating a designated system for climbing access under a future climbing plan (**Climbing Decision I**) would discourage undesignated uses and enable the BLM to maintain and minimize erosion near developed trails.

The proposed timed entry system (**Visitation Management Decision I**) would limit visitor use to manageable levels. Implementing **Fee Management Decision I** would allow the BLM to fund trail maintenance and increase enforcement of appropriate trail use; this would avoid excessive and inappropriate uses that contribute to trail erosion. Implementing trail maintenance strategies (**Trails and Access Strategies 9, 11, and 12**) and conducting ongoing monitoring and adaptive management would further ensure that trail conditions can sustain the associated use.

Implementing **Education Strategies 1–8** and **Decisions 1 and 2** would communicate trail information and appropriate trail uses. Informed visitors would be more likely to respect trail infrastructure and avoid behavior that contributes to soil erosion along trails.

Visual Resources

Implementing the RAMP would provide the BLM with the necessary planning-level direction to accommodate current and anticipated future recreation demand while avoiding, minimizing, or mitigating the potential for undesirable changes to visual resources in the plan area. Specifically, implementing a timed entry and reservation system for the Calico Basin (**Visitation Management Strategy 1 and Decision I**) would provide the BLM with a mechanism to manage the number of people recreating in the Calico Basin at one time. A sustainable recreating population would be unlikely to create new social trails that detract from the visual integrity of the area. Accordingly, the implementation of such a system would be consistent with the guiding principle of protecting scenic resources for present and future generations. Similarly, considering the setting of the recreation site when evaluating SRPs (**SRP Strategy I**) would avoid the potential for resource degradation from large group events. This would help protect and preserve visual resource values.

The degree to which a management activity affects the visual quality of a landscape depends on the visual contrast created between a project and the landscape. Installing a fee collection booth (**Visitation Management Decision 2**), visitor entrance station (**Facility Strategy 4**), and other facilities and infrastructure (**Facility Strategy 5**) would modify landscape forms, lines, and patterns as viewed from certain locations in the Calico Basin. Vegetation could be removed to accommodate the proposed improvements. While there are already unnatural lines and forms in the Calico Basin, namely roadways, fence lines, and other human-made structures, new or expanded structures could be visually distinct from the existing landscape.

The location and extent of these impacts would be evaluated as part of any future project. Any project would need to conform to the VRM Class II objective to retain the existing character of the landscape (BLM Manual 8400 [BLM 1984] and BLM Handbook H-8431 [BLM 1986]). The BLM could consider strategies such as the use of earth tone colors, textured and anti-reflective materials, and vegetation screening to mitigate any effects on visual resources. These strategies would also be considered during future, implementation-level NEPA analyses.

Water Resources

Under the proposed action, preventing new user-created trails (**Trails and Access Strategy 5**), restricting use or closing trails where there are resource damage concerns (**Trails and Access Strategy 10**), monitoring trail conditions (**Section 3.1.2**), and restoring undesignated trails (**Trails and Access Strategy 4**) would minimize further damage to wetlands, streams, and springs and their associated riparian areas. The anticipated benefits of the proposed management strategies would be more pronounced at Calico Spring and Ash Spring, where social trails are the main cause of riparian disturbance. Implementing the RAMP would also minimize disturbance to the endemic species found at Calico Spring.

The facilities at the Red Spring Picnic Area, including a road that terminates at Red Spring, a parking lot, and picnic areas that have existed since the 1970s, would remain under the proposed action. They would continue the risk for disturbance to the riparian area near Red Spring, including saline soils and the mariposa lilies that depend on these soils.

The proposed timed entry system (**Visitation Management Decision 1**) would limit visitor use to manageable levels. Implementing **Fee Management Decision 1** would allow the BLM to fund trail maintenance and increase enforcement of appropriate trail use; this would avoid excessive and inappropriate uses that disturb riparian areas near wetlands, springs, and streams and contribute to trail erosion. Implementing trail maintenance strategies (**Trails and Access Strategies 9, 11, and 12**) and conducting ongoing monitoring and adaptive management would further ensure that trail conditions can sustain the associated use without adverse effects on water resources.

Red Spring is the only spring located near a parking lot. Changes to parking facilities under the proposed action would not affect other springs in the Calico Basin. Implementing **Education Strategies 1–8** and **Decisions 1 and 2** would communicate trail information, such as appropriate trail uses, and the importance of riparian areas for the biodiversity of the Calico Basin. This information would help prevent misuse of trails and disturbance to sensitive riparian areas near wetlands, springs, and streams.

No Action

Conservation Lands

NCA

Under the no action alternative, the BLM would continue managing recreation uses in the Calico Basin consistent with the RRCNCA RMP. Visitation would result in ongoing resource degradation, such as soil erosion from new social trails, trampling of vegetation, and irreparable damage to sensitive riparian areas. These changes would alter the scenic characteristics and associated recreation setting that contribute to the NCA values. Without a RAMP specific to the Calico Basin, the BLM would not have adequate planning-level direction to implement the necessary projects and programs to address these anticipated impacts and avoid adverse and potentially irreversible impacts on natural resources from increasing recreation use.

Wilderness

Under the no action alternative, the BLM would continue managing the La Madre Mountain Wilderness according to the La Madre Mountain Wilderness and Rainbow Mountain Wilderness Management Plan (BLM and Forest Service 2013). Allowed recreation uses would be consistent with the wilderness plan. Rapidly increasing visitation would jeopardize the wilderness character in the La Madre Mountain Wilderness. Specifically, steadily increasing visitor density would diminish opportunities for solitude and

potentially impact the natural resources that contribute to the wilderness character. While the area would remain undeveloped, there would be steadily increasing signs of human use, which could alter the untrammeled and primitive character of the area.

Wild Horses and Burros

Continuing to manage recreation use in the Calico Basin without more specific management direction would result in the potential for a rapidly growing number of visitors to encounter wild horses and burros in the Calico Basin. The presence of visitors on trails and noise from recreation at developed sites could disturb the animals. A growing number of visitors would also increase the potential for animals to be displaced from portions of the RRHMA.

Cultural Resources

Management under the no action alternative would lead to continued unrestricted and rapidly increasing visitor access and use in the plan area. Although all applicable federal and local laws are in place and would continue to be enforced to protect the various natural and cultural resources found within the Calico Basin portion of the RRCNCA, there would be an increased likelihood for adverse impacts on historic properties or other cultural resources. These impacts include looting, vandalism, inadvertent damage, and unauthorized collection of artifacts or other cultural resources.

Under the no action alternative, as visitation and recreational uses in the Calico Basin increase, the impacts on resources on or around trails would also increase with the potential for reduced vegetation cover and the resultant erosion that could impact sensitive cultural resources and plant species that may have tribal use. Trails in poor condition can cause users to create alternate routes, further exacerbating the impacts from trail use on resources potentially important to affected tribes.

The potential for impacts on cultural resources increases when there is an increase in population, when there is a change in recreation that alters the visual or audible character of the setting, or when recreation is concentrated in sensitive areas (Nyaupane et al. 2006; Pinter and Kwas 2005). With the expanding population in Las Vegas, increasing trends in tourism and visitation to the RRCNCA, and the proximity of the Calico Basin to Las Vegas, the potential for adverse impacts on cultural resources in the Calico Basin under the no action alternative would increase over time. Most impacts on cultural resources would be permanent or long term, although there could be some short-term effects on the setting or access.

Biological Resources

Under the no action alternative, impacts on biological resources would continue at the current—or an accelerated—rate as visitation rates increase. More visitors would increase the potential for widespread impacts on biological resources. Users would continue creating new social trails, which would damage or destroy vegetation, including in riparian areas.

The springs found within the Calico Basin are unique ecosystems that support life within and for external use by birds, insects, and other animals that rely on springs as their water supply. Without increased recreation management actions, degradation of natural springs and impacts on dependent plant and animal species would continue under the no action alternative. Visitors would not be properly educated on the fragile nature of the springs and may trample sensitive vegetation or pollute the water.

Recreation uses would continue to alter vegetation along access routes and trails. Unauthorized use off designated trails would increase the chance for spreading invasive or nonnative weeds.

Impacts on biological resources from parking in non-designated areas would continue. This is because there would not be enough parking to accommodate the number of visitors, especially during peak visitation periods. Continuous illegal parking on unpaved areas adjacent to roadways and parking areas would cause irreparable damage to vegetation. As native vegetation degrades, noxious or invasive weeds may alter species composition and outcompete native vegetation. Illegal parking would also disturb wildlife habitat.

Under the no action alternative, there would not be specific direction for the BLM to consider the recreation setting when issuing SRPs. Large group and commercial events could disrupt wildlife and damage vegetation.

Under the no action alternative, current education and outreach efforts may not reach the increasing amount of visitors to the extent that is needed to help protect biological resources. There would be more visitors entering the Calico Basin who are not informed about the impacts recreation use can have on biological resources.

Native American Concerns

Under current management, the recent exponential increase in visitation and specifically the increase in the use of trails represent a significant potential for visitors to purposefully or inadvertently damage or destroy areas that are potentially important or significant to tribes with ties to the Calico Basin. There would be the potential for reduced vegetation cover and the resultant erosion that could impact sensitive cultural resources and plant species that may have tribal use. Heavy trail use would degrade trail surfaces and lead users to create alternate routes, further exacerbating the impacts from trail use on resources potentially important to affected tribes. Some resources important to the region's Indigenous communities are nonrenewable; impacts would be mostly permanent or long term, although there also could be some short-term effects on the setting or access.

Paleontological Resources

Under a continuation of current management, all applicable federal and local laws would be in place and would continue to be enforced to protect paleontological resources found within the Calico Basin portion of the RRCNCA. BLM policy is to manage paleontological resources for scientific, educational, and recreational values and to protect these resources from adverse impacts. Paleontological resource surveys, the use of PFYC maps, and site-specific review would continue to be prerequisites to the implementation of project plans. However, with the projected increase in recreation demand and visitation to the Calico Basin, there would be the potential for adverse impacts on paleontological resources, including inadvertent damage and unlawful or unauthorized collection of fossils or other paleontological resources. The potential for adverse impacts on paleontological resources would increase over time concurrent with increasing visitation to the Calico Basin. Paleontological resources are considered fragile and nonrenewable; direct impacts would be permanent.

Public Health and Safety

Under the no action alternative, the Calico Basin would continue to experience high visitation rates, traffic, and recreation use, including unauthorized activities such as riding mountain bikes on trails in the recreation area. The Calico Basin would also continue to function as the primary overflow location for the Scenic Drive when reservations are not available and visitor use is capped. These high visitation levels and recreational activities would likely continue or exacerbate the crime trends in the Calico Basin. With the extensive visitation, recreational users would also experience impacts on their safety

from increased traffic in a relatively small area, and residents would continue to experience challenges in egress and ingress for emergencies.

Impacts could also grow if visitation increases continue at the current rates. Funding for law enforcement and ranger patrols would continue to be drawn from the overall RRCNCA funds, which could limit the availability of enforcement of best practices and public health and safety guidelines for Calico Basin visitors.

Socioeconomics and Environmental Justice

Under the no action alternative, there would be the potential for new and expanded user-created trails and limited maintenance capacity for existing trails. The placement of new educational signage at trailheads or other key locations, which could potentially reduce impacts on the Calico Basin homeowners and promote responsible recreation near this residential neighborhood, would be done as funding allows. The growing number of users on the trails would affect trail conditions; this would potentially lead to secondary erosion increasing the likelihood of downstream flooding in nearby neighborhoods. There would not be specific management direction for improving connectivity with Summerlin or other neighborhoods that do not rely on the vehicular access via Calico Basin Road.

Unrestricted visitation at the Calico Basin under the no action alternative would serve as a way to accommodate nonlocal and local visitors who may not be familiar with the reservation system on the Scenic Drive, thereby affording an opportunity for short-term recreation on an impromptu basis. Parking would be available on all the roads in the Calico Basin, which would continue to be maintained by the county and therefore considered public and open to visitor parking. This amount of parking could allow for more of the increased visitation.

The BLM would continue to manage the Calico Basin as part of the RRCNCA fee area. There would be a required payment for day use at the Red Springs Picnic Area. However, the BLM would not construct a fee collection station or implement another system to collect fees for all visitors. Disadvantaged populations would experience disproportionate impacts from visitor fees at Red Springs, but would have no additional impacts for use elsewhere in the Calico Basin.

In census tract 58.23, which includes the Calico Basin, 5 percent of the families live below the poverty level; this would continue to be a significantly lower percentage than those for Nevada or other portions of Clark County. Further, the population in census tract 58.23 would have fewer minorities as compared with Clark County or Nevada, although the lack of available census data on those self-identifying as both Hispanic and White makes exact conclusions difficult. It, therefore, appears the no action alternative would not have a disproportionate impact on environmental justice populations.

Soils

Under the no action alternative, undesignated trails would not be closed; these areas, which are not maintained like designated trails, would continue to be at risk for soil erosion. There would not be any specific management directing the BLM to implement educational or interpretive strategies to help avoid inappropriate uses of trails and the creation of undesignated trails. This would increase the risk for erosion for soils with moderate and severe erosion hazard ratings and for soils on slopes greater than 20 percent.

Climbing impacts would be the same as described under the proposed action. However, undesignated social trail use would likely continue under the no action alternative because it would not include a

strategy to develop a trail system for climbing access. In addition, current surface disturbance from undesignated social trails would not be closed or restored; these areas would likely experience continued soil erosion.

Increasing pedestrian and equestrian traffic would compact and displace soils and increase their erosion hazard. In addition, increased visitor use could limit the BLM's ability to maintain and restore trails efficiently. If disturbance exceeds restoration efforts, the erosion hazard would increase.

Visual Resources

Under the no action alternative, the BLM would continue managing recreation uses in the Calico Basin consistent with the RRCNCA RMP, which provides management direction per the VRM Class I and II areas, as applicable. However, without a RAMP specific to the Calico Basin, the BLM would not have area-specific planning-level direction to implement the necessary projects and programs to avoid incremental changes to the visual landscape. Over time, rapidly increasing visitation would perpetuate the creation of social trails. Depending on the observer's location, these trails could detract from the area's visual character.

Water Resources

The extent and intensity of disturbance from pedestrian and equestrian use would likely increase under the no action alternative. Eroded soils from trails that are transported as sediment could enter wetlands or riparian areas and negatively impact their endemic and rare vegetation. In addition, pedestrian and equestrian traffic on new user-created social trails could cross wetlands and riparian areas. Visitors on these trails would compact soils and trample vegetation.

Impacts on Red Spring would be the same as described under the proposed action.

Impacts on springs and their riparian areas would be exacerbated by increased visitor use, which would continue under the no action alternative. Similar to soils management, this could reduce the BLM's ability to efficiently and effectively minimize disturbance to riparian areas in the Calico Basin and their associated endemic and rare vegetation.

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Chapter 5. Consultation and Coordination

5.1 TRIBES, INDIVIDUALS, ORGANIZATIONS, AND AGENCIES CONSULTED

During the NEPA process for this RAMP/EA, the BLM formally and informally consulted and coordinated with other federal agencies, state and local governments, Native American tribes, and the interested public. The agency did this to ensure its compliance, in both the spirit and intent, with 40 CFR 1501.7, 1502.19, and 1503. In addition to the public information gathering process, the BLM implemented collaborative outreach and a public involvement process that included inviting agencies to be cooperative partners for the EA planning process. A cooperating agency is any federal, state, or local government agency or Native American tribe that enters into formal agreement with the lead federal agency to help develop an environmental analysis.

5.1.1 Government-to-Government Consultation

The federal government works on a government-to-government basis with Native American tribes because they are recognized as separate governments. This relationship was formally recognized on November 6, 2000, with EO 13175 (65 *Federal Register* 67249). As a matter of practice, the BLM coordinates with all tribal governments, associated Native communities, Native organizations, and tribal individuals whose interests might be directly and substantially affected by activities on public lands.

In addition, Section 106 of the NHPA requires federal agencies to consult with Native American tribes for undertakings on tribal lands and for historic properties of significance to the tribes that may be affected by an undertaking (36 CFR 800.2(c)(2)). BLM Manual 1780, Tribal Relations, and BLM Handbook H-1780-1, Improving and Sustaining BLM-Tribal Relations, provide guidance for Native American consultations. EO 13175 stipulates that during the NEPA process, federal agencies must consult tribes identified as being directly and substantially affected.

The BLM notified several tribes of the proposed action on March 25, 2021, with an emailed electronic copy of a signed letter in advance of physical documents that were mailed on March 26, 2021. Letters were sent to the Moapa Band of Paiutes, Las Vegas Paiute Tribe, Chemehuevi Indian Tribe, Twenty-Nine Palms Band of Mission Indians, Fort Mojave Indian Tribe, Colorado River Indian Tribes, Paiute Indian Tribe of Utah, Fort Independence Indian Community of Paiute Indians, Kaibab Band of Paiute Indians, Owens Valley Paiute Benton Reservation, San Juan Southern Paiute Tribe, Hopi Tribe, and Timbisha Shoshone.

The BLM followed up on the letters with emails on June 8 and 9, 2021, that included electronic copies of the letter and project descriptions. Tribes were also previously emailed on March 3 and March 11, 2021, with information about public meetings for the Calico Basin and Cottonwood Valley RAMPs. The Moapa Band of Paiutes, Twenty-Nine Palms Band of Mission Indians, Paiute Indian Tribe of Utah, Kaibab Band of Paiute Indians, San Juan Southern Paiute Tribe, and Timbisha Shoshone have responded by phone, email, tribal consultation meetings, or even one in-person site visit. The remaining tribes have not provided responses yet. The BLM continues to consult with tribes who may be interested in this area.

5.1.2 Nevada State Historic Preservation Officer

In accordance with the requirements of Section 106 of the NHPA, the BLM is consulting with the Nevada State Historic Preservation Officer.

5.1.3 Cooperating Agencies

Cooperating agencies are any federal, state, or local government agency or Native American tribe that enters into a formal agreement with the lead federal agency to help develop an environmental analysis. Cooperating agencies and tribes work with the BLM, sharing knowledge and resources, to achieve desired outcomes for public lands and communities within statutory and regulatory frameworks. Clark County agreed to participate as a cooperating agency for this NEPA process.

5.1.4 Other Stakeholders

Calico Basin Community

The BLM communicates regularly with the Calico Basin community to discuss issues related to recreation and public land management in the Calico Basin. As part of the early information gathering period in March 2021, the BLM held a virtual meeting with Calico Basin residents to introduce the RAMP concept and obtain feedback from the community members. The BLM intends to continue similar coordination during the implementation of proposed management in this RAMP.

Rock Climbers

The BLM recognizes the importance of the Calico Basin and broader Red Rock Canyon for their unique rock climbing opportunities. The BLM coordinates regularly with organizations such as the Southern Nevada Climbing Coalition and the Access Fund on land management issues related to rock climbing. During the early information gathering period in March 2021, the BLM hosted a virtual meeting to gather input from stakeholders concerned about rock climbing opportunities in the Calico Basin. The BLM intends to continue similar coordination during the development of a climbing management plan for Red Rock Canyon and the implementation of other proposed management in this RAMP.

Friends of Red Rock Canyon

The Friends of Red Rock Canyon is a nonprofit organization with the mission of preserving, protecting, and enriching the RRCNCA. The BLM regularly partners with the Friends of Red Rock Canyon on volunteer stewardship events, educational programs, and other initiatives to implement the goals of the RRCNCA RMP. Ongoing coordination and partnerships with the Friends of Red Rock and other nonprofit stakeholders will be an important component of implementing the goals and strategies in this RAMP.

5.2 LIST OF PREPARERS

This RAMP/EA was prepared by an IDT of staff from the BLM and Environmental Management and Planning Solutions, Inc. The following is a list of people who prepared or contributed to the development of this RAMP/EA.

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Chapter 7. Glossary

Cultural resources—Per BLM Manual 8100, definite locations of human activity, occupation, or use identifiable through field inventory, historical documentation, or oral evidence; these include archaeological, historic, or architectural sites, structures, or places with important public and scientific uses, and may include definite locations (sites or places) of traditional cultural or religious importance to specified social or cultural groups.

Nuwu—The name that the Southern Paiute use to identify themselves from their own Uto-Aztecan dialect.

Paleontological resources—Any fossilized remains, traces, or imprints of organisms, preserved in the earth's crust, that are of paleontological interest and that provide information about the history of life on earth (Paleontological Resources Preservation Act, Section 6301, 16 US Code 470aaa-1).

Potential Fossil Yield Classification—The PFYC system allows the BLM employees to make initial assessments of paleontological resources in order to plan for multiple uses of public lands, consider disposal or acquisition of lands, analyze potential effects of a proposed action under the NEPA, or conduct other BLM resource-related activities. The PFYC system can also highlight the areas for paleontological research efforts or predict illegal collecting. The system provides a consistent and streamlined approach to determine whether a potential action may affect paleontological resources on public lands.

Pre-contact resources—Any material remains, structures, and items used or modified by people before Euro-Americans established a presence in the region.

Traditional cultural property—A property that is eligible for inclusion in the NRHP based on its associations with the cultural practices, traditions, beliefs, lifeways, arts, crafts, or social institutions of a living community, as defined in National Park Service *Bulletin 38* (Parker and King 1998). TCPs are rooted in a traditional community's history and are important in maintaining the continuing cultural identity of the community. The cultural practices or beliefs that give a TCP its significance are, in many cases, still observed at the time a TCP is considered for inclusion in the NRHP. Because of this, it is sometimes perceived that the practices or beliefs themselves, not the property, make up the TCP. While the beliefs or practices associated with a TCP are of central importance, the NRHP does not include intangible resources. The TCP must be a physical property or place—that is, a district, site, building, structure, or object.

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Appendix A

Approved Commercial, Competitive, and Organized Use

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Appendix A. Approved Commercial, Competitive, and Organized Use

The following tables show the approved commercial ongoing SRPs, competitive SRPs, and organized group use of developed facilities and climbing areas in the core area of the RRCNCA. The BLM approved the SRPs and uses in Environmental Assessment: DOI-BLM-NV-S020-2010-0014-EA (BLM 2010). The core area of the RRCNCA is defined as the system of trails and roads (Scenic Drive, Red Spring, and the Calico Basin area) and facilities (Dedication Overlook, Scenic Drive Exit, Old Oak Creek, First Creek, and Moenkopi Road) along State Route 159. The core area also includes the La Madre Mountain Wilderness and Rainbow Mountain Wilderness for some, but not all, approved SRP activities.

Table A-1. Commercial Ongoing SRPs*

Recreation Opportunities	Number of Permits Proposed Annually	Number of Tours Allowed per Day	Maximum Number per Tour
4 X 4 (OHV) guided tours	4	2 per SRP	5 vehicles
Artistic groups	2	1	12 participants
Bus tours (commercial groups)	Not described	No limit	Undefined
Camping—Commercial use of group camp	2 per day	2 group sites; limit 14 days two times per year	Up to 50 participants, depending on site
Duel sport (not speed events)—Rocky Gap	2	50	N/A
Equestrian—Full-time	3	8	40 participants
Hiking guided tours	5	2	12 participants
Hunting	Not defined (contingent upon NDOW and BLM allowances)	1	Only allowed in areas above 5,000 feet with Las Vegas FO authorized permit.
Motorcycle/scooter tours	4	2	20 participants
Mountain bike/road bike guided tours—Full-time	4	2	12 participants
Mountain bike/road bike events	2	1	100 participants on the Scenic Drive at one time
Rock climbing—Full-time	5	2 per area	12 participants
Rock climbing—guest permits	8	2 per area	12 participants
Weddings	10 full-time	5	50 participants or less depending on location
Yoga/fitness groups	2	1	12

* **Note:** Commercial ongoing SRPs are issued annually, with renewals granted up to 5 years pending the successful completion of annual compliance inspections.

Table A.2. Competitive SRPs

Recreational Opportunities	Number of Permits Proposed Annually	Maximum Number of Participants Allowed per Event
Competitive rock climbing	1	Limit of 1,000 participants/spectators per site/event
Equestrian—Rocky Gap	1	50
Foot race/walk events—utilizing the Scenic Drive	5	2,000
Foot race/walk events—utilizing trails and non-paved roads	2	300
Poker run/events—utilizing the Scenic Drive	5	50

Table A-3. Organized Group Use of Developed Facilities and Climbing Areas

Recreational Opportunities	Number of Permits Proposed Annually	Maximum Number of Participants Allowed per Event
Group camping and off-season use of campgrounds	20	20
Guest climbing permits education/group	4	50 with only 12 per area per day
Noncommercial wedding permits	100	50 person and 10 vehicles
Red Spring group picnic area	200	50
Willow Spring and 159 Overlook picnic areas	100	50
Visitor center and amphitheater—during normal operating hours	50	300 (subject to room/facility limits)
Visitor center and amphitheater—during non-operating hours	20	1,000 (subject to site, exclusive use, and possible cost reimbursement fees)
Developed parking areas	50	Dependent on available parking and disturbed area at each trailhead. No more than 50 percent of parking or public space would be impacted.