

## 1.0 Introduction

This Environmental Assessment (EA) evaluates the US Bureau of Land Management (BLM) proposal for the construction of the Zone 2 portion of a new multi-use recreation trail system within the Red Rock Canyon National Conservation Area (RRCNCA). *SR-159 Corridor Trail Feasibility Study and Programmatic Environmental Assessment (PEA), Red Rock Canyon National Conservation Area, Final* (BLM 2009) documents the planning for the entire trail system.

The trail system will be built as a segmented, phased construction project that requires the preparation of a site-specific EA or Determination of NEPA Adequacy (DNA) report for subsequent National Environmental Policy Act (NEPA) compliance (40 Code of Federal Regulations [CFR] 1508.28).

Led by the BLM, an interdisciplinary design team developed the Zone 2 Trail (3.1-mile trail system) evaluated in this EA. Chapter 6, List of Preparers, identifies the consultants who worked with the BLM as part of the interdisciplinary team.

This EA presents the environmental impacts and mitigation for the construction, operation, and maintenance of the Proposed Action. The EA also describes the No Action Alternative. The timing for completion does not include a construction schedule because no funding is currently available to implement this bid package.

Where applicable, this EA will tier off the PEA. In addition, this EA will focus on the effects of individual action not analyzed in the PEA and/or supplemental information required as a result of this proposal.

The Field Office Manager will first determine whether an environmental impact statement (EIS) is required based on the significance of environmental effects (40 CFR 1509.9) documented in this site-specific EA. If no significant effects are anticipated, a Finding of No Significant Impact (FONSI) will be issued and a Decision Record (DR) will be prepared.

The DR will document the decision regarding the action for which the site-specific EA was completed and will specify which alternative is selected for implementation. The decision cannot be implemented until the DR is signed. Once the DR is signed, implementation would consist of construction of the trail alignment, trailheads, and other structures within the trail corridor alignment proposed under this site-specific EA.

**Table 1-1** provides a summary of project information for the RRCNCA Zone 2 EA.

**Table 1-1. Project Information**

<b>EA Number</b>	DOI-BLM-NV-S020-2011-0011-EA
<b>Project/Activity Type</b>	Multi-use recreation trail design and construction
<b>General Location</b>	Red Rock National Conservation Area, Clark County, Nevada The limits of the project study area for the Zone 2 EA begin at the end of West Charleston Boulevard near the Fee Station, extending southerly through the State Route (SR)-159 corridor toward SR-160, terminating at the intersection of the south portion of the 13-mile Scenic Drive dirt road. Basically, the trail system for Zone 2 begins at the Visitor Center Underpass and ends at the Exit Lot Trailhead.
<b>Name and Location of Preparing Office</b>	Bureau of Land Management (BLM) – Red Rock/Sloan Field Office
<b>Applicant Name</b>	Bureau of Land Management (BLM) – Red Rock/Sloan Field Office

## 1.1 Background of Project

The BLM is proposing the multi-use trail system within the RRCNCA to provide recreational opportunities for a broad range of non-motorized users, such as recreational bicyclists, hikers, runners, and people pushing strollers or walking dogs. Trail access from SR-159 and parking will be enhanced to accommodate other regional uses, such as equestrians and rock climbing in the canyons and the rest of the RRCNCA. The trail will also serve as a “spine” that connects a larger network of trails and trailheads, some existing and some proposed.

The proposed multi-use trail system will provide connections to various recreation resources in the RRCNCA, including, as illustrated in **Figure 1-1**:

- Red Rock Canyon Campground
- Red Springs/Calico Basin
- Red Rock Canyon Visitor Center
- 13-mile Scenic Drive
- Spring Mountain Ranch State Park
- Bonnie Springs
- Blue Diamond
- SR-160

Subsequent phases of trail development are planned to expand the network of trails in RRCNCA and to make connections to trail systems in the greater Las Vegas Valley.

The overall corridor presented in the PEA consists of a 30-mile multi-use trail system, as shown on **Figure 1-1**. The corridor is segmented into five distinct zones. **Figure 1-1** also illustrates the breakdown of the five zones and highlights the location of Zone 2. The Zone 2 Trail is approximately 3 miles in length and expands two trailheads accessed from SR-159; one for the 13-mile Scenic Drive Exit Lot (Exit Lot); and the other for the Red Rock Canyon Vista Overlook Lot (Vista Overlook Lot).

## 1.2 Location of Proposed Action

The Zone 2 Trail is located in Clark County approximately 4 miles west of the Las Vegas, Nevada, metropolitan area along SR-159, within the RRCNCA. The site can be found on the La Madre Mountain, Nevada US Geological Survey 7.5 minute quadrangle.

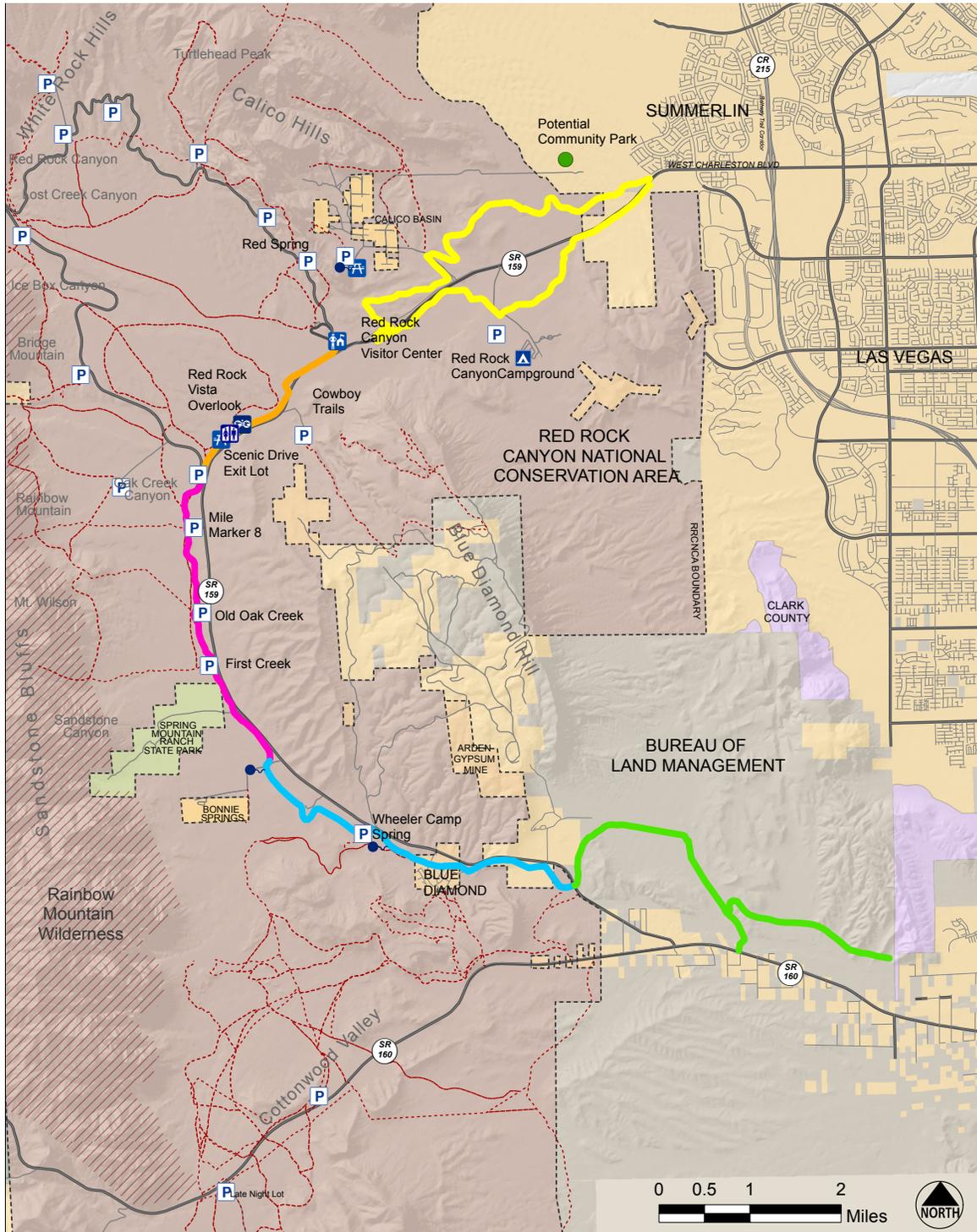
Zone 2 is located within Township 21S, Range 58E, Sections 12, 13, 14, and 23, and Township 21S, Range 59E, Section 7. It begins approximately 200 feet south of the Red Rock Canyon Visitor Center or 1.8 miles due west of the Red Rock Canyon Campground.

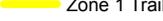
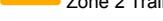
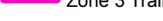
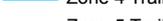
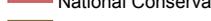
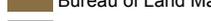
Portions of the project are located in the Nevada Department of Transportation (NDOT) right-of-way (ROW) along SR-159, including the acceleration and deceleration lanes at the trailheads and a small portion of the Vista Overlook Lot and trail connection.

The geographic study area for vegetation, drainage/washes, and soil resources encompasses approximately 201 acres of BLM lands along SR-159 within the RRCNCA. The Zone 2 Trail study area generally runs parallel to the existing roadway and varies in distance away from the highway ranging from the edge of the NDOT ROW to about 2,000 feet. The alignment for the Proposed Action lies within approximately 150 feet of the western edge of the study area.

The corridor traverses terrain that varies between approximately 3,700 and 3,800 feet above mean sea level and is mostly undeveloped, except for SR-159, the entrance/exit of the Visitor Center, the Exit Lot, and the Overlook.

Figure 1-1. Project Overview



 Sources: BLM, LVFO GIS Data Base	 Zone 1 Trail  Zone 2 Trail  Zone 3 Trail  Zone 4 Trail  Zone 5 Trail	- - - - - NCA Boundary - - - - - Trails ——— Local Streets ——— Major Streets  Potential Community Park	 Trailhead Parking  Picnic Area  Fee Station  Overlook  Campgrounds  Restroom	<b>Land Ownership</b>  Red Rock Canyon  National Conservation Area  Bureau of Land Management  Clark County, Nevada  Forest Service  State Owned  Privately Owned
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### 1.3 Purpose and Need for Action

Chapter 1 of the PEA presented the purpose and need for the RRCNCA proposed 30-mile multi-use trail system. As one of only 15 areas designated as a National Conservation Area managed by the BLM, the RRCNCA is experiencing increased recreation use with its proximity to Las Vegas residents and tourists. BLM predicts an approximate annual visitation of 1.0 to 1.2 million by 2021.

Almost all access to the RRCNCA by bicycle or automobile is via SR-159 or SR-160. SR-159 is a popular route for road cyclists and runners; however, there is no off-road paved trail within the RRCNCA. The proposed multi-use trail system presented in the PEA provides a safe recreation opportunity for the public to experience the unique natural setting of Red Rock Canyon while conserving and protecting the natural resources of the RRCNCA.

The purpose of the Proposed Action for this EA is to construct the Zone 2 Trail, which would fulfill many RRCNCA objectives.

#### 1.3.1 Purpose for the Zone 2 Trail

The following represent the purpose for the Zone 2 Trail:

- The termini for the Zone 2 Trail at the Red Rock Canyon Visitor Center, the Overlook, and the Exit Lot parking area provide strategic trail access and improve circulation for non-motorized users among existing recreational amenities, nodes, and services within RRCNCA. The termini for the Zone 2 Trail connect with the 13-mile Scenic Drive.
- The Exit Lot parking area provides amenities for equestrian users.
- The carefully designed alignment and overlooks for the proposed 3.1-mile trail system offer recreation opportunities that allow the public to enjoy and appreciate the “unique and natural setting of RRCNCA” (BLM 2005), while promoting human health.
- The Zone 2 trail alignment improves safety along the SR-159 corridor for motorized and non-motorized users.
- The trail is compatible with the conservation and protection of the natural and cultural resources in RRCNCA.
- Zone 2 expands access/linkages to RRCNCA from the greater Las Vegas Valley system of on- and off-road non-motorized trails.
- The trail design minimizes operation and maintenance costs.

#### 1.3.2 Need for the Zone 2 Trail

The primary need of the multi-use trail system is to construct a hiker/biker trail “spine” that improves access to various nodes within RRCNCA and accommodates the growing demand for recreational services/amenities as a result of increased RRCNCA visitation. The rationale for implementing the Zone 2 Trail first was in response to BLM priorities and public demand regarding the issues of access, circulation, and safety.

SR-159 is a popular route for road cyclists and runners, many of whom are training for road racing or generally conditioning themselves. No paved off-road routes currently exist in this area of RRCNCA that allow recreational users to circulate through the area and connect easily to recreational nodes; therefore, families and other less skilled cyclists and runners also use the highway shoulder. SR-159 is also heavily used as a high-speed transportation link between West Charleston Boulevard and SR-160.

As of July 2009, NDOT reduced the speed limit from 60 miles per hour (mph) to 50 mph following a legislative action. The resulting law requires regular NDOT review of the speed limit based on safety

concerns along the highway. Increased use of SR-159 has continued to escalate annually. This increase in traffic has had adverse safety impacts on cyclists and runners on the road shoulder. SR-159 provides a low-quality experience of RRCNCA for the recreational cyclists and runners.

## 1.4 Existing Conditions

### 1.4.1 Trails

One of the primary recreational opportunities available to visitors at RRCNCA is the extensive network of hiking, biking, and equestrian trails. Trail connections for non-motorized users between these trail areas and other recreational amenities are limited and sporadic (see Figure 1-2 in PEA).

### 1.4.2 Trailheads

The trailheads and parking areas in the vicinity of SR-159 are developed to various levels. Some of these facilities adequately meet the current needs of visitors; others can be filled beyond capacity on high-use days in RRCNCA. On such days, there is heavy use of the shoulder of SR-159 for parking.

The Entrance and Fee Booth Lot for the 13-mile Scenic Drive currently provides 50 parking spaces. Existing paved parking areas in the project area include the Vista Overlook Lot. The Vista Lot provides parking, restrooms, and shaded picnic areas in addition to interpretive elements and a world famous view. Current capacity is 28 spaces for vehicles, including 4 that are Americans with Disabilities Act (ADA)-compliant. It does not, however, meet anticipated demand over the next 10 years, with more than three times the existing spaces required to do so (Robert Peccia & Assoc. 2001).

Several gravel parking areas located along SR-159 currently provide parking, trail access, and staging areas. In general, these areas provide few additional amenities. They are hot, dry, and dusty much of the year, lacking shade and pavement, and do not provide restrooms, picnic areas, or bicycle racks.

On high-use days, vehicles line the shoulder of SR-159 from the Exit Lot south, creating unsafe conditions, as well as the following:

- Destroying vegetation within the ROW
- Increasing erosion
- Creating dust
- Detracting from the general quality of the recreational experience

The Exit Lot was built to provide equestrian parking and staging at the north end of the area where equestrians are permitted. It is a simple gravel lot on the north side of the exit from 13-mile Scenic Drive onto SR-159 with multiple points of access. Current capacity is 40 spaces for automobiles and 15 spots for trucks with trailers. It is highly used by equestrians.

## 1.5 Decision to Be Made

The BLM will decide whether or not to implement the Zone 2 trail alignment and trailhead construction for the RRCNCA multi-use trail system project. The site-specific EA, as required by NEPA, provides the analytical basis for the BLM to make a decision to select the best alternative on RRCNCA resources. This EA evaluates cumulative impacts on public land resources, including soils, visual resources, vegetation, wildlife, and endangered species. The impacts from ground-disturbing activities can be reduced to a level of “not significant” provided that measures are undertaken to minimize and mitigate effects associated with trail construction.

## Draft Environmental Assessment

The NEPA documentation will include an environmental resource assessment of the Proposed Action for Zone 2 at a Tier 2 level of detail, including completing the mitigation measures designated in the PEA and implementation strategies. The signed FONSI identifies the specific mitigation measures that will be required for the final design and construction, and parameters of the alignment for the project-specific tiered NEPA document.

This need is consistent with the goals and policies set forth in the General Management Plan and Resource Management Plan (RMP) for RRCNCA. The directives in these plans are to provide recreation opportunities that allow the public to enjoy and appreciate the unique natural setting of Red Rock Canyon, while conserving and protecting the RRCNCA's natural resources. This hiker/biker trail system satisfies the need for safe recreational use while minimizing disturbance of the site's important resources.

### 1.6 Scoping and Public Involvement

The majority of scoping and public involvement was completed as part of the NEPA process for the RRCNCA PEA. The BLM's intention for this project has been to assess the concerns, needs, and desires of the public at-large and to create a multi-use trail system that would be sensitive to their concerns.

Informational (scoping) packets were mailed on May 6, 2009 to five federally recognized Native American Tribes to participate in the PEA process (see Chapter 5, Section 5.5 of the PEA). No Native American concerns have currently been identified within the Zone 2 study area. The following tribes were contacted:

- Chemehuevi Indian Tribe
- Colorado River Indian Tribe
- Las Vegas Paiute Tribe
- Moapa Band of Paiutes
- Pahrump Paiute Tribe

Previous consultations have been held with federally recognized Native American tribal governments to determine the presence or absence of properties possessing significance to tribal religious beliefs or practices and cultural affiliation. Although such properties exist in the vicinity, none are present within the proposed project area. The Native American tribes will be re-contacted as part of the Zone 2 EA review.

#### 1.6.1 Internal Scoping

The internal scoping process for the Zone 2 site-specific design development and environmental studies was conducted through a series of BLM planning meetings, field studies, and plan reviews. The agency and public input from PEA scoping provided the overall context for the Zone 2 planning and design process. The alignment and design concepts for Zone 2 evolved through the following sequence of scoping reviews:

- **Design Kickoff Meeting – July 20, 2010**

The initial internal scoping meeting for Zone 2 provided direction on the transition from the PEA to the site-specific design and EA. Scoping established that the purpose for this segment of the Red Rock Canyon Multi-use Trail is to attract family-oriented use into the RRCNCA within the immediate vicinity of the Red Rock Visitor Center and trailheads. The PEA alignment and design guidelines for Zone 2 were reviewed to initiate the design and environmental study processes. In addition, maintenance-related issues were outlined, including drainage, seasonal icing, flooding, fire risk, weed control, parking requirements, and access control. Coordination with NDOT regarding SR-159 access to trailheads, signage, and underpass structures was also outlined.
- **Preliminary Trail Design Review – October 25, 2010**

This stage of internal scoping examined initial trail alignment and design details, with a focus on safety, visitor experience, and minimization of overall disturbance of the trail system to the

RRCNCA ecosystem, including wash crossings. A team workshop and field tour included a review of refinements to the Zone 2 PEA trail alignment, Exit Lot, and Overlook trailhead parking and overlook. The trail alignment was shifted away from the NDOT ROW, following natural contours to improve the overall safety and user experience. Use of local walls minimized the disturbance area of the trail footprint.

■ **50% Level Design Reviews – March to July 2011**

The last stage of the internal scoping process responded to the 50% design phase, which defines the description of the Proposed Action provided in Chapter 2 of this EA. Key issues focused on:

- Achieving an overall natural character to the trail system through the use of architecture and landscape design details, such as minimizing trail grades
- Establishing a “soft” surface to the terrain along the trail with the use of laid back slopes and natural stone, rather than hard surface concrete retaining walls
- Accommodating multiple trail uses by integrating the benefits of hard surface concrete for biking and softer surface crusher fine for walking and running into the trail section

## 1.6.2 External Scoping

External scoping was initiated as a part of the PEA process, through a series of meetings, workshops, and open houses that provided opportunities for the public, agencies, and stakeholders to participate in the planning process (See Chapter 1, Section 1.4; Appendix C; and Appendix D of the PEA). The PEA scoping process identified both corridor-wide and site-specific issues and recommendations at key points in the planning process.

The following summarizes the issues and recommendations from PEA scoping meetings, as well as their relevance to Zone 2:

■ **Issue identification**

Focus Group Meeting – April 16, 2008 (PEA Appendix D1) and

Public Meeting #1 – May 29, 2008 (PEA Appendix D2)

Issues and suggestions for trail planning and design identified through initial public participation and local interest groups representing walkers, hikers, cyclists, runners, and equestrian users, including:

- Blending in with the environment to minimize visual impacts and disturbance to the desert ecosystem and wildlife habitat
- Avoiding or minimizing wash crossings
- Minimizing impacts on resources while providing a quality user experience
- Providing access to SR-159 for trailhead parking
- Locating the trail away from SR-159 traffic for safety and visitor experience
- Separating bicycling and equestrian uses
- Existing soft-surface equestrian facilities
- Providing trailhead amenities

■ **Trail alignment and design recommendations**

Public Meeting #2 – August 12, 2008 (PEA Appendix D3)

Participants provided recommendations for trail alignments and surfaces, and trailheads through a combination of an open house, a workshop, and small group meetings. The PEA preferred alternative alignment was developed from a combination of two of the three alternatives. Review of trail surfacing alternatives, including crusher fines, concrete, and asphalt, led to a preference

for a concrete paved trail. Other recommendations included consolidation of trailheads to provide fewer high-quality trailheads and to develop “loop” opportunities within the trail system.

- **Influence of external scoping on Zone 2 PEA trail alignment and design**

The majority of the PEA alignment for Zone 2 parallels SR-159 and is within areas of existing disturbance. The PEA trail design includes a 10-foot-wide concrete paved surface with 2-foot-wide gravel shoulders on either side.

## 1.7 Consultations with Cooperating Agencies/Organizations

Contacts with Federal, state, and local government agencies, and Native American Tribes were initiated as a part of the PEA consulting process (see Chapter 5 of the PEA). Ongoing agency consultation for the Zone 2 EA includes contacts with the following:

- US Army Corps of Engineers
- US Fish and Wildlife Service
- Nevada Department of Transportation
- Clark County Regional Flood Control District
- Clark County Department of Air Quality and Environmental Management

**Chapter 5** of this EA provides additional information on tribes, individuals, organizations, or agencies consulted as part of the NEPA process.

## 1.8 Issues and Concerns

Issues and recommendations identified through the public scoping process (see **Section 1.6.2**, External Scoping), and by BLM resource specialists (see **Section 1.6.1**, Internal Scoping) have provided direction for the scope of the evaluations for the Zone 2 EA. In summary, the following issues provided direction for trail planning, design, and environmental mitigation:

- Provision of a safe and quality recreation experience for the public
- Ground-disturbing activities associated with trail and trailhead construction
- Aesthetics and visual quality of trail system design
- Minimization of visual contrast of the trail system with the landscape setting
- Trail construction on steep slopes and in wash crossings
- Soil erosion and sedimentation on steep slopes and in wash crossings
- Disturbance to Special Status Species (SSS) plant and animal habitats
- Impacts on BLM sensitive species, especially the desert tortoise and Joshua tree
- Spread or establishment of invasive plants
- Control of (vehicle) access points to trail and trailheads

**Chapter 3, Table 3-1**, lists the affected resources evaluated further in this site-specific EA and the rationale for determination.