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Bureau of Land Management

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Mud Springs Trail System
DRAFT Environmental Assessment
DOI-BLM-UT-Y010-2023-0045-EA**



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CHAPTER 1. INTRODUCTION

The Bureau of Land Management (BLM) Moab Field Office (MFO), San Juan County, and Grand County Active Transportation and Trails (GCATT) propose to construct the Mud Springs Trail System consisting of approximately 9.75 miles of stacked loop mountain bike trails and 7.2 acres of trailhead and parking area within the Upper Spanish Valley Mountain Bike Focus Area (USVFA), South Moab Special Recreation Management Area (SMSRMA) as identified in the 2008 Moab Field Office Resource Management Plan (RMP). The trailhead would be located $\frac{3}{4}$ mile east of Highway 191, 12 miles south of Moab, Utah, along B Road 129 (Yellow Circle Road, 38.43003, -109.42161) and the trail system would be within the hills immediately to the east. The trails would be designed and constructed to be inclusive and provide opportunities for and accommodate adaptive cycles. Camping in the project area would be managed through camping restrictions, including designating campsites, for the southern end of Spanish Valley published in the Federal Register on February 25, 2016 (Vol. 81, No. 37, pg. 9505). This proposal analyzes the first phase of a larger project, which will include future analysis of an additional approximate 15 miles of trails. The BLM would issue a right of way for all trails, trailhead, and designated campsites and will maintain the recreation assets in perpetuity.

Additionally, this proposal will analyze and authorize the use of Class 1 electric bicycles (e-bikes) on all proposed trails. This Environmental Assessment (EA) analyzes three alternatives to the proposed action:

- (1) Authorize the proposed trailhead, camping management and trail system but do not allow for any class of e-bikes.
- (2) Authorize the proposed trailhead, camping management, and trail system and allow for Class 1, 2, and 3 e-bikes.
- (3) No Action – no new trails, trailhead or parking area will be constructed, and camping will not be managed in the area.

1.1. Background

The 1.8-million-acre MFO is a popular recreation area for residents of both Grand and San Juan Counties, and even more popular as a destination for regional, state-wide, national, and international visitors. There are over 150 miles of mountain bike trails and 12 stacked loop trail systems to the north, west, and east of the town of Moab within Grand County. These systems have few trails that can accommodate adaptive handcycles, which have a wider wheelbase than traditional mountain bikes, or purpose built downhill and flow style trails.

Current large mountain bike events, such as Outerbike and National Interscholastic Cycling Association (NICA) races hosted by the Utah High School Cycling League, are held at the Moab Brands Trail System north of Moab. These events host approximately 1,100 participants; however, larger state level events may accommodate the 7,000 athletes from 77 schools that make up the league. The Moab Brands Trail System was not designed as a venue for large events and was not be used for a NICA event in 2023. NICA is interested in partnering with this

project and helping to create a larger, more suitable event venue that would also provide training opportunities for local youth and be a recreation asset for the communities and visitors.

The RMP established the USVFA (2,255 acres) for development of a beginner to intermediate skill level mountain bike trail system through conversion of existing routes and development of new routes. The USVFA is approximately 12 miles south of Moab within San Juan County. It is situated in close proximity to the Spanish Valley residential area, which is experiencing continual new development including planned communities on private and Utah Trust Lands Administration (UTLA) properties. Motorized recreationists currently utilize the area as a link to the Strive Ravine 4WD Route, the Utah to Colorado Rimrocker Trail, and the Behind the Rocks OHV trails. Both dispersed and designated dispersed camping is popular in the project area. These camping opportunities south of Moab attract large groups of families and friends and are user created. The BLM estimates that over 100 vehicles per night utilize the area for free camping during peak spring and fall visitation. Some people, including individuals employed in the service industry, live out of their vehicles in this area due to the high cost and lack of available housing in Moab.

E-bikes. The popularity of e-bike use as a means of transportation and recreation is growing rapidly in the United States and around the world. An e-bike is a bicycle with a small electric motor of not more than 750 watts (one horsepower) which assists in the operation of the bicycle and reduces the physical exertion demands on the rider. E-bikes may have two or three wheels and must have fully operable pedals. The batteries and motors make them heavier than ordinary bikes. Typically, an e-bike weighs about 38-70 pounds, depending on the type, battery and motor sizes, and materials used (eBike Generation 2021). A typical traditional mountain bike weighs between 25 and 30 pounds.

There are three classes of e-bikes.

- Class 1 E-bike - Equipped with a motor that provides assistance only when the rider is pedaling and that ceases to provide assistance when the bicycle reaches a speed of 20 miles per hour.
- Class 2 E-bike - Equipped with a motor that provides assistance regardless of whether the rider is pedaling but ceases to provide assistance when the bicycle reaches a speed of 20 miles per hour. Typically operated with a grip-twist or button throttle-assisted system.
- Class 3 E-bike - Equipped with a motor that provides assistance only when the rider is pedaling and that ceases to provide assistance when the bicycle reaches a speed of 28 miles per hour.

All classes limit the motor's power to one horsepower (750 watts).

United States Federal law defines e-bikes, general safety specifications they must be built to, and where they can be used. The Consumer Product Safety Commission (CPSC) regulates the manufacturing of low-speed electric bicycles while the National Highway Transportation Safety Administration (NHTSA) regulates vehicle safety standards. For the purposes of Federal Highway programs, e-bikes are defined by title 23 of the U.S. Code, Section 217(j)(2), amended in 2021 with the passage of the Infrastructure Investment and Jobs Act (Public Law 117-58), as "a bicycle equipped with fully operable pedals, a saddle or seat for the rider, and an electric

motor of less than 750 watts; that can safely share a bicycle transportation facility with other users of such facility; and that is a class 1 electric bicycle, class 2 electric bicycle, or class 3 electric bicycle.”

BLM E-Bike Policy. In 2019 and 2020, the Department of the Interior and the BLM issued new guidance regarding the management of e-bikes on BLM-administered public lands. On August 29, 2019, The Secretary of the Interior issued Secretary's Order (SO) 3376 for the purpose of increasing recreational opportunities through the use of Electric Bikes (e-bikes). The SO directed the BLM and other agencies (National Park Service, United States Fish and Wildlife Service, and Bureau of Reclamation) to expand access on public lands to e-bikes and begin the longer-term process of amending existing regulations to address e-bikes. The SO specifically directed the BLM to revise its off-road vehicle or off-highway vehicle (OHV) regulations at 43 CFR part 8340.

A BLM final e-bike rule was published in the Federal Register on November 2, 2020, and became effective on December 2, 2020. The final rule is in line with the Secretary's Order.

While the BLM intends for the rule to increase accessibility to public lands and recreational opportunities on public lands, e-bikes would not be given special access beyond what traditional, non-motorized bicycles are allowed. The rule amends 43 CFR 8340.0-5 to define e-bikes, which are limited to Class 1, 2, and 3 e-bikes as defined above. This guidance can be found on BLM’s national e-bike webpage, <https://www.blm.gov/programs/recreation/e-bikes>.

The rule provides authorized officers the ability to authorize, through subsequent land-use planning or implementation-level decisions, the use of Class 1, 2, and 3 e-bikes on non-motorized roads and trails. It provides managers the ability to exclude e-bikes that meet certain criteria from the definition of off highway vehicle (OHV) at 43 CFR 8340.0-5(a).

The rule, however, does not result in any immediate on-the-ground changes or site-specific allowances for e-bike usage on BLM-administered public lands. In other words, the rule does not, by itself, open any designated non-motorized trails to be re-designated for e-bike use. Before any on-the-ground changes can occur, an authorized officer must issue a land use planning or implementation-level decision that complies with NEPA and other applicable legal requirements.

Specifically, 43 CFR 8342.2 now includes the following subparts regarding designation procedures for e-bike use:

(d) *E-bikes*

- (1) Authorized officers may allow, as part of a land-use planning or implementation-level decision, e-bikes, or certain classes of e-bikes, whose motorized features are not being used exclusively to propel the e-bike for an extended period of time on roads and trails upon which mechanized, non-motorized use is allowed; and
- (2) If the authorized officer allows e-bikes in accordance with this paragraph (d), an e-bike user shall be afforded all the rights and privileges, and be subject to all of the duties, of a user of a non-motorized bicycle.

As an alternative to using the exclusion in 43 CFR 8340.0-5(a) to authorize e-bike use on non-motorized trails, in areas with limited OHV area designation (as is the case in the SMSRMA), the BLM may define e-bikes as OHVs and use the designation procedures described in 43 CFR 8242.2 to authorize e-bike use.

The BLM MFO currently has two non-motorized connector trails open to e-bike use as part of the Lower Monitor and Merrimac Bicycle Trail loop in the Mill Canyon Area north of Moab for a total of 1.4 miles of singletrack trail. E-bikes are otherwise allowed on all motorized routes including the Slickrock National Recreation Trail. The only other opportunity for e-bikes in the immediate Moab area is the Intrepid Trail System at Deadhorse State Park, 32 miles northwest of Moab, which has 16.6-miles of non-motorized trails open to e-bikes. In April 2022 the BLM Grand Junction Field Office (GJFO) authorized Class 1 e-bikes on 29 miles of trails within the North Fruita Desert Special Recreation Management Area (DOI-BLM-CO-G010-2021-0016-EA), which is approximately 105 miles northeast of Moab.

Research and guidelines on the use and management of e-bikes on trails is continually expanding. In November 2022, the Federal Highway Administration (FHWA) published *The Future of E-bikes on Public Lands: How to Effectively Manage a Growing Trend*. This report, funded by FHWA, is the first national-scale effort to develop a comprehensive framework for the opportunities and challenges related to e-bike use on public lands and focuses on four research areas: (1) Ecological, Cultural, and Historical Resources; (2) Safety factors; (3) Social factors; and (4) Processes for E-Bike Management.

Camping – An inventory of existing campsites within the SMSRMA was conducted by the MFO in April 2020 and May 2023. The inventory identified 35 dispersed campsites within or directly adjacent to the USVFA and initial phase of the proposed trail system. Many of these campsites are clustered together in areas ranging from 0.6 acres to 2.3 acres. The following supplementary rules for “lands located at the southern end of Spanish Valley located on the east and west sides of U.S. Highway 191 to the rim of the valley, south of San Juan County line to Kane Springs Creek Canyon Rim Road” were published in the Federal Register, Vol. 81, No. 37 on February 25, 2016:

- You must not camp at a non-designated site.
- You must not ignite or maintain a campfire at a non-designated site.
- You must not dispose of human waste in any container other than a portable toilet.
- You must not gather wood.

1.2. Purpose and Need

The purpose of the proposed action is to meet the BLM management objectives for the SMSRMA, which include:

- manage the area as a destination SRMA, primarily for outside visitation,
- provide emphasis upon development of non-motorized trails,

- and develop the USVFA for beginner to intermediate skill level mountain bike trail system through conversion of existing routes and development of new routes (BLM MFO 2008).

The BLM MFO's need is to provide an inclusive trail system that will provide recreation opportunities for adaptive cycles, support larger events, provide opportunities for purpose built downhill and flow style trails, provide opportunities for recreation south of Moab in San Juan County, and manage camping in and directly adjacent to the USVFA through designated campsites. This proposal also addresses the BLM MFO's need to respond to the growing demand for expanded access to trails open to e-bikes. The BLM MFO is engaging in the required NEPA planning process to analyze the effects of designating campsites and authorizing trails including e-bike use (Alternatives B and D), designating campsites and authorizing trails but prohibiting e-bike use (Alternative C) or not designating campsites or authorizing trails (Alternative A) within the USVFA.

1.2.1. Decision to be Made

The BLM MFO Field Manager will decide whether to approve the proposed Spanish Valley Trail System project based on the analysis within this EA. Under the National Environmental Policy Act (NEPA), the BLM must determine if there are any significant environmental impacts associated with the proposed action warranting further analysis in an Environmental Impact Statement (EIS). The BLM MFO Field Manager may choose to: a) not authorize the project, b) authorize the project as proposed, c) authorize the project but do not allow for e-bikes, or d) authorize the project but allow for Class 1, 2, and 3 e-bikes. The BLM Field Manager may also select a hybrid of the analyzed alternatives.

1.3. Scoping and Issues

The project proposal was presented to the MFO Interdisciplinary Team (IDT) on May 9, 2023. The conclusions of this meeting are presented in the IDT Checklist in Appendix A. The resources determined to be present with the potential for impact and require further detailed analysis are listed in Table 1.

The BLM MFO is working with San Juan County, GCATT, and members of the public on the proposed action. The proposed trail design is the work of an accomplished professional trail designer who has designed mountain bike trails throughout the state and nationally. NICA has been and would continue to be consulted on trail design and needs. The project was presented at the San Juan County, Board of Commissioners meeting on August 2, 2022 and again on February 21, 2023 and was approved to move forward. The San Juan County Commission received an update on the project during the August 1, 2023 session. It has been discussed at monthly public Grand County Motorized Trail Committee and Grand County Trail Mix Committee meetings since October 2022. A presentation was provided at the October 13, 2022 Motorized Trail Committee meeting and at the December 13, 2022 Trail Mix Committee meeting. The BLM, San Juan County, and GCATT met with a representative from the Utah Trust Lands Administration (UTLA) at the project site on March 21, 2023 and October 24, 2023. The BLM met with cattle ranchers and grazing permittees, Steve Deeter and Justice Redd, on September 18, 2023.

The project was listed on ePlanning on May 24, 2023.

Table 1. Issues Analyzed in Detail

Resource and Issue #	Issue Statement
Issue 1 - Recreation	How would the proposed trail system and designated camping affect recreation experiences and opportunities in the SMSRMA and the MFO?
Issue 2 - Socioeconomics	How would the proposed trail system and designated camping affect the socioeconomics of San Juan County and the Moab area?

CHAPTER 2. ALTERNATIVES

2.1. Alternative A – No Action Alternative

Under the No Action alternative, none of the proposed new trails, trailhead, parking area, or designated camping described in the Proposed Action would take place. E-bikes would not be allowed on any of the trails currently designated for and limited to non-motorized use within the MFO.

2.2. Alternative B – Proposed Action

The proposed action is for the BLM MFO, San Juan County, and GCATT (participating through an interlocal agreement with San Juan County) to construct the Mud Springs Trail System consisting of approximately 9.75 miles of stacked loop mountain bike trails and 7.2 acres of trailhead and parking area within the USVFA as identified in the 2008 Moab Field Office Resource Management Plan (RMP). A total of 28 campsites of the inventoried 35 campsites over 8.6 acres would also be designated.

The BLM would designate all the new trails as singletrack OHV-limited, open only to non-motorized uses and Class 1 e-bikes. By definition, Class 1 e-bikes are equipped with a motor that provides assistance only when the rider is pedaling, and that ceases to provide assistance when the bicycle reaches the speed of 20 mph. The motor's power is limited to one horsepower (750 watts). This proposed action would prohibit Class 2 or 3 e-bikes on the proposed new trails with the exception of adaptive cycles. To provide inclusive opportunities in the MFO for individuals with disabilities, the trails would be designed and constructed using current design standards to accommodate adaptive cycles, including those that meet the BLM definition of a Class 1 or 2 e-bike. A BLM authorized officer may also allow exceptions for persons with disabilities on a case-by-case basis to use a mobility device as requested. All classes of e-bikes

would continue to be allowed on trails and roads currently open to motorized vehicles. See the background section for more information on BLM e-bike management guidelines and policy.

The trails would be available for private mountain bike as well as commercial, competitive, and organized group use with authorization through a special recreation permit. The proposal being analyzed is the initial phase of a larger project, which will include future analysis of an additional approximate 15 miles of trails within the trail system. The BLM would complete detailed NEPA compliance and site-specific surveys for future project phases. This initial phase would take approximately two years to complete. The BLM would issue a right of way for all trails, trailhead, and designated campsites and maintain the recreation assets in perpetuity.

The proposed trailhead and parking area would accommodate non-motorized trail users accessing the proposed new trails and motorized trail users accessing motorized routes in the area such as Strike Ravine. A 0.5-acre progressive bicycle skill development area would be constructed within the trailhead and parking area. Information regarding camping in the area, including restrictions, cultural resources, paleontological resources, winter wildlife closures, sensitive plant species, and other compliance requirements would be provided at the trailhead.

The BLM would implement an annual seasonal closure for all recreational uses in the area from December 1 to April 15 and no construction would occur from November 15 to April 15 for protection of winter mule deer range and to avoid trail damage due to muddy conditions.

The proposal would result in new surface disturbance (newly constructed routes and areas) along approximately 9.75 miles of linear routes, 7.2 acres of trailhead and parking area, and existing disturbance of approximately 8.6 acres of designated camping. Based on the design features in section 2.1.2 below, the BLM estimates the total area of surface disturbance for the initial phase of the project would be approximately 20.05 acres based on the following assumptions and calculations summarized in Table 2.1:

- 7.02 miles of new trails (72%) would be 36 – 48 inches (3 - 4 feet) wide;
- 0.93 miles of new trails (1%) would be 24 – 42 inches (2 – 3.5 feet) wide;
- 1.8 miles of new trails (18%) would be 12 – 24 inches (1-2 feet) wide;
- 7.2 acres of trailhead and parking area;
- 8.6 acres of designated camping.

Table 2 Estimated Surface Disturbance from Proposed Action Trails

Trail Rating	Route Length	Tread Width	Aera (ft ²)	Acres of Disturbance
Beginner	7.02 miles	36 – 48 inches	111,195 – 148,260 ft ²	2.55 – 3.4 acres

Intermediate	0.93 miles	24 – 42 inches	9,716 – 17,003 ft ²	0.22 – 0.39 acres
Advanced	1.8 miles	12 – 24 inches	10,032 – 20,064 ft ²	0.23 – 0.46 acres

Approximately 29 percent of trails would be constructed by hand using a variety of hand tools (pick mattocks, shovels, McLeods, etc.) and approximately 71 percent of trails would be constructed using motorized equipment (trail dozers, mini excavator, skid-steer). The finished trail tread width would vary from 12 inches to 48 inches. There would be planned and designed wider locations up to 50 inches off of the tread surface to allow for safe passing, specifically during races or other events, resting, and taking in the views. Temporary disturbances wider than 48 inches would occur during construction to allow for equipment use, all of which would be rehabilitated post construction. Excess soil from trail construction would be removed from the area. Existing designated roads would be utilized to reach the general project area and machines would be deep cleaned prior to construction to mitigate the spread of invasive plant species.

Corridor width would be up to 4 feet depending on vegetation thickness and corridor height would be up to 9 feet (corridor is the cleared, or partially cleared, area above and to the sides of the trail tread). The project area has a low density of vegetation, specifically vegetation over 2 feet tall, and efforts would be made to minimize corridor clearing impacts. Obstacles in the corridor would not be over 1 foot in height. This allows for bicycles with a wider wheelbase than the trail tread to navigate the trail system.

The trailhead and parking area would be constructed using motorized equipment with a compacted road base and gravel surface. Installations would include a double vault toilet, parking delineations, and an information kiosk, including necessary space for maintenance needs and accessibility.

Camping in the project area would be managed to protect viewsheds, reduce environmental and cultural resource impacts while allowing for camping opportunities, and mitigate potential visitor use conflicts through campsite delineation and camping restrictions. Management would include designating campsites and implementation of supplementary rules published in the Federal Register on February 25, 2016 (Vol. 81, No. 37, pg. 9505). These supplementary rules include camping only in designated campsites, the possession and use of a portable toilet or commercially available Waste Alleviating Gel-type (WAG) bag to facilitate the proper disposal of solid human waste is required, and wood cutting, gathering and collection is prohibited. A total of 28 designated campsites would be established in previously disturbed areas currently used for dispersed camping, and delineated using posts, cable, and signs with campsite symbols. No amenities would be provided initially but may be added in the future. Information on camping in the area, including restrictions would be posted at the trailhead and parking area and made available through information centers and online sources. A total of seven existing campsites, five of which are in sensitive plant species (Isley’s milkvetch) occupied or suitable

habitat, will be closed and rehabilitated. Two of these campsites, totaling 0.6 acres, will be closed to protect cultural resources.

San Juan County would be responsible for maintenance of the trails, with assistance from GCATT (through contracts and agreements) and the BLM. See section 2.2.1 Design Features for detailed trail maintenance measures. The BLM would be responsible for maintenance of the trailhead, parking area, and camping. This would include vault toilet cleaning/maintenance and pumping, parking area delineation, and designated campsite delineation. Vegetative restoration efforts would be implemented after construction to improve the plant community of the area.

2.2.1. Design Features

Consistent with the management objectives for the USVFA, the BLM and its partners have designed the proposed trail system primarily for mountain biking activities using best management practices (BMPs) published in “Managing Mountain Biking: IMBA’s Guide to Providing Great Riding” (IMBA 2017), “Guidelines for a Quality Trail Experience” (BLM/IMBA 2017) and Kootenay Adaptive Sports Association “Adaptive Trail Standards” (Kootenay Adaptive Sports Association 2020). These BMPs include curvilinear design principles that utilize the contours of the natural topography, as well as frequent tread grade reversals, constructed and bermed turns, and combination of insloped and outsloped tread that are all part of modern “bike-optimized” trail design and construction. Trail grades would generally be less than 15%, but grades may be steeper where durable surface, like rock surfaces with down gradient armoring or purpose-built trail features can be incorporated into the trail design. Kootenay Adaptive Sports trail building guidelines for adaptive users would be implemented throughout.

In addition to providing high quality mountain biking opportunities, these design features are intended to reduce soil erosion and sedimentation which can impact downstream water quality. Outsloped tread would be constructed wherever possible, and the trail design would incorporate tread grade reversals or drainage features approximately every 50 to 100 feet, or approximately every 30 to 40 feet within 100 feet of natural drainages or where the tread grade exceeds 15%.

Advanced rated trails would be designed, constructed and designated for one-way directional travel and other trails would be designed and constructed as recommended for one-way directional travel. One-way travel would optimize trail-user experiences and reduce trail widening due to riders passing one another in opposite directions. Designated travel is enforceable and is designed for experiences of one-way travel. Recommended travel is not enforceable and allows for varied experiences during different conditions. Both are means to achieve user experience objectives and promote visitor safety and resource protection. Essentially, trails designed for directional travel are more fun to ride in the preferred direction of travel and are often more difficult to ride in the opposite direction.

Design features that promote one-way directional travel include:

Uphill

- Gradual tread grades – generally less than 7%

- Constructed along the contours of hillsides with relatively steep cross slopes. This helps keep the tread width narrow and discourages two-way traffic since passing at high speeds is impractical on steep cross slopes.
- Subtle grade reversals and periodic changes in tread grade steepness to provide rest/recovery opportunities for riders.
- Occasional tighter radius turns or switchbacks that are easily negotiable at lower climbing speeds but interrupt the flow and fun of a descent.

Downhill

- Features that promote flow
 - Wider radius turns
 - Sight lines sufficient for riders to comfortably maintain speed
 - Berms and jumps
 - More pronounced and steeper tread grade reversals
- Technical features that discourage uphill travel
 - Steep rocky sections,
 - Rock ledges/drops

The BLM and partners would communicate recommended mode of transportation and direction of travel using onsite signage and maps along with online messaging and maps. To communicate recommended direction of travel, the BLM would implement methods that have proven effective on other trail systems designed and managed for directional travel. Those methods include:

- labeling signs only on the side facing the user traveling in the preferred direction,
- including direction of travel arrows on all maps - trailhead kiosks, trail intersections, paper handout maps, and online maps,
- communicating with other service providers (bike shops, permitted guide services, mapping apps, websites, etc.) to ensure that they understand and convey desired management strategies,
- posting onsite and online messages regarding the rationale for directional travel recommendations,
- posting information that on recommended one-way travel trails, riders travelling in the opposite of the recommended direction, must yield to other users,
- posting “Wrong Way” signs if necessary.

The trails would be constructed with a combination of paid professional trail builders and trained and supervised volunteer trail crews. The trails would be constructed starting in the spring of 2024. The completion date for all the proposed trails would be dependent on availability of volunteer labor and other factors such as weather.

At all trail and road intersections in the project area, the BLM and its partners would post signs with maps indicating location, trail names, and any other pertinent compliance or safety information.

The BLM and partners would conduct formal onsite monitoring a minimum of two times annually (typically early Spring and early Fall) to identify and address maintenance needs. The BLM and its partners would perform interim maintenance on an as-needed basis (based on conditions reported by trail users and information observed on patrol). Trail maintenance activities would restore the trail to the original design specifications. Typical trail maintenance activities would include clearing drainage features (grade reversals and rolling grade dips), restoring tread width, de-berming and outsloping tread, and re-constructing technical trail features.

All trail users would be expected to remain within the constructed/maintained tread width. As described above, the BLM would authorize the use of adaptive cycles that meet the definition of a Class 1 or Class 2 e-bike. To promote visitor understanding of trail restrictions, trail management objectives, and responsible recreation practices (e.g., trail etiquette, interactions with livestock, mitigating the spread of noxious weeds), the BLM would collaborate with San Juan County and GCATT to:

- implement current, effective responsible recreation measures in place in Grand County
- post onsite (trailhead kiosk) and online (websites and social media) information and education messaging,
- share the proposed trail system with service providers (bike shops, mapping apps, websites, etc.) to ensure that they understand and convey desired management strategies.

Camping - During inventory and analysis a total of 28 of the 35 identified, existing campsites were determined to be adequate for the proposed designated campsites. Each campsite would be delineated with post and cable where necessary (no natural or topographic features constrain the campsite area), existing appropriate campfire rings would be left in place, and each campsite would be marked with a campsite symbol post. A total of seven campsites were determined to be negatively impacting cultural resources, viewsheds, and/or sensitive plant species. These campsites would be closed by removing constructed fire rings, scattering natural debris (rocks, downed wood) to disguise past use and impede camping activities, and installing *no camping* signs where necessary. Directional signs for camping may be installed at road intersections if deemed necessary.

2.3. Alternative C – Authorize the Proposed Trails, Trailhead, Parking Area, and Designated Camping, E-bikes Not Authorized

Under this alternative, the BLM would implement the proposed trail system, trailhead, parking area, and designated camping described in Alternative B. The BLM would not authorize e-bike use on any of the proposed trails or existing routes that are currently limited to non-motorized uses in the MFO.

2.4. Alternative D – Authorize the Proposed Trails, Trailhead, Parking Area, and Designated Camping, and Allow for Class 1, 2, and 3 E-bikes

Under this alternative, the BLM would implement the proposed trail system, trailhead, parking area, and designated camping described in Alternative B. The BLM would authorize class 1, 2, and 3 e-bike use on the proposed trails.

2.5. Conformance

The Proposed Action is in conformance with the following Land Use Plan:

Moab Field Office Resource Management Plan (RMP) (October 2008)

The Proposed Action is specifically provided for in the following Land Use Plan (LUP) decisions:

Recreation

REC-7 Management actions limiting camping, wood gathering, firewood cutting, and requiring use of fire pans and portable toilets implemented through published closures limitations, restrictions, or special rules applicable to specific land areas within the MPA are carried forward in all alternatives (see Moab Field Office Recreation Rules in Appendix L) (page 82). Appendix L (page L-1) lists the areas, including “areas within Spanish Valley.”

REC-21 Manage all SRMAs for sustainable camping opportunities. Camping may be restricted to designated sites if use and conditions warrant (page 83).

REC-42 South Moab SRMA: Focus Area -- Mountain Bike Backcountry Touring: Upper Spanish Valley Mountain Biking Focus Area (2,255 acres; Mud Spring Area) for development of a beginner to intermediate skill level mountain bike trail system through conversion of existing routes and development of new routes. Work with UTLA to expand route system on adjacent state lands (page 94)

Travel

TRV-14 Limit mechanized (mountain bike) travel to designated trails. (page 128)

TRV-16 Identification of specific designated mountain bike routes will be initially established through the RMP process and may be modified through subsequent planning at the activity plan and project plan levels on a case-by-case basis. These modifications will be analyzed through site-specific NEPA (page 128).

Wildlife

WL-44 Deer and Elk Habitat: Protect deer and/or elk crucial winter habitat (349,955 acres) by applying a timing limitation stipulation for oil and gas leasing as well as other surface-disturbing activities. (This includes 73,160 acres in WSAs, which are already closed to leasing.) This limitation will preclude surface-disturbing activities from November 15 through April 15.

CHAPTER 3. AFFECTED ENVIRONMENT AND ENVIRONMENTAL IMPACTS

This chapter describes the existing conditions relevant to the issues presented in Table 1 in Section 1.3 and discusses the potential impacts of the Proposed Action and alternatives. The affected environment provides the baseline for comparison of impacts/effects described under environmental impacts. For a discussion of issues not described, see the IDT Checklist (Appendix A).

3.1. Issue 3: Recreation - How would the proposed trail system and designated camping affect recreation experiences and opportunities in the SMSRMA and the MFO?

3.1.1. Affected Environment

The proposed action would occur within the South Moab SRMA and in the Upper Spanish Valley Mountain Biking Focus Area. This area is managed as a Recreation Management Zone to “develop a beginner to intermediate skill level mountain bike system”. To date, no action has been taken to affect this RMP goal.

The Moab Field Office is well known for its mountain bike opportunities. Since 2008, approximately 150 miles of mountain bike only trails have been constructed on Moab BLM lands; all of these trails have been constructed in Grand County, Utah. The number of bicyclists throughout the Field Office is unknown; but as an example, the Bar M Mountain Bike Focus Area hosted approximately 42,000 visitors in 2022. (Bar M is chosen as a comparable as it is approximately the same size and is equally close to Moab).

Moab is a destination for mountain bikers (and other recreationists). The Moab BLM offers the setting, outcomes and opportunities that mountain bikers seek, as is evidenced by the number of bicyclists who visit Moab, as well as the bicycling economy that these visitors support. The Moab Field Office has 113 special recreation permit (SRP) holders whose primary focus is mountain biking; these include those who offer commercial tours as well as those that host bicycle events on public lands. There is a demand for additional mountain bike opportunities, especially if those opportunities are proximate to town.

The Moab Field Office lacks a non-motorcycle single track system that is available to e-bikes of any class. The 150 miles of mountain bike trail constructed since 2008 were designated specifically for non-motorized use; the funding used for their construction was limited to non-motorized use.

The location proximate to the proposed trail system has been used for dispersed camping for many years. Although camping was limited to designated sites in the 2008 RMP, the on-the-ground actions to implement these designated sites have not been undertaken in a fashion that has endured. As a result, campers choose campsites at will.

3.1.2. Environmental Impacts

The proposed action and alternatives are focused within the SMSRMA, but the new trails and changes would affect recreation opportunities throughout the entire Moab Field Office. See the Introduction and Background section for more information on the SMSRMA.

Outdoor recreation on public lands surrounding Moab within Grand and San Juan Counties is highly valued. Moab is seen as a recreation mecca and the public has come to expect recreational opportunities when visiting this area.

3.1.2.1. *Impacts of the Alternative A – No Action Alternative*

Alternative A would not provide additional opportunities for any type of user. Bicyclists and e-bicyclists would not have use of a trail system that is close to town; this would affect local users as well as the many visitors who come to Moab to cycle. A recreational opportunity on new trails would be lost, diminishing the overall attraction of the Moab area for bicyclists and e-bicyclists.

Sustainable parking areas for recreational activities would not be provided. This means that those utilizing the area would continue to park at will, potentially damaging soils, vegetation and visual resources in an area close to town. A large event venue would not be provided.

Dispersed camping would continue to occur without a concerted effort to designate sustainable sites. Dispersed campers would continue to choose sites at random, potentially damaging soils, vegetation and visual resources.

3.1.2.2. *Impacts of the Alternative B – Proposed Action: Authorize the Proposed Trails, Trailhead, Parking Area, and Designated Camping and Allow for Class 1 E-bikes*

Alternative B would provide bicyclists and Class 1 e-bicyclists with a new opportunity to cycle in a scenic area close to town. Initially, they would be able to experience an additional 9.75 trail miles of trail opportunity. A sustainable, defined parking area, suitable for events, would be provided, as well as a skill development area that would be of particular interest to younger riders and other beginners. These amenities would enhance the experiences of local and visiting mountain bikers and e-bicyclists; they would provide an opportunity to SRP holders, especially for those wishing to host mountain bike or e-bike events. The provision of this opportunity may decrease pressure at other existing mountain bike trailheads (such as Bar M and Klondike).

Those who wish to camp in the area would be directed to managed, designated sites chosen to minimize impacts to other resources.

Those bicyclists who do not wish to share non-motorized trails with e-bicyclists may have negative social interactions with them. Those mountain bikers who wish to avoid e-bikes altogether may not utilize a trail system that is open to Class 1 e-bikes. This perceived social conflict may abate over time as bicyclists experience sharing trails with Class 1 e-bicyclists, as Class 1 e-bikes more closely resemble traditional mountain bikes than do Class 2 and Class 3 e-bikes.

3.1.2.3. *Impacts of Alternative C: Authorize the Proposed Trails, Trailhead, Parking Area, and Designated Camping, E-bikes Not Authorized*

The impacts of Alternative C are similar to those for Alternative B, except that e-bicyclists would be denied the recreational opportunities afforded by the new trail system and parking area. E-bike events could not occur at the new trailhead venue; e-biking experiences would be foregone. A new non-motorcycle single track system would be unavailable to e-bicyclists in the Moab area, an area that is lacking in single-track e-biking opportunities.

Those bicyclists who do not wish to share non-motorized trails with e-bicyclists would be positively affected.

3.1.2.4. *Impacts of Alternative D: Authorize the Proposed Trails, Trailhead, Parking Area, and Designated Camping, Allow for Class 1, 2, and 3 E-bikes*

The impacts of Alternative D are similar to those for Alternative B. The fact that the system would also accommodate Class 2 and Class 3 e-bicyclists could lead to these additional impacts.

Bicyclists and Class 1 e-bicyclists who do not wish to share non-motorized trails with Class 2 or 3 e-bicyclists may have negative social interactions with them. There is generally more acceptance of Class 1 e-bikes (pedal assist up to 20 miles per hour) among traditional mountain bikers as they are seen as more comparable to mountain bikes. The higher speed capabilities of Class 3 e-bikes and the throttle used for power on Class 2 e-bikes lead many recreationists to view Class 2 and 3 e-bikes as more closely resembling electric motorcycles. Mountain bikers may view Class 2 and 3 e-bikes as a greater intrusion on their recreation experience than that provided by Class 1 e-bikers.

Class 2 and 3 e-bicycles may increase the speed and distance travelled during an outing. Both Class 1 e-bicyclists and traditional mountain bikers may have a negative social interaction due to increased and non-compatible speeds. These perceptions could diminish the Focus Area's prescribed non-motorized characteristics.

The factors above could lead mountain bikers to go elsewhere for their mountain biking experiences.

Alternative D would provide a singletrack opportunity for Class 1, 2 and 3 e-bicyclists in an area that has very little non-motorcycle singletrack available for them.

Some research indicates that Class 2 (throttled) e-bikes and the higher max speed Class 3 e-bikes have a greater capacity for trail damage. The selection of Alternative D may increase the maintenance needs on the trail system. In addition, since it is easier to venture off trail when using a more powerful machine, there is an increased potential of off-trail damage from Class 2 and Class 3 e-bike use.

3.1.2.5. *Cumulative Impacts*

The Cumulative Impact Area is the South Moab SRMA (63,999 acres). The Upper Spanish Trail Mountain Biking Focus Area is a portion (2,255 acres) of this SRMA. Past impacts within the SRMA include recreation use, grazing and some limited mineral activity. Recreation use

includes hiking, use of Ken's Lake, camping (both in campgrounds and in a dispersed setting), motorized use on designated roads and other activities. Present impacts include a continuation of this recreation use and grazing; there are no current mineral activities ongoing. The reasonably foreseeable actions that could occur in the SRMA are continued and increased recreation use and continued grazing at current levels. There are no minerals activities proposed at the current time.

The construction of the trail system would add cumulatively to the recreation benefits afforded in the South Moab SRMA. Provision of a trail system within Moab's Valley would provide a cumulative benefit to local users, visitors and SRP holders.

3.2. Issue 4: Socioeconomics - How would the proposed trail system and designated camping affect the socioeconomics of San Juan County and the Moab area?

3.2.1. Affected Environment

The socioeconomic planning area consists of Grand County, Utah and the northern portion of San Juan County, Utah, located within the administrative boundary of the Moab BLM Field Office. Almost all the population of San Juan County within the MFO resides in the far northern portion of the County contiguous with the city of Moab. Other major populations in San Juan County reside a considerable distance south of the project area, typically fifty miles or more. Most of the population of Grand County, on the other hand, reside in Moab just a few miles north of the project area. Both counties have low-income populations exceeding the Utah and national averages, especially San Juan County. Despite this, and likely due to both differences in household size and San Juan's large Native American population, Grand County per capita income (\$75,418) exceeds the Utah and national numbers, but San Juan per capita income (\$22,658) trails these numbers by a wide margin. Both counties have very low percentages of private land, with much of the acreage under federal management.

As of the 2020 Census, Grand County had a population of 9,630, and San Juan had a population of 14,610. Grand County's population is predominately white (81 per cent), while San Juan has a very sizeable minority population (57 per cent), many of them Native Americans residing on reservations in the southern part of the county. As mentioned earlier, most of the population in the vicinity of the project area live in Grand County and the northern edge of San Juan County.

The two counties differ significantly in their employment structure. Grand County has very tourist and recreation-oriented economy, with accommodations and food service the largest employment sector., followed by government and retail trade. San Juan's largest employment sector is government, followed by farm and healthcare/social services. Although San Juan has many residents employed in tourism and recreation-oriented industries, these sectors are much smaller than in Grand County.

The recreation economy in both counties consists of a variety of activities. There are two popular National Parks within the socioeconomic planning area, as well as numerous opportunities for hiking, water sports and OHV-related pursuits. As discussed in Section 3.3.1 (Recreation: Affected Environment), a major difference between the two counties is the number of constructed and maintained mountain bike facilities, with Grand County having numerous locales with many miles of marked trails and associated infrastructure such as parking, information kiosks, and rest room facilities. One of these locales, for example is the Bar M

system, which is about equally distant from the center of Moab as is the current proposal. The Bar M system has been designated a National Recreation Trail and attracts over 40,000 annual users. It also hosts large events such as the Utah High School Mountain Bike championships and several commercial competitions.

BLM lacks the data necessary to distinguish economic contributions by type of recreation activity (e.g., mountain biking vs. whitewater rafting), and recognizes that many recreational participants, whether local or nonlocal, may pursue a variety of recreational pursuits. BLM does have data, however, enabling the estimation of general economic impact resulting from recreation activities in the planning area. The analysis which follows is based on the Grand County economy and associated visitor spending profiles and is appropriate since virtually all the current tourist infrastructure (hotels, restaurants, etc.) that project visitors are likely to use are in Grand County. In addition to the economic impacts, the analysis which follows also considers non-market values associated with BLM activities. This concept is discussed more fully under Environmental Impacts, below.

3.2.2. Environmental Impacts

3.2.2.1. *Methodology*

Economic impacts from expected recreation use of the proposed project were calculated using the Impact Analysis for Planning Model (IMPLAN), an input-output model that tracks inter-industry and consumer spending in a local or regional economy; this allows estimation of indirect and induced economic impacts from a onetime direct change to the economy due to increases or decreases in expenditures, employment, or income. Indirect impacts result from the inter-industry transactions (for example, when a recreation outfitter buys supplies from a local grocery store). Induced impacts result from re-spending of household income (for example, when employees of the recreation outfitter buy goods for personal use at a local grocery store). The outputs calculated from IMPLAN include employment, labor income, value added and gross regional output.

3.2.2.2. *Impacts of the Alternative A – No Action Alternative*

Under Alternative A, the project would not be built. There would be no additional impacts to the socioeconomic planning area, nor any benefits associated with nonmarket values.

3.2.2.3. *Impacts of the Alternative B – Proposed Action: Proposed Action: Authorize the Proposed Trails, Trailhead, Parking Area, and Designated Camping and Allow for Class 1 E-bikes*

Table 3 shows the estimated economic impact from 40,000 annual visitors using the proposed trail system. This estimate is similar to current numbers for the roughly equidistant and similar Bar M system north of Moab. Inputs to the model use BLM's best available data for spending patterns on recreation-related sectors (e.g., hotels, restaurants, gas, etc.), allocated among different recreation segments (e.g., local vs non-local, lodging vs camping, etc.). In general, the largest impacts come from non-local visitors in overnight lodging, and the smallest impact comes from local day use. The more use shifts occur from one category to another, the more one would expect a change in impacts. The model also assumes that overnight nonlocal users would be

staying and spending in Grand County (Moab specifically), since northern San Juan County currently lacks the necessary tourist infrastructure. Estimated employment and labor income, however, could benefit residents of either County since northern San Juan is experiencing substantial residential growth and many of these residents work in Moab.

Table 3: Estimated Economic Impact from 40,000 Annual Visitors to Project Area

<i>Impact</i>	<i>Employment</i>	<i>Labor Income</i>	<i>Value Added</i>	<i>Output</i>
Direct Effect	60.9	\$2,012,314	\$3,171,638	\$5,233,991
Indirect Effect	10.6	\$373,979	\$611,095	\$1,454,282
Induced Effect	8.1	\$321,738	\$672,910	\$1,202,813
Total Effect	79.7	\$2,708,032	\$4,455,643	\$7,891,086

Notes: (1) IMPLAN results are strictly linear, meaning that half the expected use would produce half the estimated impact. Twice the expected use would produce twice the impact, and so on.

Nonmarket Values. The term nonmarket values refers to the benefits individuals attribute to experiences of the environment or uses of natural and cultural resources that do not involve market transactions and therefore lack prices. Examples include the benefits received from wildlife viewing, hiking in a wilderness, or hunting for recreation. Nevertheless, such values are important to consider because they help tell the entire economic story. Estimates of nonmarket values supplement estimates of income generated from commodity uses to provide a more complete picture of the economic implications of proposed resource management decisions. Unlike gasoline or employee wages, these values either do not have a market or do have a market but are difficult to quantify. Nevertheless, such values are important to consider because they help tell the entire economic “story.” This is especially important regarding recreation activities on BLM which are typically “free” to the user, but still have value even if not expressed in monetary terms. Despite the difficulties associated with measurement of these values, it is well-accepted that the natural, recreational, and cultural resources of an area, and the open space the area may provide, have value, even if difficult to quantify in dollars.

Economists measure nonmarket use values by estimating the “consumer surplus” associated with these activities. Consumer surplus is defined as the maximum dollar amount, above any actual payments made, that a consumer would be willing to pay to enjoy a good or service. For instance, hikers pay a market price for gasoline used to reach a trail but pay nothing to use the trail. Any amount that a recreationist would be willing to pay to use this otherwise free resource represents the nonmarket consumer surplus value of that resource to that consumer. Nonmarket use values have been studied extensively for a wide variety of recreation “goods.” For mountain biking, as an example relevant to the current project, several studies have estimated the consumer surplus associated with this activity as averaging \$176 per day.

3.2.2.4. *Impacts of Alternative C: Proposed Action: Authorize the Proposed Trails, Trailhead, Parking Area, and Designated Camping, No E-Bikes*

Although there could be a different mix of users (no e-bikers but perhaps more mountain bikers), BLM does not expect a change in overall visitation, and economic impacts would be similar to Alternative B.

3.2.2.5. *Impacts of Alternative D: Proposed Action: Authorize the Proposed Trails, Trailhead, Parking Area, and Designated Camping and Allow for Class 1, 2, and 3 E-bikes*

Although there could be a different mix of users (more e-bikers but perhaps fewer mountain bikers), BLM does not expect a change in overall visitation, and economic impacts would be similar to Alternative B.

3.2.2.6. *Summary of Impacts/ Cumulative Impact Statement*

The Cumulative Impact Area for socioeconomic is Grand County and the northern portion of San Juan County. Past impacts within the CIA include recreation use, grazing and some limited mineral activity. Recreation use includes hiking, camping (both in campgrounds and in a dispersed setting), motorized use on designated roads and other activities. The reasonably foreseeable actions that could occur in the CIA are continued and increased recreation use with associated socioeconomic impacts. The construction of the trail system would add cumulatively to the socioeconomic benefits afforded in the CIA. Provision of a trail system within Moab's Valley would provide a cumulative benefit to local users, visitors and SRP holders, who could expand the economic.

CHAPTER 4. PUBLIC INVOLVEMENT, CONSULTATION AND COORDINATION

4.1. Public Involvement

The project proposal was received by the BLM from members of the public, San Juan County and GCATT. The proposal was presented to and approved by the San Juan County, Board of Commissioners and was discuss at the Grand County Trail Mix Committee and Grand County Motorized Trail Committee. These two committees hold public meetings to discuss proposals and involve the public in their deliberations. The NICA has been consulted on trail design and event venue parameters.

The proposal was posted on the BLM's ePlanning website on May 24, 2023. No members of the public have submitted comments through this posting. A 15-day public comment period will take place in November 2023.

4.2. Consultation and Coordination

Table 4: List of all Person, Agencies, and Organizations Consulted for Purposes of this EA.

Name	Purpose & Authorities for Consultation or Coordination	Findings & Conclusions
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Rim to Rim Restoration	Habitat Assessment for Jones cycladenia (<i>Cycladenia humilis</i> var. <i>jonesii</i>)	Based on the results of the habitat suitability assessment, the study area does not contain suitable habitat for Jones cycladenia.
The Three Milkvetch Conservation Agreement Committee	Assessment of <i>Astragalus iselyi</i> occupied habitat within the project area	The project is located in an area that has been identified by USFWS as suitable habitat for Isely's milkvetch (<i>Astragalus iselyi</i>). Plant surveys were completed in late April and early May 2023. Approximately 0.8 miles of the proposed trail system falls within occupied habitat. The project was presented to the Utah Three Milkvetch Conservation Agreement Committee in July 2023. Potential impacts to Isely's milkvetch would be mitigated through educational messaging at the trailhead, marking the population during trail construction, survey of the area for 5 years post construction with sharing of information with the committee, and elimination of dispersed camping within occupied habitat.
Native American Tribes and State Historic Preservation Office (SHPO)		A Class III archaeological survey of the area of potential effects was completed (U23MQ0137). Four sites were relocated, and five new sites were documented. The project was redesigned to minimize impacts to 42SA16864 (a CCC erosion control site). A determination of "no adverse effects will be

		submitted to the SHPO and tribes.
Steve Deeter and Justice Redd	Grazing concerns on the Black Ridge Allotment	No concerns with trails crossing fences due to the lack of fences in the project area, cattle presence will mostly be during trail system seasonal closure. Minimal post and cable fencing will be used in the campsite areas and trailhead/parking. Signs will be used to deter bike use of cattle trails if any within the trail system.

CHAPTER 5. LIST OF PREPARERS

Table 5: List of Preparers

Name	Title	Resource Area Represented for this Project.
Katie Stevens	Outdoor Recreation Planner	ACEC, Recreation, Visual Resources
Nate Huber	Natural Resource Specialist	Air Quality
Ami Schlosser/Lori Hunsaker	Archeologist	Cultural Resources, Native American Religious Concerns
Gabe Bissonnette	Aquatic Ecologist	Fisheries, Floodplains, Wetlands/Riparian Zones
Josh Relph	Fuels Specialist	Fire/Fuels Management
Jennifer Whittington	Geologist	Geology/Mineral Resources/Energy Production, Water, Waste
Lisa Wilkolak	Realty Specialist	Lands/Access
Aaron Vollmer	Rangeland Management Specialist	Livestock Grazing, Rangeland Health Standards, Soils, Vegetation
Chris Marlor	Fuels Technician	Invasive Species/Noxious Weeds

Bill Stevens	Outdoor Recreation Planner	Natural Areas, Environmental Justices, Lands with Wilderness Characteristics, Socioeconomics, Wilderness, Wild and Scenic Rivers
Alan Titus	Paleontologist	Paleontology
Todd Murdock	Assistant Field Manager - Resources	Vegetation – UT BLM Sensitive Species, Threatened, Endangered or Candidate Species
Jonathan Argov	Wildlife Biologist	Wildlife – Non-designated species, UT BLM Sensitive Species, Migratory Birds (incl. raptors), Threatened, Endangered or Candidate Species
Jill Stephenson	Planning and Environmental Coordinator	Woodlands

References

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- eBike Generation. 2021. Retrieved from: <https://ebikegeneration.com/blogs/news/how-much-do-e-bikes-weigh-know-the-facts>. Accessed on July 7, 2023.
- Federal Highway Administration. 2022. The Future of E-bikes on Public Lands: How to Effectively Manage a Growing Trend. Retrieved from: <https://highways.dot.gov/sites/fhwa.dot.gov/files/wfl-e-bike-final-report.pdf>. Accessed on July 7, 2023.
- IMBA. 2017. Managing Mountain Biking: IMBA's Guide to Providing Great Riding
- Kootenay Adaptive Sports Association. 2020. Adaptive Trail Standards. Retrieved from: https://kootenayadaptive.com/wp-content/uploads/2021/03/KASA-Adaptive-Standard_FINAL-EDIT2.pdf. Accessed on July 7, 2023.

Appendices

Appendix A: IDT Checklist

Appendix B: Map of Proposal

APPENDIX A:

INTERDISCIPLINARY TEAM CHECKLIST

Project Title: Mud Springs Trail System

NEPA Number: DOI-BLM-UT-Y010-2023-0045-EA

SPECIALIST DETERMINATIONS: *(Choose one of the following options for the “Determination” column)*

NP = not present in the area impacted by the proposed action or alternatives

NI = present, but not affected to a degree that detailed analysis is required

PI = present with relevant impacts that need to be analyzed in detail in the EA or EIS

The following elements are not present in the Moab Field Office and have been removed from the checklist:

Farmlands (Prime or Unique), Wild Horses and Burros.

RESOURCES AND USES CONSIDERED (INCLUDING SUPPLEMENTAL AUTHORITIES APPENDIX 1 H-1790-1)

Resource/Use	Determination	Rationale for Determination	Name of Assigned Specialist	Date
Air Quality Greenhouse Gas Emissions	NI	As the project is proposed it not likely that there will be an increase to or affect to AQ or GHG emission that will exceed the State of Utah National Ambient Air Quality Standards. Air Equality and Green House Gasses will not be discussed further in this EA.	N. Huber	8/15/23
Areas of Critical Environmental Concern (ACEC)	NP	There are no ACECs in the project area; thus the project would have no impacts on ACECs. See Map 21 of the Moab RMP.	K. Stevens	5/9/23
BLM Natural Areas	NP	No BLM Natural Areas are present within the project area. See 2008 Moab RMP, map 16	B. Stevens	5/9/23
Cultural Resources	NI	A Class III archaeological survey of the area of potential effects was completed (U23MQ0137). Four sites were relocated, and five new sites were documented. The project was redesigned to minimize impacts to 42SA16864 (a CCC erosion control site). A determination of “no	L. Hunsaker	10/17/23

Resource/Use	Determination	Rationale for Determination	Name of Assigned Specialist	Date
		adverse effects will be submitted to the SHPO and tribes.		
Environmental Justice (EO 12898)	NI	<p>Low income populations have been identified within Grand County. See https://ejscreen.epa.gov/mapper/</p> <p>The Census, however, has determined that low income data for Grand County is considered very unreliable, due to sampling error inherent with small populations, making a confident identification of this EJ population problematic.</p> <p>This finding could change based on information received from scoping, public comment, tribal consultation and/or local knowledge.</p> <p>Low income and minority populations have been identified within San Juan County. See https://ejscreen.epa.gov/mapper/</p> <p>The proposed action, however, is distant from any population centers, and is not likely to have a disproportionately adverse impact on identified EJ populations.</p> <p>This finding could change based on information received from scoping, public comment, tribal consultation and/or local knowledge.</p>	B. Stevens	5/9/23
Fisheries – Non-designated Species (including UT BLM sensitive species)	NP	There are no fish bearing or perennial waters within the project area. See aerial imagery, BLM Lotic AIM Data, BLM PFC, and 2008 Moab RMP Riparian Data. No water withdrawals are proposed.	G. Bissonette	5/11/23
Fisheries – Threatened, Endangered or Candidate Species	NP	There are no fish bearing or perennial waters within the project area. See aerial imagery, BLM Lotic AIM Data, BLM PFC, and 2008 Moab RMP Riparian Data. No water withdrawals are proposed.	G. Bissonette	5/11/23

Resource/Use	Determination	Rationale for Determination	Name of Assigned Specialist	Date
Floodplains	NP	There are no large floodplains within the area although smaller erosional gullies may be encountered.	G. Bissonette	5/11/23
Fuels/Fire Management	NI	Project as proposed will have minimal impact to the sparse fuels in the area. Re-vegetation with native species is proposed. No further analysis is needed.	J. Relph	6/6/23
Geology/ Mineral Resources/ Energy Production	NI	No mining claims or leasable mineral resource/energy production are present in the proposed project area. No mineral material sales or community material pits are active in the area.	J. Whittington	5/15/23
Lands with Wilderness Characteristics	NP	No lands with wilderness characteristics as identified by BLM are present within the project area. See 2008 Moab RMP, map 15	B. Stevens	5/9/23
Lands/ Access	NI	Existing rights-of-ways and other land use authorizations would not be impacted by the proposed project as the uses would not interfere with each other. ROWs in the area are mainly issued for utilities and roads. A portion of the proposed project area is within a proposed land exchange with SITLA. If the land exchange is finalized, BLM would issue itself a ROW reservation for any of the project area that would transfer to the management of SITLA.	L. Wilkolak	5/24/23
Livestock Grazing	NI	Current designated trails and roads throughout the Moab Field Office are evidence that livestock grazing would not be impacted. Barriers to control the cycling and camping traffic would not utilize barbed wire. Post and cable fencing on roads and trails would not interfere with gathering or moving livestock. Following the implementation of the trail system periodic conversations with the permittee would occur to address any concerns. Opportunity to educate the general public regarding grazing on public lands would be included at the trailhead.	A. Vollmer	9/19/23

Resource/Use	Determination	Rationale for Determination	Name of Assigned Specialist	Date
Native American Religious Concerns	NI	Letters initiating government-to-government consultation were mailed on May 24, 2023. No responses have been received to date.	J. Stephenson	6/30/23
Paleontology	NI	PFYC 4 and PFYC 5 units occur throughout the area of the Proposed Action. Impacts to vertebrate fossils could occur with trail construction aspects requiring surface disturbance. Survey required prior to any ground disturbing activity in units with PFYC ratings of 4 or 5. A cultural survey completed by Montgomery Archaeological Consultants August 2023, noted potential vertebrate fossil sites. Preliminary field inspection on 10/20/23 by ALT determined these to all be petrified wood and plant molds. Any significant fossil sites found during survey will be avoided or mitigated through scientific documentation and collection.	Alan Titus	10/20/23
Rangeland Health Standards	NI	22.24 Acres of disturbance would occur in the Black Ridge allotment, which would affect less than 1 percent of the 14,842 acres of the allotment. The Resources of Soils, Riparian, Vegetation/Habitat/T&E species, and Water Quality, which are the Utah Standards, are found elsewhere in the checklist. Each of these resources are analyzed under their component elements. Depending on the range of affects to these resources by alternatives, achieving rangeland health standards could be affected positively or negatively.	A.Vollmer	9/19/23
Recreation	PI	Would provide recreation benefit for those who enjoy biking. See analysis in EA.	K. Stevens	5/9/23
Socioeconomics	PI	Based on other mountain bike trail projects in the area, there are likely to be impacts from visitor spending directly resulting from use of the proposed trail system. The body of the EA describes results using an advance economic impact model	B. Stevens	5/9/23

Resource/Use	Determination	Rationale for Determination	Name of Assigned Specialist	Date
		<p>(IMPLAN), along with a description of the model. Since the exact level of use is difficult to estimate, the results show the impact per 1000 visitor days annually. Actual results may be higher or lower, depending on use of the trail system.</p> <p>In addition to the quantifiable economic impacts, there likely will also be non-market values resulting from the consumer surplus realized by recreationists receiving something of value (use of the trail system) at a cost less than they may be willing to pay, if one were charged. This concept is also discussed in the body of the EA.</p> <p>There may be additional benefits to San Juan County by making recreation facilities more readily available to residents of south Spanish Valley. Currently, almost all trail systems in the area are north of Moab, necessitating additional travel for San Juan County residents.</p>		
Soils	NI	There would be 11.5 acres of new soil that would be impacted by the construction of the new trail system. After the completion of the construction the trail system the total amount disturbance would be 4.25. Impacts on soils could be partially mitigated by use of proper construction methods in developing trails, camping areas, and parking area. A description of these methods is included in the EA.	A.Vollmer	9/19/23
Vegetation – Non-designated Species	NI	Up to 22.24 Acres of vegetation could be permanently removed in the construction of the trails. Disturbance associated with construction would be reseeded with native plant communities.	A.Vollmer	9/19/23
Vegetation – UT BLM Sensitive Species	NI	The project is located in an area that has been identified by USFWS as suitable habitat for Isely’s milkvetch (<i>Astragalus</i>	T. Murdock	9/22/23

Resource/Use	Determination	Rationale for Determination	Name of Assigned Specialist	Date
		iselyi). Plant surveys were completed in late April and early May 2023. Approximately 0.8 miles of the proposed trail system falls within occupied habitat. The project was presented to the Utah Three Milkvetch Conservation Team in July 2023. Potential impacts to Isely's milkvetch would be mitigated through educational messaging at the trailhead, marking the population during trail construction, survey of the area for 5 years post construction with sharing of information with the committee, and elimination of dispersed camping within occupied habitat.		
Vegetation – Threatened, Endangered or Candidate Species	NP	The project is located within an area that has been identified as an area of influence for Jones Cycladenia (<i>Cycladenia humilis</i> var. <i>jonesii</i>). A habitat assessment was completed by Rim to Rim Restoration in August 2023. The area was determined to be non-suitable habitat based on soil conditions.	T. Murdock	9/22/23
Vegetation – Invasive Species/Noxious Weeds	NI	Because any noxious species would be treated by the BLM should they be inadvertently introduced by project activity, there would be no increase of unwanted species as a result of the project.	S. Foley	5/24/23
Visual Resources	NI	A portion of the project area, 6.7 acres, is managed as VRM Class II, where the objective is to preserve the existing character of the landscape; Activities may be seen but should not attract the attention of the casual observer. The footprint of the trail is small and would not be visible from the Key Observation Point, which is Highway 191. The remaining portion of the project area, 15.5 acres, is managed as VRM Class III, where the level of change to the characteristics landscape should be moderate	K. Stevens	5/9/23

Resource/Use	Determination	Rationale for Determination	Name of Assigned Specialist	Date
Wastes (hazardous or solid)	NI	All trash, refuse or waste generated during the construction or maintenance of the proposed Mud Springs Trail System shall be removed from the proposed project area and disposed of in accordance all applicable local and state regulations. No hazardous wastes are currently present or expected to be generated during, or as a result of, the proposed construction, maintenance, or recreational use of the proposed trail system.	J. Wittington	5/15/23
Water Resources/ Quality (drinking, surface, ground)	NI	<p>The proposed route would be located on a hill but not on any discernable water pathways that serve as drainage systems. The construction and use of the trail system are not expected to negatively impact surface or groundwater resources and potential impact would be mitigated to a degree that the resource does not require further analysis.</p> <p>The type of recreational use proposed creates temporary shallow surface disturbance from bicycle tire and foot traffic. During construction of the trail system, the crews would contain and clean-up any trash, human waste, or oil/grease/gas spills generated during construction to prevent waste from potentially seeping into surface or groundwaters.</p> <p>The proposed trail system could affect surface water runoff patterns and a potential impact could be erosion of the trail over time from surface water run-off, especially along steeper elevations. Maintenance of the trail system would be sufficient to repair any sections damaged by water erosion and sediment transport.</p>	J. Whittington	8/3/2023
Wetlands/Riparian Zones	NP	There are no mapped riparian areas within the project area. See 2008 Moab RMP	G. Bissonette	5/11/23

Resource/Use	Determination	Rationale for Determination	Name of Assigned Specialist	Date
		Riparian data, BLM Lotic AIM data, and PFC data.		
Wilderness / WSA	NP	No Wilderness or WSAs are present within the project area. See 2008 Moab RMP, map 23	B. Stevens	5/9/23
Wildlife – Non-designated species	NI	Trail work nor trail use would occur between Dec 1 – April 15 to avoid disturbance to deer and elk on critical winter habitat.	J. Argov	5/10/23
Wildlife – UT BLM Sensitive Species	NI	Trail work would not occur within 660 feet of prairie dog colonies to protect Gunnison prairie dog habitat (surveys pending). Trail work will avoid covering or damaging animal burrows >6 inches to protect Burrowing Owl habitat. Trail work would not occur in potential burrowing owl habitat between March 1st – August 31st to prevent disturbance to owls during nesting season. Exceptions would be granted by the wildlife biologist if the proposed areas are surveyed and deemed unoccupied or of little value to wildlife.	J. Argov	5/10/23
Wildlife – Migratory Birds (incl. raptors)	NI	Trail work would not occur between March 1 - July 31 to prevent disturbing Pinyon Jays and other migratory birds during nesting season. Exceptions would be granted by the wildlife biologist if the proposed areas are surveyed and deemed unoccupied or of little value to migratory birds.	J. Argov	5/10/23
Wildlife – Threatened, Endangered or Candidate Species	NP	No threatened, endangered or candidate species present in the project area.	J. Argov	5/10/23
Wild and Scenic Rivers	NP	No WSR corridors are present within the project area. See 2008 Moab RMP, map 22	B. Stevens	5/9/23
Woodland/Forestry	NI	The project area is partially within mapped woodland habitat. The proposed parking area and staging area are outside of mapped woodlands; the parking and staging area would not impact the quality	J. Stephenson	6/16/23

Resource/Use	Determination	Rationale for Determination	Name of Assigned Specialist	Date
		or quantity of woodland resources. The proposed trail network is partially within woodland resources. Trail construction would avoid the removal of woodland resources wherever possible; trails would be routed around trees where practical. Minimal removal of individual pinyon pine or juniper is expected resulting in a nominal amount of disturbance for the overall quality and quantity of the woodland resource. Therefore detailed analysis is not needed.		

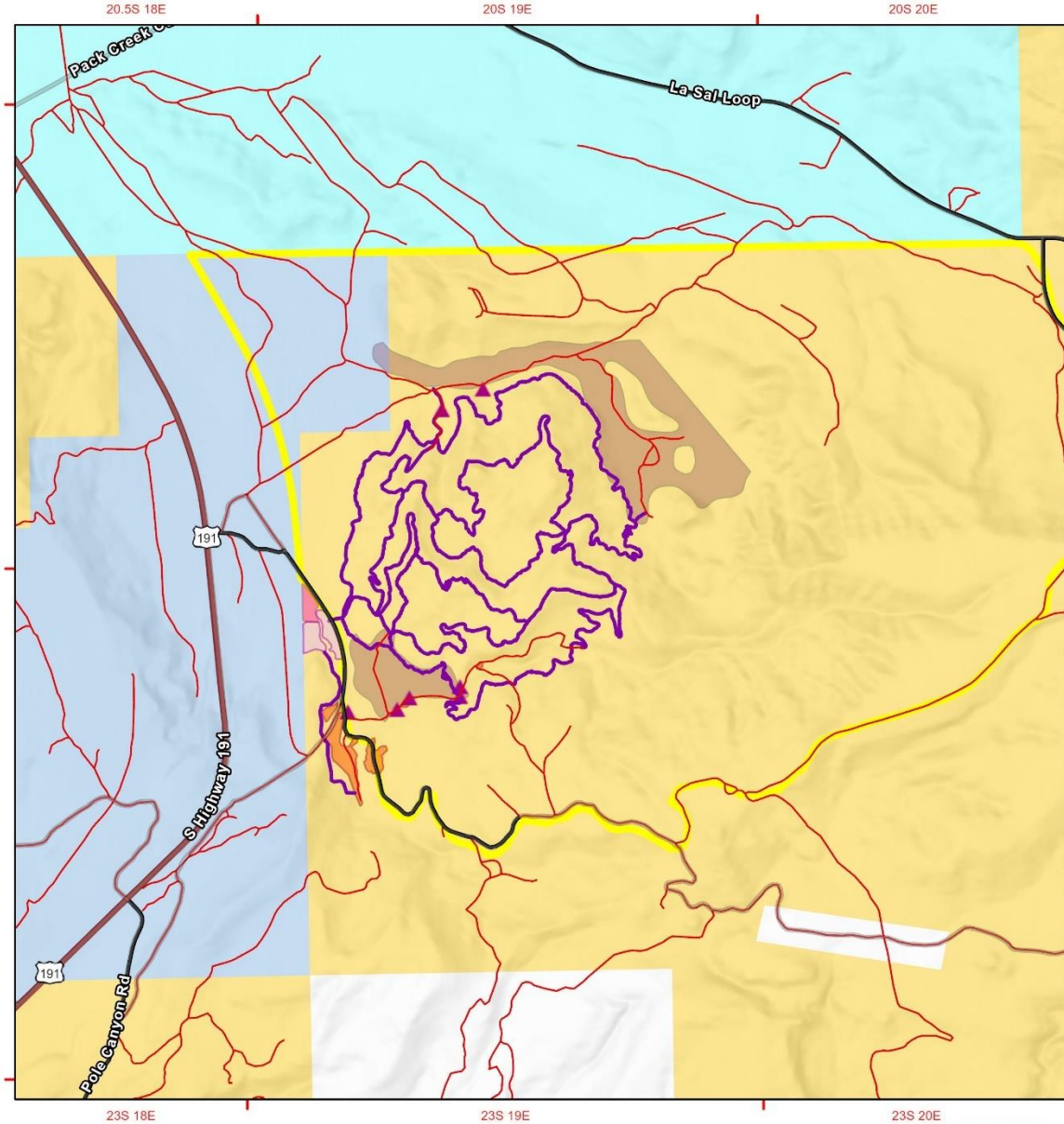
FINAL REVIEW:

Reviewer Title	Signature	Date	Comments
Environmental Coordinator			
Authorized Officer (Field Manager)			

APPENDIX B: Project Map

Mud Springs Trail System

DOI-BLM-UT-Y010-2023-0045 EA
 Bureau of Land Management
 Moab Field Office



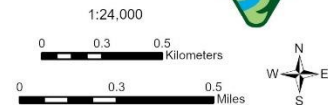
Location Map
 Utah BLM Field Office Boundaries



Date: 10/26/2023

Legend

- Phase 1 Trails
- Mountain Bike Focus Area
- Trailhead/Parking
- Trailer and Overflow Parking
- Designated Camping - 28 Campsites
- ▲ Closed and Rehabilitated Campsites
- Suitable Habitat - Isley's milkvetch
- Upper Spanish Valley Mountain Bike Focus Area
- A Roads
- B Roads
- D Roads
- UTLA Land Exchange Dingell Act
- Bureau of Land Management (BLM)
- State
- Private



No warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data for individual use or aggregate use with other data.