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Managing Camping within the Labyrinth Rims/Gemini Bridges Special Recreation Management Area

ENVIRONMENTAL ASSESSMENT DOI-BLM-UT-Y010-2021-0094-EA

Location: Portions of the Labyrinth Rims/Gemini Bridges SRMA Grand County, Utah

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CHAPTER 1. INTRODUCTION

The Bureau of Land Management (BLM) Moab Field Office (MFO) proposes to manage camping by designating campsites within a 120,037-acre area (project area) of the Labyrinth Rims/Gemini Bridges Special Recreation Management Area (SRMA). All camping in this area would be limited to designated campsites; in addition, subsequent supplementary rules would require the possession and use of a portable toilet/human waste disposal bag to facilitate the proper disposal of solid human waste, possession and use of a fire pan and packing out the ash, and prohibit wood cutting, gathering and collection. The proposed area of management is generally west of Utah State Route 313 and south of the Ten Mile Point Road in Grand County, Utah; it is depicted on the Maps found in Appendix B.

The BLM would seek establishment of supplementary rules regarding camping, possession and use of a portable toilet and fire pan, and wood cutting, gathering and collection, which would be undertaken through publication in the *Federal Register*, in accordance with 43 CFR 8365.1-6.

1.1. Background

The MFO hosts approximately three million visitors per year; a substantial but unknown number of these visitors camp on BLM administered lands. Visitation to the MFO has increased over the last ten years and dispersed camping pressures have increased commensurately, particularly in the last five years. In 2021, the BLM MFO hosted 259,000 visitor days in its developed campgrounds, but the number of dispersed campers is not known. The best estimate of the number of visitors to the project area is provided by the traffic counters on Utah State Route 313. In 2021, over 625,000 vehicles utilized Utah State Route 313 (one way). If one assumes three people per vehicle, then 1,875,000 people travelled on Utah State Route 313. While some of these people went only to Canyonlands National Park and/or Dead Horse Point State Park, many also visited nearby BLM lands; an unknown number of these people camped on BLM lands, either in the three campgrounds on Utah State Route 313 or dispersed within the project area.

The Labyrinth Rims/Gemini Bridges SRMA (300,650 acres) was established in the Moab Field Office Record of Decision and Approved Resource Management Plan (Moab RMP) as a Destination SRMA. At that time, camping restrictions were applied to 88,062 acres of the SRMA, including lands located east of Utah State Route 313 and the Dubinky Well Road, as well as in desert bighorn sheep lambing habitat. In the 14 years since the publication of the RMP, dispersed camping demand has increased and has extended to more remote and outlying areas. The project area, totaling 120,037 acres within the SRMA where camping is not restricted in the RMP, is popular for motorized recreation, biking, horseback riding, hiking, bicycling, motorized scenic driving, climbing, slacklining and BASE jumping. Facilities include trailheads, roads and trails; limited toilet facilities are also available. Since the time of the 2008 RMP, dispersed camping has increased, particularly in spring and fall. Camping pressure has been especially acute over the past two years, as visitors who wish to camp have expanded in numbers. Up to several thousand people may disperse camp on any given spring and fall weekend, without the benefit of sanitary facilities. Prior to the 2008 RMP, there was relatively little dispersed camping occurring within this portion of the SRMA. The need for management of dispersed camping and the resultant solid human waste has come from both within the BLM and from local government partners. Management concerns regarding solid human waste led the State of Utah's Southeast Utah Health Department to ask Grand County to enact an ordinance regarding the deposition of solid human waste. Grand County enacted an ordinance in 2019 disallowing the improper disposal of solid human waste anywhere in Grand County. Restricting camping to designated campsites, and requiring the use of a toilet system, would enable the BLM to require campers to carry out solid human waste.

1.2. Purpose and Need

The need for BLM action is to address the increasing demand for dispersed camping and subsequent resource damage from unmanaged camping, solid human waste disposal and wood cutting, gathering and collection within a portion of the Labyrinth Rims/Gemini Bridges SRMA.

The purpose of the BLM action is to provide a safe and quality recreation experience, which includes sustainable and sanitary camping opportunities while minimizing resource damage from dispersed camping and associated activities.

1.2.1. Decision to the made:

The BLM will decide:

- 1. whether to manage camping opportunities (which may be found in an eventual campground as well as in marked individual campsites);
- 2. whether to require the use of portable toilets/human waste disposal bags for campers in designated campsites outside of campgrounds;
- 3. whether to require the use of a fire pan; and
- 4. whether to prohibit wood cutting and gathering.

The BLM would seek establishment of the supplementary rules regarding the decision above in accordance with 43 CFR 8365.1-6.

1.3. Scoping and Issues

The proposal was presented to the MFO Interdisciplinary Team (IDT) on July 13, 2021. The conclusions of this meeting are presented in the IDT Checklist in Appendix A of this document. Eighteen issues were deemed to be present with the potential for impact that requires further detailed analysis. Those resources identified for potential impact are identified in Table 1.

The project was posted on the BLM's ePlanning website on August 9, 2021. It was discussed at the public meeting of Trail Mix, Grand County's non-motorized trail committee on August 10, 2021, with a member of the Grand County Commission in attendance. One member of the public responded to the ePlanning posting. and was concerned with the continued ability of the public to enjoy dispersed camping opportunities. In addition, one non-governmental organization contacted the BLM by telephone in support of the project.

Table 1: Resources Identified for Analysis

Resource and Issue Number	Issue Statement
Issue 1 – Floodplains, Wetlands, and Riparian Resources	How does unmanaged dispersed camping impact the function and quality of floodplains, wetlands and riparian resources?
Issue 2 - Soils	How does unmanaged dispersed camping impact soil health?
Issue 3 - Recreation	How does unmanaged dispersed camping impact the recreation experience for users?
Issue 4 – Wild and Scenic Rivers	How does unmanaged dispersed camping impact the Outstanding Remarkable Values of the Green River's Wild and Scenic designation?
Issue 5 – Visual Resources	How does unmanaged dispersed camping impact visual resources?
Issue 6 – Lands with Wilderness Characteristics	How does unmanaged dispersed camping impact the naturalness and solitude of Lands with Wilderness Characteristics?

Resource and Issue Number	Issue Statement
Issue 7 – Cultural Resources	How does unmanaged dispersed camping impact cultural resources?
Issue 8 – Native American Religious Concerns	What concerns do Tribes with ties to the project area have with unmanaged dispersed camping?
Issue 9 – Wildlife - Threatened and Endangered Species	How does unmanaged dispersed camping impact habitat for threatened and endangered wildlife species and their behavior?
Issue 10 – Wildlife – Utah BLM Sensitive Species	How does unmanaged dispersed camping impact BLM Utah sensitive species habitat and their behavior?
Issue 11 – Wildlife – Migratory Birds	How does unmanaged dispersed camping impact migratory bird breeding, nesting, and foraging habitat?
Issue 12 – Wildlife – General	How does unmanaged dispersed camping impact large game species habitats and behaviors?
Issue 13 – Fisheries – Threatened and Endangered Species, Candidate Species, and BLM Utah Sensitive Species	How does unmanaged dispersed camping impact fisheries (including T&EC and BLM UT Sensitive Species) habitat?
Issue 14 – Invasive Species/Noxious Weeds	How does unmanaged dispersed camping impact the spread and colonization of invasive species and noxious weeds?
Issue 15 – Vegetation – Threatened and Endangered Species	How does unmanaged dispersed camping impact threatened and endangered vegetative species?
Issue 16 – Vegetation – General	How does unmanaged dispersed camping impact general vegetation communities?
Issue 17 – Woodlands/Forestry	How does unmanaged dispersed camping impact woodland resources?
Issue 18 – Paleontology	How does unmanaged dispersed camping impact paleontological resources?

CHAPTER 2. ALTERNATIVES

2.1. Alternative A: Proposed Action

The BLM proposes to manage dispersed camping in a 120,037-acre portion of the Labyrinth Rims/Gemini Bridges SRMA (See map in Appendix B). This management would be accomplished by limiting camping to designated campsites within the project area.

In order to manage camping and recreation, the BLM proposes the following rules that would apply year-round:

- 1. Camping on BLM-administered public lands would be limited to designated campsites or developed campgrounds. These campsites would be located where resource impacts are minimal.
- 2. Possession and use of portable toilets for containment and disposal of solid human body waste would be required at all designated campsites, except at campgrounds where constructed toilets would be provided. A portable toilet is defined as 1) containerized and reusable; 2) a commercially available biodegradable system, such as a "wagbag" or 3) a toilet within a camper, trailer or motorhome. Proper disposal of portable toilet waste off public land would be required.

- 3. Possession and use of a fire pan would be required at all designated campsites, except at campgrounds where metal fire rings are provided. All ash would be required to be packed out and properly disposed of off public land.
- 4. Wood cutting, gathering and collection on BLM-administered public land within the targeted area would be prohibited at all times.

At the conclusion of the EA process, the BLM would seek to establish a Supplementary Rule (through publication in the *Federal Register*, in accordance with 43 CFR 8365.1-6) governing camping.

In 2022, the BLM conducted an inventory of campsites within the project area; a total of 356 dispersed campsites were recorded (see Maps in Appendix B). Following the establishment of Supplementary Rules, inventoried campsites would be evaluated and chosen for designation following an interdisciplinary team process. BLM may choose to designate other non-inventoried campsites as needs arise; these additional campsites would be located, as much as possible, in previously disturbed locations. Campsites would be clearly marked with signage and delineated as needed. Routes would be marked for vehicular access to the campsites; if necessary, the BLM could consider adding a route to the Travel Plan using the NEPA process. Existing dispersed campsites that are not designated would be reseeded and restored to enhance recovery from past disturbance of dispersed camping and, if necessary, signed as not available for camping.

Camping opportunities and the rules governing their use would be made available through online maps to make finding their locations easy. Those areas not available for camping would be clearly marked as such. Signs would be installed to inform the public of the locations of the campsites and of the rules governing their use.

In addition to the designated dispersed campsites throughout the project area, the BLM may build a campground on the west side of Utah State Route 313 along the Mineral Bottom Road as funding becomes available. This campground location is already approved for fee collection by the Resource Advisory Council as part of the 2018 *Moab Campground Business Plan*. An additional site-specific environmental assessment would be completed prior to campground construction.

Campsite Designation Criteria for Wildlife Protection

Design features following United States Fish and Wildlife Service (USFWS) Guidelines were developed to protect identified resources and would be adhered to throughout the designation process.

- 1. When designating campsites, construction and surface disturbing activities, and vegetative treatments and removal would be avoided during the migratory bird nesting season (April 1 through July 31) if BLM determines that vegetative nesting structures exist, and the proposed activity would result in disturbance to nesting birds.
- 2. To protect Mexican spotted owl suitable habitat and nesting, the following design features would be implemented:
 - a. If a *new* nest is identified within 0.5 miles of a campsite, that location would be closed to camping unless additional consultation with the USFWS provides appropriate mitigation measures.
 - b. Developed campground facilities would be prohibited within 0.5 miles of occupied habitats, Protected Activity Centers (nest sites) and within suitable Critical Designated Habitat.

- 3. Designated campsites would not be located within the USFWS raptor spatial buffer (generally 0.5 miles) of active nesting structures to reduce disturbance to nesting raptors and golden eagles. See Appendix R of the Moab RMP for the spatial buffers by raptor species.
- 4. If an active raptor nest is located within 0.5 miles of a designated campsite, the BLM would determine if the level of human activity at the facility warrants mitigation that may include temporary or seasonal closures.
- 5. Within desert bighorn sheep lambing habitat¹ the following would be implemented:
 - a. No campsites would be designated in canyon bottoms.
 - b. No campsites would be designated within 300 meters of canyon rims.

Campsite Designation Criteria for Sensitive Plant Protection

- 1. To minimize the potential for designated campsites to impact Jones cycladenia, Navajo sedge, San Rafael cactus, Ute ladies' tress and any other plant species protected under the Endangered Species Act (ESA) the following mitigation measures would be implemented:
 - a. If designated dispersed campsites are to be located in potential habitats, pre-project habitat assessments would be completed, including 300-foot buffers of the campsite to determine habitat suitability.
 - b. Designated campsites or related surface disturbances would be prohibited within 300 feet of occupied habitats.
 - c. If new populations are identified within 300 feet of designated campsites, these locations would be closed and removed unless additional consultation with the USFWS provides appropriate mitigation measures.
- 2. To protect Cisco milkvetch (includes *Astragalus sabulosus & Astragalus sabulosus* var. *vehiculus*, both BLM UT Sensitive Species), the following design features would be implemented:
 - a. If designated dispersed sites would be located in potential habitat, pre-project habitat assessments would be completed, including 300-foot buffers to determine habitat suitability.
 - b. Designated campsites or related surface disturbances would avoid direct disturbance and indirect impacts to populations and to individual plants within 300 feet of occupied habitats.

Campsite Designation Criteria for Protection of Recreation Resources

Viewsheds of popular motorized and non-motorized trails would be considered when campsites are designated. Popular trails include but are not limited to:

Designated non-motorized trails Metal Masher jeep route Gold Bar Rim jeep route Golden Spike jeep route Poison Spider jeep route Seven Mile Rim jeep route

¹ Camping is allowed only in designated campsites within Desert bighorn sheep lambing habitat (46,314 acres) as determined in the Moab RMP (WL-37, page 142). The criteria are incorporated in this EA in the event that lambing habitat might change.

Viewsheds of popular recreation facilities would be considered when campsites are designated. Popular recreation facilities include but are not limited to:

Horsethief Campground Cowboy Camp Campground Lone Mesa Campground

Campsite Designation Criteria for Protection of Other Resources

- 1. Designated campsites would be concentrated in areas that avoid high quality riparian habitats.
- 2. Designated campsites would not be sited at locations with known cultural resources.
- 3. Designated campsites would not be sited at locations with known paleontological resources.

2.2. Alternative B– No Action Alternative

The BLM would not manage camping opportunities by designating campsites within 120,037-acre portion of the SRMA. Dispersed camping would continue with limited restrictions, management, or guidance and resource impacts would continue. The No Action Alternative is included to compare the impacts of the Proposed Action to the current condition.

2.3. Alternatives Considered but Eliminated from Detailed Analysis

Two alternatives were suggested by the public during the comment period on the EA. Each is discussed below.

1. Limiting Dispersed Camping to Designated Sites only along Maintained Roads

An alternative was proposed that would address dispersed camping only along maintained roads. These roads include Mineral Bottom Road, Mineral Point Road, Spring Canyon Bottom Road, Spring Canyon Point Road, Levi Well Road, Dripping Springs Road, Dubinky Well Road and the Ten Mile Point Road.

While the majority of dispersed camping currently does occur along these roads (due to the ease of access), limiting the proposed restrictions to only those corridors does not meet the purpose and need for the project, which is to address the resource damage that is occurring due to unmanaged camping. Should dispersed camping be limited only along maintained roads campsites would proliferate just outside those corridors, leading to increased resource damage. In the Moab RMP, the BLM limited camping to designated sites along several maintained road corridors, including Utah State Route 313, the Gemini Bridges Road and the Long Canyon Road. The result of this pattern of limitation was that campsites were created just outside the road corridor.

The successful management of camping requires consistent messaging and signing. It is impractical to sign corridors; such a pattern of management results in a checkerboard of rules that are very difficult to find on-the-ground. The public is better served by the consistent messaging that can be attained by signing areas, rather than corridors.

2. Expanding the Limitations on Dispersed Camping to a Larger Area

During the comment period, several commenters suggested that the project area be expanded to the north as far as Interstate 70. This area hosts dispersed campers but at a lower concentration compared to the project area. While it is possible that at some point in the future, dispersed camping management would need to be expanded to include the area north of the Ten Mile Point

Road, the BLM does not feel that resource damage is occurring in this area at a rate and intensity that requires immediate attention and does not meet the purpose and need of the proposed action.

2.4. Conformance

The Proposed Action is in conformance with the Approved Moab RMP, as amended (2008). This is specifically provided for in the following Land Use Plan decisions:

Recreation (REC):

- **REC-2:** Where unacceptable damage to natural or cultural resources by recreation use is anticipated or observed, BLM will seek to limit or control activities by managing the nature and extent of the activity or by providing site improvements that make the activity more sustainable or by a combination of management controls and facility development. Such management actions will seek to reduce or eliminate the adverse impact while maintaining the economic benefits associated with a wide range of recreation uses (page 81).
- **REC-3:** BLM will consider and, where appropriate, implement management methods to protect riparian resources, special status species and wildlife habitat while enhancing recreation opportunities. Management methods may include limitation of visitor numbers, camping and travel controls, implementation of fees, alteration of when use takes place, and other similar actions to be approved through normal BLM procedures (page 81).
- **REC-6:** Dispersed camping is allowed where not specifically restricted. Dispersed camping may be closed seasonally or as impacts or environmental conditions warrant. All vehicle use associated with dispersed camping activities is required to stay on designated roads (page 81).
- **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 [planning area] are carried forward in all alternatives (see MFO recreation Rules in the RMP Appendix L) (page 82).
- **REC-21**: Manage all Special Recreation Management Areas (SRMA) for sustainable camping opportunities. Camping may be restricted to designated sites if use and conditions warrant (page 83).

Appendix L Moab Field Office Recreation Rules:

L.1.2 Dispersed Camping: When damage to an area from dispersed camping becomes obtrusive, that area would be added to the "controlled camping" category, where camping is restricted to designated, undeveloped campsites... Obtrusive can refer to any or all of the following problems: human sanitation, trash, hacked trees, trampled vegetation and fire danger from excessive campfires (page L-1).

Appendix M Labyrinth SRMA

Management Goals: For a variety of visitor benefits, provide opportunities for 1) quality river recreation experiences on Labyrinth Canyon; 2) quality camping experiences in one developed campground and other designated sites; 3) quality hiking experiences on- and off-trails; 4) quality scenic driving experiences on Highway 313; 5) quality on-route mountain biking and backcountry driving experiences on established routes throughout the SRMA. (page M-4)

Special Status Species (SSS):

SSS-3: As required by the Endangered Species Act, no management action will be permitted on public lands that will jeopardize the continued existence of plant or animal species that are listed or are officially proposed or are candidates for listing as T & E (page 117).

Travel:

TRV-6: OHV [off-highway vehicle] access for game retrieval, antler collection and dispersed camping will only be allowed on designated routes (designated routes/spurs have been identified specifically for dispersed camping; parking areas associated with dispersed campsites will be marked during Travel Plan implementation). Adherence to the Travel Plan is required for all activities.

Wildlife and Fisheries:

WL-12: Restrict dispersed camping in riparian areas to protect riparian wildlife habitat. Restrictions could include limiting camping to designated sites or prohibiting camping (page 138).

The following laws, regulations, policies and plans are related to the Proposed Action:

- The Federal Land Policy and Management Act of 1976 [FLPMA], as amended, mandates multiple use of public lands, including recreation use. An objective of BLM's recreation policy is to satisfy recreation demand within allowable use levels in an equitable, safe and enjoyable manner, minimizing adverse resource impacts and user conflicts.
- The BLM's 2018 *Moab Campground Business Plan* (approved by the BLM Utah Resource Advisory Council) authorizes the construction of a fee campground along the Mineral Bottom Road in order to mitigate the ongoing resource damage caused by unmanaged dispersed camping.
- The Proposed Action is related to IM [Instruction Memorandum] No. 2013-161 *Processing and Approving Supplementary Rules*:
 - "The state director may establish supplementary rules to provide for the protection of persons, property, and public lands and resources. Supplementary rules are used to support objectives of 43 CFR Subpart 8365, "Rules of Conduct" for the protection of public lands and resources, and for the protection, comfort and well-being of the public in its use of recreation areas, sites and facilities on public lands. Supplementary rules should not duplicate or conflict with these or other Federal regulations.

"Supplementary rules may be proposed in circumstances where existing regulations are not sufficient to manage resource use conflicts or to protect resources and may also be needed to implement decisions in resource management plans or other planning documents".

The Proposed Action is also consistent with the Grand County General Plan (2012), which calls for promoting management of public lands for benefit and enjoyment o the people of Grand County and the Nation. The Grand County General Plan recognizes that "the public lands of Grand County are the Foundation of the County's Economic Prosperity" because of the reliance of Grand County on Tourist Revenue (Section 3.2). The Proposed Action is also consistent with Grand County's Ordinance on the deposition of solid human waste in the county.

CHAPTER 3. AFFECTED ENIRONMENT AND ENVIRONMENTAL IMPACTS

This chapter defines the scope of analysis contained in this EA, describes the existing conditions relevant to the issues presented in Table 1 in Section 1.3, and discloses the potential direct, indirect

and cumulative impacts of the Proposed Action and No Action Alternatives. Issues have been presented in Chapter 1; for a discussion of issues not brought forward for analysis, see the Interdisciplinary Team Checklist (Appendix A).

General Setting

The 120,037 acres proposed for camping management is within the Labyrinth Rims/Gemini Bridges SRMA. It is managed as a Destination SRMA which (most of the visitation is from outside of the area) and receives heavy visitation. The SRMA is generally located northwest of Moab, Utah, in Grand and San Juan Counties.

Analysis Assumptions

The analysis assumes that once chosen and marked, visitors would adhere to the camping management rules. That is, visitors would cease to camp in undesignated campsites and only camp in designated campsites or campgrounds, use portable toilets and carry out all human waste, use fire pans and would not gather or collect firewood. Analysis assumes that in accordance with the camping management rules, no new campsites and/or access roads to campsites would be created.

3.1. Issue 1: Floodplains, Wetlands and Riparian Resources

How does unmanaged dispersed camping impact the function and quality of floodplains, wetlands and riparian resources?

3.1.1. Affected Environment

The project area includes approximately 1,875 acres of riparian areas, 78% of which occur along the Green River. Riparian areas are defined as areas of land directly influenced by permanent (surface or subsurface) water and have visible vegetation or physical characteristics reflective of permanent water influence. Riparian areas include wetlands and those portions of floodplains and valley bottoms that support riparian vegetation (Meehan 1991). These small, but unique areas comprise less than one percent of the approximately 22 million acres of public lands administered by the BLM in Utah and are among the most important, productive, and diverse ecosystems in the state.

The surface waters within the project area consist primarily of portions of the Green River as well as eleven known springs, several perennial and intermittent streams, and seasonal vernal/ephemeral pools. The area includes a number of larger tributaries to the Green River, including Ten Mile Canyon, Spring Canyon, Hell Roaring Canyon, and Mineral Canyon. Perennial streams within the analysis area are spring fed with increased flows and recharge occurring in conjunction with spring snowmelt and monsoonal precipitation events. Interrupted flow in both perennial and intermittent stream systems is common, and the dimensions of the wetted area may vary seasonally based upon available precipitation or diurnally based on evapotranspiration. All stream systems are flashy. The subbasins and watersheds within and adjacent to the analysis area typically have a lower snowpack than others in the field office. Numerous stock ponds provide water to cattle and wildlife alike.

Although prevalent within the project area, excluded are such sites as ephemeral streams or washes that do not exhibit the presence of vegetation dependent upon free water in the soil (BLM 1991). It is important to note that an ephemeral stream is one that flows only in direct response to precipitation and whose channel is always above the water table. In some cases, intermittent or ephemeral streams which do not currently exhibit riparian characteristics may in fact be connected to a water table and could potentially develop riparian attributes with management changes.

Water resources, particularly important in this arid portion of the MFO, are managed to ensure that water quality standards, stream conditions, and floodplain and riparian function are not diminished. Riparian areas are often a preferred camping location because of the proximity to water and shade. Campsites located in riparian areas likely receive a disproportionate amount of use when compared to upland sites, especially in the hot summer months.

3.1.2. Environmental Impacts

Riparian areas are all important resources for aquatic organisms, wildlife, grazing, and recreation. Riparian areas provide many benefits within the area of the Proposed Action, including filtering and purifying water, reducing sediment loads and enhancing soil stability, contributing to groundwater recharge, dissipating high-energy flows (floods), providing thermal refugia and habitat for obligate species, and supporting greater biodiversity. Healthy and productive riparian areas provide water, food, cover, and travel corridors for many aquatic and terrestrial wildlife species, some of which are obligate to the riparian area and not found in xeric upland areas. Native riparian plants and their root systems contribute to improved water quality and quantity by holding soils in place while filtering sediments, increasing ground water recharge, and protecting streambanks.

The value of riparian areas to the public has been increasing by providing opportunities for a wide variety of recreation activities and aesthetic attributes. However, riparian ecosystems are fragile resources that are among the first indicators of impacts from disturbance. Intensive recreational camping in riparian areas often results in damage to native riparian trees and shrubs because of wood gathering for campfires. Cover of native herbaceous understory plants are generally reduced, and soil compaction increases in frequently used campsites. Bank stability is often compromised in social trails used to access perennial waters or shade. Lastly, contaminants from uncontained human waste and ash from fire pits may enter stream channels and become a downstream water quality issue.

3.1.2.1. Impacts of Alterative A – Proposed Action

The Proposed Action would reduce impacts from dispersed camping to the 100-year Green River floodplain and floodplains associated with tributary streams, help maintain or improve water quality, and protect critical riparian resources by focusing camping opportunities to designated campsites. Designated campsites would be concentrated to areas that avoid high quality riparian habitats or create issues of erosion, therefore protecting water quality, enhancing soil stability, supporting riparian biodiversity, and dissipating effects from floods. The Proposed Action would help minimize the proliferation of campsites and fire rings, reduce wildland fire hazards, better manage human waste, and restrict wood cutting, gathering and collection, except where biomass from BLM vegetation projects is offered.

3.1.2.2. Impacts of Alternative B – No Action Alternative

Impacts from dispersed camping to floodplains, wetlands and riparian resources would continue. Campsites in high quality riparian habitat would continue to be used, often seeing heavy impacts from visitors seeking cool, shady campsites. Campsite proliferation would continue as visitor levels increase, potentially reducing water quality and riparian habitat, and leading to degradation of floodplains and wetland functions. Woodland resources would continue to be gathered for campfires, creating further damage to the riparian ecosystem. The collection of human waste would not be regulated, causing degradation of downstream water quality.

3.1.2.3. Cumulative Impacts

The Cumulative Impact Analysis Area (CIAA) for floodplains, wetlands and riparian resources is the 202,994-acre Labyrinth Rims/Gemini Bridges SRMA. The SRMA has been and continues to be a venue for recreation activities of all types; riparian areas are used by both land and water based recreationists. Grazing occurs throughout the SRMA. Minerals activities have included oil and gas development (which continues to this day), as well as lithium and potash exploration and past uranium mining activity.

Reasonably foreseeable actions include increased recreational use. Grazing is expected to continue at current use levels. Oil and gas activity is expected to increase at approximately the same rate as it has in the past, with a doubling of the oil wells currently found in the area. Interest in lithium means that lithium mining could become established as the demand for lithium increases. Climate is expected to become warmer and drier on the Colorado Plateau; precipitation patterns are expected to shift to less snowpack and increased monsoonal precipitation.

Cumulative impacts to floodplains, wetlands and riparian resources include reduced functionality of the systems from unsustainable use, reduced water quality, and degradation or destruction of critical wildlife habitat, including that of threatened and endangered species. The 100-year floodplain of the Green River is critical habitat for ESA listed fish species. These systems are imperiled by the synergistic pressures of prolong drought, prolonged peak summer temperatures, grazing, off-road vehicle use, pollution, longer fire seasons, and other recreational pressures like camping. Management actions that incrementally mitigate for one or more of these pressures reduces the cumulative impacts and proactively plans for the likelihood of increased future use.

Under the No Action Alternative, camping would continue in its current state within riparian areas. Campsites would continue to be created in fragile environments with the potential to lead to a proliferation of disturbed areas that are no longer able to support riparian resources, including wildlife, vegetation and the myriad of benefits provided through flood dissipation and water filtration. Valuable habitats for Federally listed species could be damaged or lost by unsustainable camping practices and the ability for these ecosystems to rebound in a warmer and drier climate.

3.2. Issue 2: Soils

How does unmanaged dispersed camping impact soil health?

3.2.1. Affected Environment

The soils are variable, reflecting the interactions between topography, elevation, parent material and time. Topography ranges from nearly level valley bottoms to vertical cliffs. There are a variety of soil types; much of it is quite sandy. Biological soil crusts are also present and are composed primarily of cyanolichens and cyanobacteria.

3.2.2. Environmental Impacts

Biological soil crusts are important soil stabilizers that retain soil moisture and discourage the growth of invasive weeds. Repeated disturbance of biological crusts can permanently destroy the living filaments of the organisms, preventing the recovery of the crusts. Blowing dust from disturbed soils can cover nearby crusts, depriving them of needed sunlight, ultimately leading to the death of the living organisms that comprise the crust.

3.2.2.1. Impacts of Alternative A – Proposed Action

Managing camping has the potential to benefit soils because surface disturbance (from both driving and camping itself) would be limited to designated locations. New soil disturbance and

compaction would be curtailed as people would be required to limit camping to the sites designated for that use. Impacts to biological soil crust would be reduced because less soil disturbance usually results in less dust that can then cover nearby crusts.

3.2.2.2. *Impacts of Alternative B – No Action Alternative*

Visitors would continue to camp where they please, often creating new disturbed areas which in turn degrades soil health. Disturbed soils invite recreationists to venture further into the untrampled areas, contributing to additional disturbance, campsite creep and proliferation. Soil compaction would continue to occur as new roads and campsites are created, decreasing the long-term health of the soils and the vegetation communities the soils support. Biological soil crusts would continue to be damaged as blowing dust from recently disturbed areas could cover otherwise healthy organisms.

3.2.2.3. Cumulative Impacts

The CIAA for soils is the portion of the Labyrinth Rims SRMA that is covered by the Proposed Action. Dispersed camping, motorized, and non-motorized travel, livestock grazing, and mineral and energy development have and continue to occur with the CIAA. Mineral and energy development include oil and gas production, and lithium and potash exploration. The area also sees the occasional wildland fire. Critical habitat for big game species, including bighorn sheep exists.

Reasonably foreseeable actions include increasing recreational use such as dispersed camping and motorized and non-motorized use. Livestock grazing is expected to continue at its current use level. Oil and gas activity is expected to increase at the same rate as it has in past years. Lithium and potash exploration is expected to increase as demand rises.

Cumulative impacts to soil health within the CIAA include surface disturbance from the creation of new campsites, soil compaction and erosion, and a decreased capacity to sustain biological productivity. These impacts are created by continued expansion of recreational areas such as campsites and roads, and livestock grazing. The Proposed Action would limit these cumulative impacts from dispersed camping and associated activities by concentrating use to predetermined areas. By designating dispersed campsites, new soil disturbance would be reduced due to lack of new campsite and road creation, thus limiting the amount of damage to soils, including biological soil crusts. By limiting surface disturbance from campers, soil compaction and erosion would be reduced, benefiting the native plant community and the wildlife species it supports. Dust sources would also be limited.

The No Action Alternative would reflect a continuation of current conditions and an incremental reduction in soil health would occur through soil disturbance and compaction by dispersed campers. As soil health deteriorates, so does its ability to sustain native plant populations which are relied upon by the resident wildlife.

3.3. Issue 3: Recreation

How does unmanaged dispersed camping impact the recreational experience for users?

3.3.1. Affected Environment

The acres proposed for managed camping via designating campsites comprises some of the most heavily visited locations on BLM lands in the State of Utah. Utah State Route 313, the main access road to the Labyrinth/Gemini Bridges SRMA and subsequent area proposed for camping

management, receives over 625,000 vehicles (one way) each year. Recreational opportunities abound in the SRMA, including hiking, mountain biking, scenic driving, and 4x4 driving.

Dispersed campsites are prevalent, and observations show that dispersed camping has increased over the years. These campsites are heavily utilized during a relatively long visitor season (March through November) and are often occupied many consecutive nights. In 2002, the BLM conducted an inventory of the number of dispersed campsites that currently exist within the project area. There are approximately 356 existing dispersed campsites; the maps provided in Appendix B show their locations.

While some visitors do dispose of human waste and trash properly, others do not. The sandy soils of the desert environment do not lead to the organic breakdown of human waste even when buried. Additionally, many of the dispersed campsites are littered with multiple rock fire rings and trash piles. When other visitors encounter this, they drive further off-road in search of a "clean" campsite, which soon becomes compromised with more rock fire rings added to the landscape. This associated off-road travel mars the landscape and opens new areas to resource degradation.

The western edge of the Labyrinth Rims SRMA is bordered by the Green River, designated a Wild and Scenic River (Dingell Act, 2019). Labyrinth Canyon, the section of river adjacent to the project area is designated as "Scenic". Boaters floating this section of river may also utilize the SRMA for camping and hiking.

3.3.2. Environmental Impacts

3.3.2.1. Impacts of Alternative A – Proposed Action

Designating campsites would provide campers with a sustainable and established camping opportunity. In designating campsites, the BLM would seek to provide camping opportunities for all recreationists, including opportunities for isolated camping experiences, different group sizes and recreational uses. Where feasible, campsites would be designated in locations sought to reduce impacts to other recreationists (i.e., hikers, bikers, motorists, boaters and other campers) and provide enjoyable recreational experiences of all users.

Because designated campsites would not be placed within view of popular biking, hiking or 4x4 routes and would be placed far enough apart so that visitors do not feel crowded, other recreationists would be benefited by the Proposed Action. All designated campsites would be placed on designated roads, leading to a lessening of cross-country motorized travel. If a chosen campsite required the designation of a new route, this decision would be undertaken using the NEPA process, and impacts would be considered.

Designating campsites and requiring fire pans would lessen the proliferation of rock fire rings and accumulation of ash. If campsites needed tending to, designating campsites would allow recreation staff to find them more readily. The requirement to carry out all solid human waste would lead to a cleaner environment for all visitors. The requirement to not collect, cut or gather wood would lead to the preservation of those trees which offer shade, scenic value, and privacy to recreationists. The most heavily used camping locations would seem less like a sacrifice area if the campsites were designated, organized, managed and delineated.

Dispersed camping opportunities would remain, providing opportunities for all recreationists, including campers. Visitors seeking an unmanaged dispersed camping experience would no longer be able to camp at-will. These visitors would need to seek areas not managed for dispersed camping to find that experience. This would inconvenience those recreationists because their preferred style of camping would no longer be available in the project area. The Proposed Action

would be beneficial to recreationists seeking clean, inviting, and sustainable camping opportunities.

3.3.2.2. Impacts of Alternative B – No Action Alternative

Camping management would remain unchanged, and recreationists would continue to camp in a dispersed manner. Dispersed camping would continue to present potential impacts to recreationists seeking isolated experiences, including other campers, hikers, bikers, and motorists. Off-route travel and campsite creation and expansion would continue; infringement on adjacent existing campsites or within the viewsheds of popular biking or motorized use trails would continue. The abundance of rock fire rings and marred vegetation would further push campers into new areas in search of "clean" campsites. People would continue to camp at trailheads and at important scenic features.

Solid human waste would continue to present a health hazard to campers and the ecological resources. Wood cutting, gathering and collection would continue to destroy trees; the value of these trees to other recreationists would be lost, and campers may create new campsites in areas with ample resources, further expanding the camping footprint. There would not be a requirement to have and use a fire pan and pack out ash. Rock fire rings would continue to fill with ash and more fire rings would be created.

3.3.2.3. Cumulative Impacts

The CIAA for recreation is the entire Labyrinth Rims/Gemini Bridges SRMA. The SRMA has and continues to be a venue for recreation activities of all types including hiking, biking, motorized use, camping, and scenic driving. Grazing occurs throughout the SRMA. Mineral activities include past and present oil and gas development and lithium and potash exploration. Past uranium mining occurred in the SRMA.

Reasonably foreseeable actions include the increase in recreational use of all types. Grazing is expected to continue at its current use levels. Oil and gas activity is expected to increase at approximately the same rate as it has in the past with a doubling of oil and gas wells currently found. Interest in lithium means that lithium mining could become established as demands increase.

Cumulative impacts to the recreational experience include unsustainable dispersed camping activities such as creating new roads and campsites, expanding existing campsites, and human waste and trash accumulation. Unmanaged, these actions would reduce the recreational enjoyment visitors seek when visiting. Additionally, these actions could result in prolonged resource damage to soils, vegetation, and wildlife habitat.

The Proposed Action has the potential to reduce the cumulative impacts of unmanaged camping by reducing the unregulated distribution of user-chosen campsites throughout the SRMA. This would reduce the cumulative impact of an expanding camping footprint impacting other recreational uses, including campers, hikers and motorized users. The Proposed Action has the potential to increase demands for dispersed campsites on BLM lands north of the project area, such as along the Ten Mile Point Road at the White Wash Sand Dunes.

The Proposed Action also has the potential to increase the demands for dispersed camping on adjacent lands managed by Utah State School and Institutional Trust Lands Administration (SITLA). However, SITLA may allow or disallow dispersed camping on its lands as it sees fit. For example, SITLA decided in 2008 to no longer allow camping on SITLA lands within Spanish

Valley. The lands were immediately signed and compliance with SITLA's ruling has been very good.

The No Action Alternative would continue the status quo and would not have the potential to reduce the cumulative impacts of unmanaged camping to recreation and visual resources. The gradual "taking" of the land for a single use – unregulated dispersed camping – would continue.

3.4. Issue 4: Wild and Scenic Rivers

How does unmanaged dispersed camping impact the Outstanding Remarkable Values of the Green River's Wild and Scenic River designation?

3.4.1. Affected Environment

The Green River, which runs on the western edge of the project area, is designated as a Wild and Scenic River (WSR). This portion of the Green River, known as Labyrinth Canyon, is classified as "Scenic". The Outstanding Remarkable Values (ORVs) of this section of river are Cultural, Recreation, Scenic, and Fish.

Labyrinth Canyon of the Green River attracts boaters seeking a multiple-day trip through relatively calm waters, offering abundant scenery and hiking options, many of which are within the SRMA.

3.4.2. Environmental Impacts

3.4.2.1. Impacts of Alternative A – Proposed Action

Managing dispersed camping opportunities within the SRMA would help protect the ORVs identified under the Wild and Scenic River designation. Providing sustainable camping opportunities, specifically adjacent to the Green River, would reduce negative impacts to the river corridor such as increased erosion. Supplementary rules requiring visitors to carry out solid human waste and ash from fire pans would further help protect the river's water quality as required by the WSR Act. In turn, these would protect the River's Recreation and Fish ORVs.

Cultural ORVs would be protected by designating campsites away from cultural resources within the river corridor and protecting them for future generations to enjoy. Scenic ORVs would be protected by limiting campsite proliferation and concentrating use to designated campsites.

3.4.2.2. *Impacts of Alternative B – No Action Alternative*

The No Action Alternative would not provide management actions to protect the ORVs of the Green River WSR. The designated Scenic segment of the river may be degraded by the proliferation of campsites within the river corridor, reducing the scenic value as seen from the river. Without supplementary rules requiring visitors to carry out solid human waste and ash from campfires, water quality of the Green River may deteriorate as camping use increases, reducing Fish and Recreation ORVs.

3.4.2.3. Cumulative Impacts

The CIAA for the ORVs of the Green River's Wild and Scenic designation is the river corridor within/along the SRMA. Labyrinth Canyon was designated as "Scenic" as part of the Green River's Wild and Scenic River designation in 2019. Land and water-based recreation activities have and continue to be popular. Past and present livestock grazing occurs along the Green River in certain areas. Past mining activity, especially uranium, occurred during the 1900s. No active mining claims exist.

Implementation of management actions within Labyrinth Canyon to protect its ORVs and "Scenic" designation is anticipated. Recreation use is expected to increase with both land and water-based users. Livestock grazing is expected to continue at its current use level. The Green River is withdrawn from mineral entry; no future mining claims are expected.

Cumulative impacts to ORVs of the WSR include resource degradation associated with unregulated dispersed camping that leads to long-term and prolonged impacts. This includes campsite proliferation impacting scenic values, surface disturbance creating erosion and run-off into the river, and gradual degradation of cultural sites. The Proposed Action would limit these cumulative impacts by concentrating camping use to previously disturbed areas and limiting the creation of new campsites which would help protect each ORV.

The No Action Alternative would provide potential for cumulative impacts to continue as dispersed camping would continue in its current unmanaged state. Campsites would continue to be created, disturbing vegetation and soils. This can have a negative cumulative impact on fish and other wildlife species that rely on the area for food and habitat. Solid human waste would not be required to be carried out, maintaining potential health issues for humans and decreased habitat value for wildlife.

3.5. Issue 5: Visual Resources

How does unmanaged dispersed camping impact visual resources?

3.5.1. Affected Environment

Visitors seek out the Labyrinth Rims/Gemini Bridges SRMA because of the scenery that the area offers, whether to hike, bike, or engage in motorized vehicular travel. The visual resources of the area include buttes, spires, canyons and rock domes of colorful sandstone. On the western edge of the project area, views are accorded to the Green River below. The area proposed for camping management is treasured for its iconic scenery, which is also the reason for the establishment of the adjacent Dead Horse Point State Park and Canyonlands National Park.

Approximately 107,804 acres of the project area have been inventoried as Visual Resources Inventory (VRI) Class II (the highest inventory class outside of a special designation). Inventory classes are informational in nature and provide the basis for considering visual values in the RMP process. Management direction is not established through VRI, but rather through Visual Resource Management (VRM) Classes that are assigned through the RMP process. Of these inventoried VRI Class II acres, 41,959 acres are managed as Visual Resource Management Class II, also the highest visual management category outside of a special designation. Objectives for VRM Class II areas require that the level of change to the landscape be low; activities can be seen but should not attract the attention of the casual observer.

3.5.2. Environmental Impacts

3.5.2.1. Impacts of Alterative A – Proposed Action

Visual resources would see beneficial impacts as scenic values would generally be enhanced when campsites are designated with resources in mind. Where practical, campsites would be designated in areas that would not unduly impede the scenic views that visitors come to enjoy. Campsites would not be designated within view of popular bike trails, hiking trails, 4x4 trails, trailheads, or features which visitors regularly utilize for day use. Additionally, campsites would be designated away and/or not immediately adjacent to other campsites to preserve the viewshed and backcountry feel of dispersed camping. These design features would help protect the viewsheds of those recreating and offer privacy and solace to those wishing to dispersed camp.

The supplementary rule disallowing the cutting, collection and gathering of firewood would preserve the trees in camping areas, which add to the scenery that visitors come to enjoy. campers.

3.5.2.2. *Impacts of Alterative B – No Action Alternative*

Visual resources may continue to be degraded and change to the landscape may exceed the VRM Class II objective of low. Dispersed camping would continue in its current state with campers creating new campsites and access routes. The creation of new campsites would continue without regard to visual impacts of other recreationists and viewsheds that visitors come to enjoy may diminish as campsites expand into previously undisturbed areas. The cutting of firewood would continue to damage the trees, reducing the scenic value they provide to both land and water-based recreationists.

3.5.2.3. Cumulative Impacts

The CIAA for visual resources is the viewshed as seen from designated roads and trails in the SRMA. Recreational activities, both land and water based, have and continue to be popular including hiking, biking, motorized use, camping, and scenic driving. Grazing occurs on multiple allotments throughout the SRMA. Mineral activities include past and present oil and gas mining, and lithium and potash exploration, as well as uranium mining.

Reasonably foreseeable actions include increased recreation use of all types. Livestock grazing is expected to continue at its current use levels. Oil and gas activity is expected to increase at approximately the same rate as it has in the past. Interest in lithium means that lithium mining could become established as demand increases.

Cumulative impacts to visual resources include the degradation of the viewshed and visual resources that visitors come to the area to enjoy. Continued impairment to the visual resources would impact the VRM Class II objectives, and anything more than low amounts of change could lead to the area not meeting those objectives. The Proposed Action would reduce cumulative impacts to visual resources as camping and related activities would be concentrated to areas where viewsheds are not greatly impacted, including those of trails, roads, and other campsites. Supplementary rules would disallow the gathering of firewood and creation of new campsites, protecting the long-term visual resources for recreationists.

The No Action Alternative would not provide visitors with designated campsites and new campsite creation and campsite expansion would continue. With unregulated camping, viewsheds from existing campsites, popular trails and roads would become impeded. Thus, scenic values, privacy and solace that recreationists come to enjoy would degrade.

3.6. Issue 6: Lands with Wilderness Characteristics

How does unmanaged dispersed camping impact the naturalness and solitude of Lands with Wilderness Characteristics (LWC)?

3.6.1. Affected Environment

Approximately 38,141 acres of the project area is inventoried by BLM as possessing wilderness characteristics. The SRMA has five inventoried LWC units found to possess wilderness characteristics (Deadhorse Point, Goldbar, Goldbar Canyon, Horsethief Point, and Labyrinth Additions). These areas are not managed to protect, preserve, and maintain wilderness characteristics (Moab RMP page 27-28). There are approximately 24.8 miles of non-cherry-stemmed roads in areas inventoried as possessing wilderness characteristics; an unknown number of dispersed campsites are located along these roads.

3.6.2. Environmental Impacts

3.6.2.1. Impacts of Alternative A – Proposed Action

Managing camping by focusing use to designated campsites would benefit inventoried wilderness characteristics adjacent to roads and dispersed campsites. Designated campsites would be placed only on designated roads, thus eliminating some of the off-road driving that occurs throughout the SRMA, including on those lands possessing wilderness characteristics, and the undeveloped character of these lands would continue. Designated campsites would be placed only in previously disturbed areas, meaning that the naturalness of the area would not be further compromised. Applying appropriate spacing between designated campsites would enhance opportunities for solitude.

3.6.2.2. *Impacts of Alternative B – No Action Alternative*

Allowing unmanaged dispersed camping to continue would impact inventoried wilderness characteristics by increasing the likelihood of visitors engaging in off-route travel in pursuit of a camping spot. This off-route travel and campsite creation reduces the undeveloped character of these lands and decreases the feeling of solitude. Visitors may choose campsites that would create new impacts to the naturalness of the lands inventoried as having wilderness characteristics. If campsites are not designated, campers would not be offered the benefit of adequately spaced campsites. Large congregations of campers in one location, especially in areas possessing LWC, could dimmish the opportunities that visitors have to seek solitude.

3.6.2.3. Cumulative Impacts

The CIAA is the Labyrinth Rims/Gemini Bridges SRMA; 94,043 acres of that SRMA is inventoried by BLM as possessing wilderness characteristics. The SRMA has and continues to be a venue for recreation activities of all types. Grazing occurs throughout the SRMA. Mineral activities include past and present oil and gas development, and lithium and potash exploration. Uranium activity occurred in the past.

Reasonably foreseeable actions include increased recreation use as visitation increases. Livestock grazing is expected to continue at its current use levels. Oil and gas activity is expected to continue and increase at approximately the same rate as it has in the past. Recent interest in lithium means that lithium mining could become more established in the area.

Cumulative impacts to land with wilderness characteristics are any impacts that would cause the area to lose its naturalness and solitude, including undeveloped character and primitive recreational activities. These impacts could include increased disturbance from human activity such as dispersed camping and associated off-route travel, or development. Designating campsites in previously disturbed areas would reduce the cumulative impacts of unmanaged camping areas creeping into lands that have been inventoried to possess wilderness characteristics.

The No Action Alternative would allow the continuation of unmanaged dispersed camping and would not have the potential to reduce the cumulative impacts to LWC. Disturbed areas from dispersed camping and associated off-route travel would continue to infringe on LWC, decreasing opportunities for solitude as more area becomes compromised due to camping activities. Cumulative impacts to LWC would not meet the management objectives of this resource and could result in lands losing their naturalness and solitude.

3.7. Issue 7: Cultural Resources

How does unmanaged dispersed camping impact cultural resources?

3.7.1. Affected Environment

As defined in BLM Manuel 8100, cultural resources are defined as:

A definite location of human activity, occupation, or use identifiable through field inventory (survey), historical documentation, or oral evidence (BLM Manual 8100). The term includes archaeological, historic, or architectural sites, structures, or places with important public and scientific uses, and may include definite locations (sites or places) of traditional cultural or religious importance to specified social and/or cultural groups. Cultural resources are concrete, material places and things that are located, classified, ranked, and managed through system of identifying, protecting, and utilizing for public benefit. They may be, but are not necessarily, eligible for the National Register of Historic Places.

Both known and unknown cultural resources occur throughout the Labyrinth/Gemini Bridges SRMA and particularly in the project area.

3.7.2. Environmental Impacts

3.7.2.1. Impacts of Alternative A – Proposed Action

Limiting camping to designated campsites would provide protection to cultural resources and reduce inadvertent damage by concentrating camping impacts to specified areas. The BLM would consider the effect to cultural resources for all potential campsites prior to designation. As directed by Section 106 of the National Historic Preservation Act and implementing regulations 36 CFR 800, the BLM would avoid, minimize, and mitigate any effects to cultural resource sites that are eligible for the National Register of Historic Places. With these measures in place, cultural resources would be provided better protection since campsites would be placed in areas away from and determined to not impact the integrity of cultural resources.

3.7.2.2. Impacts of Alternative B - No Action Alternative

Cultural resources can be inadvertently damaged by recreational activities, including dispersed camping. Unmanaged camping does not provide designated campsites or sustainable camping opportunities, and leaves potential for cultural resource damage. Direct and indirect impacts, such as vandalism, site trampling, soil erosion or unauthorized artifact collection may occur as a result of campsite creation and expansion. The integrity of the cultural sites would decrease as sites may inadvertently become damaged by new disturbances.

3.7.2.3. Cumulative Impacts

The CIAA for cultural resources is the entire Labyrinth/Gemini Bridges SRMA, which has and continues to be used for a wide array of recreation activities, both land and water based. Grazing occurs throughout the SRMA. Past and present minerals activities include oil and gas development, as well as lithium and potash exploration; uranium mining was a common activity.

Reasonably foreseeable actions include increased recreation use of all varieties, including land and water based. Grazing is expected to continue at current use levels. Oil and gas activity is expected to increase at approximately the same rates as it has in the past. Interest in lithium means lithium mining activity could increase as demand rises.

The Proposed Action has the potential to minimize cumulative impacts to cultural resources. Cumulative impacts include disturbance and loss of site integrity, dust effects from disturbed soils, and trampling of resources from human recreation and livestock. Managing camping opportunities

by designating campsites that avoid cultural resources would contribute to the long-term protection of these resources.

The No Action Alternative would allow the continuation of unmanaged dispersed camping and cumulative impacts may occur, leading to possible degradation of cultural sites.

3.8. Issue 8: Native American Religious Concerns

What concerns do Tribes with ties to the project area have with unmanaged dispersed camping?

3.8.1. Affected Environment

On July 19, 2021, the BLM sent consultation letters to ten Tribes who have ancestral ties to the MFO and have expressed an interest in consulting with the MFO. The BLM has received responses from three Tribes expressing concerns about impacts to natural and cultural resources in the project area. These Tribes do not have objections to the Proposed Action and wish to be consulted with regarding the potential designation of any campsites.

3.8.2. Environmental Impacts

3.8.2.1. Impacts of Alternative A -Proposed Action

Consultation on the impacts of the Proposed Action is ongoing. BLM would continue to consult with interested Tribes regarding the potential designation of any future campsites to limit the impacts to natural and cultural resources.

3.8.2.2. Impacts of Alternative B – No Action Alternative

The continuation of unregulated dispersed camping would likely affect sites and natural resources that are of interest to Tribes for religious and/or traditional reasons.

3.8.2.3. Cumulative Impacts

The CIAA for Native American Religious Concerns is the entire Labyrinth Rims/Gemini Bridges SRMA. The SRMA has and continues to be a heavily visited area for recreationists seeking many different recreational activities, including dispersed camping. Livestock grazing occurs throughout the SRMA. Oil and gas mining and mineral exploration are active within the project area. Uranium mining occurred in the past.

Reasonably foreseeable actions include increased recreational use, including activities such as dispersed camping and motorized travel. Grazing is expected to continue to occur at current use levels. Mineral exploration, particularly lithium, is expected to increase as demand rises. Oil and gas development is expected to increase at the same rate as it has in the past.

The Proposed Action has the potential to minimize cumulative impacts to natural and cultural resources, which Tribes with ancestral ties to the MFO have expressed concerns with. Cumulative impacts include disturbance and loss of site integrity, dust effects from disturbed soils, trampling of resources from human recreation and livestock, and degradation of natural resources. Managing camping opportunities would contribute to the long-term protection of these resources and mitigate adverse effects. Tribes would be consulted further when campsite designation occurs to mitigate any unforeseen impacts.

The No Action Alternative would allow the continuation of unmanaged dispersed camping and cumulative impacts to cultural and natural resources may occur as camping use increases.

3.9. Issue 9: Wildlife – Threatened and Endangered Species

How does unmanaged dispersed camping impact habitat for threatened and endangered wildlife species and their behavior?

3.9.1. Affected Environment

Species listed as threatened or endangered are afforded protection under the ESA. The BLM is required to consult with the USFWS on potential impacts to Federally listed species. A brief description of Federally listed species with potential habitat is listed in Table 2.

Table 2: Federally Listed Species With Potential Habitat

Table 2. Federally Elisted Species with I otential Habitat						
Common Name (Scientific Name)	Habitat	Status	Designated Critical Habitat in Project area	Potential for Occupancy in Project area	Further Analysis (Yes/No)	
California Condor (Gymnogyps californianus)	Roosts and nests in cliff habitat. Forages in open areas.	Endangered, Experimental	No	Very low- unverified, rare migrant	No	
Mexican spotted owl (Strix occidentalis lucida)	Nests in caves or on cliff ledges in steep-walled canyons.	Threatened	No	Limited – no know occupancy	Yes	
Southwestern willow flycatcher (Empidonax traillii extimus)	Low scrub, thickets, or groves of small trees, often near watercourses.	Endangered	No	Suitable – No known nesting -migrant occupancy	Yes	
Western yellow- billed cuckoo (Coccyzus americanus occidentalis)	Riparian areas with large galleries of cottonwoods or other broad-leafed trees.	Threatened	No	No Nesting Potential. Limited migrant potential	Yes	

Mexican spotted owl

The Mexican Spotted Owl Recovery Plan (USFWS 2012) describes owl habitat as deep, steep-walled canyons and hanging canyons. Canyon rims support foraging, roosting, and fledging activities. Suitable, but not critical, habitats are found within the SRMA.

The MFO initiated an extensive habitat assessment program in 1999 and to date the entire field office has had some level of habitat evaluations and surveys. Three nests have been identified from these surveys. Two nests were known to be active in 2021, one being in a remote canyon near the SRMA.

Mexican spotted owls are primarily threated by habitat destruction by wildfire, habitat degradation, habitat fragmentation, and human development and recreation (USFWS 2012).

Southwestern willow flycatcher

The Southwestern willow flycatcher is one of four known sub-species of willow flycatcher, a neotropical migratory passerine that breeds across most of the United States and southern Canada. It winters in southern Mexico down to northwestern South America.

The Southwestern willow flycatcher utilizes and breeds in patchy to dense riparian habitats along streams and wetlands near or adjacent to surface water or saturated soils. These dense riparian habitats are often interspersed with small openings, open water, and/or shorter/sparser vegetation, creating a mosaic habitat pattern. This habitat is found along much of the Green River within the SRMA.

Protocol surveys within the SRMA have deemed riparian areas as suitable willow flycatcher breeding habitats; only migrant willow flycatchers have been detected. No nesting willow flycatchers have been detected in the MFO and they are not expected to nest within the SRMA. There is some potential for migrant willow flycatchers of all sub-species to move along riparian corridors in the SRMA. In Utah, the northern boundary of the Southwest willow flycatcher (*E. t. extimus*) is adjacent to the southern boundary of *E. t. adastus*; therefore, it is not known at this time if the endangered Southwest willow flycatcher is known to the SRMA.

The Southwest willow flycatcher sub-species is listed as an endangered species due to its extirpation from many historical breeding sites and a marked decrease in range-wide population size (USFWS 1995). Population declines are attributed to numerous, complex, and interrelated factors such as habitat loss and modification, invasion of exotic plants into breeding habitat, brood parasitism by cowbirds, vulnerability of small population numbers, and winter and migration stress.

Western yellow-billed cuckoo

The Western yellow-billed cuckoo (cuckoo) is associated with cottonwoods and riparian cover (greater than 12 acres), which provides nesting and brood-rearing habitat. Cuckoos are obligate riparian nesters and are restricted to more mesic habitat along rivers, streams and other wetlands.

Riparian habitats along the Green River within the SRMA may provide some migratory and stopover habitats, but due to lack of large cottonwood galleries, nesting is not expected. No migrating cuckoos have been identified within the SRMA, and no nesting cuckoos have been detected within the MFO.

The primary threat to cuckoos is habitat loss and degradation, particularly riparian forests. Riparian forests have declined throughout the west as a result of conversion to agriculture and other uses.

3.9.2. Environmental Impacts

Increasing outdoor recreation on public lands increases the potential for human-wildlife interactions that may result in negative impacts to wildlife populations (Monz 2021) and the habitats they depend upon. Recreational activities may affect threatened and endangered species directly through disturbances caused by human activity or indirectly through alteration of habitats such as damage to vegetation, soil compaction, road and campsite creation, and an increased risk of wildland fires. Additionally, human disturbance to migrant birds in the spring may increase energetic demands when birds are flushed (Marzluff 1997).

Human disturbance of riparian habitats has allowed tamarisk to outcompete native vegetation (USFWS 2003) which is typically associated with a reduction or loss of bird species associated with cottonwood-willow habitat, including the cuckoo.

3.9.2.1. Impacts of Alternative A – Proposed Action

Habitats for threatened and endangered species, including the Mexican spotted owl, Southwestern willow flycatcher and Western yellow-billed cuckoo would be offered protection from the Proposed Action as dispersed camping would be focused in areas that possess lesser valuable habitat and new campsite creation would be curtailed. Habitat alternation from human use would be reduced as would other indirect impacts to these species such as vegetation alteration, soil compaction, and increased wildland fire risk.

Limiting camping to designated campsites would reduce human-wildlife interactions as humans would be less present in high value habitats and would follow a more predictable use pattern. Potential springtime disturbance to Southwestern willow flycatcher and Western yellow-billed cuckoos would be reduced as they forage and roost in their stop-over habitats. Energetic demands in response to human presence would decrease, causing less stress on individuals and populations.

Design features were developed following USFWS Guidelines to further protect suitable and occupied habitats, including nesting and foraging habitats:

- 1. In designated campsites, any construction, surface disturbing activity, and vegetative treatments and removal would be avoided during the migratory bird nesting season (April 1 through July 31) if BLM determines that vegetative nesting structures exist, and that the proposed activity would result in disturbance to nesting birds.
- 2. To protect Mexican spotted owl suitable habitat and nesting, the following mitigations would be implemented:
 - a. If a new nest is identified within 0.5 miles of a campsite(s), these campsites would be closed to camping unless additional consultation with the USFWS provides appropriate mitigation measures.
 - b. Developed camping facilities would be prohibited within 0.5 miles of occupied habitats, Protected Activity Centers (nest sites), and suitable Critical Designated Habitat.

3.9.2.2. *Impacts of Alternative B – No Action Alternative*

The continuation of unmanaged dispersed camping may result in short- and long-term disturbance to valuable habitats for threatened and endangered species. Recreational activities including dispersed camping in potential habitat could deter species such as Mexican spotted owls from nesting or foraging in that area. Disturbances caused by dispersed camping activities could indirectly impact threatened and endangered species through alteration of habitats such as vegetation damage, soil compaction, off-route travel, and increased risk of wildland fires. Impacts to willow flycatchers and cuckoos may result from negative human interactions if they are flushed as they forage or roost in stop-over habitat. The No Action Alternative would not address unmanaged dispersed camping or its impacts to these species.

3.9.2.3. Cumulative Impacts

The CIAA for threatened and endangered species includes suitable habitat within the SRMA such as riparian areas, canyons, and canyon rims. Actions with the potential to impact threatened and endangered species include recreation activities such as dispersed camping, boating, motorized use, mountain biking, and hiking. Grazing occurs on allotments on canyon bottoms and rims. Mineral and energy development occur in the SRMA; the Green River corridor is closed to mineral entry. There is the occasional occurrence of wildland fire.

Reasonably foreseeable actions include increased recreation use of all types as visitation increases, including the expansion of dispersed camping. Mineral and energy development are expected to increase at approximately the same rate as it has in the past. Livestock grazing is expected to continue at its current use levels.

Cumulative impacts to threatened and endangered species include vegetation and habitat alteration, habitat fragmentation, and negative human-wildlife interactions. Recreational activities have the greatest impact on these species and result in greater cumulative impacts than other actions. Livestock use also alters the vegetation community and competes for foraging needs. Additionally, anthropogenic effects on the landscape can alter and reduce the quality, quantity, and use of habitat associated with local wildlife species that utilize the CIAA for breeding, nesting, and foraging.

The Proposed Action would reduce the undesirable impacts to wildlife habitats, such as alteration and fragmentation, as dispersed camping would be concentrated to areas with less potential for impact. Concentrating use would allow human-wildlife interactions to happen at more predictable intervals for wildlife species. The No Action Alternative would not provide these benefits to threatened and endangered wildlife species habitat and behavior. Dispersed camping would continue unmanaged, with the potential for continued habitat alteration to a degree that these habitats are no longer suitable for the reliant species.

3.10. Issue 10: Wildlife – Utah BLM Sensitive Species

How does unmanaged dispersed camping impact BLM Utah sensitive species habitat and their behavior?

3.10.1. Affected Environment

Special Status Species Management Policy 6840 requires the BLM to manage State Sensitive animal species to prevent the need for future listing under the ESA. The BLM Utah State Director's Sensitive Species List includes Federally listed species, those listed as sensitive by the State of Utah, and those listed as State Sensitive by the Utah Division of Wildlife Resources.

Ten Utah State Sensitive animal species are either known to occur within the project area or the habitat is present for the species to potentially occur (UDWR 2015). Of these ten species, one has the potential to be impacted by the Proposed Action and will be further analyzed in this EA. Table 3 shows Utah State Special Status species that have potential to occur within the project area.

Table 3: Special Status Species in Utah within the Area of the Proposed Action

Common Name (Scientific Name)	Habitat	Habitat Potential Within the Project area that may be impacted Project Activities	Further Analysis (Yes/No)
Big free-tailed bat (Nyctinomops macrotis)	Rocky and woodland habitats, roosts in caves, mines, old buildings, and rock crevices.	Species may occur; no maternity roosts are known. Minimum site-specific habitat alterations may occur	No
Spotted bat (Euderma maculatum)	Varies. Habitat ranges from deserts to forested mountains; roost and hibernate in caves and rock crevices.	but are not expected to reduce insect forage base. No impacts expected during roosting.	No

Common Name (Scientific Name)	Habitat	Habitat Potential Within the Project area that may be impacted Project Activities	Further Analysis (Yes/No)
Townsend's big- eared bat (Corynorhinus townsendii)	Varies. Often found near forested areas; roosts and hibernates in caves, mines, and buildings.		No
Western Red Bat (Lasiurus blossevillii)	Found near water, often in wooded areas. Extremely rare in Utah.		No
Kit fox (Vulpes macrotis)	Open prairie, plains, and desert habitats.	Suitable habitat throughout.	Yes
White-tailed prairie dog (Cynomys leucurus)	Semi-desert grasslands and open shrublands.	Soils suitability is minimal for burrowing; no known occupancy.	No
Bald Eagle (Haliaeetus leucocephalus)	Roosts and nests in tall trees near bodies of water.	Minimal roosting and nesting habitat potential along the Green River due to the minimal availability of cottonwood snags.	No
Burrowing owl (Athene cunicularia)	Open grassland and prairies. Often nests in active and inactive prairie dog colonies.	Limited and minimal quality suitable habitats due to lack of prairie dog activity and limited soil suitability.	No
Ferruginous hawk (Buteo regalis)	Flat and rolling terrain in grassland or shrub steppe; nests on elevated cliffs, buttes, or creek banks.	Limited suitable habitats and nesting structure; no known nesting.	No
Short-eared owl (Asio flammeus)	Grasslands, shrublands, and other open habitats.	Occasional winter resident, nesting does not occur.	No

Kit fox

The kit fox is typically found in open desert, shrubby or shrub-grass habitat such as the shadscale, greasewood and sagebrush areas. The kit fox opportunistically eats small mammals (primarily rabbits and hares), small birds, invertebrates, and plant matter. The species is primarily nocturnal, but individuals may be found outside of their dens during the day. The kit fox mates in late winter, with a litter of four to seven pups being born about two months later. Young first leave the den about one month after birth, in late spring or early summer.

3.10.2. Environmental Impacts

As outdoor recreation on public lands increases, so does the potential for increased human-wildlife interactions that may have negative impacts on wildlife (Monz, 2021) and the habitats they depend

on. Human disturbance results in altered wildlife behavior and physiology. It has also been associated with avoidance behavior (Frid and Dill 2002), physiological stress (Hayward et al. 2011, Strasser and Heath 2013), and impaired sensory perception (Mason et al. 2016). Human disturbance can lead to changes in habitat use (Gill and Sutherland 2000, Webber et al. 2013), interfere with foraging (Fernández-Juricic and Tellería 2000), and reduce parental care to young (Fernández and Azkona 1993, Steidl and Anthony 2000). Ultimately, disturbance could lead to reduced breeding success (Buick and Paton 1989, Brambilla et al. 2004, Watson et al. 2014), which may lead to population declines (Palacios and Mellink 1996, Wiedmann and Bleich 2014, Pauli et al. 2017).

Although some species may exist in human-dominated landscapes by becoming tolerant to human activities, a long-lived species with low recruitment may be unable to experience individual learning or population-level adaptation at a rate sufficient to compensate for a rapidly shifting anthropogenic landscape (Pauli et al. 2017).

Predictability seems to be a particularly important component in level and type of species responses to human disturbance – species react most to spatially unpredictable (i.e., off trail) activities (Taylor and Knight 2003). While roads have many negative impacts on wildlife, they can offer somewhat higher levels of predictability for wildlife than a variety of recreation types (motorized and non-motorized), which may or may not be limited to trails (Snetsinger and White 2009). A literature review of recreational ecology by Monz (2021) suggests that while outdoor recreation visitors on public lands can cause substantial ecological disturbance to natural resources, effective management works to minimize these disturbances and can sustain both recreation and conservation goals. Monz (2021) further suggests that wildlife often adapts to consistent, non-threatening recreational activities. Impacts of Alternative A – Proposed Action

The Proposed Action would benefit sensitive species that may be utilizing the project area for nesting, denning, foraging and breeding activities. The Proposed Action would designate campsites away from the most sensitive species valuable habitat, including that for kit fox.

Containment strategies that spatially concentrate use on formal trails and impact-resistant recreation sites can limit negative wildlife impacts (Monz 2021). Additionally, modifying the location and timing of use, such as shifting trails and recreation sites away from areas of high-quality wildlife habitat to areas of lower-quality habitat is also an effective strategy.

Designated campsites would be focused in areas that avoid high quality wildlife habitat. Campsite designation would concentrate use away from those habitats and would offer wildlife a higher amount of predictability when it comes to human-wildlife interaction, thus reducing negative short and long-term impacts to these species.

Design features measure developed following USFWS Guidelines to further reduce human-wildlife conflicts include:

1) Dogs and other pets will be required to be under control at campsites to protect kit fox and other local wildlife.

3.10.2.1. Impacts of Alternative B – No Action Alternative

Increases in outdoor recreation may have negative impacts to wildlife including Utah Sensitive Species. The No Action Alternative would not address the rapid increases in visitors and the need for dispersed camping management to limit short- and long-term impacts to the sensitive species habitat.

As unmanaged dispersed camping expands, there is a high potential for undesirable impacts including habitat fragmentation and loss, reduced breeding success, and population decline. Dispersed camping would continue in its current trend, expanding into untrammeled areas. This expansion would displace sensitive species like the kit fox or disturb potential habitat of other sensitive species. Habitat disturbance or displacement can ultimately lead to long-term impacts such as population declines.

Human use would continue in unpredictable patterns as visitors seek out new campsites, putting sensitive species in stressful situations which may negatively impact foraging, parental care, and overall species health.

3.10.2.2. Cumulative Impacts

The CIAA for Utah Sensitive Species is the entire SRMA. Recreation use, including dispersed camping and motorized and non-motorized travel, is popular. Livestock grazing occurs on allotments. Oil and gas and mineral activity occurs throughout the area.

Reasonably foreseeable actions include increasing recreation use as visitation increases. This includes increased numbers of dispersed campers. Grazing is expected to continue at its current rate. Oil and gas development is expected to increase at the same rate as it has in the past.

The cumulative impacts to Utah Sensitive Species are increased pressure on habitat and population numbers created by unregulated dispersed camping and other surface disturbing and non-predictable recreational use. High quality habitat for kit fox exists and without management faces fragmentation and alteration which can ultimately lead to population displacement.

The Proposed Action would limit cumulative impacts to sensitive species by designating campsites in areas of lower-quality habitat and away from active breeding sites. This would decrease stress on populations and allow humans and wildlife to interact synonymously. Disturbance to valuable habitats would be reduced by concentrating impacts, protecting foraging, nesting and breeding grounds.

The No Action Alternative would allow impacts to sensitive species habitat to continue without the benefit of mitigation measures or management. Campsites would continue to be created and expand into potential sensitive species habitat, leading to ultimate species displacement. Camping use would not be concentrated, and unpredictable human-wildlife interactions would continue, putting stress on individual species and populations. If sensitive species habitat or populations continue to decline, the species could eventually become Federally listed.

3.11. Issue 11: Wildlife – Migratory Birds (Including Raptors)

How does unmanaged dispersed camping impact migratory bird breeding, nesting and foraging habitat?

3.11.1. Affected Environment

Migratory birds, including a wide variety of songbirds and neo-tropical migrants spend at least part of the year within the MFO and use habitats within the Labyrinth Rims/Gemini Bridges SRMA for breeding, nesting, and foraging. Migratory birds may nest on tree limbs, on the ground, or in/on rock outcrops. The nesting season for migratory birds is generally April 1st through July 31st. The Green River Bird Habitat Conservation Area is within the project area.

Migratory bird species of concern within the SRMA were identified using the 2021 USFWS Birds of Conservation Concern (BCC) list, Utah Partners in Flight (PIF) Priority Species List, and the

Utah Conservation Data Center database. See Table 4 for a list of species that occur within the project area.

Table 4: USFWS Birds of Conservation Concern and Utah Partners in Flight Species

Species	BCC ‡	PIF§	Moab Area	1st Breeding	2nd Breeding Habitat§	Winter
1	Pot		Potential†	Potential† Habitat§		Habitat§
Black Rosy-finch**	X	X	Non-breeding	Alpine	Alpine	Grassland
Black-throated Gray Warbler		X	Breeding	Pinyon- Juniper	Mountain Scrub	Migrant
Brewer's Sparrow		X	Breeding	Shrub steppe	High Desert Scrub	Migrant
Broad-tailed Hummingbird	X	X	Breeding	Lowland Riparian	Mountain Riparian	Migrant
Cassin's Finch	X		Year-round	Aspen	Sub-Alpine conifer	Lowland Riparian
Clark's Grebe**	X		Breeding	Wetland	Water	Water
Evening Grosbeak	X		Non-breeding	Mixed Conifer	Sub-Alpine Conifer	Lowland Riparian
Gray Vireo		X	Breeding	Pinyon- Juniper	Oak	Migrant
Long-billed Curlew		X	Migrant	Grassland	Agriculture	Migrant
Long-eared Owl			Migrant	Lowland Riparian	Lowland Riparian	Lowland Riparian
Pinyon Jay	X		Breeding	Pinyon- Juniper	Ponderosa pine	Pinyon- Juniper
Sagebrush Sparrow		X	Breeding	Shrub steppe	High Desert Scrub	Low Desert Scrub
Southwestern Willow Flycatcher*	X		Migrant	Riparian	Riparian	Riparian
Three-toed Woodpecker		X	Breeding	Sub-Alpine Conifer	Lodge-pole pine	Sub-Alpine Conifer
Virginia's Warbler	X	X	Breeding	Oak	Pinyon-Juniper	Migrant
Western Grebe	X		Breeding	Lowland Riparian	Mountain Riparian	Migrant
Yellow-headed Blackbird	X	X	Breeding	Lowland Riparian	Agriculture	Migrant

[‡] BCC 2021 (USFWS, 2021), § Utah PIF Avian Conservation Strategy Version 2.0 (Parrish et al., 2002), †The Cornell Lab online

Migratory birds are protected under the Migratory Bird Treaty Act (MBTA). The MBTA makes it unlawful to pursue, hunt, kill, capture, possess, buy, sell, purchase, or barter any migratory bird, including the feathers or other parts, nests, eggs, or migratory bird products. Some birds are also protected by the ESA and/or are included in the State of Utah/BLM Sensitive Species Lists. To further the purposes of these protective acts, Memorandum of Understanding (MOU: EO 131863) *To Promote the Conservation of Migratory Birds*, was issued in 2010 by the BLM and the USFWS.

Raptors

^{*=}Federally Listed, Italic=Utah Sensitive Species, **limited habitat/occupancy potential, bold=habitats in USFS

Raptors typically use the same nest site year after year. Nesting and fledgling seasons for raptors vary, but typically extend from March 1st through August 31st. Eagles often begin their nesting season in January. The SRMA also offers suitable wintering and migration habitats for nonnesting raptor species. The USFWS issued guidelines for the protection of raptors that includes species-specific timing limitations and spatial offsets to active nests (Romin and Muck 2002). Table 5 provides a summary of raptor habitats and species-specific timing limitations and spatial offsets to active nests.

Table 5: Raptor Species with the Potential to Nest in the Project Area and USFWS Spatial and Seasonal Buffers

Common Name	Scientific Name	USFWS Spatial Buffer	USFWS Seasonal Buffer	General Habitat and Potential in Project Area
				Potential for occurrence and nesting.
American Kestrel	Falco sparverius	N/A	N/A	High potential to forage in open habitats (prairies, deserts, wooded streams, and farmlands) and nest in natural holes in trees, abandoned woodpecker holes, cliffs, and nest-boxes. Moderate potential to nest on cliffs and ledges. Moderate potential to forage from cliffs and ledges, and low potential in desert shrub and pinyon-juniper woodland.
Burrowing Owl	Athene cunicularia hypugaea	0.25 miles	3/1-8/31	Limited potential to nest due to lack of prairie dog colony activity.
Cooper's Hawk	Accipiter cooperii	0.5 miles	3/15-8/31	Moderate potential and limited known occurrence. High potential to nest and forage in woodland areas and riparian zones.
Golden Eagle	Aquila chrysaetos	0.5 miles	1/1-8/31	Moderate to high potential to nest and forage. Commonly nests on cliff ledges and rock outcrops. Moderate potential to forage in desert shrub and pinyon-juniper woodlands.
Great- horned Owl	Bubo virginianus	0.25 miles	12/1-9/31	High potential to nest. High potential to occur in a variety of habitats. Nests occur on cliff ledges, pinyon-juniper, or nests of other species. Moderate potential to forage in desert shrub and pinyon-juniper woodlands.
Northern Harrier	Circus cyaneus	0.5 miles	4/1-8/15	Low to moderate potential to nest. Moderate potential to forage and nest in sagebrush/ grassland vegetative community and desert scrublands. Low potential to nest in pinyon-juniper woodlands. Utilizes open habitats such as marshes, fields, and grasslands.
Peregrine Falcon	Falco peregrinus	1.0 mile	2/1-8/31	High potential and known occurrence and nesting. Utilizes habitats containing cliffs and almost always nests near water.
Prairie Falcon	Falco mexicanus	0.25 mile	4/1-8/31	Moderate to high potential to nest and forage. High potential to nest on cliffs and ledges. Moderate potential to forage in desert shrub; moderate in pinyon-juniper woodland.

Common Name	Scientific Name	USFWS Spatial Buffer	USFWS Seasonal Buffer	General Habitat and Potential in Project Area
Red-tailed Hawk	Buteo jamaicensis	0.5 mile	3/15-8/15	Moderate to high potential to nest. High potential to nest and forage in open country where scattered trees or other elevated perches are available. Moderate potential to nest on cliffs and low potential to nest in pinyon-juniper woodlands. High potential to forage in desert shrub and pinyon-juniper woodlands.
Sharp- shinned Hawk	Accipiter striatus	0.5 mile	3/15-8/31	Low potential to nest and forage. High potential to forage in forest and woodland habitats, often nesting in tall coniferous trees. In arid areas and pinyon-juniper woodlands, nests are found in riparian zones along streams and desert washes. Moderate potential to nest in pinyon-juniper woodlands.

3.11.2. Environmental Impacts

Human disturbances, including pet dogs, can interrupt territorial singing, alter nest defense, increase predation, and increase energetic demands when birds are flushed (Marzluff 1997). Human disturbances can also negatively impact the composition of bird communities, including less tolerant species being replaced by more tolerant species. Predation and parasitism may also increase as species composition changes. Negative effects of human recreational disturbance can readily occur after low-intensity disturbance events, even when occurring over a short time period (Botsch 2017). This is especially relevant during territory establishment in early spring, when improving weather conditions lead to increases in outdoor recreation.

Most bird species (especially neo-tropical) are decreasing in numbers throughout their ranges. According to Parrish et al. (2002), riparian habitats are used as either breeding or wintering habitat by Utah's birds almost twice as much as any other habitat type. Within Utah, 66 to 75 percent of all bird species use riparian habitats during some portion of their life cycle. Shrublands, forest, and additional habitat groups (i.e., water, rock, playa, agriculture, urban, and cliff) all are about equal and second to riparian habitat when considering their importance to bird species. To prevent further population declines for bird species, the protection of these habitat types, especially riparian, are crucial.

Within occupied raptor territories, visitation by pedestrians during the early portion of the breeding season negatively influenced the likelihood of golden eagles laying eggs, resulting in some territories being occupied by eagles that made no detectable breeding attempt. Adverse responses to pedestrians and non-motorized riders before the mean egg-laying date supports the hypothesis that large raptors may be particularly vulnerable to disturbance at this crucial time (Watson 2010).

Findings show a 1% annual increase in recreation resulted in negative population growth rates and substantially decreased eagle population size compared to no annual increases in recreation (Pauli et al, 2017). Furthermore, a 3% annual increase in recreation resulted in the local extinction of eagles within 100 years in most simulations. Thus, even moderate growth in recreation activity can have major consequences on eagle populations.

3.11.2.1. Impacts of Alternative A – Proposed Action

The Proposed Action would facilitate management of dispersed camping and associated activities, resulting in a positive impact to migratory birds and raptors that utilize the area for breeding, nesting and foraging activities. Dispersed campsites would be located in areas that avoid high quality habitat for migratory birds and raptors. Supplementary rules would disallow the collection of firewood, protecting tree species that provide habitat for these species. By designating campsites, visitors would utilize the area in a more predictable pattern and cause less disturbance to bird species. Closures of certain areas could be enacted in the event an active raptor nest is found to limit potential for human disturbance to the breeding raptors.

Campsite designation would adhere to additional design features developed following USFWS Guidelines to protect migratory birds and raptors during campsite designation and continued use. These guidelines include species-specific timing limitations and spatial offsets to active nests (Romin and Muck, 2002). See Table 5 for more details. Guidelines relevant to the Proposed Action include:

- 1. During campsite designation, construction and surface disturbing activities and vegetative treatments and removal would be avoided during the migratory bird nesting season (April 1st through July 31st), if BLM determines that vegetative nesting structures exist, and that the proposed activity would result in impacts to nesting birds.
- 2. Designated campsites would not be located within the USFWS raptor spatial buffer (generally 0.5 miles) of active nesting structures for nesting raptors and golden eagles. See Appendix R of the Moab RMP for buffers, by species.
- 3. If an active raptor nest is located within 0.5 miles of a designated campsite, the affected BLM programs would determine if the level of human activity at the facility warrants mitigation that may include temporary or seasonal closures.

3.11.2.2. Impacts of Alternative B – No Action Alternative

Dispersed camping activities would continue as would the potential for disturbance to migratory birds, including raptors and their breeding, nesting and foraging habitats. Campsites would continue to be created within or in proximity to valuable habitats used for breeding, nesting and foraging. Continued human disturbance in these areas could cause population declines of certain species as they are less likely to successfully breed in areas occupied by humans. Many raptors occupy nest sites prior to the increase in spring visitation; thus, nests might be chosen that are adjacent to heavily used areas during peak visitation.

Negative human-wildlife interactions would continue as visitors expand camping footprints into previously undisturbed areas that may be being utilized by migratory birds. These interactions could cause increased energetic demands in bird species, interrupt territorial signing, and alter nest defense. Further, species less tolerant of human disturbances may be replaced by species with more tolerance, changing the species composition of the area.

3.11.2.3. Cumulative Impacts

The CIAA for migratory birds is the extent of the SRMA. The area encompasses year-round habitats for migratory birds and raptors. Recreation use including dispersed camping, motorized, and non-motorized travel is popular within the SRMA. Livestock grazing occurs throughout the area. Oil and gas development, and lithium and potash exploration have and continue to occur.

Reasonably foreseeable actions within the CIAA would be the continued rapid increase in recreational use and the expansion of dispersed camping and related actions. Mineral and energy

development are expected to increase at approximately the same rate it has in the past. Livestock grazing would continue to occur at its current rate.

The cumulative impacts to migratory birds and raptors include increased human disturbance and habitat loss. Recreation activities can result in habitat fragmentation from campsite and road creation, human disturbance and unpredictable human-wildlife interactions. Human use and livestock grazing can contribute to altered vegetation communities with increased invasive species presence.

Under the No Action Alternative, dispersed camping would continue to degrade the quality, quantity and use of breeding, nesting and foraging habitat. High quality habitat would continue to be fragmented and disturbed as unmanaged camping use expands. Foraging grounds may disappear as areas become more disturbed from human use and may ultimately lead to population decline or displacement. Birds may become less likely to successfully reproduce due to increased human disturbance, ultimately leading to population decline or displacement. Migratory birds may become more prone to predation and parasitism and displaced by less sensitive species.

The Proposed Action would limit the cumulative impacts by managing dispersed camping opportunities and concentrating use to designated areas. These areas would be designated away from high quality breeding, nesting, and foraging habitats to protect valuable wildlife resources. Use would be concentrated to less valuable habitat and would limit human disturbance and protect migratory bird populations from negative interactions.

3.12. Issue 12: Wildlife – General

How does unmanaged dispersed camping impact large game species habitats and behaviors?

3.12.1. Affected Environment

The plant communities, riparian, riverine habitats, and topography provide habitat for various wildlife species including small mammals (songbirds, raptors, snakes, lizards, etc.) and predators (cougar, coyote, bobcat, fox, etc.). Commonly observed wildlife in the more desert arid areas include ravens, horned larks, ground squirrels, cottontail rabbits, and black-tail jackrabbits, and mourning doves. The Green River contains adequate or consistent flows to support high value riparian habitat. Habitat for large game, including desert bighorn sheep, pronghorn antelope and mule deer also exist. These large game species will be analyzed in detail.

Desert Bighorn Sheep (Ovis canadensis nelson)

Desert bighorn sheep inhabit steep, rugged terrain, including the talus slopes and cliffs. Canyon bottoms and mesa tops adjacent to talus slopes and cliffs provide valuable foraging grounds. Evidence of bighorn sheep presence dates to 2,000 to 4,000 years through Indian rock art. In the 1800s, livestock grazing by domestic sheep introduced disease to many wild sheep populations, and along with illegal hunting, decimated many populations, including the herds around Moab.

Together with the Utah Division of Wildlife Resources (UDWR), Brigham Young University, the Wild Sheep Foundation, and Canyonlands National Park, the MFO completed GPS collar studies on the resident bighorn sheep between 2002 and 2010. These studies have facilitated mapping of critical habitats, migration corridors, and lambing grounds. Ongoing research is being conducted by UDWR and Colorado State University on recreational impacts to these animals. Additionally, the data collected from these studies has allowed the MFO to develop and implement management measures to reduce the impacts of human activities in these crucial habitats, including protection of vital lambing grounds.

Many of the canyons offer desert bighorn sheep remote areas fairly undisturbed by human activities, ample foraging grounds surrounded by high quality escape terrain, and water resources (guzzlers). These sheep generally remain year-round and do not migrate. Lambing season occurs from early April through late June and the rutting season begins in early September and continues through December.

Pronghorn Antelope (Antilocapra americana)

Pronghorn antelope inhabit open plains where they feed mainly on forbs and grasses. They prefer areas with larger tracts of flat to rolling terrain where they rely on keen eyesight and swift movement to avoid predation. Pronghorns are often found in small groups and are most active during the day.

Native to North America, fossil records indicate that the species may go back at least one million years. Pronghorn populations are thought to have been abundant (40 million) in the late 1800s but declined by as much as 99 percent in the 1900s due to fencing, habitat loss, and human interference.

Pronghorn inhabiting the SRMA stem from the Cisco Desert herd, which ranges from the Colorado State Line west to Green River and south of Interstate 70 (I-70). In 2017, UDWR estimated the population of the Cisco Desert herd at 1,280, with approximately 160 animals ranging on the south side of I-70 and west side of Highway 191. Within the SRMA, UDWR identifies yearlong habitats on the mesa between Ten Mile Canyon and Spring Canyon where small groups of pronghorn reside.

Pronghorn are highly responsive to climatic conditions; mild winters and good moisture conditions typically help pronghorn numbers increase, and during drought cycles pronghorn numbers sharply decline. The Cisco Desert herd is currently believed to be increasing.

Mule Deer (Odocoileus hemionus)

Mule deer occupy most ecosystems in Utah but likely attain their greatest densities in shrublands characterized by rough, broken terrain and abundant browse and cover. A small number of resident deer populate the lowlands along the Green River.

During the winter of 1992-1993, deer herds in Utah suffered a sharp decline from record breaking snowfall but are since showing an increasing population trend. No management prescriptions have been identified by the UDWR or the Moab RMP for mule deer habitat along the Green River.

3.12.2. Environmental Impacts

Human-wildlife interactions increase as outdoor recreation increases, causing potential negative impacts to wildlife (Monz, 2021) and the habitat they depend on. Disturbance by humans can result in altered behavior and physiology and has been associated with avoidance behavior (Frid and Dill, 2002). Some wildlife species may exist in human-dominated landscapes by becoming tolerant to human activities, but long-lived species with low recruitment may be unable to experience individual learning or population-level adaptation at a rate sufficient to compensate for a rapidly shifting anthropogenic landscape (Pauli et al. 2017).

Human disturbance can lead to changes in habitat use (Gill and Sutherland 2000, Webber et al. 2013), interruption of seasonal migration routes (Ough and de Vos 1984), interference with foraging (Fernández-Juricic and Tellería 2000), and reduced parental care to young (Fernández and Azkona 1993, Steidl and Anthony 2000). Additionally, human disturbance can cause physiological stress (Hayward et al. 2011, Strasser and Heath 2013), and impaired sensory perception (Mason et al. 2016) on individual species. Ultimately, disturbance could lead to

reduced breeding success (Buick and Paton 1989, Brambilla et al. 2004, Watson et al. 2014), which may lead to population declines (Palacios and Mellink 1996, Wiedmann and Bleich 2014, Pauli et al. 2017).

Predictability has been found to be a particularly important component in level and type of species responses to human disturbance (Taylor and Knight 2003). While roads have many negative impacts on wildlife, they can offer higher levels of predictability for wildlife than recreational activities that may not be limited to roads and trails (Snetsinger and White 2009).

Several recent studies that have focused exclusively on Moab's bighorn sheep herds (Canyonlands and Potash) have concluded that desert bighorn sheep spent less time grazing and more time scanning in high human use areas (22% grazing, 29% scanning) than in low human use areas (54% grazing, 8% scanning) (Sproat et al. 2012). Increased human use near bighorn herds results in increased vigilance and flight, as bighorn equate humans as a potential predator risk. Vigilance refers to an animal's examination of its surroundings to heighten awareness of predator presence. Vigilance often leads to increased flight response and comes at the expense of time spent feeding, resting, and caring for young. This behavior elevates stress levels, making them more susceptible to disease and predation. Ultimately, if disturbance levels become too great, desert bighorn will abandon an area.

Monz (2021) suggests that containment strategies that spatially concentrate use to designated roads can limit negative wildlife impacts. Additionally, modifying the location and timing of use, such as shifting trails and recreation sites away from areas of high quality wildlife habitat to areas of lower-quality habitat is also an effective strategy.

3.12.2.1. Impacts of Alternative A – Proposed Action

Increased visitation often results in increased numbers of visitors choosing to dispersed camp. Managed dispersed camping opportunities, can provide sustainable practices to dispersed camping that limit the disturbance to wildlife species. Designating campsites that take resource impacts into consideration provides the public with adequate camping opportunities and protects wildlife populations from short and long-term impacts.

Campsites would be designated in areas that avoid high quality habitat for wildlife and would offer wildlife more predictable interactions with humans, as new campsites would no longer be created. This in turn woulcharacd reduce stress on individual species, improve breeding success and provide better foraging opportunities. Wildlife, such as bighorn, would spend less time scanning the environment to heighten awareness and more time foraging, resting, and caring for young. By managing dispersed camping and consolidating impacts to designated areas, habitat fragmentation and loss would also be reduced.

Design features have been developed following USFWS guidance to protect general wildlife habitats, specifically desert bighorn sheep.

- 1) Within desert bighorn sheep habitat as identified in the 2016 Moab Master Leasing Plan and as amended in the Moab RMP:
 - a. No campsites would be designated in canyon bottoms.
 - b. No campsites would be designated within 300 meters of canyon rims.

3.12.2.2. Impacts of Alternative B - No Action Alternative

Dispersed camping would continue with visitors camping in an unmanaged, dispersed manner. New campsites and access routes would continue to be created in high value wildlife habitat, potentially displacing individual species and/or populations.

Campsite creation in previously undisturbed areas may cause interruption of migration routes, changes in habitat use, interference with foraging and reduced parental care to young. It could mean that individual animals spend less time grazing, and more time scanning the environment. This behavior elevates stress levels and predation susceptibility, reduces population fitness and diminishes levels of individual and group energetics and health. Unmanaged camping and associated cross-country travel would continue to damage vegetation that provides valuable forage and cover and fragment habitats. Unpredictable patterns of human use could cause stress to the wildlife species which could reduce their breeding success and the health of the overall population.

Increased disturbance from unmanaged dispersed camping could lead to habitat fragmentation. Human encroachment into high value habitats could create short-term seasonal disturbances during prime breeding, birthing and rearing seasons and long-term negative impacts to wildlife populations and use patterns.

3.12.2.3. Cumulative Impacts

The CIAA for general wildlife resources includes the entire SRMA. This area encompasses habitats for the local and year-round wildlife species identified above. The SRMA has and continues to be a venue for many different recreational activities including dispersed camping, hiking, biking, and motorized travel. Livestock grazing occurs within the SRMA. Mineral and energy development occur; the Green River corridor is removed from mineral entry. There is the occasional occurrence of wildland fires.

Reasonably foreseeable actions include increased recreational activities throughout the SRMA including dispersed camping and motorized travel. Livestock grazing is expected to continue at its current use levels. Mineral and energy development are expected to continue to increase at approximately the same rate as they have in the past. Wildland fire occurrence is not expected to increase.

Cumulative impacts to general wildlife species include habitat fragmentation, negative human-wildlife interaction, and vegetation alteration. The continuation of unmanaged dispersed camping could lead to population decline and/or displacement of wildlife species. Continued negative human-wildlife interactions and unpredictable encounters could result in reduced fitness, recruitment, and survival.

The Proposed Action would reduce these impacts by focusing human use and creating more predictable use patterns for wildlife. The anthropogenic effects would be contained over time in lesser value wildlife habitat, therefore reducing the rate and intensity of cumulative impacts. By focusing human use to areas of less valuable habitat, humans and wildlife could synonymously utilize the area in harmony.

Impacts to wildlife resources would continue under the No Action Alternative, creating the potential for continued habitat fragmentation, altered vegetation communities, and human-wildlife conflicts. Habitat for wildlife species would decrease in quality and quantity, putting pressure on species at individual and population levels. Over time, these impacts may cause population displacement and/or decline.

3.13. Issue 13: Fisheries – Threatened and Endangered Species, Utah BLM Sensitive Species

How does unmanaged dispersed camping impact fisheries (including threatened, endangered and candidate (T&EC) species and BLM UT Sensitive Species) habitat?

3.13.1. Affected Environment

Riparian areas comprise less than one percent of the approximately 22 million acres of public lands administered by the BLM in Utah. Perennial and intermittent stream systems supporting lotic and lentic habitats are equally rare. The 100-year floodplain of the Green River is critical habitat for ESA listed fish species. These systems are imperiled by the synergistic pressures of prolonged drought, prolonged peak summer temperatures, grazing, off-road vehicle use, pollution, longer fire seasons, and other recreational uses like camping.

Species listed as threatened or endangered are afforded protection under ESA. The BLM is required to consult with the USFWS on potential impacts to Federally listed species. Four aquatic Federally listed fish species were identified as having the potential to occur, as well as three sensitive fish species (Table 6).

Table 6: ESA and Sensitive Fish Species

Common Name	Status	Designated Critical Habitat in Project Area	Potential for Occupancy in Project Area	Further Analysis (Yes/No)
Bluehead sucker (Catostomus disobolus)	Sensitive	Yes	Known Occupancy and Migration	Yes
Bonytail chub (Gila elegans)	Endangered	Yes	Known Occupancy and Migration	Yes
Colorado pikeminnow (Ptychocheilus lucius)	Endangered	Yes	Known Occupancy and Migration	Yes
Flannelmouth sucker (Catostomus latipinnis)	Sensitive	Yes	Known Occupancy and Migration	Yes
Humpback chub (Gila cypha)	Threatened	Yes	Known Occupancy and Migration	Yes
Razorback sucker (Xyrauchen texanus)	Endangered with petition to down list to threatened	Yes	Known Occupancy and Migration	Yes
Roundtail chub (Gila robusta)	Sensitive	Yes	Known Occupancy and Migration	Yes

The fish bearing waters of the SRMA consist primarily of portions of the Green River (Labyrinth Canyon) as well as seasonally inundated side channels, backwaters, and confluence habitats associated with tributaries to the Green River including Ten Mile Canyon, Spring Canyon, Hell Roaring Canyon, and Mineral Canyon. Critical habitat for Federally listed species and important habitat for BLM Sensitive fish species extends from the wetted channel to the elevation of the 100-year floodplain. These species have declined due to streamflow regulation, competition with and predation by non-native fish species, and habitat modification resulting in habitat loss, degradation,

and fragmentation caused by watershed changes, including increased sedimentation and other water quality changes (e.g., pollutants and pesticides).

In terms of fisheries, the Green River is important in comparison with other rivers in the Colorado River Basin because of the uniqueness of fish species and connectivity within the river system. The Green is recognized for its high level of fish migration through its river system and is often referred to as the "superhighway for fish". This river is considered regionally important for the recovery of the four Federally listed species.

The Labyrinth Canyon of the Green River, sometimes called the "nursery" reach, provides key connectivity, migration, nursery and/or spawning areas for an intact native fish species assemblage consisting of the four Federally listed species, three BLM Sensitive species, and two other native species: the Mottled Sculpin and Speckled Dace. These fish species have overlapping needs and occupy different habitats in different stretches along the river as they migrate through the river system.

The following information, extracted from the UDWR reports, highlight the relative importance of the Labyrinth segment of the Green River. In 2020, 125 Young-of-year (YOY) Colorado pikeminnow were encountered on the lower Green River (Labyrinth/Stillwater), and none on the middle Green River (Split Mountain to Sand Wash) (Breen, M.J. and C.M. Michaud 2020). Over the 2000–2013 sample period, weighted regression indicated abundance of adult Colorado pikeminnow declined in the Green River Subbasin but in the Desolation-Gray Canyon and lower Green River reaches, numbers were stable (Bestgen et. al. 2018). The total number of razorback sucker larvae captured annually by light trapping has increased significantly on the lower Green River (Labyrinth/Stillwater) since sampling began in 2009, except for 2020, when sampling was suspended due to COVID-19 (Burke, K. and J. Caldwell 2020). Additionally, one YOY razorback was collected from the lower Green River in 2020 during seine sampling while none were encountered in other locations (Burke, K. and J. Caldwell 2020).

Bluehead sucker

Bluehead suckers are widespread in rocky riffle habitats of small to large rivers in the Upper Colorado River Basin. Bluehead sucker habitat consists of many factors including annual and peak flows, habitat availability, type, and substrate, and water quality. Bluehead sucker needs access to complex habitat to support its full life cycle and allow for successful recruitment. (UDWR, 2020a) Bluehead sucker have experienced range contraction in recent years, and now occupy only 47% of their historical range (Budy et al. 2015).

Bonytail chub

The bonytail chub was listed as endangered on April 23, 1980. It is endemic to the large rivers of the Colorado River Basin and is adapted to mainstem rivers, where it has been observed in pools and eddies (USFWS 2008). Primary threats include stream flow regulation and habitat modification, competition with and predation from non-native fishes, hybridization with other native *Gila* species, and pesticides and pollutants (USFWS 2002a). Historically widespread and abundant in mainstem rivers, its populations have been greatly reduced; currently, remnant populations occur in the wild in low numbers (USWFS 2008).

Colorado pikeminnow

The Colorado pikeminnow was Federally listed as an endangered species in 1967 before being fully protected by the ESA on January 4, 1974. It is the largest fish in the minnow family, is native to North America, and evolved as the main predator in the Colorado River system. The species is

a long-distance migrator that requires long sections of river with unimpeded passage as well as pools, deep runs, and eddy habitats with high spring flows. Primary threats include stream flow regulation and habitat modification, competition with and predation from non-native fishes, and pesticides and pollutants (USFWS 2002b). Historically found throughout warm-water reaches of the Colorado River Basin, the species is currently restricted to the Upper Colorado River Basin and inhabits warm-water reaches of the Colorado, Green, and San Juan River and associated tributaries (USFWS 2008).

Flannelmouth sucker

Flannelmouth sucker inhabits large mainstem and tributary systems that exhibit a large variety of habitat characteristics. In these river systems, individuals typically occupy pools and deep runs (UDWR 2006). This species prefers water temperatures ranging from 10 to 27°C and appears excluded from higher elevation areas for this reason (Carter and Hubert 1995 as cited in UDWR 2020b). Substrate preference ranges from mud and silt, to cobble and gravel (Sigler and Sigler, 1996 as cited in UDWR 2020b). Young fish prefer low-velocity habitats such as backwaters and eddies. Adults have demonstrated large-scale movement patterns (Fiorelli and Breen 2017 as cited in UDWR 2020b), suggesting that this species can make long-distance migrations to complete life history needs (UDWR 2020b). They now occupy about 50% of their historical range in the Upper Colorado River Basin (UDWR 2006).

Humpback chub

The Humpback chub was listed as endangered on March 11, 1967, before being fully protected by the ESA on January 4, 1974. It was down listed to threatened in 2021. It is a medium-sized fish in the minnow family that is endemic to the Colorado River Basin. Humpback chub migrate very little and seem to prefer canyon reaches. In Utah, Humpback chub occur in a few whitewater areas of the Green and Colorado Rivers. Primary threats include stream flow and habitat modification, competition with and predation by non-native fishes, parasitism, hybridization with other native *Gila* species, and pesticides and pollutants (USFWS 2008). Historically, Humpback chub were distributed throughout much of the Green River and tributaries; present concentrations in the Upper Colorado River Basin occur in canyon-bound river reaches.

Razorback sucker

The razorback sucker was designated as endangered on October 23, 1991. It is endemic to warmwater portions of the Colorado River system. It is found most in low-velocity habitats such as backwaters, floodplains, flatwater river reaches, and reservoirs (USFWS, 2018b). Threats include stream flow regulation and habitat modification, competition with and predation by non-native fishes, and pesticides and pollutants. Historically, razorback suckers were found in the mainstem Colorado River and major tributaries in Arizona, California, Colorado, Nevada, New Mexico, Utah, Wyoming, and Mexico and were once so abundant they were used as food by early settlers and were commercially marketable in the mid-1900s. Currently, the largest concentration is found in Lake Mohave; the largest populations in the upper basin are found in the upper Green and lower Yampa rivers. In the Upper Colorado River Basin, they are found in limited numbers in both lentic and riverine environments. Razorback suckers are in imminent danger of extirpation in the wild (USFWS 2008).

Roundtail chub

Habitat consists of rocky runs, rapids, and pools of creeks, streams, and rivers. They now occupy about 45% of their historical range in the Upper Colorado River Basin (UDWR 2006).

3.13.2. Environmental Impacts

Effects are analyzed collectively for the special status fish species, as the habitat for each species is the same: the portions of the Green River along the Proposed Action's western boundary as well as active channels and adjacent floodplains of perennial or seasonally inundated tributary reaches and confluences connected to the Green River. This area is encompassed by the Conditional Area of Influence (AOI), derived from the USFWS Information for Planning and Consultation (IPaC) dataset, which includes the 100-year floodplain (the AOI) and 0.5-mile buffer of the portions of the Green River.

3.13.2.1. Impacts of Alternative A – Proposed Action

Within the Green River 100-year floodplains and adjacent slackwater habitats, raft- and vehicle-based camping opportunities would occur only at sustainable sites, minimizing the proliferation of campsites, better managing human waste and ash piles from campfires, and by restricting wood cutting/gathering. Although, direct impacts to fisheries are typically small and localized, modifications to physical habitat or water quality at campsites is highly probable. This alternative provides an opportunity to locate camps away from important low-velocity nursery habitats that are more susceptible to changes in water quality from camp-related activities (e.g., soaps, detergents, sunscreens, urine, ash, etc.).

3.13.2.2. Impacts of Alternative B – No Action Alternative

If camping continues to be unmanaged, the ability to respond to increased recreational use, manage activities within the 100-year floodplain, and locate camps away from critical low-velocity habitats would not be available. Management continuity would not exist, making management practices in other areas along the river corridors less effective, as activities in riverine habitats could impact much larger areas. Small, localized modifications to physical habitat or water quality from unmanaged campsites may occur.

Campsite proliferation can remove vegetation and expose soil essential to maintaining the health of the floodplains and slackwater habitats and causing small, localized modifications to physical habitat.

Water quality from unmanaged camping and associated activities would continue to be degraded. Supplementary rules requiring the removal of human waste would not exist, maintaining the potential for water quality degradation which could indirectly diminish fish habitat.

3.13.2.3. Cumulative Impacts

The CIAA is the for aquatic resources is the Green River corridor and 100-year floodplain. The SRMA has been and is a venue for recreation activities of all types; grazing occurs throughout the SRMA. Minerals activities have included oil and gas development (which continues to this day), as well as lithium and potash exploration and past uranium mining activity.

Reasonably foreseeable actions include increased recreation use of all types. Grazing is expected to continue at current use levels. Oil and gas activity is expected to increase at approximately the same rate as it has in the past, with a doubling of the oil wells currently drilled. Interest in lithium means that lithium mining could become established as the demand for lithium increases.

The Proposed Action has the potential to reduce the cumulative impacts to floodplain, riparian, wetland, and aquatic habitats. Management actions that control one of more recreation pressures, even incrementally, reduces the cumulative impacts and proactively plans for the likelihood of increased future use.

3.14. Issue 14: Vegetation - Invasive Species/Noxious Weeds

How does unmanaged dispersed camping impact the spread and colonization of invasive species and noxious weeds?

3.14.1. Affected Environment

The presence of noxious weeds and invasive species can be used as indicators of healthy ecosystems as their presence is often related to disturbances and loss of native species. Weeds colonize disturbed areas where native vegetation has been removed and/or soil disturbance and compaction has occurred. In disturbed areas, weeds grow more readily than native vegetation, can gain a competitive advantage and outcompete native plants. Noxious weed species present and on Grand County's noxious weed list include cheatgrass (List C), Russian knapweed (List B) and tamarisk (List B). Other non-native species present include Russian olive and halogeton. Surface disturbing activities, including unmanaged dispersed camping, increase the potential to introduce or spread invasive species and noxious weeds.

3.14.2. Environmental Impacts

3.14.2.1. Impacts of Alternative A – Proposed Action

Managing camping and confining dispersed camping to designated sites has the potential to decrease the spread of invasive species and noxious weeds. As campers seek new campsites, they compact soils which encourages the growth of invasives, as they are more competitive in disturbed conditions. As native vegetation is disturbed by the activities associated with dispersed camping (including off-route driving in search of campsites), invasive species and noxious weeds gain a competitive advantage over native vegetation. Limiting camping to designated sites would lessen the spread of invasive species and noxious weeds to unoccupied areas.

3.14.2.2. Impacts of Alternative B – No Action Alternative

Invasive species and noxious weeds would continue to spread as new disturbance is created, allowing these species to infiltrate native vegetation. As campers seek new campsites, they disturb and compact soils which encourages the growth of invasives, as they are more competitive in disturbed conditions. As native vegetation is disturbed by the activities associated with dispersed camping, including inappropriate driving in search of campsites, invasive species and noxious weeds gain a competitive advantage over native vegetation.

3.14.2.3. Cumulative Impacts

The CIAA for invasive species and noxious weeds is the entire SRMA. The SRMA has and continues to be a popular venue for recreation activities including dispersed camping and motorized and non-motorized use. Livestock grazing occurs on allotments throughout the SRMA. Oil and gas activity and development as well as lithium and potash exploration occur.

Reasonably foreseeable actions include increased recreation activities, including dispersed camping and motorized and non-motorized use. Livestock grazing is expected to continue at its current rate. Oil and gas activity is expected to increase at approximately the same rate as it has in the past, with a doubling of the oil wells currently drilled. Interest in lithium means a potential increase in lithium exploration.

Invasive species and noxious weeds have the potential to cumulatively impact resources such as native vegetation, wildlife, and livestock by altering the vegetation community and outcompeting native vegetation. Continued campsite expansion and creation under the No Action Alternative would create new opportunities for invasive species to take hold in areas that previously were

occupied by native vegetation. This can then reduce valuable forage is native communities are compromised and species are replaced with less nutritious plants for wildlife and livestock.

The Proposed Action would limit camping to designated sites and reduce the spread of weeds. By limiting activities such as camping and associated off-route travel to designated area, less soil and surface disturbance would occur, thus limiting the opportunity for invasive species to colonize areas.

3.15. Issue 15: Vegetation – Threatened and Endangered Species

How does unmanaged dispersed camping impact threatened and endangered plant species?

3.15.1. Affected Environment

The USFWS through its IPaC program identified areas of suitable habitat for three threatened and endangered plant species: Jones cycladenia, Navajo sedge, and San Rafael cactus.

Jones cycladenia (*Cycladenia humilis* var. *jonesii*) – Threatened

Jones cycladenia is known from 26 sites in southern Utah and northern Arizona. It occurs between 4,390 to 6,000 feet elevation in plant communities of mixed desert scrub, juniper, or wild buckwheat and Mormon tea. It is found on gypsiferous, saline soils of Cutler, Summerville, and Chinle Formations. The USFWS listed the taxon as threatened on May 5, 1986, due to the loss and fragmentation of its habitats from OHV travel and oil, gas, and mineral exploration. Pollinator availability, small populations, and low levels of sexual reproduction, although not considered threats in and of themselves, are vulnerabilities, present and acting on the taxon, which may exacerbate the impacts of existing threats (USFWS 2021).

Navajo sedge (*Carex specuicola*) – Threatened

Navajo sedge is known from a few small populations in northeastern Arizona and southeastern Utah. The USFWS listed the taxon as threatened on May 8, 1985. Navajo sedge occurs only in seeps and springs, usually in moist, sandy or silty soils with limited soil development. The seeps and springs usually occur on Navajo Sandstone between 5,710 and 5,980 feet in elevation. Originally found on Navajo Sandstone, it is now also known from Cedar Mesa, De Chelly, and Kayenta sandstone formations. Navajo sedge is usually found within pinyon pine-juniper woodlands. The main threat to Navajo sedge is disturbance to seeps and springs.

San Rafael cactus (Pediocactus despainii) – Endangered

The San Rafael cactus is a small, barrel shaped cactus, growing up to two inches tall. With its diminutive size and peculiar habit of shrinking underground for several months during dry or cold seasons, the cactus is often only noticeable for a short time in the spring when in bloom. San Rafael cactus is endemic to Emery and Wayne counties in central Utah and potential habitat has been identified in the SRMA. It occurs on benches, hilltops, and gentle slopes in open pinyon pine-juniper and salt desert scrub communities between 6,000 to 6,700 feet in elevation. San Rafael cactus is restricted to limestone gravels, shales, clays and silty substrates of the Mancos, Morrison, Moenkopi and Carmel formations. The San Rafael cactus was listed as endangered on September 16, 1987.

3.15.2. Environmental Impacts

The USFWS identified threats to threatened and endangered plants from habitat loss and fragmentation from OHV travel (Jones cycladenia) and OHV travel and recreation use (San Rafael cactus). Additional threats identified in the USFWS 2016 Draft Recovery Plan for the San Rafael cactus include mineral and energy development, livestock grazing, and climate change. The Five-

Year Status Review for the San Rafael cactus identified recreational use in occupied habitat as an increasing threat (USFWS 2019).

Navajo sedge faces threats related to seep and spring habitat alteration or destruction. In the Navajo sedge Five-Year Review (USFWS 2014), two of the three main threats that served as the basis for listing Navajo sedge were water development for livestock at occupied springs, and livestock trampling of areas around these water sources.

Camping and off-road use can inadvertently compact soils and damage vegetation. Habitat alteration, fragmentation, and deterioration leads to competition for water, space, and nutrients, which results in decreased reproductive success for native vegetation, including threatened and endangered species. In areas of limited habitat suitability, minimal damage can be highly detrimental to a species. Monz (2021) suggests that effective management strategies can work to minimize ecological disturbance caused by recreational activities and sustain goals for both recreation and conservation.

3.15.2.1. Impacts of Alternative A – Proposed Action

Designated campsites would avoid areas of known populations or areas of suitable habitat to offer protection to these species. New campsite creation would be curtailed and the inadvertent damage to these habitats would be reduced. Threats identified by the USFWS including habitat loss and fragmentation and OHV use would be minimized.

Design features were developed based upon USFWS guidance to minimize impacts to threatened and endangered species habitats:

- 1. If designated dispersed campsites are to be located in potential habitats, pre-project habitat assessments would be completed, including 300-foot buffers to determine habitat suitability.
- 2. Designated campsites or related surface disturbances or use would be prohibited within 300 feet of occupied habitats.
- 3. If new populations are identified within 300 feet of designated campsites, these locations would be closed and removed unless additional consultation with the USFWS provides appropriate mitigation measures.

3.15.2.2. *Impacts of Alternative B – No Action Alternative*

Unmanaged dispersed camping activities would continue to potentially create damage to threatened and endangered species habitat. New campsite creation and association off-road travel would not be addressed, continuing the expansion of campsites into otherwise undisturbed areas. This disturbance can compact soils and damage native vegetation, creating a foothold for competition with invasive species. By altering habitats, the limited suitable habitats for threatened and endangered species may be reduced and/or fragmented.

3.15.2.3. Cumulative Impacts

The CIAA for threatened and endangered species is the entire SRMA. Recreational use including activities such as dispersed camping, motorized use, mountain biking, and hiking are popular. Livestock grazing occurs on allotments throughout the SRMA. Oil and gas development and mineral exploration have and continue to take place.

Reasonably foreseeable actions include increased recreational use, including increased use of dispersed camping resources. Livestock grazing is expected to continue at its current use levels. Oil and gas activity is expected to continue to increase at a similar rate to what it has in the past.

Interest in lithium could mean increased mineral exploration. Changes in precipitation patterns and warmer temperatures are expected in future years.

The cumulative impacts include surface disturbing activities such as recreational use, development (recreation, mining, mineral and livestock infrastructure), and livestock grazing. As these uses are expected to continue and grow, increased pressure is put on habitats suitable for threatened and endangered species. Without proper management, recreational use, such as new campsite creation and off-road travel could spread into areas of suitable habitat and cause lasting impacts to the species. Recreational activities, development and livestock grazing have the capability to alter habitats by soil compaction, introduction of invasive species, and damage to native species. These actions can create undue pressure on threatened and endangered species habitat, especially as they continue to expand into the undisturbed landscape. In addition to cumulative impacts caused by surface disturbance, climate change has the potential to reduce the possibility of habitats bouncing back from disturbance. If habitats change to a certain degree, it becomes more likely that an altered vegetation community would result and would no longer be suitable for threatened or endangered species to survive.

3.16. Issue 16: Vegetation – General

How does unmanaged dispersed camping impact general vegetation communities?

3.16.1. Affected Environment

Vegetation is typical of both desert upland and pinyon pine-juniper environments, including saltbush, greasewood, shadscale, blackbrush, Indian ricegrass, sagebrush, wild rye, and rabbitbrush. The majority of the project area lies in four vegetation zones: blackbrush, pinyon pine-juniper, desert scrub, and dunes. The canyon bottoms contain a variety of riparian vegetation, including cottonwood, and willows. Native vegetation provides forage for livestock grazing as well as forage and habitat for wildlife, and serves a major role in the hydrologic cycle as an interface between the soil and the atmosphere. Some native vegetation communities (such as blackbrush) show a poor history of revegetation, and some communities (such as sagebrush) have high percentages of conversion to cheatgrass.

3.16.2. Environmental Impacts

3.16.2.1. Impacts of Alternative A – Proposed Action

Managing camping has the potential to benefit vegetation by concentrating all camping to designated campsites. Each time a person choses a new campsite, vegetation is inadvertently damaged or crushed. Indirect changes in physiological process via dust deposition leads to reduced stomatal conductance, increased transpiration rates, decreased photosynthetic rates, and decreased reproductive rates. If the campsite is used repeatedly, the vegetation near the campsite can die. By allowing camping only in designated campsites, in carefully chosen areas, vegetation would be preserved.

Designating campsites would reduce soil compaction. Less soil compaction could benefit vegetative habitat because soil compaction can alter habitats by changing soil characteristics, reducing pore spaces and increasing soil density, which results in reduced water infiltration, reduced seedling establishment, and increased competition with weeds more adapted to disturbed conditions. Concentrating camping to designated sites would limit soil compaction to those sites and would curtail additional soil compaction that would occur if new campsites were to be created.

3.16.2.2. Impacts of Alternative B – No Action Alternative

Dispersed camping would continue with the unregulated creation of new campsites and access roads. Damage to vegetation resources would continue as plants get removed and crushed by vehicles and visitors. Without designated sites, campsite creep would continue into areas of undisturbed vegetative communities, introducing soil disturbance and invasive species. Continued use of new sites may mean certain species of vegetation are less likely to be able to revegetate without further management intervention.

Disallowing the collection of firewood would reduce the loss of vegetation because campers would not be gathering vegetation adjacent to campsites, such as shrubs. This would provide further protection to vegetation.

3.16.2.3. Cumulative Impacts

The CIAA for general vegetation is the entire SRMA as it provides varied habitats for a wide range of plant species. Recreational use including activities such as dispersed camping, motorized use, mountain biking, and hiking are popular. Livestock grazing occurs on allotments throughout the SRMA. Oil and gas development and mineral exploration have and continue to take place.

Reasonably foreseeable actions include increased recreational use, including increased pressure on dispersed camping resources. Livestock grazing is expected to continue at its current use levels. Oil and gas activity is expected to continue to increase at a similar rate to what it has in the past. Interest in lithium could mean increased mineral exploration. Changes in precipitation patterns and warmer temperatures are expected in future years.

Cumulative impacts to vegetation include surface disturbing actions such as recreational activities and development. Dispersed camping and off-road travel can cause inadvertent damage to vegetation by crushing plants and compacting soils. Repeated use of disturbed sites can result in certain species of vegetation less likely to revegetate and invasive species may eventually colonize the area. As campsites continue to be used, they tend to expand in size, pushing disturbance further into untrammeled areas and damaging more vegetation. Vegetation disturbance can create a marred landscape, decreasing the recreational value and viewshed for the visitor. It also puts pressure on wildlife species that rely on these vegetive communities for forage. Development and livestock grazing also creates disturbance to vegetative communities and can introduce invasive species which may outcompete native species. Without proper design or management practices, these actions could cause widespread disturbance which can alter the vegetative community and reduce available forage for wildlife and livestock.

3.17. Issue 17: Woodlands/Forestry

How does unmanaged dispersed camping impact woodland resources?

3.17.1. Affected Environment

Scattered stands of pinyon pine and juniper dot the landscape throughout the project area. These species are long-lived with low recruitment due to the harsh growing climate. Cottonwood trees grow in canyon bottoms and riparian areas along the Green River. The trees provide shade to campers as well as privacy and scenery. In areas popular for dispersed camping, many of the trees have been stripped of limbs to provide campfire fuel.

3.17.2. Environmental Impacts

3.17.2.1. Impacts of Alternative A – Proposed Action

Supplementary rules disallowing wood cutting, gathering and collection would provide benefits to the various tree species growing in close proximity to campsites. Pinyon pines and junipers would be allowed to grow unharmed and continue providing shade and scenery for the campers. Cottonwood trees would continue to grow and provide shady campsites along the Green River.

Designated campsites would further protect woodland resources by concentrating camping use to disturbed areas which would limit vehicular impacts to trees, including soil compaction. Concentrating use to designated campsites and roads would also disincentivize campers from driving off-road in search of campsites with healthy trees that provide shade.

3.17.2.2. Impacts of Alternative B – No Action Alternative

Campers would continue to strip the trees of bark and limbs to fuel their campfires. These actions stress slow growing trees and can ultimately lead to their death. Dead and/or stripped trees have less value to visitors as resources for shade, privacy, and scenery.

3.17.2.3. Cumulative Impacts

The CIAA for woodland resources is the entire SRMA. Past and present recreational activities including camping, motorized use, mountain biking, and hiking occur throughout the CIAA. Livestock grazing occurs in winter months; cattle use pinyon pine and juniper for shade. There is the occasional occurrence of wildland fires.

Reasonably foreseeable actions include increased recreation use and continued livestock grazing.

The cumulative impacts to woodland resources include stress to trees when stripped for firewood, and soil compaction from human and livestock use. Under the No Action Alternative, no supplementary rules would be created disallowing wood collection and trees would continue to be stripped of bark and limbs for campfires. When trees have been sufficiently stripped, subsequent campers may then go looking for a new campsite with healthy trees to provide shade and firewood.

Stripping trees of bark and limbs creates stress on the trees. Additional stress from soil compaction and reduced water infiltration due to motor vehicle and foot traffic can further stress them. If not managed, the cumulative impacts may lead to dead and dying trees that offer little value to recreationists, livestock and wildlife.

3.18. Issue 18: Paleontology

How does unmanaged dispersed camping impact paleontological resources?

3.18.1. Affected Environment

The exposed geologic formations with paleontological resources have a BLM Potential Fossil Yield Classifications (PFYC) ranging from PFY3 (moderate potential for occurrence) to PFY5 (very high potential for occurrence). The geologic formations with a high to very high potential for fossil exposures at the surface are the Jurassic-aged Morrison (PFYC 5), Entrada (PFYC 4), Navajo (PFYC 5), and Kayenta (PFYC 4). Multiple known fossil occurrences, such as fossil remains and/or tracks, indicate that the geologic formations with high PFYC values may yield paleontological resource throughout their extent. Paleontological excavation sites are known to exist.

3.18.2. Environmental Impacts

3.18.2.1. Impacts of Alternative A – Proposed Action

Paleontological resources can be damaged by natural processes over time. Unintentional as well as intentional human interaction with exposed paleontological resources can accelerate the damage. The Proposed Action to manage camping would limit dispersed camping to designated sites in areas less prone for encounters with paleontological resources.

Designating campsites would also reduce cross-country motorized travel associated with dispersed camping by concentrating disturbance to designated routes. The proposed camping restrictions would decrease the chance of human interaction with paleontological resources and increase BLM oversight to allow for better protection of the paleontological resources.

3.18.2.2. Impacts of Alternative B – No Action Alternative

Paleontological resources would continue to be threatened by a less managed approach to camping. Direct and indirect impacts are probable as people would continue to camp where they wish. Visitors would continue to drive off the designated route system seeking dispersed campsites which creates the potential to damage paleontological resources. This situation may worsen with time as visitation numbers increase.

Fossil material can be difficult to visually distinguish from the surrounding rock, and exposures are not always obvious, so while much of the damage to paleontological resources may be inadvertent, these resources are non-renewable and no amount of damage to them is acceptable.

3.18.2.3. Cumulative Impacts

The CIAA for paleontological resources is the entire SRMA. The SRMA has been and is a venue for recreation activities of all types, including dispersed camping. Grazing occurs throughout the SRMA. Minerals activities include oil and gas development (which continues to this day), as well as lithium and potash exploration and past uranium mining activity.

Reasonably foreseeable actions include increased recreation use of all types. Grazing is expected to continue at current use levels. Oil and gas activity is expected to increase at approximately the same rate as it has in the past, with a doubling of the oil wells currently drilled. Interest in lithium means that lithium mining could become established as the demand for lithium increases.

The Proposed Action would reduce the cumulative impacts to the paleontological resources through designating dispersed campsites. Designated campsites would be placed in areas of lower PFYC and would contribute to their long-term protection. The cumulative impacts of the No Action Alternative would lead to possible degradation of paleontological sites as people continue to create new and expand existing dispersed campsites.

CHAPTER 4. PUBLIC INVOLVEMENT, CONSULTATION AND COORDINATION

4.1. Public Involvement

During preparation of this EA, the public was notified of the project by posting on the BLM's ePlanning website on August 9, 2021. The BLM received an email from one member of the public as a result of this posting who expressed his concern and asked for answers to some questions, which were supplied via email. The BLM also received a telephone call in support of the Proposed Action.

The proposal was discussed at the public meeting of Trail Mix, Grand County's non-motorized trail committee on August 10, 2021. A member of the Grand County Commission was in

attendance at this meeting. Trail Mix, and its County Commission member, expressed support for the Proposed Action.

A public comment period was held on the EA from May 23 to June 22, 2022. The comments received, as well as the BLM's response to those comments, are summarized in Appendix C.

4.2. List of Preparers

BLM Preparers

Name	Title	Responsible for the Following Section(s) of this Document		
Bill Stevens	Outdoor Recreation Planner	Wilderness, Environmental Justice, Socioeconomics, L with Wilderness Characteristics, Natural Areas, Wild Scenic Rivers		
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Gabe Bissonette	Aquatic Ecologist	Wetlands/Riparian Resources, Floodplains		
Pam Riddle	Wildlife Biologist	T&E Animals, Wildlife, Migratory Birds, Utah BLM Sensitive Species, T and E Plants		
Charlie Fischer	Natural Resource Specialist - Fuels	Invasive Weeds		
Josh Relph	Fuels/Fire	Fuels Specialist		
Aaron Vollmer	Rangeland Specialist	Livestock Grazing, Rangeland Health Standards, Soils, Woodlands/Forestry, Vegetation		
Lori Hunsaker	Archeologist	Cultural, Native American		
Jennifer Whittington	Geologist	Geology/Minerals/Energy Production, Paleontology, Water Resources,		
Lisa Wilkolak	Realty Specialist	Lands/Access		
Katie Stevens	Outdoor Recreation Planner	Team Lead, Recreation, Visual Resources, ACECs		

4.3. **REFERENCES**:

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APPENDIX A: INTERDISCIPLINARY TEAM CHECKLIST

Project Title: Managing Camping within Labyrinth Rims/Gemini Bridges Special Recreation

Management Area

NEPA Log Number: DOI-BLM-UT-Y010-2021-0094-EA

Project Leader: Katie Stevens

DETERMINATION OF STAFF: (Choose one of the following abbreviated options for the left column)

NP = not present in the area impacted by the proposed or alternative actions NI = present, but not affected to a degree that detailed analysis is required

PI = present with potential for relevant impact that need to be analyzed in detail in the EA

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 Issues Considered (Includes Supplemental Authorities Appendix 1 H-1790-1)

Determi- nation	Resource	Rationale for Determination	Signature	Date
NI	Air Quality Greenhouse Gas Emissions	The Proposed Action of managing camping opportunities has the potential to provide minimal reduction of dust sources and production. Greenhouse gas emissions are not measurably affected from camping activities.	Nate Huber	7/7/21
ΡΙ	Floodplains	The Proposed Action would improve the 100-year Green River floodplain, associated with critical habitat for T&E fish, by providing camping opportunities only at sustainable sites, minimizing the proliferation of campsites, better managing human waste, and by restricting wood cutting/gathering. Positive impacts are expected within floodplains associated with intermittent and perennial streams and confluence habitats.	Gabe Bissonette	7/27/21
PI	Soils	The Proposed Action would reduce new surface disturbances that result from expanding dispersed camping.	Aaron Vollmer	7/7/21
NI	Water Resources/Quality (drinking/surface/ground)	The Proposed Action is not expected to negatively impact surface or groundwater resources.	Jennifer Whittington	7/7/21
ΡΙ		The Proposed Action would improve riparian zones located primarily along the Green River by providing camping opportunities only at sustainable sites, minimizing the proliferation of campsites, better managing human waste, and by restricting wood cutting/gathering.	Gabe Bissonette	7/27/21
NP	Areas of Critical Environmental Concern	There are no ACECs within the proposal area.	Katie Stevens	7/6/21
PI	Recreation	Would provide sustainable camping opportunities in a popular area; the resources that people come to the SRMA to enjoy	Katie Stevens	7/6/21

Determi- nation	Resource	Rationale for Determination	Signature	Date
		would be improved. May negatively impact those who wish to camp wherever they please.		
PI	Wild and Scenic Rivers	The Green River is designated as a Wild and Scenic River. Boating-based camping occurs within its corridor.	Bill Stevens	8/4/21
PI	Visual Resources	Would improve Visual Resource Management by constraining dispersed camping to designated sites. The short-term visual impact of camping would be restricted to designated sites and thus the visual impact would be lessened.	Katie Stevens	7/6/21
NP	BLM Natural Areas	There are no BLM Natural Areas within the project area. See 2008 Moab RMP.	Bill Stevens	8/4/21
NI	Socioeconomics	Minimal impact relative to planning area economy. Dispersed camping would not be eliminated but managed.	Bill Stevens	8/4/21
NP	Wilderness/WSA	There are no WSAs within the project area. See 2008 Moab RMP.	Bill Stevens	8/4/21
PI	Lands with Wilderness Characteristics	Potential benefit from managed dispersed camping with likely reduced surface disturbance.	Bill Stevens	8/4/21
PI	Cultural Resources	Changes in camping rules would ultimately minimize effects to cultural resources. Once the rules are in place, proposed designations would be subject to Class III survey, and designations would be designed to avoid effects to cultural resources.	Lori Hunsaker	7/13/21
PI	Native American Religious Concerns	Tribal consultation letters sent on 7/27/21 and consultation will be ongoing.	Lori Hunsaker	7/13/21
NI	Environmental Justice	No Environmental Justice populations identified in planning area. See 2008 Moab RMP and 2016 Moab MLP.	Bill Stevens	8/4/21
NI	Wastes (hazardous or solid)	The Proposed Action would manage the disposal of human waste in the project area.	Jennifer Whittington	7/7/21
PI	Threatened, Endangered or Candidate Animal Species	Suitable habitats for the Mexican spotted owl, Southwestern willow flycatcher and yellow-billed cuckoo are present. Critical Habitat, populations, and/or individuals for all four endangered Colorado River fish occurs.	Pam Riddle Gabe Bissonette	7/14/21 2/8/22
PI	Migratory Birds	Migratory birds, including various raptors, golden eagles and bald eagles are known to utilize the project area for nesting, foraging and overwintering.	Pam Riddle	7/14/21

Determi- nation	Resource	Rationale for Determination	Signature	Date
PI	Utah BLM Sensitive Species	Minimal habitat opportunity is found in the project area for prairie dogs and burrowing owls due to limited soil suitability. Ferruginous hawks are not expected to nest in project area due to limited nesting structure availability. Therefore, these three species will not be affected to a degree requiring further analysis. Several sensitive bat species may forage or roost in the project area; no maternity roosts are known of in this area. Minimal site-specific habitat alteration may occur but is not expected to reduce insect forage base. No impacts from project activity are expected during foraging or roosting periods. Therefore, bat species will not be affected to a degree requiring further analysis. Habitat opportunity is found in the SRMA for kit fox. This species is typically associated with habitats consisting of prairies, semi-arid grasslands, plains, deserts, semi-desert grasslands and open shrublands. Flannelmouth sucker, bluehead sucker, and roundtail chub utilize aquatic habitats and inundated floodplains adjacent to or within the project area.	Pam Riddle	7/14/21
ΡΙ	Fish and Wildlife Excluding USFWS Designated Species	Habitat for pronghorn antelope, desert bighorn, and mule deer is identified by UDWR within the SRMA. Bighorn sheep and general wildlife (including pronghorn and mule deer) habitats will be analyzed.	Pam Riddle	7/14/21
PI	Invasive Species/Noxious Weeds	Unmanaged camping has the potential to spread noxious weeds from new surface disturbance.	Charlie Fischer	8/31/21
ΡΙ	Threatened, Endangered or Candidate Plant Species	Navajo sedge – suitable geology is in the SRMA. Jones cycladenia – current model (IPaC) identifies habitat potential in the SRMA. San Rafael cactus – USFWS IPaC identifies potential area of interest in portions of the SRMA.	Pam Riddle	7/14/21
NI	Livestock Grazing	Designating campsites would occur in relatively small areas of allotments and not impede on grazing activities. Designating sites would concentrate use to specific areas, reducing additional disturbance to forage.	Aaron Vollmer	7/7/21

Determi- nation	Resource	Rationale for Determination	Signature	Date
NI	Rangeland Health Standards	Designating campsites would not influence the ability of lands to meet rangeland health standards.	Aaron Vollmer	7/7/21
PI	Vegetation Excluding USFW Designated Species	The Proposed Action would concentrate use to designated areas and result in less disturbance to vegetation.	Aaron Vollmer	7/7/21
PI	Woodland / Forestry	The Proposed Action would disallow wood collecting, providing protection to woodland resources.	Aaron Vollmer	7/7/21
NI	Fuels/Fire Management	Designating campsites may provide minimal reduction of wildland fire risks from campfires as dispersed camping areas would be more organized and fires would be required to be contained within fire pans.	Josh Relph	7/12/21
NI	Geology / Mineral Resources/Energy Production	Mineral resources and energy production are present in the area but would not be impacted by the Proposed Action and do not require further analysis. Active mining claims exist in T22S R20E Sec 31 SW.	Jennifer Whittington	7/7/21
NI	Lands/Access	Subject to valid existing rights.	Lisa Wilkolak	8/17/21
PI	Paleontology	The underlying geologic formations in the proposed area have a potential fossil yield classifications ranging from PFY3 to PFY5, and the proposed camping restrictions would significantly decrease the chance of interaction between humans and the paleontological resources in the area.	Jennifer Whittington	7/9/21

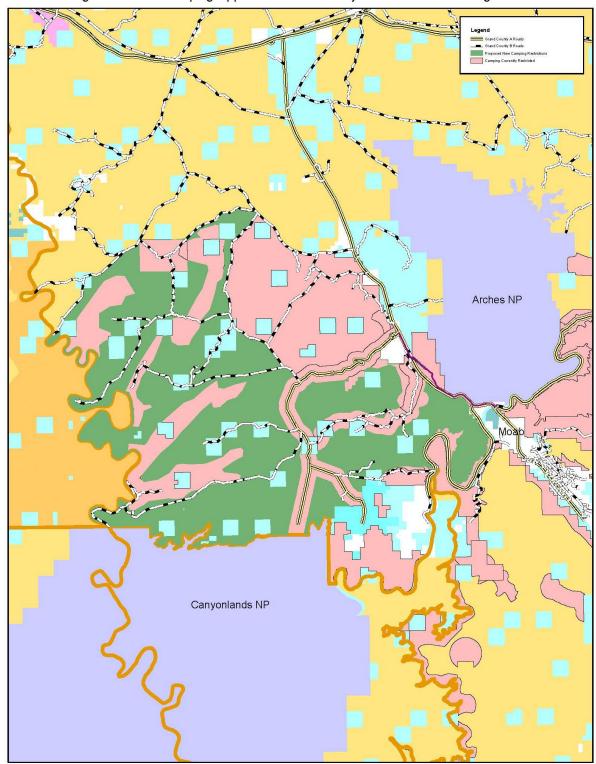
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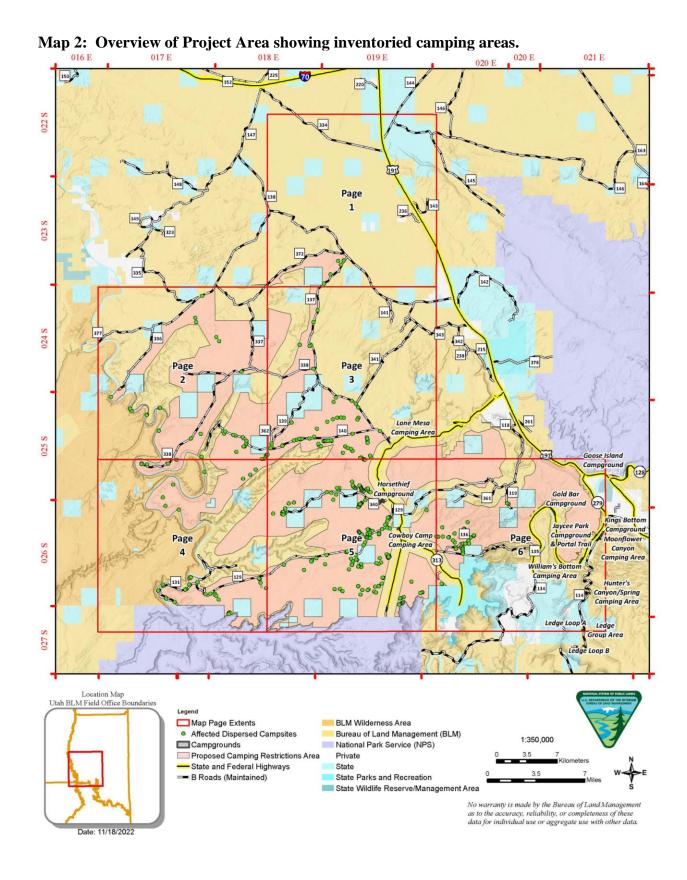
Reviewer Title	Signature	Date	Comments
Environmental Coordinator			
Authorized Officer			

APPENDIX B: MAPS

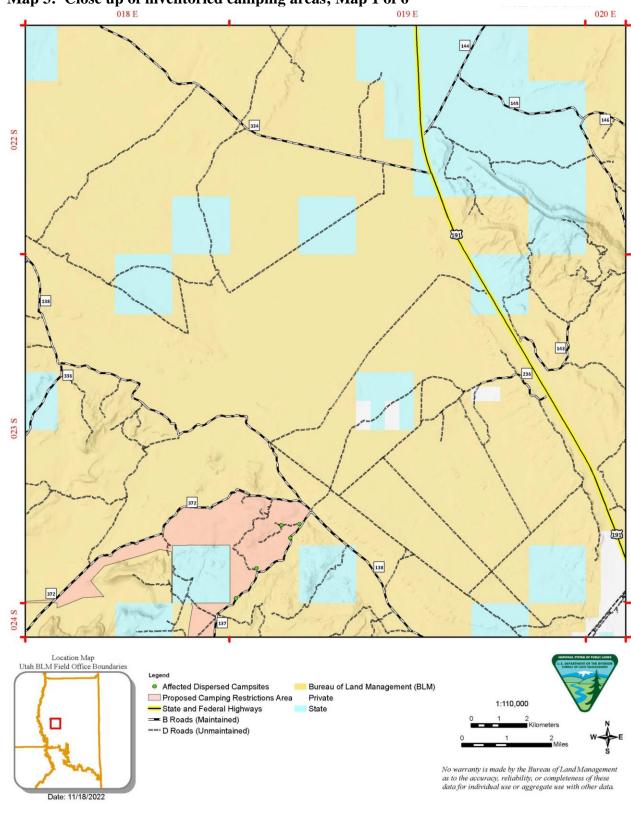
Map 1: Overview of Project Area

Supplementary Rules on Camping and Wood Gathering: Providing Sustainable Camping Opportunities in the Labyrinth Rims/Gemini Bridges SRMA

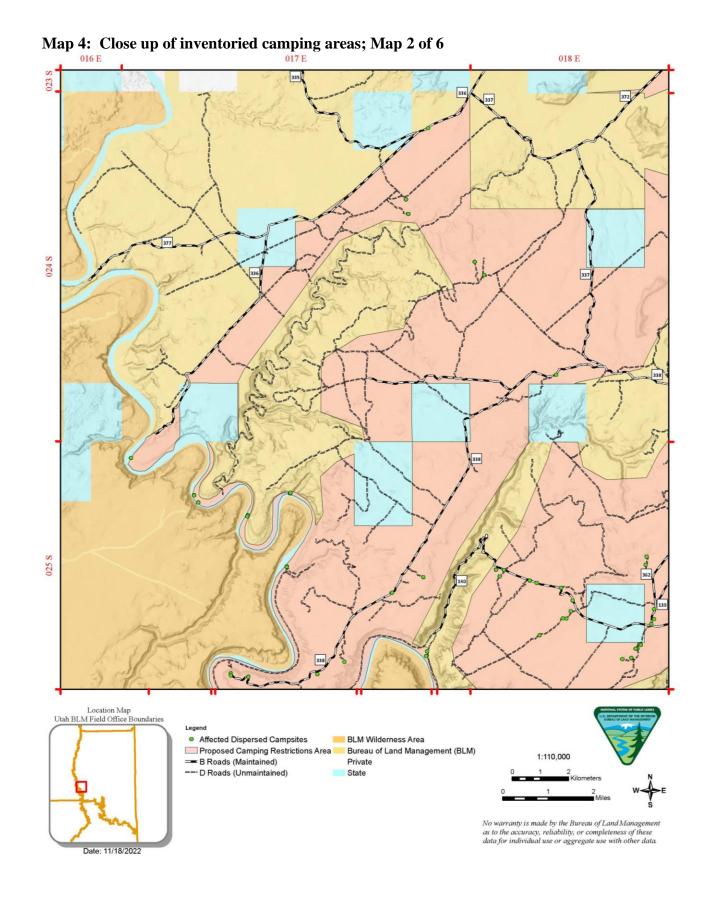


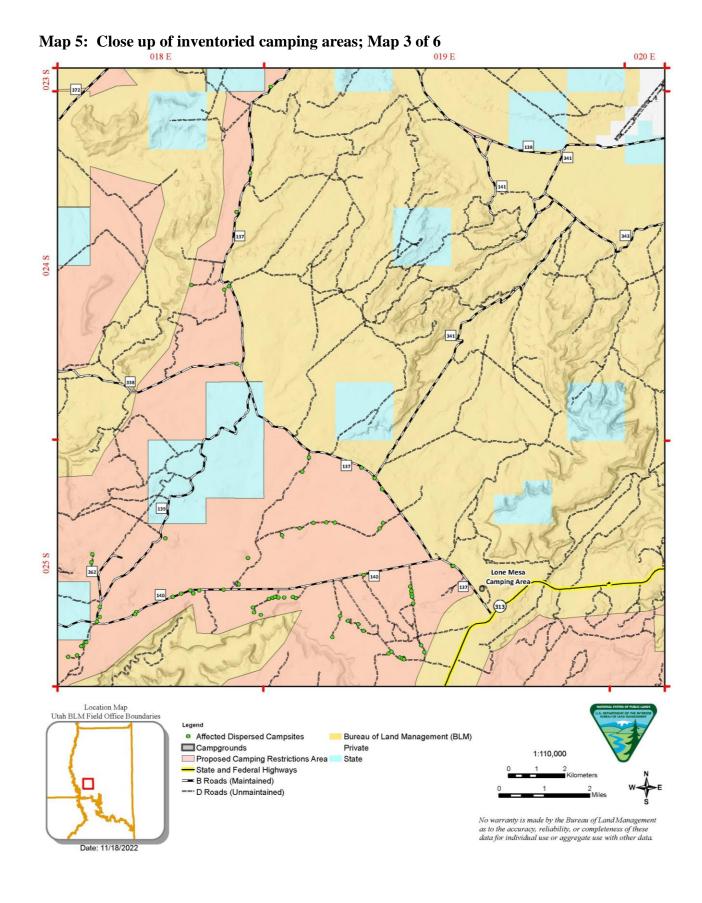


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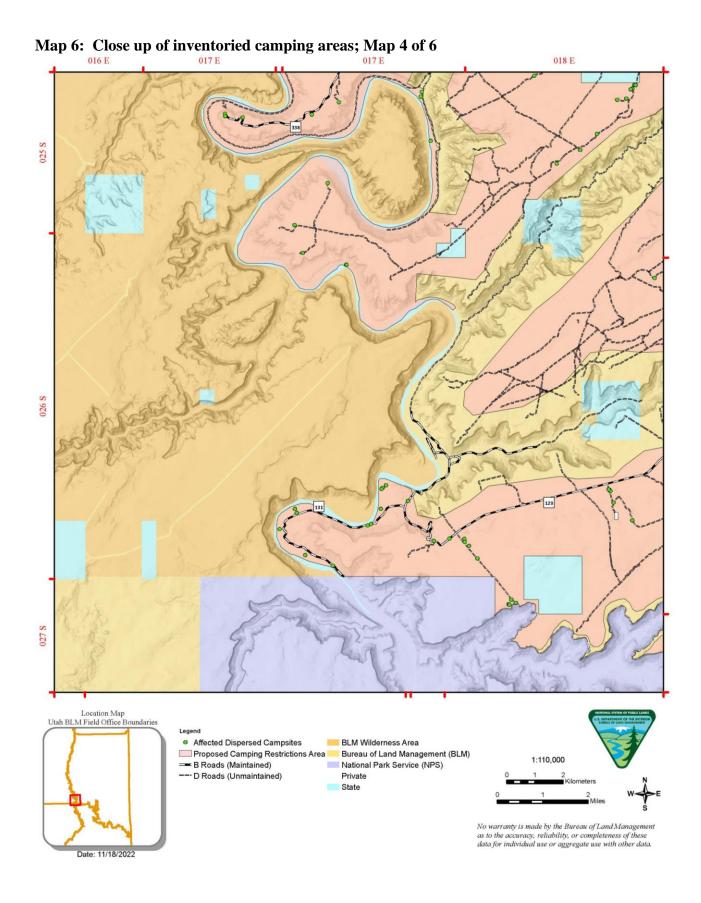


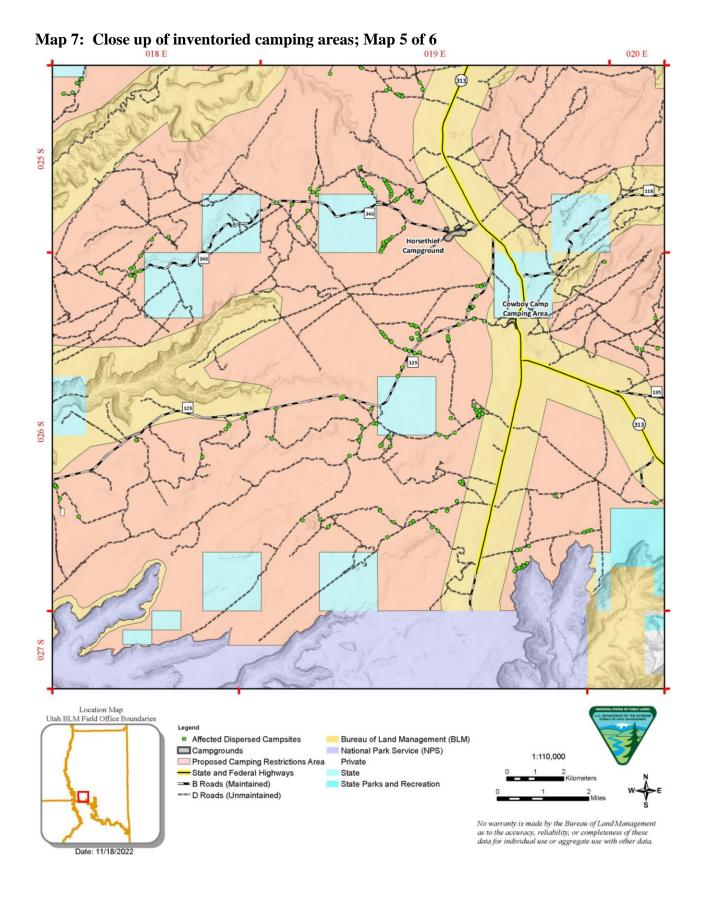
Map 3: Close up of inventoried camping areas; Map 1 of 6

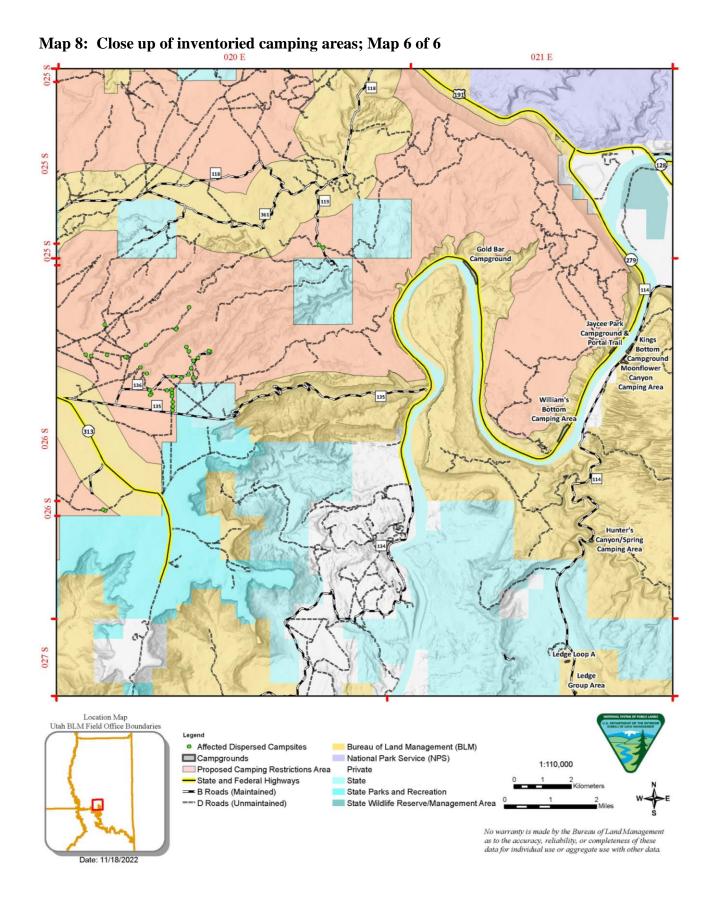




Appendix B: Environmental Assessment DOI-BLM-UT-Y010-2021-0094-EA







APPENDIX C: COMMENT RESPONSE REPORT

The Bureau of Land Management (BLM), Moab Field Office (MFO) requested comments on the Environmental Assessment from May 23 to June 23, 2022. The project was initially posted on the BLM's ePlanning website on August 9, 2021. Notification of the draft EA was distributed via press release, email and the ePlanning NEPA project log.

The comments received and the BLM responses are summarized below. Edits and clarifications have been made to the EA based on the input received.

General Comments

Summary of Comments: BLM is obligated to manage visitation and visitation levels in a sustainable fashion. The BLM's proposal to vet existing dispersed sites and designate only those sites with minimal resource impacts strikes a good compromise between providing opportunities for dispersed camping and protecting the many resources found in this area. The criteria for site selection are sound and these actions should be taken as soon as possible.

BLM Response: The BLM is committed to balancing resources throughout the Moab Field Office.

Summary of Comments: Unmanaged dispersed camping is a valued opportunity and should not be curtailed.

BLM Response: The BLM is obligated to manage for sustained yield as well as for multiple use. The Proposed Action strikes a balance between protection of resources and the provision of dispersed camping opportunities. The intent is to manage dispersed camping and not to eliminate it.

Summary of Comments: How will the Labyrinth Rims/Gemini Bridges Travel Management Plan impact the Proposed Action of managing dispersed camping?

BLM Response: The Labyrinth Rims/Gemini Bridges Travel Management Plan is an implementation level plan and can be adjusted on a case-by-case basis. That is, if campsites to be designated meet all the criteria laid out in the Proposed Action but do not have a designated road to them, a designated road can be added to the Travel Plan for the purpose of the use of those campsites. A sentence has been added to this EA in Section 2.1 stating that routes could be added to any resultant Travel Plan for the purposes of dispersed camping. This also is provided for in the Moab RMP, TRV-3 (page 126) which states: the Travel Plan "may be modified through subsequent implementation planning ... on a case-by-case basis".

In addition, decision TRV-6 of the Moab RMP states: "OHV access for game retrieval, antler collection and dispersed camping will only be allowed on designated routes (designated routes/spurs have been identified specifically for dispersed camping; parking areas associated with dispersed campsites will be marked during Travel Plan implementation). Adherence to the Travel Plan is required for all activities". This means that dispersed camping parking areas may be utilized if they are marked as part of the current Travel Plan. TRV-6 has been added to the EA in Section 2.4.

Summary of Comments: The BLM should provide education to the public on the existing management prescriptions in the area.

BLM Response: Currently, there are no restrictions on dispersed camping within the project area. As management prescriptions are added, extensive education will be provided to the public, including on-the-ground signing. The availability of designated campsite

maps and the rules governing their use will be posted online on both the BLM and Grand County websites. This has been clarified in Section 2.1.

Purpose and Need

Summary of Comments: Dispersed camping on public lands near Moab is an important use for visitors and locals alike, but the unmanaged proliferation of disturbed areas in recent years has resulted in degraded ecological and cultural resource conditions and a decline in quality experiences across all user groups.

BLM Response: The Proposed Action is intended to restore ecological conditions while providing quality camping experiences. Section 1.2 of the EA states: "The purpose of the BLM action is to provide sustainable and sanitary camping opportunities while minimizing resource damage from dispersed camping and associated activities".

Summary of Comments: The BLM needs to expand the purpose and need statement to include why the current situation is an issue that needs managing.

BLM Response: The Purpose and Need statement in Section 1.2 briefly summarizes the need for the Proposed Action and the objective (purpose) the BLM is trying to reach. The action alternative responds to the need as described in the Purpose and Need statement (see Chapter 3). Each of the Affected Environment sections, by resource, details the impacts of unmanaged dispersed camping on that particular resource.

Proposed Action

Summary of Comments: The BLM is complying with its duties under FLPMA by managing public lands in a way that protects the natural and cultural resources by selecting sites based on resources (wildlife, vegetation, cultural, riparian, visual, wilderness, etc.) while allowing free dispersed camping in spectacular locations.

BLM Response: The purpose and need of the Proposed Action is to balance natural and cultural resources while allowing for their use and enjoyment by the camping public.

Summary of Comments: The BLM should not publicize an inventory of dispersed campsites prior to designation to protect resources.

BLM Response: The BLM has provided a map of inventoried campsites in the project area in the EA to provide more detail concerning the Proposed Action. The campsite inventory does not include potential reasons for designation or closure to protect resources. The maps are included in Appendix B.

Summary of Comments: The BLM should further analyze camping use by providing the public the number and location of dispersed campsites that are under consideration and solicit more public input before limiting dispersed camping to designated sites.

BLM Response: The BLM inventoried dispersed campsites in the project area in response to the public comment period. This information has been added to the EA in Sections 2.1, 3.3.1 and in Maps in Appendix B.

Summary of Comments: BLM should proactively work to repair impacts to undesignated locations that have suffered a loss in naturalness, suitability as habitat, and damage to cultural sites as a result of past unmanaged camping use.

BLM Response: Section 2.1 (Proposed Action) states: "Existing dispersed campsites that are not designated would be signed, reseeded, and restored to enhance recovery from the past impacts of dispersed camping".

Summary of Comments: The BLM overemphasizes' wildlife protection and provides too wide of criteria for campsite designation (e.g., threatened and endangered species habitat, requiring dogs to be on leash, suitable raptor habitat...)

BLM Response: The wildlife protections outlined in the EA follow USFWS guidance. The BLM has an obligation to manage wildlife habitat so that both threatened and endangered species and general wildlife species can thrive. Similarly, the BLM has an obligation to provide for public enjoyment, including dispersed camping. The criterion that details which campsites could be designated in raptor habitat (Section 2.1) has been changed to:

Designated campsites would not be located within the USFWS raptor spatial buffer (generally 0.5 miles) of nesting structures for raptors and golden eagles.

The reason that dogs and other pets are required to be under control is so they do not chase animals. This is detailed in the environmental impact sections for wildlife. If dogs and other pets are controlled, the disturbance of wildlife is reduced, allowing for the designation of more campsites.

Summary of Comments: The BLM should consider designating more campsites adjacent to motorized trail networks. The Draft EA states that campsites would not be placed within view of popular biking, hiking or 4x4 routes. While this may be appropriate for hiking and biking trails, 4x4 enthusiasts generally want dispersed campsites. More campsites should be designated near motorized trail networks.

BLM Response: The wording of the EA has been changed to:

Viewsheds of popular motorized and non-motorized trails would be considered when campsites are designated. Popular trails include but are not limited to:

Designated non-motorized trails Metal Masher jeep route Gold Bar Rim jeep route Golden Spike jeep route Poison Spider jeep route Seven Mile Rim jeep route

The EA now lists the trails within the Labyrinth project area where special consideration to viewsheds would be exercised. The list of motorized trails was adopted from that in the Moab Master Leasing Plan, which applied an No Surface Occupancy stipulation to a subset of popular jeep trails. The list was also discussed with representatives of the Red Rock 4-Wheelers (Jeep Safari hosts) who indicated that very popular 4x4 routes should not be adjacent to designated campsites, but that less-used 4x4 routes could sustain some designated sites.

Summary of Comments: The BLM should change the proposed supplementary rules to allow the collection of dead and downed wood.

BLM Response: The Proposed Action retains the prohibition of the collection of dead and downed wood. This wood is part of the visual landscape; its collection is often accompanied by off-road travel, leading to the visual degradation of the areas that people come to visit.

Summary of Comments: The Draft EA mistakenly states that criteria apply to bighorn sheep which would cause a much broader effect than the BLM intended. Please edit this criterion to state bighorn sheep *lambing* habitat.

BLM Response: The correction has been made in the EA (Section 2.1). Desert bighorn lambing habitat (46,314 acres) was restricted to camping only in designated sites in the Moab Resource Management Plan. The criteria are repeated in the current EA in the event that desert bighorn lambing habitat changes. However, the desert bighorn lambing habitat as defined today is already restricted to camping only in designated sites.

Summary of Comments: Supplementary rules proposed would align with Utah DNR Forestry, Fire and State Lands requirements on navigable streams below the high-water mark.

BLM Response: The BLM appreciates the support of Utah DNR.

Summary of Comments: The BLM should reconsider the proposed supplementary rule requiring the possession and use of a fire pan by changing it to requiring all fires be in fire pans. Building a campfire is not a spontaneous event since visitors are required to bring their own firewood; those intending to have a campfire would then be required to also bring their own fire pan.

BLM Response: The wording of the proposed rule in Section 2.1 states: Possession and use of a fire pan would be required for use at all designated campsites, except at campgrounds where metal fire rings are provided.

Since one is required to bring one's own wood, building a campfire is not spontaneous and those intending to build a fire could also bring their own fire pan. The intention of the fire pan is to contain the ashes and prevent unsightly disturbance (as well as fires). A fire pan can be as simple as a garbage can lid or any other metal containment structure.

Summary of Comments: The BLM should change blanket restrictions in areas of sensitive plants to allow for exceptions if the plants are protected by fencing.

BLM Response: The few plants (Jones *cycladenia*, Navajo sedge, San Rafael cactus, and Ute ladies' tresses) that have criteria are those managed by the USFWS and complying with their stipulations is required. The Cisco milkvetch, while not listed, is covered under a Conservation Agreement with USFWS and is covered by the same criteria. Campsites would be inventoried for these plants and not designated if the actual plants are within 300 feet of the campsite. Since these plants are not common, this is not expected to alter the designation of more than a few campsites.

Alternatives Development

Summary of Comments: An alternative should be added that analyzes designating the maximum number of campsites possible and only restricts camping in areas that are showing severe resource damage.

BLM Response: The intent of the Proposed Action to is remove only those campsites which pose unacceptable resource damage. The No Action Alternative does not restrict camping to designated sites, and thus analyzes the maximum campsites possible.

Summary of Comments: The BLM should consider camping restrictions for the protection of wildlife to be seasonal only.

BLM Response: Sections 3.9, 3.10 and 3.11 detail the effects of dispersed camping on various categories of wildlife. In each of those sections, predictability of human behavior is key to wildlife coexisting with recreation activities, including dispersed camping. Seasonal limitations are very difficult to operationalize, but more importantly, they do not allow wildlife species to become habituated to people camping in predictable locations. A further difficulty with seasonal restrictions is that the season most important to wildlife populations, springtime, is the season that is most in demand by recreationists of all types,

including dispersed campers. For these reasons, the wildlife camping criteria do not include seasonal restrictions.

Summary of Comments: The BLM should require visitors to obtain permits for any dispersed camping. This permit system could include watching an educational video.

BLM Response: To permit each and every dispersed camper, even those limited to designated sites, is a task that is beyond the capability of the Moab BLM and its staff. The idea of an educational video detailing approved camping behaviors has been undertaken in cooperation with neighboring San Juan County, Utah. The link to that video is: https://www.youtube.com/watch?v=nfLykEMAarA While helpful, the viewing of this video alone is unlikely to address all the resource impacts raised in this EA.

Summary of Comments: The proposed management area should be extended to include all BLM lands south of I-70. An additional alternative should be analyzed to extend the boundaries to include all BLM lands south of I-70 and east to Cisco, Utah.

BLM Response: Currently, the dispersed camping pressures are not found on the BLM lands south of I-70 but north of the Ten Mile Point Road (the northern boundary of the Proposed Action). A section has been added, Section 2.3, *Alternatives Considered but Eliminated from Detailed Analysis*, where that alternative is addressed.

Summary of Comments: An alternative analyzing managing camping along the heavily used B roads in the project area should be included. There is no need to restrict camping along D roads. The B roads could include Mineral Bottom Road, Mineral Point Road, Spring Canyon Bottom Road, and Spring Canyon Point (plus a few other shorter B roads). A distance should be established on either side of these specific road corridors in which camping is restricted to designated sites.

BLM Response: In the areas restricted to designated sites in the Moab RMP, several were along road corridors (Utah State Route 313, Long Canyon Road, Gemini Bridges Road). The result has been that unmanaged campsites proliferate right outside these boundaries. This idea is addressed in an added section, Section 2.3, *Alternatives Considered but Eliminated from Detailed Analysis*.

Summary of Comments: An alternative analyzing the BLM providing backcountry toilets and education to visitors and not manage camping through designated campsites should be included in the EA.

BLM Response: The provision of backcountry toilets everywhere that people choose to disperse camp is beyond the capacity of the Moab BLM. Toilets are initially expensive, but the larger cost is the expense of cleaning them on at least a weekly basis, as well as the cost of pumping the effluent and removing it to an approved sanitary facility. An alternative which provides backcountry toilets everywhere is not feasible.

Summary of Comments: The entire Labyrinth Rims/Gemini Bridges SRMA should be designated as a No Fires zone.

BLM Response: The BLM does not seek to prohibit all campfires, but rather to manage the impacts that campfires can impose. The Proposed Action restricts the collection of firewood and requires a fire pan to contain the unsightly ash.

General Comments on Resources

Summary of Comments: There is more and more damage and unsavory activity in favorite camping areas that are attributable to the increase of unregulated use and lack of consideration by other users - whether intentional or inadvertent. In particular, continued encroachment on

undisturbed areas of native vegetation and biocrust, 'random' turn arounds that lead to more encroachments, illegal cutting of live juniper, pinyon pine, etc. for campfires, and crowds of caravans are disheartening to see. Human waste and 'white flags' have become a more than a real problem.

BLM Response: The Proposed Action, to manage dispersed camping, attempts to address some of the resource concerns stated.

Summary of Comments: The BLM should provide more data supporting the Proposed Action, particularly visitation data.

BLM Response: Section 1.1 states the Moab BLM office hosts three million visitors per year. It is not known how many of these visitors wish to camp, nor is it known how many visitors disperse camp (in 2021, the BLM hosted 259,000 visitor days in its developed campgrounds). The best estimate of the number of visitors to the Labyrinth Project Area is provided by the traffic counters on Utah State Route 313. In 2021, over 625,000 vehicles utilized Utah State Route 313. If one assumes three people per vehicle (the number per vehicle recorded at Dead Horse Point State Park), this means that 1,875,000 people travelled Utah State Route 313. While some of these people visited only Canyonlands National Park or Dead Horse Point State Park, many also visited nearby BLM lands and an unknown number camped on BLM lands.

This information has been added to Section 1.1.

Summary of Comments: BLM should provide more information and education about dispersed camping, especially after campsites are designated. More minimum impact camping education might solve the problem.

BLM Response: The Proposed Action (Section 2.1) details some of the measures that Moab BLM intends to undertake to educate the public concerning designated sites and the proper use of these sites.

Summary of Comments: BLM should look at various Forest Service dispersed camping regimens.

BLM Response: The BLM reached out to the Manti La Sal National Forest to learn about how dispersed camping is managed in the La Sal Mountains and across the U.S. Forest Service. The U.S. Forest Service operates under a different set of rules regarding the designation of campsites. The ability to limit camping to designated sites is vested in the Forest Supervisor (the equivalent of a BLM District Manager). Generally, a Forest Service unit does an EA indicating which dispersed campsites will be designated; when the Forest Supervisor signs the Decision Record and publishes a Forest Order, the Forest may mark the campsites. This process enables the USFS to tackle much smaller units at a time, unlike the BLM. The BLM is required to publish a Federal Register Notice to change the rules regarding dispersed camping. This lengthy process makes it impractical to designate campsites in a piecemeal fashion, area by area.

Summary of Comments: The EA needs to analyze the effect of the Proposed Action on adjacent landowners, particularly SITLA lands.

BLM Response: Information has been added to Section 3.3.2.3 (Cumulative Impacts-Recreation) regarding the potential of the Proposed Action to increase camping pressures on SITLA lands.

Summary of Comments: The EA needs to analyze the effect of the Proposed Action on adjacent BLM lands, such as White Wash and Canyon Rims.

BLM Response: Information has been added to Section 3.3.2.3 (Cumulative Impacts-Recreation) regarding the potential of the Proposed Action to increase camping pressures on adjacent BLM lands such as White Wash. It is unlikely that resultant camping pressures would extend as far as the Canyon Rims Recreation Area, which does not currently see increased levels of use.

Summary of Comments: The twelve resources analyzed in the EA are not relevant to recreation. **BLM Response:** The purpose and need for the Proposed Action is to balance the demands of other resources with recreation use, including dispersed camping. Recreation is one of the resources analyzed (as is Visual Resources). Finding a balance between recreation use and natural and cultural resources requires looking at the impacts that dispersed camping has on other natural and cultural resources.

Summary of Comments: The year 2020 saw large increases in recreation use. This increased use may be an outlier and the BLM should not plan for an "out" year.

BLM Response: Dispersed camping in Labyrinth occurred with regularity prior to 2020. The future is not known, and the BLM acknowledges that 2020 and 2021 saw big increases in recreation use. The intent of the current action is to outline management prescriptions that could assist the Moab BLM in managing visitation at higher levels in a proactive fashion.

Summary of Comments: Dispersed camping issues would be solved if the current BLM laws were enforced.

BLM Response: The BLM supports the enforcement of all current laws; however, there are currently no rules on where people may and may not disperse camp in the area under consideration.

Visual Resources

Summary of Comments: The use of vehicles both cross-country and on currently unmaintained, reclaiming two-track routes has negatively impacted visual resources by disturbing soils, eliminating vegetation, and bisecting the landscape with new motorized routes and linear disturbances. VRM Class II areas must be managed to retain the existing character of the landscape, including taking proactive steps to reclaim and re-naturalize illegal user-created routes {to campsites}.

BLM Response: The purpose and need for the Proposed Action is to balance camping use with resources; visual resources is acknowledged as being impacted by unmanaged camping. Section 2.1 (Proposed Action) states: "Existing dispersed campsites that are not designated would be reseeded and restored to enhance recovery from the past impacts of dispersed camping". Undertaking this action in VRM Class II managed areas would enhance visual resources.

Lands Inventoried as Possessing Wilderness Characteristics

Summary of Comments: Under FLPMA Section 201, BLM is obligated to maintain a current inventory of all public lands that it manages. BLM should conduct an updated wilderness inventory to fill in remaining gaps in its existing inventory within the three planning areas.

BLM Response: The Moab BLM's inventory of lands with wilderness characteristics is updated regularly. The inventory in the Labyrinth area was updated for the 2016 Moab Master Leasing Plan. BLM has received no new information either internally or externally concerning these areas which would invoke new Wilderness Inventory under Manual 6310. Manual 6310 states:

The BLM will determine when it is necessary to update its wilderness characteristics inventory. Under the following circumstances, the **BLM will consider** whether to update a wilderness characteristics inventory or conduct a wilderness characteristics inventory for the first time:

- a. The public or the BLM identifies wilderness characteristics as an issue during the National Environmental Policy Act (NEPA) process.
- b. The BLM is undertaking a land use planning process.
- c. The BLM has new information concerning resource conditions, including wilderness characteristics information submitted by the public that meets the BLM's minimum standard described in the Wilderness Characteristics Inventory Process section of this policy.
- d. A project that may impact wilderness characteristics is undergoing NEPA analysis.
- e. The BLM acquires additional lands.

[emphasis added]

The BLM has not determined that the Proposed Action warrants a re-inventory of Lands with Wilderness Characteristics.

Summary of Comments: To comply with Manual 6320, the BLM should avoid designating sites that will impact Lands with Wilderness Characteristics, including lands proposed for wilderness designation under America's Red Rock Wilderness Act.

BLM Response: Manual 6320 addresses *identification* of Lands with Wilderness Characteristics as part of a Land Use Planning Process. The current project is not an example of a Land Use Planning effort.

Summary of Comments: The BLM should designate campsites in Lands with Wilderness Characteristics.

BLM Response: The BLM has not developed a criterion disallowing the designation of campsites in Lands with Wilderness Characteristics if these campsites are already an impact upon naturalness. New surface disturbance would be avoided, as it would be throughout the field office.

Summary of Comments: Dispersed campsites within LWC areas are listed as damage sites in the Baseline Report accompanying the Labyrinth TMP.

BLM Response: Lands with Wilderness Characteristics in the Labyrinth area are not managed to preserve, protect or maintain their wilderness characteristics. However, dispersed campsites are ground disturbing and are thus an inventoried impact upon naturalness. These dispersed campsites affect the naturalness of the area and were thus included as impacts in the Baseline Report accompanying the Labyrinth Travel Plan.

Wildlife and Raptors

Summary of Comments: Ride with Respect feels that the extent of proposed restrictions for wildlife is unwarranted, resulting in the closure of many well-established and high quality campsites unnecessarily. We have developed a wildlife report to refine your guidelines, ensuring both sufficient habitat and camping opportunities where compatible. Wildlife habitat should be based upon verifiable data and not on modeled potential habitat.

BLM Response: The BLM has an obligation to maintain wildlife habitat for the benefit of that resource; the agency works in close consultation with the Utah Division of Wildlife Resources and the U.S. Fish and Wildlife Service. Habitat coverages for species are provided by these two agencies, those with the jurisdictional authority over the affected

animals. Modeled habitat is used by the USFWS because, as the agency charged with protection of Threatened, Endangered and Candidate Species, they are required to manage species to avoid extinction. Modeled habitat is used to further investigate the impacts of designated campsites, not to deny the existence of all campsites within that modeled habitat.

The BLM has altered the criterion in Section 2.1 concerning suitable raptor habitats.

Summary of Comments: Bighorn sheep are not in decline and the State of Utah allows hunting of this species and therefore, measures to protect bighorn are unwarranted. We dispute the research presented on impacts to desert bighorn sheep.

BLM Response: Desert bighorn sheep, while not in immediate decline, do not approach historical numbers within their habitat. Hunting is highly regulated by the State of Utah Division of Wildlife Resources, with only a few ram-only permits allowed per year. It should be noted that desert bighorn lambing habitat was restricted in the Moab Resource Management Plan; the guidelines are repeated in this effort should bighorn lambing habitat be changed in the future. There are no other specific criteria proposed specifically for the protection of desert bighorn sheep over their entire habitat.

Summary of Comments: Raptor guidelines are applicable to new projects, not existing uses. Raptors can adapt to human activity. The raptor buffer (0.5 miles) is a one-size fits all buffer that is not warranted. Experimental (sic) evidence reveals a greater tolerance of golden eagles (and other raptors) to human presence and activities than is typically parroted in the literature and in various well-intentioned guidelines that are based upon opinions rather than experimental data. This comment included literature that supports the reduction of raptor buffers.

BLM Response: Raptor guidelines have been developed by the USFWS, the agency with jurisdictional authority over these species. However, the criterion in the EA has been altered to state: "Designated campsites would not be located within the USFWS raptor spatial buffer (generally 0.5 miles) of active nesting structures for nesting raptors and golden eagles" (rather than 0.5 miles of suitable habitat). The BLM has an inventory of raptor nest locations and would use this data layer to inform its campsite designation. Spatial buffers specific to each species are found on page R-13 of the Moab RMP; they range from 0.25 miles to one mile in diameter, depending on the species.

Appendix R of the Moab RMP ("Best Management Practices for Raptors and Their Associated Habitats in Utah" was codified in the 2008 RMP; it specifically addresses dispersed recreation and directs the agency to use these guidelines to address raptor management.

Recreation

Summary of Comments: The criterion to not designate sites near recreational trails is appreciated.

BLM Response: the BLM has identified which trails would be considered for viewshed protection. This list is not exclusionary but is provided as a guideline.

Summary of Comments: Unmanaged dispersed camping is degrading the visitor experience.

BLM Response: The BLM acknowledges that unmanaged dispersed camping is a negative impact upon many visitors.

Summary of Comments: The impacts of designating sites on those who wish to retain the current dispersed camping model are understated.

BLM Response: The impact has been restated. The social impacts on various recreation users are summed up briefly in Section 3.3.2.1. The BLM acknowledges that some people do not wish to see managed camping and others do wish to see camping regulated.

Summary of Comments: BLM should list the goals of the Labyrinth Gemini SRMA.

BLM Response: The goals for the Labyrinth SRMA as stated in the Moab RMP have been added to Section 2.4.

Socioeconomics

Summary of Comments: The BLM should analyze the economic impacts to the region of eliminating dispersed camping. Local communities rely on recreation and dispersed camping for economic opportunities. Restricting access will affect local communities' ability to maximize the economic benefits. The Bureau of Economic Analysis showed that in 2019 outdoor recreation brought in \$459.8 billion. Restricting dispersed camping would greatly hinder economic opportunity.

BLM should analyze socioeconomic impact of limiting free dispersed camping around Moab - public lands should be accessible for all economic classes.

BLM Response: BLM believes that managing camping will not reduce numbers of campers and associated spending in local communities. The Proposed Action directs *where* people can camp, not *whether* they can camp.

Economic analyses by BLM, USFS and National Park Service (NPS) indicate that dispersed camping provides the lowest economic contribution of all types of overnight accommodation. That is, more economic benefit is derived from those that stay in hotels than from those who camp.

Should dispersed sites be designated, they will remain free and thus will not affect accessibility by economic class.

Out of Scope

Summary of Comments: The BLM must not make camping more expensive in light of the affordable housing crunch in Moab.

BLM Response: BLM lands are not intended for living accommodations (which is why there is a 14 day stay limit on all BLM lands.) In addition, the proposal is not for fee campsites, but rather to allow camping only in designated sites.

Summary of Comments: The BLM should install additional toilets in popular dispersed camping areas. Toilets can be acquired through Utah State Parks grants.

BLM Response: The cost of a toilet is not just its purchase and/or construction – it is the weekly cleaning and maintenance of the toilet, as well as the pumping, which is expensive. To maintain toilets, BLM requires the revenue stream from a fee site. In addition, toilets must be located on roads that are accessible by a large pumper truck, meaning that many of the dispersed camping areas could not be served.

Summary of Comments: Comments were received in support of development of a campground along the Mineral Bottom Road. Suggestions included that the campground should accommodate all types of campers, including large RVs.

BLM Response: Although not germane to this Proposed Action, the BLM does have plans for a campground on the Mineral Bottom Road (See *Moab Campground Business Plan*).

Summary of Comments: The BLM should open additional areas where dispersed camping is allowed in order to better satisfy the demand for campsites.

BLM Response: Dispersed camping is allowed on BLM wherever it is not limited to designated sites. Currently, there are 1,662,581 acres (of the 1.8 million acres that comprise the Moab Field Office) open to dispersed camping. Should the Labyrinth Rims Project area (120,037 acres) be limited to designated sites only, there would be 1,542,544 acres available for dispersed camping in the Moab Field Office. There are also two other project areas under consideration for limiting camping to designated sites – Utah Rims (16,704 acre) and Two Rivers (9,180 acres). Should all three of these areas be limited to designated sites, 1,515,660 acres would remain open to dispersed camping.

Summary of Comments: Why did Grand County ask Trail Mix for its opinion (a non-motorized committee)? Why didn't they ask the motorized committee?

BLM Response: Grand County asked both its motorized and its non-motorized committees for input. Both committees, including the motorized committee, provided input to the Grand County Commission.

Summary of Comments: Why hasn't Moab BLM asked for help from the State Park OHV program? Only two requests from Moab are in the record.

BLM Response: The commenter refers to the FIG grants that were requested by the Moab BLM. The Moab BLM has applied for RTP funding from Utah State Parks on a yearly basis and has been successful in getting many RTP grants.

Summary of Comments: Every year, King of the Hammers hosts a motorized city twenty times the size of Moab. It is managed so that it returns to the desert after the event. Good management can mitigate impacts.

BLM Response: King of the Hammers occurs in an OHV open area in the California desert. There is little to no vegetation at the location, so there are very few natural resources to impact, unlike the areas proposed for campsite designation in the Moab FO.

Summary of Comments: Current dispersed camping usage reflects the public desire for a high quality recreational experience while dispersed camping. Most offices allow dispersed camping within a certain distance of a designated road (Moab does not). Moab should change its parameters to allow dispersed camping to occur anywhere within a certain distance of a road. If the camper has to stay on the designated road, how can they have a high quality camping experience?

BLM Response: RMP Decision TRV-6 states: OHV access for game retrieval, antler collection and dispersed camping will only be allowed on designated routes (designated routes/spurs have been identified specifically for dispersed camping; parking areas associated with dispersed campsites will be marked during Travel Plan implementation.) Adherence to the Travel Plan is required for all activities. To change this decision would require an RMP Amendment. One should note that parking areas just off roads may be marked for the convenience of dispersed campers.