



Calf Creek Recreation Site Deferred Maintenance and Improvements Project

Environmental Assessment (EA)

DOI-BLM-UT-P010-2021-0010-EA



Calf Creek Recreation Site from above campground looking down canyon, 2021

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ACRONYMS

ABA	Architectural Barriers Act
ARMPs	2020 Record of Decision and Approved Resource Management Plans for Grand Staircase-Escalante National Monument
BLM	Bureau of Land Management
CCC	Civilian Conservation Corps
CCRS	Calf Creek Recreation Site
DOI	Department of the Interior
EA	Environmental Assessment
ESA	Endangered Species Act
FLPMA	Federal Land Policy and Management Act
GAOA	Great American Outdoors Act
GIS	Geographic Information System
GSENM	Grand Staircase-Escalante National Monument
IPAC	US Fish and Wildlife Service Information, Planning, and Conservation System
KOP	Key Observation Point
MOA	Memorandum of Agreement
MSO	Mexican Spotted Owl
NEPA	National Environmental Policy Act
NLCS	National Landscape Conservation System
NRCS	Natural Resources Conservation Service
NHPA	National Historic Preservation Act
NRHP	National Register of Historic Places
PLPCO	Public Lands Policy Coordinating Office
SAR	Search and Rescue
SB12	Scenic Byway 12
SHPO	Utah State Historic Preservation Office
SRMA	Special Recreation Management Area
SWFL	Southwestern Willow Flycatcher
T&E	Threatened or Endangered Species
UDOT	Utah Department of Transportation
US	United States
USFWS	US Fish and Wildlife Service
VRI	Visual Resource Inventory
VRM	Visual Resource Management
WSA	Wilderness Study Area
WSR	National Wild and Scenic River System

CHAPTER 1. PURPOSE AND NEED

1.1. INTRODUCTION

The Bureau of Land Management (BLM) proposes to implement deferred maintenance¹ and improvements (see section 2.2) at the Calf Creek Recreation Site (CCRS). The project area encompasses the CCRS, which includes the campground, picnic areas, and trailhead for Lower Calf Creek Falls. It is located in Grand Staircase-Escalante National Monument (GSENM) between the towns of Escalante and Boulder in Garfield County, Utah and is bounded on the west and north sides by a wilderness study area (WSA)² and on the east and south sides by Scenic Byway 12 (SB12). The CCRS is located in the southern end of the larger Calf Creek Recreation Area. The project area is situated at approximately 5,300' elevation in the bottom of a narrow riparian canyon surrounded by vertical Navajo sandstone walls. Calf Creek, a tributary of the Escalante River, runs through the middle of the site.

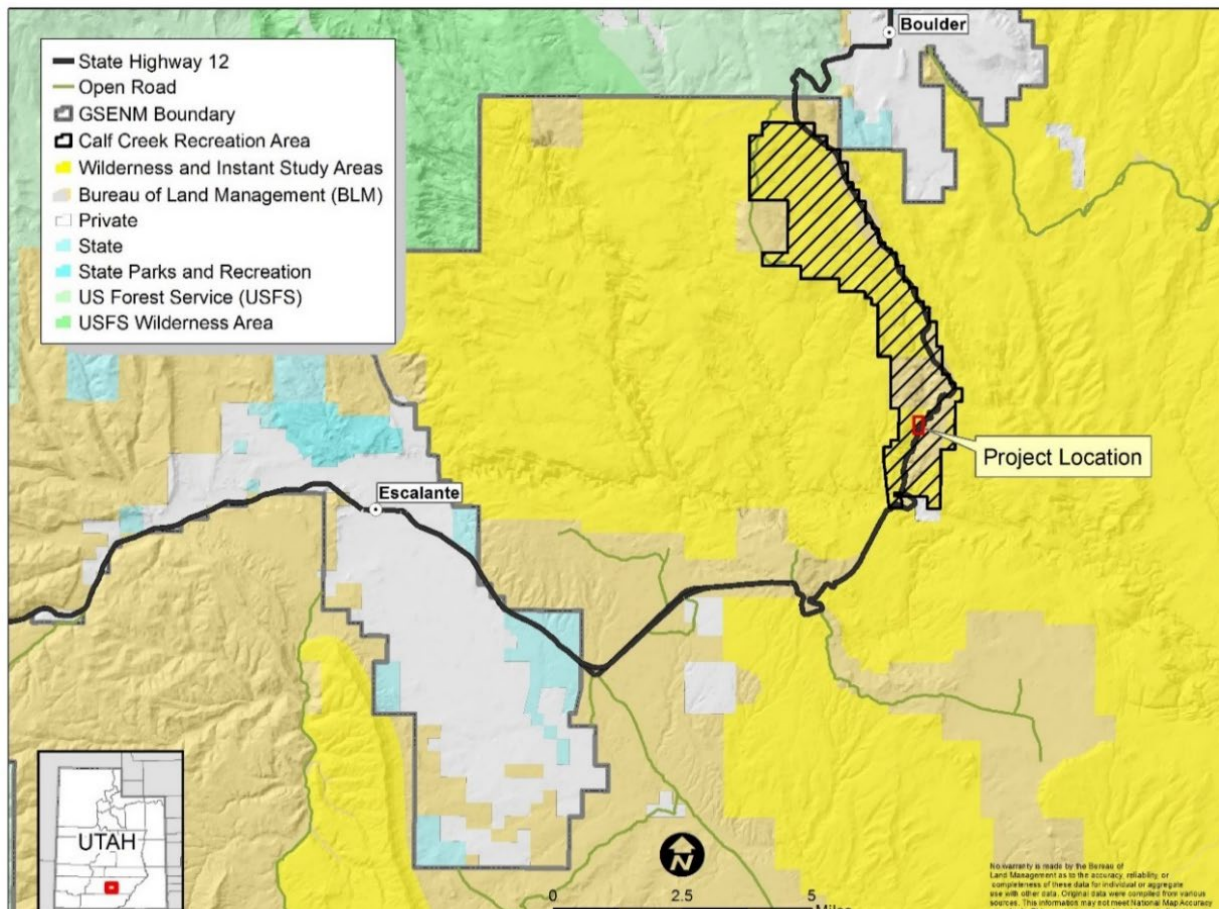


Figure 1 - Calf Creek Project Location Map

¹ According to the *BLM Fund Code Handbook, 2020*, *deferred maintenance* includes maintenance that was not performed when it should have been or when it was scheduled and was therefore put off or delayed for a future period. It can also include code compliance issues, unfunded or delayed maintenance, defects that result from delayed maintenance, and facilities that pose a threat to human health and safety.

² *Wilderness Study Areas* are places that have wilderness characteristics; that is a minimum size, naturalness, and outstanding opportunities for recreation which make them eligible for designation as wilderness. In 1976, Congress directed the BLM to evaluate all of its land for the presence of wilderness characteristics, and identified areas became WSAs. Until Congress decides to add or end consideration of a WSA, the BLM manages the area to ensure its suitability for designation as wilderness is not impaired, in accordance with Section 603 of FLPMA.

1.2. BACKGROUND

Recreational facilities (nine camping units, a group picnic area, toilet, road and bridges, water system, etc.) were first developed at Calf Creek in 1962-1963, authorized and funded through the Accelerated Public Works Program.³ The use of this funding allowed the BLM to create the CCRS as one of the agency's first developed recreation sites.

The almost 3-mile-long trail to the lower falls was constructed in 1968. Then, in 1970, the broader area encompassing 5,835 acres of the Calf Creek watershed was designated as the Calf Creek Recreation Area under authority contained in 43 Code of Federal Regulations 2070 and the Multiple Use Act.

Since initial construction in the 1960s, infrastructure at the CCRS has been maintained, replaced, improved, and expanded. Today it contains the following amenities and site fixtures (see appendix A for a schematic of the existing CCRS):

- Designated, paved parking for approximately 30 standard-sized vehicles including two accessible stalls (space limitations do not allow for vehicles over 25-feet) that serves the picnic areas, trailhead, and nearby walk-in campsites.
- Eleven standard⁴ and two walk-in campsites with tables, fire rings, and site numbering posts – one campsite also has a shade shelter.
- Two picnic areas (one group area with wooden tables, a campfire ring and benches, and a food prep area - the other with two shade shelters, tables, and fire rings).
- A host site with utility connections.
- A chlorinated culinary water system with five hydrants.
- A main restroom building, constructed in the 1980s, with sinks and four toilets connected to a septic system.
- A vault toilet on the east side of the campground that was installed in 2019.
- A paved site road with a large culvert-style creek crossing⁵ near the entrance, and a concrete slab low water crossing within the campground.
- A pedestrian suspension bridge in the campground.
- A self-service fee station with a fee tube and bulletin boards.
- A trailhead register box and kiosk at the beginning of the Lower Calf Creek Falls Trail on the north end of the campground.
- A water play area in the creek near the picnic areas and walk-in campsites.
- Signs, retaining walls, and wooden fencing.

Much of this infrastructure is either old, failing, unsafe, not universally accessible, insufficient to meet current and increasing visitation pressure, and/or contributing to resource degradation. BLM has received Great American Outdoors Act of 2020 (GAOA) funding to help address deferred maintenance, as outlined in portions of this project proposal (see table 2 for deferred maintenance items). GSENM intends to use funds collected

³ The *Public Works Acceleration Act of 1962* provided federal assistance to areas hard hit by recession and provided the Bureau its first major funding for recreation site development.

⁴ According to <https://trailandsummit.com/every-type-of-campsite-defined-camping-faqs/> "standard" campsites usually accommodate party sizes of 6 people or less. They may be suitable for tents or RVs, though they are mostly used by tent campers because most standard sites have driveways that are only suitable for smaller campers and campervans. Note that the CCRS is limited to vehicle sizes of 25' long or less limiting the size of RVs accommodated in the campground.

⁵ This structure is considered a "major culvert" in BLM's Bridge Inspection Program. It is constructed of a large arch-shaped corrugated metal pipe supported by concrete footings.

locally through recreational use permits, as well as grants, to support items that are not included in the GAOA funding.

The proposed action is designed to address immediate infrastructure needs at the CCRS only. The new GSENM resource management plan, as required by Proclamation 10286 and recently noticed in the Federal Register, may include goals, objectives, and management actions for this area. The appropriate time to address the broader management concerns like carrying capacity and allocation in the entire Calf Creek Recreation Area would be through the new management plan, or after the plan has been issued. The proposed action is designed to complement, not deter, from these potential future efforts.

The proposed action is supported by recreation ecology research that suggests "concentrating visitor use in previously impacted or hardened sites and trails will likely be a successful management strategy, while dispersal strategies may result in a proliferation of recreation disturbance." (Monz, 2021). That "in many situations, the majority of change occurs with initial use (which at the CCRS occurred decades ago), with additional use resulting in minimal change." (Monz, 2021). "Therefore, sustainable management strategies will likely involve the concentration of recreational use and amenity development in previously-impacted or high-use areas." (Monz, 2021).

1.3. PURPOSE AND NEED⁶

The need for the proposed action is driven by the fact that most of the infrastructure at the CCRS is decades old and in need of repair, replacement, or upgrade.

The main purposes of the proposal are to 1) improve human health and safety, 2) address deferred maintenance needs, 3) improve universal accessibility,⁷ 4) enhance visitor experience, and 5) address resource degradation concerns at the CCRS.

1.4. RELATIONSHIP TO AND CONFORMANCE WITH STATUTES, REGULATIONS, AND OTHER NATIONAL ENVIRONMENTAL POLICY ACT (NEPA) DOCUMENTS

1.4.1. Conformance with GSENM Proclamation 10286

The proposed action is consistent with the protection of Monument objects and values identified in Proclamation 10286. This is demonstrated by the analysis in chapter 3 and appendices B and F of this environmental assessment (EA). Replacing and improving infrastructure will enhance the resiliency of resources and help ensure the long-term protection of Monument objects and values.

1.4.2. Conformance with BLM Land Use Plans

The proposed action supports decisions in and is in conformance with the *2020 Record of Decision and Approved Resource Management Plans for Grand Staircase-Escalante National Monument (ARMPs)*. The following ARMPs Recreation and Visitor Services goals and objectives are specifically related to this proposal:

- Provide opportunities for visitor use and enjoyment of the area, consistent with resource capabilities, and mandated resource requirements (goal 2, page ARMPs-26).

⁶ The BLM's need to protect Monument objects and values is established by Proclamation 10286. This requirement is overarching rather than project specific and applies to all BLM-approved actions within GSENM. As a result, protection of Monument objects and values is not specified in the purpose and need associated with the CCRS Deferred Maintenance and Improvements Project.

⁷ *Universal accessibility* refers to providing the conditions that allow any individual to access and enjoy a place freely and independently, to the greatest extent possible, regardless of their age, ability, or status in life.

- *Maintain or improve important recreational values and sites in Federal ownership to ensure a continued diversity of recreation activities, experiences, and benefits (objective 2nd bullet, page ARMPs-26).*
- *Provide for public health and safety through mapping and information, facility development, and visitor management (objective 4th bullet, page ARMPs-26).*

The ARMPs also established the Calf Creek SRMA, which provides for direction for management of the CCRS. The management framework for the SRMA is detailed in the ARMPs appendix H, pages H-2 to H-5. The objective for the Calf Creek SRMA is *“to retain the rural and rugged flavor through designed recreation developments in key locations, reduce user-created impacts in undesirable locations, and retain the visual qualities along the highway. Calf Creek provides a unique opportunity for the public to experience a world-class destination, providing a hike in the canyons along a riparian corridor to waterfalls adjacent to Highway 12”* (page H-2). The management framework goes on to provide the following guidance applicable to this proposal:

- Provide the opportunity for a high-quality recreational experience on all lands within the Calf Creek Recreation Area (objective 1, page H-2).
- Maximize the variety of recreational uses that may be experienced within distinct portions of the recreation area (objective 2, page H-2).
- Protect and preserve existing resource values for present and future recreational uses (objective 3, page H-3).
- Promote visitor safety through education, interpretation, and removal of existing and potential hazards (objective 4, page H-4).

1.4.3. Relationship to Statutes, Regulations, Guidance, and Other Plans

The proposed action is consistent with federal, state, and local laws, regulations, guidance, and plans, including but not limited to the following:

- *BLM Instruction Memorandum No. 2022-010 – E-Commerce Technologies for Recreation Fee Collection and Reservation Services* – directs BLM offices to expand the inventory of BLM servable sites on Recreation.gov and use e-commerce technologies to conduct official business electronically.
- *Garfield County General Management Plan – Resource Management Section (2019)* - identifies Lower Calf Creek Falls as a SRMA referring to it as an area where more intensive recreation management is needed; where recreation is a principal management objective; where greater managerial investment in facilities or supervision can be anticipated; and as an area having high levels of recreation activity and valuable natural resources (pages 251 and 350). The proposed action includes improvements that are supported by this plan, specifically the call to provide human and solid waste collection and disposal (page 353).
- *National Landscape Conservation System (NLCS) 15-Year Strategy 2010-2025* - directs Conservation Lands units (goal 1F) to: “Manage facilities in a manner that conserves, protects, and restores NLCS values. Ensure that accessibility, environmentally friendly building materials, ‘green’ technology, and energy conservation standards are incorporated into all new buildings and facility retrofits. Encourage use of exterior lighting that protects the dark night sky.” The proposed action includes improvements and design features that specifically address this goal.
- *Scenic Byway 12 Corridor Management Plan (2001)* –The vision for management of the byway includes, “... make improvements, where necessary, but to do so in a way that will be in harmony with the intrinsic qualities. Using carefully designed methods and professional expertise, future development could address the needs and do so without compromising the byway corridor. “And

one of the goals is to, “Protect and enhance the integrity of the intrinsic qualities within the byway corridor.” Two of the six intrinsic qualities included in the plan are scenic and recreational qualities. The plan specifically addresses the CCRS by calling for completing a site plan as a proposed action (page 40) as well as a generally calling for agencies to work with byway partners to provide recreational facilities to accommodate travelers, including the physically challenged. It also calls for consolidating signage, implementing interpretive programs, and constructing an amphitheater at the CCRS (page 60). The proposed action is consistent with this Plan.

- *Architectural Barriers Act of 1968 (ABA)* - stipulates that all buildings and facilities which are financed with Federal funds and intended for use by the public be designed and constructed to ensure that they are fully accessible to and usable by handicapped individuals. The Proposed action includes improvements that would remedy the ABA deficiencies at the CCRS and improve universal accessibility at the site.

1.4.4. Relationship to Past Decisions, Plans, and NEPA Documents

Since the time of its initial development, the management, maintenance, and development of facilities at the CCRS have been influenced and guided by several decisions and planning efforts. See appendix C for a listing and more detailed explanation of past decisions, plans and NEPA documents related to the CCRS. The most recent Calf Creek SRMA Framework (ARMPs appendix H, pages H-2 to H-5) superseded the past decisions and plans and this project has been planned and designed to conform with it.

CHAPTER 2. ALTERNATIVES

This chapter discloses the actions that BLM is considering to meet the purpose and need discussed in chapter 1. This EA focuses on the maintenance only and proposed action (deferred maintenance and improvements) alternatives. Additional alternatives were considered but eliminated from detailed analysis, including a no action alternative where no maintenance would occur. See appendix D for a description of those alternatives and the rationale for their dismissal.

2.1. MAINTENANCE ONLY ALTERNATIVE

BLM would continue maintenance and management of the 8-acre CCRS. See table 1 for a list of the project components that would be addressed as funding and staffing capacity allow. See appendix A for a schematic of the existing CCRS, and figures 2 and 3 in chapter 3 for images of the existing site.

Work would be performed by contractors, BLM staff, interns, and/or volunteers on an as needed basis as funding allows. A variety of heavy, motorized equipment, and hand and power tools would be used during implementation. Removed items would be disposed of in a local permitted landfill. Work would be done during daylight hours. The CCRS would be closed, in whole or in part, during implementation, if necessary, to ensure public safety.

Table 1 - Maintenance only alternative components which address the purpose and need

MAINTENANCE ONLY COMPONENTS	PURPOSES ADDRESSED BY MAINTENANCE ONLY COMPONENT				
	Health and Safety	Deferred Maintenance	Universal Accessibility	Visitor Experience	Resource Degradation
PARKING AND CIRCULATION					
Culvert-style Creek Crossing Maintenance	X				
Low Water Crossing Maintenance	X				

MAINTENANCE ONLY COMPONENTS	PURPOSES ADDRESSED BY MAINTENANCE ONLY COMPONENT				
	Health and Safety	Deferred Maintenance	Universal Accessibility	Visitor Experience	Resource Degradation
Site Road Maintenance	X				
SANITATION AND POLLUTION					
Main Restroom Building Maintenance; Septic System Maintenance	X				
SITE AMENITIES/FIXTURES					
Shade Shelters Replacement	X	X	X	X	
Retaining Walls Maintenance	X				
Fee Station/Kiosk Replacement		X	X	X	
Small Fixtures (Picnic tables, fire rings, signs, etc.) Replacement		X	X	X	

2.1.1. Health and Safety

The damage to the concrete base of the large culvert would be patched to extend the life of the structure and prevent its failure. The low water crossing would be periodically cleaned and would be roughened on the surface to provide better traction. BLM would continue to repair and shore up the site road by patching potholes, putting riprap in areas that blow out during heavy rains, and periodically crack seal and chip seal the asphalt. The main restroom facility and septic system would continue to be maintained. The shade shelters would be replaced with new structures of similar size and scale in the same locations. The retaining walls at the water play area would continue to be shored up and loose landscape blocks would be removed from the creek as needed.

2.1.2. Deferred Maintenance

Replacing the shade shelters, fee station/kiosk, and small fixtures would address deferred maintenance.

2.1.3. Universal Accessibility

BLM would continue to provide universally accessible structures and site fixtures in a piecemeal manner as old amenities (shade shelters, fee station/kiosk, picnic tables, fire rings, etc.) are replaced.

2.2. DECISION TO BE MADE

The BLM decision to be made is whether to continue to maintain and manage the CCRS as described in the maintenance only alternative, or to maintain, manage, and improve the CCRS by replacing, improving, and providing new infrastructure as discussed in the proposed action. The project area does not include the entire 5,835-acre Calf Creek Recreation Area or the Lower Calf Creek Falls Trail (which is within the recreation area) beyond the edge of the project area, and no decisions will be made for work associated with areas outside the CCRS.

2.2.1. Visitor Experience

Replacing the shade shelters, fee station/kiosk, and small site fixtures would address visitor experience.

2.2.2. Design Elements

BLM staff will monitor the construction and maintenance of the CCRS to ensure compliance with the design features of the maintenance only alternative. The site will be routinely monitored by BLM staff to assess resource conditions, report maintenance needs, and identify potential resource issues to avoid and minimize impacts, including the monitoring of objects and values identified in Proclamation 10286.

Cultural Resources

- No ground disturbing activities associated with the project will be allowed within 15 meters of 42GA1431.
- Per the Memorandum of Agreement (MOA) between BLM and the Utah State Historic Preservation Office (SHPO) regarding the CCRS proposal, adverse effects to 42GA8060 (Calf Creek Campground) historic property will be mitigated. These mitigation measures include amending the site form to include detailed digital photography and an updated site sketch; completing an architectural site form; preparing measured drawings of Feature 5; and conducting historical document research for the purpose of creating and installing interpretive signage that reflects the historical significance of the historic campground.

Equipment Use

- Prior to entering the project area, all equipment and machinery will be cleaned for petroleum accumulations, dirt, plant material. All equipment and machinery leaks will be repaired prior to entering site. Such equipment includes large machinery, stationary power equipment (such as generators), and gas-powered equipment with tanks larger than 5 gallons.
- Heavy equipment use will be avoided during wet, muddy conditions to reduce the compaction of soils.

Fisheries/Aquatics

- Any instream work or periods of prolonged equipment in the stream channel will not occur during spawning season of brown trout (October-December) and cutthroat (spring when stream levels begin to rise) unless first cleared by a qualified biologist. If work needs to occur during spawning timeframes, other mitigation features such as block nets and fish removal from the construction area will be used.

Health and Human Safety

- Hazard trees would be trimmed or removed as warranted.
- Signs to warn of hazards will be installed as necessary.
- The public will be allowed to use the site or portions of the site when mixing vehicular and pedestrian traffic with maintenance activities does not pose immediate safety concerns. When it is not safe, the CCRS will be closed in whole or in part to the public for overnight and day use, including hiking Lower Calf Creek Falls Trail.

Recreation

- BLM will provide notice to relevant media outlets (including via social media), publish notices on the GSENM website, and post notices at GSENM visitor centers and other local outlets to inform the public of any construction closures and associated timelines.

Visual Resources

- Natural and/or natural-appearing materials that are appropriate to the place and setting and reflect a rural and rugged flavor will be used (natural or fabricated stone, colored concrete, gravels, or crusher fines, rusted or painted metal, wood, etc.).
- Colors that blend with the natural environment will be used. No bright colors such as whites or yellows will be used (except for signs and pavement striping).

2.3. PROPOSED ACTION (DEFERRED MAINTENANCE AND IMPROVEMENTS)

BLM proposes to implement deferred maintenance and improvements at the CCRS. The existing footprint for the CCRS is approximately 8 acres and new improvements would either be within that footprint or adjacent to it. See table 2 for a list of the project components, appendix A for an existing conditions schematic, and appendix E for a project area and conceptual site plan map of the proposal.

Work would be performed by contractors, BLM staff, interns, and/or volunteers. A variety of heavy, motorized equipment and hand and power tools would be used during construction. Work would be done during daylight hours. Several proposal components (parking areas, nature trail, tent pads) would require the importation of base and/or fill materials. Removed items would be disposed of in a local landfill. Throughout construction, equipment would be parked at the project site and contractors, if used, would have the option of camping onsite. If approved, project construction could begin in late 2023 prior to the ground freezing, though most work is anticipated for 2024. The CCRS would be closed for several, multi-week phases during construction.

This alternative assumes that a no-parking zone will be established by the Utah Department of Transportation (UDOT) along SB12 extending one-half mile in both directions from the CCRS entrance⁸.

BLM's Guidelines for a Quality Built Environment (2010)⁹, the *US Access Board Accessibility Standards for Federal Outdoor Developed Areas* (2014)¹⁰, and the *BLM Manual 9112 Bridge and Major Culvert* (2021)¹¹ have been used to plan and will be used to design this project. Detailed design will occur once a decision regarding this proposal is made. The final detailed design will not exceed analysis contained within this EA.

⁸ Since project initiation, BLM has coordinated with UDOT and Garfield County on the establishment of a no parking zone along SB12 by the entrance to the CCRS. UDOT will work with BLM to develop and install signs once additional designated parking is available within the recreation site, and Garfield County will increase safety patrols and enforcement once the project is complete.

⁹ These guidelines help ensure that BLM facilities project a positive image for the agency by being attractive, functional, and sustainable.

¹⁰ These standards detail accessibility guidelines for the construction and alteration of facilities covered by the Americans with Disabilities Act of 1990 and the ABA to ensure that the facilities are readily accessible to and usable by people with disabilities.

¹¹ This manual provides policy guidance to ensure that bridges and major culverts on BLM lands are safe, preserve or improve streambed gradients and velocities to allow fish passage, minimize erosion and sediment damage, and abate pollution of surface and ground water resources.

Most components of the proposed action address more than one of the health and safety, deferred maintenance, universal accessibility, visitor experience, or resource degradation needs. Table 2 shows which purposes the various proposal components address. More detailed explanations follow the table.

Table 2 - Proposed action components which address the purpose and need

ALTERNATIVES COMPONENTS	PURPOSES ADDRESSED BY PROPOSED ACTION COMPONENT				
	Health and Safety	Deferred Maintenance	Universal Accessibility	Visitor Experience	Resource Degradation
PARKING AND CIRCULATION					
Additional Designated Parking	X		X	X	X
Culvert-style Creek Crossing Replacement	X	X			X
Low Water Crossing Replacement	X	X			X
Site Road Improvements	X	X		X	X
Trailhead Relocation				X	
Bypass Trail Segment				X	
Nature Trail/Pedestrian Pathways	X		X	X	X
SANITATION AND POLLUTION					
Main Restroom Building Replacement and Relocation; Septic System Removal	X	X	X	X	X
Additional Vault Toilets	X		X	X	X
On-site Trash Collection	X			X	X
SITE AMENITIES/FIXTURES					
Shade Shelters Replacement	X	X	X	X	
Retaining Walls Replacement	X	X			X
Campsites Reconfiguration	X		X	X	X
Additional Campsites			X	X	
Host Site Relocation	X			X	
Group Picnic Area Relocation	X		X	X	
Small Amphitheater			X	X	
Fee Stations/Kiosks		X	X	X	
Small Fixtures (Picnic tables, tent pads, fire rings, signs, etc.)		X	X	X	
COMMUNICATIONS					
Fiber Line Installation	X			X	

2.3.1. Health and Safety

Parking and Circulation

Several improvements are proposed to address vehicular and pedestrian circulation and vehicle parking. The site road would be widened to improve traffic flow. Relocation and/or reconstruction of the main restroom building, the host site, the group picnic area, and the retaining walls would allow for the reconfiguration and expansion of the main parking area. The main parking area would be redesigned to improve circulation and increase

designated parking capacity by approximately 15 parking stalls. An overflow parking area for approximately 40 vehicles would be constructed near the entrance to the site and parking for approximately 15 vehicles would be constructed along the site road. At least one parking stall would be provided for each campsite. Parking for walk-in sites would be designated in the main parking area, and adjacent parking would be provided for standard campsites. All designated parking would be paved. A pedestrian pathway would be provided along the edge of the site road from the overflow parking area to the core of the recreation site.

The culvert-style creek crossing would be replaced with a bridge, and the low water crossing would be replaced with a structure (an open-bottom arched culvert or partially buried box culvert) that spans the creek and provides a natural stream bottom. These structures will be designed and constructed in accordance with BLM Manual 9112 – Bridge and Major Culvert to handle a 100-year flood event and provide 2-foot clearance between the lower limit of the bridge structure or the bottom of the culvert top slab.

Sanitation and Pollution

The main restroom building and associated septic system would be removed. A vault toilet restroom facility of similar capacity would be constructed in a location that fits best with the redesign of the main parking area. Additional vault toilets would be installed - one within the campground on the west side of the creek and another by the overflow parking area. An area for onsite trash collection would be provided.

Site Amenities/Fixtures

As noted in the Parking and Circulation section above, the host site and group picnic area would be relocated to allow for reconfiguration of the main parking area. Shade shelters in the lower picnic area and campground would be replaced. Retaining walls would be replaced. The tent pads of campsites that are close to the creek would be located away from the creek's edge, and flash flood warning signs would be installed.

Communications

A buried communications fiber line would be installed along the edge of the site road. It would connect to the existing fiber trunk line near the site entrance and extend down to the main parking area to allow for the installation of emergency phones and Wi-Fi communication at the site.

2.3.2. Deferred Maintenance

Parking and Circulation

Several of the parking and circulation proposal improvements mentioned in section 2.2.1 also address deferred maintenance needs. Those include improving the site road, replacing the large culvert with a bridge, and replacing the low water crossing.

Sanitation and Pollution

Deferred maintenance improvements that would address sanitation are removing the main restroom building and septic system and replacing them with a vault toilet restroom facility as described in section 2.2.1.

Site Amenities/Fixtures

Removing and replacing the existing shade shelters, fee station/kiosks, and small fixtures, as well as replacing the retaining walls as noted in section 2.2.1 are also deferred maintenance items.

2.3.3. Universal Accessibility

Parking and Circulation

Three standard-sized, accessible parking stalls and one van-accessible parking stall would be provided in the main parking area.¹² A universally accessible interpretive nature trail would be constructed within the day use and campground areas of the CCRS. Additional pedestrian pathways that provide a firm and stable travel surface would be constructed to connect the various use areas within the recreation site.

Sanitation and Pollution

To ensure universal accessibility, all new toilets would be unisex and would meet accessibility standards.

Site Amenities/Fixtures

Pathways to the new day use picnic shelters and the spacing around the tables under the shelters would meet accessibility standards. All campsites would be outfitted with accessible tables and fire rings, and with tent pads that are flush to the ground. Existing campsites would be configured to improve accessibility, and new campsites would be constructed to meet accessibility standards. The new amphitheater, fee stations/kiosks, and small site fixtures (picnic tables, fire rings, etc.) would also meet accessibility standards.

2.3.4. Visitor Experience

Parking and Circulation

Improving the site road and constructing additional designated parking as discussed in section 2.2.1 and providing delineated pedestrian pathways as discussed in sections 2.2.1 and 2.2.3 and a nature trail as discussed in section 2.2.3, would also improve the visitor experience. A by-pass trail segment that begins in the main parking area and goes up onto the bench¹³ above the west side of the campground would be constructed.¹⁴ It would be aligned away from the edge of the bench and signed with “stay on trail” messaging. It would reconnect with the existing trail near the north boundary of the campground and be retained for use by those in the campground, for administrative purposes, and search and rescue (SAR) operations.

Sanitation and Pollution

Sanitation improvements mentioned in sections 2.2.1 and 2.2.3 that would also improve visitor experience include providing new and additional unisex and universally accessible toilets and providing on-site trash collection.

Site Amenities/Fixtures

Several new site amenities are included in the proposal to improve visitor experience. A large group shade shelter and up to three single-party shelters (two would be replacements) would be constructed in the picnic

¹² Accessibility standard is to provide at least four accessible parking stalls when total parking is 76 to 100 vehicles.

¹³ A bench is a relatively narrow strip of relatively level or gently inclined land that is bounded by distinctly steeper slopes above and below it.

¹⁴ The bypass trail segment would meet “Condition for Exception 1” of the *Accessibility Standards for Federal Outdoor Developed Areas* because it would not be “practicable” to construct it to meet grade requirements due to the steep topography. The existing trail also meets this or other exceptions and is not universally accessible.

area. New shade shelters would be installed at campsites lacking shade. Up to four additional car campsites would be provided as space allows. The old, paved athletic court would be removed and converted to new walk-in sites. The trailhead for Lower Calf Creek Falls would be relocated to the main parking area. A small amphitheater for hosting interpretive and education programs would be constructed in proximity to the picnic areas. The existing fee station/kiosk would be removed, and a new fee station would anchor the relocated trailhead at the beginning of the by-pass trail. Separate fee stations for the campground and trailhead may be constructed if determined during design to reduce confusion for visitors. A secondary fee station would be installed in proximity to the overflow parking near the entrance. All fee stations would be self-service.

Site amenities mentioned in sections 2.2.1 and 2.2.3 that would also improve visitor experience include relocating the host site and the group picnic area, replacing and adding shade shelters in the picnic area and campground, adding and reconfiguring campsites, providing an amphitheater, and providing universally accessible site fixtures (picnic tables, fire rings, etc.) throughout the recreation site.

Communications

The buried communications fiber line described in section 2.2.1 would provide reliable communication to and from the CCRS.

2.3.5. Resource Degradation

Parking and Circulation

Parking and circulation improvements discussed in section 2.2.1 that would also address resource degradation include improving the site road, providing additional designated parking for day use and within the campground, replacing the large culvert and low water crossing, and defining pedestrian pathways. Replacement of the large culvert would include removal of the footers and abutments that would be replaced with support structures moved away from the edges of the creek. Replacement of the low water crossing in the campground with an above stream structure would include removing the existing concrete structure. Defining pedestrian pathways would include designating access points to the creek along the nature trail.

Sanitation and Pollution

Removing the septic system, providing additional vault toilets by parking areas and in the campground, and providing on-site trash collection, as discussed in section 2.2.1, would also address resource degradation.

Site Amenities/Fixtures

Replacement of the retaining walls by the water play area and reconfiguration of campsites that have erosion issues to improve drainage would also address resource degradation.

2.3.6. Design Elements

Design elements noted for the maintenance only alternative in section 2.1.6 would also apply to the proposed action unless modified as noted below. BLM staff will monitor the construction and maintenance of the CCRS to ensure compliance with the design features of the proposed action. The site will be routinely monitored by BLM staff to assess resource conditions, report maintenance needs, and identify potential resource issues to avoid and minimize impacts, including the monitoring of objects and values identified in Proclamation 10286.

Cultural Resources

- No ground disturbing activities associated with the project will be allowed within 15 meters of 42GA1431.
- If cultural resources are discovered during project implementation, activity will cease, and a BLM archaeologist will be consulted immediately. Work will be suspended until written authorization to proceed is provided.
- Per the MOA between BLM and SHPO regarding the CCRS proposal, adverse effects to two historic properties (42GA8060 and 42GA6091) will be mitigated. These mitigation measures include:
 - 42GA8060 (Calf Creek Campground) – amending the site form to include detailed digital photography and an updated site sketch map; completing an architectural site form; preparing measured drawings of Feature 5; conducting historical document research for the purpose of creating and installing interpretive signage that reflects the historical significance of the historic campground.
 - 42GA6091 (old Escalante to Boulder Road) – conducting historical document research for the purpose of creating and installing interpretive signage that reflects the historical significance of the old road.

Equipment Use

- During construction, spill containment berms will be used in all locations where equipment refueling occurs. On-site absorbent pads and booms (long enough to extend across Calf Creek) will be available should a spill occur. The above serve to prevent the potential for hazardous petroleum-based materials to contaminate Calf Creek.
- To the extent feasible, heavy equipment work along the creek will be from the top of the bank, unless work from another location (instream) would result in less habitat disturbance, less floodplain disturbance, or better meet project design criteria. Operating heavy equipment in streams would only occur when project specialists believe that such actions are the only reasonable alternative for implementation or would result in less sediment in the stream channel or damage (short- or long-term) to the overall aquatic and riparian ecosystem relative to other alternative methods.

Health and Human Safety

- The public will be allowed to use the CCRS or portions of the site when mixing vehicular and pedestrian traffic with construction and/or maintenance activities does not pose immediate safety concerns. When it is not safe, the site will be closed in whole or in part to the public for overnight and day use, including hiking Lower Calf Creek Falls Trail.

Night Skies

- Artificial lighting (in restroom buildings) will follow International Dark Sky Association outdoor lighting basics (use lighting only when and where needed, use lights that are no brighter than necessary, minimize blue light emissions, and use fully shielded fixtures).

Paleontology

- A qualified paleontologist will be on site to monitor construction activities during any bedrock disturbance¹⁵, particularly at the proposed overflow parking area and any place along the proposed bypass-trail. If fossils are encountered during construction, the resource must either be avoided or collected, depending on the threat to the resource and the practicality of avoidance for construction.

Soils

- Storm drainage, erosion, and sediment control structures (swales, riprap, curbs, straw mats, vegetation, etc.) will be used to control erosion and sedimentation during and after construction.

Vegetation

- Native tree and shrubs species and/or native plant seed will be used revegetate areas impacted during construction.
- Native trees will be planted to provide additional shade.
- Where practical, native plants that need to be removed during construction will be saved and replanted in areas where revegetation is needed.
- The project site will be monitored for noxious and invasive vegetation after construction. If noxious weeds or non-native, invasive plants are discovered, BLM-approved weed treatments¹⁶ would be applied in a manner consistent with current BLM practice.

Water Resources/Hydrologic Conditions

- A Utah Division of Water Quality Stormwater Pollution Prevention Plan¹⁷ will be prepared prior to project construction to protect Calf Creek during and after construction.
- A US Army Corp of Engineers/Utah Division of Water Rights Steam Channel Alteration Permit¹⁸ will be acquired prior to replacement of the culvert, low water crossing, and retaining walls by the creek.
- Storm drainage from parking areas, roads, and facilities will be managed through engineering (slope, riprap, curbs, etc.) and by using sediment control structures (swales, straw mats, vegetation, etc.) to reduce the potential of contaminants entering Calf Creek during and after construction.
- During the removal of the old restrooms and associated septic system, containment berms will be used to prevent any contaminants from entering the Calf Creek riparian zone in case of a spill.

¹⁵ Movement of or impacts to (scraping, gouging, hammering) consolidated strata of mappable geological units.

¹⁶ See *Programmatic Noxious Weed and Invasive Plant Management - Grand Staircase-Escalante National Monument Environmental Assessment*, DOI-BLM-0300-2011-0009-EA, 2015.

¹⁷ The Stormwater Pollution Prevention Plan details the strategy for construction projects to comply with Federal and State stormwater regulations. These regulations are put in place to minimize sediment and other pollutants in stormwater runoff commonly associated with construction activities.

¹⁸A stream alteration permit is required by the US Army Corp of Engineers and the State of Utah to ensure protection of the natural resource value of the state's natural streams, vested water rights, aquatic wildlife, and recreational opportunities associated with natural streams and ensure that stream alteration projects do not unreasonably limit flood capacity in natural channels. The permit ensures compliance with Section 404 of the Clean Water Act and Section 10 of the Rivers and Harbors Act.

Wildlife

- No construction activities that result in surface disturbance or the removal of vegetation will occur during the migratory bird **primary nesting season** (April 1 to July 1).
- Construction activities that result in surface disturbance or the removal of vegetation implemented during the migratory bird **maximum nesting season**¹⁹, during times that are not already excluded by the dates above (January 1 to March 31 and July 2 to August 31), will first be surveyed by a qualified biologist within 7-10 days prior to work beginning. If nests with eggs or young are located, a 100-foot buffer will be implemented. Ground-disturbing activities within the buffer areas will be postponed until the birds have fledged and are no longer dependent on the nest.
- To the extent possible, vegetation will be cleared on project areas (bypass trail, upper parking lot, etc.) when nesting birds are not present, and surveys are not required (September 1 to December 31) to remove potential nesting substrate so returning birds cannot nest there.
- To minimize potential impacts to the ongoing hummingbird monitoring study, the banding location would be shifted away from the main toilet building and lower day-use area access route to an area across (southwest of) the existing lodgepole fence where no construction is proposed. On the hummingbird banding days, construction activities would not occur within immediate proximity to where hummingbirds are actively fed, captured, and processed, during the banding season (May 1 to September 30).

Winter Maintenance

- The culinary water system will be winterized (shut down) and not available during the months with freezing temperatures (usually November to March).
- As needed, the site road will be plowed to clear snow, or if icy conditions make use of the site road unsafe, the gate will be closed until the ice melts.
- Snow will be stockpiled in parking areas.

¹⁹ Dates for the **primary nesting season** (April 1 to July 1) and **maximum nesting season** (January 1 to August 31) are found within Instruction Memorandum No. UT-2017-007: *Guidance for Utah Bureau of Land Management to Meet Responsibilities under the Migratory Bird Treaty Act and Executive Order 13186: General Project Planning Process.*

CHAPTER 3. AFFECTED ENVIRONMENT AND ENVIRONMENTAL CONSEQUENCES

3.1. SCOPING AND IDENTIFICATION OF ISSUES

NEPA documents should focus on the issues that are most relevant to the action in question.²⁰ Generally, issues highlight potential effects, reflect cause-effects relationships, and are relevant to the decision to be made. Those resources and issues that helped distinguish between alternatives or inform the decision or could potentially have significant effect were brought forward for analysis in this chapter.

The BLM conducted internal and external scoping and also reviewed the *2017 Calf Creek Recreation Area Site Improvements EA* (DOI-BLM-UT-0300-2015-0040-EA) to identify potential issues (see chapter 4 for a summary of public involvement). These processes set the scope of analysis. The BLM interdisciplinary team then formulated issue statements for the proposed action.

Issues associated with the following topics have been identified for analysis and are detailed in the sub-sections that follow:

- Human Health and Safety
- Universal Accessibility
- Recreation Resources
- Cultural Resources
- Fisheries/Aquatic Resources
- Floodplains
- Social Connection
- Water Resources
- Wild and Scenic River
- Wilderness Study Areas
- Wildlife Resources

3.2. HUMAN HEALTH AND SAFETY

Issue: How would human health and safety be affected by the alternatives at the CCRS?

3.2.1. Human Health and Safety - Affected Environment

The analysis area for this issue is the CCRS. Figure 2 shows several of the human health and safety concerns at the CCRS.

Parking and Circulation

The CCRS site road is approximately 15 feet wide. Its edges have been repeatedly damaged by storm runoff and visitors parking in undesignated spaces. In 2021, a flood event undercut the pavement near the entrance that was coned off until it could be shored up with riprap and soil.

Parking capacity in designated spaces has been exceeded for at least twenty years, first during busy holidays, and more recently during the high visitation periods from Spring through Fall any day of the week. The parking overflow leads visitors to park along the site road and SB12 creating traffic flow issues and safety hazards for motorists and pedestrians. The main parking area is not laid out according to design standards. It has an open core of unused space that is not large enough for most vehicles to complete a turn without backing up when all

²⁰ See for example, 40 CFR 1500.1 which describes the purpose of NEPA.

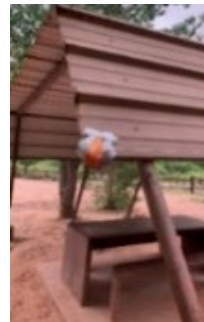


Figure 2 - Healthy and safety concern examples (top down, left to right): parking along highway and site road; low water crossing; retaining wall and steps at water play area; concrete damage to base of culvert-style creek crossing; shade shelter with exposed footers and low overhead clearance; congestion at entrance to main parking area; pavement damage to edge of site road.

the parking stalls are full (see appendix E for aerial image of main parking area). Visitors must perform multi-point turns in the center of the parking area or drive all the way through the campground to turn around. The vehicular congestion during high visitation periods requires BLM employees to provide traffic control at the site entrance and in the designated parking area. The toilet building and host site are in the south end of the parking area, and the fee station/kiosk and group picnic area are on the north end. Where these site elements are located constricts the options for providing a safe turning radius for vehicles and more efficient use of the space. Additionally, parking for some campsites is not large enough for even a small car, so vehicles protrude into the site road, causing traffic flow issues and decreasing safety.

Pedestrians repeatedly mix with vehicular traffic along the site road as they go from the parking area through the campground to the trailhead and in the center of the parking area as they go back and forth from their vehicles to the restrooms, the host site, and the fee station. This mixing of pedestrians and vehicle traffic could result in pedestrians being hit by vehicles. Social trails on the bench above the campground provide evidence that some site users explore this area; BLM is not aware of any safety issues (rock falls, trips, or slips, etc.) associated with this use.

The culvert-style creek crossing along the entrance road was constructed in the 1960s. It was inspected in 2018 and found to be in structurally poor overall condition.²¹ Algae grows on the travel surface of the concrete low water crossing making it slippery. Motorcyclists have gone down when attempting to cross the low water crossing, requiring recovery, and potentially releasing pollutants in the creek. Pedestrians also slip and fall on the low water crossing due to the algae growth and risk serious injury. During flash flood events campers on the east side of the campground must wait for flood waters to recede to drive out over the low water crossing. To date, no one has been injured attempting to drive across the low water crossing during a flood.

Sanitation and Pollution

The main toilet building is connected to the 1980s era septic system that is about 150 feet from the creek. The system is overburdened, often clogs, and requires regular pumping. Typically, from late October to mid-March, the main toilet building is shut down to prevent the pipes from freezing, which leaves only one vault toilet for both trail and campground users. The vault toilet is not visible to trail users because it is on the opposite side of the creek from where they walk to get to the trailhead. Though signs direct visitors to this toilet, many do not use it and instead relieve themselves on the ground.

The CCRS is a pack-it-in/pack-it-out site where visitors are directed to take their trash to the nearest public trash collection facilities several miles away. BLM recently installed a pet waste bag dispenser with a small collection receptacle. However, trash and pet waste are commonly left throughout the CCRS, but especially near the beginning of the trail.

Site Amenities/Fixtures

The shade shelter roof overhangs do not meet current building codes for proper overhead clearances, and their concrete footers are a tripping hazard. The landscape block retaining walls along the creek at the water play area are repeatedly damaged and pieces dislodged by erosion from flood events and recreation use in the area. The dislodged pieces fall into the creek where they are often hard to see, creating hazards for recreating visitors. A few campsites are close to the edge of the creek and threatened during flash floods.

²¹ The BLM Calf Creek Culvert Inspection Report (signed 2019) estimated the remaining life of the culvert to be 5-10 years.

Communications

Cellular service is not available at Calf Creek because of its location deep in the canyon. The nearest cellular reception is a few miles away in high spots along SB12. Staff, site host, search and rescue crews, and other first responders are required to use radio communication when on site, but radio communication is not always reliable due to the topography of the area. This lack of communication capacity increases first responder response times and creates additional strains to rescue operations during emergencies.

3.2.2. Human Health and Safety - Environmental Effects

Effects of the Maintenance Only Alternative on Human Health and Safety

Parking and Circulation

Visitors would continue to park along the road edges; turning around in the main parking area would continue to require multi-point turns or driving through the campground, and pedestrians would continue to walk in vehicle travel lanes, increasing the potential for vehicle to vehicle and vehicle to pedestrian accidents. Social trailing on the bench above the campground would continue along with its inherent risks. Employees would continue to be at high risk providing traffic control to motorists during high visitation times. The site road would continue to be repaired on a perpetual as-needed cycle due to damage from flood events which undercut it to try to prevent visitors from driving into edge holes. The footings of the culvert-style creek crossing would continue to be repaired to provide a short extension to the life of the structure to prevent failure that could harm motorists traveling across it. The surface of the low water crossing could be roughened to increase traction for motorcycles and pedestrians though algae growth would create a slippery surface and the potential for falling would remain.

Sanitation and Pollution

The main restroom building and septic system would continue to be maintained but the likelihood of system clogs and overflows and the potential for the septic system to contaminate Calf Creek would remain. The vault toilet on the east side of the campground would continue to be the only winter human waste option so human waste and toilet paper would be expected to continue to be found on the ground creating sanitation concerns for visitors and staff. Staff would continue to collect and dispose of trash and pet waste that is left by visitors who do not pack-it-in/pack-it-out. These sanitation issues expose staff and visitors to biological hazards including, but not limited to, Hepatitis B.

Site Amenities/Fixtures

The shade shelters would be replaced with similar size and scale structures to address roof overhang and footer tripping hazard issues. The retaining walls at the water play area would continue to be shored up and the dislodged pieces would be retrieved from the creek. Signs would continue to warn campers to be cautious of flash floods close to the creek's edge.

Communications

Under the maintenance only alternative, staff, site host, search and rescue (SAR) crews, and other first responders would continue to depend on an unreliable radio communications system. This can result in delayed emergency response for the visitors needing rescue and medical assistance.

Effects of the Proposed Action on Human Health and Safety

Parking and Circulation

Reconfiguring the main parking area after relocating the group picnic area and main restroom building, providing additional designated parking in several locations, widening the site road, and establishing pedestrian pathways throughout the site would result in better traffic flow and less congestion thus reducing the likelihood of vehicle to vehicle or vehicle to pedestrian accidents. Providing additional designated parking would reduce the need for employees to provide traffic control, and the resulting closure of the SB12 roadside to overflow parking would increase safety on the highway. Stabilizing the site road would also address the edge of the road collapsing and prevent the risk of visitors catching a tire and veering down the steep grade toward the creek. Providing the bypass trail would allow trail hikers to forego walking along the site road in the campground, further reducing the likelihood of pedestrian to vehicle accidents. However, the bypass trail requires making steep transitions with stone steps which pose concerns similar to taking stairs instead of walking on flat surfaces and would bring hikers in proximity to steep drop-offs. Two campsites are below the edge of the bench where the bypass trail would be located. The proposed bypass trail alignment will be approximately 100-feet away from the edge and signing to encourage hikers to stay on the trail would reduce the risk of rocks being tossed or falling into the campsites.

Replacing the culvert-style creek crossing on the entrance road with a bridge would remedy the potential structural failure that could injure staff or visitors. Replacing the low water crossing with a structure that spans the creek would remedy the issue of motorcyclists and pedestrians slipping and falling due to the algae build up. It would also extend the amount of time campers on the east side of the campground would have to exit during flood events. As compared to the low-water crossing, the new structure would provide more time for vehicle passage over the creek (until flood waters cover the structure making it unpassable).

Sanitation and Pollution

The proposed action would provide additional year-round toilet facilities for visitors. Replacing the main toilet building with vault toilets would remedy the need for staff to clean up after a clogged toilet. Onsite trash collection would allow visitors to conveniently dispose of their trash and pet waste. The additional toilets and trash collection should reduce the amount of human waste and trash on the ground, thus reducing the potential exposure to biological hazards for visitors and staff who may encounter it.

Site Amenities/Fixtures

Replacing the shade shelters with ones that meet code would remedy the potential of visitors being injured by tripping over the footers or hitting their heads on the roof overhangs. Replacing the landscape block retaining walls would remedy the potential for injury from tripping or slipping on dislodged blocks below the water's surface to those playing in the creek. Installing tent pads away from the creek edge at the campsites close to the creek would increase the likelihood that a camper could get safely away in the event of a flash flood.

Communications

Under the proposed action staff, site host, SAR crews, and other first responders would benefit from improved communication options associated with fiber connectivity, such as emergency phones and Wi-Fi calling and texting, which could result in quicker responses during emergencies.

Human Health and Safety - Comparison of Effects of Alternatives

Many of the components of the proposed action are driven by the need to address human health and safety concerns at the CCRS (see table 2). Under the maintenance only alternative, in instances where items can be replaced with structures of similar size and scale in the same locations (shade shelters) the human health and safety concerns would also be addressed. However, the remaining proposed action components would not be implemented (additional designated parking and site road improvements, replacement of the culvert-style and low water crossings, pedestrian pathways, replacement of main restroom building and septic system removal, additional vault toilets, retaining wall replacement, and campsite reconfiguration), and the corresponding human health and safety benefits would not be realized. These components would continue to be maintained and repaired pending funding, staffing, priorities, and time.

The proposed action would reduce safety hazards currently present along the site road, along SB12, in the designated and non-designated parking areas, in the campground, at the water play area, and at the water crossing sections. The actions would also reduce, if not eliminate, the potential for unnecessary exposure to biological hazards. Visitors parking along SB12 have created a pervasive safety hazard for passing motorists, visitors, and employees conducting traffic control. This hazard would be addressed by increasing designated parking, UDOT's implementation of a no parking zone, and the improved/widened site road.

The bench above the campground where the bypass trail is proposed would be used by more visitors as a result of the proposed action than would likely continue under the maintenance only alternative. Though the trail would be about 100 feet from the edge and signed with "stay on trail" messages, social trailing is likely to continue and the number of site users who explore the edges of the bench above the two campsites could increase.

Human Health and Safety - Cumulative Effects

The cumulative effects area of analysis for human health and safety is the project area plus the stretch of SB12 where parking currently occurs along the sides of the road because human health and safety impacts outside these areas are independent of the CCRS project. Past, present, and reasonably foreseeable actions include construction, use and maintenance of the roads, campground, trails, and trailheads in the cumulative impact area. Cumulative impacts to human health and safety include ongoing risks due to disorganized parking, including parking along SB12, a slippery low water crossing, pedestrians walking within the parking areas and on the roads, human waste not disposed of properly, shade shelters with low clearance and exposed footers, collapsing retaining walls, camping in or near areas prone to flooding, and unreliable communication for emergencies. Under the proposed action, the improvements would organize the parking and create additional parking off SB12 to accommodate the current visitation, replace the low water crossing with a structure above the creek, create walking paths separated from traffic and outside the parking areas, provide vault toilets in convenient locations that are available year-round, replace the shade structures with higher clearance and footers that are not tripping hazards, replace the retaining walls, move the camping out of the flooding areas, provide Wi-Fi communication, and close the SB12 roadside to overflow parking. The maintenance only alternative would only roughen the low water crossing surface and replace the shade structures with higher clearance and footers that are not tripping hazards. Overall, because both alternatives would result in actions designed to address visitor health and safety concerns at the CCRS, neither would result in an incremental increase in cumulative impacts on human health and safety.

3.3. UNIVERSAL ACCESSIBILITY

Issue: How would the alternatives affect universal accessibility at the CCRS?

3.3.1. Universal Accessibility - Affected Environment

The ABA was passed by Congress to ensure access to the built environment for people with disabilities. The law requires that buildings or facilities that were designed, built, or altered with federal dollars or leased by federal agencies after August 12, 1968, be accessible. Standards for accessible design issued by the US Access Board²² ensure that the ABA requirements are met. In 2013 a final rule issued by the Board amended the ABA Accessibility Guidelines by adding requirements for outdoor developed areas constructed or altered by or on behalf of federal agencies. Several amenities and site fixtures at the CCRS do not meet the *US Access Board Accessibility Standards for Federal Outdoor Developed Areas* (2014) per the *BLM Accessibility Assessment for Calf Creek* (2016) prepared by the BLM Utah State Office. Figure 3 shows some of the accessibility deficiencies at the CCRS.

Parking and Circulation

There are two dedicated accessible parking stalls in the main parking area which meets the accessibility standard of providing two accessible stalls for a parking area with 26 to 50 total stalls. Several pedestrian pathways within the CCRS do not meet accessibility standards. The lower picnic area and edge of the water play area are not accessible due to slope and terrain. The pedestrian footbridge is not accessible on the west side due to steps²³ nor on the east side because the transition from the paved site road to the bridge is uneven and exceeds the maximum allowable grade. At the low water crossing, the flowing water impedes pedestrian passage for those with limited mobility.

Sanitation and Pollution

The 1980s-era main restroom building is divided into sex-segregated halves and does not meet accessibility standards because the entrance doors and restroom stall doors are narrower than the required 36" wide.

Site Amenities/Fixtures

In the group picnic area, the wooden picnic tables do not have the 19" necessary leg room required for wheelchair users, and the built-in 1960s-era barbeque grill and side tables provide only 24" of clear space, below the required 48" clearance around grills. The shade shelter roof planes are below the 60" minimum overhead clearance and the concrete footers jut out 24" above the ground, which could result in the visually-impaired being injured. The envelope distributor on the fee station kiosk is above the required 48" maximum reach distance. Some of the concrete picnic tables in the campground that do have the necessary leg room clearance are placed too close to the retaining walls or too close to the fire rings (less than 48" of clear space), and others are on platforms rendering them inaccessible. Many of the fire rings and grills are not accessible because they are missing the 9" fire building surface, and the operable grill parts take more than five pounds of pressure to adjust.

²² The Access Board is an independent federal agency that promotes equality for people with disabilities through leadership in accessible design and the development of accessibility guidelines and standards. The Board was created in 1973 to ensure access to federally funded facilities.

²³ The stairs to the footbridge are exempt from meeting standards because they were constructed prior to passage of the ABA.



Figure 3 - Universal accessibility deficiency examples (top down, left to right): table too close to wall; group picnic tables that do not provide 19" of knee clearance; fire rings that do not provide 9" high fire building surface; table that is accessible on ends but that cannot be approached because of elevated pad surrounded by blocks; 1960s era grills and side tables that do not have required clear space; table that does not have 19" of knee clearance; fire ring and table that are too close together; campsite that is not universally accessible due to grade changes and erosion.

3.3.2. Universal Accessibility - Environmental Effects

Effects of the Maintenance Only Alternative on Universal Accessibility

Parking and Circulation

Under the maintenance only alternative, additional accessible parking would not be provided, and movement within the CCRS for someone in a wheelchair or with limited mobility would continue as it is now.

Sanitation and Pollution

Under this alternative, the effects of not providing unisex or gender-neutral restrooms that meet accessibility standards are longer lines, the inability to meet the needs of differently-abled or cross-generational users, an increased risk of certain user groups feeling unsafe or uncomfortable, and potential harassment or discrimination.

Site Amenities/Fixtures

Under this alternative, based on available funding, BLM would continue to replace site fixtures that are not universally accessible with ones that are, but in a piecemeal fashion. These would include replacing the shade shelters, the fee station/kiosk, picnic tables, and fire rings. The group picnic area with wooden tables and grill area that do not meet accessibility standards would remain in place.

Effects of the Proposed Action on Universal Accessibility

The proposed accessibility improvements at the CCRS would in some instances exceed the standards which set minimum requirements for a site to be considered accessible for those with disabilities. For example, the standards call for providing a minimum of two universally accessible camping units for a campground with up to 25 units total, but in the CCRS campground with fewer than 20 sites, all but two will be universally accessible.

Parking and Circulation

The proposed action includes providing at least two additional accessible parking stalls in the main parking area. The proposed action would improve pedestrian circulation throughout the CCRS for those in wheelchairs and with limited mobility. It includes improvements to ensure that the day use areas, including the water play area, are accessed via paths that are at least 36" wide, firm, stable, and not steeper than 10% grade. Those in wheelchairs would not have direct access to the creek at the water play area, but they would be able to be near the creek's edge. They would also be able to access the footbridge more easily from the east side and be able to cross the creek in the back of the campground using the proposed above-creek structure. The new nature trail would provide the opportunity to enjoy a short trail experience within the creek's riparian zone for those in wheelchairs or with limited mobility.

Sanitation and Pollution

The proposed vault toilet restroom building in the main parking area would have unisex individual rooms that meet accessibility standards. This would make them function better not only for those in wheelchairs but also for those with young children or others who need assistance. They would also be more inclusive for all users. The additional unisex vault toilets in the campground and overflow parking area would also meet accessibility standards.

Site Amenities/Fixtures

The proposed action includes replacing several site amenities and fixtures (group picnic area, shade shelters, picnic tables, fee station/kiosk, etc.) with ones that meet accessibility standards. It also includes providing a few new campsites and reconfiguring the existing ones to meet accessibility standards. Two campsites are located high enough above the site road and parking spaces that steps are the most reasonable way to access them. The standard is to provide a minimum of two universally accessible camping units for a campground with up to 25 units total. The CCRS will exceed the standard by making all but two camping units universally accessible. The new amphitheater would also meet accessibility standards.

Universal Accessibility - Comparison of Effects of Alternatives

Some of the components of the proposed action are driven by the need to improve universal accessibility at the CCRS (see table 2). In instances where the items can be replaced with structures of similar size and scale in the same locations (shade shelters, fee station replacement, small site fixtures) the universal accessibility concerns would be addressed in both alternatives. Under the maintenance only alternative, the remaining proposed action components (additional accessible parking, nature trail/pedestrian pathways, main restroom building, additional/reconfigured campsites, group picnic area, amphitheater) would not be implemented, and their corresponding universal-accessibility benefits would not be realized.

Universal Accessibility - Cumulative Effects

The cumulative effects area of analysis for universal accessibility includes public recreation sites along SB12 because many visitors travel the length of the byway to connect the southern Utah national parks and visit not only the parks but also BLM, Forest Service, and state park sites along the way. Past, present, and reasonably foreseeable actions include the construction, use, and maintenance of several visitor centers, byway waysides, campgrounds, and trailheads along the byway, that are managed by federal, state, local, and private entities. The visitor centers, most of the byway waysides, and at least some portions of the campgrounds are universally accessible. But the majority of the trailheads and trails, especially those outside the national parks, are not. Under the proposed action, the additional accessible parking, nature trail/pedestrian pathways, main restroom building and additional vault toilets, additional and reconfigured campsites, group picnic area, and small amphitheater would provide access and additional opportunities within the area of analysis to those with limited mobility. The maintenance only alternative would provide amenities that modestly improve universal accessibility (shade shelters, fee station/kiosk, and small site fixtures) which would allow those amenities to be more easily used by those with disabilities. Those improvements would modestly improve universal accessibility to existing facilities in the cumulative impact area.

3.4. RECREATION RESOURCES

Issue 1: How would the alternatives affect the recreational opportunities and experiences of visitors?

Issue 2: How would the alternatives affect the BLM's ability to manage and maintain the CCRS?

Issue 3: How would the alternatives affect use along the Lower Calf Creek Falls Trail?

3.4.1. Recreation Resources - Affected Environment

The CCRS is one of the most visited recreation sites in the Monument with visitation steadily increasing in recent decades, driven in part by designation of the Monument in 1996, advertising by the Utah Office of Tourism and Garfield County Office of Tourism, designation of SB12 in 2001, private and crowd-sourced hiking destination websites and apps, and general outdoor recreation-tourism trends. Visiting Calf Creek is the #1 "Thing to Do in Escalante, Utah" on Tripadvisor.com and is #27 on the same site's "Things to Do in Utah" list. The primary recreation opportunities provided at the CCRS are associated with camping, picnicking, and hiking. Hiking to the 126-foot high Lower Calf Creek Falls is the main draw for the vast majority of visitors.

Trail use is counted using a TRAFx²⁴ counter. Campground use is calculated using recreation use permits²⁵. Though recreation use permits for day use are also collected, they are not used for trail user counts because comparing TRAFx data to permits makes it clear that some hikers do not pay for a permit.

Based on TRAFx data, the primary visitation season begins in March and goes through October, with the months of May and June being the busiest, and March and August being less busy. Visitation especially peaks around Memorial Day in late May and in mid-October when Utah schools are on fall break. Saturday is the busiest day of the week. Trail use is busiest from 9 a.m. to 3 p.m. and peaks midday when hikers are recorded coming and going. The average party size for those visiting the CCRS is 2-3 people.

Since Fiscal Year²⁶ 2000 visitation to the CCRS has more than doubled. Going back just 10 years, day use visitation at the CCRS has increased about 40%, but campground use has held fairly steady with an average of 5,000 campers annually. Visitor use and fee collections at the CCRS for Fiscal Year 2021:

- Approximately 40,000 hikers used the Lower Calf Creek Falls Trail
- Approximately 5,000 campers purchased almost 2000 recreation use permits (\$15/night) totaling slightly below \$30,000
- More than 12,000 recreation use permits were collected for day use (\$5/vehicle) totaling almost \$60,000

Calf Creek was identified as one of the top “Special Places” in the *Grand Staircase-Escalante National Monument Recreation Experience Baseline Study – Phase 4 Report*²⁷ which detailed the results of 16 focus groups conducted in 2016. It was a location where study participants expected a degree of crowding during the visitation season and noted that if they preferred seeing fewer people they would shift to going in the off-season. The report noted this as a key observation of the study:

Many participants identified iconic locations such as Calf Creek Campground and Trail as ideal locations to develop and maintain recreational resources because of their accessibility, beauty, and safety for visitors who might be less familiar with the more rugged parts of the landscape and the demands it places on visitors. They often expressed pleasure in “sharing” these places with the visitors to the area and seeing them enjoy the landscape in the front-country.

According to the last *Government Performance and Results Act Calf Creek Recreation Visitor Survey* (2016), hiking was by far the most popular activity, followed in order of popularity by swimming, sightseeing, picnicking, camping, and bird watching/wildlife viewing. About two-thirds of visitors were adult parties of two people or less, equally dispersed across age groups.

Visitors to the CCRS rely on the site infrastructure, amenities, and fixtures to be available and functional to support their desired recreation experiences and associated benefits. The attractiveness of spending time at an easily accessible, front country site in a highly scenic desert canyon that has water, shade, and a waterfall, coupled with the publicity generated by external agencies and individuals, drives the visitation to CCRS that has

²⁴ TRAFx Infrared Trail Counters count people - walkers, hikers, joggers, etc. - on trails, paths, and sidewalks. They sense and detect the infrared wavelength that people emit. Because the trail to Lower Calf Creek Falls has one entrance and is an in/out hike, BLM divides the number of total daily TRAFx passes by 2.

²⁵ Recreation use permits for camping are collected on site because camping is first come/first service. A reservation system for camping is not currently in place but could be implemented at any time based on existing agency policy.

²⁶ Federal fiscal years begin October 1 and end September 30.

²⁷ The *GSENM Recreation Experience Baseline Study* was conducted over five years by Colorado Mesa University’s Natural Resource Center. Phase 4 of the study focused on the areas accessed by Highway 12 and Burr Trail Road.

put additional strain on the old infrastructure. The following sub-sections discuss the current status of that infrastructure.

Parking and Circulation

The CCRS site road requires passing vehicles to go off the pavement edge and to wait or back up for on-coming vehicles in the most narrow spots. The main parking area is used by visitors who hike the trail, picnic, play in Calf Creek, or camp in the two walk-in campsites. It has 30 delineated, standard size parking stalls. Once those fill, usually by 10 a.m., parking overflows to areas on the edges of the parking area, along the site road, near the entrance, and along the highway. BLM staff have counted more than 70 vehicles in these undesignated parking locations during peak times. Hiking the 6-mile roundtrip to the Lower Falls takes most visitors 3-4 hours, so the average turnover for parking is four hours or more. Parking for vehicles over 25-feet is not provided because of lack of space to turnaround or to provide oversize parking stalls; signs along the highway and at the entrance warn visitors about this limitation.

The site road also serves as the primary pedestrian route for those parking outside the main parking area, for hikers to get from the fee station to the trailhead, and for campers to go between campsites and to the toilets. Pathways to the lower picnic area and water play area are not well-defined.

Sanitation and Pollution

The main restroom building is located on the south end of the main parking area separated from the campground and trailhead. It has sinks and flush toilets and is open from during the months when pipes are not likely to freeze (usually April to October). Several times a year the restroom building's plumbing clogs due to heavy use requiring closure for maintenance, pumping, and cleaning. The single vault toilet in the campground is the only toilet available year-round, including for hikers. It is on the east side of the creek and requires hikers and those using the western side of the campground to cross the pedestrian suspension bridge to use it.

The CCRS is a pack-it-in/pack-it-out site so campers and hikers are required to take their trash to public collection locations several miles away. A dispenser for pet waste bags and a small trash receptacle for this waste is located at the trailhead.

Site Amenities/Fixtures

The shaded group picnic area is used primarily by individual parties but is available for advance reservation for groups up to 75 people during non-holiday times. In the past five years, this group picnic area has been reserved less than twice a year.

The campground is in a highly desirable setting along a creek with shade. It has 11 standard sites (most accommodate one or two standard size vehicles; none are designed for oversize vehicles) and two walk-in sites adjacent to the group picnic area. Camping is first-come, first serve. Through much of the visitation season, the daily occupancy is at or exceeds capacity and sites often turnover as quickly as the previous night's campers leave. There are no group camping sites, but it is fairly common for larger parties to secure two sites that are in close proximity. Only one campsite has a shade shelter. A few campsites have little or no shade and are less desirable than those with shade and are taken last (except during the cold months when it is advantageous to be in the sun). All camp sites have a picnic table and fire ring. All but a couple sites have a cleared open area to pitch a tent.

The water play area is popular during the summer, especially for families with children. Adults often sit in camp chairs in the shallow areas where the water runs across sandstone while children play in the creek.

The host site is located behind the main restroom building, separated from the fee station/kiosk and campground by the main parking area. The trailhead is further away in the opposite direction, to the back of the campground, and is not visible to visitors upon arrival. The group picnic area and the two walk-in campsites are adjacent to the fee station/kiosk where day use and camping fees are collected. Though the fee station/kiosk is large, visitors often do not notice it and go toward the restroom building and host site looking for where to pay fees.

Communications

The CCRS does not have land line telephone or fiber optic service and because it is at the bottom of a deep canyon, cell phone services are not available. A temporary BLM radio repeater provides radio communication for BLM staff and the site host to contact the Escalante Interagency Visitor Center or the Garfield County Sheriff's Office dispatch, but it is not always reliable.

3.4.2. Recreation Resources - Environmental Effects

The analysis area for recreation resource is the project area.

Effects of the Maintenance Only Alternative on Recreation Resources

Under the maintenance only alternative, the CCRS would continue to be managed by BLM staff with support from volunteers, a site host, and/or contractors. Fees collected on site would continue to help fund the management and maintenance of the CCRS. Considering the age of the site assets, BLM can expect increasing costs to manage and maintain the CCRS in its current condition. Replacing assets in a piece-meal fashion would require repeated mobilizations, result in less cohesiveness, and impact visitors when closing the site is necessary multiple times across several years.

Parking and Circulation

Under the maintenance only alternative, traffic congestion and parking in undesignated locations would continue. Parking for the walk-in campsites would continue to be in main parking area as space is available. Visitor dissatisfaction from regular and ongoing congestion and confusion about where to park would continue. The need for staff and the host to provide traffic control would continue and likely increase. Visitors would continue to walk along the site road dodging traffic. First-time visitors would continue to be unsure of where to begin the hike to the falls. Hikers would continue to walk through the campground, decreasing privacy for campers in the sites on the west side.

Sanitation and Pollution

Under the maintenance only alternative, the plumbing in the main restroom building would continue to clog during the visitation season and need to be shut down in the winter adding additional strain on BLM staff. The presence of human waste on the ground in the campground and along the trail is expected to continue, which is not only unsanitary, unsightly, and negatively affects visitor experience, but also creates extra work and exposure to potential pathogens for staff and the host who must collect and dispose of it. Visitors would continue to pack their trash off-site or leave it on the ground or in the restrooms and fire rings for the site host and staff to address.

Site Amenities/Fixtures

Under the maintenance only alternative, day use picnicking would continue to be available in two locations, by the fee station/kiosk and in the open area below the main parking area. Shade shelters that do not pose hazards

would replace the existing ones. The campsites without sufficient parking or space to pitch a tent would remain. The site host would continue to be located across the main parking area from the campground in an inconvenient location for interaction with visitors. Hikers who park outside the main parking area would continue to be required to walk down and back up along the steep section of the site road to pay fees and put the pay stub in their vehicle windows.

Communications

BLM staff and the site host would continue to use unreliable radio communication for emergencies. Delayed emergency response has a negative effect not only on human safety, as noted in section 3.2.2, but also on visitor experience for the people who need emergency assistance. This limited communication capacity also contributes to anxiety and added stress for BLM staff, the site host, and emergency response teams. A reservation system, if adopted in the future, would be less efficiently managed because it would depend on unreliable radio communication and staff driving back and forth from the Escalante visitor center to mark reserved sites.

Effects of the Proposed Action on Recreation Resources

Under the proposed action, the public would not have access to the CCRS or Lower Calf Creek Falls Trail for several weeks when it is not safe for the public to mix with construction activities. During this time visitors would be displaced to other places to hike and camp in the general area. Once constructed, the upgraded and new infrastructure would require regular maintenance. Fees collected on-site would continue to help fund the management and maintenance of the CCRS.

Parking and Circulation

The additional designated parking for day use would provide parking in an organized and efficient manner while accommodating similar numbers of vehicles that have parked in the existing lot and along the site road and SB12. The proposed action will not result in an increase in day use parking as compared to average parking levels in the main parking area, along the site road, and along SB12 on busy days during peak visitation times. The difference is that a similar number of vehicles to those that have been parking in both the lot, along the site road, and along SB12 will be able to park in a safer, more organized manner. Hazards to pedestrians and vehicle traffic caused by parking along SB12 will be eliminated, as UDOT has committed to establishing a no parking zone along SB12 for ½ mile in each direction of the entrance to the CCRS. Providing for similar parking volume, in designated instead of non-designated spaces, would not have a meaningful effect on use along the Lower Calf Creek Falls Trail as overall parking capacity would not exceed that which has historically occurred during peak visitation. Parking in designated spaces instead of along the site road and highway and widening the site road would improve the visitor experience by reducing the confusion and anxiety about where and how to park and about whether or not there is room to safely pass oncoming traffic. Providing the additional designated parking would reduce the burden on staff and the host to provide traffic control on an increasingly regular basis. Providing at least one designated parking stall per campsite would improve visitor experience by ensuring that campers have a place to park and by reducing the risk of being side-swiped at a couple sites which require parking partly in the travel lane.

Relocating the trailhead to the main parking area and constructing the by-pass trail would help hikers better understanding where to begin the hike and would reduce the hiker foot traffic through the campground. This would reduce confusion and lack of orientation for hikers, increase privacy for campers, and reduce the time staff and the host spend directing visitors to the trail. The by-pass trail would require hikers to use steps to navigate the steep transitions onto and off the bench at the beginning of their hike to connect to the existing trail just north of the campground. It would be aligned more than 100' from the edge of the bench above the

two campsites on the west side of the site road, but if hikers venture off the trail they have been directed to stay on, they could peer down into the campsites, reducing privacy for those campers, and some could kick or toss rocks off the edge. It is anticipated that hikers who have been to the CCRS before may continue to walk through the campground to access the trail and also that hikers on their return from the falls may choose to walk through the campground back to the parking area to avoid the steep transitions of the bypass trail segment.

The proposed interpretive nature trail would provide visitors, especially those who do not hike the trail to the falls, the opportunity to walk near and access Calf Creek and learn about the special resources of the area.

Sanitation and Pollution

Replacing the main restroom building with a vault system facility would improve the visitor experience by providing toilets in an obvious and convenient location year-round. Providing additional vault toilets in the overflow parking area and on the west side of the campground would also improve the experience by providing more restrooms in locations that are more convenient for visitors. These additional restroom facilities would result in less human waste on the ground and less exposure to this waste for visitors, staff, and the host. Providing on-site trash collection would improve the visitor experience because visitors, especially campers, would be able to conveniently dispose of their trash. These sanitation and pollution improvements would reduce the burden on BLM staff and the site host related to dealing with clogged plumbing, and trash and pet waste collection.

Site Amenities/Fixtures

Providing a large group shelter and up to three smaller shelters for picnicking would provide visitors of differing party sizes more options and provide shelter from sun and rain. The large shelter could also be used for special programming, gatherings, or events. Removing the existing group picnic area with the original wooden tables from the shaded area would do away with an amenity that provides historic charm associated with a bygone era. The proposed small amphitheater would provide a place to host interpretive programs and other events, adding an additional opportunity for visitors.

Providing additional campsites at the CCRS would allow more people to experience camping in this prime location than is afforded now. Reconfiguring campsites so they provide adequate space for parking, a tent pad, and movement around the picnic table and fire rings would provide a better and safer camping experience. Additional shade shelters, especially in the campsites lacking shade, would make those sites much more desirable in the summer months. Relocating the site host closer to the campground would allow campers to find and more easily engage with the host.

Reconfiguring the main parking area requires that the fee station be relocated. Depending on the final design of the main parking area, one or two fee stations would be constructed in the core area, one by the beginning of the trail and one by the entrance to the campground. This will be determined based on what provides the best orientation and convenience for visitors. The proposed secondary fee station near the entrance would allow hikers who park in the overflow parking area to conveniently pay fees and put the pay stub in their vehicle windows and not have to make a long roundtrip to the main fee station before starting to hike.

Communications

The proposed fiber line would allow for reliable communication between those on site (camp host and staff) and the interagency office in Escalante. Additionally, as noted in section 3.2, the BLM staff, site host, SAR crews, and other first responders would have access to emergency phones and/or Wi-Fi calling and texting, allowing for quicker responses during emergencies, a benefit for the visitor experience of those needing assistance, and a

reduction in stress for those responding to the emergency. Reliable communications to and from the site would ease implementation of a reservation system because the site host and BLM staff at the CCRS could directly communicate with staff at the Escalante visitor center to coordinate reservations.

Recreation Resources - Comparison of Effects of Alternatives

Under the maintenance only alternative, on-going maintenance of the aged infrastructure would continue. The visitor experience would likely diminish over time as infrastructure continues to degrade and crowding increases. The stress on BLM staff and the site host associated with managing and maintaining the CCRS would continue and likely increase. The opportunity for BLM to use GAOA funds to pay for substantial deferred maintenance in the near future and accomplish the construction in a couple years, instead of spreading across many years, would be lost.

The proposed action would result in the implementation of long-needed infrastructure upgrades and replacements. Implementing the proposed action would result in improved visitor experience associated with a well-kept, better organized, and efficient-to-use site and closure to parking along SB12. The stress on BLM staff and the site host associated with managing and maintaining the CCRS would decrease. BLM would capitalize on the opportunity to use GAOA funds to pay for substantial deferred maintenance improvements beneficial now and into the future.

Recreation Resources - Cumulative Effects

The cumulative effects area of analysis for recreation resources includes recreation opportunities for camping, hiking, and picnicking accessed by SB12 because many visitors travel the length of the byway to connect the southern Utah national parks to enjoy the array of recreation experiences provided by the Park Service, BLM, Forest Service, state parks and private operators. Past, present, and reasonably foreseeable activities include the construction, use, and maintenance of several campgrounds, trailheads, trails, and picnic areas along the byway, managed by a host of federal, state, local, and private entities. The trend for increasing visitation in the last ten years has been documented by BLM (see section 3.4.1), the Park Service²⁸, and UDOT.²⁹ The proposed action would better accommodate and manage the current visitation demand. The maintenance only alternative would maintain existing facilities but would not better manage the current visitation demand. Neither alternative is projected to increase visitation to the CCRS or at other recreation destinations along the byway because infrastructure at CCRS does not drive visitation. Visitation is driven by the desirability of the location, the recreation opportunities it provides, and marketing by external entities.

3.5. CULTURAL RESOURCES

Issue: How would the alternatives affect cultural resources?

3.5.1. Cultural Resources - Affected Environment

Class III – Intensive Pedestrian Survey (Class III survey) of the cultural resource analysis area resulted in the identification of a total of three historic properties, sites that are eligible for the National Register of Historic

²⁸ Visitation to Bryce Canyon and Capitol Reef National Parks has steadily increased for decades. In the mid-2010s both parks saw dramatic increases in visitation. From 2015 to 2021 Bryce experienced a 21% increase, and during that same timeframe Capitol Reef experienced a 49% increase. <https://irma.nps.gov/STATS/>

²⁹ UDOT Annual Average Daily Traffic counts increased 31% from 2011 to 2020 along the segment of SB12 that passes by the CCRS. <https://www.udot.utah.gov/connect/business/traffic-data/traffic-statistics/>

Places (NRHP), including 42GA8060, 42GA6091, and 42GA1431. No ineligible sites or isolated finds were identified during survey.

42GA8060 consists of the Calf Creek Campground, which was created in 1962-63 by BLM. The historic campground facilities include 3 shade structures (Features 1, 2, 3), a footbridge (Feature 4), a toilet facility (Feature 5), day use facilities that include picnic tables and a barbeque station (Feature 6), a volleyball court (Feature 7), fieldstone steps to the creek (Feature 8), and a vehicle culvert/bridge (Feature 9). The campground has been expanded, updated, and improved since it was constructed. Some campground features are historic in age, while other elements are of more recent construction and are not considered historic features. The campground is considered eligible for the NRHP under Criterion A – the site is associated with a historic pattern of trends which have contributed to the development of southern Utah and the nation, namely the recreational development of public lands via camping facilities, which has led to an increase in recreational tourism. The campground is also considered eligible for the NRHP under Criterion C – the site’s historic structures exhibit inventive and innovative architectural techniques in the adoption and use of locally available native field stone and salvaged materials to construct individual structures ‘on site.’ These methods are unique, no longer common, and embody architecture that reflects immediate local needs. It stands in stark contrast to the current trend of trucking in prefabricated materials for campgrounds.

42GA6091 consists of the historic Escalante to Boulder Road, which was created by the Civilian Conservation Corps (CCC) between 1934 and 1940. The road provided the first year-round automobile-accessible route between the communities of Escalante and Boulder. A segment of the road (Segment A) is located within the analysis area and includes the roadbed, 2 galvanized metal culverts, and wet laid and dry laid retaining walls. The road is considered eligible for the NRHP under Criterion A – the road is associated with important events in our nation’s history, having been built as a CCC construction project and being the first year-round, predictable vehicular access between the communities of Escalante and Boulder, thus greatly contributing to the communication and economic capabilities of the region. The road is also considered eligible for the NHRP under Criterion C - the road’s constructed features embody distinctive materials, type, and techniques of construction.

42GA1431 is a prehistoric site that has been impacted by natural erosion. However, since its original recordation in 1997, the prehistoric site has not been impacted by recreational visitation, likely because it is located approximately 10 feet above the ground surface, is hidden behind vegetation, and is inaccessible and is not addressed further in the effects analysis.

3.5.2. Cultural Resources - Environmental Effects

The analysis area for the cultural resource issues is inclusive of the CCRS, from the entrance at the south end, extending north to the Lower Calf Creek Falls Trailhead, encompassing the campground as well as the bench immediately west of the campground. This area of analysis is inclusive of areas where ground surface disturbance from proposed construction activities is anticipated. It is also inclusive of the area surrounding the campground and the Lower Calf Creek Falls Trailhead where visitor access and use could lead to surface disturbance, casual artifact collecting, and/or vandalism.

Effects of Maintenance Only Alternative on Cultural Resources

Parking and Circulation

The historic Escalante to Boulder Road (Segment A of 42GA6091) would continue to be directly affected by degradation via natural erosional processes. This would result in a loss to site integrity to this segment of the road and negatively impact the site’s overall eligibility for the NRHP.

Patching the damage to the concrete base of the culvert-style creek crossing (Feature 9 of 42GA8060) to extend its life and prevent its failure would directly affect this historic feature – patching this historic feature could result in a loss to site integrity and negatively impact the site’s eligibility for the NHRP.

Site Amenities/Fixtures

The replacement of shade shelters (Features 1, 2, and 3 of 42GA8060) with new structures of similar size and scale in the same locations would directly affect these historic features – the replacement of the historic fabric of the shade structure features would result in a loss to site integrity and negatively impact the site’s eligibility for the NRHP.

The continued shoring up of the retaining walls at the water play area could directly affect Feature 8 of 42GA8060. This historic fieldstone step feature could also erode naturally by flood events. In both cases, the result would be a loss to site integrity and a negative impact to the site’s eligibility for the NRHP.

The day use group picnic area structures (Feature 6 of 42GA8060) are in poor condition and would continue to be directly affected by degradation over time, resulting in a loss to site integrity and a negative impact to the site’s eligibility for the NRHP.

The volleyball court (Feature 7 of 42GA8060) is non-functional at present due to natural deterioration, and such deterioration would only increase with time. This continued deterioration of the historic feature would result in a loss to site integrity and negatively impact the site’s eligibility for the NRHP.

Effects of Proposed Action on Cultural Resources

Parking and Circulation

The construction of an overflow parking area near the entrance to the CCRS would directly affect Segment A of 42GA6091. The removal of a roadbed portion of Segment A of the historic road would result in a loss to site integrity and negatively impact the site’s eligibility for the NRHP.

The replacement of the culvert-style creek crossing (Feature 9 of 42GA8060) with a new bridge would directly affect this historic feature. The removal of this historic feature would result in a loss to 42GA8060’s site integrity and negatively impact the site’s eligibility for the NHRP.

Site Amenities/Fixtures

The removal and replacement of shade shelters (Features 1, 2, and 3 of 42GA8060) in the lower picnic area and campground would directly affect these historic features – the removal of these historic shade structure features would result in a loss to 42GA8060’s site integrity and negatively impact the site’s eligibility for the NRHP.

The relocation and/or reconstruction of the day use group picnic area (Feature 6 of 42GA8060) to allow for the reconfiguration and expansion of the main parking area would directly affect this historic feature. The removal and replacement of the historic barbeque station and upgrades to the historic day use picnic areas would result in a loss to 42GA8060’s site integrity and negatively impact the site’s eligibility for the NRHP.

The removal of the paved, athletic court (Feature 7 of 42GA8060) for the purpose of conversion into walk-in campsites would directly affect this historic feature. The removal of this historic volleyball court feature would result in a loss to 42GA8060’s site integrity and negatively impact the site’s eligibility for the NRHP.

The replacement of the retaining walls at the water play area would directly affect Feature 8 of 42GA8060. The removal of the historic fieldstone step feature would result in a loss to 42GA8060's site integrity and negatively impact the site's eligibility for the NRHP.

Cultural Resources - Comparison of Effects of Alternatives

The maintenance only alternative and the proposed action would result in negative impacts to cultural resources. Both alternatives would negatively impact 42GA6091 and 42GA8060, although the impacts would result from different causes.

The negative impacts to 42GA6091 from the maintenance only alternative would be caused by degradation via natural erosional processes, while the negative impacts to 42GA6091 from the proposed action would be caused by construction-related disturbance (the removal of a segment of the historic roadbed).

The negative impacts to 42GA8060 from the maintenance only alternative would be caused by natural structural degradation over time, by natural erosion caused by flood events, and by deferred maintenance activities. The negative impacts to 42GA8060 from the proposed action would be caused by construction-related disturbance (removal of Features 1, 2, 3, 6, 7, 8, 9 of the site).

Cultural Resources - Cumulative Effects

The cumulative impact analysis area is the area of potential effect for sites 42GA6091 and 42GA8060 because by definition effects to a site occur within the area of potential effect. Past, present, and reasonably foreseeable actions include construction of SB12 and the recreation site itself. The cumulative impacts to cultural resources from past, present, and reasonably foreseeable future actions include the construction of the CCRS in 1962-63 and use of the area since its creation. The CCRS development occurred prior to the NHPA regulations being in place, but recent cultural resource surveys do not indicate that any archaeological or historic properties were directly affected by construction or recreation use. Any impacts at the CCRS itself (42GA8060) are closely related to the site's designed use, as well as to natural deterioration, hence the need for this proposed action.

The cumulative impacts to cultural resources from past, present, and reasonably foreseeable future actions also includes past SB-12 road maintenance activities have resulted in direct adverse effects to Segment A of 42GA6091 and include: the installation of a modern highway culvert that has created a deeply incised channel that bisects the segment, the presence of modern asphalt fragments upon the historic road surface, numerous rock fall slides that have completely buried portions of Segment A, as well as the presence of road fill associated with construction of SB12 upon portions of Segment A.

Cumulative impact contributions from both alternatives to 42GA8060 result from maintenance. Cumulative impacts contributions also result from the proposed action's improvements of the site facilities over time. Cumulative impact contributions to 42GA6091 also result from the proposed action's proposed overflow parking area over time, as well as from past and future SB12 road maintenance activities. However, the potential for loss of historic features at these two sites from the proposed action, and thus a loss of site integrity and a negative impact on these site's NRHP eligibility, would be mitigated as described in section 4.2.1.

3.6. FISHERIES/AQUATIC RESOURCES

Issue: How would the alternatives affect Calf Creek's fisheries resources and aquatic habitats?

3.6.1. Fisheries/Aquatic Resources – Affected Environment

Calf Creek is a perennial fish-bearing tributary stream to the Escalante River. Calf Creek provides habitat for brown trout (*Salmo trutta*), cutthroat trout hybrid (*Oncorhynchus* hybrid), and a variety of benthic macroinvertebrate species. Brown trout and cutthroat hybrids were stocked in Calf Creek in the 1980's by the Utah Division of Wildlife Resources.³⁰

Eight miles of Calf Creek are listed on the EPAs 305(b) and 303(d) lists in the Utah Division of Water Quality's 2022 Integrated Report on Water Quality³¹ for failing to meet water quality standards for temperature for cold water species of game fish (Class 3A).

The proposed project area includes approximately 1500 stream feet of Calf Creek that flows through the CCRS. The recreation site includes a 0.3-acre main parking area and approximately one acre (0.55 miles) of paved site road and campsite parking spaces where runoff drains into Calf Creek. SB12, a paved highway, also runs adjacent to the CCRS and runoff from the highway drains to Calf Creek. Vehicles parked in undesignated areas on the side of the highway and the site road compact the soil and increase runoff in those areas. Runoff from compacted areas transports sediment and other pollutants to Calf Creek. Numerous social trails in the CCRS create compacted soils which are prone to runoff and erosion into the stream. Runoff is also increased naturally by rain falling on the exposed sandstone that is pervasive throughout the area.

The culvert-style creek crossing is located within the floodplain of Calf Creek. The low water crossing provides access to camp sites on the east side of Calf Creek and requires campers to drive through the creek. The water play area near the day-use area is along approximately 60 feet of floodplain. A retaining wall next to the water play area is about 25 feet long and includes steps where most visitors access the creek. The retaining wall has been damaged by flooding repeatedly.

3.6.2. Fisheries/Aquatic Resources - Environmental Effects

Effects of Maintenance Only Alternative on Fisheries/Aquatic Resources

Parking and Circulation

Under the maintenance only alternative, visitors would continue to park along the edges of the site road in undesignated locations, compacting soils and contributing to erosion that transports sediments into Calf Creek during storms, leading to potential degradation of water quality and fish habitat. The paved surface roadways and parking areas will continue to generate runoff into Calf Creek when it rains. The culvert-style creek crossing would be patched to extend the life of the structure and prevent its failure, but the structure would not be replaced. It restricts the natural stream geomorphology, creates scouring around the footers, and contributed sediment flow into Calf Creek. Vehicles driven through the creek across the low water crossing have the potential to add pollutants such as sediment, leaking oil, road grime, and brake dust stuck to the tires and underside of vehicles to the stream. Vehicles can also stir up and transport sediment from the edges of the low water crossing into the stream. The potential for negative impacts to water quality due to vehicles crossing Calf Creek at the low water crossing would continue.

Site Amenities/Fixtures

Erosion at the water play area is likely to continue under the maintenance only alternative with sediment continuing to go into the stream. Continued failure of the landscape block retaining walls stabilizing the stream

³⁰ Personal communication with Michael Hadley, UDWR Biologist

³¹ <https://documents.deq.utah.gov/water-quality/monitoring-reporting/integrated-report/DWQ-2022-002386.pdf>

edge adjacent to the water play area could lead to excessive erosion of the stream bank and contribute sediment to Calf Creek.

Effects of Proposed Action on Fisheries/Aquatic Resources

Parking and Circulation

The widened site road and new parking areas will increase paved surfacing in the CCRS by approximately one acre and will generate additional runoff when it rains during and after construction because vegetation would be removed, and the soils would be graded, compacted, and paved over. Design features such as erosion and sediment control structures, would be used during and after construction to minimize soil loss due to runoff. Widening and paving the existing road and constructing additional paved parking areas would increase runoff. The type of runoff would be similar to the runoff from SB12, in that it would contain vehicle related contaminants, such as oil, grease, mud from tires, and brake dust.

Replacing the culvert-style structure with a bridge, replacing the low water crossing with an above creek structure, and improving the site road would improve fish habitat in Calf Creek. Replacing the culvert-style structure with a bridge with footers that are away from the stream edge would reduce the potential for scouring and increased sedimentation associated with the existing footers. Scouring and sedimentation reductions would allow the geomorphology of the floodplain to return to a more natural state and would improve aquatic organism passage.

Replacing the low water crossing with a structure that would remove vehicle traffic from the stream would reduce the amount of vehicle related contaminants, such as oil, grease, mud from tires, and brake dust, that are deposited directly into the stream when vehicles drive through the water. Erosion of the road on either side of the stream would also potentially be reduced since vehicles would not be entering and exiting the stream. Turbidity and suspended sediment in the creek would temporarily occur during removal, construction, and installation of the new structure. Replacing the low water crossing as proposed would reduce the potential for scouring and increased sedimentation associated with the existing footers. Scouring and sedimentation reductions would allow the geomorphology of the floodplain to return to a more natural state and would improve aquatic organism passage.

The nature trail with designated creek access points could contribute sediment to Calf Creek but reclamation of the user created routes into the creek is anticipated to offset the amount of sediment.

Site Amenities/Fixtures

Removing and replacing the retaining wall at the water play area would create disturbance to the streambank, contribute sediment, and increase turbidity in the creek temporarily. Replacing the retaining wall would improve the stability of the streambank over the long-term and reduce the potential for scouring and increased sedimentation associated with the wall. Scouring and sedimentation reductions would allow the geomorphology of the floodplain to return to a more natural state and would improve aquatic organism passage.

Comparison of Effects of Alternatives

Under both alternatives, erosion and sediment contributions to Calf Creek would increase temporarily during maintenance or construction activities and runoff would increase during flooding events. Under the maintenance only alternative the runoff would continue over compacted soil from off-pavement parking. Under the proposed action the runoff would be over an expanded pavement footprint.

Under the maintenance only alternative, the culvert-style structure would continue to impede the natural floodplain, and the low water crossing would continue to introduce contaminants into the stream and potentially impede aquatic organisms' movement up and downstream. Both structures would continue to impact aquatic organism passage and habitat as previously described.

Under the proposed action, replacing the culvert-style structure, replacing the low water crossing, replacing the retaining wall, establishing a designated creek access point, and providing hardened, designated parking along with associated erosion-control measures would reduce scour and sediment delivery to the stream which would improve fish habitat and aquatic organism passage as previously described.

Cumulative Effects

The cumulative impact area for fisheries is the entirety of Calf Creek from its headwaters to the confluence with the Escalante River (approximately 8 stream miles total). This area of analysis was chosen because sedimentation or contamination of habitat at the CCRS could reasonably be carried downstream until Calf Creek reaches its confluence with the Escalante River, which is of much larger water volume.

The cumulative impacts to fish and fish habitat from past, present, and reasonably foreseeable actions include the sedimentation and contamination from construction in the mid-1900s of Highway 12 and construction in the early 1960's of the recreation site. It also includes the stocking of brown trout and hybrid cutthroat trout in the late 1970's-1980's. Present activities include continued use of the highway and recreation site. Livestock grazing was removed from the portion of Calf Creek Canyon below the Lower Calf Creek Falls but continues upstream. Reasonable and foreseeable impacts would be continued maintenance of campsites, roads, trail heads, and parking areas, potential upgrades of facilities over time, and increased visitation to Upper Calf Creek Falls and the middle section of the creek between the upper and lower falls. These actions altered the fish habitat by decreasing infiltration capacity, increasing runoff, introducing foreign objects (concrete, culverts, and landscaping blocks), and creating scour, sedimentation, and contamination situations.

The proposed action would remove the social trails, concrete, culverts, and landscaping blocks and replace them with facilities designed to reduce the scour, sedimentation, and contamination. The maintenance only alternative would continue to maintain the existing facilities and effects to fish and fish habitat would stay the same.

3.7. FLOODPLAINS

Issue: How would the alternatives impact the Calf Creek floodplain?

3.7.1. Floodplains – Affected Environment

Calf Creek flows through Calf Creek Canyon, passes through the recreation site, and continues down canyon to the confluence with the Escalante River. Calf Creek and its associated floodplain make up a portion of the canyon bottom within the recreation site.

Floodplains play an important role, especially in flashy systems like Calf Creek. Large areas of slickrock in the headwaters of Calf Creek can cause runoff and quickly fluctuating flows. Floodplains that are functioning correctly can allow rising water to spread out laterally, dissipating energy, and allowing deposition of sediment. In the absence of functioning floodplains, streams can channelize, resulting in higher velocities erosion, and downcutting.

The culvert-style creek crossing is located within the floodplain and has fallen into disrepair. The concrete slab-style low water crossing is located in the floodplain. Vehicles pass over it by driving through shallow water. The water play area also lies within the floodplain. Concrete and landscape blocks have been installed on the west

bank of the creek in order to allow people to climb down to the creek more easily. This also acts as a retaining wall but has fallen into disrepair and is beginning to fail. The west bank of the play area is much higher than the east bank. At high flow, Calf Creek spreads laterally to the east at this location and the west bank becomes subject to erosion because of lack of vegetative armoring and the slumping of landscape blocks. This has created somewhat of an erosional issue but has little impact on floodplain function because of the channel cross section.

3.7.2. Floodplains - Environmental Effects

The area of analysis for floodplains is the low-lying areas along Calf Creek within the recreation site.

Effects of Maintenance Only Alternative on Floodplains

Parking and Circulation

The culvert-style creek crossing would remain as constructed within the floodplain. Energy from flowing water in Calf Creek narrows at the culvert causing increased flow velocities and subsequent erosion and scouring. The culvert crossing does create a stable base level at the location which minimizes vertical erosion or downcutting.

The low water crossing would also remain within the floodplain. Because of its low-profile cross section and by design, the flow of Calf Creek passes entirely over it from baseflow to flood events. The crossing creates a stable base level at the location, which eliminates vertical erosion or downcutting and, under most conditions, eliminates any buildup of sediment as the concrete slab is swept clean after flood events.

Site Amenities/Fixtures

If the maintenance only alternative is chosen, the play area west bank erosion would continue to cause the existing retaining wall to fail.

Effects of Proposed Action on Floodplains

Parking and Circulation

In the proposed action, both creek crossing structures would be designed at a minimum to meet Federal Emergency Management Agency standards to handle the level of a 100-year flood plus two-feet freeboard.³² The culvert-style creek crossing would be removed and replaced with a span-type bridge. The footers for the bridge would be placed wide apart on the floodplain which would allow the floodplain to maintain flow velocities. The concrete slab-style low water crossing would also be removed and replaced with a structure that spans the creek. The footers for that structure would also be placed wide apart in the floodplain to facilitate lateral spreading of higher flows. Both structures could change the baselevel as the existing culvert is removed and depending on the depth to bedrock in the channel, some vertical downcutting or deposition could occur until baselevel re-stabilizes.

Site Amenities/Fixtures

In the proposed action, the west bank of the play area in Calf Creek would be stabilized. The retaining walls and steps to access the creek would be constructed with concrete and large rock to make it safer and erosion-resistant. This would have minimal impact on floodplain function because of the cross section of the channel at

³² Freeboard is the clearance between the lower limit of the structure and the surface elevation of the water at 100-year flood level.

this location. The bank in this area is very steep and high flows spread out across the east side of the floodplain instead of the west.

Comparison of Effects of Alternatives

Under the maintenance only alternative the floodplain would continue to be impacted by the culvert-style creek crossing's channel restriction. High flows would continue to be channelized and high velocities maintained which could cause erosion and scouring. Baselevel would be unaffected as it is currently being held by the bottom elevation of the culvert. The low water crossing would continue to have minimal effect on streamflow and floodplain function. High flows would continue to spread laterally over the crossing and baselevel would remain constant at the concrete slab. Erosion would continue associated with the retaining walls at the water play area, but this is not anticipated to affect the floodplain based on channel cross section at this location.

Under the proposed action the replacement of the culvert-style creek crossing with a bridge would allow high flows to spread laterally, dissipating energy, and reducing the effects of scouring and erosion which would result in a return to a more natural floodplain. Baselevel could potentially be affected as some vertical erosion or deposition would occur until the channel achieves equilibrium. The replacement of the low water crossing with a structure that spans the creek would be designed with footings wide in the floodplain to facilitate lateral spreading of higher flows. Baselevel could potentially be affected as some vertical erosion or deposition would occur after the concrete slab is removed. The stabilization of the bank with a new retaining wall at the water play area would reduce erosion. Effects to the floodplain are not anticipated based on channel cross section at this location.

Cumulative Effects

The cumulative impact area is the entirety of Calf Creek from its headwaters to the confluence with the Escalante River (approximately 8 stream miles total). This area of analysis was chosen because floodplain impacts at the CCRS could affect downstream floodplains until Calf Creek reaches its confluence with the Escalante River, which is of much larger water volume.

Past and present cumulative impacts include the recreational facilities (campground, road, and bridges) developed at Calf Creek in 1962-1963. Future cumulative impacts include maintenance and expansion of those facilities. The floodplain has been functioning at its current capacity since the development in the 1960s. Cumulative impacts include constricted flows under the bridge, which alters flow velocity and the floodplain function. Under the proposed action, the installation of span-type bridges with wider footings would allow for a more natural, unrestricted water flow and restore the floodplain closer to its original state. The maintenance only alternative would continue the existing flow rates and floodplain impacts.

3.8. SOCIAL CONNECTION

Issue: How will the alternatives affect locally important aspects of the site including the oak trees and the ability of groups to use the day use picnic site?

3.8.1. Social Connection – Affected Environment

The CCRS, in its early decades, served as a type of community park for the communities of Boulder and Escalante. What is locally referred to as the "group site" used for day use/picnicking contains the following features: historic wooden picnic tables and a historic stonework barbeque station. An additional feature of the CCRS valued by locals are the gambel oak trees in the "group site." As the CCRS has become more and more popular with non-local visitors, the group reservations for the day use facilities have averaged around two per

year for the last 20 years, in large part due to the lack of parking available. Reservations have not been taken for holiday weekends for at least ten years.

3.8.2. Social Connection - Environmental Effects

Effects of Maintenance Only Alternative on Social Connection

Site Amenities/Fixtures

Under the maintenance only alternative, the historic wooden picnic tables and historic stonework barbeque station would remain in place. No oak trees would be affected under this alternative. However, these features are aging and degrading with time.

Effects of Proposed Action on Social Connection

Parking and Circulation

Under the proposed action, the BLM would update facilities for social gatherings by removing the historic wooden picnic tables and historic stonework barbeque station to allow for parking expansion and vehicle circulation. Regarding the oaks, the BLM has not yet completed the final design of the upgrades but intends to avoid the oak trees to the maximum extent possible. It is estimated that the BLM may need to remove up to 15% of the oaks immediately adjacent to the existing parking area to facilitate the parking and vehicle circulation improvements, which will negatively impact those who value the oaks in the area. To offset the impact, the proposed action also includes planting of trees around the expanded day use area.

Site Amenities/Fixtures

Under the proposed action, the BLM would provide group-size facilities (large picnic shelter and tables and a small amphitheater) in the lower portion of the recreation area with the individual day use picnic facilities south of the existing group facilities. The BLM would expand accommodations for individuals by replacing the two existing individual day use picnic facilities with up to three new individual shelters, each with a picnic table. This lower area will also contain a segment of the nature trail. Social trails (unplanned user-created trails) would be reclaimed. The creek and water play area are adjacent to and accessible from the expanded group and individual day use area.

Comparison of Effects of Alternatives

The impacts to the locally important aspects of the site including the group-sized day use facilities from the maintenance only alternative would be caused by aging facilities, while the impacts from the proposed action would be caused by consolidation of the group-sized day use facilities south of their existing location to an area nearer the creek and away from the parking lot. No oak trees would be affected under the maintenance only alternative, but under the proposed action up to 15% of the oaks immediately adjacent to the existing parking area may need to be removed.

Cumulative Effects

The cumulative impact area is the CCRS because the locally important social aspects of the site all occur within the site. The past, present, and reasonably foreseeable actions are the construction of Calf Creek Campground in 1962-63 and use of the campground area since its creation. Cumulative effects include historic shifts from a type of community park used primarily by the communities of Boulder and Escalante to a nationally or internationally

known recreation site used primarily by individual parties of hikers and campers. The historical oak habitat has been previously affected by these past, present, and reasonably foreseeable activities. The proposed action would consolidate social use in the updated group- and individual- day use facilities near the creek. It would also affect up to 15% of the oaks currently available at the site. The maintenance only alternative would retain existing facilities and all oaks but social effects from degradation of the site due to facility aging would continue.

3.9. VISUAL RESOURCES

Issue 1: Would the proposed structures (toilets, shade shelters), additional parking areas, and bypass trail create visual impacts to the degree that the existing landscape character is altered?

Issue 2: How would this infrastructure affect views for casual observers?

Issue 3: Would this infrastructure create visual contrast beyond what is allowed to meet Visual Resource Management (VRM) Class II objectives?

3.9.1. Visual Resources - Affected Environment

Visual Resource Inventory and VRM Class Objectives

Per the 2019 *Grand Staircase-Escalante National Monument Visual Resource Inventory (VRI)*, the project area is within the Upper Escalante Canyons Scenic Quality Rating Unit #040 with high A quality scenery (score of 28) – the highest scoring unit in the inventory area. It is within Sensitivity Level Rating Unit #023 with a high sensitivity rating and in the Foreground/Middleground Distance Zone. Combining the inventory factors per BLM VRM policy resulted in the project area being within an area inventoried as VRI Class 2.

The proposed project is in Visual Resource Management (VRM) Class 2 as established in the ARMPs (see appendix B, map 10). The objective for VRM Class 2 is to retain the existing character of the landscape. The level of change to the characteristic landscape should be low. Management activities may be seen but should not attract the attention of the casual observer. Any changes must repeat the basic elements found in the predominant natural features of the characteristic landscape.

Visual Landscape Characteristic

The proposed project area is located in the northern reaches of the Escalante Canyons physiographic province just off SB12 on a narrow canyon floor straddling Calf Creek about a mile before it joins the Escalante River. The Escalante Canyons province is a landscape comprised of dramatic erosional landforms created by the Escalante River and its tributaries. High vertical canyon walls, slot canyons, domes, arches, and natural bridges are common features in this landscape. Lush riparian corridors along the river and its tributaries provide contrasts to the expanses of exposed slickrock.

The dominant vegetation in the project area is riparian vegetation (cottonwood trees, river birch, and willows) growing along the creek. Other vegetation in the project area on the uplands are desert shrubs, grasses, and pinyon and juniper trees. The vegetation is a full range of greens, from light sage and yellow greens to dark juniper greens to the bright greens associated with cottonwoods and willows, the vegetation ranges from medium to coarse in texture.

The built elements in this landscape include the paved highway, power lines, the CCRS site road and parking area, toilet buildings, a kiosk/fee station, shade shelters, fabricated block retaining walls, pole fencing, picnic tables, fire rings, and signs. Many of the built elements are screened from view by the riparian vegetation and landforms. The elements that are more visible from the highway are the paved surfaces and the parked vehicles.

The project area is within an enclosed landscape created by the sandstone landforms that surround it. The predominant lines in this landscape are vertical, horizontal, or rounded as created by landform banding and edges. The highway and site road add distinct bands across the landscape that are created by the removal of vegetation and pavement which creates a contrast in color and texture to the existing scene and that directs the eye along their alignments. The riparian corridor also creates a distinct green band. The predominant colors of this landscape are reds, buffs, and greens due to the landforms and vegetation. The texture of the landscape varies from medium to coarse due to the mixes of vegetation and rugged landforms.

Casual Observers and Key Observation Points

The project area is a heavily visited recreation site along SB12 that is used primarily by visitors engaged in hiking, camping, picnicking, fishing, birdwatching, and photography. Those travelling along the highway but not visiting the recreation site include byway travelers and local residents. These individuals define the casual observer. The key observation points (KOP) are where most people view a project and for this proposal, SB12 was selected as a linear KOP.

3.9.2. Visual Resources - Environmental Effects

Effects of Maintenance Only Alternative on Visual Resources

For this alternative, the existing recreation site infrastructure (including any components that would be replaced with fixtures of similar size, scale, and color in the future) and vehicles parked in designated and non-designated locations would continue to be seen by those traveling along the highway though landform and vegetation screening reduce their visibility. The highway is located above the recreation site on a ledge cut into the sandstone. The curvature and grade of the highway, the steep drop-offs along its edge, and the surrounding dramatic scenery direct travelers' attention away from the CCRS. For those that do look into the canyon toward the recreation site, the average lengths of time it is in view is less than 20 seconds for eastbound travelers and less than 60 seconds for westbound travelers.

Parking and Circulation

The parking area, vehicles (when present), and site road are partially screened from view by landforms and vegetation making them only intermittently visible from the KOP. They create weak contrast.

Sanitation and Pollution

The main restroom building and vault toilet are also intermittently visible from the KOP and create weak contrast.

Site Amenities/Fixtures

The current shade shelters have dark red metal roofs and are barely visible from the KOP because they are well screened by vegetation. They create negligible contrast. If they are replaced with similar sized structures of a color that blends even better with the surrounding landscape, their negligible contrast would be reduced even further.

Effects of Proposed Action on Visual Resources

In order to evaluate the environmental consequences of the proposed action, a contrast rating analysis was conducted per *BLM Visual Resource Management Manual 8400* (1984) and associated *Visual Contrast Rating Manual 8431* (1986). The contrast rating analysis worksheet is in appendix G.

Parking and Circulation

The larger main parking area and additional parking areas, vehicles (when present), and site road are partially screened from view by landforms and vegetation making them only intermittently visible from the highway. They would create weak contrast compared to the current situation. The bypass trail and hikers using it would also be intermittently visible from the KOP but are of such a small scale in this grand scale landscape that they would create negligible contrast.

Sanitation and Pollution

The main toilet building replacement, additional vault toilets, trash collection area, and designated pet area would be screened from view by landform and vegetation; the structures would be made of materials and colors that blend with the landscape. These would create negligible to weak contrast.

Site Amenities/Fixtures

The proposed shade shelters, including one large group shelter, would be screened from view by landform and vegetation and would be constructed of materials and colors that blend with the landscape. The other site amenities/fixtures in the proposed action (retaining walls, campsites, amphitheater, fee station/kiosks, etc.) are small in scale and would be hard to see from the KOP due to vegetation and landform screening. The larger shade shelter would create weak contrast and the other amenities/fixtures would create negligible to no contrast.

Communications

The buried fiber line or the disturbance created for trenching it would not be visible because it would go under pavement or along the edge of the driveway in an area already disturbed, thus creating no contrast.

Comparison of Effects of Alternatives

The maintenance only and proposed action alternatives would result in similar effects to visual resources. Both alternatives create weak contrast associated with the forms of the built structures, parking areas, and parked vehicles. But even those elements that create weak contrast would be screened from view by vegetation and landforms for those travelling along the highway except for short durations and when immediately adjacent to the recreation site. The effects to visual resources associated with the proposed action would not alter the landscape character and the effects experienced by the casual observers driving by the recreation site would be essentially the same as what currently occurs.

Cumulative Effects

The cumulative impact area of analysis for visual resources is the viewshed along SB12 from Escalante to Boulder. The cumulative impacts to visual resources from past, present, and reasonably foreseeable actions include residential and commercial development, utility infrastructure (powerlines and communications sites) recreational facilities (trailheads, day use areas, etc.), general recreational use, livestock grazing management facilities (corrals, fences, water developments, storage buildings, etc.) and road construction and maintenance activities. The proposed action would make improvements to an existing development using elements that would blend with the landscape and be largely screened from view. Additionally, the viewshed along SB 12 from Escalante to Boulder encompasses a landscape of 100,000s of acres. These facilities are visible only when in immediate proximity to the site and are small in scale within this grand scale landscape. They would not contribute to an increase in impacts to visual resources in the area.

Plan Conformance for Visual Resources

The renovated and/or additional constructed features and parked vehicles associated with the proposed action would be largely screened from view by vegetation and landforms, would be of colors that blend with the landscape, and would create weak levels of contrast. The level of contrast created by proposed action would be similar to what currently occurs. Thus, the proposal would not result in changes to the VRI and is in conformance with the management of visual resources (meeting Visual Management Class 2 objectives) as directed in the ARMPs.

3.10. WATER RESOURCES

Issue 1: How will the water quality or quantity of Calf Creek be affected by the alternatives?

Issue 2: How will the water quality or availability of the culinary water supply in the CCRS be affected by the alternatives?

Issue 3: How will groundwater in the Calf Creek area be affected by the alternatives?

3.10.1. Water Resources - Affected Environment

The proposed action is located in Calf Creek Canyon, which is a deep sandstone canyon, surrounded by high Navajo sandstone cliffs. It is a riparian canyon and Calf Creek flows along the canyon bottom, passes through the middle of the CCRS and continues down canyon several miles until it reaches its confluence with the Escalante River. Calf Creek is listed on the State of Utah's 303(d) list for impaired waters for elevated temperature and is classified as a perennial stream. Runoff during storm events from all surfaces within the project area transport sediments and potentially carries contaminants from vehicles (oil, road grime, etc.) into Calf Creek, though lower water quality resulting from this has not been documented.

There is a nearby spring that has been diverted and is used to supply culinary water to the CCRS. This spring is located upstream from the campground and on the east side of the canyon. The diversion is protected by a structure and the water is treated to assure that it is safe to drink. It provides water for various hydrants throughout the campground, to the restrooms, and for a connection for the camp host's trailer.

The project site is located within the Navajo Sandstone aquifer. The Navajo aquifer is well known and well-studied and is regarded as one of the most important and reliable aquifers on the Colorado Plateau. The above-mentioned spring used for culinary water at the campground is supplied by water from the Navajo aquifer.

3.10.2. Water Resources - Environmental Effects

The area of analysis for water resources includes the CCRS and Calf Creek extending to its confluence with the Escalante River. This area of analysis was chosen because any potential contaminants or changes to the quality or quantity of water resources at the CCRS could reasonably be carried downstream until Calf Creek reaches its confluence with the Escalante River, which is of much larger water volume.

Effects of the Maintenance Only Alternative on Water Resources

Under the maintenance only alternative, the Navajo Sandstone Aquifer would continue to maintain a large supply of high-quality water at depth as groundwater, and Calf Creek would most likely continue to exceed temperature standards.

Parking and Circulation

Under the maintenance only alternative, runoff during storm events would continue to transport sediments and potential pollutants from vehicles to Calf Creek from the paved road and existing paved and unpaved parking areas. The current chaotic parking situation would continue to cause increased erosion where the public parks along the roadways, potentially degrading water quality from sediments transported to Calf Creek during storms, though maintenance of the site road would lessen the potential degradation. The potential to negatively affect water quality by transporting sediment from the edges of the low water crossing and by adding pollutants from their vehicles (brake dust, oil, road grime, etc.) to the stream would continue from campground users who drive through the creek over the low water crossing.

Sanitation and Pollution

Under the maintenance only alternative, the current septic system would continue to be at risk of contaminating Calf Creek. The level of risk is an unknown because water sampling in the past has not found any evidence of it, but the potential exists because of the proximity of the leach field to the creek. The culinary water system would continue to provide safe, potable water to the recreation site, due to the chlorination system and regular maintenance which ensure that it meets State culinary water testing requirements. Under this alternative, the Navajo Sandstone Aquifer would not be impacted because the public water use would stay the same; it would continue to maintain a large supply of high-quality water at depth as groundwater.

Site Amenities/Fixtures

Continued failure of the retaining wall at the water play area could lead to excessive erosion of the stream bank and contribute sediment to Calf Creek.

Effects of the Proposed Action on Water Resources

Under the proposed action, Calf Creek would likely continue to exceed temperature standards as nothing in the proposed action is likely to affect stream temperature. The culinary water system would not be impacted by the proposed action, due to its location outside the project area and would continue to provide safe, potable water to the recreation site.

Whenever large equipment is proposed for use near riparian or stream corridors, there is always a potential for fuel or oil spills and contamination of water resources. Design elements in the proposed action require spill containment berms whenever refueling occurs and that absorbent pads and booms be available to quickly resolve any spills. These design elements should reduce the potential for fuel and oil contamination of Calf Creek during construction to nearly zero.

Parking and Circulation

Widening the existing paved site road could increase runoff. Better organized and delineated parking would help resolve erosion problems along the sides of the site road. The new overflow parking area, the expansion of the existing parking area, and the small parking areas to either side of the creek, all of which would be paved, could transport contaminants into Calf Creek via surface runoff, but engineering design would capture, slow, or direct storm drainage away from the creek (see 2.2.6). Therefore, the overall increase in paved surface area associated with the proposal is not expected to generate levels of runoff that would decrease water quality. Fill materials used for the construction of parking areas would be capped with pavement and the edges would be designed and stabilized with control structures to reduce erosion into the creek.

Changing the low water crossing to a structure that would remove vehicle traffic from the stream would reduce vehicle-related contaminants, such as oil, grease, mud from tires, and brake dust, from being deposited directly into the stream due to vehicles entering the water. During removal of the old creek-crossing structures and installation of the new structures, water quality in Calf Creek could be negatively impacted through increased sediment load and turbidity, but these impacts would be temporary and water quality should return to baseline shortly after construction activities are completed.

Sanitation and Pollution

It is proposed that the main restroom building be removed, along with its septic system, and new sealed vault toilets be installed in their place. This would eliminate the potential for contamination to water resources through the leach field. The vaults would be cleaned out by a septic company, as required, instead of allowing effluent to flow into the leach field for disposal. In order to eliminate the possibility of a spill or contamination during removal of the old septic system, a design feature in the proposed project requires a containment berm be used to catch any accidental spills. Under this alternative, the Navajo Sandstone water from the aquifer used by the public at the CCRS use would stay about the same or decrease because of the removal of the main restroom building; it would continue to maintain a large supply of high-quality water at depth as groundwater.

Comparison of Effects of Alternatives

Under the maintenance only alternative, water quality and quantity would remain the same. Under the proposed action, surface water quality would be benefited in the long term from surfacing of currently disturbed surfaces and removal of the lower water crossing. Installation of a septic system could provide a long-term benefit to water quantity and quality by reducing overall water use and decreasing potential contaminants into Calf Creek.

Cumulative Effects

The cumulative impact area for water resources is the CCRS and Calf Creek extending to its confluence with the Escalante River. This area of analysis was chosen because any potential contaminants or changes to the quality or quantity of water resources at the CCRS could reasonably be carried downstream until Calf Creek reaches its confluence with the Escalante River, which is of much larger water volume. The past and current actions that have contributed to the current condition of water resources include development of the highway, and the original development and expansion of the CCRS, including the development of the spring that provides culinary water for the site, and decades of recreational use along Calf Creek. Livestock grazing was removed from the portion of Calf Creek Canyon below the Lower Calf Creek Falls but continues upstream. Reasonable and foreseeable impacts would be continued maintenance of campsites, roads, trail heads, and parking areas and potential upgrades of facilities over time. The reasonably foreseeable future actions include increased visitation to Upper Calf Creek Falls and the middle section of the creek between the upper and lower falls. These actions altered the surface and ground water quality and quantity by diverting and utilizing water and creating sedimentation and contamination situations. The proposed action would reduce erosion and better manage storm drainage and could result in decreased use of culinary water. The maintenance only alternative would continue existing erosion and potential contamination and maintain the existing water uses including the existing low water crossing and culinary water system.

3.11. WILD AND SCENIC RIVERS

Issue 1: How would the alternatives affect the wild and free flowing nature, water quality, water quantity, or any of the identified outstanding remarkable values of WSR Calf Creek Segment 3?

Issue 2: Would the alternatives have any impact to long-term suitability of Calf Creek for designation in the National Wild and Scenic Rivers System?

3.11.1. Wild and Scenic Rivers - Affected Environment

Calf Creek, a spring-fed tributary of the Escalante River flows through the recreation area and was inventoried and found suitable for inclusion in the National Wild and Scenic River System (WSR) as required by Section 5(d) (1) of the 1968 Wild and Scenic Rivers Act. Calf Creek is divided into three WSR suitable segments: Segment 1 (wild classification) from headwaters to Lower Falls; Segment 2 (scenic classification) from Lower Falls to the campground; and Segment 3 (recreational classification) from the upper edge of the campground through the campground and day use site to the confluence with the Escalante River. The area of evaluation included in the suitability determination is usually measured 1/4 mile from the mean high-water mark on both sides of the river or tributary. All eight miles of the creek are managed to retain their eligibility for possible designation as part of the 122 miles of the Escalante River and tributaries that are recommended as suitable for inclusion in the WSR.

The proposed project area for the CCRS lies within the WSR suitable segment Calf Creek-3 with a tentative classification of recreational. The WSR suitability recommendation also identifies the following Outstanding Remarkable Values: high scenic quality, Calf Creek Recreation Area, bird habitat, pre-historic site, and riparian area.

3.11.2. Wild and Scenic Rivers - Environmental Effects

Effects of Maintenance Only Alternative on Wild and Scenic Rivers

Given that this alternative maintains the existing recreation area, impacts to the recreation area and its central feature, the creek, are identified below. No impacts to visual resources or riparian are anticipated as explained in section 3.9.2 and appendix F, respectively. Impacts to birds are explained in section 3.13.2. Impacts to the prehistoric sites are explained in section 3.5.2. Impacts to creek water quality, quantity and flow are as described in section 3.10.2.

Parking and Circulation

Under the maintenance only alternative the incremental vegetation trampling and soil compaction associated with vehicular and pedestrian circulation (vehicle use off pavement and soil compaction on streamside access social trails) that results in erosion into the creek would continue. Water quality would continue to be affected from streamside trail erosion and contaminants from oil and debris washing off vehicles upon crossing the creek.

Sanitation and Pollution

Under the maintenance only alternative the potential for Calf Creek to be contaminated by the septic system would continue.

Site Amenities/Fixtures

Under the maintenance only alternative the retaining walls by the waterplay area would continue to be damaged by flood events and contribute to streamside erosion.

Effects of Proposed Action on Wild and Scenic Rivers

Given that this alternative updates the existing recreation area, impacts to the recreation area and its central feature, the creek, are identified below. No impacts to visual resources (see section 3.9.2) or riparian (see appendix F) are anticipated. Impacts to birds are explained in section 3.13.2. Impacts to the prehistoric sites are explained in section 3.5.2. Impacts to creek water quality, quantity, and flow are described in section 3.10.2.

Parking and Circulation

Under the proposed action the additional paved designated parking and delineated pedestrian pathways would result in less incremental vegetation trampling and soil compaction that results in erosion into the creek. The replacement of the culvert-style creek crossing and the low water crossing would improve the WSR characteristics by returning the creek to a more natural character. Changing the low water crossing to a structure like a box culvert that spans the stream would reduce the amount of vehicle related contaminants, such as oil, grease, mud from tires, and brake dust, that are deposited directly into the stream due to vehicles entering the water. Erosion of the road on either side of the stream would also potentially be reduced since vehicles would not be entering and exiting the stream. These project components would be beneficial to WSR Segment 3 of Calf Creek.

Sanitation and Pollution

Under the proposed action the main restroom building and associated septic system would be replaced with vault toilet system that would remove the concern of the septic system contaminating the creek.

Site Amenities/Fixtures

Under the proposed action the replacement of the retaining walls by the waterplay area would result in a stable streamside that would withstand flood events better and reduce streamside erosion.

Comparison of Effects of Alternatives

Under the maintenance only alternative, the current erosion associated with off-pavement parking and social trails, and contaminants into the creek associated with campers driving through the creek across the low water crossing, would continue. The potential for the septic system to contaminate the creek would also continue.

The proposed action would result in improvements to the WSR characteristics by returning the creek to a more natural character as well as reducing contaminants into the creek.

While the proposed action would result in beneficial effects to Calf Creek WSR values, the continuation of current conditions under the maintenance only alternative is not expected to pose long-term threats to recreational classification, wild and free-flowing nature, water quality, or outstanding remarkable values of this segment nor pose a threat to long-term suitability for designation.

Cumulative Effects of Alternatives

The cumulative impact area is the suitable WSR boundaries for segments 1 through 3 because it encompasses the relevant and important values. Past, present, and reasonably foreseeable actions within this boundary development of the highway, the original development of the CCRS, including the development of the spring that provides culinary water for the site, and decades of recreational use along Calf Creek. Livestock grazing was removed from the portion of Calf Creek Canyon below the Lower Calf Creek Falls but continues upstream. The reasonably foreseeable future actions also include increased visitation to Upper Calf Creek Falls and the middle

section of the creek between the upper and lower falls. Cumulative impacts include continued maintenance of campsites, roads, trail heads, and parking areas and potential upgrades of facilities over time. These actions created and updated the recreation area on the creek. The proposed action would reduce further update the recreation area on the creek. The maintenance only alternative would maintain the recreation area on the creek. No cumulative impacts to visual resources or riparian are anticipated because no direct or indirect impacts would occur as explained respectively in section 3.9.2 and appendix F. Cumulative impacts to birds are explained in section 3.13.2. Cumulative impacts to the prehistoric sites are explained in section 3.5.2. Cumulative impacts to creek water quality, quantity, and flow are as described in section 3.10.2.

3.12. WILDERNESS STUDY AREAS

Issue: How would the Phipps Death Hollow WSA be impacted by the alternatives?

3.12.1. Wilderness Study Area - Affected Environment

The proposed project is adjacent to the Phipps Death Hollow WSA on the north and west sides of the project area. The WSA is 42,731 acres and was created in 1980 under Section 603 of the Federal Land Policy Management Act.

The proposed bypass trail, additional designated parking along the site road between the creek and the main parking area (where parking occurs currently), the proposed replacement bridge over the creek, and the existing two northernmost camping units are in proximity (75 feet or less) to the WSA boundary. The trail to the lower falls enters the WSA about 150 feet from the existing trailhead and is within the WSA from that point to its terminus at the waterfall but work on the trail is not part of the proposed action. Human waste and graffiti are pervasive issues that BLM rangers and volunteers address along the existing trail within the WSA. Where the bypass trail is proposed, there is evidence of hikers exploring the bench area above the campground (social trailing and graffiti), though the recreation use impacts are minimal compared to areas of high use (along the trail and in the campground).

3.12.2. Wilderness Study Area - Environmental Effects

Effects of Maintenance Only Alternative on Wilderness Study Areas

Parking and Circulation

Under the maintenance only alternative, new designated parking would not be developed, and the public would continue to park off the edge of the site road in proximity to the WSA boundary between the main parking area and the creek. Hikers would continue to walk along the site road through the campground to access the trail. Infrequent exploration of the bench above the campground, including into the edge of the WSA, is anticipated to continue resulting in social trails and graffiti.

Sanitation and Pollution

Under the maintenance only alternative, the additional toilets that would be available year-round would not be provided, so BLM anticipates that the human waste issues in the WSA along the trail would be similar to the current situation, and possibly worsen as winter visitation increases.

Effects of Proposed Action on Wilderness Study Areas

Parking and Circulation

Under the proposed action, additional designated parallel parking between the site road and the WSA would provide parking in the same location as has occurred for years, but in organized and hardened spaces instead of off the road edge where vegetation and soils have been trampled. Visitors parking in these spaces are anticipated to walk northeast toward the core of the recreation site where the facilities are located, not west into the edge of the WSA.

The proposed bypass trail on the bench above the campground would parallel the boundary of the WSA. The bench has an upward approach to impassable canyon walls of Calf Creek Canyon limiting access beyond the walls into the WSA. BLM anticipates that some hikers will veer off the trail to explore this area and that their social trailing would result in trampling of soils and vegetation, and that a few of these visitors may draw graffiti on the sandstone within the WSA.

Sanitation and Pollution

The additional toilets that would be available year-round under the proposed action, are anticipated to reduce the amount of human waste deposited along the trail inside the WSA, especially during the winter.

Comparison of Effects of Alternatives

Under the maintenance only alternative, infrequent hiking on the bench above the campground that results in minimal social trailing and graffiti within the WSA is anticipated to continue. Human waste deposits along the existing trail within the WSA are anticipated to continue if not worsen with increasing winter visitation.

The proposed action is anticipated to result in additional social trailing and graffiti within the WSA near the proposed bypass trail. It is also anticipated to reduce the human waste along the existing trail within the WSA, especially during the winter.

There are no project effects from either alternative that would impair Congress' ability to designate Phipps Death Hollow WSA as wilderness.

Cumulative Effects of Alternatives

The cumulative impact area is the wilderness study area because actions occurring outside the boundaries by policy do not impact the wilderness characteristics within the boundaries. Past, present, and reasonably foreseeable activities include livestock grazing and recreation exploration. Cumulative impacts include livestock and social trailing and recreationists graffiti and waste. The proposed action would add the potential for increased social trailing and graffiti but is anticipated to reduce human waste impacts. The maintenance only alternative would continue the existing situation.

3.13. WILDLIFE RESOURCES

Issue: How would alternatives affect wildlife, migratory birds, threatened or endangered wildlife or other special status species?

3.13.1. Wildlife Resources - Affected Environment

The project area is within a narrow canyon corridor, carved by the perennial flow of Calf Creek. The canyon provides two habitat types for wildlife species: 1) a narrow riparian area adjacent to the creek, averaging about 15 feet in width, occasionally widening up to as much as 45 feet, and 2) a dry area of mixed desert vegetation in the upland directly above the creek and on the bench below the canyon walls. The riparian area vegetation consists of water-dependent plants such as willow, cottonwood, salt-cedar, birch, and Woods Rose. The vegetation in the upland consists of sagebrush, rabbitbrush, gambel oak, Utah juniper, pinyon pine, Mormon tea, fourwing saltbush, broom snakeweed, cliffrose, roundleaf buffaloberry, and skunkbush.

Calf Creek Canyon was heavily grazed by domestic cattle from pioneer settlement until it was closed to grazing in 1967 after the recreation site was constructed. Historic photos show that there was very little riparian vegetation within the corridor when the recreation area was established. Vegetation recovery within the canyon since grazing ceased has been quite remarkable. A diverse age class of trees and shrubs exist, providing potential forage and hiding cover for wildlife as well as potential roosting, nesting, and foraging areas for birds. SB12, the CCRS and its associated infrastructure (parking areas, paved access road, culverts, water crossings, bridges, buildings, picnic areas and camping areas) reduced the quality of the habitat and their potential for use by wildlife species and migratory birds due to vehicle traffic and human presence.

General Wildlife and Migratory Birds

The project area has flowing water present, which makes the canyon corridor an important stopover and migration habitat for numerous species of migratory birds, including but not limited to yellow-breasted chat, mourning dove, American robin, spotted towhee, Woodhouse's scrub-jay, yellow-warbler, say's phoebe, as well as several species of hummingbirds³³, sparrows, swallows, and flycatchers. Habitat within the project area is likely more used for stopover and foraging than for nesting because of the habitat alteration (paved access roads and parking areas, numerous disturbed camping areas) and human presence with their pets and vehicles. Although some species have acclimated to this disturbance, the overall habitat is of lesser value to wildlife and migratory birds than other areas within the canyon that have less disturbance.

There are flowering plants in areas that have not been disturbed by parking areas, camping areas or foot traffic. Flowering plants attract pollinating insects (bees, butterflies, moths) within the project area.

Special Status Wildlife

Special status wildlife species include species deemed threatened or endangered (T&E), species proposed for listing as T&E, and BLM Utah sensitive species. BLM obtained a project-specific T&E species list (see table 3) from the US Fish and Wildlife Service (USFWS) Information, Planning, and Conservation System (IPAC)³⁴ dated January 4, 2022, and verified a second time on May 17, 2022. A copy of the IPAC documentation can be found in the project file.

³³ As part of the Hummingbird Monitoring Network, hummingbirds have been actively fed, captured, and banded at Calf Creek campground each year since 2010. This occurs from mid-May to mid-September annually. Four species of hummingbird (black-chinned, broad-tailed, Calliope, and rufous) have been found within the project area.

³⁴ www.fws.gov/ipac. IPAC is recognized by USFWS as an appropriate means of identifying threatened and endangered species for project areas.

Table 3 - Potentially Affected Federally Listed Terrestrial Wildlife Species Within the Project Area

Species	Status	Known Occurrence Within Project Area	Potential/Suitable or Designated Critical Habitat in Project Area Yes/No?	Potential for Adverse Effect Under Endangered Species Act (ESA) Yes/No?
BIRDS				
California Condor <i>Gymnogyps californianus</i>	Experimental Population (Non-Essential)	No, there are no documented occurrences of California condor within the project area. Due to their curious nature and their popularity, the lack of reported occurrence within the project area is likely accurate.	Potential/Suitable: Yes Critical Habitat: No	No
Mexican Spotted Owl (MSO) <i>Strix occidentalis lucida</i>	Threatened	No, two years of complete survey within ½ mile of project area have been unable to detect the presence of MSO. MSO have been detected approximately 2.27 miles upstream from the project area. They were thought to be migrants.	Potential/Suitable: Yes Critical Habitat: No	Yes
Southwestern Willow Flycatcher (SWFL) <i>Empidonax traillii extimus</i>	Endangered	No, not known to occur within the project area. Multiple-year surveys within the project area and along the Calf creek riparian corridor have not detected the SWFL within the Calf creek drainage. The UDWR (1998) determined that the lower Calf Creek drainage, where the project area is located, is unsuitable habitat for breeding, and provides only marginal migratory habitat. Calf creek is not likely to support nesting habitat for SWFL due to habitat limitations and the narrowness of the canyon (Day and Porter 2000). In addition, a habitat suitability model has been created and ground tested for potentially occupied habitat in the Planning Area (Callahan and White 2002). No nesting pairs have been detected through either the surveys or modeling	Potential/Suitable: No for breeding or nesting; Yes, for possible stopover and migration Critical Habitat: No	Yes

Species	Status	Known Occurrence Within Project Area	Potential/Suitable or Designated Critical Habitat in Project Area Yes/No?	Potential for Adverse Effect Under Endangered Species Act (ESA) Yes/No?
		(Peterson and O'Neill 1997; Day 2004). However, because the project area does contain some elements of potential stopover habitat, this species may be present during migration periods. Design features and timing restrictions would reduce potential impacts.		
INSECTS				
Monarch Butterfly ³⁵ <i>Danaus plexippus</i>	Candidate	Yes. Several members of the BLM interdisciplinary team have indicated that they have seen monarch butterflies within the Calf Creek drainage. Milkweed is present in the Calf Creek drainage. Much of the project area is heavily disturbed by paved access roads and parking areas, camping and day use areas, and foot-traffic. This makes the project area less important to individual Monarchs as they pass through. It is unlikely that they spend much time in project area.	Potential/Suitable: Yes Critical Habitat: No	No

Mexican Spotted Owl

Numerous surveys for MSO have been conducted in GSENM by Dr. David Willey from Montana State University. From 2000 to 2006, several active territories were discovered, mostly within the Paria River corridor and side canyons (Willey and Willey 2006). The Calf Creek drainage has been surveyed on several occasions by Willey and his team, and they successfully located MSO in a side canyon below the lower falls (approximately 2.27 miles upstream from the project area) on more than one occasion. MSO detected are there sporadically and are thought to be migrants. Willey believes that MSO no longer inhabit the canyon downstream from Lower Calf Creek Falls and have possibly moved upstream, above the upper falls, where there is less human presence (personal communication, 2018).

³⁵ The Monarch butterfly is a candidate species and has not been formally listed under the ESA. BLM considers candidate species as “sensitive” but is not consulting on this species for this project.

In preparation for this project, the project area was surveyed by the GSENM wildlife biologist in 2019 and 2020 using USFWS approved protocol. MSO were not detected during the eight individual surveys conducted over a two-year span. In 2022, the area was surveyed again and did not detect any MSO.

Although some of the components of potential MSO habitat exist within the Calf Creek drainage, the area does not contain Critical Habitat.³⁶ The nearest Critical Habitat to the project area is approximately 15 miles away, while the nearest known breeding/nesting area is approximately 18 miles from the project area. Anthropomorphic disturbances (SB12, historic grazing, parking areas, camping areas, and immense human presence) have likely rendered this area unsuitable for MSO for anything other than flying over or temporary stopover on their way to more suitable areas.

Southwest Willow Flycatcher

The project area contains some elements of potential stopover habitat, so this species may be present during migration periods. Anthropomorphic disturbances (SB12, historic grazing, parking areas, camping areas, and immense human presence) have likely rendered this area unsuitable for SWFL for anything other than flying over or temporary stopover on their way to more suitable areas.

3.13.2. Wildlife Resources - Environmental Effects

The analysis area for wildlife, including migratory birds and special status species, extends ½ mile both upstream and downstream from the CCRS within the confines of the vertical canyon walls. This analysis area overlays a segment of SB12, the campground, day-use area, parking area, Lower Falls trailhead, and the bench immediately west of the campground. This area of analysis is inclusive of all existing infrastructure as well as areas where ground surface disturbance from proposed construction activities is anticipated. This analysis area was chosen because the anticipated project effects are deemed to be localized and not far-reaching as they relate to these resources. This analysis area also aligns with guidance from USFWS as it pertains to project-specific survey guidelines for MSO and SWFL.

Effects of Maintenance Only Alternative on Wildlife Resources

Parking and Circulation

The continued use and maintenance of existing parking and circulation infrastructure (site road, water crossing structures, etc.) would continue to displace wildlife, including migratory birds and special status species, and keep the habitat degraded.

Sanitation and Pollution

The potential impacts to wildlife, including migratory birds and special status species, from maintaining the main restroom building/septic system are similar to those described above in *Parking and Circulation* because they would involve the same type of action (maintaining something that is already in place).

Site Amenities/Fixtures

The potential impacts to wildlife, including migratory birds and special status species, from replacing shade shelter structures and maintaining the water play retaining wall are similar to those described above in *Parking*

³⁶ Critical Habitat is designated by USFWS and is defined as *an area essential to the conservation of a species that may require special management or protection.*

and *Circulation and Sanitation and Pollution* in regard to the replacement or maintenance of existing infrastructure.

Effects of Proposed Action on Wildlife Resources

Parking and Circulation

Under the proposed action, in addition to the ongoing general maintenance and deferred maintenance components that would be implemented (low water crossing, culvert), there would be potential impact from construction of additional designated parking near the main entrance, along the access road, and near the existing parking area. Other new project components involving ground disturbance would be the construction of a bypass trail, nature trail and pedestrian walkways. The new overflow parking area and the bypass and nature trails would involve the clearing of vegetation. The parking areas would also be paved, resulting in permanent habitat loss within these areas. The trails and walkways, although not paved, would also result in habitat loss due to the removal of vegetation and the leveling and hardening of the surface. There would be no direct impacts to nesting migratory birds due to the design features (timing restrictions, site surveys). Direct impacts to SWFL migrating through the area would also be minimized by the migratory bird timing restrictions.

Direct impacts to any nesting MSO would be minimized by the migratory bird timing restrictions, foraging habits (nocturnal), and breeding/nesting behaviors. Although MSO may initiate courtship in March, most nesting would initiate in April when construction activities would not be taking place. MSO, if present, would not be nesting within the project area, but in surrounding cliffs. MSO are primarily active at night and are not likely to be present in the project area during the daytime when construction would be taking place.

A few wildlife species inhabiting these areas such as rodents and insects, may be directly displaced by ground disturbance. This proposed infrastructure would result in ground disturbance on approximately one acre of marginal wildlife habitat. As has been stated, the areas proposed for new ground disturbance are adjacent to (upper parking area, bypass trail) and within (pedestrian walkways, nature trail) the area of ongoing effects from human presence and development (SB12, campground, hiking trails, parking areas).

Sanitation and Pollution

The potential impacts to wildlife, including migratory birds and special status species, from the construction of the new restroom facility and two additional vault toilets and their ongoing maintenance are similar to and lesser than those described within *Parking and Circulation*. The new main restroom facility would be located in the existing disturbed footprint of the parking area. One of the vaults would be co-located within the proposed new upper parking area, while the other would be within the existing campground, resulting in approximately 2000 square feet of habitat disturbance. Design elements (timing restrictions, site surveys) will reduce impacts by avoiding nesting seasons.

Site Amenities/Fixtures

All of the proposed new project components (amphitheater, on-site trash area, etc.) are within the existing recreation site. The additive impact to wildlife, including migratory birds and special status species, from the proposed action are similar to and lesser than those described above in *Parking and Circulation and Sanitation and Pollution*. The same protective design elements would apply.

Communications

The fiber optic line would be co-located within the existing site access road. Any impacts are described above in *Parking and Circulation*.

Comparison of Effects of Alternatives

Both alternatives involve the upgrading of infrastructure within the CCRS. The difference between the two alternatives is that the proposed action involves new construction (additional designated parking, fiber optic line, two additional vault toilets, bypass, and nature trail etc.). Under either alternative, the impacts to wildlife, including migratory birds and special status species, from existing infrastructure and human presence would persist into the future. The additive impacts to wildlife, including migratory birds and special status species, and their habitats for the proposed action would be the removal of vegetation and heavy machinery noise during construction. The maintenance only alternative would not create impacts beyond what are already being experienced at the CCRS.

Cumulative Effects

The cumulative impact area is Calf Creek Canyon because it contains a water source that is the basis for the wildlife habitat (whether year-round, seasonal, or migratory) in the area. Grazing is a past action that ended in 1967 and the vegetation has recovered to a degree where this disturbance is no longer impacting the analysis area. Other past actions that continue to impact the area today include highway construction and maintenance, fiber optic line installation within the highway, an electric transmission line that runs adjacent to the highway or within the creek corridor, and the construction of the CCRS (with associated paved site road and parking areas, hiking trail, and campground). This infrastructure attracts human presence (vehicle traffic, camping, hiking, pets) and also requires periodic maintenance which involves work crews, machinery, and occasional removal of vegetation. With the exception of grazing, these impacts are presently negatively affecting wildlife, including migratory birds and special status species, within the analysis area. Future foreseeable impacts include the continued use and maintenance of the infrastructure noted above. Recreational use of the analysis area has been increasing and is likely to continue to increase in the future. Because of this, the ability of wildlife, including migratory birds and special status species, to thrive within the analysis area will be reduced. In addition to the impacts described as past and present, the proposed action would result in additional habitat loss of approximately one acre. The maintenance only alternative would not result in an accumulation of impacts or additional habitat loss because it is continued use and maintenance of an existing facility. Either alternative would do little to contribute either positively or negatively to the current use and population levels of wildlife, including migratory birds and special status species, within the analysis area because the analysis area is already so highly altered.

CHAPTER 4. PUBLIC INVOLVEMENT, CONSULTATION AND COORDINATION

4.1. PUBLIC INVOLVEMENT

4.1.1. Scoping

A Notice of Proposal Development was posted to the BLM e-Planning website on June 1, 2021, to invite public input on the project proposal and served to engage for government-to-government consultation. The availability of this notice was emailed directly to interested publics, media outlets, state and local elected officials and government representatives, as well as to Tribal Nations. A public site visit was hosted by BLM at the CCRS on September 28, 2021. Both opportunities were provided for BLM to gain additional information from the public and state and local elected officials and government officials as well as Tribal Nations that could influence project design or affect natural or other resources and values.

Scoping Comments Received

BLM heard from 47 commenters via calls, emails, written notes, and e-Planning comment submissions between the posting of the notice on e-Planning and the site visit. The site visit was attended by 14 individuals, not counting BLM staff. After the site visit, BLM received two emails and one call regarding the project proposal. All information received during those outreach efforts was considered during the development of the purpose and need, the alternatives, and the effects analysis. All comments received are included in the project record.

ENTITY	# OF COMMENTS
GOVERNMENT AGENCY	2
SPECIAL INTEREST GROUPS	4
INDIVIDUALS	41

Primary Issues

Generally, the issues raised during scoping and incorporated into the EA as appropriate by the BLM include:

- How will the BLM address safety issues (parking along highway, search and rescue operations, camping in flood zone, etc.)?
- How will the BLM meet accessibility standards?
- How will the BLM protect wilderness characteristics, native vegetation, wildlife, soils, water, visual, dark night skies resources?
- How will the BLM provide for group use?
- How will the BLM address infrastructure development, management, and maintenance, (winter use considerations, waste collection systems, structure design, material choices, etc.)?
- How will the reservation/permit systems for the trail and campground change?
- How will the project affect social or economic concerns (displacement of locals with historic connection to place, effects on local employment, etc.)?
- How will the proposed action affect locally important aspects of the site including the oak trees and the ability of groups to use the day use picnic site?

Proposed Alternatives

Alternatives raised during scoping and considered by the BLM during preparation of this EA included (see appendix D for more information):

- Including Lower Calf Creek Falls Trail in the Project Area
- Adding to or excluding from the proposed project certain components and suggestions related to specific design preferences like facility style or material choices
- Developing the Calf Creek Special Recreation Management Area Plan
- Determining the carrying capacity of the Lower Calf Creek Falls Trail and limiting access to Lower Calf Creek Falls, likely via establishment of an allocation system

Out of Scope Issues

The following issues were not addressed in the EA because they do not respond to the purpose and need of this NEPA effort; or they are outside of BLM’s jurisdiction; or they are already determined by laws, regulations, or policies; or they must be addressed through a land use plan or activity level plan.

- Concerns related to limited presence of BLM staff and law enforcement at the CCRS
- Removing or relocating uses (convert campground to day use, develop camping in other locations, etc.)
- Establishing a shuttle system to get people to the CCRS from afar

4.1.2. Public Comment

The EA was posted to the BLM’s e-Planning website on October 27, 2022, to begin a 30-day public comment period which closed on November 26, 2022. The availability of the EA for review was emailed directly to interested publics, media outlets, state and local elected officials and government representatives, as well as to Tribal Nations. Two virtual webinars were scheduled on November 9, 2022, at 1 PM and 6 PM, to share details of the project, address questions, and provide information on how the public could submitted substantive comments. Due to the lack of registrants for the 6 PM webinar, only the 1 PM one was hosted. The 1 PM webinar was attended by seven individuals, not counting BLM staff.

Public Comments Received

BLM heard from 34 commenters via calls, emails, regular mail, and e-Planning comment submissions during the 30-day comment period. All information received during the public comment phase was considered during the finalization of the EA. All comments received are included in the project record. Response to comments is included in appendix H.

ENTITY	# OF COMMENTS
GOVERNMENT AGENCY	3
SPECIAL INTEREST GROUPS	3
INDIVIDUALS	28

4.2. CONSULTATION AND COORDINATION

4.2.1. National Historic Preservation Act

From March 2021 through October 2021, BLM conducted NHPA Section 106 consultation with the Utah State Historic Preservation Office (SHPO), Tribal Nations (the Hopi Tribe, Kaibab Band of Paiute Indians, Paiute Indian Tribe of Utah, and the Navajo Nation), and other consulting parties (Garfield County, Grand Staircase Escalante Partners, Southern Utah Wilderness Alliance, and Utah Rock Art Research Association), resulting in the determination that the proposed project would result in an “adverse effect” to 42GA8060 and 42GA6091, and would result in “no adverse effect” to 42GA1431. The adverse effects to historic properties that would result

from this proposed action have been resolved through execution of a MOA that calls for the following mitigation measures at each historic property:

- 42GA8060 – amending the site form to include detailed digital photography and an updated site sketch map; completing an architectural site form; preparing measured drawings of Feature 5; conducting historical document research for the purpose of creating and installing interpretive signage at the campground that reflects the historical significance of the historic campground; and
- 42GA6091 – conducting historical document research for the purpose of creating and installing interpretive signage that reflects the historical significance of the old road.

4.2.2. Endangered Species Act

On December 14, 2022, BLM received a concurrence letter from USFWS in compliance with Section 7 of the ESA that the project “may affect but is not likely to adversely affect” MSO and SWFL. USFWS also concurred that the proposed project is not likely to jeopardize the experimental, nonessential population of California condor.

ESA Affect Determinations

The following determinations have been made after considering the affected environment, environmental effects, and the design elements. These determinations apply only to special status species and not wildlife and migratory birds in general.

- The proposed project may affect but is not likely to adversely affect MSO because none were detected after three years of surveys, and therefore effects will be discountable.
- The proposed project may affect but is not likely to adversely affect SWFL because none were detected within the Calf Creek drainage after several years of surveys and there is no suitable breeding habitat within the project area. Therefore, effects to Southwestern willow flycatcher will be insignificant and discountable.
- The proposed project is not likely to jeopardize the experimental, nonessential population of California condor.

4.2.3. Tribal Consultation

In March 2021, the BLM reached out to Hopi Tribe, Kaibab Band of Paiute Indians, Paiute Indian Tribe of Utah, and the Navajo Nation to consult on a government-to-government basis and to receive comments on BLM’s NHPA Section 106 process. During this consultation effort, the Hopi Tribe deferred their consultation responses to SHPO; the Kaibab Band of Paiute Indians also deferred to SHPO and had no comments regarding the proposal other than to request being informed of the proposed mitigation measures for review and comment; the Paiute Indian Tribe of Utah concurred with BLM’s determination of site eligibility and BLM’s efforts and they requested the opportunity to review the MOA but did not desire to participate as a signatory to that agreement; the Navajo Nation determined there were no “Navajo Traditional Properties” within the project area and stated that no further consultation was needed. In August 2021, Tribal Nations were provided an opportunity to review the MOA.

Additional information that was shared to consult with the Tribal Nations on a government-to-government basis included providing notification of the Notice of Proposal Development in June 2021, the public site visit in September 2021, and the availability of the EA for public review in October 2021.

4.2.4. State and Local Government Coordination

BLM coordinated with Garfield County, UDOT, and Utah's Public Lands Policy Coordinating Office (PLPCO) on this proposal. On February 1, 2021, BLM met on-site at the CCRS with representatives from UDOT to discuss the public safety concerns associated with the public parking along SB12 when parking is full within the recreation site. On March 29, 2021, BLM virtually met with representatives from Garfield County and UDOT to discuss BLM's initial plans for improvements at the CCRS and public safety issues along SB12 by the recreation site. On June 3, 2021, BLM virtually met with representatives from Garfield County and PLPCO to discuss parking capacity, conducting a site visit, and how to handle communication. Garfield County, PLPCO, and Escalante SAR representatives attended the public site visit on September 28, 2021.

Due to a public comment received, the BLM reached out to the Utah Department of Natural Resources - Division of Wildlife Resources Native Aquatic Biologist to discuss the presence of Colorado cutthroat trout, Round-tailed Chub, or Blue Headed Sucker, Flannelmouth Sucker, Boneytail Chub, Razorback Chub, Colorado Pike Minnow, and Humpback Chub. The UDWR biologist confirmed that none of these species have been documented in Calf Creek except the Blue Headed Sucker which has not been documented since 1977 (McAda, 1977).

4.3. ROLES IN THIS ENVIRONMENTAL REVIEW

The project proposal was discussed, planned, reviewed, and analyzed by the BLM Paria River District Interdisciplinary Team, other GSENM staff, and BLM staff with special expertise from other offices.

4.3.1. BLM Interdisciplinary Team and/or Document Preparers

Allysia Angus – District Landscape Architect (project lead, site planning, accessibility, visual resources)

David Barfuss – District Engineer (deferred maintenance, infrastructure design)

Jabe Beal - GSENM Outdoor Recreation Planner (recreation, WSA, WSR)

Raymond Brinkerhoff – GSENM Botanist (vegetation, riparian)

Travis Carlson - District Occupational Health and Safety Specialist (health and safety)

Raven Chavez - GSENM Soil Scientist – (soils, riparian, floodplains)

Matthew Fockler – BLM Regional Socioeconomic Specialist (socioeconomics, environmental justice)

James Holland – Kanab Field Office Geologist (floodplains, geology, water resources)

Stephanie Howard – District Planning and Environmental Coordinator (NEPA support, socioeconomics)

Brandon Johnson – State Office Realty Specialist – (rights-of-way)

Meghan Krott – District Aquatic Ecologist/Fish Biologist (fish, aquatics, riparian)

Brian Kunk – District Engineer – (deferred maintenance, infrastructure design)

Paul Leatherbury – District GIS Specialist (GIS support, map preparation)

Cameron McQuivey – GSENM Wildlife Biologist (wildlife, migratory birds, special status animal species)

Ade Nelson – GSENM Manager

Torrian Nelson – GSENM Park Ranger (recreation)

Valerie Russell – GSENM Archeologist/Assistant Management Manager (cultural resources)

Jason Stewart – District GIS Specialist (GIS support, map preparation)

Alan Titus – District Paleontologist (paleontology)

Vicki Tyler – GSENM Manager (NEPA support, editing)

CHAPTER 5. REFERENCES

1970 35 Federal Register 19529. December 1970

BLM Accessibility Assessment for Calf Creek, 2016

BLM Calf Creek Culvert Inspection Report, 2019

BLM Fund Code Handbook, 2020 *BLM Guidelines for a Quality Built Environment, 2010*

BLM Instruction Memorandum No. 2022-010 – E-Commerce Technologies for Recreation Fee Collection and Reservation Services, 2022

BLM Interim Management of the Grand Staircase-Escalante National Monument Memorandum, December 16, 2021

BLM Manual 6330 - Management of Wilderness Study Areas, 2012

BLM Manual 8400 - Visual Resource Management, 1984

BLM Manual 8431 - Visual Contrast Rating, 1986

BLM Manual 9112 – Bridge and Major Culvert, 2021

Calf Creek Recreation Area Site Improvements EA (DOI-BLM-UT-0300-2015-0040-EA)

Callahan, D., and L. White. *Willow Flycatcher Habitat Suitability Model – Phase I, Grand Staircase Escalante National Monument, Utah*. Bureau of Reclamation. Technical Service Center. Denver, Colorado. 2002

Casey, Tim. *Grand Staircase-Escalante National Monument Recreation Experience Baseline Study – Phase 4 Report*. Colorado Mesa University-Natural Resources Center. 2018

Day, K.S and A. Porter. *Summary of Southwestern Willow Flycatcher Investigations in and Around Grand Staircase-Escalante National Monument and Along Kanab Creek, Utah*. 2000.

Day, K.S. *Summary of Southwestern Willow Flycatcher Investigations in Utah Division of Wildlife Resources' Southern Region in 2004*. UDWR Publication Number 05-09. November 2004.

Environmental Protection Agency Environmental Justice data. <https://ejscreen.epa.gov/mapper/>. June 2022.

Government Performance and Results Act Calf Creek Recreation Visitor Survey, 2016

Grand Staircase-Escalante National Monument Record of Decision and Approved Resource Management Plans, 2020

Grand Staircase-Escalante Monument Management Plan, 2000

Grand Staircase-Escalante National Monument Proclamations 10286, 2021

Grand Staircase-Escalante National Monument Visual Resource Inventory, 2019

Garfield County General Management Plan – Resource Management Section, 2019

Headwaters Economics BLM Socioeconomic Profile for Garfield County. Headwaters Economics. June 2022.
<https://headwaterseconomics.org/tools/blm-profiles/>.

International Dark Sky Association outdoor lighting basics: <https://www.darksky.org/our-work/lighting/lighting-for-citizens/lighting-basics/>

McAda, Charles. *A Survey of Threatened and Endangered Fish in Southeastern Utah Streams.* Utah Cooperative Fishery Research Unit, Utah State University. Logan, Utah. 1977.

Monz, Christopher. *Outdoor Recreation and Ecological Disturbance.* Utah State University Ecology Center and Institute of Outdoor Recreation and Tourism. November 2021.

National Landscape Conservation System 15-Year Strategy 2010-2025

National Park Service visitation statistics for Bryce Canyon and Capitol Reef National Parks:
<https://irma.nps.gov/STATS/>

Peterson, L., and D. M. O’Neill. *Southwestern Willow Flycatcher Occurrence and Habitat in the Escalante River, Kanab Creek, and Paria River drainages in 1997.* Publication No. 97-12. Utah Division of Wildlife Resources. Cedar City, Utah. September 1997.

Programmatic Noxious Weed and Invasive Plant Management Grand Staircase-Escalante National Monument Environmental Assessment (DOI-BLM-0300-2011-0009-EA) 2015.

Scenic Byway 12 Corridor Management Plan, 2001

Tripadvisor.com “Thing to Do in Escalante, Utah” on 8/23/2022: https://www.tripadvisor.com/Attractions-g56980-Activities-Escalante_Utah.html

Tripadvisor.com “Things to Do in Utah” on 8/23/2022: https://www.tripadvisor.com/Attractions-g28965-Activities-a_allAttractions.true-Utah.html

Utah Department of Transportation traffic statistics: <https://www.udot.utah.gov/connect/business/traffic-data/traffic-statistics/>

Utah Division of Water Quality, Integrated Report on Water Quality, 2022
<https://documents.deq.utah.gov/water-quality/monitoring-reporting/integrated-report/DWQ-2022-002386.pdf>

US Access Board *Accessibility Standards for Federal Outdoor Developed Areas, 2014*

US Fish and Wildlife Service (USFWS) Information, Planning, and Conservation System (IPAC) www.fws.gov/ipac.

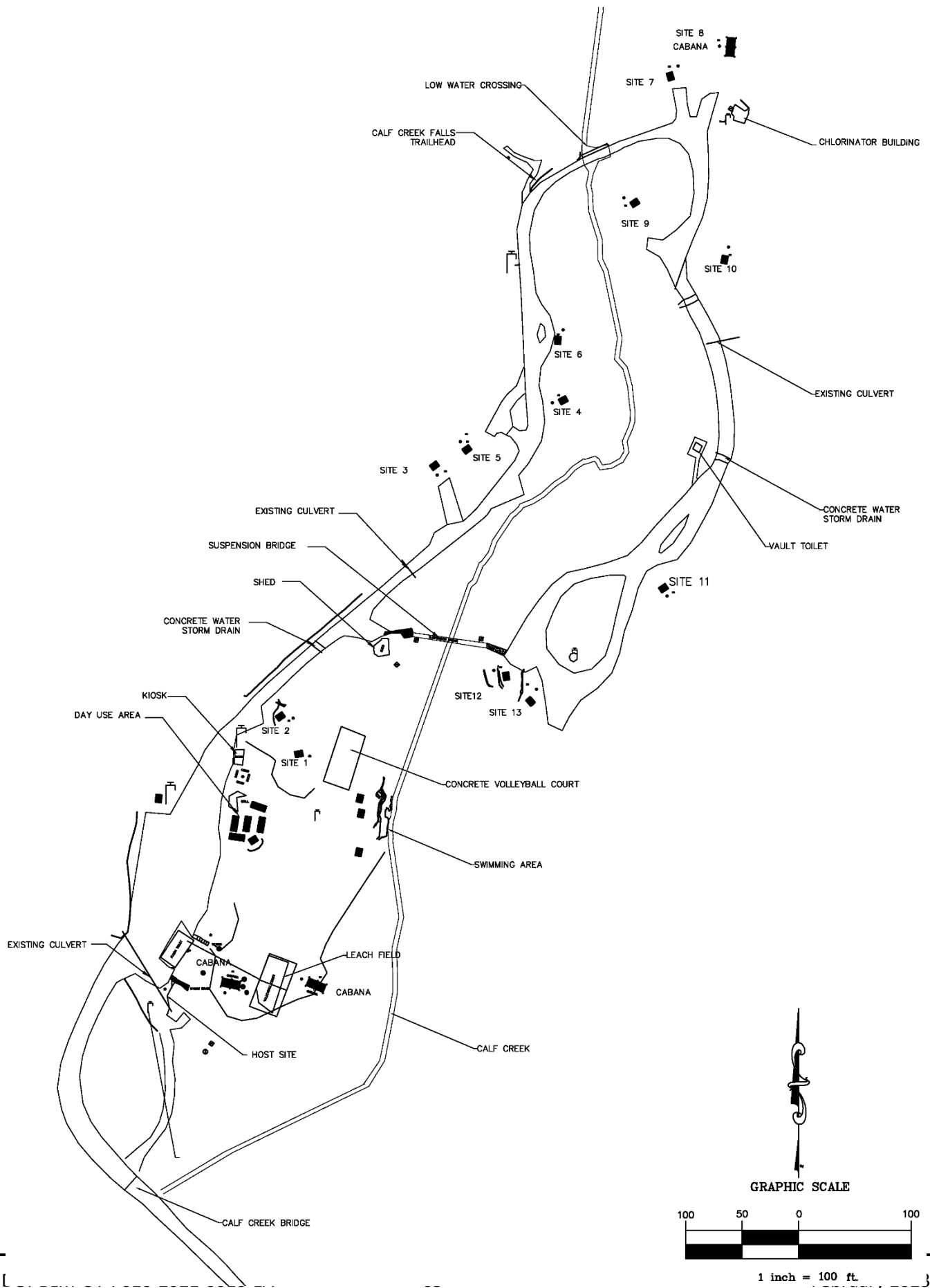
USDA Natural Resources Conservation Service *Custom Soil Resource Report for Grand Staircase-Escalante National Monument Area, Parts of Kane and Garfield Counties, Utah, June 2022*

USDA Natural Resources Conservation Service Soil Data Access Prime and other Important Farmlands List, June 2022

Willey, D. W., and H. C. Willey. *Ecology of Small Mammals within Spotted Owl Nest Areas in Grand Staircase-Escalante National Monument*. Pages 439 – 456 in *Learning from the Land: Grand Staircase-Escalante National Monument Science Symposium Proceedings*. September 12-14, 2006. Southern Utah University, Cedar City, Utah.

APPENDIX A: CCRS EXISTING CONDITION SCHEMATIC DRAWING

See next page.



APPENDIX B: MONUMENT OBJECTS AND VALUES CONSISTENCY REVIEW

The analysis of issues and potentially affected resources in chapter 3, the consideration of various other resources dismissed from detailed analysis (see appendix F), and the content that follows in this appendix collectively constitute an analysis of potential effects to the monument objects and values identified in Proclamation 10286. Based on this analysis, the BLM has determined that the proposed action is consistent with the protection of the monument objects and values identified in the proclamation that could be impacted by the proposed action. Rationale for that conclusion is set forth below.

As discussed in chapter 2, the proposal consists of project components within a recreation site that was initially developed in the 1960s and that has experienced ongoing and increasing recreational use and associated maintenance and improvement since that time. No project element has the potential for any but localized effects for any of the general/social resource objects and values identified in Proclamation 10286 (GSENM's vast and austere landscape, frontier character, night skies, soundscapes, scientific study). For example, because the proposal is located in the bottom of a canyon, it will be visible only from specific areas and will not be apparent from most vantage points in the Monument. Impacts to objects and values associated with landscape character are analyzed in section 3.9.2. As noted in section 2.2.6, the potential effects to landscape character would be reduced or eliminated through project design elements, including the use of natural and/or natural-appearing materials and colors that blend with the natural environment. The CCRS is one of only three locations within GSENM with artificial lighting (inside the main restroom facility). As noted in the design elements in section 2.2.6, artificial lighting in the new restroom building will follow International Dark Sky Association outdoor lighting basics to ensure protection of night skies. As a result, the project would be consistent with protection of the monument's night skies. The CCRS is located below a highway which generates motor vehicles noise on an on-going, regular basis. Heavy equipment and power tools would be used during construction, as noted in section 2.2. While this would result in some temporary noise during daylight hours only, it would not be expected to carry over long distances given the limited geographic scale and scope of the proposal and its location in a canyon shared with a highway and the associated highway noise. For that reason, the project would be consistent with protection of the monument's soundscapes. Additionally, because the project is proposed in an area that has already been significantly disturbed and, therefore, unlikely to house substantial research opportunities, the project should not impact the Monument's ability to act as a laboratory for scientific study. For example, the proposed project should not impact the CCRS's ability to serve as an outdoor laboratory as part of the Hummingbird Monitoring Network where the public can engage with scientists as they band hummingbirds.

Proclamation 10286 identifies the high and geologically unique Navajo Sandstone cliffs surrounding the CCRS as a monument object. As a result of the proposal's limited geographic scale and scope (see appendix G), neither these sandstone cliffs, nor Calf Creek Canyon in which the CCRS is situated, would be adversely impacted by the proposed action.

The project area is underlain with outcrops of the early Jurassic Age Kayenta Formation in which vertebrate skeletal sites are rare but vertebrate trace fossils are more common. Pedestrian survey of the project area did not identify any obvious vertebrate trace fossils currently exposed at the surface, however, the potential to uncover and/or damage previously hidden fossils exists anywhere Kayenta bedrock will be disturbed by proposed construction activities (construction of overflow parking, site road widening, and bypass trail construction). To ensure protection of paleontological resources, the proposed action requires that a qualified paleontologist to be on site to monitor construction during bedrock disturbance activities. All additional paleontological objects identified in Proclamation 10286 were considered, and based on current information,

none would be affected (marble-like iron oxide concretions, petrified wood, etc.) due to their absence in the project area (see appendix F).

With respect to archeological and historic objects and values, a Class III archaeological inventory survey was performed in compliance with Section 106 of the NHPA. It resulted in identification of three historic properties (archaeological sites evaluated as eligible for the NRHP within the area of potential effect, which includes one prehistoric site (42GA1431) and two historic-period sites (42GA6091 and 42GA8060). However, only one (42GA1431) is identified as a monument object in Proclamation 10286. Since its original recordation in 1997, site 42GA1431 has not been impacted by recreational visitation, likely because it is located approximately 10 feet above the ground surface, is hidden behind vegetation, and is inaccessible. The inconspicuousness and inaccessibility of this site means that it should not be adversely affected. The proposed action will not impact the “high density of Fremont historic sites, such as pit houses, villages, and storage cists,” “Fremont, Ancestral Pueblo, and Southern Paiute rock writings,” and “many inscriptions left by early settlers of European descent” that are identified in Proclamation 1086 and located in the Upper Escalante Canyons area. Additionally, the proposed action includes a design element to ensure any currently undiscovered cultural resources are protected during project implementation (see section 2.2.6).

For the reasons stated in appendix F, the proposal will be consistent with the protection of life zones, riparian areas, or floristic communities that are identified as monument objects in Proclamation 10286. None of the other floristic communities (hanging gardens, relict plant, tinajas, rock crevices, dunal pockets) identified in Proclamation 10286, nor other vegetative objects and values (sky islands, 1400-year-old pinyon and juniper trees) are present in the project area. There are no populations of special status plant species within the project area.

The CCRS was developed in the early 1960s and has been used by recreationists since. Wildlife have likely acclimated to the human presence or were displaced to some degree even prior to the original monument designation in 1996. Impacts to wildlife resources are analyzed in detail in section 3.13.2. Winter elk habitat, pronghorn, chuckwalla, and desert night lizard (wildlife objects noted specifically in Proclamation 10286) are not located in the project area, the proposed action would not affect them. The fact that the proposed action is not expected to increase visitation to the area, and therefore should not impact the scope or location of recreation in the area, should also limit the impact on wildlife.

The proposal area is within the Calf Creek watershed along Calf Creek, a tributary of the Escalante River. As described in section 2.2.6, the project design incorporates measures to protect the creek and its floodplain from potential impacts associated with construction (equipment refueling spill containment, preparing a stormwater pollution prevention plan, acquiring a stream channel alternation permit, using sediment control structures, etc.). Additionally, as described in sections 3.7.2 and 3.10.2, the proposed action should enhance the protection of Calf Creek. For example, the replacement of the culvert-style creek crossing with a bridge would result in a return to a more natural floodplain; the new retaining walls at the water play area would reduce erosion; and the replacement of the main restroom facility with a vault toilet system would reduce overall water use and decrease the potential for contamination of the creek.

Finally, as noted in appendix F, biological soil crusts, which are identified as a monument object in Proclamation 10286, are present in the project area but are minimal due to previous natural and human-caused disturbances. The proposed action includes design elements to protect soil resources from erosion during and after construction (see section 2.2.6). While there would be short-term adverse effects to soils and biological soil crusts during construction in a relatively small area, the erosion control, storm drainage, and revegetation design elements would reduce erosion in the long-term. As a result, the proposed action will be consistent with the protection of soil crusts.

APPENDIX C: PAST DECISIONS, PLANS, AND NEPA DOCUMENTS

1970 - Federal Register Declaration: Created Calf Creek Recreation Area and established certain use limitations.

1976 - Calf Creek Recreation Area Management Plan: This plan provided uniform management direction for recreational usage and development within the recreation area; it is not a NEPA document. This plan has been superseded by other land use plans (GSENM Management Plan, 2000 and Record of Decision and Approved Resource Management Plan for GSENM, 2020).

1979 - Escalante Management Framework Plan: This is a conceptual framework that references the 1976 *Calf Creek Recreation Area Management Plan* for most details of the area's management; it is not a NEPA document.

1998 - GSENM Trail/Trailhead Maintenance/Restoration EA (UT-048-98-015): This EA allowed for maintenance and restoration of existing trails and trailheads in the Escalante area of GSENM, including the Lower Calf Creek Falls Trail and Trailhead.

1998 - GSENM Calf Creek Campground Maintenance and Improvements Categorical Exclusion (UT-048-98-016): This decision allowed for installation of a new fee station and buried electrical line, repairing masonry steps near the water play area, and pruning and removing vegetation around campsites and the roadway.

1999 - GSENM Calf Creek Campground Maintenance and Improvements Categorical Exclusion (UT-030-99-020): This decision allowed construction of a retaining wall around the day use parking area, replacing all faucets and drains, insulating the waterline, and filling in the old spring box.

2000 - GSENM Management Plan (MMP): The Calf Creek Recreation Area designation was carried forward in the MMP. It is the first land use plan, created as part of a NEPA process, to address this area. The MMP placed the project area within the Frontcountry Management Zone, "intended to be the focal point for visitation by providing day-use opportunities in close proximity to adjacent communities" and highways. There were no group size limits in this zone nor would social encounters trigger allocation (limited use). It also placed the project area within the Highway 12 SRMA where the recreation experience was to focus on learning about monument objects and values as well as scenic and interpretive viewing.

2009 - GSENM Calf Creek Recreation Area Water System Replacement EA (DOI-BLM-UT-0300-2009-0008-EA): This EA allowed for the installation of approximately 3000 feet of new and replacement waterline and five hydrants with ABA-compliant pump handles to protect human health and safety and improve accessibility.

2013 - Calf Creek Recreation Area and Deer Creek Campground Business Plan: This business plan established the current user fees (\$15/night for camping and \$5/day/car for day use) and budgeted for facility and staffing needs at the recreation site.

2017 - Calf Creek Recreation Area Site Improvements EA (DOI-BLM-UT-0300-2015-0040-EA): The Decision Record and Finding of No Significant Impact for this EA were signed in 2017, but the decision was appealed. At BLM's request, the decision was vacated and remanded back to BLM for additional analysis. Shortly thereafter, other planning priorities superseded completing the additional analysis and the environmental assessment was not finalized.

APPENDIX D: ALTERNATIVES CONSIDERED BUT DISMISSED FROM ANALYSIS

No Action Alternative: Under this no action alternative, the BLM would not take any action in the CCRS. The BLM dismissed this alternative from detailed analysis because taking no action to address infrastructure that is failing poses health and safety issues, does not meet accessibility standards, and would not meet BLM's responsibility to provide safe and accessible facilities. Additionally, taking no action at the CCRS would not meet the agency's basic policy objectives for management of the area as defined in the Calf Creek SRMA Framework (ARMPs, appendix H, pages H-2 to H-5) which notes that the area is to provide for day-hiking and a campground, among other things, and that the desired physical recreation setting characteristic for facilities is to provide modern facilities such as campgrounds, group shelters, and occasional exhibits. Therefore, this alternative was dismissed because it would not respond to the agency's purpose and need.

Modest Improvements and Expanded Improvements Alternatives from 2017 EA: The *Calf Creek Recreation Area Site Improvements EA* (DOI-BLM-UT-0300-2015-0040-EA) included two action alternatives, one with modest improvements and another with expanded improvements at the CCRS. Most of the improvements considered in those two alternatives are included in proposed action. However, additional needs (culvert-style creek crossing structural deficiencies) have arisen since 2017 that required expansion and revision of the proposed action. BLM determined it was not necessary to include the 2017 modest improvements and expanded improvements alternatives in this EA because they are substantially similar design and effects to the maintenance only and proposed action (deferred maintenance and improvements) alternatives.

Including Lower Calf Creek Falls Trail in project area: Under this alternative, the BLM would expand the project area to include the Lower Calf Creek Falls Trail. This alternative was proposed during internal and public scoping. This alternative was proposed to address human waste by installing a toilet, to remediate impacts to soils and vegetation due to social trailing, to conduct trail maintenance, and to construct a helipad halfway up the trail and make the trail accessible for utility terrain vehicles for SAR activities. Regarding toilet installation and SAR activity components, the current Calf Creek SRMA Framework notes that the "Desired Physical Recreation Setting Characteristic" is "*No structures along the trails. Foot trails only outside of the campgrounds and trailheads.*" (ARMPs, appendix H, page H-4). Additionally, *BLM Manual 6330-Management of Wilderness Study Areas* directs that all uses and/or facilities within WSAs must meet the non-impairment standard (must be both temporary and not create surface disturbance). Therefore, installing a toilet or a helipad or making the trail accessible for utility terrain vehicles was dismissed from detailed analysis because these actions are inconsistent with RMP objectives for the area, and the SAR components are also inconsistent with BLM policy. Regarding remediation of social trailing and trail maintenance, these are compliance issues that can be addressed through other laws, regulations, and policies as needed. For these reasons, the project area was not expanded to include the trail.

Providing walk-in campsites behind campsite #12: Under this alternative the BLM would create walk-in campsites behind campsite #12 as proposed in the Notice of Proposed Development. Public scoping comments raised concerns about potential flooding in this area. Therefore, the BLM dismissed these proposed campsites from detailed analysis because they do not respond to the purpose and need of improving health and safety within the CCRS.

Providing a helipad in the campground: Under this alternative BLM would construct a helipad in the campground for SAR responses as requested during public scoping. Helicopter landing is currently allowed for emergency response anywhere on public lands within GSENM and along the highway that passes by the CCRS. BLM law enforcement met in May 2022 with the Garfield County Sheriff's Office to identify possible improved helicopter landing zones and short haul locations along the Lower Calf Creek Falls Trail. Then in August 2022, the Utah BLM State Director and PRD Manager, Kane County and Garfield County Sheriffs, and representatives from the offices of Senators Mike Lee and Mitt Romney met at Calf Creek to discuss helicopter landing zones for SAR

activities. This alternative is substantially similar to both action alternatives, so the BLM dismissed it from detailed analysis.

Excluding the amphitheater, bypass trail, and additional campsites and designated parking areas from the project, and retaining the main restroom building, group picnic area, and low water crossing in the project: Under this alternative the BLM would not build the amphitheater, by-pass trail, additional campsites, or more designated parking areas, nor would BLM replace/relocate the main restroom building, group picnic area, or low water crossing. This alternative is substantially similar in design to the maintenance only alternative, so the BLM dismissed it from detailed analysis.

Providing composting toilets: As was suggested by the public, the BLM would install self-composting toilets instead of vault toilets to replace the flush toilet restroom. Self-composting toilets requires a high level of on-going, regular maintenance to function properly. The BLM does not have the capacity to maintain this type of system. Otherwise, this alternative would have substantially similar environment effects to what is analyzed in the proposed action and was dismissed from detailed analysis.

Providing a circular dance floor in the day use area: Under this alternative BLM would construct a circular dance floor in the day use area to serve as a multi-purpose space as suggested in public comments. The proposed action includes an amphitheater and group shade shelter, both of which could serve multiple functions. This alternative is substantially similar to the proposed action and was dismissed from detailed analysis.

Committing to specific design techniques and project implementation details (including but not limited to bio-engineering methods for bank stabilization, non-pergola-style shade shelters, signage/interpretative material messaging, doing construction only in October and winter): As noted in section 2.2, detailed design will occur once a decision regarding this proposal is made. The final detailed design will not exceed analysis contained within this EA. Specific designs and project implementation details will have substantially similar effects to what is analyzed in the proposed action.

Developing the Calf Creek SRMA Plan: Under this alternative the BLM would develop a Calf Creek SRMA Plan for the 6,954-acre SRMA first, as proposed by internal and public scoping. That type of planning effort addresses broad recreation management concerns and decisions instead of site-specific needs. The BLM's purpose and need for this project is focused on addressing existing use and facility deficiencies at the CCRS. The BLM dismissed this alternative from detailed analysis because it would not respond to the purpose and need.

Limiting use of the trail: Under this alternative the BLM would establish a user capacity and subsequently limit use of the trail as requested by public scoping comments. Determining carrying capacity and subsequently limiting use of a trail is an activity level or land use plan level management decision. The BLM's purpose and need for this project is focused on addressing existing use and facility deficiencies at the CCRS. The BLM dismissed this alternative from detailed analysis because it would not respond to the purpose and need.

Converting the campground and/or lower day use area to parking: Under this alternative BLM would convert part or all of the campground and/or lower day use area to day use parking. The Calf Creek SRMA framework in the Monument's land use plan notes that the area "supports a campground, day use area, and a 3-mile-long trail to Lower Calf Creek Falls" and that the desired physical recreation setting characteristics include "modern facilities such as campgrounds." Additionally, the developable areas between the cliffs and the creek are quite constrained. Converting the additional areas to parking would require the removal of wide swaths of vegetation adjacent to the creek. And traffic flow, which already challenging in CCRS, would be exacerbated. Therefore, this alternative was dismissed because it is inconsistent with the land use plan and because it would not respond to the purpose and need.

APPENDIX E: CCRS PROJECT AREA AND CONCEPTUAL SITE PLAN

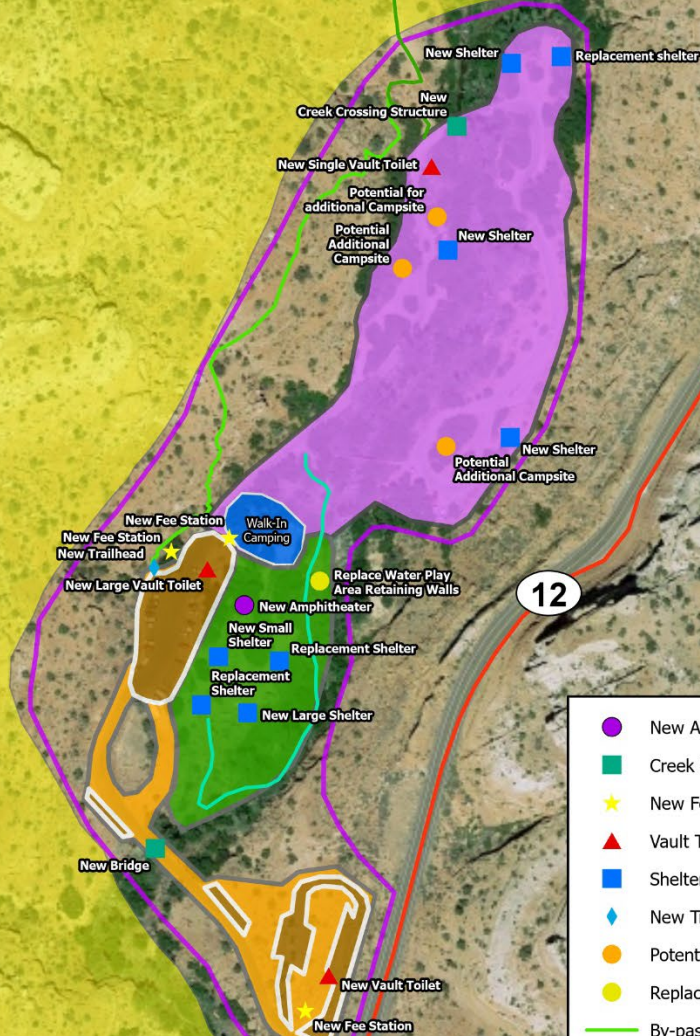
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NATIONAL CONSERVATION LANDS



Phipps-Death Hollow WSA

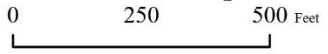


	New Amphitheater
	Creek Crossing Structure
	New Fee Station
	Vault Toilet
	Shelter
	New Trailhead
	Potential Additional Campsite
	Replace Water Play Area Retaining Walls
	By-pass Trail
	Existing Trail
	Nature Trail
	Calf Creek Project Area
	Campground
	Walk-in Camping
	Day Use Area
	Parking Site and Road
	Designated Parking
	WSA

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Calf Creek Recreation Site Deferred Maintenance and Improvements EA Project Area and Conceptual Site Plan



Paria River Distri
GSENM

February 2023

APPENDIX F: RESOURCES DISMISSED FROM FORMAL ANALYSIS

Air Quality

Air quality in the project area is unclassified/attainment of the NAAQS. The proposed project would result in criteria air pollutant and fugitive dust emissions from vehicle travel to and from the site and heavy equipment operation. Air emissions would be during the equipment use only. The level of emissions would be indistinguishable from background emissions as measured by monitors or predicted by models. As a result, a formal analysis of air quality is not provided.

Economics

The BLM reviewed the Headwaters Economics BLM Socioeconomic Profile for Garfield County.³⁷ Special Recreation Permit use occurs in the area, resulting in wages for guided activity. Leisure and Hospitality results in 38% of the wages of Garfield County. The heavy equipment work would be contracted, and the successful bidders historically have been from this or an adjacent county. Construction results in 3% of the wages of Garfield County. The economic status of the county will not be affected to a degree that detailed analysis is required because this project will continue recreation- and construction-related jobs from the continued maintenance or improvement of the recreation site but will not create new jobs.

Environmental Justice

A review of the Environmental Protection Agency's Environmental Justice data³⁸ and the Headwaters Economics BLM Socioeconomic Profile (footnote 33) show that low-income people and family percentages are higher than the national average (People: 16.4% compared to 12.8% nationally. Families: 11.3% compared to 9.1% nationally). County minority populations are lower than the national average (11.4% compared to 39.9% nationally). The proposal would not have disproportionately high or adverse human health or other environmental effects on low-income or minority populations because no group of people would bear a disproportionate burden of any harm or risk and/or be excluded from any benefit resulting from the maintenance or upgrade of the existing recreation site. The appropriate Tribal Nations have been contacted through BLM's cultural resources clearance process and have not expressed concern with the project. GSENM is not aware of any minority visitor groups that have concerns with the project.

Farmlands

Prime or unique farmlands in Garfield County as defined by the US Department of Agriculture Natural Resources Conservation Service (NRCS)³⁹ are limited to soil map unit 5025, Yarts sandy loam, and it is only prime farmland if irrigated. This soil type is not found in the project area, nor is there any irrigation infrastructure present.

Fuels/Fire Management

The project area is primarily around a riparian zone which is less prone to wildfire due to the associated moisture of the creek. Where the project area extends beyond the riparian zone, the vegetation is sparse, in random patches, and intermixed with bare ground. The proposed action would not increase the threat of fire or fuel loading because the new paved, graveled, and compacted natural surfaces and weed control measures

³⁷ <https://headwaterseconomics.org/tools/blm-profiles/>

³⁸ <https://ejscreen.epa.gov/mapper/>

³⁹ https://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcseprd1338623.html

would minimize establishment of flashy fine fuels such as cheatgrass. Designated fire rings would minimize risk of campfires spreading into surrounding vegetation.

Geology

The high Navajo Sandstone cliffs surrounding the CCRS are geologically unique and identified as a monument object by Proclamation 10286, but they would not be impacted by the proposed action because it is proposed for an existing recreation site with roads, parking areas, and campsites.

Greenhouse Gas Emissions

The proposed project would result in greenhouse gas emissions from vehicle travel to and from the site and heavy equipment operation during construction. Greenhouse gas emissions would be only during use of equipment. The level of emissions would be indistinguishable from background emissions as measured by monitors or predicted by models. As a result, a formal analysis of greenhouse gas emissions is not provided.

Mineral Resources

All lands within GSENM have been withdrawn from all forms of entry, location, selection, sale, or other disposition under the public land laws, from location, entry, and patent under the mining laws, and from disposition under all laws relating to mineral and geothermal leasing, other than by exchange that furthers the protective purposes of the monument, subject to valid existing rights. Because there are no known valid existing rights related to mineral resources within the project area, the proposed action should not impact mineral resources.

Lands/Realty

There are existing rights-of-way in the project area for a small power distribution line, a telephone line, fiber optic line, and for Highway 12. However, the proposed action is not expected to adversely impact any of these existing rights-of-way since the project has been designed to avoid direct disturbance of the infrastructure associated with these valid existing rights. In fact, the increased parking capacity proposed at the CCRS is expected to alleviate some safety concerns along the highway and reduce parking along the highway shoulder as described in section 3.2.2. The proposed action also includes a potential fiber optic line to serve the CCRS. Since the fiber optic line is designed to be buried within the recreation area access road corridor, no additional impacts would be expected from installation of the fiber optic line.

Paleontology

Outcrops of the early Jurassic Age Kayenta Formation underly the entire project area. While vertebrate skeletal sites are rare in the Kayenta Formation, vertebrate trace fossils including burrows and trackways are more common, being seen in the formation throughout its outcrop area in the Colorado Plateau and eastern Great Basin. These, like all skeletal fossils, are protected by the Paleontological Resource Preservation Act and are important natural heritage resources. Because the project area is located in GSENM, these fossils, which are identified as monument objects in Proclamation 10286, are also protected by the Antiquities Act. Pedestrian survey of the entire project area did not identify any obvious vertebrate trace fossils currently exposed at the surface, however, the potential to uncover and/or damage previously hidden fossils exists anywhere Kayenta bedrock will be disturbed by the construction activities related to the proposed action. A design element is included in the proposed action to meet the protections provided under the Paleontological Resources Preservation Act of 2009. It requires that a qualified paleontologist be on site to monitor construction activities during any bedrock disturbance to identify any fossils that may be exposed so they could be avoided or

collected. This design element minimizes the potential for impacts such that detailed analysis will not help inform the decision or have any potential for significance.

Livestock Grazing/Rangeland Health

The project area overlaps a designated and developed recreation/camping area that is unavailable for livestock grazing. The expanded footprint would be within the existing recreation site footprint. Thus, the size and scope of the project would not affect rangeland health standards.

Soils (biological and physical)

Biological soils crusts are present within the project area but are minimal due to previous development of recreation infrastructure, recreation use, and varying weather events - all of which affect biological soil crust establishment. Since the project area is an existing recreation/camping area, and since the project either maintains or upgrades existing facilities and uses, during construction short term effects to biological soil crusts are anticipated under both alternatives.

According to the USDA NRCS Soils Report, there are two types of soils within the project area. The canyon bottom soils along the creek consist of alluvium with depths ranging from deep to very deep located on stream terraces, alluvial fans, hillslopes, etc. (Map Unit 5088 - Calcree-Bowington-Mespun complex). Directly adjacent to the canyon bottom are very shallow to shallow depth soils found on structural benches and escarpments along with exposed Navajo sandstone rock (Map Unit 5087 - Kenzo, steep-Rock outcrop [Kayenta Formation] complex). Due to the extensive sandstone parent material found throughout Calf Creek Canyon, the soils are sandy and prone to wind and water erosion. Soil erosion is a natural and ongoing process in this environment.

Parking outside the parking area and off the road edges as well as cross-country pedestrian travel within the CCRS have trampled soils, including biological soils, causing increased erosion and sedimentation into Calf Creek. The proposed action would provide hardened, designated parking and delineated pedestrian pathways, which would reduce encroachment into undesignated and undisturbed locations, thus minimizing the degradation of soils due to user encroachment. Construction activities would displace soils and increase erosion potential in the short-term, but erosion control and storm-drainage design features would reduce erosion in the long-term, especially once vegetation is reestablished. As a result, a formal analysis of soils is not provided.

Vegetation

The upland vegetation plant community which is above the riparian zone contains a mix of trees, shrubs, grasses, and forbs. These species occur in random patches or are interspersed with bare ground.

The invasive species in the upland area are puncture vine (*Tribulus terrestris*), yellow bluestem (*Bothriochloa ischaemum*), and cheat grass (*Bromus tectorum*). These species do not dominate the site but are present throughout. A design element is included in the proposed action to monitor for and treat noxious and invasive weeds as part of ongoing site maintenance.

Most project components requiring new construction (overflow parking area, nature trail, amphitheater, etc.) would disturb or displace vegetation for the life of the existing recreation site that has been previously disturbed by ongoing uses. Areas disturbed during construction without permanent facilities sited on them (edges of road, edges by creek crossing structures, etc.) will be revegetated.

Since the project area is an existing recreation/camping area, and since the project either maintains or upgrades existing facilities and uses, no new effects to vegetation are anticipated under either alternative. Based on the

aforementioned information, the long-term effects to vegetation would not help the decision maker choose between alternatives and are not potentially significant.

Wetlands/Riparian Zones

The riparian plant community is continuous along the Calf Creek drainage. No state noxious weeds are present in the riparian area of the project area. Herbaceous riparian vegetation cover is high with woody species that are the dominant plant form. Dominant riparian vegetation species in the project area include:

- Fremont cottonwood (*Populus fremontii*)
- Coyote willow (*Salix exigua*)
- Whiplash willow (*S. lucida* var. *caudata*)
- Yellow willow (*S. lutea*)
- Water birch (*Betula occidentalis*)
- Box-elder (*Acer negundo*)
- Skunkbush (*Rhus aromatica*)
- Sedges (*Carex* spp.)
- Arctic rush (*Juncus balticus*)
- Common reed (*Phragmites australis*)
- Reedgrass (*Calamagrostis* spp.)
- Willowherbs (*Epilobium* spp.)
- Clover (*Trifolium* spp.)

The proposed action would result in the removal of riparian vegetation to accommodate the retaining wall upgrades, the replacement of the water crossing structures, and the new nature trail. This riparian has previously been disturbed by livestock grazing, the construction of the existing structures and by the recreation use of the site. Areas disturbed during construction without permanent facilities sited on them (edges by creek crossing structures, edges of retaining wall, etc.) will be revegetated as described in the design features. Also, as described in the proposed action, additional riparian vegetation (cottonwoods, willows, etc.) would be planted in day use area, and social trails into creek would be revegetated. In the long term, riparian vegetation would benefit from stabilization of soils and reclamation of the social trails. Based on the aforementioned information, the long-term effects to riparian vegetation would not help the decision maker choose between alternatives and are not potentially significant.

Threatened, Endangered, and Candidate Plant Species

Special status plant species include species deemed threatened or endangered, species proposed for listing as threatened or endangered, and BLM Utah sensitive species. BLM obtained a project specific IPAC threatened or endangered species list from USFWS, dated January 4, 2022. There were two plant species listed as threatened that were identified in this report that could be present within the CCRS: Jones' Cycladenia (*Cycladenia humilis* var. *Jonesii*) and Navajo Sedge (*Carex specuicola*). Jones' Cycladenia does not occur in the project area because the habitat it requires is not present at the CCRS. Navajo sedge is found only in San Juan County and is exclusively linked to hanging gardens which are not found in the project area. Though not on the IPAC list, Utes ladies tresses (*Spiranthes diluvialis*) is a riparian T&E species that is found in the Deer Creek drainage several miles to the east. This plant also has not been found in the project area or Calf Creek Canyon.

APPENDIX G: VISUAL RESOURCE CONTRAST RATING ANALYSIS WORKSHEET

Form 8400 - 4 (September 1985)	Date 3/3/2022
UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT	District Paria River
VISUAL CONTRAST RATING WORKSHEET	Resource Area GSENM
	Activity (program) Recreation

SECTION A. PROJECT INFORMATION

1. Project Name Calf Creek DM and Site Improvements EA	4. Location Calf Creek Recreation Site	5. Location Sketch See images next pages. KOP is along SB12
2. Key Observation Point Linear Along HWY 12		
3. VRM Class 2		

SECTION B. CHARACTERISTIC LANDSCAPE DESCRIPTION

1. LAND/WATER		2. VEGETATION	3. STRUCTURES
FORM	Narrow canyon bottom surrounded by sheer to rugged sandstone walls with rounded tops.	Swath of thick riparian vegetation along creek. Randomly spaced trees and shrubs on side slopes.	Blocky and angular buildings and structures and parked vehicles (most of which are screened by landforms and vegetation). Thin vertical elements associated with powerline and highway signage. Road and highway create bands. Parking area creates paved polygon.
LINE	Vertical (walls), horizontal (banding) and rounded (tops of features).	Meandering riparian band. Stippled upland vegetation.	Curving band of highway and site road that hugs landscape. Indistinct for other elements.
COLOR	Vermillion, salmon, buff, brown	Bright green (in summer) or (gold in fall) for riparian vegetation. Medium green and sage gray green and yellow green in shrub and grassy areas. Dark PJ green.	Gray, brown, black, buff, reddish and various colors associated with vehicles.
TEXTURE	Coarse	Medium to coarse.	Fine to medium.

SECTION C. PROPOSED ACTIVITY DESCRIPTION

1. LAND/WATER		2. VEGETATION	3. STRUCTURES
FORM	Same.	Same.	Same but with additional structures added.
LINE	Same.	Same.	Same.
COLOR	Same.	Same.	Same.
TEXTURE	Same.	Same.	Same.

SECTION D. CONTRAST RATING SHORT TERM - X LONG TERM

1. DEGREE OF CONTRAST	FEATURES												2. Does project design meet visual resource management objectives? <input checked="" type="radio"/> Yes No (Explain below)	
	LAND/WATER BODY (1)				VEGETATION (2)				STRUCTURES (3)					
	Strong	Moderate	Weak	None	Strong	Moderate	Weak	None	Strong	Moderate	Weak	None	3. Additional mitigating measures recommended? .. Yes x No (Explain on reverse side)	
														Evaluator's Names Date Allysia Angus 3/3/2022
	Form			x				x			x			
Line			x				x				x			
Color			x				x				x			
Texture			x				x				x			

SECTION D. (Continued)

Comments from item 2.

A linear KOP along SB12 going in both directions is used for this analysis. When driving eastbound the site is visible for less than 20 seconds along less than .25 miles of highway. When travelling westbound the site is visible for less than 60 seconds along approximately .3 miles of highway. The recreation site is located below the highway in the bottom of a narrow valley mostly within the vegetation along Calf Creek. The highway is on a shelf carved out of the sandstone with sharp curves and steep drop-offs along the edge toward the recreation site.

The proposal includes upgrading/replacing existing facilities and adding some new elements like an upper overflow parking area, bypass trail on bench above campground, and additional shade shelters. Most site elements are/would be screened by vegetation and/or landform from the KOP along the highway. The parking areas, parked vehicles, main toilet, and day use elements would be visible more so than other elements of the project. The bypass trail and hikers on it would be visible from the highway, as are segments of the existing trail, but their scale would reduce their visibility. All these visible elements would be partially screened from view along the KOP and come in and out of view depending on where one is on the highway. The highway is in a superior position to the recreation site and most driving along the narrow, winding route are paying attention to the stunning scenery and focusing on staying on the road more than looking at what is located in the depression below them.

Analysis Factors

Viewing distance – Project is within immediate foreground.

Angle of observation – From a superior position, project is below KOP.

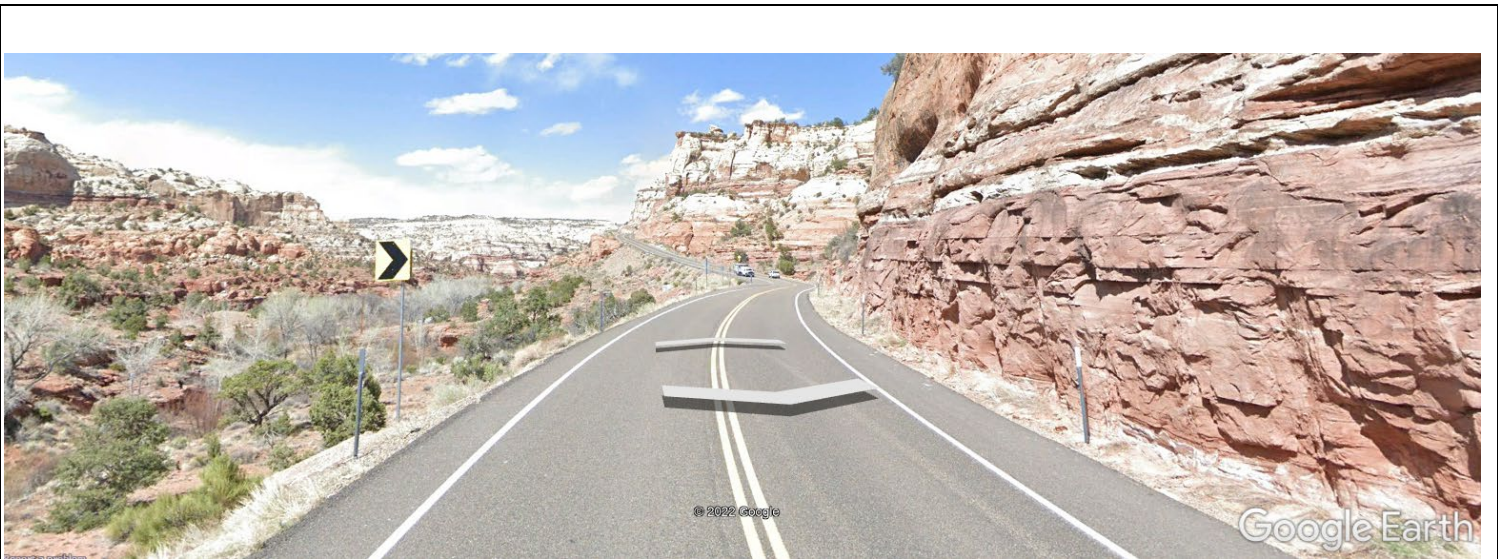
Length of time in view - <20 second for eastbound along highway; <60 seconds for westbound along highway.

Relative size or scale – Proposed project elements are small scale compared to surrounding cliffs.

Season of use – from March through October is busiest time, but winter visitation is increasing.

Spatial relationships – Proposed project elements are low in canyon and below the KOP along the highway. They are also fitted within landforms and vegetation.

Motion – automobiles and people moving within site.



Eastbound view along SB12 of recreation site (before vegetation is leafed out) also where overflow parking would come into view – about 500 ft from entrance. Credit: Google Earth Streetview.



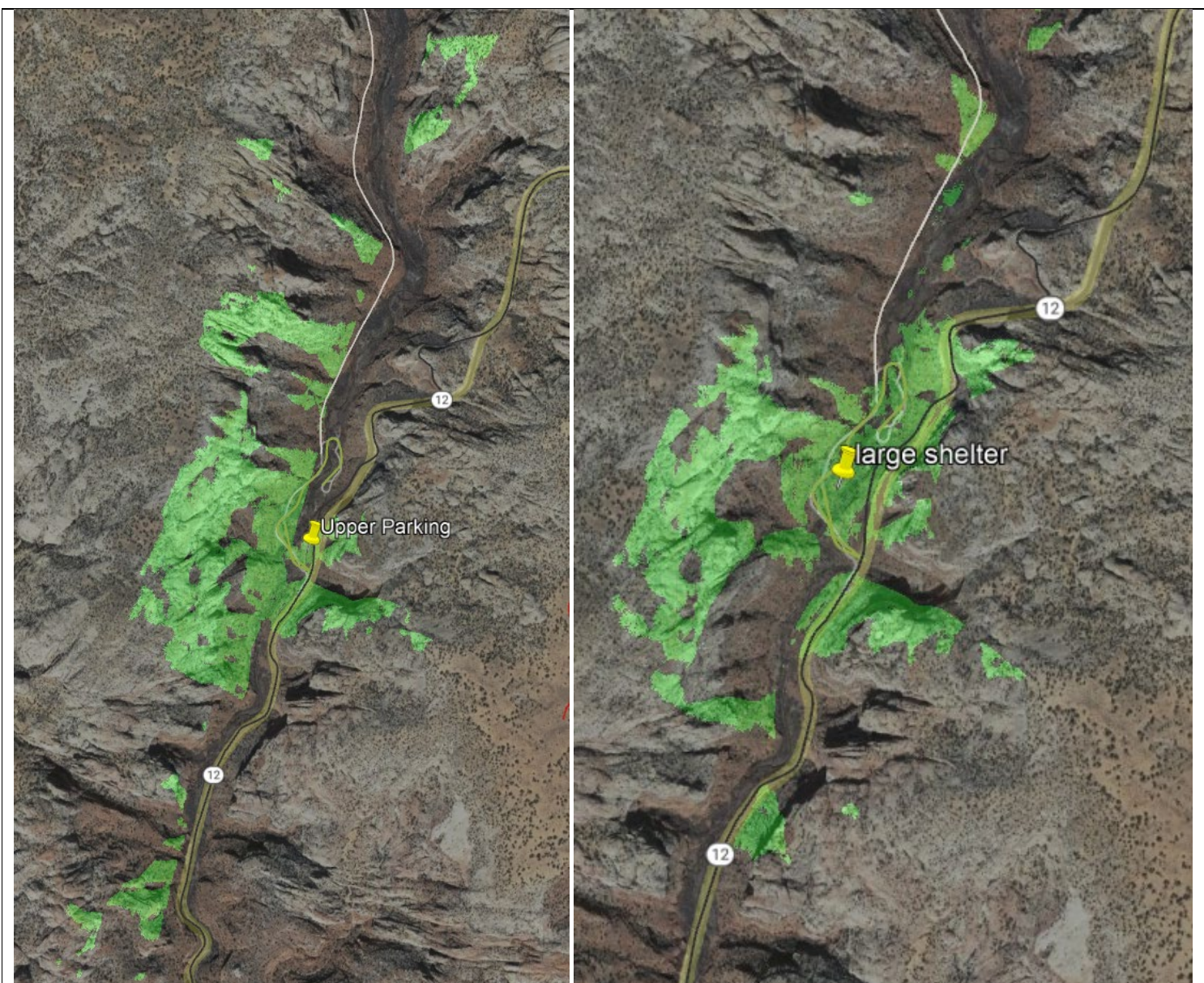
Eastbound view along SB12 of recreation site (before vegetation is leafed out) about 100 ft from entrance. Credit: Google Earth Streetview.



Westbound view along SB12 of recreation site (before vegetation is leafed out) Credit: Google Earth Streetview.



Westbound view along SB12 of entrance to recreation area (before vegetation is leafed out) when overflow parking area would come into view – about 600 ft from entrance. Credit: Google Earth Streetview.



Areas along SB12 where upper parking area (left) and large picnic shelter (right), not taking into account vegetation screening, would be visible (green) are shown above.

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APPENDIX H: COMMENT RESPONSE

Non-substantive comments included comments in four broad categories:

Comments in favor or opposed to the proposal or parts of it

Examples of non-substantive comments in favor of or against the proposal or parts of it without reasoning include the following:

- being in favor of or disapproving of the BLM's proposal in general
- being in favor of or disapproving of the amount of designated parking
- being in favor of or disapproving of including the bypass trail
- being in favor of or disapproving of the number of campsites
- being in favor of or disapproving of replacing the existing restroom building with a vault toilet system
- being in favor of or disapproving of widening the site road
- being in favor of or disapproving of providing the amphitheater

Comments that agreed or disagreed with BLM policy or resource decisions

Examples of non-substantive comments that agreed or disagree with BLM policy or resource decisions include the following:

- disapproving of BLM allowing large RV and motorhomes in campgrounds in general
- suggesting that BLM use materials and colors to blend in with natural landscape which is existing BLM policy
- disapproving of changes made to the CCRS over time

Comments that were outside the scope of the project area or the decision to be made

Examples of non-substantive comments that were outside the scope of the project area or the decision to be made include the following:

- immediately instituting a no-parking zone along SB12
- establishing an allocation system (limiting use) for hiking on Lower Calf Creek Falls Trail
- requiring a ranger talk prior to hiking the trail to Lower Calf Creek Falls
- allowing local residents free access to the CCRS

Comments that were vague or open-ended

Examples of non-substantive comments that were vague or opened include the following:

- noting that BLM should collect and analyze data to inform recreation management but without specifying which data to collect or suggesting how it should inform recreation management
- questioning the use of BLM bridge standards without providing an alternative suggestion
- questioning why BLM did not conduct visitor surveys at CCRS in 2021 without explaining how those would better inform BLM's understanding of the situation

Substantive comments are discussed in the following table. Comments are paraphrased and/or combined due to their length or when identified by more than one commentor. Summaries are intended to capture the nature of the comments submitted. The summaries do not include non-substantive comments received.

BLM Comment Categories and Summaries	BLM Response
<p><i>GSENM Objects and Values</i> The BLM did not include protection of objects and values as an item in the purpose and need.</p>	Protection of objects and values is a broad directive for GSENM. Appendix B discusses in the detail the proposal’s consistency with object and value protection. A footnote was added to the section 1.3 header to clarify why protection of objects and values was not included in the purpose and need.
<p><i>NEPA Process</i> The BLM did not adequately analyze and disclose the effects (cumulative and otherwise) of increased visitation that would result from infrastructure improvements at CCRS.</p>	The deficiencies in the EA suggested by the commenter are discussed in sections 1.2, 3.2.1, 3.2.2, 3.4.1, 3.4.2, 3.12.2., and 3.13.2. Sections 3.4.1 and 3.4.2. were edited to clarify the concerns noted in this comment.
<p><i>Health and Safety</i> The BLM did not disclose how to handle hazard trees in CCRS.</p> <p>The BLM did not disclose the potential for hiker caused rock falls above campsites associated with the bypass trail.</p>	<p>Section 2.1.5 has been edited to address how hazard trees will be handled.</p> <p>Sections 2.2.4, 3.2.1, 3.2.2, and 3.4.2 have been edited to address the concern about potential rock falls.</p>
<p><i>Recreation – Parking</i> The BLM should convert the campground or parts of the campground to day use parking.</p> <p>The BLM should not provide delineated parking adjacent to Calf Creek.</p>	Appendix D has been edited to address the commenters’ suggestions.
<p><i>Recreation – Toilets</i> The BLM should consider composting toilets.</p>	Appendix D has been edited to address the suggestion to provide composting toilets.
<p><i>Recreation – Site fixtures</i> The BLM should provide a circular dance floor in the day use area.</p>	Appendix D has been edited to address the suggestion to provide a circular dance floor in the day use area.
<p><i>Cultural Resources</i> BLM failed to address the historic character of CCRS and requested BLM seek NRHP recognition for CCRS.</p>	See sections 3.5.1 and 3.5.2 for discussion of and impacts to the historic properties of the CCRS. BLM has met obligations of NHPA by consulting with SHPO and the resulting MOA addresses mitigation of historic properties that will be adversely affected by proposal (see sections 2.2.6 and 4.2.1). Seeking NRHP recognition is outside the scope of the decision to be made.
<p><i>Water Quality</i> The BLM did not analyze the impacts to water quality from the use of fill materials to create parking areas.</p>	Sections 2.2 and 3.10.2 have been edited to address the use and effects of using fill materials.

<p>The BLM did not analyze impacts to water quality from runoff from parking areas adjacent to creek.</p>	<p>Sections 3.10.1 and 3.10.2 have been edited to address effects to water quality from runoff from parking areas adjacent to creek.</p>
<p>Wildlife – Birds</p> <p>The BLM analysis lacks detailed information about MSO and SWFL.</p> <p>The BLM analysis lacks detailed information about migratory bird breeding and nesting, bird species diversity, and presence of such species as yellow breasted chat.</p>	<p>Detailed information about MSO and SWFL are included in section 3.13.1 (including USFWS approved protocol survey results) and section 4.2.2.</p> <p>Section 3.13.1 has been edited to clarify this concern related to migratory bird breeding and nesting, species diversity, and the presence of yellow breasted chat.</p>
<p>Wildlife – Fish</p> <p>The BLM did not analyze effects to Colorado cutthroat trout, Round-tailed Chub, or Blue Headed Sucker.</p> <p>The BLM did not analyze effects of migration from the Colorado River to Calf Creek for Flannelmouth Sucker and Boneytail Chub, Razorback Chub, Colorado Pike Minnow, and Humpback Chub.</p>	<p>Communication with the Utah Department of Natural Resources - Division of Wildlife Resources Native Aquatic Biologist confirmed Colorado cutthroat trout and Round-tailed Chub have not been documented in Calf Creek, and Blue Headed Sucker have not been documented since the 1977 (McAda, 1977). Bluehead Sucker have since been extirpated likely due to non-native trout persistence. Therefore, the BLM did not analyze effects to these species.</p> <p>BLM did not analyze effects to Flannelmouth Sucker, Boneytail Chub, Razorback Chub, Colorado Pike Minnow, or Humpback Chub because those species have never been recorded in the Escalante River according to the Utah Department of Natural Resources - Division of Wildlife Resources Native Aquatic Biologist.</p> <p>Section 4.2.3 has been edited to note this communication.</p>