FINDING OF NO SIGNIFICANT IMPACT

Environmental Assessment

DOI-BLM-UT-C010-2013-0015-EA

Hurricane Cliffs Trails

Based on the analysis of potential environmental impacts contained in the attached environmental assessment, and considering the significance criteria in 40 CFR 1508.27, I have determined that the Hurricane Cliffs Trails Project will not have a significant effect on the human environment. An environmental impact statement is therefore not required.

Elizabeth R. Burghard

Elizabeth R. Burghard
Field Manager
Cedar City Field Office

5/6/14
Date

DECISION RECORD
Environmental Assessment
DOI-BLM-UT-C010-2013-0015-EA

Hurricane Cliffs Trails

INTRODUCTION:

The Bureau of Land Management (BLM) has conducted an environmental analysis (DOI BLM UT C010 2013 0015 EA) to identify three focus areas (Red Hill Area, "C" Trail Area, and Parowan Front Area) that will allow for the construction and maintenance of non-motorized trails, mountain bike skills park, technical trail features and authorization of new and unauthorized singletrack trails to the designated trail network. The specific routes consist of 1.75 miles of singletrack trail spurred from the "C" Trail, 1.6 miles of trail in the Parowan Front Area, and 7.45 miles of unauthorized trail in The Red Hill area. The three focus areas will be analyzed for new development of trails to enhance the opportunity for enjoyment of non-motorized singletrack trail systems within close proximity to Cedar City and Parowan City.

The project area lies within the Hurricane Cliffs along the front country of Parowan and Cedar City, UT. A Proposed Action Alternative, No Action Alternative and an Alternative B were analyzed in the EA

The public was notified of the proposed action by posting on the Environmental Notification Bulletin Board (ENBB) on January 8, 2013. The proposal was discussed at meetings with the Cedar City Trails Committee, Parowan City, Utah Division of Wildlife Resource, and the local cycling club.

Compliance and Monitoring

The trails will be monitored annually when time and funding allows. The trails will be assessed using the maintenance plan. (See Appendix E of DOI-BLM-UT-C010-2013-0015-EA)

Terms / Conditions / Stipulations

This decision is contingent on meeting all stipulations and monitoring requirements listed below:

Decision

It is my decision to authorize new and unauthorized trails within the "C" Trail to Shurtz Canyon Area (A), Parowan Area (B), and the Red Hill Area (C), construct trailheads, install a skills park, and sign and authorize new and unauthorized singletrack trails as non-motorized as identified in DOI-BLM-UT-C010-2013-0015-EA.

A. "C" Trail To Shurtz Canyon Area (Apppendix D - See Map 1.0 of DOI-BLM-UT-C010-2013-0015-EA)

The "C" Trail to Shurtz Canyon Area is 5374 acres and is located east of Cedar City and south of Highway 14. Trail designations (new and existing) within the "C" Trail to Shurtz Canyon Area will be up to 30 miles not including the designated "C" Trail.

SKILLS PARK
The skills park will be located on BLM land near the base of the "C" Trail and just West of the paved East Bench Trail. This park will be 1.5 acres. (Appendix D - See Map 1.2 of DOI-BLM-UT-C010-2013-0015-EA)

TRAILHEADS
"C" Trail Bottom Trailhead is currently a small bladed pad (0.2 acres) that consists of compacted road base. The trailhead currently accommodates the non-motorized use for the "C" Trail and Cedar City's East Bench Trail.

Green Lakes Dr. Trailhead will be up to 0.5 acres in an area that is currently disturbed adjacent to Green Lakes Dr.

Shurtz Canyon Trailhead will be 0.42 acres and located near the maintained Shurtz Canyon Road on BLM land. The trailhead may need to be moved further east on the road after resource clearances are completed. With the trailhead moving further East the road will need to be improved to the trailhead while staying in the current disturbance of the road.

Southern View Subdivision Trailhead will be 0.44 acres and is located just off the southwest corner of the Southern View subdivision on BLM land. There is a short section of paved road that leaves the subdivision and leads into the trailhead area. This trailhead may be paved to improve the aesthetics and maintenance in conjunction with the subdivision that it will be connected to. A bridge will also need to be constructed to cross the large ravine to the east of the parking lot to allow access to the trail system.

Authorization of existing trails
1- 1.75 ("C" Technical)
The trail spurs off of the authorized "C" Trail and currently has various technical trail features that include ladder bridges, drops, and jumps. These features are unauthorized and in poor condition and could be hazardous for riders. The features will be redesigned, removed, or reconstructed. There will be optional lines provided, so that a less experienced rider could choose the alternate route around the technical feature. This will allow for riders with different abilities to progress. Trails that directly ascend a hillside are known as fall-line trails. This branch off of the "C" Trail is a fall-line trail that will need reroutes and repairs to keep the run-off water from flowing down the trail. Heavy equipment such as a mini excavator may be needed in places for the reconstruction of the trail. The portions of the trail that have fall-line and are currently eroding will be reclaimed. The trail will lie within a selected corridor between large draws. (Appendix D

- See Map 1.1 of DOI-BLM-UT-C010-2013-0015-EA) The trail will also require more curvilinear design principles along with berms to help prevent fall-line. (A curvilinear trail is one aligned to follow the natural contours of the slope. A curvilinear trail alignment will allow the trail to gain elevation gradually in conjunction with the natural contours of the terrain. This type of design generally: minimizes maintenance; preserves the natural resource; and makes use of natural drainage patterns.)

B. Parowan Front Area (See Map 2.0 of DOI-BLM-UT-C010-2013-0015-EA)

The Parowan Front Area will be 10,468 acres (8,618 on BLM and 1,850 on Division of Wildlife Resources (DWR)), and is located primarily southeast of Parowan City. Trail designations (new and existing) on BLM within the Parowan Front Area will be up to 20 miles.

TRAILHEADS

Worth Orton Trailhead will be 0.3 acres and located on Parowan City property north of the Parowan Cemetery. The trailhead will be in the existing parking area.

Heritage Park Trailhead will be the access for the 1.25 mile trail up to the "P". The trailhead will be located on the eastern side of the Park. This trailhead will also be a starting point for other trails as they are designed and constructed. If an easement is not obtained by Parowan City, then an alternate 1.0 acre trailhead on BLM lands 0.25 northeast of Heritage Park will be constructed.

AUTHORIZATION OF EXITING TRAILS

1- 1.6 miles (Worth Orton Trail)
The Worth Orton Trail, a singletrack trail, begins at the north end of the cemetery which is located on the eastern side of Parowan.

PROPOSED TRAILS

1- 1.25 miles ("P" Trail)
The "P" trail will begin at the Heritage Park and be constructed up to the "P". The trail will be 1-2 miles in length.

2- 2.0 miles (Penstock Trail)
The Penstock Trail will be maintained for multiple user groups including ATVs and non-motorized. The trail will presumably be constructed/ maintained adjacent to the Parowan City penstock (water pipeline) to the hydro-power plant and serve dual purposes with the Federal Energy Regulatory Commission (FERC) maintenance road.

C. Red Hill Area (See Map 3.0 of DOI-BLM-UT-C010-2013-0015-EA)

The Red Hill Area is 3892 acres and is located east of Cedar City and north of Highway 14. Trail designations (new and existing) within the Red Hill area will be up to 25 miles. This area will also have trailheads that will accommodate equestrian use.

TRAILHEADS

Fiddlers Canyon Trailhead will be up to 1 acre located on private property. The trailhead will tie into the Cedar City Trails paved network and have a connector trail up to the mouth of the canyon. The parking area and entrance may be paved and delineated with curb and gutter. A recreational easement or purchase of property may be accomplished by Cedar City or the Bureau of Land Management Cedar City Field Office.

Red Hill Trailhead will be .47 acres and is located approximately 1 mile up Cedar Canyon on the north side of Hwy 14. This parking area is property of Cedar City, and is currently an informal parking area. This trailhead will accommodate equestrian use.

Thunderbird Gardens Trailhead will be .67 acres located east of the Cedar City golf course on Cedar City property. The road will need drainage features and will need to be maintained for low clearance vehicle access. This trailhead will accommodate equestrian use.

AUTHORIZATION OF EXITSTING TRAIL

1- Trail One 1.5 miles (The Red Hill Trail)
Trail One connects the Cedar Canyon area to the Thunderbird Gardens area just above the Cedar City Golf Course. The majority of the trail currently meets IMBA guidelines; however, short portions of the trail may not meet the guidelines due to topography.

2- Trail Two 1.2 miles on BLM and .30 on private land (Salt Creek Trail)
Trail Two follows a two-track road up Salt Creek Canyon for approximately one mile, and then turns into an unauthorized trail over to Trail Three. The southern end of the trail adjacent to Highway 14 crosses private land and will require an easement. The Northern end of the trail at the end of the two-track will be designated as non-motorized.

3- Trail Three 2.75 miles (Thunderbird Gardens ATV Trail)
Trail Three is an ATV trail in the Thunderbird Gardens area. The trail provides a connection between Trail One and Trail Two. The trail is currently open to motorized and non-motorized use. If user conflict arises, a non-motorized trail will be constructed adjacent to Trail Three.

4- Trail Four 1.35 miles on Cedar City Property and .25 miles through BLM (Razorback Trail)

Trail Four runs from Thunderbird Gardens south to Hwy 14. The trail traverses some unique topography that creates a ridge top type feature. Optional lines are present and will be designated with the trail.

5- Trail Five .3 miles (Toboggan Run Trail)
Trail Five is parallel and east of the razor back trail and is located mostly in the drainage. The trail currently is being used by motorized and non-motorized users.

6- Trail Six 1.45 miles (Fiddlers Canyon)
Trail Six is a current hiking and equestrian trail that is about a mile and half in length and goes up Fiddlers Canyon to a dispersed picnicking area. The west portion of the trail will begin at the Fiddler Canyon trailhead and cross private land up to the mouth of the canyon. An easement will need to be obtained to cross this lower section of land. Portions of the trail will need to be rerouted to avoid being in the drainage.

DESIGN FEATURES

SKILLS PARK

The skills parks, also known as challenge parks, will be fenced off with post and pole with an entrance that prohibits motorized use. Within this area there will be an area that consists of multiple technical obstacles and features such as: bridge ladders, teeter totters, balance beams, jumps, berms, etc. (Appendix A - See Map 1.2)

1- Skills parks will be built in areas where bike trails are prevalent, near trailheads, or in another park area.

2- If possible, skills parks will be built in areas where a water source is present to help maintain the pump-track features.

3- The park will be delineated with a post and pole fence with appropriate access.

4- The park will include optional lines for all levels of riders.

5- Features that are low-maintenance will be preferred (e.g. rounded rollers last a long time with no real maintenance vs. tabletop jumps).

TRAILHEADS/ACCESS

All trailheads may be constructed where feasible with: a road base type material or pavement, post and pole fence or boulders with controlled access to delineate parking, a kiosk, shade structure, fire rings, grills, picnic table, drinking water, and restroom.

TRAILS

New trail proposals and authorized existing trails within the three focus areas will be analyzed to determine if they meet the purpose and need statement and adhere to the guidelines identified in this EA. If the trails meet the identified criteria they may be

constructed or adopted into the trail network. If the trails do not meet the criteria then they may be modified and rerouted to meet the guidelines identified in this EA.

The operation of heavy equipment may be used in the construction/maintenance of the skills park, reconstruction of the existing trails, or construction of new trails. The heavy equipment will conduct work to the slopes near the trail to create a desirable 18"-24" tread width. Hand tools will also be used to help with trail construction and maintenance.

TRAIL AND TRAILHEAD CONSTRUCTION

1- All existing trails will be subject to re-route construction where needed after being surveyed and designed to meet the BLM and IMBA Trails Solutions guidelines. There may be some trails that do not meet the guidelines due to topography; however, these trails will be built in a sustainable manner. The purpose of the construction is to create sustainable trails that will help prevent erosion, trail braiding, and unmaintained feature hazards. When reroutes are constructed the old routes will be closed and rehabilitated with a suitable seed mix to help control invasive weeds and provide soil stabilization.

2- Vegetation removal will be kept to a minimum when constructing and installing the trails and technical trail features. Minor trimming of shrubs and trees will occur on the trails to improve the tread, trail corridor, and to increase safety. The corridors affected by vegetation removal will be reclaimed with the appropriate seeding to ensure that invasive species establishment is reduced in the areas while providing for soil stabilization.

3- All trails will be maintained in accordance with the maintenance plan that identifies marking/signing trails, monitoring and assessing trails, trail repair, and how to address newly discovered unauthorized trails, etc. (See Maintenance Plan, Appendix F)

4- Before construction, all trails will have wildlife and cultural clearances. If needed, the trails will be modified to avoid impacts to wildlife and cultural resources.

5- The trails must have authorized access (when crossing private land) from both ends of the trail.

6- All future trails within the three identified areas will be built to meet the guidelines illustrated in IMBA's manuals. The trails will be constructed in a fashion that will prevent fall-line type trails in order to minimize erosion.
   a. All trail construction and corridors will be built in accordance with section six of IMBA Trails Solutions Guidelines. This includes switchbacks, insloped turns, bench cuts, corridor heights and widths, etc.

   b. Grades will be controlled in a way that sustainable trails are created. IMBA's five essential elements of a sustainable trail will be implemented

to control grade and prevent erosion. The five essential elements are as follows

- The Half Rule: A trail's grade will not exceed half the grade of the sideslope that the trail traverses, with rare exceptions.
- The Ten Percent Average Guideline: Trails will be constructed such that their *average* grade will not exceed ten percent.
- Maximum Sustainable Trail Grade: Grade will rarely, if ever, exceed 15 to 20 percent and then only if local conditions (rock armor, etc.) will support the grade as sustainable.
- Grade Reversals: Incorporate grade reversals (spot at which trail levels out then changes direction for 10 to 50 feet before rising again) to force water to exit the trail at the lowest point before it can gain volume, momentum and erosive power.
- Outslopes: Trails will be constructed such that lower edge of tread will tilt slightly down and away from the high side, allowing water to sheet across and off the trail rather than down its center.

7- Mechanized equipment will need to be cleaned by power washing at an approved location before entering public lands. All equipment will need to be cleaned before leaving the project site if operating in areas infested with weeds. Where mechanized equipment results in a trail wider than desired, the excess width will be rehabilitated with an appropriate seed mix to create desired tread width.

8- Technical trail features will be built in a manner that allows for optional lines. The users will be able to choose to ride the feature or simply stay on the trail. The technical trail features will be constructed to meet the guidelines in the IMBA manuals.

9- South slopes will be utilized for trails when possible to avoid habitat degradation. The southern slopes generally produce less vegetation and tend to dry out much faster after storms, which lead to users not rutting up the trails.

10- Loamy type soils will be targeted for the area where the trails will be built. Silt, clay, and sand will be avoided when possible. Sensitive (fragile) soils will be avoided to the maximum extent possible.

11- Gates, walk-ins, cattle guard, etc. will be installed on new and existing fences.

APPLICABLE TO ALL CONSTRUCTION

General Wildlife

- A wildlife site clearance will be completed prior to authorization of any ground disturbing activities. Clearances will be completed by a BLM wildlife biologist or one approved by the BLM. Site specific mitigations may be developed and implemented to avoid and/or minimize disturbance to all USFWS listed species and/or BLM Special Status plants and animals.

Utah Prairie Dogs

- Proposed ground-disturbing activities within the USFWS's high intensity survey area for Utah prairie dogs will require that active season surveys be completed within suitable habitat prior to construction activities in accordance with established USFWS protocols.

- Mapped Utah prairie dog habitat will be avoided by project features through the design and implementation phase for each trail area if such habitat is identified during USFWS's protocol level surveys.

- All Project employees will be informed of the occurrence of the Utah prairie dog in the general area, and of the threatened status of the species. They shall be advised as to the definition of "take", and the potential penalties (up to $200,000 in fines and one year in prison) for taking a species listed under the ESA. Project personnel will not be permitted to have firearms or pets in their possession while on the Project site. The rules on firearms and pets will be explained to all personnel involved with the Project.

- If a dead or injured Utah prairie dog is located, initial notification must be made to the Service's Division of Law Enforcement, Salt Lake City, Utah, at telephone 801-975-3330, to the UDWR at telephone number 435-865-6100, and to the Authorized Officer at 435-865-3000. Instruction for proper handling and disposition of such specimens will be issued by the Division of Law Enforcement. Care must be taken in handling sick or injured animals to ensure effective treatment and care and in handling dead specimens to preserve biological material in the best possible state.

- BLM will re-initiate consultation with the USFWS if it is determined through site-specific coordination, USFWS protocol level surveys, etc. that impacts will vary from what has been consulted on.

Mexican Spotted Owl

- Canyon habitats will be assessed to determine if they meet the primary constituent elements for canyon habitats prior to ground-disturbing activities. If habitat requirements are met, then the BLM or UDWR will conduct Mexican spotted owl surveys in accordance with USFWS protocols. If surveys conclude that Mexican spotted owls occupy the canyons, PACs will be established in coordination with USFWS and Section 7 consultation will be re-initiated with the USFWS.

Big Game

- Minimize ground-disturbing activities within crucial mule deer winter habitat to avoid critical life stages December 1st through April 15th.

Migratory Birds and Raptors

- Any raptor nest found in proximity to an area targeted for disturbance (i.e. trailhead, trail, skills park) will be protected and managed according to Best Management Practices for Raptors and Their Associated Habitats in Utah (BLM, August 2006), Utah Field Office Guidelines for Raptor Protection from Human and Land Use Disturbances (U.S. Fish and Wildlife Service, Utah Field Office, Salt Lake City, Jan. 2002). Raptor nests will be protected through incorporation of spatial and seasonal buffers and additional conservation measures identified through the Site Specific Analysis worksheets will be identified in coordination with the ID Team.

- Minimize construction impacts during the migratory bird nesting season from April 1st – July 15th to protect migratory bird breeding and nesting.

Cultural Resources

An intensive/pedestrian Class III inventory will be conducted prior to all potentially ground disturbing range improvement projects. The purpose of these inventories will be to locate and record all cultural resources within the project area. An evaluation of significance or eligibility to the National Register of Historic Places will occur at each site. If a significant site(s) are located within the project area, the project will be redesigned to avoid an adverse effect to the site. If avoidance of a significant site is not feasible, the Range Improvement Project will be discontinued or other mitigation measures will be conducted to prevent or minimize the effects to this site.

Rationale for Decision

The decision to build and designate trails meets the purpose and need for the project by providing singletrack opportunities in the Parowan and Cedar City areas. There are no significant impacts to any resources located in the areas.

Maintained trails in the three focus areas will increase recreational opportunities in the Cedar City and Parowan Areas. Recreationists will be able to diversify their activities by not only enjoying the paved trail system in Cedar City, but by tying into the new singletrack trails that are adjacent to the community. The BLM will partner with UDWR to promote user awareness about the wildlife habitats that are traversed by the Trail Areas and encourage users to be mindful of the wildlife and other important resources that use these areas.

Impacts on mule deer crucial winter range will be further minimized by incorporation of the Design Feature that will minimize construction related activities from December 1st through April 15th when mule deer impacts will be the greatest. In addition, personal communication with UDWR (Rhett Boswell January 15, 2014) was conducted. It was acknowledged that UDWR is in support of non-motorized trails to enhance use of public lands and educational opportunities in this area. Crucial winter range within the "C" Trail to Shurtz Canyon area comprises less than 1% of the total available habitat within the WMU.

There are no impacts to Mexican spotted owls anticipated at this time, as there are no PACs or critical habitat and no breeding owls have been detected in past monitoring efforts.

Due to the proximity of mapped habitat to the Focus Areas, impacts to Utah prairie dogs are expected to be minimal; however, consultation with USFWS will be re-initiated if Utah prairie dogs surveys result in impacts beyond what was anticipated during design and implementation of trailheads, skills park, unauthorized trails, or new trails. The BLM received concurrence from USFWS on March 24, 2014.

Wildlife clearances and raptor nest searches will be completed during appropriate seasons prior to construction of trails in this area. The identification of a raptor nest will follow the BLM Best Management Practices for Raptors and Their Associated Habitats in Utah and a Site-Specific Analysis worksheet will be completed and evaluated by the team to design the trail in a manner that minimizes impacts to nesting raptors.

A peregrine falcon eyrie is located 0.4 miles from the Red Hill Trailhead; however, this eyrie is in close proximity to Highway 14 and existing land uses on private lands. UDWR (Personal communication Keith Day – February 11, 2013), recognizes that existing disturbances associated with Highway 14, recreation, and businesses already occur in the area and that the additional disturbance associated with the Proposed Action are not expected to disrupt falcons.

The network of trails in close proximity to population centers will facilitate birding and other wildlife viewing opportunities. Birders and other wildlife associated recreation can bring money into the local economies on a variety of goods and services for trip-related expenditures including food, lodging, and transportation. In 2011, the USFWS completed a comprehensive survey, which revealed that over *90 million U.S. residents 16 years old and older participated in wildlife-related recreation. During that year, 33.1 million people fished, 13.7 million hunted, and 71.8 million participated in at least one type of wildlife-watching activity including observing, feeding, or photographing fish and other wildlife in the United States* (USFWS 2011 and USFWS 2011-1).

When reroutes are constructed the old routes will be closed and rehabilitated with a suitable seed mix to help control invasive weeds. Vegetation removal will be kept to a minimum when constructing and installing the trails and technical trail features.

Design Features will provide for wildlife clearances prior to construction to identify sensitive wildlife and avoidance of important seasons, which will effectively minimize impacts. In addition, Design Features have been incorporated to minimize impacts to Soils/Hydrologic Conditions and Vegetation.

Authorities

The authority for this decision is contained in:

§43 CFR 8342—Designation of Areas and Trails

§43 CFR 8342.1(a): Areas and trails shall be located to minimize damage to soil, watershed, vegetation, air, or other resources of the public lands, and prevent impairment to wilderness suitability.

§43 CFR 8342.2(c): *Identification of designated areas and trails.* The authorized officer shall, after designation, take action by marking and other appropriate measures to identify areas and trails so that the public will be aware of locations and limitations applicable thereto. The authorized officer shall make appropriate informational material, including maps, available for public review.

Appeal Procedures

The decision may be appealed to the Interior Board of Land Appeals, Office of the Secretary, in accordance with the regulations contained in 43 CFR Part 4. Public notification of this decision will be considered to have occurred on once the decision is signed.Within 30 days of this decision, a notice of appeal must be filed in the office of the Authorized Officer at *(*Elizabeth R. Burghard, Field Manager, Cedar City Field Office, 176 East DL Sargent Drive, Cedar City, Utah 84721*)*. If a statement of reasons for the appeal is not included with the notice, it must be filed with the Interior Board of Land Appeals, Office of Hearings and Appeals, U.S. Department of the Interior, 801 North Quincy St., Suite 300, Arlington, VA 22203 within 30 days after the notice of appeal is filed with the Authorized Officer.

If you wish to file a petition for stay pursuant to 43 CFR Part 4.21(b) *(or cite applicable programmatic rules for petition for stay)*, the petition for stay should accompany your notice of appeal and shall show sufficient justification based on the following standards:

1. The relative harm to the parties if the stay is granted or denied,
2. The likelihood of the appellant's success on the merits,
3. The likelihood of irreparable harm to the appellant or resources if the stay is not granted, and
4. Whether the public interest favors granting the stay.

If a petition for stay is submitted with the notice of appeal, a copy of the notice of appeal and petition for stay must be served on each party named in the decision from which the appeal is taken, and with the IBLA at the same time it is filed with the Authorized Officer.

A copy of the notice of appeal, any statement of reasons and all pertinent documents must be served on each adverse party named in the decision from which the appeal is taken and on the Office of the Regional Solicitor, U.S. Department of the Interior, 6201 Federal Building, 125 South State Street, Salt Lake City, Utah 84138-1180, not later than 15 days after filing the document with the Authorized Officer and/or IBLA.

Elizabeth R Burghard

Elizabeth R. Burghard
Field Manager
Cedar City Field Office
Authorized Officer

5/6/14
Date

Attachments:

1- Environmental Assessment: DOI-BLM-UT-C010-2013-0015-EA
2- DOI-BLM-UT-C010-2013-0015-EA Appendices

United States Department of the Interior
Bureau of Land Management

Environmental Assessment
DOI-BLM-UT-C010-2013-0015-EA

March 2014
Hurricane Cliffs Trails EA

Locations: ***Red Hill Area, "C" Trail Area, and Parowan Front Area***

Applicant/Address: **Bureau of Land Management**
Cedar City Field Office
176 D.L. Sargent Dr.
Cedar City, UT 84721

U.S. Department of the Interior
Bureau of Land Management
Cedar City Field Office
176 D.L. Sargent Dr.
Cedar City, UT 84721
Phone: 435-865-3000
Fax: 435-865-3058

Authorization of Trails in the "C" Trail to Shurtz Canyon Area, Parowan Front Area, and Red Hill Area
Environmental Assessment
DOI-BLM-UT-C010-2013-0015-EA

CHAPTER 1
PURPOSE & NEED

1.1 Introduction

This Environmental Assessment (EA) has been prepared to disclose and analyze the environmental consequences of constructing non-motorized trails, building mountain a bike skills park and technical trail features, analyzing three focus areas for trail networks, and authorizing new and unauthorized singletrack trails to a designated trail system. The existing routes consist of 1.75 miles of singletrack trail spurred from the "C" Trail, 1.6 miles of trail in the Parowan Front Area, and 7.45 miles of unauthorized trail in The Red Hill area (see maps Appendix A). The three focus areas would be analyzed for new development of trails to enhance the opportunity for enjoyment of non-motorized singletrack trail systems within close proximity to Cedar City and Parowan City. Trail designation, signs, repairs, and reroutes would help resolve the existing problem of pioneering unauthorized trails. The trail networks are being evaluated to determine if the trails coincide with BLM and International Mountain Bicycling Association (IMBA) guidelines: Trail Solutions guide, (2004) and Managing Mountain Biking, (2007). The technical trail features would vary in difficulty and style to meet the needs of diversifying the trail system while following guidance from the IMBA. The addition of these trails to the designated trail system is proposed by the Bureau of Land Management Cedar City Field Office.

The EA is a site-specific analysis of potential impacts that could result with the implementation of a proposed action or alternatives to the proposed action. The EA assists the BLM in project planning and ensuring compliance with the National Environmental Policy Act (NEPA), and in making a determination as to whether any "significant" impacts could result from the analyzed actions. "Significance" is defined by NEPA and is found in regulation 40 CFR 1508.27. An EA provides evidence for determining whether to prepare an Environmental Impact Statement (EIS) or a statement of "Finding of No Significant Impact" (FONSI). If the decision maker determines that this project has "significant" impacts following the analysis in the EA, then an EIS would be prepared for the project. If not, a Decision Record may be signed for the EA approving the selected alternative, whether the proposed action or another alternative. A Decision Record (DR), including a FONSI statement, documents the reasons why implementation of the selected alternative would not result in "significant" environmental impacts (effects) beyond those already addressed Cedar Beaver Garfield Antimony Resource Management Plan (CBGA RMP) 1986.

1.2 Background

The BLM proposes to authorize new singletrack trails, construct a skills park, and improved unauthorized singletrack trails to coincide with the existing designated trail

system within the "C" Trail, Parowan Front, and Red Hill areas. Unauthorized expansion of the trail system has already taken place in all three focus areas. The unauthorized trails consist of a total of 10.8 miles of trail. The trails near Cedar City would coincide with the Cedar City master trail plan and link where possible with existing and future Cedar City trailheads.

The "C" Trail to Shurtz Canyon Area is south of Highway 14, East of I-15, and ties into the Shurtz Canyon Road (See Map 1.0, Appendix A). The Parowan Front Area is southeast of Parowan City (See Map 2.0, Appendix A). The Red Hill area is located East of Cedar City and North of Highway 14 (See Map 3.0, Appendix A). These three focus areas would be considered in this EA as areas for growth and development of trail networks. The trailheads and trails would be constructed and managed in accordance with design features listed in Section 2.6.

The "C" Trail was designated in 1996 in commemoration of Utah's centennial statehood. The trail is accessible to the public within a short distance of Cedar City.

The Worth Orton Trail is a hiking trail just outside of Parowan within walking distance of the local community.

1.3 Purpose and Need for the Proposed Action

The purpose of the proposed project is to designate and improve a trail network within the "C" Trail to the Shurtz Canyon, Parowan Front, and Red Hill areas. The need for the proposed action is to act and respond to the demand for more trails within the Cedar City and Parowan City communities, to provide a diverse trail network with a variety of trail styles to keep the visitors excited about the area and to decrease the desire of pioneering unauthorized trails.

1.4 Conformance with BLM Land Use Plan(s)

The proposed action is in conformance with the Cedar Beaver Garfield Antimony Resource Management Plan (CBGA RMP). The plan states in the objectives, "Provide recreation opportunities under the Bureau's basic stewardship responsibilities for unstructured, extensive types of recreation uses, maximizing the visitor's freedom of choice. Continue to maintain important recreational values in Federal ownership to insure this continued diversity of recreation opportunities."

1.5 Relationship to Statutes, Regulations, or Other Plans

The proposed action is consistent with the Iron County Resource Management Plan (June 2009, Page 1 Background) which states, "Traditionally, these counties and the residents thereof have used public lands and resources for economic growth and stability. These local associations with and dependence on public lands continues today. Specifically, local use of public lands and resources include, but are not limited to, recreation, minerals, oil and gas, timber, water, agriculture, fisheries and wildlife". The county plan further highlights, "support for state and local plans that are designed to produce and provide the watersheds, timber, food fiber, livestock and wildlife forage, and minerals necessary to meet present needs and future economic growth and community expansion.

As well as meet the recreational needs and the personal and business related transportation needs of the citizens of the state without impairing the productivity of the land."

The proposed action is consistent with the Cedar City General Plan (2012 page 57 Goal 5) which states, "This Master Plan represents an important step in the City's efforts to enhance the public's ability to enjoy the natural beauty and extensive recreational opportunities in Cedar City. This section is predicated on the importance of the City forming a partnership with private and public entities that represent the variety of resources that complement the goals, and objectives set forth below. This General Plan section provides direction for integrating public and private resources and facilities. The intent is providing better recreational facilities and services, and improving public access to open space".

The proposed action is also consistent with the following laws and regulations:

- FLPMA 1976 Sec. 103. [43 U.S.C. 1702] (c)
- Endangered Species Act (ESA) of 1973 (as amended)
- Fish and Wildlife Conservation Act of 1980
- Sikes Act of 1974
- Executive Order 13186 (Migratory Bird Treaty Act)
- Executive Order 13443: Facilitation of Hunting Heritage and Wildlife Conservation
- 1962 Bald and Golden Eagle Protection Act
- Western Association of Fish and Wildlife Agencies Guidelines
- Habitat Guidelines for Mule Deer Intermountain West Ecoregion (2009)
- BLM Manual 6840- Special Status Species Management
- Migratory Bird Treaty Act
- Utah Comprehensive Wildlife Conservation Strategy (CWCS)
- Utah Partners in Flight Avian Conservation Strategy Version 2.0.
- U.S. Fish and Wildlife Service Birds of Conservation Concern 2008
- IM 2008-050, Migratory Bird Treaty Act - Interim Management Guidance
- Utah Comprehensive Wildlife Conservation Strategy (2005-2015)
- Coordinated Implementation Plan for Bird Conservation in Utah (2005)
- Panguitch Lake Deer Herd Unit Management Plan
- Zion Deer Herd Unit Management Plan

1.6 Identification of Issues

The Interdisciplinary Team Checklist is a checklist of all resources and issues considered by BLM staff (see checklist, Appendix B). Those issues that are relevant to the proposed action are: Fish and Wildlife/ Special Status Animal Species/Migratory Birds, Cultural Resources, Recreation, Socio-Economics, Soils/ Hydrologic Conditions, and Vegetation.

1.6.1 Fish and Wildlife (Including Big Game, Upland Game Birds, Special Status Species and Migratory Birds)

Proposed trail building and other facility construction may result in disturbances to wildlife and associated habitats.

1.6.2 Recreation

Unauthorized trails are being built and pioneered within the Cedar City and BLM interface. Though some of the trails are built with trail building guidelines in mind, some of the trails have fall-line and drainage issues that should be addressed.

1.6.3 Socio-Economics

Impacts to the Iron County economy could result from adding the singletrack trail networks near the communities.

1.6.4 Soils / Hydrologic Conditions

Naturally occurring (and some man-made) erosion is prevalent in localized areas. Proposed trail building and other construction would result in disturbances to soils with increased erosion in some areas and decreased erosion in others.

1.6.5 Vegetation

The proposed construction of trailheads and trails may result in disturbances and impacts to sagebrush, mountain shrub, mixed shrub/grass, pinyon pine, and juniper with grass/shrub understory type vegetation.

CHAPTER 2
DESCRIPTION OF ALTERNATIVES

2.1 INTRODUCTION
This EA focuses on the Proposed Action, Alternative B, and the No Action Alternative. The No Action alternative is considered and analyzed to provide a baseline for comparison of the impacts of the other alternatives.

2.2 PROPOSED ACTION
The BLM proposes to network new and unauthorized trails within the "C" Trail to Shurtz Canyon Area (A), Parowan Front Area (B), and the Red Hill Area (C); modify unauthorized trails; construct new trails and trailheads; install a skills park; and sign and authorize new and unauthorized singletrack trails within these three focus areas. All new singletrack construction would be designated as non-motorized.

DESIGN FEATURES
Design Features will be implemented to minimize impacts (See Design Features, Appendix C).

A. "C" Trail To Shurtz Canyon Area (See Map 1.0, Appendix A)
The "C" Trail to Shurtz Canyon Area is 6,206 acres and is located east of Cedar City and south of Highway 14. Trail designations (new and existing) within the "C" Trail to Shurtz Canyon Area would be up to 30 miles not including the designated "C" Trail.

Skills Park
The skills park would be located on BLM land near the base of the "C" Trail and just West of the paved East Bench Trail. This park would be 1.5 acres. (See Map 1.2, Appendix A)

Trailheads
"C" Trail Bottom Trailhead is currently a small bladed pad (0.2 acres) that consists of compacted road base. The trailhead currently accommodates the non-motorized use for the "C" Trail and Cedar City's East Bench Trail. No developments on public land are anticipated at this time.

Green Lakes Dr. Trailhead would be up to 0.5 acres in an area that is currently disturbed adjacent to Green Lakes Dr.

Shurtz Canyon Trailhead would be 0.42 acres of new disturbance located near the maintained Shurtz Canyon Road on BLM land.

Southern View Subdivision Trailhead would be 0.44 acres and is located just off the southwest corner of the Southern View subdivision on BLM land. There is a short section of paved road that leaves the subdivision and leads into the trailhead area. This trailhead may be paved to improve the aesthetics and maintenance in conjunction with the

subdivision that it would be connected to. A bridge would also need to be constructed to cross the large ravine to the east of the parking lot to allow access to the trail system.

Unauthorized Trails

"C" Technical (1.75 miles) spurs off of the authorized "C" Trail and currently has various technical trail features that include ladder bridges, drops, and jumps. These features are unauthorized and in poor condition and could be hazardous for riders. The features would be redesigned, removed, or reconstructed. There would be optional lines provided, so that a less experienced rider could choose an alternate route around the technical feature. This would allow for riders with different abilities to progress. Trails that directly ascend a hillside are known as fall-line trails. This branch off of the "C" Trail is a fall-line trail that would need reroutes and repairs to keep the run-off water from flowing down the trail. Heavy equipment such as a mini excavator may be needed in places for the reconstruction of the trail. The portions of the trail that have fall-line and are currently eroding would be reclaimed. The trail would lie within a selected corridor between large draws. (See Map 1, Appendix A)

B. Parowan Front Area (See Map 2.0)

The Parowan Front Area would be 10,468 acres (8,618 on BLM and 1,850 on Division of Wildlife Resources (DWR)), and is located primarily southeast of Parowan City. Trail designations (new and existing) on BLM within the Parowan Front Area would be up to 20 miles.

Trailheads

Worth Orton Trailhead (0.3 acre) would be located on Parowan City property north of the Parowan Cemetery. The trailhead would be in the existing parking area.

Heritage Park Trailhead (1.25 mile) would be the access for trail up to the "P". The trailhead would be located on the eastern side of the Park. This trailhead would also be a starting point for other trails as they are designed and constructed. If an easement is not obtained by Parowan City, then an alternate 1.0 acre trailhead on BLM lands 0.25 northeast of Heritage Park would be constructed.

Unauthorized Trails

The Worth Orton Trail (1.6 miles) is a singletrack trail which begins at the north end of the cemetery located on the eastern side of Parowan. Modifications and reroutes may occur to the current unauthorized trail.

Proposed Trails

"P" Trail (1-2 miles) would begin at the Heritage Park and be constructed up to the "P".

Penstock Trail (2 miles) would be maintained for multiple user groups including ATVs and non-motorized users. The trail would be constructed/ maintained adjacent to the Parowan City penstock (water pipeline) to the hydro-power plant and serve dual purposes with the Federal Energy Regulatory Commission (FERC) maintenance road.

C. Red Hill Area (See Map 3.0)

The Red Hill Area is 4,030 acres and is located east of Cedar City and north of Highway 14. Trail designations (new and existing) within the Red Hill area would be up to 25 miles. This area would also have trailheads that would accommodate equestrian use.

Trailheads

Fiddlers Canyon Trailhead (up to 1 acre) would be located on BLM just north of the canyon entrance.

Red Hill Trailhead (0.47 acre) would be located approximately 1 mile up Cedar Canyon on the north side of Hwy 14. This parking area is the property of Cedar City, and is currently an informal parking area. This trailhead would accommodate equestrian use.

Thunderbird Gardens Trailhead (0.67 acre) would be located east of the Cedar City golf course on Cedar City property. The road would need drainage features and would need to be maintained for low clearance vehicle access. This trailhead would accommodate equestrian use.

Unauthorized Trails

Red Hill Trail (1.5 miles) would connect the Cedar Canyon area to the Thunderbird Gardens area just above the Cedar City Golf Course. The majority of the trail currently meets IMBA guidelines; however, short portions of the trail may not meet the guidelines due to topography.

Salt Creek Trail (1.2 miles on BLM and .30 on private land) would follow a two-track road up Salt Creek Canyon for approximately one mile, and then turns into an unauthorized trail over to Trail Three. The southern end of the trail adjacent to Highway 14 crosses private land and would require an easement. The Northern end of the trail at the end of the two-track would be designated as non-motorized.

Thunderbird Gardens ATV Trail (2.75 miles) is an ATV trail in the Thunderbird Gardens area. The trail provides a connection between Trail One and Trail Two. The trail is currently open to motorized and non-motorized use. If user conflict arises, a non-motorized trail would be constructed adjacent to Trail Three.

Razorback Trail (1.35 miles on Cedar City Property and .25 miles on BLM) runs from Thunderbird Gardens south to Hwy 14. The trail traverses some unique topography that creates a ridge top type feature. Optional lines are present and would be designated with the trail.

Toboggan Run Trail (0.3 mile) is parallel and east of the razor back trail and is located mostly in the drainage. The trail currently is being used by motorized and non-motorized users.

Fiddlers Canyon Trail (1.45 miles) is a current hiking and equestrian trail goes up Fiddlers Canyon to a dispersed picnicking area. The west portion of the trail would begin

at the Fiddler Canyon trailhead and cross private land up to the mouth of the canyon. An easement would need to be obtained to cross this lower section of land. Portions of the trail would need to be rerouted to avoid being in the drainage.

Approximate miles and acreages of existing and new disturbance for all three project areas under the Proposed Action are found in Table 2.1. For more specific information on disturbances by area, please refer to Appendix D.

Table 2.1 Acres of Disturbance for Skills Parks, Trailheads and Trails

	Private Land				Public Land			
	Existing		New		Existing		New	
Area	Acres	Miles	Acres	Miles	Acres	Miles	Acres	Miles
"C" Trail to Shurtz Canyon	0.25	--	0.12	--	--	1.75*	2.86	29.13**
Parowan Front	0.30	--	--	--	--	1.60	1.0***	20.00
Red Hills	0.59	1.65	1.09	--	--	7.45	1.0	17.55
TOTALS	1.14	1.65	1.21	0.00	--	10.8	3.86	66.7†
ACREAGE TOTALS	2.79		1.21		1.96		15.98	

* Approx. 50% of "C" Technical Trail's 1.75 mi. (0.875 mi) needs new disturbance reconstruction.
** Includes 0.875 miles of reconstruction
*** Alternative to Heritage Park Trailhead
† 66.7 miles of trail x 1.5 foot tread width equals 12.12 acres.

2.3 ALTERNATIVE B

Alternative B would be the same as Alternative A except for the following changes. This alternative would result in less than 1.0 acres of additional disturbance to private or public land. (See Table 2.1)

The "C" Trail Skills Park located at the bottom of the "C" Trail would be on Cedar City property north of the current "C" Trail parking area would be approximatley1 acre.

The Razorback Trailhead would be located at the start of the Razorback Trail. The trailhead would be .29 acres and on Cedar City property.

2.4 NO ACTION

The No Action Alternative would deny the designation of the trails, a skills park, and implementation of technical trail features. The unauthorized trails would be reclaimed, barricaded, and signed to indicate the closure.

CHAPTER 3
AFFECTED ENVIRONMENT

INTRODUCTION AND GENERAL SETTING

The affected environment of the Proposed Action, Alternative B, and No Action alternatives were considered and analyzed by an interdisciplinary team as documented in the Interdisciplinary Team Checklist (See Checklist, Appendix B). The checklist indicates which resources of concern are either not present in the project area or would not be impacted to a degree that requires detailed analysis.

Resources which could be impacted to a level requiring further analysis; these resources are described in this chapter, and impacts on these resources are analyzed in Chapter 4.

3.1 Fish and Wildlife (Including Big Game, Upland Game Birds, Special Status Species and Migratory Birds)

Big Game

The proposed trail areas are incorporated in two different Wildlife Management Units: The Parowan Front and Red Hill Areas are in the Panguitch WMU, and the "C" Trail to Shurtz Canyon is within the Zion WMU. The three trail areas occur within mule deer crucial winter habitat and elk substantial summer and winter habitat. Black bear yearlong crucial and substantial habitat also occurs.

Hunting Heritage

The Panguitch, and Zion WMUs provide a variety of hunting experiences, particularly for mule deer and elk.

The Panguitch WMU encompasses approximately 565,072 acres. Population objectives defined in the Panguitch Herd Unit Management Plan (2006) are as follows:

- Target winter herd size: A modeled winter population of 8,500 deer. This population objective remains for both the short-term (5-year life of this plan) and long term, barring significant changes in range conditions.
- Harvest: Antlerless harvest as needed to maintain stable herd size. Winter survival is highly dependent on snow accumulation on winter range on the west side of the unit.
- Herd Composition: Maintain a region wide three-year average post-season buck: doe ratio ranging from 15 to 20 bucks per 100 does.

The Zion WMU encompasses approximately 1,103,546 acres. Population objectives defined in the Zion Herd Unit Management Plan (2006) are as follows:

- Target winter herd size - A modeled winter population of 9,000 deer on the entire WMU. This population objective remains for both the short-term (5-year life of this plan) and long term, barring significant changes in range conditions.

- Herd Composition – Maintain a region wide three-year average post-season buck: doe ratio ranging from 15 to 20 bucks per 100 does.

The Proposed Action would not detract from the hunting opportunities within the Project Area and would provide non-motorized access, which may enhance hunting opportunities for hunters wanting the walk-in access experience.

Wildlife Species	Trail Area	Habitat Value	Acres within Trail Areas (BLM)	% of Total Habitat Affected by WMU	
				Panguitch Lake (565,072 acres)	Zion (1,103,546 acres)
Mule Deer	"C" Trail to Shurtz Canyon	Substantial Summer	538.77	0	0.049%
		Crucial Winter	5,667.01	0	0.51%
	Parowan Front	Substantial Summer	1,219.50	0.22%	0
		Crucial Winter	9,249.03	1.64%	0
	Red Hills[1]	Substantial Summer	51.36	0.01%	0
		Crucial Winter	3,840.62	0.68%	0
Elk	"C" Trail to Shurtz Canyon	Substantial Summer	1,505.80	0	0.14%
		Substantial Winter	4,016.65	0	0.36%
	Parowan Front	Substantial Summer	1,399.60	0.25%	0
		Substantial Winter	3,522.26	0.62%	0
	Red Hills	Substantial Summer	0	0	0
		Substantial Winter	0	0	0
Black Bear	"C"Trail to Shurtz Canyoin	Substantial Yearlong	3,861.38		0.35%
		Crucial Yearlong	919.35		0.08%
	Parowan Front	Substantial Yearlong	6,972.28	1.23%	0
		Crucial Yearlong	1,966.66	0.35%	0
	Red Hills	Substantial Yearlong	2,619.76	0.46%	0
		Crucial Yearlong	43.18	0.01%	0

Special Status Species (U.S. Fish and Wildlife Service Listed and BLM/State Sensitive Species)

Federally Listed Threatened, Endangered, Candidate & Petitioned Species

[1] **The Red Hill Area occurs within both the Panguitch WMU and Zion WMU; however, acres within the Zion WMU are 10.51 acres and was so minimal it was not conducive to breaking out.**

The U.S. Fish and Wildlife Service maintains lists of federally listed and proposed endangered, threatened, and candidate species in Utah. Table 3.0 summarizes those species that were on the U.S. Fish and Wildlife Service lists as checked on January 31, 2014. Lists were obtained for Iron County.

Table 3.0 Status of Federally Listed Species

Common Name	Scientific Name	Status	Habitat suitability or known occurrence of the species in or near Project Area.
California condor	*Gymnogyps californianus*	Endangered [2]	Suitable foraging habitat is present within the Project Area. The nearest known roost site is Kolob Reservoir near Zion National Park, which is 10 miles from the Project Area.
Greater sage grouse	*Centrocercus urophasianus*	Candidate	The Project is not located within occupied sage grouse habitat (UDWR, March 2012).
Least Chub	*Iotichthys phlegethontis*	Candidate[3]	No suitable habitat within the Project Area.
Mexican spotted owl	*Strix occidentalis lucida*	Threatened	The Parowan Front, Red Hill, and "C" Trail to Shurtz Canyon Areas occur within MSO modeled habitat (1997 and 2000) in the Parowan Canyon, Fiddlers Canyon and Green Hollow areas. The modeled habitat within the Project Areas do not provide substantial canyon habitat to support nesting Mexican spotted owls. Habitats may provide foraging habitat; however, the nearest PAC is 6.14 miles south of the "C" Trail to Shurtz Canyon Area.
Southwest wouldow flycatcher	*Empidonzx traillii extimus*	Endangered	No suitable habitat within the Project Area.
Utah prairie dog	*Cynomys parvidens*	Threatened	The Parowan Front, Red Hill, and "C" Trail to Shurtz Canyon Areas are all within the USFWS high intensity survey areas. Mapped habitat occurs within proximity to the "C" Trail to Shurtz Canyon, Parowan Front and Red Hill Areas.
Virgin River Chub	*Gila seminude*	Endangered	No suitable habitat within the Project Area.
Western Yellow-billed Cuckoo	*Coccyzus americanus occcidentalis*	Threatened	This species inhabits riparian habitat with dense riparian vegetation including cottonwood with a developed canopy.
Woundfin	*Plagopterus argentissiums*	Endangered	No suitable habitat within the Project Area.

Utah Prairie Dog:

[2] This species is designated a non-essential, experimental population east of I-15 to 191, and south of I-70. Condors occurring outside the designated areas are protected as Endangered.

[2] The species is not present in this county. One or more hydrologic unit (8-digit HUC) in this county is occupied by the species in an adjacent county. Any water depletion from an occupied hydrologic unit may adversely affect this species.

[3] The species is not present in this county. One or more hydrologic unit (8-digit HUC) in this county is occupied by the species in an adjacent county. Any water depletion from an occupied hydrologic unit may adversely affect this species.

Utah prairie dog habitat is being reduced by permanent habitat loss and fragmentation (i.e. largely from commercial and residential development), and plague.

The Project Area is within West Desert Recovery Unit, which encompasses most of Iron County, southern Beaver County, and northern Washington County. The revised recovery plan is available on USFWS website at: (http://ecos.fws.gov/docs/recovery_plan/1203012_UTPD_RevisedRecoveryPlan_Final.pdf.).

Within the West Desert Recovery Area, there are six Population Focus Areas; a portion of the Parowan Area is within the Parowan Valley/Buckhorn Population Focus Area.

Utah prairie dogs prefer grassland habitats with a good diversity of grasses, forbs, and few shrubs. Within the Project Area, sagebrush, pinyon pine and juniper woodlands, and mountain shrub communities are a dominant component of the Project Area. Small openings with grassland or sparsely vegetated habitats may exist within the Project Area, which may provide suitable habitat for Utah prairie dogs.

The following table provides information on Utah prairie dog mapped habitat within 0.5 miles of the "C" Trail to Shurtz Canyon, Red Hills, and Parowan Front areas.

Table 3.1 Status of Utah prairie dog habitat within 0.5 miles of the Proposed Trail Areas.

Trail Area	Colony ID	Summary of status based on Spring Count Data
"C" Trail to Shurtz	**0103ep**	Occupied
	0103ff	Unoccupied based on spring counts of zero since 2009.
	0112b	Occupied
	0122d	Occupied
Parowan Front	**0107ab**	Unoccupied based on spring counts of zero since 2008.
	0107ai	Occupied
	0107ba	Occupied
	0107t	Occupied; however, spring counts in 2012 and 2013 were at zero.
	0107y	Unoccupied based on springs counts of zero since 2005.
	0107z	Unoccupied based on spring counts of zero since 2006.
	0108a	Occupied
	0108b	Occupied
	0108c	Occupied
	0108f	Occupied
	0109q	Occupied

Mexican Spotted Owl: Threats to Mexican spotted owls in the Colorado Plateau Recovery Unit include recreation, overgrazing, road development in canyons, catastrophic fire, timber harvest in upland forests, and oil, gas, and mining development (USFWS, 2007).

There is no critical habitat within the "C" Trail to Shurtz Canyon, Red Hills, or Parowan Front areas. Mexican spotted owls have been seen outside of critical habitat and there is a 1995 observation of a single male owl in Parowan Canyon. Surveys were completed in Parowan Canyon in 1997, 1999 and 2000 and no detections were recorded. Habitat assessments were also completed in conjunction with the Parowan to Brian Head OHV trail within 0.5 miles of Highway 143 in association with that project in 2012.

BLM Sensitive Species

The area is likely to support populations of raptors, bats, and migratory birds (BLM Utah Sensitive Species List 2010).

Bald Eagles: Bald eagles primarily winter in southern Utah (Iron County) and are associated with a variety of habitats for roosting and foraging. There are no known roost locations within the Project Area; however, bald eagles are likely to be observed from November 1st through March 15th. Additional protections to preserve raptor nesting habitat and minimize future disturbances would be worked out through the Site Specific Analysis worksheets to ensure that trails are constructed in a manner that promotes the wildlife values as well.

Ferruginous Hawk: The ferruginous hawk is a BLM Sensitive Species, Utah Partners in Flight Priority Species (Parrish et al. 2002), and Bird of Conservation Concern (USFWS 2008). The ferruginous hawk was designated as a Tier II species in the Comprehensive Wildlife Conservation Strategy (UDWR 2005). Primary breeding habitat is pinyon-juniper and secondary breeding habitat is shrubsteppe. Edges of pinyon pine-juniper woodlands, utility structures (transmission poles), cliffs, and isolated trees serve to provide nesting as well as perching structures for ferruginous hawk.

Habitat loss associated with destruction of preferred habitats due to chaining, timber harvest, fire management, and livestock grazing was recognized as a specific threat to this species in the Comprehensive Wildlife Conservation Strategy (UDWR 2005). Ferruginous hawks have been documented within the area.

A known ferruginous hawk nest is located within 0.33 miles northwest of the Parowan Front Area and an additional ferruginous hawk nest was located in the Red Hills Area during raptor nest searches in 2013.

Golden Eagle: Golden eagles may be present within the Project Area. There are currently no known golden eagle nest sites within the Project Area. Golden eagles are year-round residents. There are no known golden eagle nests within 0.5 miles of the area; however, eagles may be observed foraging in the area throughout the year

Northern Goshawk: Nesting generally occurs in mid- to high-elevation (6,000 to 10,000 feet) sites in mature aspen or coniferous forest. Goshawks use these forest types even when there is substantial insect-related mortality in the overstory. In southern Utah, Engelmann spruce and subalpine fir cover types are used frequently for nesting. Goshawks only moderately use ponderosa pine for nesting in Utah (Utah National Forests

et al., 1998). Major prey includes rabbits, hares, squirrels, and birds. Goshawks have been known to use pinyon pine/juniper woodlands during winter.

Migratory Birds and Non-BLM Sensitive Raptors
The Project Area is primarily pinyon pine and juniper woodland with some sagebrush/mountain shrub communities. The Utah Partners in Flight Bird Conservation Plan identifies several bird species associated with each of these eco-types (Utah Partners in Flight Bird Conservation Plan, 2002) such as black-throated gray warbler, ferruginous hawk, gray vireo, and Virginia's warbler. The USFWS has identified Bird Conservation Regions throughout the United States (USFWS 2008). The Project Area is within Bird Conservation Region 16 (Southern Rockies/Colorado Plateau). Many of the species identified by USFWS as Birds of Conservation Concern within Region 16 are likely to occur within the Project Area based on habitat including ferruginous hawk, gray vireo, juniper titmouse, and pinyon jay.

There is a peregrine falcon eyrie less than 0.1 miles from the Red Hills Area. This is an alternate eyrie location that may be used; however, it is located on private lands. This eyrie is subject to a lot of human activity and traffic associated with Highway 40 (pers. comm. with Keith Day 2/11/13). Red-tailed hawk and long-eared owls may also occur in the Project Area. There are no known raptor nests within the Project Area.

3.2 Recreation
The areas in which the proposed trails are located are used for mountain biking and hiking. The "C" Trail averages 5,500 visitors per year with over 35,000 visitors per year visiting the "C" Trail lookout. The majority of the visitors use the "C" trail April-October. The CCFO currently has four miles of the "C" Trail designated. The CCFO is also seeing a demand for new trails within the Red Hill Area, "C" Trail Area, and Parowan Front Area. Currently, there are over 10 miles of unauthorized trails throughout the three focus areas.

3.3 Socio-Economics
The Cedar City and Parowan areas benefit from tourism. Both cities would see benefits from increased use of the trails by people that live outside of the Cedar City area. An authorized trails system that has connecting loops is appealing to recreationists. The Outdoor Industry Association in a recent study displayed that the economic benefits of outdoor recreation are: 6.1 million American jobs, $646 billion in outdoor recreation spending each year, $39.9 billion in federal tax revenue, and $39.7 billion in state/local tax revenue. The study also illustrated that Americans spend $81 billion on bicycling gear and trips. (Outdoor Industry Association, 2012)

These trails would likely draw mountain bikers, hikers, and other outdoor enthusiasts to the area that would sequentially bring tourist dollars to the community.

3.4 Soils / Hydrologic Conditions
Portions of the three trail development areas serve as headwaters to Iron County 100 year floodplains at Cross Hollows, at Parowan Creek and at Coal Creek. The "C" Trail to

Shurtz Canyon area contains a portion of the "Green's Lake Watershed" which has been withdrawn as a Public Law (PL) 566 area. While there is no prohibition on developing trails such as those proposed, development in the PL 566 area (and other areas) should be completed in as environmentally sound a manner as possible since the watersheds are important in protecting downstream communities.

Hydrologic conditions are extremely variable on the three focus areas proposed for trails, with natural erosion occurring wherever slopes are steep and vegetation is lacking. Any ground disturbance that is introduced has a high potential to increase erosion conditions. Conditions can range from nearly barren and unstable on south-facing slopes on the Worth Orton Trail and in the "breaks" areas above Cedar City to diverse, highly protected, stable condition on north slopes near the "C" Trail. The landscape is more able to resist erosion when it consists of gentle gradients supporting highly protective desirable plants. It is least likely to resist erosion on hot, south slopes which lack protective vegetation.

Soils in the three focus areas are variable and precise soil descriptions may be found in the Natural Resource Conservation Service's Soil Survey of Iron-Washington Area, Utah (1996). Soils proposed for trail work are generally suited for trail construction, with limitations due to soil texture and slope. Soils can range from heavy clays to loams and can contain substantial amounts of rock fragments. The proposal appropriately states that clays and silty soils would be avoided. Loams, particularly those with a high content of gravel or small cobbles are present in the area and are most suitable for trail construction.

Some soils in the project proposal area are considered fragile (or sensitive) soils. These soils are difficult to construct sustainable trails on because they are highly subject to water erosion. For the purposes of this environmental assessment, soils with a soil erodibility factor (Kw value) of greater than .2 and slopes of 25 percent or more are assumed to be fragile. The soil erodibility factor (Kw) is used to quantify soil detachment by runoff and raindrop impact. It is an index used to predict the long-term average soil loss from sheet and rill erosion under various conservation techniques.

3.5 Vegetation

Vegetation types throughout all trail locations are mainly sagebrush, mountain shrub, mixed shrub/grass and pinyon pine and juniper with grass/shrub understory.

The following tables illustrate the dominant vegetation associated with each ecological site.

Table 3.2

ECOLOGICAL SITE	SITE NAME	PERCENT PERENNIAL GRASSES	PERCENT PERENNIAL FORBS	PERCENT SHRUBS	PERCENT TREES	DOMINANT ASPECT OF PLANT COMMUNITY
R047XB333	Upland Stony Loam	55	10	35	15	Pinyon-Utah Juniper
R028AY338	Upland Stony Loam	45	5	40	10	Pinyon-Utah Juniper

A more detailed description of the ecological sites is included in Appendix D.

CHAPTER 4
ENVIRONMENTAL IMPACTS

DIRECT AND INDIRECT IMPACTS

PROPOSED ACTION

This section analyzes the impacts of the Proposed Action, Alternative B and No Action Alternative to those resources described in the Affected Environment.

4.1 Fish and Wildlife (Including Big Game, Upland Game Birds, Special Status Species and Migratory Birds)

Alternative A – Proposed Action

Direct and Indirect Impacts for All Focus Areas

Direct and indirect effects to wildlife resources would be expected to be similar within all three focus areas due to geographic proximity and similar wildlife habitat values and uses. Improving recreational facilities and providing opportunities within these areas would result in increased human/wildlife interactions. Resident wildlife within these areas is already pre-conditioned to an extent to the existing activity that is occurring along the unauthorized trails; however, improvements to these areas and increased public awareness that these trails are available to the public for recreational purposes would likely result in increased visitor traffic and human/wildlife interaction. Recreational use within these areas may disrupt wildlife behaviors associated with breeding, nesting, feeding, or raising of young. It would be expected that some wildlife would be more sensitive to disruption than others and may avoid the area altogether while other wildlife may be more adaptable to the disturbance, which may cause shifts in associated species in the areas over time. Disturbances to wildlife would be further minimized through a user-education based experience. The BLM would partner with UDWR to promote user awareness about the wildlife habitats that are traversed by the Trail Areas and encourage users to be mindful of the wildlife and other important resources that use these areas.

Construction of a skills parks, trailheads, and trails would result in temporary disturbances to a variety of wildlife within the Project Area. Increased noise and human activity associated with construction activities would lead to short-term displacement and disruption of wildlife for the duration that activities are occurring. Wildlife may avoid the area during intensive construction; however, they would be expected to resume use of the Project Area once construction activities are completed. Direct impacts associated with construction activities may occur and would be reduced through the incorporation of Design Features.

Due to the proximity of mapped habitat to the Focus Areas, impacts to Utah prairie dogs are expected to be minimal; however, consultation with USFWS would be re-initiated if Utah prairie dogs surveys result in impacts beyond what was anticipated during design and implementation of trailheads, skills park, or trails.

Mexican spotted owl modeled habitat occurs within all three focus areas. For the majority of the areas habitat does not provide the primary constituent elements for canyon habitats, except for the Parowan Front Area. There are no impacts to Mexican spotted owls anticipated at this time, as there are no PACs or critical habitat and no breeding owls have been detected in past monitoring efforts. There are some canyon habitats that have not been assessed or monitored for Mexican spotted owls. These habitats would be assessed to determine if they provide the primary constituent elements for canyon habitats and protocol level surveys would be completed if it is determined that habitats are suitable for Mexican spotted owl occupancy prior to design and construction of any trails in these types of habitats.

Wildlife clearances, including raptor nest searches would be completed in advance of new trail construction. Active raptor nests would be managed in accordance with the following Design Feature.

"C" Trail to Shurtz Canyon Area:
Utah prairie dog colonies within 0.5 miles of the "C" Trail to Shurtz Canyon Area include colonies 0103ep, 0103ff, 0112b, and 0122d as identified in the Table 3.1. Impacts to Utah prairie dogs and their associated habitats would be minimized through implementation of the Design Features as discussed above. Due to the proximity of mapped habitat to the "C" Trail to Shurtz Canyon Area impacts to Utah prairie dogs are expected to be minimal; however, consultation with USFWS would be re-initiated if Utah prairie dogs surveys result in impacts beyond what was anticipated during design and implementation of trailheads, skills park, unauthorized trails or new trails. The implementation of the Design Features would ensure that Utah prairie dog mapped habitat would be avoided through project design and implementation.

Thresholds established in the "C" Trail to Shurtz Canyon Area for potential new trail designations would be up to 30 miles. Thirty miles would be the upper limit of trail designations that may be identified in this area, which would equate to a total of 3.64 acres of potential disturbance. In terms of wildlife habitat values impacted, this would result in a direct disturbance to approximately 3.64 acres of crucial mule deer winter range, migratory bird, and raptor habitat.

In addition, impacts on mule deer crucial winter range would be further minimized by incorporation of the Design Feature that would minimize construction related activities from December 1st through April 15th when mule deer impacts would be the greatest. In addition, personal communication with UDWR (Rhett Boswell January 15, 2014), it was acknowledged that UDWR is in support of non-motorized trails to enhance use of public lands and educational opportunities in this area. Crucial winter range within the "C" Trail to Shurtz Canyon area comprises less than 1% of the total available habitat within the WMU. Mule deer winter use in this area is high due to limited habitat availability and pressures associated with proximity of this area to Cedar City and I-15; however, disturbances to mule deer are not anticipated to result in large-scale displacement or disruption due to the low impact type of recreational activities that the trails would

promote. In addition, the BLM and UDWR would partner to implement a user-education program for these areas.

A variety of raptors and migratory birds are expected to utilize habitats associated with the "C" Trail to Shurtz Canyon Area. Wildlife clearances, including raptor nest searches would be completed in advance of new trail construction. Impacts to active raptor nests would be minimized through management in accordance with the Design Features as discussed above.

Minimizing disturbance to nesting raptors and implementing appropriate seasonal and spatial buffers would effectively reduce the impact of the Proposed Action on raptors.

A variety of migratory birds are expected to utilize the area. Direct impacts to migratory birds would be incorporated through implementation of Design Features that would minimize construction activities during the breeding and nesting season. In addition, vegetation removal would be kept to a minimum as mentioned above, which would further minimize impacts to nesting migratory birds and preserve their habitat minimizing fragmentation. There may be some impacts to avian species that are not accustomed to increased human disturbances, which may cause a shift in avian species that are more tolerant of disturbance.

Skills Park

The proposed skills park is located within the USFWS high intensity survey area for Utah prairie dogs. The nearest mapped Utah prairie dog habitat is 0.23 miles (unoccupied) and 0.25 miles (nearest occupied) from the skills park. The skills park would not result in direct impacts to Utah prairie dogs and associated habitats; however, increased visitor use along access roads getting to the facilities may increase the potential for disturbances. The nearest mapped Utah prairie dog habitat is located on private lands. This area is unoccupied and is immediately adjacent to an existing gravel road that provides access to the current trailhead and the proposed skills park. Completing USFWS protocol level surveys prior to ground disturbing activities would minimize potential for disturbing Utah prairie dogs and associated habitat.

The proposed skills park would result in the loss of 1.5 acres of mule deer winter range in this area; however, it is located in an area that has existing disturbances and is in close proximity to a housing development, roads, and retention dams. Human disturbances in this area are high due to the proximity to Cedar City and the existing East Bench Trail. The skills park would be fenced with wood post and pole construction, which may preclude mule deer from utilizing the 1.5 acre area.

There are no other special status wildlife species that occur within this area; however, wildlife clearances would be complete prior to construction.

Trailheads

The "C" Trail Bottom, Southern View and Shurtz Canyon trailheads are all within the USFW's high intensity survey area for Utah prairie dogs. For the "C" Trail Bottom trailhead is an existing trailhead; mapped Utah prairie dog habitat occurs immediately adjacent to the dirt access road on private land and is approximately 0.16 miles from the existing trailhead parking area. The Utah prairie dog habitat in this area is currently unoccupied. Habitat surrounding the existing trailhead and access road consists of rabbitbrush, sagebrush, and scattered juniper. There is no direct disturbance anticipated with the "C" Trail Bottom trailhead if it were to be expanded in the future on Utah prairie dogs or associated habitats since the nearest colony is 0.16 miles from the trailhead and it has had a spring count of zero since 2000. The "C" Lower End Trailhead is 0.25 acres of existing disturbance and 0.12 acres of new disturbance within mule deer winter range.

The Southern View trailhead is 1.21 miles from the nearest mapped Utah prairie dog habitat and is near the Southern View subdivision. The Southern View trailhead is not expected to impact Utah prairie dogs or associated habitats due to distance from the nearest known occupied colony. Suitable habitat would be surveyed in accordance with USFWS Utah prairie dog protocols. The Southern View trailhead is not expected to have direct impacts to Utah prairie dogs or their associated habitats due to distance from the nearest occupied habitat.

The Shurtz Canyon Trailhead is 0.23 miles from the nearest mapped Utah prairie dog habitat. This area is occupied by Utah prairie dogs and shows a relatively stable population over the past 10 years. Access to the trailhead would be via a main graveled county road. Facilitating recreational opportunities in this area could increase traffic along this maintained county road to access the trailhead, which could increase potential for vehicle/Utah prairie dog collisions along the road. There are no metrics currently available to gauge the extent that the trailhead could increase traffic. The trailhead itself is not expected to have any direct impacts to Utah prairie dogs or their habitats due to the distance from this colony.

The proposed trailheads are within mule deer crucial winter range and would result in a loss of 0.86 acres of mule deer crucial winter range; however these areas are proposed in previously disturbed areas so impacts associated with habitat disturbance would be minimal.

KIOSKs would be placed at each trailhead and BLM would partner with Utah Division of Wildlife Resources to increase awareness of sensitive wildlife resource concerns in the area and use this as an opportunity to increase user education to minimize impacts to wildlife.

Unauthorized Trails

The "C" Trail Technical trail currently traverses 1.75 miles within mule deer winter range through pinyon pine and juniper woodland/mountain shrub habitat, which equates to approximately 0.21 acres of direct loss of wildlife habitat values (i.e. forage and cover). The Proposed Action would ensure that existing trails are developed to meet BLM and

IMBA Trails Solutions guidelines, which would minimize indirect disturbance to wildlife habitats resulting from impacts of trails that were not constructed in a sustainable manner and have caused erosion and habitat degradation concerns.

The habitats traversed by the "C" Technical Trail have potential for nesting raptors. There are no known raptor nests within the "C" Trail to Shurtz Canyon Area; however, there have been observations of bald eagle and Swainson's hawk. Goshawks may also be expected to utilize the pinyon pine and juniper habitats for foraging. Raptor nest searches were conducted in June 2013 within the vicinity of the "C" Technical Trail and no raptor nests were located within 0.5 miles of this trail. Wildlife clearances and raptor nest searches would be completed during appropriate seasons prior to construction of trails in this area. The identification of a raptor nest would follow the BLM Best Management Practices for Raptors and Their Associated Habitats in Utah and a Site-Specific Analysis worksheet would be completed and evaluated by the team to design the trail in a manner that minimizes impacts to nesting raptors.

Proposed Trails

The exact locations of proposed new trails have not been identified at this stage; however, the analysis focuses on the wildlife habitat values present within the "C" Trail to Shurtz Canyon Area. Proposed new trails would be constructed to BLM and IMBA Trail Solutions guidelines. The ID Team would work together to ensure that wildlife clearances are completed and that trail design and implementation would take into consideration wildlife habitat values and minimizing impacts to resources. A maximum of 28.25 miles of proposed new trails, which would result in a total of 3.64 acres of disturbance to wildlife habitat values in the area. Incorporation of Design Features as previously discussed would minimize impacts to wildlife habitat values in the area.

Parowan Front Area:

Impacts to wildlife within the Parowan Front Area would be expected to be similar to those identified for the "C" Trial to Shurtz Canyon Area due to similar habitat values and wildlife species use. The following analysis focuses on the site-specific projects associated with the recreational facilities identified for the Parowan Front Area.

Trailheads

The Worth Orton and Heritage Park trailheads are within the USFWS's high intensity survey area for Utah prairie dogs. Utah prairie dog habitat is located 0.2 miles (nearest mapped habitat to Worth Orton) and 0.7 miles (nearest mapped habitat to Heritage Park) from the respective trailheads. All surveys would be completed prior to ground disturbing activities and if mapped habitat was found it would be avoided. The Worth Orton trailhead would be located within an existing parking area near the cemetery. The Heritage Park trailhead is located on private lands within Parowan city and would be located on the east side of the Park.

Unauthorized Trails

The Worth Orton trail is an existing unauthorized trail that is approximately 1.6 miles long traversing through red hills and pinyon pine and juniper woodlands, which would be

a 0.19 acre disturbance of wildlife habitat values such as crucial mule deer winter range. There are no known raptor nests within proximity to the trail; however, raptor nest surveys have not been completed.

Proposed Trails

The "P" Trail is 2.0 miles in length and would result in a 0.24 acre disturbance within wildlife habitats. Primary wildlife habitat values impacted would include crested wheatgrass seedings in the lower elevations, sagebrush, and pinyon-juniper woodland. There are no known raptor nests in the area; however, surveys have not been completed.

The Penstock Trail is also 2.0 miles in length and follows Highway 143 up Parowan Canyon to the reservoir. This trail would be located in previously disturbed areas associated with rights-of-ways in the area. This is a motorized trail that would tie into previously authorized motorized trails leading to the Dry Lakes Road from Right Left Hand Canyon (Brian Head OHV trail). This trail would impact approximately 0.24 acres of wildlife habitat values; however, there are existing disturbances associated with existing rights-of-way and Highway 143 in this area that have already disrupted wildlife in this area.

The Proposed Action would allow for an additional 16 miles of proposed trails in this area; however, these have not been identified at this time. Impacts would be similar to those identified for proposed trails in the "C" Trail to Shurtz Canyon area and would impact approximately 1.6 acres of wildlife habitat values.

Red Hill Area:

Impacts to wildlife within the Red Hill Area would be expected to be similar to those identified for the "C" Trial to Shurtz Canyon Area due to similar habitat values and wildlife species use. The following analysis focuses on the site-specific projects associated with the recreational facilities identified for the Red Hill Area.

Trailheads

The Fiddlers Canyon, Red Hill, and Thunderbird Gardens Trailheads all occur within the high intensity survey area for Utah prairie dogs. For the Fiddlers Canyon Trailhead, mapped Utah prairie dog habitat occurs 0.9 miles from the 1 acre trailhead proposed on private property. Impacts to prairie dogs are not anticipated due to the habitat suitability. However, the area needs to be monitored before implementation.

The Red Hill Trailhead is 1.2 miles from the nearest mapped Utah prairie dog habitat and is located up the canyon off of Highway 14 on Cedar City property. This area would be located in an existing disturbed area that is currently used as a pullout. Habitat in this area is unsuitable for Utah prairie dogs.

The Thunderbird Gardens Trailhead is 0.5 miles from the nearest mapped Utah prairie dog habitat east of the golf course on Cedar City property. Habitats in this area are primarily pinyon pine and juniper in steep elevations and would not provide suitable habitat for Utah prairie dogs.

The proposed trailheads would result in a new disturbance of 2.09 acres and 0.59 acres of existing disturbance within mule deer crucial winter range on private lands.

A peregrine falcon eyrie is located 0.4 miles from the Red Hill Trailhead; however, this eyrie is in close proximity to Highway 14 and existing land uses on private lands. Personal communication with UDWR (Keith Day February 11, 2013), he recognizes that existing disturbances associated with Highway 14, recreation and businesses already occur in the area and that the additional disturbance associated with the Proposed Action are not expected to disrupt falcons.

Unauthorized Trails

All unauthorized trails are within crucial mule deer winter range and would result in a disturbance of 0.2 acres on private lands and 0.9 acres of disturbance on public land. Impacts would be similar to those analyzed under the "C" Trail to Shurtz Canyon Area.

Raptor nest surveys were completed in 2013 for Trail One and Trail Two. A ferruginous hawk nest was located east of Trail One approximately 0.1 miles in a rock formation. This nest would continue to be monitored and a Site Specific Analysis worksheet would be completed prior to design of the trail to minimize impacts to nesting raptors. The current location of the unauthorized trail would be evaluated to determine if this trail is sustainable in accordance with the BLM and IMBA Solutions guidance.

Proposed Trails

The Proposed Action would allow for an additional 17.55 miles of new trail to be identified in the future. This would result in an additional 2.13 acres of disturbance within mule deer crucial winter range and other wildlife habitats. Impacts would be similar to those discussed previously and the incorporation of Design Features would minimize impacts to wildlife.

Alternative B

Impacts under Alternative B would be the same as those identified under the analysis for the Parowan Front Area.

Analysis for the "C" Trail to Shurtz Canyon Area would be similar to those analyzed under the Proposed Action Alternative A. Under Alternative B, the Skills Park would be located north of the parking area on Cedar City property, which would place it closer to mapped Utah prairie dog habitat (colony 0103ff) which has been unoccupied since 2009.

Analysis for the Red Hills Area would be similar to that analyzed under the Proposed Action. Alternative B would also add the Razorback Trailhead, which would be located 0.8 miles from the nearest mapped Utah prairie dog habitat.

No Action
Due to proximity to Cedar City and other population centers it would be expected that recreation use would continue to be dispersed. Impacts to wildlife would be similar to those analyzed for the Proposed Action because there trail braiding and creation of unauthorized trails is expected to continue. It is anticipated that the level of recreation use would be lower than those analyzed under the Proposed Action.

4.2 Recreation
The addition of singletrack trails, optional lines, a skills park, and technical trail features in the three focus areas would allow cyclists and hikers to form trail loops, progress in their abilities, and have an overall more diversified experience. Views from the proposed trail areas of the surrounding Cedar City Valley are outstanding, representing another benefit for the user groups. Additionally, maintained trails in the three focus areas would lead to higher use levels, and would have positive impacts to the recreation resource in the Cedar City and Parowan areas. Recreationists would be able to diversify their activities by not only enjoying the paved trail system in Cedar City, but by tying into the new singletrack trails that are adjacent to the community. As discussed, the BLM would partner with UDWR to promote user awareness about the wildlife habitats that are traversed by the Trail Areas and encourage users to be mindful of the wildlife and other important resources that use these areas.

The trails being improved or constructed would need to be sustainable. This would require more curvilinear design principles along with berms to help prevent a fall-line type trail. (A curvilinear trail is one aligned to follow the natural contours of the slope. A curvilinear trail alignment would allow the trail to gain elevation gradually in conjunction with the natural contours of the terrain. This type of design generally minimizes maintenance, preserves the natural resource, and makes use of natural drainage patterns.)

Alternative B
Impacts would be the same as those identified under the analysis for the proposed action with the exception of location of the Razorback Trailhead and expansion of "C" Trail Park which would be less than 1.0 acres of additional disturbance to public and private land.

No Action
Due to proximity to Cedar City and other population centers it would be expected that unauthorized trail building and trail braiding would continue to increase. However, the recreation use would be at lower levels than the Proposed Action.

4.3 Socio-Economics
Cedar City would benefit from having more outdoor recreational opportunities close to the community. There are many businesses that rely on income generated from outdoor recreation related tourism. In addition, those businesses that provide food and lodging would also benefit if more mountain bikers and hikers were attracted to the Cedar City and Parowan areas.

The Proposed Action Alternative is expected to enhance opportunities for wildlife associated recreation, which may include such activities as birding, wildlife viewing, and facilitating walk-in access for hunting. While backyard birders are the most prevalent form of birding, many birders travel more than a mile from home to visit public lands. The network of trails in close proximity to population centers would facilitate birding and other wildlife viewing opportunities. Birders and other wildlife associated recreation can bring money into the local economies on a variety of goods and services for trip-related expenditures including food, lodging, and transportation. In 2011, the USFWS completed a comprehensive survey, which revealed that over *90 million U.S. residents 16 years old and older participated in wildlife-related recreation. During that year, 33.1 million people fished, 13.7 million hunted, and 71.8 million participated in at least one type of wildlife-watching activity including observing, feeding, or photographing fish and other wildlife in the United States* (USFWS 2011 and USFWS 2011-1).

Alternative B
Impacts would be the same as those identified under the analysis for the proposed action with the exception of the location of the Razorback Trailhead and expansion of "C" Trail Park which would be less than 1.0 acres of additional disturbance to private and public land.

No Action
Due to proximity to Cedar City and other population centers it would be expected that recreation use would continue albeit at lower levels than the Proposed Action.

4.4 Soils/ Hydrologic Conditions
Table 2.1 summarizes new ground disturbance to soils in the three focus areas. Approximately 2.21 acres of new disturbance is proposed for private lands and approximately 14.5 acres of new disturbance is proposed for public lands across all three focus areas. The new disturbance has the potential to increase soil erosion from water flows. Implementation of the design features and following the IMBA trail guidelines would help to minimize the impacts of the new disturbance. As trail surfaces become packed, soil erosion would lessen over time. Water erosion is apt to be higher on steeper slopes that lack protective vegetation cover.

The topography and nature of soils in the Parowan Front Area lends itself well to trail construction and there is little erosion anticipated as a result of trail construction. Likewise, there is no substantial soil erosion problems expected from any of the skills parks or trail heads because they are relatively flat.

Trail construction on sensitive (fragile) soils can create excessive erosion because their surface layers lack stability or they may be particularly steep. It is stipulated that these soils be avoided to the maximum extent possible. Sensitive soils subject to erosion occur in both the "C" Trail to Shurtz Canyon and the Red Hills areas. The programmatic nature of the new trails (unknown locations) makes analysis difficult, though it is estimated that

trail construction on sensitive soils could result in two to four times the amounts of erosion when compared to non-sensitive soils. A maximum of 12.12 new acres of disturbance could result in substantially increased soil erosion, depending upon trail layout. The amount of trail actually constructed on sensitive soils is likely to be considerably less because of implementation of design standards and the IMBA guidelines. The "C" Technical Trail (currently unauthorized) is an example of a fall line trail constructed on sensitive soils which have been subjected to excessive erosion. Reconstructing and rehabilitating approximately 0.87 miles of this trail should result in a substantial decrease in soil erosion.

4.5 Vegetation

The disturbance of vegetation would be expected with improvements and installation of trails and trail heads. It is expected that the machinery used to install improvements in and on the edges of the trails and trail heads would cause vegetation disturbances.

Alternative B

Impacts would be the same as those identified under the analysis for the proposed action with the exception of location of trailheads and expansion of "C" Trail Park which would be less than 1.0 acres of additional disturbance to private and public property.

No Action

Due to proximity to Cedar City and other population centers it would be expected that unauthorized trail building and trail braiding would continue to increase. However, the recreation use would be at lower levels than the Proposed Action.

CUMULATIVE IMPACTS

Cumulative impacts are those impacts resulting from the incremental impact of an action when added to other past, present, or reasonably foreseeable actions regardless of what agency or person undertakes such other actions.

Table 4.1 Cumulative Impacts Table

Project/Action	Name or Description	Status (X)		
		Past	Present	Future
East Bench Trail	Issued a twenty-foot-wide ROW to Cedar City Corporation for the construction and maintenance of a paved recreational trail across 850 feet of BLM land.	X		
Dog Park	Cedar City Dog Park near the front.			X
Route Proliferation	With the popularity of OHV use, route proliferation has occurred across much of the Hurricane Cliffs.	X	X	
Off Highway Vehicle (OHV) use	OHV use occurs throughout the field office.	X	X	X
Regulated Hunting	Regulated hunting occurs throughout the field office.	X	X	X
Subdivisions	New subdivisions have been built in the recent years near the BLM land increasing activity in the Hurricane Cliffs.	X		
Realignment of Green's Lake Road	County has proposed to realign the road to help with public safety.			X
Water Tanks	Cedar City and Enoch have built water tanks.	X		

Project/Action	Name or Description	Status (X)		
		Past	Present	Future
Enoch's Flood Control	Building of flood control dams, reservoirs, and ditches have been proposed.			X
FERCs Pipeline Replacement	The pipeline is proposed to be replaced in Parowan Canyon			X
Construction of Fences	Elevated fences were built along the freeway.	X		
Range Improvements	Maintenance and construction of range improvement projects throughout the field office (fences, water developments, guzzlers, etc.)	X	X	X
Chainings	Previous chainings are comprised of the 1960's crested wheatgrass treatments.	X		
Seedings	Multiple seeding projects and ongoing seeding maintenance occurs on the front.	X	X	
Invasive Weed Treatments	Invasive weed treatments along the front each year.	X	X	X
Wildfire Suppression and Rehabilitation	Wildfire suppression and rehabilitation activities throughout the field office.	X	X	X
Vegetative and Wildlife Habitat Improvement Projects	Habitat improvement projects throughout the Cedar City Field Office.	X	X	X
SITLA and Private Land Management	A variety of projects are occurring on SITLA and private lands.	X	X	X

Fish and Wildlife (Including Big Game, Upland Game Birds, Special Status Species and Migratory Birds)

Cumulative Impact Area: The Cumulative Impact Area for wildlife is defined as:

Wildlife Species	Cumulative Impact Area (CIA)	Rationale for CIA
Mule Deer Elk Black Bear	Panguitch and Zion WMU	Based on UDWR's Wildilfe Management Unit Boundaries.
Utah prairie dogs	Extent of mapped habitat within 0.5 miles of the "C" Trail to Shurtz Canyon, Parowan Front, and Red Hill Areas.	Based on USFWS permanent disturbance buffer of 0.5 miles.
Migratory Birds	Associated habitats within the "C" Trail to Shurtz Canyon, Parowan Front, and Red Hill Areas.	Based on the BLM BMPS for Raptors and Their Associated Habitats in Utah (BLM 2006) and Utah Field Office Guidelines for Raptor Protection from Human and Land Use Disturbances (USFWS 2002).

As discussed, the primary direct and indirect effects associate with the Proposed Action would result in temporary disturbances associated with trail construction activities. Given the temporary nature of these effects, the expected use of the trail systems and features once established, and the past and present actions associated with the existing human and land use disturbances within these areas are not anticipated to contribute to cumulative effects on wildlife or wildlife habitats.

Recreation
New developed trails and trailheads with delineated parking and informative kiosks would likely attract recreationists to the areas increasing the use. The data collected from the "C" Trail shows an average annual increase of 15% and the trails in the three project areas would likely see similar increases. (The data derives from trail counters from the years 2012-2013. The highest visitor use occurs from March through October.) The proposed trails that connect into or near the Cedar City Paved trails would likely increase the use on the paved trail network that ties directly into the community.

Socio-Economics
The Cedar City and Parowan areas receive outside money from tourism. These cities will likely see benefits from the increased use of the trails by people that live outside the area. An authorized trail network that functions well is appealing to recreationists, therefore boosting the amount of traveling outdoor enthusiasts to stop in the area to recreate.

Soils / Hydrologic Conditions
Watersheds above the towns of Parowan and Cedar City are important for protecting downstream infrastructure, so much so that the Green's Lake watershed (the watershed which the "C" Trail to Shurtz Canyon area is a part of) has been withdrawn as a Public Law (PL) 566 area. It is important that healthy vegetation communities capable of slowing and absorbing water flows remain and are managed on these watersheds.

Construction of the trails would be cumulative with natural, geologic erosion which occurs in the watersheds above these towns and with human caused disturbances, such as the Cedar Livestock Associations livestock trail, route proliferation (both authorized and unauthorized), inappropriate ATV use, private land developments, which all remove protective vegetation to some degree and lead to increased erosion. On the other hand, because these trails would be constructed by hand, contain impact minimization criteria (e.g. design features) and are generally intended for non-mechanized uses, they are not expected to be substantial contributors to increased erosion.

Vegetation
Upland vegetative communities throughout the trails system are influenced by a variety of factors, including, but not limited to: climate, drought, wind, geology, topography, soil, elevation, slope, aspect, etc. They are also influenced by natural and human-caused disturbances including insects, disease, fire and fire suppression, invasive species, domestic livestock grazing, wildlife, etc.

With any ground disturbing activity, there would be the opportunity for invasive species, both native and nonnative, to invade the associated sites. This would depend on level of disturbance, proximity of invasive species to the disturbed area, success of the rehabilitation, etc. The washing of undercarriages of vehicles and equipment prior to implementation activities and reseeding disturbed areas in and around the trails and trail heads following implementation would be expected to minimize invasive species introduction.

CHAPTER 5
PERSONS, GROUPS, AND AGENCIES CONSULTED

During preparation of the EA, the public was notified of the proposed action and EA by posting on the Utah Environmental Notification Bulletin Board (ENBB). The proposed action was posted on the BLM's Environmental Notification Bulletin Board (ENBB) on January 8, 2013- April 30, 2014. Two comments were received from the posting. One comment was in support of the economic impact of trail improvements. The other comment was inquiring about the use of motorcycles on the singletrack trail system. This EA's focus is on providing a non-motroized singletrack trail network to the area; however singletrack motorized use could be analyzed in the future plans to improve the recreation opportunities available in the area.

Table 5.1. List of Persons, Agencies and Organizations Consulted

Name	Dates Consultation or Coordination occurred	Findings & Conclusions
Cedar City Trails Committee	2/13/13, 1/9/14	Location of Trails, Trailheads, and Areas defined
Parowan City	12/19/13	Location of Trails, Trailheads, and Areas defined
Division of Wildlife Resources	1/15/14	Expanded the Parowan Boundary to include DWR lands
USFWS	2/5/14	Reviewed the Proposed Action, Needs consultation
Frank Nichols	3/4/2014	Located the area for the Fiddler's Canyon Trailhead
Southern View Subdivision	3/5/2014	Discussed with the project foreman (Logan) on where the trailhead would be.
Color Country Cycling Club	3/13/13, 5/8/13	Location of Trails, Trailheads, and Areas defined. Source of Volunteers.

List of BLM Preparers

Name	Title	Responsible for the Following Section(s) of this Document
Craig Egerton	Natural Resource Specialist	Soils and Hydrologic Conditions
Christine Pontarolo	Wildlife Biologist	TES Wildife, Migratory Birds, Fish and Wildlife
Jeff Reese	Range Management Specialist	Vegetation
Mitch Owens	Outdoor Recreation Technician	Socio-economics, Recreation
Dave Jacobson	Outdoor Recreation Planner	Socio-economics, Recreation

See Appendix B: Interdisciplinary Team Analysis Record Checklist

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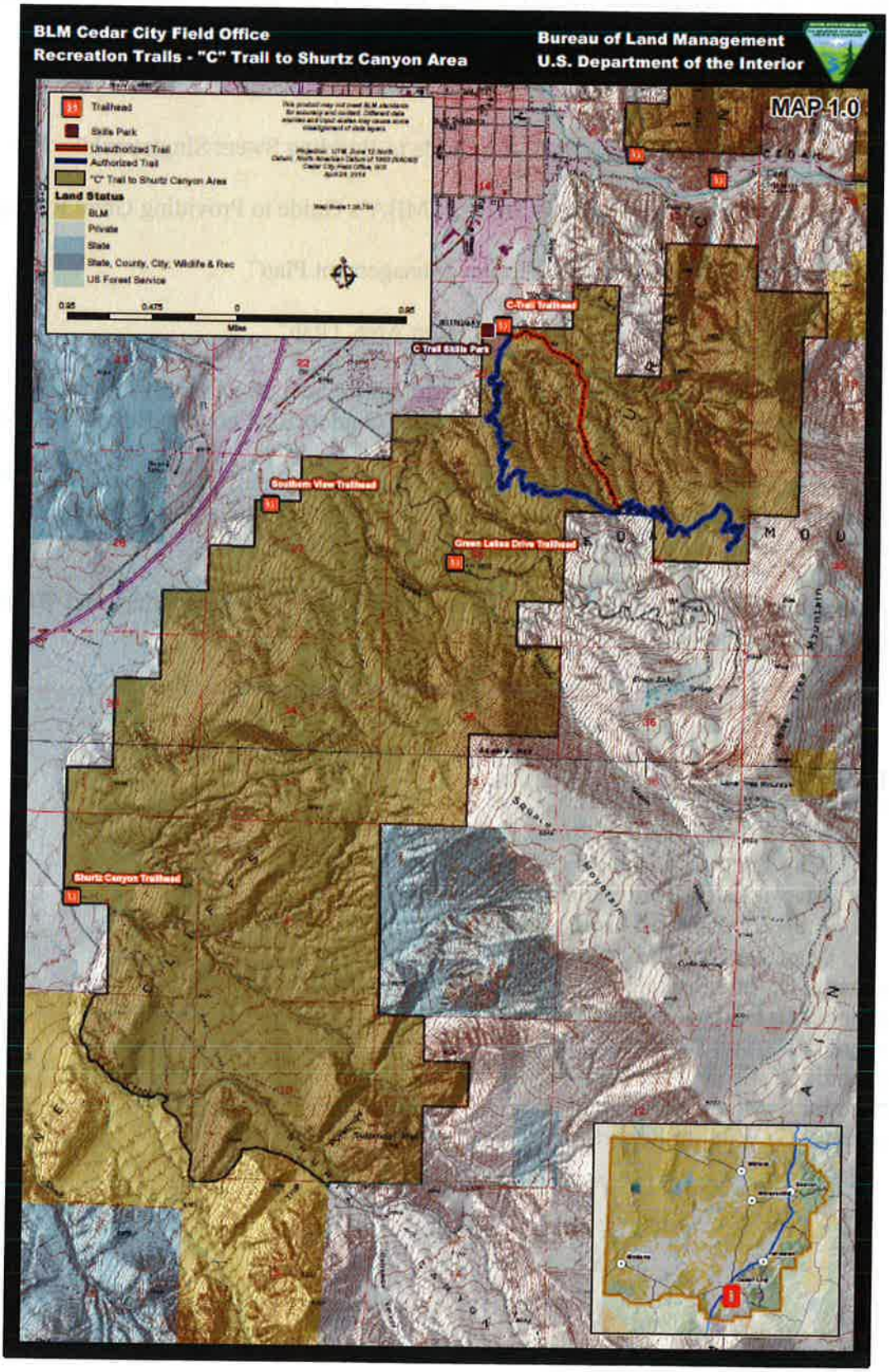
Appendices

Appendix A: Maps
- Map 1.0: "C" Trail to Shurtz Canyon Area
- Map 1.1: "C" Technical Corridor
- Map 1.2: "C" Trail Skills Park
- Map 2.0: Parowan Front Area
- Map 3.0: Red Hill Area

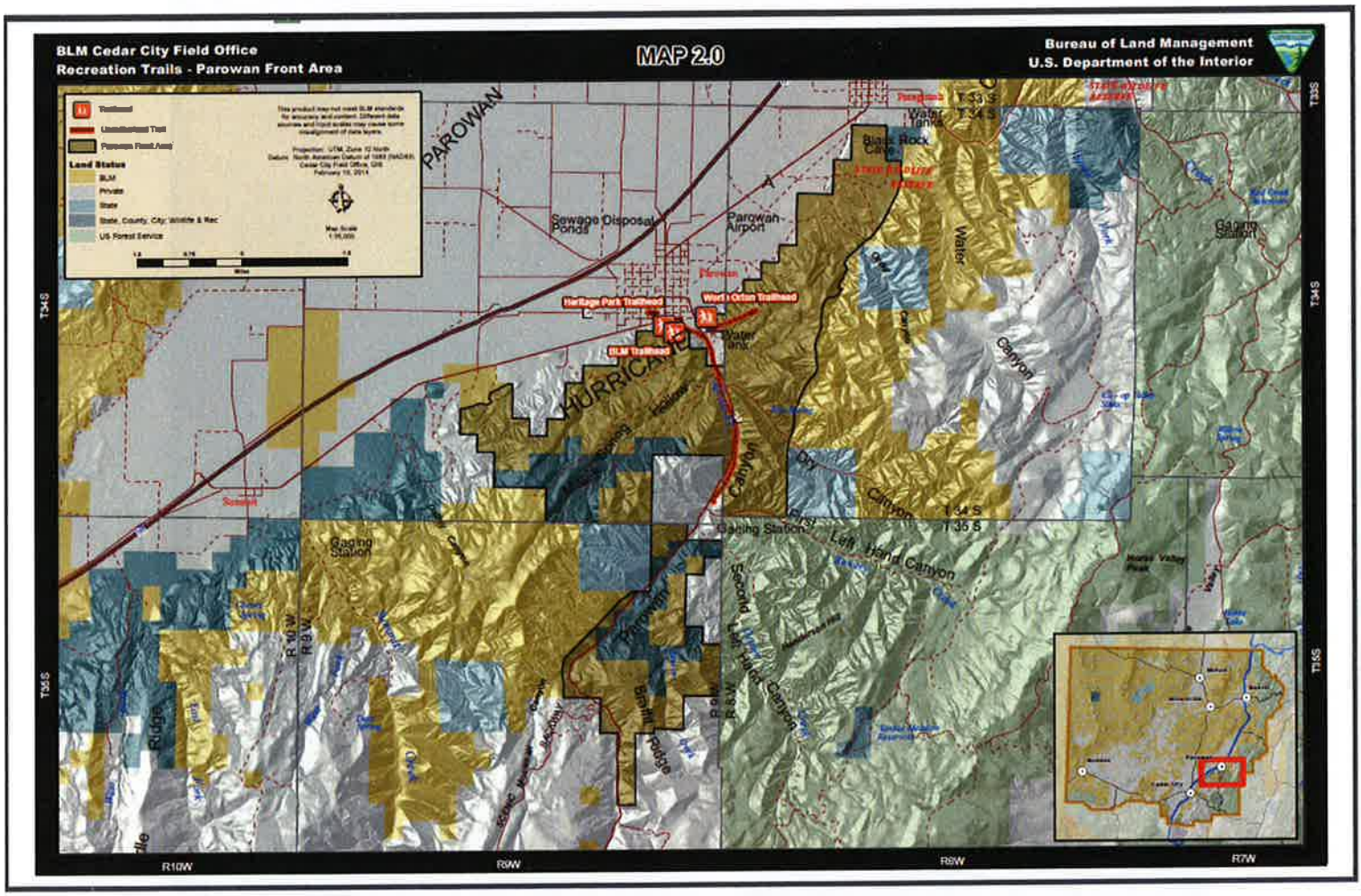
Appendix B: Interdisciplinary Team Analysis Record Checklist
Appendix C: Design Features
Appendix D: Soil Disturbance Tables
Appendix E: Ecological Sites
Appendix F: Maintenance Plan
Appendix G: Wildlife Report

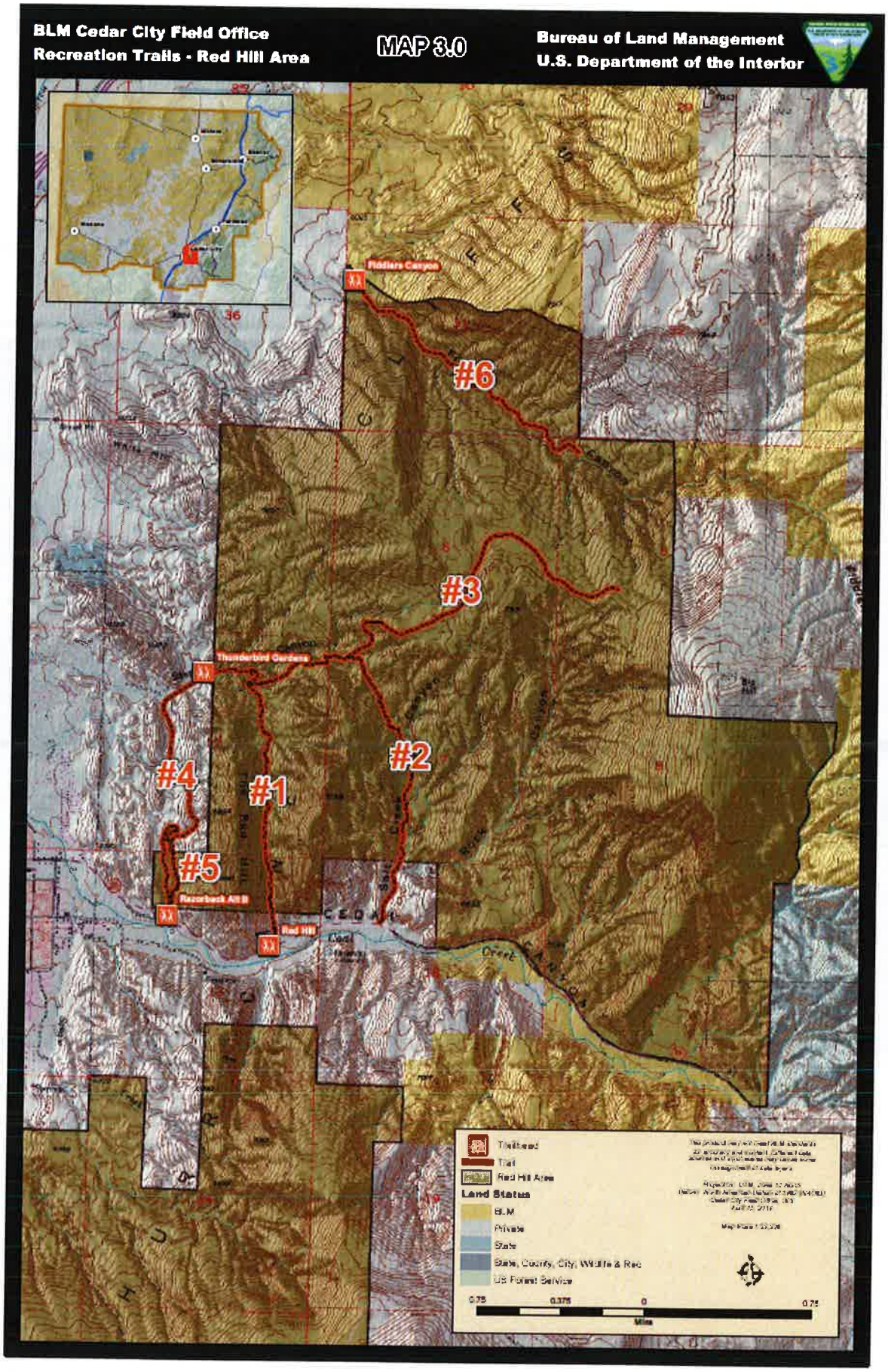
APPENDIX A
MAPS




BLM Cedar City Field Office
Recreation Trails - "C" Trail Cooridor
Bureau of Land Management
U.S. Department of the Interior
MAP 1.1
Trailhead
Skills Park
Unauthorized Trail
Authorized Trail
"C" Trail to Shurtz Canyon Area
"C" Trail Coorridor
Land Status
BLM
Private
State
State, County, City, Wildlife & Rec
US Forest Service
C Trail Trailhead
C Trail Skills Park
BOUNDARY
Spring
Creek
Reservoir
Coal
Green
Hollow
Green Lak
BM 6872
BM 7963
23
24
25
26
35
36


BLM Cedar City Field Office
Recreation Trails - "C" Trail Skills Park
Bureau of Land Management
U.S. Department of the Interior
MAP 1.2
Trailhead
Skills Park
Unauthorized Trail
Authorized Trail
"C" Trail to Shurtz Canyon Area
"C" Trail Skills Park
Land Status
BLM
Private
State
State, County, City, Wildlife & Rec
US Forest Service
C-Trail Trailhead
C Trail Skills Park


BLM Cedar City Field Office
Recreation Trails - Parowan Front Area
MAP 2.0
Bureau of Land Management
U.S. Department of the Interior
Trailhead
Unauthorized Trail
Parowan Front Area
Land Status
BLM
Private
State
State, County, City, Wildlife & Rec
US Forest Service
PAROWAN
Sewage Disposal Ponds
Parowan Airport
Water Tanks
Black Rock Cave
Gaging Station
Heritage Park Trailhead
Ward Ostler Trailhead
BLM Trailhead
HURRICANE
Water Canyon
Dry Canyon
First Left Hand Canyon
Second Left Hand Canyon
Parowan Ridge
Bunker Ridge
Horse Valley Peak
T 33 S
T 34 S
T 35 S
T34S
T35S
R10W
R9W
R8W
R7W


BLM Cedar City Field Office
Recreation Trails - Red Hill Area
MAP 3.0
Bureau of Land Management
U.S. Department of the Interior
Riddlers Canyon
#6
#3
Thunderbird Gardens
#2
#4
#1
#5
Razorback Mtn
Red Hill
Trailhead
Trail
Red Hill Area
Land Status
BLM
Private
State
State, County, City, Wildlife & Rec
US Forest Service
0.75
0.375
0
0.75
Miles

APPENDIX B
INTERDISCIPLINARY TEAM NEPA CHECKLIST

Project Title: Cedar City Recreation Trails

NEPA Log Number: DOI-BLM-UT-C010-2013-0015-EA

File/Serial Number:

Project Leader: M. Owens

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

NP = not present in the area impacted by the proposed or alternative actions
NI = present, but not affected to a degree that detailed analysis is required
PI = present with potential for relevant impact that need to be analyzed in detail in the EA
NC = (DNAs only) actions and impacts not changed from those disclosed in the existing NEPA documents cited in Section D of the DNA form. The Rationale column may include NI and NP discussions.

RESOURCES AND ISSUES CONSIDERED:

Determination	Resource	Rationale for Determination	Signature	Date
NI	Air Quality	Area is currently in attainment with NAAQS or is unclassified. Nothing in the proposal would alter those ratings.	C. Egerton	01/15/13
NP	Areas of Critical Environmental Concern	None within Field Office boundaries.	M. Owens	01/17/13
PI	Cultural Resources	A Class III inventory would need to take place on these trails prior to authorization. If historic properties are identified during these inventories the trail may need to be moved to avoid any potential adverse effects. If no historic properties are identified or no adverse effects to historic properties are identified than this determination would be changed to an NI.	N. Thomas	1/28/13
NI	Greenhouse Gas Emissions	Negligible amounts of GHG emissions as much of the work would be hiking and hand tool work.	C. Egerton	01/15/13
NI	Environmental Justice	There would be no low income or minority populations disproportionately impacted by the proposed action.	M. Owens	1/28/13
NP	Farmlands (Prime or Unique)	None present based on review of maps, knowledge of area and lack of irrigation water supplied.	C. Egerton	01/15/13
PI	Fish and Wildlife	Team should have a discussion about seasonal restrictions on crucial winter ranges and the relationship of the proposed designations with the proposed TMP, and the travel limitation in CBGA. Some trails are within the spatial buffers for raptor nests. Would need a site specific analysis per Raptor BMPs to determine if relocation of trails is necessary. May need additional raptor surveys. BMPs state: "Development of biking trails near raptor nesting areas would be avoided."	R. Bonebrake	18 Jan 2013
NI	Floodplains	The project area serves as headwaters to 100 year floodplains of Coal Creek, Cross Hollows and Parowan Creek. The proposed trails are far enough removed from the trails that the proposal conforms to EO #11988. Care should be exercised in construction of trails to preserve as much protective	C. Egerton	01/15/13

Determination	Resource	Rationale for Determination	Signature	Date
		vegetation as possible and thus minimize erosion.		
NI	Fuels/Fire Management	Although the proposed action would not directly impact fuels, parts of most of the proposed trails have had fuels treatments occur near them and may need additional areas treated or maintenance in the future to maintain the work that has already been done. Increasing human activity also increases the possibility of human caused fires in these areas.	M. Mendenhall	1/16/14
PI/NI	Geology / Mineral Resources/Energy Production	The only known mineral resources present in the project area are deposits of gypsum in the Red Hills trail section. Portions of the Red Hills proposed action are coincident with unpatented mining claims on which there is no current existing or proposed surface disturbing authorizations but have been mined in the past for agricultural gypsum and as a sculpting material in the form of alabaster. The lands within all four trails sections are prospectively valuable for oil and gas resources. As there are no minerals-related authorizations in place, there are no direct impacts; however, should a proposal be received, the presence of the trails, to the extent they were coincident with the authorization area, would be a negative impact, as they would be incompatible uses.	E. Ginouves	12/18/12
PI	Hydrologic Conditions	Hydrologic conditions are extremely variable in the three focus areas, with naturally occurring erosion on steeper areas lacking protective ground cover. Reclaiming and reconstructing portions of the C Trail spur should reduce erosiveness of the trail. Constructing new trails in accordance with IMBA guidelines would further minimize impacts. EA would attempt to quantify new disturbances for disclosure purposes.	C. Egerton	01/15/13
NI	Invasive Species/Noxious Weeds	There may be some minor issues with invasive, non-natives and very rare instances of noxious weeds. BLM currently controls noxious weeds using contractors, the counties and resource staff and any new occurrences should be easily handled by BLM resource staff and hand tools. Agree with Jeff under "Vegetation" that areas wider than facilities or single track should be reclaimed / reseeded to help prevent weeds. Apply all applicable weed prevention measures from Appendix C of the programmatic weed EA. I would either attach to EA or include in Design Features.	C. Egerton	01/15/13
NI	Lands/Access	The C Trail spur crosses lands withdrawn or classified for protection of the Greens Lake Watershed (UTU-024105). This restricts the disposal of lands within the area and uses which would negatively impact the watershed. The proposed trail if built as described in the proposed action to reduce erosion would be expected to have negligible impact to the watershed and could be allowed. The Red Hill trails would have no impact to the Lands/Access resource as long as existing rights are honored. For easements across private lands it would likely be quicker and less costly for the City to purchase and manage those easements; however BLM would have less control over management of those easements. If the City holds the easements it may be beneficial to enter into an agreement with the City so access for the trail system is maintained.	B. Johnson	1/25/13

Determi-nation	Resource	Rationale for Determination	Signature	Date
NI	Livestock Grazing	The Majority of trails is not within active grazing allotments and would have no impact on livestock grazing. Portions of the C Trail, "P" Hill, and Penstock trails are within active grazing allotments. It is expected that the features designed, removed, or reconstructed on the new and existing trails and trailheads would have slight to no impact on livestock grazing. The disturbance from creating, enhancing, and improving the trails would be minimal and areas where available forage is removed or disturbed adjacent to the trails and trailheads would be re-vegetated.	J. Reese	01/28/13
PI	Migratory Birds	A variety of migratory birds utilize the habitats associated with the trails.	C. Pontarolo	1/30/13
NI	Native American Religious Concerns	Consultation with the Paiute Indian Tribe of Utah took place on January 31, 2013. The Tribe did not have any objections to this event moving forward. The Tribe would like an opportunity to name some of the trails.	N. Thomas	2/5/13
NI	Paleontology	The surficial geology of the areas of the proposed action include Mesozoic-age sedimentary formations which have either a moderate or unknown potential (Class 3 using the Bureau's Potential Fossil Yield Classification System) for vertebrate fossils or scientifically significant invertebrate fossils. The very limited nature of any surface disturbances associated with the proposed action make impact of any fossils unlikely and it would be reasonable to proceed without any specific mitigation measures.	E. Ginouves	12/18/12
NI	Rangeland Health Standards	The new and existing trails are not expected to impact the Rangeland Health Standards and Guidelines due to the small size of disturbance (new trails and trailheads) and the already existing disturbance within the area (existing trails and trailheads).	J. Reese	01/28/13
PI	Recreation	The three focus areas in the proposed action are within close proximity to Cedar City. The areas are currently seeing high levels of recreational use and with those uses generating unauthorized/social trails. The bulk of the use in the areas is mostly comprised of hiking/jogging, mountain biking, equestrian, and OHV. The designations and improvements with the trails would lead to higher use levels and would have positive impacts to the recreation resource in the Cedar City front country.	M. Owens	1/16/13
PI	Socio-Economics	Cedar City would benefit from having more outdoor recreational opportunities close to the community. There are many businesses that rely on income generated from outdoor recreation related tourism. In addition, those businesses that provide food and lodging to visitors would also benefit if more mountain bikers were attracted to Cedar City.	M. Owens	1/29/13
PI	Soils	See hydrology. EA would combine.	C. Egerton	01/15/13
NP	Special Status Plant Species	There are no Special Status Plant occurrences documented within the project area. The soils, geology, and habitats are not known to support populations.	C. Pontarolo	1/30/13
PI	Special Status Animal Species	Utah prairie dog surveys would be required for portions of the proposal. A variety of Special Status raptors may occur within the	R. Bonebrake	18 Jan 2013 1-30-13

Determination	Resource	Rationale for Determination	Signature	Date
		project area including burrowing owl, golden eagle, bald eagle, peregrine falcon, and northern goshawk. Impacts to nesting raptor nests would be managed in accordance with Utah Raptor BMPs and analyzed in the EA. Refer to TECS analysis in the EA.	C. Pontarolo	
NI	Wastes (hazardous or solid)	There are currently no known waste issues within the proposal area. The proposal is not anticipated to increase any potential waste impacts than currently demonstrated on any public land.	Randy Peterson RMT	12/31/13
NP	Water Resources/Quality (drinking/surface/ground)	No known waters in close proximity to any of the trails.	C. Egerton CC	01/15/13
PI/NI	Wetlands/Riparian Zones	The Project Area includes portions Parowan Canyon, Fiddlers Canyon, and Coal Creek which are associated with riparian zones. In order to alleviate potential impacts, trail routes should follow previously disturbed areas and avoid stream crossings where possible. Deciduous riparian vegetation (i.e. cottonwood/willow) would not be removed unless absolutely necessary.	A. Stephens	01/28/13
NP	Wild and Scenic Rivers	None within Field Office boundaries.	M. Owens	1/28/13
NP	Wilderness/WSA	The proposed action is not within or near Wilderness or Wilderness Study Area	M. Owens	1/28/13
NI	Woodland / Forestry	Some trees might be removed, but project is not expected to impact woodland resources due to the size of the project.	J. Sathe	1/28/13
PI	Vegetation	The disturbance of vegetation is expected to occur while creating and improving these new and existing trails and trailheads. Machinery may be used to create and install improvements in and on the edges of new and existing trails and trailheads, causing vegetation disturbances. Areas affected by vegetation removal and disturbance would need to be reclaimed with the appropriate seed mix to ensure that invasive species establishment is limited within the area.	J. Reese	01/28/13
NI	Visual Resources	The three focus areas in the proposed action are in VRM Classes IV and II. Portions of the "C" Trail area and The Red Hill area have Class II VRM. All construction would meet the objectives of VRM class II, and a Contrast Rating Analysis would be conducted after trail layout to determine if mitigation would need to be implemented to meet the objectives. The Contrast Rating would be conducted to ensure all landscape modifications and trail construction would not change the surrounding landscape enough to conflict with the objectives of VRM Class II. The trails primarily go through areas that are heavily vegetated with pinion and juniper, which create a uniform color and texture. Through proper survey and design of the trails, the impacts to the visual resource would be kept to a minimum.	M. Owens	3/12/13
NP	Wild Horses and Burros	Projects are outside any wild horse herd areas (HA) or herd management areas (HMA).	C. Hunter	3/15/13
NP	Lands with Wilderness Characteristics	The Red Hill Area: • UT-C010-127 was inventoried, and the unit was determined not to have wilderness character. This determination was due to the lack of naturalness and the lack of an opportunity for solitude or a	M. Owens	2/19/2014

Determi-nation	Resource	Rationale for Determination	Signature	Date
		primitive and unconfined type of recreation. The Parowan Area: • UT-C010-136 was inventoried, and the unit was determined not to have wilderness character. This determination was due to the lack of an opportunity for solitude or a primitive and unconfined type of recreation. • UT-C010-128 was inventoried, and the unit was determined not to have wilderness character. This determination was due to the lack of an opportunity for solitude or a primitive and unconfined type of recreation.		

FINAL REVIEW:

Reviewer Title	Signature	Date	Comments
Environmental Coordinator	Gina Greenwood	5/26/14	
Authorized Officer	Elizabeth R Burghardt	5/16/14	

APPENDIX C
DESIGN FEATURES

SKILLS PARK

The skills parks, also known as challenge parks, would be fenced off with post and pole with an entrance that prohibits motorized use. Within this area there would be an area that consists of multiple technical obstacles and features such as: bridge ladders, teeter totters, balance beams, jumps, berms, etc. (Appendix A - See Map 1.2)

1- Skills parks would be built in areas where bike trails are prevalent, near trailheads, or in another park area.

2- If possible, skills parks would be built in areas where a water source is present to help maintain the pump-track features.

3- The park would be delineated with a post and pole fence with appropriate access.

4- The park would include optional lines for all levels of riders.

5- Features that are low-maintenance would be preferred (e.g. rounded rollers last a long time with no real maintenance vs. tabletop jumps).

TRAILHEADS/ACCESS

All trailheads may be constructed where feasible with: a road base type material or pavement, post and pole fence or boulders with controlled access to delineate parking, a kiosk, shade structure, fire rings, grills, picnic table, drinking water, and restroom.

TRAILS

New trail proposals and unauthorized trails within the three focus areas would be analyzed to determine if they meet the purpose and need statement and adhere to the guidelines identified in this EA. If the trails meet the identified criteria they may be constructed or adopted into the trail network. If the trails do not meet the criteria then they may be modified and rerouted to meet the guidelines identified in this EA.

The operation of heavy equipment such as a mini excavator or trail dozer would be used in the construction of the skills park, and may be needed in the reconstruction of the existing trails or construction of new trails. Hand tools would be the preferred method of trail construction and maintenance.

TRAIL AND TRAILHEAD CONSTRUCTION

1- All existing trails would be subject to re-route construction where needed after being surveyed and designed to meet the BLM and IMBA Trails Solutions guidelines. There may be some trails that do not meet the guidelines due to topography; however, these trails would be built in a sustainable manner. The purpose of the construction is to create sustainable trails that would help prevent

purpose of the construction is to create sustainable trails that would help prevent erosion, trail braiding, and unmaintained feature hazards. When reroutes are constructed the old routes would be closed and rehabilitated with a suitable seed mix to help control invasive weeds and provide soil stabilization.

2- Vegetation removal would be kept to a minimum when constructing and installing the trails and technical trail features. Minor trimming of shrubs and trees would occur on the trails to improve the tread, trail corridor, and to increase safety. The corridors affected by vegetation removal would be reclaimed with the appropriate seeding to ensure that invasive species establishment is reduced in the areas while providing for soil stabilization. When reroutes are constructed the old routes would be closed and rehabilitated with a suitable seed mix to help control invasive weeds.

3- All trails would be maintained in accordance with the maintenance plan that identifies marking/signing trails, monitoring and assessing trails, trail repair, and how to address newly discovered unauthorized trails, etc. (See Maintenance Plan, Appendix F)

4- Before construction, all trails would have wildlife and cultural clearances. If needed, the trails would be modified to avoid impacts to wildlife and cultural resources.

5- If trail design incorporates private land, then an easement would be obtained prior to trail construction.

6- All future trails within the three identified areas would be built to meet the guidelines illustrated in IMBA's manuals. The trails would be constructed in a fashion that would prevent fall-line type trails in order to minimize erosion.
   a. All trail construction and corridors would be built in accordance with section six of IMBA Trails Solutions Guidelines. This includes switchbacks, insloped turns, bench cuts, corridor heights and widths, etc.

   b. Grades would be controlled in a way that sustainable trails are created. IMBA's five essential elements of a sustainable trail would be implemented to control grade and prevent erosion. The five essential elements are as follows
      - The Half Rule: A trail's grade would not exceed half the grade of the sideslope that the trail traverses, with rare exceptions.
      - The Ten Percent Average Guideline: Trails would be constructed such that their *average* grade would not exceed ten percent.
      - Maximum Sustainable Trail Grade: Grade would rarely, if ever, exceed 15 to 20 percent and then only if local conditions (rock armor, etc.) would support the grade as sustainable.
      - Grade Reversals: Incorporate grade reversals (spot at which trail levels out then changes direction for 10 to 50 feet before rising

again) to force water to exit the trail at the lowest point before it can gain volume, momentum and erosive power.

- Outslopes: Trails would be constructed such that lower edge of tread would tilt slightly down and away from the high side, allowing water to sheet across and off the trail rather than down its center.

7- Mechanized equipment would need to be cleaned by power washing at an approved location before entering public lands. All equipment would need to be cleaned before leaving the project site if operating in areas infested with weeds. Where mechanized equipment results in a trail wider than desired, the excess width will be rehabilitated with an appropriate seed mix to create desired tread width.

8- Technical trail features would be built in a manner that allows for optional lines. The users would be able to choose to ride the feature or simply stay on the trail. The technical trail features would be constructed to meet the guidelines in the IMBA manuals.

9- South slopes would be utilized for trails when possible to avoid habitat degradation. The southern slopes generally produce less vegetation and tend to dry out much faster after storms, which lead to users not rutting up the trails.

10- Loamy type soils would be targeted for the area where the trails would be built. Silt, clay, and sand would be avoided when possible. Sensitive (fragile) soils would be avoided to the maximum extent possible.

11- Gates, walk-ins, cattle guard, etc. would be installed on new and existing fences.

APPLICABLE TO ALL CONSTRUCTION

General Wildlife

- A wildlife site clearance would be completed prior to authorization of any ground disturbing activities. Clearances would be completed by a BLM wildlife biologist or one approved by the BLM. Site specific mitigations may be developed and implemented to avoid and/or minimize disturbance to all USFWS listed species and/or BLM Special Status plants and animals.

Utah Prairie Dogs

- Proposed ground-disturbing activities within the USFWS's high intensity survey area for Utah prairie dogs would require that active season surveys be completed within suitable habitat prior to construction activities in accordance with established USFWS protocols.

- Mapped Utah prairie dog habitat would be avoided by project features through the design and implementation phase for each trail area if such habitat is identified during USFWS's protocol level surveys.

- All Project employees would be informed of the occurrence of the Utah prairie dog in the general area, and of the threatened status of the species. They shall be advised as to the definition of "take", and the potential penalties (up to $200,000 in fines and one year in prison) for taking a species listed under the ESA. Project personnel would not be permitted to have firearms or pets in their possession while on the Project site. The rules on firearms and pets would be explained to all personnel involved with the Project.

- If a dead or injured Utah prairie dog is located, initial notification must be made to the Service's Division of Law Enforcement, Salt Lake City, Utah, at telephone 801-975-3330, to the UDWR at telephone number 435-865-6100, and to the Authorized Officer at 435-865-3000. Instruction for proper handling and disposition of such specimens would be issued by the Division of Law Enforcement. Care must be taken in handling sick or injured animals to ensure effective treatment and care and in handling dead specimens to preserve biological material in the best possible state.

- BLM would re-initiate consultation with the USFWS if it is determined through site-specific coordination, USFWS protocol level surveys, etc. that impacts would vary from what has been consulted on.

Mexican Spotted Owl

- Canyon habitats would be assessed to determine if they meet the primary constituent elements for canyon habitats prior to ground-disturbing activities. If habitat requirements are met, then the BLM or UDWR would conduct Mexican spotted owl surveys in accordance with USFWS protocols. If surveys conclude that Mexican spotted owls occupy the canyons, PACs would be established in coordination with USFWS and Section 7 consultation would be re-initiated with the USFWS.

Big Game

- Minimize ground-disturbing activities within crucial mule deer winter habitat to avoid critical life stages December 1st through April 15th.

Migratory Birds and Raptors

- Any raptor nest found in proximity to an area targeted for disturbance (i.e. trailhead, trail, skills park) would be protected and managed according to Best Management Practices for Raptors and Their Associated Habitats in Utah (BLM, August 2006), Utah Field Office Guidelines for Raptor Protection from Human and Land Use Disturbances (U.S. Fish and Wildlife Service, Utah Field Office,

Salt Lake City, Jan. 2002). Raptor nests would be protected through incorporation of spatial and seasonal buffers and additional conservation measures identified through the Site Specific Analysis worksheets would be identified in coordination with the ID Team.

- Minimize construction impacts during the migratory bird nesting season from April 1st – July 15th to protect migratory bird breeding and nesting.

Cultural Resources

An intensive/pedestrian Class III inventory would be conducted prior to all potentially ground disturbing trail projects. The purpose of these inventories would be to locate and record all cultural resources within the project area. An evaluation of significance or eligibility to the National Register of Historic Places would occur at each site. If a significant site(s) are located within the project area, the project would be redesigned to avoid an adverse effect to the site. If avoidance of a significant site is not feasible, the trail project would be discontinued or other mitigation measures would be conducted to prevent or minimize the effects to this site.

APPENDIX D
SOIL DISTURBANCE TABLES

A. "C" Trail to Shurtz Canyon Area (assumes 30 miles of trails)

	Estimated Ground Disturbance							
	Private				Public			
	Existing		New		Existing		New	
Facility	Acres	Miles	Acres	Miles	Acres	Miles	Acres	Miles
"C" Trail Skills Park							1.50	
"C" Lower End T.H.	0.25		0.12					
Shurtz Canyon T. H.							0.42	
Subdivision T. H.							0.44	
Green Lakes Dr. T.H.							0.50	
"C" Technical Trail						1.75		
Subtotals	**0.25**		**0.12**			**1.75**	**2.86**	
Existing Trails						1.75		
New Trails Proposed (assumes 30 total trail miles in Area								**28.25**

B. Parowan Front Area (assumes 20 miles of trails)

Facility	Estimated Ground Disturbance							
	Private				Public			
	Existing		New		Existing		New	
	Acres	Miles	Acres	Miles	Acres	Miles	Acres	Miles
Worth Orton T. H.	0.30							
Heritage Park T. H.	N/A							
Worth Orton Trail						1.6		
"P" Trail								2.0
Penstock Trail								2.0
Subtotals	**0.30**					**1.6**		**4.0**
Other New Trails Proposed (assumes 20 total trail miles In this Area								**16.0**

C. Red Hills Area (assumes 25 miles of trails)

Facility	Estimated Ground Disturbance							
	Private				Public			
	Existing		New		Existing		New	
	Acres	Miles	Acres	Miles	Acres	Miles	Acres	Miles
Fiddler's Canyon T.H.							1.0	
Razorback T. H.	0.12		0.17					
Red Hill T. H.	0.47		0.25					
Thunderbird Gardens T. H.			0.67					
Red Hills Trail						1.50		
Salt Creek Trail		0.3				1.20		
Thunderbird Gardens ATV						2.75		
Razorback Trail		1.35				0.25		
Toboggan Run Trail						0.30		
Fiddler's Canyon Trail						1.45		
Subtotals	**0.59**	**1.65**	**1.09**			**7.45**	**1.0**	
New Trails Proposed (assumes 25 total trail miles in the Area)								**17.55**

TOTALS SUMMARY

Area	Private Land				Public Land			
	Existing		New		Existing		New	
	Acres	Miles	Acres	Miles	Acres	Miles	Acres	Miles
"C" Trail to Shurtz Canyon	0.25	--	0.12	--	--	1.75*	2.86	29.13**
Parowan Front	0.30	--	--	--	--	1.60	--	20.00
Red Hills	0.59	1.65	1.09	--	--	7.45	1.0	17.55
TOTALS	1.14	1.65	1.21	0.00	--	10.8	3.86	66.7†
ACREAGE TOTALS	2.79		1.21		1.96		15.98	

* Approx. 50% of "C" Technical Trail's 1.75 mi. (0.875 mi) needs new disturbance reconstruction.

** Includes 0.875 miles of reconstruction

† 66.7 miles of trail x 1.5 foot tread width equals 12.12 acres.

APPENDIX E
ECOLOGICAL SITES

R047XB333 Upland Stony Loam (Pinyon- Utah Juniper)
The general view of this site is pinyon and juniper. The composition by air-dry weight is approximately 55 percent perennial grasses, 10 percent forbs, 35 percent shrubs, and 15 percent trees.

As the ecological condition deteriorates, Indian ricegrass and the bluegrasses decrease, while the Utah juniper and pinyon increase. When the potential natural plant community is burned, juniper, pinyon, and sagebrush decrease and the grasses and bitterbrush increase. Pinyon and juniper would readily increase on this site and can completely dominate the site.

R028AY338 Upland Stony Loam (Pinyon- Utah Juniper)
The soils are deep and well drained. The dominant aspect of this plant community is Utah juniper-pinyon. The composition by air-dry weight is approximately 45 percent perennial grasses, 5 percent forbs, 50 percent shrubs and 10 percent trees.

As ecological condition deteriorates due to overgrazing, bluebunch wheatgrass, Indian ricegrass, bitterbrush, and mountain mahogany decrease, while juniper, pinyon, big sagebrush and low rabbitbrush increase. When the potential natural plant community is burned, pinyon, juniper, big sagebrush, and bitterbrush decrease while low rabbitbrush, serviceberry and Sandberg bluegrass increase. Cheatgrass, Russian thistle and annual forbs are most likely to invade this site.

APPENDIX F
MAINTENANCE PLA N

Trail Maintenance and Assessment Plan

"All trails benefit from routine maintenance. Foresight, care, and hard work –everything that you put into building a new trail –should go into maintaining the existing trails." IMBA

1- Assessing the Trail

a. Step 1- Print out Trail Assessment and Repair Sheet. Trail assessment sheets give you a means of identifying maintenance projects, their locations, the nature of the problems, and a strategy for resolving each situation. List tools needed and the amount of people needed for the repair. The sheet needs to be filled out well enough that you could give it to a volunteer group to complete the work in the proper area.

b. Step 2- Walk or ride the trail. Whenever you find a spot that needs repair, pull out the trail assessment sheet, record how far the site is from the trailhead or major intersection (use cyclocomputer or UTM), the nature of the problem, and its severity.

c. Step 3- Save your copies of the assessment so that there is a working log and track record for each trail.

d. Step 4- Assign work lead and work crew, know the UTM of the site, and answer these questions:

   1- What tools would we need?
   2- What is the problem?
   3- How should we go about repairing the problem?

2- What to look for during trail assessment…

Note Very first always look and make sure that the trail corridor is still passable and that the sightlines are acceptable. Scout the trail with an eye for unwieldy vegetation and tree branches in the trail corridor, trees that have fallen over and blocked the trail, loose rocks on the tread, and exposed roots that could pose danger to users.

1. In areas that are overgrown use lopper type equipment to prune the vegetation back. However, don't prune so far back that the riders drift away from the center of the tread. The fall is a great time to monitor a trail for vegetation overgrowth.

2. Downed trees can be hazardous especially after a wet winter. Best time to look at removing downed trees is during the spring before heavy use. However, downed logs can be a desired obstacle, so if the trail corridor allows for an optional line, then seize the opportunity.
3. Remove loose rocks and hazards from the tread. Some rocks that are in more technical areas can be left for the added challenge, but on the normal intermediate trails they should be cleared off. If bigger rocks are loosened out of the tread and a hole that presents a tripping hazard should be filled and compacted with moist dirt.
4. Examine the roots. Roots can pose an issue with erosion and safety. If the root is high enough off the ground and has daylight under it, then it should be removed due to a trip hazard. Roots that cross the trail perpendicular are not usually as big of an issue as roots running the length of the trail.

- **Major Problems**: Such as trail braiding, trail creep, washboards, and drainage issues –see IMBA Trail Solutions chapter 7 for solutions.
- **Technical Trail Features**: Use the same maintenance practices you would use on an exterior deck, staircase, or pedestrian bridge.
- **Inspection Intervals**: Inspect Technical Trail Features bi-weekly in the high-use season (April-Oct) and monthly in the winter season if weather permits. Trails should be assessed monthly during the high-use season, and maintenance concerns should be addressed and taken care of as soon as possible. If a trail or feature fails their inspection or assessment, then they need to be fixed or signed closed.

3- Placement of Signs

- Major trail junctions, road crossings, or every .25 mile with no junctions or crossings
- Consistency: Use the same type of signs and markings. If the trail is a blue, then be sure to be consistent with the signs color and difficulty.
- Trail Rating Signs: For initial rating have someone experienced with all levels of trails ride the trail and determine the rating. Sign the

4- Social Trials

- GPS the trail
- Figure out the purpose of trail
- Analyze it and decide if we should close it. If the problem of pioneering trails becomes substantial in the area, then take a zero tolerance approach and close all pioneered trails.

Trail Assessment and Repair Sheet

Site:	**UTM:**
Priority/ Timeframe:	**Crew Lead**

Problem: _____

_____

_____

_____

_____

Repair: _____

_____

_____

_____

_____

Sketch Existing Trail	**Sketch repair (restore outslope, create knick or rolling grade dip, reroute etc.)**

Crew:	**Tools:**

Appendix G
Wildlife Report

Bureau of Land Management
Cedar City Field Office

Technical Report for Special Status Species and Other Wildlife Species

Project Name and Environmental Assessment Number: Non-motorized Use Recreation Trails
Resources Analyzed: Fish & Wildlife (Big Game, Upland Game Birds, Special Status Species)
Date Finalized:
Prepared by Christine Pontarolo, Wildlife Biologist

Relationship to Planning:

- Endangered Species Act (ESA) of 1973 (as amended)
- Fish and Wildlife Conservation Act of 1980
- Sikes Act of 1974
- Executive Order 13186 (Migratory Bird Treaty Act)
- Executive Order 13443: Facilitation of Hunting Heritage and Wildlife Conservation
- 1962 Bald and Golden Eagle Protection Act
- Western Association of Fish and Wildlife Agencies Guidelines
    - Habitat Guidelines for Mule Deer Intermountain West Ecoregion (2009)
- BLM Manual 6840- Special Status Species Management
- Migratory Bird Treaty Act
- Utah Comprehensive Wildlife Conservation Strategy (CWCS)
- Utah Partners in Flight Avian Conservation Strategy Version 2.0.
- U.S. Fish and Wildlife Service Birds of Conservation Concern 2008
- IM 2008-050, Migratory Bird Treaty Act - Interim Management Guidance

BLM- MOU WO-230-2010-04
Promote the conservation of migratory birds; specifically, *to strengthen migratory bird conservation by identifying and implementing strategies that promote conservation and avoid or minimize adverse impacts on migratory birds through enhanced collaboration between the Parties, in coordination with state, tribal, and local governments.*

The Migratory Bird Treaty Act (16 U.S.C. §§ 703-712, July 3, 1918, as last amended in 1989) prohibits taking, killing, or possessing migratory birds including nests and eggs. In 2001, Executive Order 13186 was issued to outline responsibilities of federal agencies to protect migratory birds under the Migratory Bird Treaty Act (66 FR 3853-3856). 66 Fed. Reg. 3853, (January 17, 2001), directs agencies to take certain actions to further implement the migratory bird conventions, the Migratory Bird Treaty Act (MBTA), the Bald and Golden Eagle Protection Act (BGEPA) and other pertinent statutes. On January

11, 2001 President Clinton signed the Migratory Bird Executive Order. This executive order outlines the responsibilities of Federal agencies to protect migratory birds. A list of the migratory birds affected by the President's executive order is contained in 50 CFR 10.13. References to "species of concern" pertain to those species listed in the periodic report "Migratory Nongame Birds of Management Concern in the United States", priority migratory bird species as documented by established plans (such as Bird Conservation Regions in the North American Bird Conservation Initiative or Partners in Flight physiographic areas) and those species listed in 50 CFR 17.11.

Utah Comprehensive Wildlife Conservation Strategy (2005-2015)
To address wildlife species in the CWCS, UDWR adopted a three-tiered system that defines and prioritizes Utah's native animal species according to conservation need. Tier I includes federally listed species and species for which a Conservation Agreement has been completed and implemented. Tier II species include those listed on the Utah Species of Concern List under sole state authority. Tier III includes species that are of conservation concern because they are linked to an at-risk habitat, have suffered marked population declines, or there is little information available regarding the ecology or status of the species. The tiered ranking system provides a perspective for wildlife managers to prioritize conservation activities.

Coordinated Implementation Plan for Bird Conservation in Utah (2005)
The purpose of the Coordinated Implementation Plan for Bird Conservation in Utah was to develop coordinated habitat goals, objectives, and projects that addressed the conservation needs of all bird species in Utah and included the identification of important Bird Habitat Conservation Areas.

<u>Panguitch Lake Deer Herd Unit Management Plan</u>
Unit Management Goals
Maintain a healthy deer population with post season numbers that are in balance with available winter range. Cooperate with the various publics and agencies in managing deer to provide a diversity of deer hunting and viewing experiences.

<u>Zion Deer Herd Unit Management Plan</u>
Unit Management Goals
Maintain a healthy deer population with post-season numbers that are in balance with available winter range. A major proportion of this herd unit is on private land and herd size must be compatible with private land uses, particularly in such areas as Smith's Mesa, which has some dry land farming but also is important seasonal range for deer.

Cooperate with the public and land management agencies in managing deer to provide a diversity of deer hunting and viewing experiences.

Further Recommendations/ Conservation Measures:

Wildlife

General Wildlife

- A wildlife site clearance would be completed prior to authorization of any ground disturbing activities. Clearances would be completed by a BLM wildlife biologist or one approved by the BLM. Site specific mitigations may be developed and implemented to avoid and/or minimize disturbance to all USFWS listed species and/or BLM Special Status plants and animals.

Utah Prairie Dogs

- Proposed ground-disturbing activities within the USFWS's high intensity survey area for Utah prairie dogs would require that active season surveys be completed within suitable habitat prior to construction activities in accordance with established USFWS protocols.

- Mapped Utah prairie dog habitat would be avoided by project features through the design and implementation phase for each trail area if such habitat is identified during USFWS's protocol level surveys.

- All Project employees would be informed of the occurrence of the Utah prairie dog in the general area, and of the threatened status of the species. They shall be advised as to the definition of "take", and the potential penalties (up to $200,000 in fines and one year in prison) for taking a species listed under the ESA. Project personnel would not be permitted to have firearms or pets in their possession while on the Project site. The rules on firearms and pets will be explained to all personnel involved with the Project.

- If a dead or injured Utah prairie dog is located, initial notification must be made to the Service's Division of Law Enforcement, Salt Lake City, Utah, at telephone 801-975-3330, to the UDWR at telephone number 435-865-6100, and to the Authorized Officer at (435)865-3000. Instruction for proper handling and disposition of such specimens would be issued by the Division of Law Enforcement. Care must be taken in handling sick or injured animals to ensure effective treatment and care and in handling dead specimens to preserve biological material in the best possible state.

- BLM would re-initiate consultation with the USFWS if it is determined through site-specific coordination, USFWS protocol level surveys, etc. that impacts would vary from what has been consulted on.

Mexican Spotted Owl

- Canyon habitats would be assessed to determine if they meet the primary constituent elements for canyon habitats prior to ground-disturbing activities. If habitat requirements are met, then the BLM or UDWR would conduct Mexican spotted owl surveys in accordance with USFWS protocols. If surveys conclude that Mexican spotted owls occupy the canyons, PACs would be established in coordination with USFWS and Section 7 consultation would be re-initiated with the USFWS.

Big Game

- Minimize ground-disturbing activities within crucial mule deer winter habitat to avoid critical life stages December 1st through April 15th.

Migratory Birds and Raptors

- Any raptor nest found in proximity to an area targeted for disturbance (i.e. trailhead, trail, skills park) would be protected and managed according to Best Management Practices for Raptors and Their Associated Habitats in Utah (BLM, August 2006), Utah Field Office Guidelines for Raptor Protection from Human and Land Use Disturbances (U.S. Fish and Wildlife Service, Utah Field Office, Salt Lake City, Jan. 2002). Raptor nests would be protected through incorporation of spatial and seasonal buffers and additional conservation measures identified through the Site Specific Analysis worksheets would be identified in coordination with the ID Team.
- Minimize impacts during the migratory bird nesting season from April 1st – July 15th to protect migratory bird breeding and nesting.

Issues:

- Proposed trails may disrupt wildlife and impact wildlife habitat values.

Affected Environment

Fish and Wildlife (Including Big Game, Upland Game Birds, Special Status Species and Migratory Birds)

Upland Game Birds

Band-tailed Pigeon (*Patagioenas fasciata*): Band-tailed pigeons are migratory and primarily utilize coniferous forests. This species is a Tier III species as designated in the Comprehensive Wildlife Conservation Strategy (UDWR 2005). This species is fairly common in southern Utah and nests at mid-elevations. Ponderosa pine is utilized as primary breeding habitat and mixed conifer as secondary breeding habitat. Primary foods comprised include acorns, berries, pine buds, seeds, and needles. Insects, such as grasshoppers account for a small portion of the diet. Substantial and crucial, spring-early fall habitat has been identified by UDWR (date) within the Project Area; however the Project Area does not provide primary or secondary breeding habitat.

Specific threats identified in the Comprehensive Wildlife Conservation Strategy (UDWR 2005) include lack of abundance, distribution, and demographic information, degradation of suitable habitat, and unregulated hunting in parts of their range.

Big Game

The proposed trail areas are incorporated in two different Wildlife Management Units: The Parowan Front and Red Hill Areas are in the Panguitch WMU, and the "C" Trail to Shurtz Canyon is within the Zion WMU. The three trail areas occur within mule deer crucial winter habitat and elk substantial summer and winter habitat. Black bear yearlong crucial and substantial habitat also occurs.

Hunting Heritage

The Panguitch, and Zion WMUs provide a variety of hunting experiences, particularly for mule deer and elk.

The Panguitch WMU encompasses approximately 565,072 acres. Population objectives defined in the Panguitch Herd Unit Management Plan (2006) are as follows:

- Target winter herd size: A modeled winter population of 8,500 deer. This population objective remains for both the short-term (5-year life of this plan) and long term, barring significant changes in range conditions.

- Harvest: Antlerless harvest as needed to maintain stable herd size. Winter survival is highly dependent on snow accumulation on winter range on the west side of the unit.

- Herd Composition: Maintain a region wide three-year average post-season buck:doe ratio ranging from 15 to 20 bucks per 100 does.

The Zion WMU encompasses approximately 1,103,546 acres. Population objectives defined in the Zion Herd Unit Management Plan (2006) are as follows:

- Target winter herd size - A modeled winter population of 9,000 deer on the entire WMU. This population objective remains for both the short-term (5-year life of this plan) and long term, barring significant changes in range conditions.

- Herd Composition – Maintain a region wide three-year average post-season buck:doe ratio ranging from 15 to 20 bucks per 100 does.

The Proposed Action would not detract from the hunting opportunities within the Project Area and would provide non-motorized access, which may enhance hunting opportunities for hunters wanting the walk-in access experience.

Wildlife Species	Trail Area	Habitat Value	Acres within Trail Areas (BLM)	% of Total Habitat Affected by WMU	
				Panguitch Lake (565,072 acres)	Zion (1,103,546 acres)
Mule Deer	"C" Trail to Shurtz Canyon	Substantial Summer	76.18	0	0.014%
		Crucial Winter	5,298.30	0	0.94%
	Parowan Front	Substantial Summer	1,219.50	0.22%	0
		Crucial Winter	9,249.03	1.64%	0
	Red Hills[4]	Substantial Summer	51.36	0.01%	0
		Crucial Winter	3,840.62	0.68%	0
Elk	"C" Trail to Shurtz Canyon	Substantial Summer	924.19	0	0.16%
		Substantial Winter	4,016.65	0	0.71
	Parowan Front	Substantial Summer	1,399.60	0.25%	0
		Substantial Winter	3,522.26	0.62%	0
	Red Hills	Substantial Summer	0	0	0
		Substantial Winter	0	0	0
Black Bear	"C"Trail to Shurtz Canyoin	Substantial Yearlong	3,347.68		0.59%
		Crucial Yearlong	620.70		0.11%
	Parowan Front	Substantial Yearlong	6,972.28	1.23%	0
		Crucial Yearlong	1,966.66	0.35%	0
	Red Hills	Substantial Yearlong	2,619.76	0.46%	0
		Crucial Yearlong	43.18	0.01%	0

Special Status Species (U.S. Fish and Wildlife Service Listed and BLM/State Sensitive Species)

Federally Listed Threatened, Endangered, Candidate & Petitioned Species

The U.S. Fish and Wildlife Service maintains lists of federally listed and proposed endangered, threatened, and candidate species in Utah. The following Table summarizes those species that were on the U.S. Fish and Wildlife Service lists as checked on January 31, 2014 for Iron County.

[4] The Red Hill Area occurs within both the Panguitch WMU and Zion WMU; however, acres within the Zion WMU are 10.51 acres and was so minimal it was not conducive to breaking out.

Table - Status of Federally Listed Species.

Common Name	Scientific Name	Status	Habitat suitability or known occurrence of the species in or near Project Area.	Determination
California condor	*Gymnogyps californianus*	Endangered [5]	Suitable foraging habitat is present within the Project Area. The nearest known roost site is Kolob Reservoir near Zion National Park, which is 10 miles from the Project Area.	No Affect
Greater sage grouse	*Centrocercus urophasianus*	Candidate	The Project is not located within occupied sage grouse habitat (UDWR, March 2012).	Not Applicable
Least Chub	*Iotichthys phlegethontis*	Candidate[6]	No suitable habitat within the Project Area.	Not Applicable
Mexican spotted owl	*Strix occidentalis lucida*	Threatened	The Parowan Front, Red Hill, and "C" Trail to Shurtz Canyon Areas occur within MSO modeled habitat (1997 and 2000) in the Parowan Canyon, Fiddlers Canyon and Green Hollow areas. The modeled habitat within the Project Areas do not provide substantial canyon habitat to support nesting Mexican spotted owls. Habitats may provide foraging habitat; however, the nearest PAC is 6.14 miles south of the "C" Trail to Shurtz Canyon Area.	May Affect, Not likely to Adversely Affect
Southwest willow flycatcher	*Empidonzx traillii extimus*	Endangered	No suitable habitat within the Project Area.	No Affect
Utah prairie dog	*Cynomys parvidens*	Threatened	The Parowan Front, Red Hill, and "C" Trail to Shurtz Canyon Areas are all within the USFWS high intensity survey areas. Mapped habitat occurs within proximity to the "C" Trail to Shurtz Canyon, Parowan Front and Red Hill Areas.	May Affect, Not likely to Adversely Affect
Virgin River Chub	*Gila seminude*	Endangered	No suitable habitat within the Project Area.	No Affect
Western Yellow-billed Cuckoo	*Coccyzus americanus occcidentalis*	Threatened	This species inhabits riparian habitat with dense riparian vegetation including cottonwood with a developed canopy.	Not Applicable
Woundfin	*Plagopterus argentissiums*	Endangered	No suitable habitat within the Project Area.	No Affect

Utah Prairie Dog:

The Utah prairie dog was listed as an endangered species on June 4, 1973 (38 FR 14678), pursuant to the Endangered Species Conservation Act of 1969. The species' was downlisted to threatened in 1984 (49FR 22330). The Utah prairie dog's rangewide population has been stable to increasing over the last 30 years. Threats across the range of the Utah prairie dog include plague, urban expansion, over-grazing, cultivated agriculture, vegetation community changes, invasive plants, OHV and recreational uses,

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[5] This species is designated a non-essential, experimental population east of I-15 to 191, and south of I-70. Condors occurring outside the designated areas are protected as Endangered.

[2] The species is not present in this county. One or more hydrologic unit (8-digit HUC) in this county is occupied by the species in an adjacent county. Any water depletion from an occupied hydrologic unit may adversely affect this species.

[6] The species is not present in this county. One or more hydrologic unit (8-digit HUC) in this county is occupied by the species in an adjacent county. Any water depletion from an occupied hydrologic unit may adversely affect this species.

climate change, energy resource exploration and development, fire management, poaching, and predation. These issues can be reduced to two overriding concerns: permanent habitat loss and fragmentation (i.e. largely from commercial and residential development), and plague.

The Project Area is within West Desert Recovery Unit, which encompasses most of Iron County, southern Beaver County, and northern Washington County. A draft recovery plan was first written in 1979, and following several revisions, was formally approved in 1991 (USDI FWS 1991). Critical habitat has not been designated for this species. In 2012, a revision of the 1991 recovery plan was finalized with the purpose of guiding implementation of actions that would lead towards long-term survival and conservation of the Utah prairie dog. The revised recovery plan is available on USFWS website at: (http://ecos.fws.gov/docs/recovery_plan/1203012_UTPD_RevisedRecoveryPlan_Final.pdf.).

The Utah Prairie Dog Recovery Implementation Program put forth a white paper, *Population Structure for Utah Prairie Dog Recovery* (final draft March, 2013), presenting a framework for achieving a Utah prairie dog population structure that would set forth objectives, criteria, and actions for recovery. Within the West Desert Recovery Area, there are six Population Focus Areas; a portion of the Parowan Area is within the Parowan Valley/Buckhorn Population Focus Area.

Utah prairie dogs prefer grassland habitats with a good diversity of grasses, forbs, and few shrubs. Within the Project Area, sagebrush, pinyon pine and juniper woodlands, and mountain shrub communities are a dominant component of the Project Area. Small openings with grassland or sparsely vegetated habitats may exist within the Project Area, which may provide suitable habitat for Utah prairie dogs.

The following discussion provides information on Utah prairie dog mapped habitat within 0.5 miles of the "C" Trail to Shurtz Canyon, Red Hills, and Parowan Front Areas.

Table - Status of Utah prairie dog habitat within 0.5 miles of the Proposed Trail Areas

Trail Area	Colony ID	Summary of status based on Spring Count Data
"C" Trail to Shurtz	0103ep	Occupied
	0103ff	Unoccupied based on spring counts of zero since 2009.
	0112b	Occupied
	0122d	Occupied
Parowan Front	0107ab	Unoccupied based on spring counts of zero since 2008.
	0107ai	Occupied
	0107ba	Occupied
	0107t	Occupied; however, spring counts in 2012 and 2013 were at zero.
	0107y	Unoccupied based on springs counts of zero since 2005.
	0107z	Unoccupied based on spring counts of zero since 2006.
	0108a	Occupied
	0108b	Occupied
	0108c	Occupied
	0108f	Occupied
	0109q	Occupied

Mexican Spotted Owl:

The Mexican spotted owl was listed as a threatened species on April 15, 1993 (USFWS, 1993). A recovery plan was completed for the Mexican spotted owl in 1995 (USFWS, 1995) and a revised recovery plan was completed in September, 2012. Threats to Mexican spotted owls in the Colorado Plateau Recovery Unit include recreation, overgrazing, road development in canyons, catastrophic fire, timber harvest in upland forests, and oil, gas, and mining development (USFWS, 2007). Designated critical habitat was established for this species in 2001 and revised in 2004 (USFWS, 2004).

For canyon habitats, the primary constituent elements include one or more of the following attributes: (1) cooler and often more humid conditions than the surrounding area, (2) clumps or stringers of trees and/or canyon walls containing crevices, ledges, or caves, (3) high percentage of ground litter and woody debris, and (4) riparian or woody vegetation. The primary constituent elements related to forest structure include: (1) a range of tree species, (2) shade canopy created by the tree branches covering 40 percent or more of the ground, and (3) large dead trees with a trunk diameter of at least 12 inches (69 *Federal Register* 53181, August 31, 2004).

There is no critical habitat within the "C" Trail to Shurtz Canyon, Red Hills, or Parowan Front Areas. Mexican spotted owls have been seen outside of critical habitat and there is a 1995 observation of a single male owl in Parowan Canyon. Surveys were completed in Parowan Canyon in 1997, 1999 and 2000 and no detections were recorded. Habitat assessments were also completed in conjunction with the Parowan to Brian Head OHV trail within 0.5 miles of Highway 143 in association with that project.

BLM Sensitive Species

Based on habitat types, GAP Analysis (Utah Conservation Data Center), and professional knowledge, the area is likely to support populations of raptors, bats, and migratory birds (BLM Utah Sensitive Species List 2010).

Bald Eagles: Bald eagles primarily winter in southern Utah (Beaver County) and are associated with a variety of habitats for roosting and foraging. There are no known roost locations within the Project Area; however, bald eagles are likely to be observed from November through March.

Bats (Fringed myotis, big free-tailed, and Townsend's big-eared bats): Fringed myotis can be found in a variety of habitats, but are most often found near lowland riparian and water courses. Caves, mines, and buildings are often used for roosting and are sensitive to human disturbances, especially near maternity colonies. Townsend's big-eared bats can be found in a variety of habitat types, but are most often found near forested habitats. Caves, mines, and buildings are used for roosting and winter hibernation. Bats often forage around trees and in riparian areas due to the abundance of insects within these habitats. Primary prey species is comprised of flying insects, principally moths. There are no know roosts within the Project Area and project activities are expected to have negligible impacts to foraging bats or associated habitats so are not further discussed.

Ferruginous Hawk: The ferruginous hawk is a BLM Sensitive Species, Utah Partners in Flight Priority Species (Parrish et al. 2002), and Bird of Conservation Concern (USFWS 2008). The ferruginous hawk was designated as a Tier II species in the Comprehensive Wildlife Conservation Strategy (UDWR 2005). Primary breeding habitat is pinyon-juniper and secondary breeding habitat is shrubsteppe. Edges of pinyon pine-juniper woodlands, utility structures (transmission poles), cliffs, and isolated trees serve to provide nesting as well as perching structures for ferruginous hawk.

Habitat loss associated with destruction of preferred habitats due to chaining, timber harvest, fire management, and livestock grazing was recognized as a specific threat to this species in the Comprehensive Wildlife Conservation Strategy (UDWR 2005). Ferruginous hawks have been documented within the allotments.

A known ferruginous hawk nest is located within 0.33 miles northwest of the Parowan Front Area and an additional ferruginous hawk nest was located in the Red Hills Area during raptor nest searches in 2013.

Golden Eagle: Golden eagles may be present within the Project Area. There are no known golden eagle nest sites within the Project Area.

Northern Goshawk: Nesting generally occurs in mid- to high-elevation (6,000 to 10,000 feet) sites in mature aspen or coniferous forest. Goshawks use these forest types even when there is substantial insect-related mortality in the overstory. In southern Utah, Engelmann spruce and subalpine fir cover types are used frequently for nesting.

Goshawks only moderately use ponderosa pine for nesting in Utah (Utah National Forests et al., 1998). Major prey includes rabbits, hares, squirrels, and birds. Goshawks have been known to use pinyon pine/juniper woodlands during winter.

Migratory Birds and Non-BLM Sensitive Raptors

The Project Area is primarily pinyon pine and juniper woodland with some sagebrush/mountain shrub communities. The Utah Partners in Flight Bird Conservation Plan identifies several bird species associated with each of these eco-types (Utah Partners in Flight Bird Conservation Plan, 2002) such as black-throated gray warbler, ferruginous hawk, gray vireo, and Virginia's warbler. The USFWS has identified Bird Conservation Regions throughout the United States (USFWS 2008). The Project Area is within Bird Conservation Region 16 (Southern Rockies/Colorado Plateau). Many of the species identified by USFWS as Birds of Conservation Concern within Region 16 are likely to occur within the Project Area based on habitat including ferruginous hawk, gray vireo, juniper titmouse, and pinyon jay.

There is a peregrine falcon eyrie less than 0.1 miles from the Red Hills Area. This is an alternate eyrie location that may be used; however, it is located on private lands. This eyrie is subject to a lot of human activity and traffic associated with Highway 40 (pers. comm. with Keith Day 2/11/13). Red-tailed hawk and long-eared owls may also occur in the Project Area. There are no known raptor nests within the Project Area.

Alternative A – Proposed Action

Direct and Indirect Impacts for All Areas

The Proposed Action would provide for a network of new and user-created trails within the "C" Trail to Shurtz Canyon, Parowan Front, and Red Hill Areas. To facilitate recreation use within these areas trails heads, skills parks, and signing and authorizing new and user-created trails would occur as defined in the Proposed Action.

Direct and indirect effects to wildlife resources would be expected to be similar within all three areas due to geographic proximity and similar wildlife habitat values and uses. Improving recreational facilities and providing opportunities within these areas would result in increased human/wildlife interactions. Resident wildlife within these areas is already pre-conditioned to an extent to the existing activity that is occurring along the user-created trails; however, improvements to these areas and increased public awareness that these trails are available to the public for recreational purposes would likely result in increased visitor traffic and human/wildlife interaction. Recreational use within these areas may disrupt wildlife behaviors associated with breeding, nesting, feeding, or raising of young. It would be expected that some wildlife would be more sensitive to disruption than others and may avoid the area altogether while other wildlife may be more adaptable to the disturbance, which may cause shifts in associated species in the areas over time. Disturbances to wildlife would be further minimized through a user-education based experience. The BLM would partner with UDWR to promote user awareness about the

wildlife habitats that are traversed by the Trail Areas and encourage users to be mindful of the wildlife and other important resources that use these areas.

Construction of skills parks, trailheads, and trails would result in temporary disturbances to a variety of wildlife within the Project Area. Increased noise and human activity associated with construction activities would lead to short-term displacement and disruption of wildlife for the duration that activities are occurring. Wildlife may avoid the area during intensive construction; however, would be expected to resume use of the Project Area once construction activities are completed. Direct impacts associated with construction activities may occur and would be reduced through the incorporation of Design Features. Design Features would provide for wildlife clearances prior to construction to identify sensitive wildlife and avoidance of important seasons, which would effectively minimize impacts.

Mexican spotted owl modeled habitat occurs within all three areas. For the majority of the areas habitat does not provide the primary constituent elements for canyon habitats, except for the Parowan Front Area. There are no impacts to Mexican spotted owls anticipated at this time, as there are no PACs or critical habitat and no breeding owls have been detected in past monitoring efforts. There are some canyon habitats that have not been assessed or monitored for Mexican spotted owls. These habitats would be assessed to determine if they provide the primary constituent elements for canyon habitats and protocol level surveys would be completed if it is determined that habitats are suitable for Mexican spotted owl occupancy prior to design and construction of any trails in these types of habitats. The following Design Features would ensure that impacts to Mexican spotted owls and their habitats are minimized should they occur:

> *Trails within canyon habitat in the Parowan Front Area would be assessed for potential Mexican spotted owl habitat prior to trail construction. Canyon habitats would be assessed to determine if they meet the primary constituent elements for canyon habitats prior to ground-disturbing activities. If habitat requirements are met, then the BLM or UDWR would conduct Mexican spotted owl surveys in accordance with USFWS protocols. If surveys conclude that Mexican spotted owls occupy the canyons, PACs would be established in coordination with USFWS and Section 7 consultation would be re-initiated with the USFWS.*

"C" Trail to Shurtz Canyon Area:

The "C" Trail to Shurtz Canyon Area would result in construction of a skills park, the "C" Trail Bottom Trailhead, Shurtz Canyon Trailhead, and the Southern View Subdivision Trailhead. User-created trails (Trail One) is approximately 1.75 miles in length and is an existing trail that would require improvements to features and the trail to ensure that it is sustainable for long-term use.

Utah prairie dog colonies within 0.5 miles of the "C" Trail to Shurtz Canyon Area include colonies 0103ep, 0103ff, 0112b, and 0122d as identified in the Table - Status of

Utah prairie dog habitat within 0.5 miles of the Proposed Trail Areas. Impacts to Utah prairie dogs and their associated habitats would be minimized through implementation of the following Design Feature:

> *Proposed ground-disturbing activities within the USFWS's high intensity survey area for Utah prairie dogs would require that active season surveys be completed within suitable habitat prior to construction activities in accordance with established protocols.*

Due to the proximity of mapped habitat to the "C" Trail to Shurtz Canyon Area impacts to Utah prairie dogs are expected to be minimal; however, consultation with USFWS would be re-initiated if Utah prairie dogs surveys result in impacts beyond what was anticipated during design and implementation of trailheads, skills park, user-created trails or new trails. The following Design Feature would ensure that Utah prairie dog mapped habitat would be avoided through project design and implementation.

> *Mapped Utah prairie dog habitat would be avoided by project features through the design and implementation phase for each trail area if such habitat is identified during USFWS's protocol level surveys.*

Thresholds established in the "C" Trail to Shurtz Canyon Area for potential new trail designations would be 20-30 miles. Thirty miles would be the upper limit of trail designations that may be identified in this area, which would equate to a total of 3.64 acres of potential disturbance. In terms of wildlife habitat values impacted, this would result in a direct disturbance to approximately 3.64 acres of crucial mule deer winter range, migratory bird, and raptor habitat. Impacts to wildlife habitats would be minimized through implementation of the Design Features set forth under Trail Construction as identified in the Proposed Action, specifically Trail Construction bullet number 2, which states:

> *Vegetation removal would be kept to a minimum when constructing and installing the trails and technical trail features. Minor trimming of brush and trees would occur on the trails to improve the tread, trail corridor, and to increase safety. The corridors affected by vegetation removal would need to be reclaimed with the appropriate seeding to ensure that invasive species establishment is reduced in the areas.*

This Design Feature and others as identified in the Proposed Action would preserve much of the natural state of the vegetation communities, which would maintain wildlife habitat values that are important to mule deer, migratory birds, and raptors within the Project Area.

In addition, impacts on mule deer crucial winter range would be further minimized by incorporation of the Design Feature that would minimize construction related activities from December 1st through April 15th when mule deer impacts would be the greatest. In addition, personal communication with UDWR (Rhett Boswell January 15, 2014), it was

acknowledged that UDWR is in support of non-motorized trails to enhance use of public lands and educational opportunities in this area. Crucial winter range within the "C" Trail to Shurtz Canyon area comprises less than 1% of the total available habitat within the WMU. Mule deer winter use in this area is high due to limited habitat availability and pressures associated with proximity of this area to Cedar City and I-15; however, disturbances to mule deer are not anticipated to result in large-scale displacement or disruption due to the low impact type of recreational activities that the trails would promote. In addition, the BLM and UDWR would partner to implement a user-education program for these areas.

A variety of raptors and migratory birds are expected to utilize habitats associated with the "C" Trail to Shurtz Canyon Area. Wildlife clearances, including raptor nest searches would be completed in advance of new trail construction. Active raptor nests would be managed in accordance with the following Design Features:

> *Any raptor nest found in proximity to an area targeted for disturbance (i.e. trailhead, trail, skills park) would be protected and managed according to Best Management Practices for Raptors and Their Associated Habitats in Utah (BLM, August 2006), Utah Field Office Guidelines for Raptor Protection from Human and Land Use Disturbances (U.S. Fish and Wildlife Service, Utah Field Office, Salt Lake City, Jan. 2002). Raptor nests would be protected through incorporation of spatial and seasonal buffers and additional conservation measures identified through the Site Specific Analysis worksheets would be identified in coordination with the ID Team.*

Minimizing disturbance to nesting raptors and implementing appropriate seasonal and spatial buffers would effectively reduce the impact of the Proposed Action on raptors. Additional protections to preserve raptor nesting habitat and minimize future disturbances would be worked out through the Site Specific Analysis worksheets to ensure that trails are constructed in a manner that promotes the wildlife values as well. Bald eagles are expected to use the area primarily from November 1st through March 15th. There are no bald eagle roost sites and eagle use would be associated with foraging activities. Golden eagles are year-round residents. There are no known golden eagle nests within 0.5 miles of the area; however, eagles may be observed foraging in the area throughout the year.

A variety of migratory birds are expected to utilize the area. Direct impacts to migratory birds would be incorporated through implementation of Design Features that would minimize construction activities during the breeding and nesting season. In addition, vegetation removal would be kept to a minimum as mentioned above, which would further minimize impacts to nesting migratory birds and preserve their habitat minimizing fragmentation. There may be some impacts to avian species that are not accustomed to increased human disturbances, which may cause a shift in avian species that are more tolerant of disturbance.

Skills Park

The proposed skills park is located within the USFWS high intensity survey area for Utah prairie dogs. The nearest mapped Utah prairie dog habitat is 0.23 miles (unoccupied) and 0.25 miles (nearest occupied) from the skills park. The skills park would not result in direct impacts to Utah prairie dogs and associated habitats; however, increased visitor use along access roads getting to the facilities may increase the potential for disturbances. The nearest mapped Utah prairie dog habitat is located on private lands. This area is unoccupied and is immediately adjacent to an existing gravel road that provides access to the current trailhead and the proposed skills park. Completing USFWS protocol level surveys prior to ground disturbing activities would minimize potential for disturbing Utah prairie dogs and associated habitat.

The proposed skills park would result in the loss of 1.5 acres of mule deer winter range in this area; however, it is located in an area that has existing disturbances and is in close proximity to a housing development, roads, and retention dams. Human disturbances in this area are high due to the proximity to Cedar City and the existing East Bench Trail. The skills park would be fenced with wood post and pole construction, which may preclude mule deer from utilizing the 1.5 acre area.

There are no other special status wildlife species that occur within this area; however, wildlife clearances would be complete prior to construction.

Trailheads

The "C" Trail Bottom, Southern View and Shurtz Canyon trailheads are all within the USFW's high intensity survey area for Utah prairie dogs. For the "C" Trail Bottom trailhead is an existing trailhead; mapped Utah prairie dog habitat occurs immediately adjacent to the dirt access road on private land and is approximately 0.16 miles from the existing trailhead parking area. The Utah prairie dog habitat in this area is currently unoccupied. Habitat surrounding the existing trailhead and access road consists of rabbitbrush, sagebrush, and scattered juniper. There is no direct disturbance anticipated with the "C" Trail Bottom trailhead if it were to be expanded in the future on Utah prairie dogs or associated habitats since the nearest colony is 0.16 miles from the trailhead and it has had a spring count of zero since 2000. The "C" Lower End Trailhead is 0.25 acres of existing disturbance and 0.12 acres of new disturbance within mule deer winter range.

The Southern View trailhead is 1.21 miles from the nearest mapped Utah prairie dog habitat and is near the Southern View subdivision. The Southern View trailhead is not expected to impact Utah prairie dogs or associated habitats due to distance from the nearest known occupied colony. Suitable habitat would be surveyed in accordance with USFWS Utah prairie dog protocols. The Southern View trailhead is not expected to have direct impacts to Utah prairie dogs or their associated habitats due to distance from the nearest occupied habitat.

The Shurtz Canyon Trailhead is 0.23 miles from the nearest mapped Utah prairie dog habitat. This area is occupied by Utah prairie dogs and shows a relatively stable population over the past 10 years. Access to the trailhead would be via a main graveled

county road. Facilitating recreational opportunities in this area could increase traffic along this maintained county road to access the trailhead, which could increase potential for vehicle/Utah prairie dog collisions along the road. There are no metrics currently available to gauge the extent that the trailhead could increase traffic. The trailhead itself is not expected to have any direct impacts to Utah prairie dogs or their habitats due to the distance from this colony.

The proposed trailheads are within mule deer crucial winter range and would result in a loss of 0.86 acres of mule deer crucial winter range; however these areas are proposed in previously disturbed areas so impacts associated with habitat disturbance would be minimal.

KIOSKs would be placed at each trailhead and BLM would partner with Utah Division of Wildlife Resources to increase awareness of sensitive wildlife resource concerns in the area and use this as an opportunity to increase user education to minimize impacts to wildlife.

User-Created Trails

Trail One ("C" Trail Technical) currently traverses 1.75 miles within mule deer winter range through pinyon pine and juniper woodland/mountain shrub habitat, which equates to approximately 0.21 acres of direct loss of wildlife habitat values (i.e. forage and cover). The Proposed Action would ensure that existing trails are developed to meet BLM and IMBA Trails Solutions guidelines, which would minimize indirect disturbance to wildlife habitats resulting from impacts of trails that were not constructed in a sustainable manner and have caused erosion and habitat degradation concerns.

The habitats traversed by Trail One have potential for nesting raptors. There are no known raptor nests within the "C" Trail to Shurtz Canyon Area; however, there have been observations of bald eagle and Swainson's hawk. Goshawks may also be expected to utilize the pinyon pine and juniper habitats for foraging. Raptor nest searches were conducted in June 2013 within the vicinity of Trail One ("C" Trail Technical) and no raptor nests were located within 0.5 miles of this trail. Wildlife clearances and raptor nest searches would be completed during appropriate seasons prior to construction of trails in this area. The identification of a raptor nest would follow the BLM Best Management Practices for Raptors and Their Associated Habitats in Utah and a Site-Specific Analysis worksheet would be completed and evaluated by the team to design the trail in a manner that minimizes impacts to nesting raptors.

Proposed Trails

The exact locations of proposed new trails have not been identified at this stage; however the analysis focuses on the wildlife habitat values present within the "C" Trail to Shurtz Canyon Area. Proposed new trails would be constructed to BLM and IMBA Trail Solutions guidelines. The ID Team would work together to ensure that wildlife clearances are completed and that trail design and implementation would take into consideration wildlife habitat values and minimizing impacts to resources. A maximum of 28.25 miles of proposed new trails, which would result in a total of 3.64 acres of

disturbance to wildlife habitat values in the area. Incorporation of Design Features as previously discussed would minimize impacts to wildlife habitat values in the area.

Parowan Front Area:

Impacts to wildlife within the Parowan Front Area would be expected to be similar to those identified for the "C" Trial to Shurtz Canyon Area due to similar habitat values and wildlife species use. The following analysis focuses on the site-specific projects associated with the recreational facilities identified for the Parowan Front Area.

Trailheads

The Worth Orton and Heritage Park trailheads are within the USFWS's high intensity survey area for Utah prairie dogs. Utah prairie dog habitat is located 0.2 miles (nearest mapped habitat to Worth Orton) and 0.7 miles (nearest mapped habitat to Heritage Park) from the respective trailheads. All surveys would be completed prior to ground disturbing activities and if mapped habitat was found it would be avoided. The Worth Orton trailhead would be located within an existing parking area near the cemetery in an existing parking area. The Heritage Park trailhead is located on private lands within Parowan city and would be located on the east side of the Park. There would be no new impacts associated with the Proposed Action, except for the addition of a KIOSK to promote the trailhead.

User-Created Trails

The Worth Orton trail is an existing user-created trail that is approximately 1.6 miles long traversing through red hills and pinyon pine and juniper woodlands, which would be a 0.19 acre disturbance of wildlife habitat values such as crucial mule deer winter range. There are no known raptor nests within proximity to the trail; however, raptor nest surveys have not been completed. Raptor nest surveys would be completed in accordance with the Design Features and managed in accordance with the BLM Best Management Practices for Raptors and Their Associated Habitats in Utah and a Site-Specific Analysis worksheet would be completed and evaluated by the team to design the trail in a manner that minimizes impacts to nesting raptors.

Proposed Trails

There are two trails that have been identified within the Parowan Front Area.

The "P" Trail is 2.0 miles in length and would result in a 0.24 acre disturbance within wildlife habitats. Primary wildlife habitat values impacted would include crested wheatgrass seedings in the lower elevations, sagebrush, and pinyon-juniper woodland. There are no known raptor nests in the area; however, surveys have not been completed.

The Penstock Trail is also 2.0 miles in length and follows Highway 143 up Parowan Canyon to the reservoir. This trail would be located in previously disturbed areas associated with rights-of-ways in the area. This is a motorized that would tie into previously authorized motorized trails leading to the Dry Lakes Road from Right Left Hand Canyon (Brian Head OHV trail). This trail would impact approximately 0.24 acres

of wildlife habitat values; however, there are existing disturbances associated with existing rights-of-way and Highway 143 in this area that have already disrupted wildlife in this area.

The Proposed Action would allow for an additional 16 miles of proposed trails in this area; however, these have not been identified at this time. Impacts would be similar to those identified for proposed trails in the "C" Trail to Shurtz Canyon area and would impact approximately 1.6 acres of wildlife habitat values.

Red Hill Area:
Impacts to wildlife within the Red Hill Area would be expected to be similar to those identified for the "C" Trial to Shurtz Canyon Area due to similar habitat values and wildlife species use. The following analysis focuses on the site-specific projects associated with the recreational facilities identified for the Red Hill Area.

Trailheads
The Fiddlers Canyon, Red Hill, and Thunderbird Gardens Trailheads all occur within the high intensity survey area for Utah prairie dogs. For the Fiddlers Canyon Trailhead, mapped Utah prairie dog habitat occurs 0.9 miles from the 1 acre trailhead proposed on private property. Habitat in this area is associated with steep terrain dominated by pinyon pine and juniper. Habitats in this area are already disturbed, being in close proximity to catchment ponds, roads, and housing development.

The Red Hill Trailhead is 1.2 miles from the nearest mapped Utah prairie dog habitat and is located up the canyon off of Highway 14 on Cedar City property. This area would be located in an existing disturbed area that is used as a pullout. Habitat in this area is unsuitable for Utah prairie dogs.

The Thunderbird Gardens Trailhead is 0.5 miles from the nearest mapped Utah prairie dog habitat east of the golf course on Cedar City property. Habitats in this area are primarily pinyon pine and juniper in steep elevations and would not provide suitable habitat for Utah prairie dogs.

The proposed trailheads would result in a new disturbance of 2.09 acres and 0.59 acres of existing disturbance within mule deer crucial winter range on private lands.

A peregrine falcon eyrie is located 0.4 miles from the Red Hill Trailhead; however, this eyrie is in close proximity to Highway 14 and existing land uses on private lands. Personal communication with Keith Day recognizes that existing disturbances associated with Highway 14, recreation and businesses already occur in the area and that the additional disturbance associated with the Proposed Action are not expected to disrupt falcons.

User-Created Trails

The user-created trails traverse the red hills east of Cedar City through mountain shrub and pinyon pine-juniper woodlands. All user-created trails are within crucial mule deer winter range and would result in a disturbance of 0.2 acres on private lands and 0.9 acres of disturbance on public land. Impacts would be similar to those analyzed under the "C" Trail to Shurtz Canyon Area. The incorporation of Design Features would minimize impacts to wildlife habitat values.

Raptor nest surveys were completed in 2013 for Trail One and Trail Two. A ferruginous hawk nest was located east of Trail One approximately 0.1 miles in a rock formation. This nest would continue to be monitored and a Site Specific Analysis worksheet would be completed prior to design of the trail to minimize impacts to nesting raptors. The current location of the user-created trail would be evaluated to determine if this trail is sustainable in accordance with the BLM and IMBA Solutions guidance.

Proposed Trails

The Proposed Action would allow for an additional 17.55 miles of new trail to be identified in the future. This would result in an additional 2.13 acres of disturbtance within mule deer crucial winter range and other wildlife habitats. Impacts would be similar to those discussed previously and the incorporation of Design Features would minimize impacts to wildlife.

Alternative B –

Impacts under Alternative B would be the same as those identified under the analysis for the Parowan Front Area.

Analysis for the "C" Trail to Shurtz Canyon Area would be similar to those analyzed under the Proposed Action Alternative A. Under Alternative B, the Skills Park would be located north of the parking area on Cedar City property, which would place it closer to mapped Utah prairie dog habitat (colony 0103ff) which has been unoccupied since 2009. The Trail Seven ("C" Technical Trail) would be designed without the technical features, which would not have impacts different than those analyzed under the Proposed Action.

Analysis for the Red Hills Area would be similar to that analyzed under the Proposed Action. Alternative B would move the location of the Fiddlers Canyon trailhead further east, which would move it further from Utah prairie dog mapped habitat. It would also add the Razorback Trailhead, which would be located 0.8 miles from the nearest mapped Utah prairie dog habitat.

Alternative C- No Action

Under the No Action Alternative, there would be no designations of trails, skills parks or trail heads. User-created trails would be reclaimed, barricaded, and signed for closure, which would allow for reclamation of wildlife habitats; however, due to proximity to

Cedar City and other population centers it would be expected that recreation use would continue albeit at lower levels than the Proposed Action.

Cumulative Impacts

Cumulative Impact Area: The Cumulative Impact Area for wildlife is defined as:

Wildlife Species	Cumulative Impact Area (CIA)	Rationale for CIA
Mule Deer	Panguitch and Zion WMU	Based on UDWR's Wildilfe Management Unit Boundaries.
Elk		
Black Bear		
Utah prairie dogs	Extent of mapped habitat within 0.5 miles of the "C" Trail to Shurtz Canyon, Parowan Front, and Red Hill Areas.	Based on USFWS permanent disturbance buffer of 0.5 miles.
Migratory Birds	Associated habitats within the "C" Trail to Shurtz Canyon, Parowan Front, and Red Hill Areas.	Based on the BLM BMPS for Raptors and Their Associated Habitats in Utah (BLM 2006) and Utah Field Office Guidelines for Raptor Protection from Human and Land Use Disturbances (USFWS 2002).

As discussed, the primary direct and indirect effects associate with the Proposed Action would result in temporary disturbances associated with trail construction activities. Given the temporary nature of these effects, the expected use of the trail systems and features once established, and the past and present actions associated with the existing human and land use disturbances within these areas are not anticipated to contribute to cumulative effects on wildlife or wildlife habitats.