

**United States Department of the Interior
Bureau of Land Management**

**Environmental Assessment
for the North Fruita Desert SMA Trails**

Grand Junction Field Office
2815 H Road
Grand Junction, Colorado 81506

DOI-BLM-CO-130-2012-0013-EA

March 2012



United States Department of the Interior
Bureau of Land Management

Environmental Assessment
for the Norton Forks Forest SNA Study

Final Report
October 1998
Bureau of Land Management
Norton Forks Forest SNA Study

TABLE OF CONTENTS

| | |
|---|-----------|
| CHAPTER 1 - INTRODUCTION..... | 5 |
| 1.1 IDENTIFYING INFORMATION..... | 5 |
| 1.2 PROJECT LOCATION AND LEGAL DESCRIPTION..... | 5 |
| 1.3 PURPOSE AND NEED..... | 6 |
| 1.4 PLAN CONFORMANCE REVIEW..... | 6 |
| 1.5 PUBLIC PARTICIPATION..... | 7 |
| 1.6 DECISION TO BE MADE..... | 8 |
| CHAPTER 2 - PROPOSED ACTION AND ALTERNATIVES..... | 8 |
| 2.1 INTRODUCTION..... | 8 |
| 2.2 ALTERNATIVES ANALYZED IN DETAIL..... | 8 |
| 2.2.1 Proposed Action..... | 8 |
| 2.2.3 No Action Alternative..... | 12 |
| 3.1 INTRODUCTION..... | 12 |
| 3.2 PHYSICAL RESOURCES..... | 13 |
| 3.2.3 Mineral Resources..... | 13 |
| 3.2.4 Soils (includes a finding on Standard 1)..... | 13 |
| 3.2.5 Water (surface and groundwater, floodplains) (includes a finding on Standard 5)..... | 15 |
| 3.3 BIOLOGICAL RESOURCES..... | 19 |
| 3.3.1 Invasive, Non-native Species..... | 19 |
| 3.3.2 Threatened, Endangered and Sensitive Species (includes a finding on Standard 4)..... | 19 |
| 3.3.3 Vegetation (grasslands, forest management) (includes a finding on Standard 3)..... | 22 |
| 3.3.5 Wildlife (includes fish, aquatic and terrestrial) (includes a finding on Standard 3)..... | 25 |
| 3.4 HERITAGE RESOURCES AND HUMAN ENVIRONMENT..... | 26 |
| 3.4.1 Cultural Resources..... | 26 |
| 3.4.2 Paleontological Resources..... | 28 |
| 3.4.3 Tribal and Native American Religious Concerns..... | 28 |
| 3.4.4 Visual Resources..... | 29 |
| 3.4.5 Social\Economic\Environmental Justice..... | 31 |
| 3.4.8 Transportation/Access..... | 32 |
| 3.4.9 Wastes, Hazardous or Solid..... | 33 |
| 3.5 LAND RESOURCES..... | 33 |
| 3.5.2 Recreation..... | 33 |
| 3.5.6 Range Management..... | 35 |
| CHAPTER 4 - CONSULTATION AND COORDINATION..... | 37 |
| 4.1 LIST OF PREPARERS AND PARTICIPANTS..... | 37 |

TABLE OF CONTENTS

1. INTRODUCTION

2. THE PROBLEM

3. THE DATA

4. THE MODEL

5. THE SOLUTION

6. CONCLUSIONS

7. REFERENCES

8. APPENDICES

9. INDEX

10. GLOSSARY

11. BIBLIOGRAPHY

12. LIST OF FIGURES

13. LIST OF TABLES

14. SUMMARY

15. ACKNOWLEDGMENTS

16. AUTHOR'S BIOGRAPHY

17. CONTACT INFORMATION

18. DECLARATION OF INTEREST

19. STATEMENT OF WORK

20. CERTIFICATE OF ORIGINALITY

21. STATEMENT OF PUBLICATION RIGHTS

22. STATEMENT OF CONFIDENTIALITY

23. STATEMENT OF NON-COMMERCIALITY

24. STATEMENT OF NON-EXCLUSIVITY

25. STATEMENT OF NON-ASSIGNMENT

26. STATEMENT OF NON-EXHAUSTIVE RIGHTS

27. STATEMENT OF NON-EXCLUSIVE RIGHTS

28. STATEMENT OF NON-EXCLUSIVE RIGHTS

29. STATEMENT OF NON-EXCLUSIVE RIGHTS

30. STATEMENT OF NON-EXCLUSIVE RIGHTS

CHAPTER 1 - INTRODUCTION

1.1 IDENTIFYING INFORMATION

BACKGROUND:

This EA has been prepared by the BLM to analyze the proposed addition of 5.1 miles of new singletrack trails in the North Fruita Desert Special Management Area (SMA). This SMA designation was established through a planning process that culminated in 2004. Several of the management prescriptions in that plan have yet to be implemented. During the SMA planning process NFD was identified as having many singletrack trail opportunities for recreational users. A bicycle emphasis area was designated for targeted management of mountain biking opportunities. In addition to a designated trail network, the bicycle emphasis area includes a developed campground with 35 sites, used primarily by mountain bikers. In areas outside of the bicycle emphasis area, management is focused on a multiple-use motorized trail system.

In the spring of 2011 a working group was formed to develop a strategy for continued implementation of trail development actions identified in the 2004 NFD SMA plan. The working group consisted of representatives from the City of Fruita, the Colorado Plateau Mountain Bike Trail Association (COPMOBA), Responsible Recreation Foundation, Motorcycle Trail Riders Association, Fruita business owners and the BLM. This group identified additional trail construction in the NFD as a way to meet increasing demand for trail-based recreation opportunities in the area, along with the associated economic benefits to the community.

CASEFILE/PROJECT NUMBER:

DOI-BLM-CO-130 2012-0013-EA

PROJECT NAME:

North Fruita Desert Trails

PLANNING UNIT:

BLM, CO, Grand Junction Field Office, North Fruita Desert SMA

1.2 PROJECT LOCATION AND LEGAL DESCRIPTION

The North Fruita Desert SMA is located approximately 12 miles north of Fruita, Colorado. Maps identifying the locations of each of the six proposed trails are included below in section 2.2.1, Proposed Action.

LEGAL DESCRIPTION:

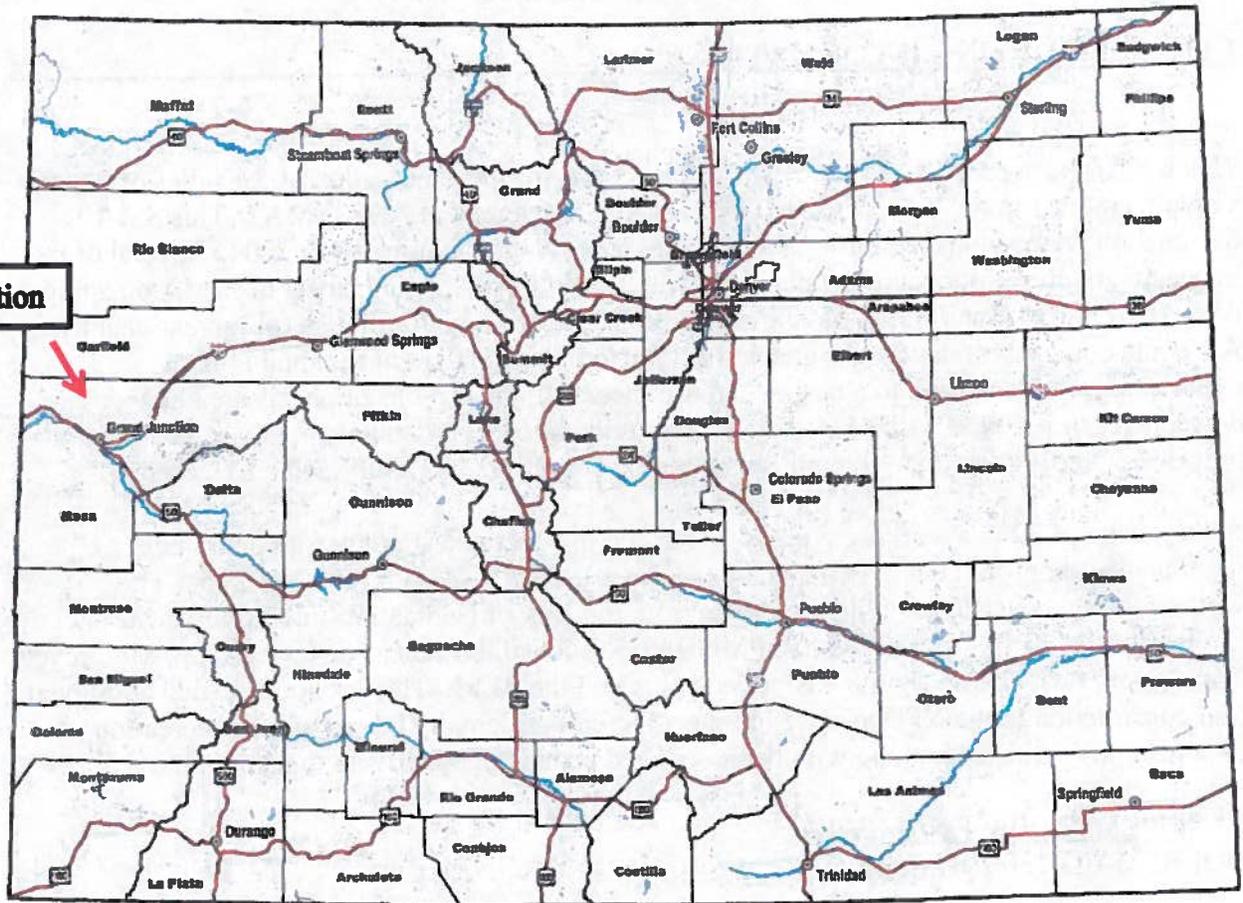
6th PM T8S, R.102W, Sections 13, 14, 24, 36

6th PM T8S, R.101W, Sections 18, 19, 20, 21, 22, 23, 29, 30, 31

6th PM T9S, R.102W, Section 1

6th PM T9S, R.101W, Section 6

Project Location



1.3 PURPOSE AND NEED

The purpose of the proposed project is to provide additional mountain biking opportunities in the NFD SMA. The need for this project is to address public demand for additional recreation opportunities that were first identified during the North Fruita Desert SMA planning process, and subsequently in trail development requests from recreation user groups and the community of Fruita. The need for the project is established by BLM's responsibility under FLMPA to respond to requests for construction of recreational trails across BLM-managed lands. The proposed action is consistent with and supports the objectives of the North Fruita Desert Management Plan.

1.4 PLAN CONFORMANCE REVIEW

PLAN CONFORMANCE REVIEW: The Proposed Action is subject to and has been reviewed for conformance with the following plan (43 CFR 1610.5, BLM 1617.3):

Name of Plan:
GRAND JUNCTION Resource Management Plan 1987

Decision Language and Page Number:
Pages 1-20

To ensure the continued availability of outdoor recreational opportunities which the public seeks and which are not readily available from other public or private entities.

To protect resources, meet legal requirements for visitor health and safety, and mitigate resource user conflicts.

Name of Plan:

North Fruita Desert Special Recreation Management Area Plan 2004

Decision Language and Page Number:

Page 47

Additional trails throughout the planning area will be considered by the BLM, after the implementation of the actions described in this plan, subject to the agency's environmental analysis process and consistency with this plan.

In January 1997, the Colorado State Office of the BLM approved the Standards for Public Land Health and amended all RMPs in the State. Standards describe the conditions needed to sustain public land health and apply to all uses of public lands.

Standard 1: Upland soils exhibit infiltration and permeability rates that are appropriate to soil type, climate, land form, and geologic processes.

Standard 2: Riparian systems associated with both running and standing water function properly and have the ability to recover from major disturbance such as fire, severe grazing, or 100-year floods.

Standard 3: Healthy, productive plant and animal communities of native and other desirable species are maintained at viable population levels commensurate with the species and habitat's potential.

Standard 4: Special status, threatened and endangered species (federal and state), and other plants and animals officially designated by the BLM, and their habitats are maintained or enhanced by sustaining healthy, native plant and animal communities.

Standard 5: The water quality of all water bodies, including ground water where applicable, located on or influenced by BLM lands will achieve or exceed the Water Quality Standards established by the State of Colorado.

Because standards exist for each of these five categories, a finding must be made for each of them in an environmental analysis. These findings are located in Chapter 3 of this document.

1.5 PUBLIC PARTICIPATION

1.5.1 Scoping: NEPA regulations (40 CFR §1500-1508) require that the BLM use a scoping process to identify potential significant issues in preparation for impact analysis. The principal goals of scoping are to allow public participation to identify issues, concerns, and potential impacts that require detailed analysis.

Persons/Public/Agencies Consulted: Many of these trails were identified conceptually, and made available for public comment during the North Fruita Desert Special Management Area planning process beginning in 2000. Early in 2011 3 planning meetings were conducted in the community of Fruita, and on-site to discuss the need for trail development, and to identify what kind of future trail system was preferred. These meetings were open to the public and comments were discussed among a working group of stakeholders. Participants included representatives from COPMOBA, the City of Fruita, Fruita businesses and the BLM. Based on input from these meetings, the working group recommended the trail proposals described in this document. In general, the group expressed a desire for a variety of new trail opportunities in the NFD. There was concern expressed by one individual about the potential consequences of any new trails in close proximity to developed campsites, including the creation of social trails from campsites to constructed trails, and the impact to the recreational experiences of both campers and trail users.

Internal scoping included discussions with the GJFO interdisciplinary team and staff from Colorado Parks and Wildlife. The proximity of the original alignment of Trail A to potential burrowing owl nesting sites was identified as a concern. In response to that concern, recreation and wildlife staff visited the site and modified the proposed action with a realigned route.

Scoping also included posting this project on the Grand Junction Field Office NEPA website. No comments were received via this mechanism.

1.6 DECISION TO BE MADE

The BLM will decide whether to implement the proposed North Fruita Trails project based on the analysis contained in this Environmental Assessment (EA). This EA will analyze the construction and use of 5.1 miles of new singletrack trails. The BLM may choose to: a) construct the three trails as proposed; b) construct a select set of the proposed trails, with modifications based on the analysis in this document; or c) not implement the project at this time.

CHAPTER 2 - PROPOSED ACTION AND ALTERNATIVES

2.1 INTRODUCTION

The purpose of this chapter is to provide information on the Proposed Action and Alternatives. Alternatives considered but not analyzed in detail are also discussed.

2.2 ALTERNATIVES ANALYZED IN DETAIL

2.2.1 Proposed Action

The BLM Grand Junction Field Office, City of Fruita and COPMOBA have proposed the construction of three new trail segments within the North Fruita Desert SMA (see Table 2.2 and the attached maps below.) The trails that are being moved forward at this time are located within the Bicycle Emphasis Area (Trails A, C and D) and would be designed and managed for mountain bike use.

These trails would be constructed using a combination of hand tools (pick mattocks, McCleods, shovels, rakes) and motorized trail-building equipment (walk-behind trail machine, mini-excavator). Tread width for trails A and C would vary from 18 inches to 24 inches, and the short-term corridor disturbance (during construction) would be up to 48 inches. Trail D would be a downhill specific pump track, or “flow country” trail, providing a unique challenge for more advanced riders. This trail would have a variety of constructed dirt berms, jumps and other technical trail features. Tread width for Trail D would vary from 24 to 36 inches. This trail would be constructed primarily by a professional trail building contractor. All trails would be designed and constructed using best management practices described in the GJFO Trail Design Criteria (BLM 2004) and IMBA’s “Trail Solutions” (IMBA 2004.) The proposed construction timeframe for these trails would be spring and summer of 2012, within the constraints of any timing limitations for resource protection identified in the analyses of this document. Construction of Trails A, C and D would be cooperatively funded and coordinated by the BLM GJFO, City of Fruita and COPMOBA.

A small footbridge is proposed for Trail C (Campground Loop) where it crosses a drainage, approximately 700 feet down trail east of 18 Road. The exact trail corridor for the southwest portion of the trail is undetermined, but will fall within a 10 acre area represented by the “Campground Trail Polygon” found on the map. The trails that are bold in the following table are being analyzed through this document.

Table 2.2 North Fruita Desert Trail Proposals

| Trail Name | Applicant | Proposed Action | Construction Mileage |
|--|------------------------------------|------------------------|-----------------------------|
| Trail A (Zip-Off) | City of Fruita/ COPMOBA | Construction | 1.7 |
| Trail C (Campground Loop) | City of Fruita/ COPMOBA | Construction | 1.7 |
| Trail D (Pumptrack Trail) | City of Fruita/ COPMOBA | Construction | 1.7 |
| Total trail miles | | | 5.1 |

2.2.2 ALTERNATIVES NOT ANALYZED IN DETAIL

The original proposal included 6 trails. Three of the proposed trails will be analyzed in a separate NEPA action, because they are not ripe for decision at this time. During internal scoping it was determined that additional biological surveys were necessary in order to complete the analysis.

| Trail Name | Applicant | Proposed Action | Construction Mileage |
|------------------------------|------------------------------------|------------------------|-----------------------------|
| Trail B (Eat at Joes) | City of Fruita/ COPMOBA | Construction | 1.0 |
| Trail E (Coal Gulch) | Internal | Construction | 2.5 |

| | | | |
|---------------------------|----------|--------------------------|-------------|
| to 16 Rd) | | | |
| Trail F (Backside) | Internal | Construction | 12 |
| | | Total trail miles | 15.5 |

2.2.3 No Action Alternative

In this alternative, the development of the North Fruita Desert Trails would not occur. Recreationists would continue to use the existing travel system.

CHAPTER 3 - AFFECTED ENVIRONMENT AND EFFECTS

3.1 INTRODUCTION

This section provides a description of the human and natural environmental resources that could be affected by the Proposed Action and presents comparative analyses of the direct, indirect and cumulative effects on the affected environment stemming from the implementation of the actions under the Proposed Action and other alternatives analyzed.

This EA draws upon information compiled in the Grand Junction Resource Area RMP (BLM 1987) and the North Fruita Desert SMA Plan (BLM 2004).

3.1.1 Elements Not Affected

The following elements, identified as not being present or not affected will not be brought forward for additional analysis:

| Resource | Rationale |
|------------------------|---|
| ACEC | There are no ACECs present in the immediate vicinity of the proposed trails. |
| Farmlands | There are no farmlands of unique value within the proposed action vicinity. |
| Wild and Scenic Rivers | There are no eligible Wild and Scenic River segments in the immediate vicinity of the proposed trails. |
| Wilderness | There are no Wilderness areas, WSAs or lands with wilderness characteristics in the immediate vicinity of the proposed trails. |
| Geology | This project will not impact any unique geologic resources. |
| Air Quality | Given the nature of the proposed action and the limited degree of surface, no substantial impacts to air quality are anticipated. |

3.1.1 Past, Present, Reasonably Foreseeable Actions

NEPA requires federal agencies to consider the cumulative effects of proposals under their review. Cumulative effects are defined in the Council on Environmental Quality (CEQ) regulations 40 CFR §1508.7 as "...the impact on the environment that results from the incremental impact of the action when added to other past, present, and reasonably foreseeable actions regardless of what agency...or person undertakes such other actions." The CEQ states that the "cumulative effects analyses should be conducted on the scale of human communities, landscapes, watersheds, or airsheds" using the concept of "project impact zone" or more simply put, the area that might be affected by the proposed action. The area that may be affected by this project includes the 5th code watershed that contains the project area. To assess past, present and reasonably foreseeable actions that may occur within the affected area a review of GJFO NEPA log and our field office GIS data was completed. The following list includes all past, present and reasonably foreseeable actions known to the BLM, that may occur within the affected area:

Past Actions:

North Fruita Desert SMA PLAN - 2004
North Fruita Trail Proposal CO-130-2011-0027-DNA
18 RD Campground Proposal CO-130-2009-0059

Present Actions:

The developed campground in the Bicycle Emphasis Area currently contains 35 campsites that are currently free of charge and are typically filled to capacity on weekends from March through May and from September through November. A proposal to begin charging fees for overnight camping (\$10 per night) has received initial approval and is scheduled to be implemented starting in September 2012. Current management allows for camping to occur at undeveloped campsites outside of the Bicycle Emphasis Area. During the peak use season described above there are typically 30-40 "overflow" camps at these undeveloped campsites.

Reasonably Foreseeable Actions

Resource Management Plan revision for GJFO is currently in internal review and will be available to the public in the fall of 2012 with a tentative release date of 2013. The RMP Revision has the potential to change land use allocations in the North Fruita Desert. Expansion of the developed campground and requiring overnight use in designated, undeveloped sites may be necessary to mitigate increased use and provide for resource protection. Analysis of three trails totaling 15.5 miles is currently under review in the North Fruita Desert. Internal scoping indicated that these trails needed additional biological studies and are in that process. This list of past, present and reasonably foreseeable actions was considered when analyzing cumulative effects in sections 3.2, 3.3, 3.4, and 3.5 below.

3.2 PHYSICAL RESOURCES

3.2.3 Mineral Resources**Current Conditions:**

The Coal Gulch Road services 16 active natural gas well locations. On 16 Road, approximate daily traffic by Oil and Gas personnel is 5 trucks per day. During times of well/road drilling, maintenance or surface reclamation work, traffic on these roads increase substantially, but on a short term basis. Increased activity typically occurs in the spring, summer and fall months coinciding with the high use times for the proposed trails. This increase is characterized by both heavier volume and larger sizes of vehicles ranging from pickup trucks to drilling rigs.

3.2.4 Soils (includes a finding on Standard 1)**Current Conditions:**

Soils in the desert area, north of the Highline Canal, west to the state line, and to the Bookcliffs, are developing in and from shales and sandstones of the Mancos and Mesa Verde Formations. They are generally alkaline, and some have a high salt content. Surface textures range from sandy loam to silty clay; substratum textures vary from loamy sand to silty clay or clay. Weathered shale or sandstone bedrock is at depths from less than 12 inches to many feet below the surface. Exposures of shale and sandstone bedrock are common. The area is dissected by many gullies, with runoff-producing events carrying sediment into the gully system. Depending

on the intensity and duration of convective storm events or from particularly heavy and rapid snowmelt, sediment from upland erosion can enter major drainage networks such as Big Salt Wash and eventually reach the Colorado River. Erosion of exposed geologic material on steep slopes is a major contributor of sediment. There is no indication of excessive soil erosion in the area as a whole. There are, of course, small areas scattered throughout the desert with indicators of erosion that is taking place at greater rates than the soils resource can sustain. In these areas, lack of soil cover (vegetation, litter, cryptogamic crust, inorganics) is a factor, as are recreation and historic livestock uses. The main factor limiting increases in ground cover and the vigor of existing plants is the lack of precipitation, a high evaporation rate, and saline/alkali conditions in many of the soils. The Mancos Shale (and its marine sediments) is the primary factor.

Finding for Public Land Health Standard 1 (Soils):

The proposed travel facilities cross areas which are meeting land health standard 1 as well as areas which are not. Areas not meeting standard 1 are confined to swales and drainage bottoms. These areas lack desirable perennial vegetation necessary to stabilize soils and experience higher than normal rates of erosion.

No Action

Direct and Indirect Effects: Under the no-action alternative, no new trail construction would be authorized. Recreational usage in the area would continue to grow as Grand Valley communities expand and the demand for recreational opportunities close to these urban areas increases. No direct impacts to soil resources are anticipated to occur under the no-action alternative. However, indirect impacts could occur as a result of increased use of existing travel facilities and development of unauthorized routes which may not be properly designed, constructed, or maintained. Under these circumstances soil resources could be degraded as increased surface disturbance would elevate erosion potential.

Finding for Public Land Health Standard 1 (Soils):

No change from current conditions would be anticipated under the No-action alternative. Areas meeting land health standard 1 would continue to do so. Areas currently not meeting land health standard 1 would also continue to not meet standards in the absence of intense reclamation efforts and favorable weather conditions.

Cumulative Effects:

Under the No-action alternative, BLM would not develop additional travel facilities in this area. However, demand for recreational activities is anticipated to increase in this area. As a result, un-authorized routes could continue to be developed in the area. It is unlikely these un-authorized routes would be constructed to BLM standards for sustainability and would likely cause accelerated erosion over time.

Proposed Action

Direct and Indirect Effects: Implementation of the proposed action will result in expansion of travel facilities in the 18 road area open to mechanized travel. New surface disturbance associated with the proposed action is anticipated to be less than 5 acres based on typical trail construction widths less than 24 inches. Direct effects of the proposed action would be increased erosion potential from the project area during construction and maintenance activities as soils

will be striped of stabilizing vegetation, woody debris, and rock. Decreased soil stabilization increases erosion potential which also elevates potential alteration of natural drainage patterns with formation/enhancement of rills, pedestals and gullies. Changes in natural drainage patterns alters the hydrologic function of watersheds as degraded upland conditions reduced residence time of rainfall through soils and vegetation increasing frequency, magnitude, and intensity of sheet-flow events. Sheet flow events can be very damaging to soil resources as the landscape is striped of valuable topsoil essential to sustaining a desirable vegetative community necessary to stabilize soils. However, degradation of soil resources resulting from the proposed action will be affectively mitigated through implementation of BMPs associated with BLM recreation facilities construction/maintenance standards. Likewise, the BLM has obtained a "Rainfall Erosivity Waiver" from the State which dictates appropriate periods for small construction projects (less than 5 acres) in lieu of CDPS Stormwater Permitting to limit erosion and reduce erosion potential during specific seasons. Indirect impacts to soil resources could occur with **increased recreational use of the trail system. Increased use in these areas could cause trail damage and my result in more off trail use as recreationists drawn to the area expand camp sites, explore the area on foot, or illegally construct new routes. Increased surface disturbance would result as would erosion potential.**

Finding for Public Land Health Standard 1 (Soils):

No change from current conditions would be anticipated with implementation of the proposed action. Areas meeting land health standard 1 would continue to do so. Areas currently not meeting land health standard 1 would also continue to not meet standards in the absence of intense reclamation efforts and favorable weather conditions.

Cumulative Effects:

Increased surface disturbance in the project area will increase erosion potential which may result in increased erosion and sedimentation to Big Salt Wash over time. However, because new routes will be constructed to BLM standards and would also be maintained to those standards, it is not anticipated that these impacts would modify current finding for Public Land Health Standard 1.

3.2.5 Water (surface and groundwater, floodplains) (includes a finding on Standard 5)

Current conditions:

The proposed project area is located within water quality stream segments 13a and 13e of the Lower Colorado River Basin. Stream Segment 13a is defined as "all tributaries to the Colorado River including wetlands, from a point immediately below the confluence or Roan Creek to the Colorado-Utah border except for the specific listings in Segments 13b through 19". The primary drainages within stream segment 13a affected by the proposed action is Big Salt Wash. Big Salt Wash flows south to the Colorado River. Upper reaches of Big Salt Wash are perennial whereas lower reaches are intermittent to ephemeral in nature. The proposed action will be situated downgradient of all perennial reaches in Big Salt Wash.

Stream segment 13e of the Lower Colorado River Basin is defined as "All tributaries to the Colorado River, from Lewis Wash to the West Salt Creek drainage, from an elevation of 5,200 feet to the Government Highline Canal, excluding the mainstem of Big Salt Wash, East Salt Creek and West Salt Creek". The primary drainage affected in stream segment 13e is Dry Gulch which is an ephemeral tributary to Big Salt Wash.

Table 1 identifies stream classifications and water quality standards for Lower Colorado Basin stream segment 13a and 13e as outlined in CDPHE, Regulation No. 37.

| Table 1: Stream Segment | Classifications | Numeric Standards | | | | | |
|----------------------------|---|--|---------------------------------|----------------------|--|--|--|
| | | Physical and Biological | Inorganic (mg/l) | | Metals (µg/l) | | |
| COLCL C13a | Use Protected Aq Life Warm 2 Recreation P Agriculture | T=TVS(WWS-IV) °C D.O.= 5.0 mg/l pH = 6.5-9.0 E.Coli=205/100ml | CN(ac)=0.2 NO2=10 NO3=100 | B=0.75 | As(ch)=100(Trec) Be(ch)=100(Trec) Cd(ch)=10(Trec) CrIII(ch)=100(Trec) | CrVI(ch)=100(Trec) Cu(ch)=200(Trec) Pb(ch)=100(Trec) Mn(ch)=200(Trec) | Ni(ch)=200(Trec) Se(ch)=20(Trec) Zn(ch)=2000(Trec) |
| COLCL C13e | Use Protected Aq Life Warm 2 Recreation P Agriculture | T=TVS (WS-IV)°C D.O.=5.0 mg/l pH=6.5-9.0 E.coli=205/100ml | NO2=10 NO3=100 | B=0.75 CN(ac)=0.2 | As(ch)=100(Trec) Be(ch)=100(Trec) Cd(ch)=10(Trec) CrIII(ch)=100(Trec) CrVI(ch)=100(Trec) | Cu(ch)=200(Trec) Pb(ch)=100(Trec) Mn(ch)=200(Trec) Ni(ch)=200(Trec) | Se(ch)=20(Trec) Zn(ch)=2000(Trec) |

CDPHE 2012

The CDPHE —Integrated Water Quality Monitoring and Assessment Report-2010 update to the 2008 305(b) Report was reviewed to determine the current status of assessment and determination of water quality within the project area. The Colorado Integrated Reporting Category (IR) value assigned to the assessment units in the —Status of Water Quality in Colorado – 2010 document was: Segment 13a IR=2 and segment 13e was not assessed in the 2010 305(b) report as this segment was newly created in 2011. In Colorado, the majority of the assessed surface water bodies fall into IR Categories 1, 2, and 3. Colorado has elected to place segments where not all uses have been assessed in IR Category 2. In some cases, a complete assessment of all uses cannot be completed do to the lack of data, but the data that is available indicates that at least some of the uses that were assessed are fully supporting. IR Category 5 indicates that available data and/or information indicate that at least one classified use is not being supported or is threatened, and a TMDL is needed. Segments must be placed in Category 5 when, based on existing and readily available data and/or information, technology-based effluent limitations required by the Clean Water Act (CWA), more stringent effluent limitations, and other pollution control requirements are not sufficient to implement an applicable water

quality standard and a TMDL is needed. This category constitutes the Section 303(d) list of waters impaired by a pollutant (CDPHE. 20010b).

The 2010 CDPHE-WQCC Regulation No. 93 Section 303d List of Impaired Waters and Monitoring and Evaluation List, was reviewed to determine if Lower Colorado River stream segments 13a and 13e were listed. Neither stream segment was identified on the 303(d) or Monitoring and Evaluation list (CDPHE. 2010a) indicating both segments meet State water quality standards.

Much of the upland watershed north of the Colorado River is situated on soils derived from Mancos shale. Mancos shale soils have naturally high concentrations of selenium and salts. Excessive erosion and irrigation of Mancos shale soils has been documented to be a major contributor to water quality degradation in other parts of the field office. Most recently BLM collected water quality samples in Salt Creek downstream of I-70 (10-12-2010) and in Big Salt Wash approximately 1 mile upstream from Coal Gulch (6/22/2011). Results indicate Se levels in Salt Creek to be 9.0 µg/L which is above chronic levels (4.6 µg/L). Selenium levels in Big Salt Wash were measured at 1.5 µg/L. Studies conducted by the United States Geological Survey (USGS) and the National Irrigation Water Quality Program (NIWQP) indicated primary source areas for selenium in the Colorado River near the Colorado/Utah State line to be the eastern side of the Uncompahgre Valley, and the western one-half of the Grand Valley, where extensive irrigation is located on Mancos Shales (Gunnison Basin Selenium Task Force, 2009). These findings support the notion that irrigation between the project area and the Colorado River are the primary factor influencing selenium concentrations in surface water (not BLM actions).

Of additional concern within the project area are contributions of sediment and salinity to the Colorado River system resulting from accelerated soil erosion in upland watersheds. The Colorado River Basin Salinity Control Act (Public Law 93-320) was enacted in June 1974. The Act was amended in 1984 by Public Law 98-569. Public Law 98-569 includes directing the BLM to develop a comprehensive program for minimizing salt contributions from lands under its management. Colorado's Grand Valley is recognized as the largest non-point source of salinity in the Upper Colorado River Basin. Big Salt Wash is a tributary to the Colorado River.

Finding on Standard 5: Stream segments 13a and 13e of the Lower Colorado River Basin currently meet water quality standards (CDPHE. 2010a).

No Action

Direct and Indirect Effects: Direct and Indirect Effects: Under the no-action alternative, no new trail construction would be authorized. Recreational usage in the area would continue to grow as Grand Valley communities expand and the demand for recreational opportunities close to these urban areas increases. No direct impacts to water resources are anticipated to occur under the no-action alternative. However, indirect impacts could occur as a result of increased use of existing travel facilities and development of unauthorized routes which may not be properly designed, constructed, or maintained. Under these circumstances water quality could be degraded as increased surface disturbance would elevate erosion and sedimentation potential.

Finding on Standard 5: Stream segments 13a and 13e of the Lower Colorado River Basin currently meet water quality standards (CDPHE. 2010a). Implementation of the No-Action alternative would not likely result any change to this determination.

Cumulative Effects:

Under the No-action alternative, BLM would not develop additional travel facilities in this area. However, demand for recreational activities is anticipated to increase in this area. As a result, un-authorized routes would continue to be developed in the area. It is unlikely these un-authorized routes would be constructed to BLM standards for sustainability and would likely cause accelerated erosion over time.

Proposed Action

Short term direct impacts to water quality could occur as a result of construction activities. These direct impacts may include increased erosion and downstream sedimentation to water courses. Mineral properties of eroded soils can elevate surface water contaminants to levels exceeding numeric standards if left un-mitigated. Salt, selenium, and sediment yield are dependent upon storm period, landform type, and the soluble mineral content of the geologic formation. However, potential erosion and sedimentation resulting from construction activities will be sufficiently mitigated through implementation of BMPs associated with BLM construction, design, and maintenance standards for travel facilities. New construction will be located primarily in upland settings in locations identified as meeting criteria for recreational facility sustainability. Furthermore, maintenance of existing designated facilities will reduce the erosion potential from the project area by restoring natural drainage patterns in upland environments and limiting recreational activities to sustainable areas. Additionally, the BLM has obtained a "Rainfall Erosivity Waiver" from the State which dictates appropriate periods for small construction projects (less than 5 acres) in lieu of CDPS Stormwater Permitting to limit erosion and reduce erosion potential during specific seasons. As part of this waiver, the BLM agrees to develop and implement stormwater BMPs as needed to protect water quality.

Finding on Standard 5: Stream segment 13a and 13e of the Lower Colorado River Basin currently meet water quality standards (CDPHE. 2010a). Implementation of the proposed action with mitigation is not anticipated to alter this finding.

Cumulative Effects:

Increased surface disturbance in the project area will increase erosion potential which may result in increased erosion and sedimentation to Big Salt Wash over time. It is not anticipated that these impacts would result in any modification to the current finding for Public Land Health Standard 5.

Protective/Mitigation Measures:

1. Ensure proper drainage from and adjacent to all recreation facilities by implementing standard BLM design, construction, and maintenance plans for the project area.
2. Include adequate signage at and around parking areas and trailheads to effectively communicate rules and regulations regarding cross country travel in the planning area.
3. Continue to enforce rules and regulations governing travel management within the watershed.

4. Barricade unauthorized routes within the watershed.
5. BLM will be required to obtain a stormwater discharge permit from the State if the project's R-factor would be greater than 5 or the disturbance exceeds 5 acres.
6. Any additional trail construction in the North Fruita Desert will require a stormwater discharge permit and a Storm Water Pollution Prevention Plan.

3.3 BIOLOGICAL RESOURCES

3.3.1 Invasive, Non-native Species

Current Conditions:

The North Fruita Desert area was inventoried by BLM crews in the early 2000s. While the area has relatively few state-listed noxious weeds (A or B list species), there a number of C list species which occur in varying degrees depending on the site. C list species include cheatgrass, Russian thistle (tumbleweed) tumble mustard etc.. These species are listed a C-list species by Colorado because of their abundance state-wide, and the limited chances of wide-spread control. The quantity and vigor of these species is often tied to the timing and amount of precipitation—wetter years tend to yield more, dry years less.

No Action

Direct and Indirect Effects: Weed species are opportunistic plants, and are typically associated with any kind of disturbance, regardless of source. If the trails are not constructed, there is a decreased chance of additional weeds.

Cumulative Effects: As with short and long term effects, the less disturbance over time, the fewer chances of most weeds becoming established in new areas.

Proposed Action

Direct and Indirect Effects: The proposed action will add to the trail network of NFD, and as such, add to a network of roads and trails that provide entryways for weeds into the wildlands. Bicycles (to a lesser degree) and motor vehicles (to a greater degree) are both vectors of weed spread. However, the addition of trails that will be routinely maintained as part of a known system (the NFD Plan) are not expected to impact weed management to a large degree either in the short or long terms. The BLM recreation and weed programs, as well as the public, can co-labor in inventorying these trails for new weeds, and responding in a quick manner to new infestations.

Cumulative Effects: Each new road and trail that is added to the field office automatically becomes part of a weed inventory effort. As roads and trails become decommissioned through travel management, a manageable balance from a weed perspective is possible into the future.

3.3.2 Threatened, Endangered and Sensitive Species (includes a finding on Standard 4)

Current conditions:

Current federally listed threatened, endangered, or candidate species are not known to inhabit the North Fruita Desert SRMA. Nine Colorado BLM Sensitive species do or have inhabited the area

in recent decades (Table below). Information contained in the table is less than 5 years there are no recent surveys.

BLM Sensitive Species

| <i>Common Name</i> | <i>Scientific Name</i> | <i>Status</i> | <i>Trail Proximity</i> | <i>Distance</i> |
|------------------------------|------------------------|---------------|------------------------|-----------------|
| Great Basin Spadefoot toad | Spea intermontana | BLM - S | Campground Loop | 0 |
| Peregrine Falcon* | Falco peregrinus | BLM - S | Campground Loop | 1900' |
| White-tailed Prairie Dog | Cynomys leucurus | BLM - S | Zip Off - ROW | 0 |
| Burrowing Owl (BLM, 2008) | Athene cunicularia | BLM - S | Zip Off - ROW | < 1320' |
| Ferruginous Hawk (BLM, 1985) | Buteo regalis | BLM - S | Zip Off | < 650' |

*All trails except Zip Off are within Peregrine Potential Nesting Habitat along the Bookcliffs. The distance given in the table is the distance from a known but inactive nest site.

Land Health status in the proposal area varies from “not meeting” to “meeting” land health standards. Areas that meet land health have a higher likelihood of having sensitive species present, provided the habitats specific to a species are present. All trails except are within areas not currently meeting Land Health Standards.

No Action

Direct and Indirect Effects: No action would not cause any direct impacts to BLM Sensitive Species. No trails would be built, no ground would be disturbed. Indirect effects could arise from heavier use of existing trails near important wildlife and plant locations, or even illegal off-trail use, use of wildlife or livestock trails, or off-trail short-cutting. If trail users perceive more crowding on existing trails, they could move to other areas currently receiving less use, which could cause impacts to species listed above beyond the project area.

Cumulative Effects: No action would not alter effects already taking place or that would occur without additional trail development. Past actions, including recreation, pipeline and powerline construction, road building and use, grazing and mining have contributed in various degrees to changing the landscape and the species present. For example, it appears that development and use of the Zippity-Do-Da Trail on a ridge where Ferruginous Hawks nested in 1985 likely has precluded hawks from nesting on that ridge in recent years and will continue to do so as trail use continues. Future foreseeable actions include the proposed action, and further development of recreation trails, though no trail plans other than the proposed action are known or proposed.

Proposed Action

Direct and Indirect Effects: Direct and indirect impacts will be addressed for each trail.

All Trails:

Midget-faded Rattlesnake could be present in the vicinity of any of the proposed trails. Snakes crossing a trail, or warming themselves could be injured or killed by passing mountain bikers. No indirect impacts to snakes, such as destruction of den sites or decline of prey species would occur.

Long-nosed Leopard Lizard could occur on or near both proposed trails in the desert south of the Bookcliffs. Lizards crossing or warming themselves in a trail could also be subject to or death if run over, but their speed and alertness would minimize the chances of this taking place. Indirect effects on lizard prey or hiding cover is unlikely.

Trail A, Zip-Off:

Indirect impacts from Zip-Off could affect Burrowing Owl and Ferruginous Hawk nesting. As noted in BLM Sensitive Species table, the trail passes within 1320' and 650' of past nesting sites for both species. In the case of Ferruginous Hawk, as mentioned in cumulative impacts for the no action alternative, these nest sites have not been active and are not likely to be active again with the current use of the Zippity –Do-Da trail, which passes directly through the 1985 nest sites. (A 1/2 mile buffer is recommended buffer around Ferruginous Hawk nests - no surface occupancy and no human encroachment. CDNR-CDOW, 2008) Frequent ground-nesters, Ferruginous Hawks typically nest on hilltops that provide a panoramic view (Kingery, 1998). The lower elevation terrain crossed by the proposed Zip-Off trail does not provide suitable nesting habitat, therefore disturbance is not likely.

Indirect impacts to burrowing owls could occur if trails are used within The Colorado Division of Parks and Wildlife's recommended 150' buffer around active nest sites during the nesting season (CDNR-CDOW, 2008). Keeping trails at least 150' from the edges of prairie dog colonies will meet this recommendation for active and potential nest sites. No known active or inactive burrowing owl nest sites occur within this distance from the Zip-Off trail, but two nest sites active as recently as 2008 exist short distances from the powerline/pipeline ROW 3000' southeast of where Zip-Off connects to the ROW. The nest sites are 350' and 900' from the ROW. The connection of Zip-Off to the ROW would appear to make the ROW an integral part of the trails system and could increase use of the ROW in both directions from the connect point; traveling the ROW to the southeast provides the shortest and easiest way back to the 18 Road parking area. Traveling northwest connects to the existing Western Zippity trail. The ROW comes within 125' of the edge of the prairie dog colony with the closest nest site; therefore nesting could occur within 150' of the ROW. Since the ROW is currently open to all modes of travel, nesting this close does not seem likely.

Trail C, Campground Loop:

Direct impacts could occur to Peregrine Falcon and Great Basin Spadefoot due to proximity to trail development. Trail development is planned for fall 2012, when nesting and breeding activity is over for both species, so no direct impact will occur. Indirect impacts from trail use during the nesting and breeding seasons (spring being a very busy time for trail use) could occur due to timing, but there are no known active peregrine nests in the area, and the location of any new nest would be at least 500' to 1000' feet in elevation above and to the north of the project area and not impacted. Great Basin Spadefoot activity in the area was documented in 1996 at the stock pond at the southern terminus of Campground Loop on the east side of 18 Road. The project does not impact the pond, so impacts to the toad should not occur.

Trail D, Pumtrack:

No direct or indirect impacts result from construction of this trail, as it starts and parallels the existing Prime Rib trail east of 18 Road, out to a distance of 1000' feet east of Prime Rib. The proposed trail does not intersect or come within a mile of known locations of sensitive species or prairie dog colonies.

Cumulative Effects:

Trails A, C and D are within a designated Bicycle Emphasis Area within the North Fruita Desert SMA. The area has become very popular for mountain biking over that last 15 – 20 years. Implementation of the North Fruita Desert Management Plan of 2004 has brought more intensive management by BLM to address what was an unmanaged situation that saw dispersed camping and parking, unauthorized trail development, cross-country riding and driving, and deteriorating vegetative conditions.

Trail A: Zip-Off is the only trail south of the Bookcliffs that extends developed activity into a relatively undisturbed area and intersects with white-tailed prairie dog colonies which are also possible Burrowing Owl nest sites. Constructing Zip-Off and connecting it to the powerline-pipeline ROW along the southwest edge of the BEA could lead to extending more bicycle use on existing roads, two-tracks, and livestock/wildlife trails to the southwest. Another link along the ROW could lead to additional dispersed camping and parking adjacent to, but outside of the BEA that could impact burrowing owl nesting known to occur in recent years just outside of the BEA.

Trail C:

Campground Loop Trail should not increase cumulative effects of human activity already taking place due to its position within and parallel to other trail loops and close proximity to 18 Road and the campground, and other existing trails are located to the east.

Trail D:

Pumtrack Trail is parallel and within 1000' feet of existing activity on 18 Road and Prime Rib Trail, and therefore will not add to cumulative effects.

3.3.3 Vegetation (grasslands, forest management) (includes a finding on Standard 3)

Current conditions:

Salt desert shrub (shadscale, Garner's saltbush, mat saltbush, fourwing saltbush, greasewood, spiny hopsage, and bud sagebrush with an understory of Indian ricegrass, galleta grass, sand dropseed, bottlebrush squirreltail, poa and needle-and-thread grass) and pinyon-juniper (pinyon trees, juniper trees, patches of gambles oakbrush, snowberry, serviceberry, and sagebrush with an understory of grasses similar to those found in desert shrub vegetation) are the two main vegetation types occurring in the bicycle emphasis area. The southern and central portions of the bicycle emphasis area are dominated by desert shrub and as elevation increases towards the north in the foothills and Book Cliffs mountain range, vegetation changes to pinyon-juniper. As desert shrub transitions to pinyon-juniper (desert shrub – pinyon-juniper ecotone) sagebrush increases and production of the perennial grasses described above also increase.

Cheatgrass is spread throughout the bicycle emphasis area. Standard 3 for Public Land Health, Healthy Plant and Animal Communities, is being met in portions of the bicycle emphasis area and not in others. The areas not meeting are mainly due to lack of potential perennial grasses and invasion of cheatgrass.

No Action

Direct and Indirect Effects:

Recreationists would continue to use self-made trails and new area without consideration for possible erosion and vegetation impacts. Self-made trails in steep areas and areas vulnerable to erosion would cause increased erosion. Increased erosion would degrade rangeland conditions and create opportunity for invasive and noxious plants that would negatively affect native vegetation in the area.

Cumulative Effects:

There would be less opportunity to improve rangeland conditions and meet Land Health Standard 3 under the No Action alternative as in the past, present and in the future there has been and would be minimal control of bicycle and motorcycle use that due to concentrations and crowded conditions, self-made trails and use of new areas would continue that would also be used by livestock. Concentrated recreation and livestock use combined with other possible impacts such as oil and gas exploration would have the potential cumulative effect of increased erosion and rangeland degradation.

Proposed Action

Direct and Indirect Effects:

Construction of the trails would allow bicycle use on an approximate additional 3.4 miles of trails. This would allow for better distribution of recreationists and decrease the use in the currently crowded areas being used. The proposed trails are designed to reduce erosion impacts and would reduce the use on self-made trails that did not consider erosion impacts. The proposed trails would remove vegetation 24 inches wide and about 3.4 miles long combining the length of all the trails. This equates to approximately .5 acres of disturbance over a very large area that would be less than 1% disturbance. Due to the relative small area of disturbance and the trails designed to be built with consideration of erosion control, negative impacts are not expected and due to a better distribution of recreationists and less concentrated use, the potential for meeting Land Health Standard 3 is increased.

Cumulative Effects:

Cumulative effects would have less negative impacts to rangeland conditions than the No Action alternative allowing a better chance for rangeland conditions to improve and meet Land Health Standard 3 over the entire area the trails encompass.

3.3.4 Wetlands & Riparian Zones (includes a finding on Standard 2)

Current conditions:

Riparian and wetland zones located within the project area include Big Salt Wash, Coal Gulch, and a number of springs. Coal Gulch Creek is located to the north of the proposed trails.

Riparian habitat in the project area is limited due to the xeric conditions and intermittent nature of the two creeks. Highly saline and erosive soils along with water diversion of natural flow also

limit the potential of these creeks to fully support robust riparian habitat. Mature cottonwoods and willows are generally sparse along the creeks. Fremont cottonwoods (*Populus fremontii*), coyote willow (*Salix exigua*), sumac (*Rhus trilobata*), sedge (*Carex spp*), Baltic rush (*Juncus*), lance leaf cottonwood, horsetail (*Equisetum arvense*), tamarisk (*Tamarix ramosissima*), and baccharis were observed during a recent PFC assessment conducted in the summer of 2011 on a reach of Big Salt Wash to the north of the project area. The potential extent of the riparian habitat was also found to be limited in some locations due to a channel type with steep banks.

Public Land Health Standard for riparian systems:

Both Coal Gulch Creek and Big Salt Wash were assessed in 1993 for Proper Functioning condition (PFC) and found to be Functioning at Risk (FAR). These assessments were completed based upon review of aerial photography and professional judgment. Riparian systems are determined to be meeting PFC when they have the ability to recover from major disturbance such as fire, severe grazing, or 100-year floods.

No Action

Direct and Indirect Effects:

Under the No Action alternative the proposed trails would not be constructed. User created trails that would cross Coal Gulch Creek or Big Salt Wash may be created, but are not foreseen. There would be no new direct or indirect effects to riparian and wetland zones under this alternative.

Public Land Health Standard for riparian systems:

Riparian systems in the project area would continue to be FAR under the No Action alternative. The condition of these systems would not change under this alternative.

Cumulative Effects:

Cumulative effects from the No Action alternative may result if unauthorized trails are constructed through or adjacent to riparian habitat. Growing population and demands for recreation in and near Grand Junction increase the likelihood of new trails being created. Recreation users are often drawn to water and riparian areas for shade and rest. Careful design and consideration of trail placement helps to reduce unplanned impacts on riparian habitat.

Proposed Action

Direct and Indirect Effects:

The riparian zone along both creeks would be crossed by both trails. No special design or armoring has been proposed either of the crossings. Designing the crossings at 90 degree angles to the creeks would reduce impacts to the banks and vegetation along the creeks. Monitoring the crossings for damage and stabilizing banks and limiting the width of the crossing would reduce impacts to the riparian habitat. If crossing widths are kept to the proposed 18 to 24 width then impacts from direct removal of plants would not be measurable. Prohibiting staging areas at the crossings would protect soil and vegetation from compaction and trampling.

Public Land Health Standard for riparian systems:

Land Health Standard 2 would not be affected by this alternative as long as recreation use within the riparian zone is discouraged.

Cumulative Effects:

There would be no cumulative effects on riparian zones from the proposed action. There are 2 crossings through riparian habitat under the proposed action. These crossings would be limited to only the designated trails. Direct vegetation removal and trampling would be limited to the proposed trail footprint.

Protective/Mitigation Measures:

Trail crossings should be monitored to ensure that trails do not migrate out of the approved footprint and to ensure that new crossings are not created. If excessive erosion is found to be occurring at the two crossings then they should be armored or relocated as necessary to protect the riparian zone. Recreation staging at the crossings should be discouraged. Discouraging staging in the riparian zone would protect soils from compaction and bank sheering and would protect vegetation from trampling.

3.3.5 Wildlife (includes fish, aquatic and terrestrial) (includes a finding on Standard 3)

Current conditions:

Land Health status in the proposal area varies from “not meeting” to “meeting” land health standards. Areas that meet land health have a higher likelihood of having native and other desirable species present, provided the habitats specific to a species are present. All trails except are within areas not currently meeting biotic Land Health Standards.

No Action

Direct and Indirect Effects:

“No Action” would not cause any direct impacts to wildlife. No trails would be built, no ground would be disturbed. Indirect effects could arise from heavier use of existing trails near important wildlife locations, or even illegal off-trail use, use of wildlife or livestock trails, or off-trail short-cutting. If trail users perceive more crowding on existing trails, they could move to other areas currently receiving less use, which could cause impacts to species listed above beyond the project area.

Cumulative Effects:

No action would not alter effects already taking place or that would occur without additional trail development. Past actions, including recreation, pipeline and powerline construction, road building and use, grazing and mining have contributed in various degrees to changing the landscape and the species present. For example, it appears that development and use of the Zippity-Do-Da Trail on a ridge where Ferruginous Hawks nested in 1985 likely has precluded hawks from nesting on that ridge in recent years and will continue to do so as trail use continues. Due to the high levels of spring, early summer and fall recreation activity, larger species of birds and mammals are likely scarcer than in the past due to high human use during critical life cycle seasons (for example, late winter range use (March & April) for mule deer, or raptors that nest on the ground or in pinyon and juniper woodland (March-July). Future foreseeable actions include the proposed action, and further development of recreation trails within the SRMA.

Proposed Action

Direct and Indirect Effects:

Mule Deer: All of the proposed trails are within an area mapped as “severe winter range” by the Colorado Parks and Wildlife, and will not affect mule deer winter range to a greater effect than already experienced, as the proposed trails are close to existing trails that could provide winter

thermal cover (pinyon-juniper woodland), but are not closed in the winter at this time. Addition of these trails would not cause additional impact to mule deer winter range.

Migratory Birds: Trail work is proposed for the spring and summer months, so there may be a minimal effect on nesting of migratory birds.

Cumulative Effects: Past actions, including recreation, pipeline and powerline construction, road building and use, grazing and mining have contributed in various degrees to changing the landscape and the species present. Due to the high levels of spring, early summer and fall recreation activity, larger species of birds and mammals are likely scarcer than in the past due to high human use during critical life cycle seasons (for example, late winter range use (March & April) for mule deer, or raptors that nest on the ground or in pinyon and juniper woodland (March-July). For example, it appears that development and use of the Zippity-Do-Da Trail on a ridge where Ferruginous Hawks nested in 1985 likely has precluded hawks from nesting on that ridge in recent years and will continue to do so as trail use continues. Future foreseeable actions include the proposed action, and further development of recreation trails within the SRMA, though no trail plans other than the proposed action are known or proposed.

Protective/Mitigation Measures:

None recommended at this time

3.4 HERITAGE RESOURCES AND HUMAN ENVIRONMENT

3.4.1 Cultural Resources

Current Conditions:

A records search of the general project area, was completed by the BLM archaeologists indicating that a number of previous Class III inventories covered portions of the Area of Potential Effect (APE) as defined in the National Historic Preservation Act (NHPA); IFs were within the APE for Trail C (CRIR 1183-31 and 1009-06) and Trail D (CRIR 1182-1, 1098-20,. In areas not covered by previous inventory a Class III inventory of the APE was completed by BLM archaeologists; for Trail D CRIR 1012-01.

Conditions of the existing cultural environment are incorporated by this reference but the following briefly summarizes cultural resources in the APE. NFD trails south of the Bookcliffs escarpment have been surveyed by numerous previous Class III inventory, large block surveys were associated with proposed coal development. This environment has lower potential for significant cultural resources and most sites are associated with historic grazing and mining, with prehistoric and historic isolated finds (IFs) scattered at a low density. Cultural Resource density and site type changes in the foothills north of the Bookcliffs escarpment with more open camp and Ute sites recorded by previous survey. Isolated finds represent both prehistoric and historic activity in the area. Prehistoric isolates represent either loss or discard. Historic isolates represent trash from activities in the area related to grazing management, mining, or woodcutting. Isolates are determined in the field to not represent activities that will provide additional information and are considered not eligible for nomination to the National Register of Historic Places. The project inventory and evaluation is in compliance with the NHPA, the Colorado State Protocol Agreement, and other federal law, regulation, policy, and guidelines regarding cultural resources.

No Action

Direct and Indirect Effects: The trail system would not be expanded and areas that are not currently frequented by recreation activity would not increase.

Cumulative Effects: None

Proposed Action

Direct and Indirect Effects: There would be no direct impacts to cultural resources from the construction of the trail. Indirect impacts would be negligible and would be associated to increased access which can lead to unauthorized activity including collection of artifacts. This can damage the integrity of previously unrecorded sites.

Cumulative Effects: This expands recreation use and the indirect impacts that occur where people currently do not access frequently.

Protective/Mitigation Measures: The BLM project lead shall ensure that all persons in the area who are associated with this project shall be informed that any person who, without a permit, injures, destroys, excavates, appropriates or removes any historic or prehistoric ruin, artifact, object of antiquity, Native American remains, Native American cultural item, or archaeological resources on public lands is subject to arrest and penalty of law (16 USC 433, 16 USC 470, 18 USC 641, 18 USC 1170, and 18 USC 1361). Strict adherence to the confidentiality of information concerning the nature and location of archeological resources would be required of the proponent and all of their subcontractors (Archaeological Resource Protection Act, 16 U.S.C. 470hh)

Inadvertent Discovery: The National Historic Preservation Act (NHPA) [16 USC 470s., 36 CFR 800.13], as amended, requires that if newly discovered historic or archaeological materials or other cultural resources are identified during the Proposed Action implementation, work in that area must stop and the BLM Authorized Officer (AO) must be notified immediately. Within five working days the AO will determine the actions that will likely have to be completed before the site can be used (assuming in place preservation is not necessary).

The Native American Graves Protection and Repatriation Act (NAGPRA) [25 USC 3001 et seq., 43 CFR 10.4] requires that if inadvertent discovery of Native American Human Remains or Objects of Cultural Patrimony occurs, any activity must cease in the area of discovery, a reasonable effort made to protect the item(s) discovered, and immediate notice be made to the BLM Authorized Officer, as well as the appropriate Native American group(s) (IV.C.2). Notice may be followed by a 30-day delay (NAGPRA Section 3(d)).

The BLM may relocate activities to avoid the expense of mitigation and delays associated with this process, as long as the new area has been appropriately inventoried and has no resource concerns, and the exposed materials are recorded and stabilized. The BLM shall be responsible for mitigation costs. The BLM authorized officer will provide technical and procedural guidelines for relocation and/or to conduct mitigation in consultation with the SHPO. Upon verification from the BLM authorized officer that the required mitigation has been completed, the BLM will be allowed to resume construction.

3.4.2 Paleontological Resources

Current Conditions:

The surface geology is composed of Quaternary age sediments and Upper Cretaceous age Mancos Shale. Neither of these geologic units has a high potential for yielding scientifically significant fossils, and there are no recorded vertebrate fossil sites near the proposed trail alignments.

No Action

Direct and Indirect Effects: None.

Cumulative Effects: None.

Proposed Action

Direct and Indirect Effects: Possible direct impacts to unknown paleontological resources could occur during trail construction, or new discoveries could be made. Possible indirect impacts from trail construction and use could include discovery of new paleontological resources, and theft or vandalism of currently unknown fossils.

Cumulative Effects: The potential direct and indirect impacts could add to impacts that are already occurring from the surrounding, existing trail system.

Protective/Mitigation Measures:

The BLM project lead will inform all of the trail builders that collection of vertebrate fossil resources is not allowed without a BLM issued permit. The trail builders will also be instructed to halt construction in an area if vertebrate fossil resources are discovered and immediately notify the BLM project lead. The BLM project lead will notify the BLM paleontology coordinator, who will examine the site to determine the appropriate action.

3.4.3 Tribal and Native American Religious Concerns

Current Conditions:

American Indian religious concerns are legislatively considered under several acts and Executive Orders, namely the American Indian Religious Freedom Act of 1978 (PL 95-341), the Native American Graves Environmental Assessment Protection and Repatriation Act of 1990 (PL 101-601), and Executive Order 13007 (1996; Indian Sacred Sites). In summary, these require, in concert with other provisions such as those found in the NHPA and ARPA, that the federal government carefully and proactively take into consideration traditional and religious Native American culture and life and ensure, to the degree possible, that access to sacred sites, the treatment of human remains, the possession of sacred items, the conduct of traditional religious practices, and the preservation of important cultural properties are considered and not unduly infringed upon. In some cases, these concerns are directly related to “historic properties” and “archaeological resources”. In some cases elements of the landscape without archaeological or other human material remains may be involved. Identification of these concerns is normally completed during the land use planning efforts, reference to existing studies, or via direct consultation. There is no known evidence that suggests the project area holds special significance for Native Americans, or is actively used to maintain any traditional practices. The project would not alter or limit any access if there were traditional uses that are not known to the

agency. No additional Native American Indian consultation was conducted for the proposed project.

No Action

Direct and Indirect Effects: The Ute have a generalized concept of spiritual significance that is not easily transferred to Western models or definitions. As such the BLM recognizes that the Ute have identified sites that are of concern because of their association with Ute occupation of the area as part of their traditional lands. No traditional cultural properties, unique natural resources, or properties of a type previously identified as being of interest to local tribes, were identified during the cultural resources inventory of the project area.

Cumulative Effects: none

Proposed Action

Direct and Indirect Effects: same as the No Action. The prehistoric isolated finds do not represent a type of artifact that has been identified during consultation that would require any further consideration or consultation.

Cumulative Effects: In some consultations with our office the Ute have identified that access to areas is important to them and trails may open up areas that they would not otherwise be able to access. Typically equestrian access is preferred over hiking and often elders have difficulty getting to areas that were traditionally used.

Protective/Mitigation Measures: If new information is provided or discovered additional or edited terms and conditions for mitigation may have to be negotiated or enforced,

3.4.4 Visual Resources

Current Conditions:

The proposed project area lies north of Fruita along the northern edge of the Grand Valley where it meets the Bookcliffs (in the northeastern portion of the Colorado Plateaus physiographic province.) The proposed trails span two Visual Resource Inventory Scenic Quality Rating Units: SQRU 15 – VRI Class III, Scenic Quality C, Sensitivity High, Foreground/Middle-ground Distance Zone; and SQRU 16 – VRI Class II, Scenic Quality B, Sensitivity High, Foreground/Middle-ground Distance Zone.

The landscape is characterized by low, rolling hills with sparse low-growing grasses and shrubs, sloping gradually to patchy juniper stands along the base of the Bookcliffs. The steep eroded slopes and vertical cliffs of the Bookcliffs rise abruptly in the middle of the project area. The lower elevations of the project area along with the south aspect of the Bookcliffs are largely horizontal in form, smooth to medium in texture, and characterized by light tan and grey colors punctuated by the medium to dark greens of the scattered juniper stands. The higher elevations along the north aspect of the Bookcliffs are more heavily vegetated with pinyon and juniper creating a more uniform color and texture. Built elements in the project area include: a trailhead with post and cable barricaded gravel parking lot, kiosk/gazebo, and CXT vault toilet; a campground including access roads, parking spaces and barriers, signs, picnic tables, fire grates, and four CXT vault toilets; and a network of roads and singletrack trails.

The area is used primarily by recreationists using the campground and trail system, as well as ranchers, nearby residents, and oil and gas operation workers. These users would constitute the casual observer.

As per the 1987 GJFO RMP, the proposed trails lie within undesignated VRM areas. It has been the general practice of the GJFO to manage undesignated areas using VRM Class III objectives which allow moderate levels of change to the landscape and where management activities may attract attention, but should not dominate the view of the casual observer. Change should repeat the basic elements found in the natural landscape.

No Action

Direct and Indirect Effects: The proposed 20.6 miles of trails would not be built and would not introduce new visual contrast to the area.

Cumulative Effects: Potential changes to land use allocations through the RMP revision could either increase or decrease visual impacts to the area, depending on the alternative selected.

The implementation of a fee system, and potential expansion of the campground, would result in additional developments that would increase visual contrast in the project area. It would also increase the likelihood of undesignated social trails that do not meet BLM design criteria, thereby increasing visual impacts.

Proposed Action

Direct and Indirect Effects: Construction of the proposed trails would remove vegetation and expose soil, introducing weak to moderate contrast to the landscape. By adhering to BLM and IMBA trail design criteria the trails would follow the curvilinear patterns of the landscape, consequently reducing visual contrast. The proposed trails would primarily be visible only to trail users, and only for short distances. The motion and colors introduced to the landscape by trail users would likely create more visual contrast than the physical presence of the trails themselves.

Key observation points for Trail C would be campsites directly adjacent to the trail. The proximity of the trail to the campsites would create visual impacts to campers whenever trail users passed by.

The physical characteristics of Trail D would create more visual contrast than the other trails due to the wider tread width and constructed dirt features.

The level of change to the characteristic landscape created by the proposed trails would be low to moderate. The trails would meet the VRM Class III objectives described above.

Cumulative Effects: Potential changes to land use allocations through the RMP revision could either increase or decrease visual impacts to the area, depending on the alternative selected. The impacts to visual resources from the proposed action (described above) would be added to any additional developments prescribed in the new RMP. The proposed trails could impact changes to VRM classifications for the project area which will likely result from the RMP revision.

The implementation of a fee system, and potential expansion of the campground, would result in additional developments that would increase visual contrast in the project area. It would also increase the likelihood of undesignated social trails that do not meet BLM design criteria, thereby increasing visual impacts.

3.4.5 Social\Economic\Environmental Justice

Current Conditions:

There are approximately 25 miles of designated non-motorized trails within the bicycle emphasis area. This proposal would add approximately 3.4 miles of mountain bike riding opportunities. The Campground has 35 campsites, and is often filled to capacity during the spring and fall months. The NFD mountain bike trail system is a well-known and popular destination for mountain bikers from throughout Colorado and Utah, and also receives significant visitation from national and international mountain bike enthusiasts. Annual visitation to the project area is estimated at approximately 60,000. The estimated population in Fruita for 2010 was 10,316, and is projected to increase 11% in five years.

The Cities of Fruita and Grand Junction benefit from having these outdoor recreational opportunities close to their communities. Many businesses rely on the outside income generated by tourism.

The requirements for environmental justice review were established by Executive Order 12898 (February 11, 1994). That order declared that each federal agency is to identify “disproportionately high and adverse human health or environment effects of its programs, policies, and activities on minority populations and low income populations.”

According to Census 2010, the only minority population of note in the impact area is the Hispanic community of Mesa County. Persons describing themselves as Hispanic or Latino represented 13.3 percent of the population, considerably less than the Colorado state figure for the same group (20.7 percent). Blacks, American Indians, Asians and Pacific Islanders each accounted for around 1 percent of the population, below the comparable state figure in all cases. The census counted 11.8 percent of the Mesa County population as living in families with incomes below the poverty line, compared to 12.6 percent for the entire state.

No Action

Direct and Indirect Effects: If these trails are not built, North Fruita Deserts current trail system would continue to be used. The increasing population would continue to impact the current trail system, and crowding could become an issue in the future.

Cumulative Effects: If the campground expansion is completed in the next few years, this could bring more recreationalists onto the current 25 mile trail system. This could have a cumulative effect on crowding.

Proposed Action

Direct and Indirect Effects: If these trails are built, it would expand the types of trails in NFD, and the larger loop possibilities for NFD. This would attract more visitation from the local and international communities. Socially this would give the outdoor recreationalists more options for utilizing exercise and the environment to gain a healthy and balanced lifestyle.

Cumulative Effects: If these trails are built along with the expanded campground, this could increase the visitation for NFD. Although the new trails would disperse many of the crowding, the campground could attract more participants from outside the valley.

3.4.8 Transportation/Access

Current Conditions:

Primary access to the project area is from Fruita via 18 Road. Secondary access is from Fruita via 16 Road and V.7 Road which connects 16 Road and 18 Road. All of these roads are managed and maintained by Mesa County. In addition to access for recreation they provide access to local residences, range permittees and oil and gas operations. Based on BLM traffic counter data from 18 Road, an estimated 67,500 people traveled 18 Road within the SMA in 2011. There are approximately 25 miles of designated non-motorized trails within the bicycle emphasis area. This mixes recreation traffic with utility traffic, occasionally creating safety issues, and in several locations has resulted in the development of social trails as recreationists seek safer and more desirable recreation routes.

No Action

Direct and Indirect Effects: In this alternative, the current trail system would continue to be utilized. Without the addition of the proposed trails to disperse recreation use, expected increases in visitation would contribute to higher volumes of traffic on the existing road and trail network, compounding the safety and social trailing impacts described above.

Cumulative Effects: Potential changes to land use allocations through the RMP revision could result in either increased or decreased traffic, and changes to the type of traffic on the road and trail network in the NFD, depending on the alternative selected. The No Action alternative would not address congestion relief, traffic safety concerns, or social trailing concerns.

The potential expansion of the campground would likely increase use of the existing trail system, thereby increasing congestion on the trails, and on the roads accessing those trails. The trails in this proposal would not be available to help absorb anticipated increases in visitation.

Proposed Action

Direct and Indirect Effects: The addition of the proposed trails to the NFD trail network would likely attract additional recreational use of the area, resulting in increased traffic on 18 Road, 16 Road and V.7 Road. Congestion on the trail network would likely be reduced due to use being dispersed over new trails. These routes would also provide new access opportunities for mountain bikers and motorcyclists.

Cumulative Effects: The Proposed Action would address current transportation and access issues, and could provide a model for addressing future transportation planning issues identified in the RMP revision. Potential changes to land use allocations through the RMP revision could result in either increased or decreased traffic, and changes to the type of traffic on the road and trail network in the NFD, depending on the alternative selected.

The potential expansion of the campground would likely increase use of the existing trail system, thereby increasing congestion on the trails, and on the roads accessing those trails. The trails in

this proposal would help address those impacts as described under the effects from the proposed action.

3.4.9 Wastes, Hazardous or Solid

Current Conditions: Hazardous and solid wastes are not a part of the natural environment but could be introduced to the environment as a result of the proposed action. This could be in the form of spilled fuel and lubricants utilized by the trail construction machinery and solid wastes (trash) left by trail users.

No Action

Direct and Indirect Effects: There would be no impacts.

Cumulative Effects: None

Proposed Action

Direct and Indirect Effects: The use of mechanized trail construction machinery could result in spills of fuel and lubricants. Amounts of these materials would be small and spills would likely contaminate small areas. With prompt reporting and cleanup (see Mitigation Measures), impacts would be minimal and short-term. With proper mitigation, impacts would be limited to small amounts of contaminated soil. Public use of the trails could result in trash and litter left behind.

Cumulative Effects: There should be no cumulative effects.

Protective/Mitigation Measures:

All spills of fuel and lubricants used during construction of the trails should be promptly reported to the BLM. Any contaminated soil should be promptly removed and either disposed of or treated, as determined appropriate by the BLM.

3.5 LAND RESOURCES

3.5.2 Recreation

Current Conditions:

There are approximately 25 miles of designated non-motorized trails within the bicycle emphasis area. These trails are accessed primarily from the North Fruita Desert Trailhead (gravel parking lot, two vault toilets, information kiosk, gazebo) at the southern edge of the bicycle emphasis area on 18 Road, and the North Fruita Desert Campground which contains 35 developed campsites (picnic tables, fire grates, four vault toilets.) Social trails are prevalent between campsites and toilets, and between campsites and nearby trails.

The NFD mountain bike trail system is a well-known and popular destination for mountain bikers from throughout Colorado and Utah, and also receives significant visitation from national and international mountain bike enthusiasts. Annual visitation to the project area is estimated at approximately 60,000, with the most intensive use occurring between March and May, and from September through November. During these busy seasons, the developed campsites, as well as overflow campsites, are filled to capacity nearly every weekend. Visitation is projected to

continue to increase. OHV use occurs primarily on the network of routes located south of the bicycle emphasis area, including a 400 acre open OHV area. Motorized recreation is less intensive than mountain bike use in the area, and most participants are from the local area.

Much of the NFD trail system consists of routes that were originally utility routes (power line and pipeline roads), cow trails, and user-created social trails. The creation of new undesignated, and often unsustainable, routes continues to be a problem in the area as recreationists seek to make new connections between trails, and from campsites to trails.

No Action

Direct and Indirect Effects:

In this alternative, no new trails would be constructed and the current trail system would continue to be utilized. Increasing recreational use would increase congestion on the existing trail network, impacting visitor's recreational experiences. Identified user demand for additional trail opportunities would remain unmet, and would likely result in continued impacts from social trail use, and creation of new social trails.

Cumulative Effects: The potential expansion of the campground would likely increase use of the existing trail system, increasing congestion and impacting visitor's recreational experiences. The trails in this proposal would not be available to help absorb anticipated increases in visitation. Potential changes to land use allocations through the RMP revision could result in either an increased or decreased emphasis on recreation management in the NFD.

Proposed Action

Direct and Indirect Effects: The proposed action would implement actions first identified in the 2004 North Fruita Desert Plan, and reinforced during recent community collaboration efforts. In general, the addition of these trails to the NFD trail system would help achieve recreation management objectives for increased quantity and quality of trails and trail experiences in the NFD. The addition of new trails would disperse use and help relieve congestion on the trails.

The proposed trails would also add variety to the types of trail experiences available in the NFD. The proposed trails would increase trail system connectivity and would create new loop riding opportunities. Trail D would provide directional downhill trail riding opportunities and "flow" features that are increasingly popular among riders. Trail D would add technical trail features that increase trail difficulty and enhance the recreational experience for highly skilled riders. Trail C would provide easy access from the campground to a beginner-level riding opportunity.

The proximity of Trail C to the campground would also impact the experience of campers, as there would be frequent mountain bike traffic passing within as little as 20 feet from campsites. Additionally, it is highly likely that social trails will develop between campsites and the new trail, increasing the likelihood of additional traffic directly through campsites. Scoping identified the potential social impacts of trail development in close proximity to the campground, both for trail users and campers. These concerns may warrant further consideration and public input. Current challenges in managing social trailing throughout the campground would be amplified with the addition of Trail C.

Expansion of the trail system would likely increase the popularity of the trail system. The resulting increase in visitation would increase maintenance needs and costs for the trailhead, campground facilities and trails.

Cumulative Effects:

Potential changes in land use allocations in the RMP revision could either increase or decrease recreational use in the NFD, depending on which alternative is selected, but mechanized use, motorized use, and camping are likely to continue to increase. The proposed trails would likely contribute to that increased use by attracting recreationists seeking new opportunities, but they would also help disperse that increased traffic. New management direction from the revised RMP could also result in further expansion of the trail system and camping opportunities with impacts similar to those described above.

The campground fee system planned for implementation in 2012 would increase funding available for maintenance and upgrades of the campground and its associated facilities and trails. The planned expansion of the campground could impact or be impacted by Trail C. Final design of the campground expansion is not complete. Final road, facility and campsite locations could overlap Trail C if it is constructed prior to the completion of campground modifications. Impacts to future campsites would be the same as impacts to current campsites as described under the proposed action above.

Protective/Mitigation Measures: Due to the impacts described above, it is recommended that construction of Trail C not be implemented at this time

3.5.6 Range Management

Current conditions:

The proposed trails would occur in the Little Salt, Big Salt, Garr Mesa and Coal Gulch allotments. These allotments are currently permitted by the BLM for livestock grazing with the following grazing schedules:

Little Salt Allotment:

| | | | |
|------------|----------------|--------|-------------|
| 479 Cattle | 12/01 to 05/31 | 95%*PL | 2,722 *AUMs |
|------------|----------------|--------|-------------|

Big Salt Allotment:

| | | | |
|------------|----------------|-------|----------|
| 200 Cattle | 11/15 to 05/05 | 87%PL | 984 AUMs |
| 50 Cattle | 05/01 to 11/15 | 87%PL | 313 AUMs |

Garr Mesa Allotment:

| | | | |
|------------|----------------|-------|----------|
| 110 Cattle | 11/23 to 04/30 | 61%PL | 351 AUMs |
|------------|----------------|-------|----------|

Coal Gulch Allotment:

| | | | |
|-----------|----------------|--------|----------|
| 75 Cattle | 06/01 to 10/01 | 100%PL | 303 AUMs |
|-----------|----------------|--------|----------|

*PL is Public Land.

*AUM (Animal Unit Month) is the amount of forage on BLM Land for the sustenance of a cow/calf pair, or equivalent, for one month.

No Action

Direct and Indirect Effects:

In the bicycle emphasis area there are existing trails that are crowded and receive the most recreation use in the spring and fall. Season of use by cattle in the bicycle emphasis area occurs mainly in the spring.

Both cattle and recreationists use the existing trails with highest use occurring for both in the spring. In general, there are few conflicts but some harassment occurs to the cattle from people on the trails and by the stock ponds where cattle water and tend to hang out. There is resentment by the recreationist when they need to avoid cow pies on the trails or avoiding close contact with the cattle.

Cumulative Effects:

Cumulative effects combined with both recreation and livestock creates the possibility of increased erosion on the existing trails and degradation of rangeland conditions which would require stricter guidelines for both recreation and livestock use to maintain or improve rangeland conditions.

Proposed Action

Direct and Indirect Effects:

Having additional trails designated and constructed for bicycle and motorcycle use would better distribute recreation activities to help decrease the potential for conflicts between livestock and recreationists and decrease the current impacts to the existing trails. The proposed and existing trails would still be used by both recreationists and cattle but the recreationists would have more areas to choose from to avoid concentrations of cattle and/or people.

Cumulative Effects:

Less cumulative effects from cattle and recreationists would occur under the proposed action than No Action alternative as planning for the proposed trails considered erosion potential and would be constructed to minimize potential erosion impacts. Also, the proposed trails would better distribute recreation use helping to decrease impacts that are currently occurring in the crowded areas used by both recreationists and cattle.

CHAPTER 4 - CONSULTATION AND COORDINATION

4.1 LIST OF PREPARERS AND PARTICIPANTS

INTERDISCIPLINARY REVIEW

| NAME | TITLE | AREA OF RESPONSIBILITY |
|--------------------|---|--|
| Christina Stark | Riparian Coordinator/Project Manager | Riparian and Wetlands |
| Julia Christiansen | Natural Resource Specialist | Surface Management and Permitting for Oil & Gas |
| Aline LaForge | Archaeologist | Cultural Resources, Native American Religious Concerns |
| Chris Pipkin | Outdoor Recreation Planner | Access, Transportation, Recreation, VRM, Wilderness, ACECs |
| Scott Clarke | Range Management Specialist | Vegetation, Range |
| Jacob Martin | Range Management Specialist | Range, Forestry |
| Jim Dollerschell | Range Management Specialist | Range, Wild Horse & Burro Act |
| David Scott Gerwe | Geologist | Minerals, Geology, Paleontology |
| Alan Kraus | Hazardous Materials Specialist | Hazardous Materials |
| Robin Lacy | Realty Specialist | Land Tenure/Status, Realty Authorizations |
| Heidi Plank | Wildlife Biologist | T&E Species, Migratory Bird Treaty Act, Terrestrial & Aquatic Wildlife |
| Anna Lincoln | Ecologist | Land Health Assessment, Range Ecology, Special Status Plant Species |
| Collin Ewing | Environmental Coordinator | Environmental Justice, Prime & Unique Farmlands, Environmental Coordinator |
| Nate Dieterich | Hydrologist | Soils, Air Quality, Water Quality, Hydrology, Water Rights |
| Mark Taber | Range Management Specialist | Weed Coordinator, Invasive, Non-Native Species |
| Lathan Johnson | Fire Ecologist Natural Resource Specialist | Fire Ecology, Fuels Management |

CHAPTER 5 - REFERENCES

Bureau of Land Management (BLM). 1985. Draft Resource Management Plan and Environmental Impact Statement. Grand Junction Field Office. Grand Junction, Colorado.

Bureau of Land Management. 1987. Grand Junction Resource Area Resource Management Plan and Record of Decision. Grand Junction District. Grand Junction, Colorado.

Bureau of Land Management. 1988. H-1790-1 National Environmental Policy Handbook. Washington, D.C.

Bureau of Land Management. 2004. Resource Management Plan and Record of Decision for the Colorado Canyons National Conservation Area and Black Ridge Canyons Wilderness. Grand Junction Field Office. Grand Junction, Colorado.

BLM GJFO. 2004. "BLM, Grand Junction Field Office, Trail Design Criteria" (formerly "Criteria for the Placement of Trails")

BLM CRIR 1012-01. 2011. Class III Cultural Resources Inventory of the Pump Track Bicycle Trail in the North Fruita Desert, Mesa County, Colorado (LaForge 2011). Grand Junction Field Office. Grand Junction, Colorado.

BLM CRIR 1012-03. 2011. Class III Cultural Resources Inventory of the Anything But the Backside Bicycle Trail in Coal Gulch, Mesa County, Colorado (LaForge 2011). Grand Junction Field Office. Grand Junction, Colorado.

BLM CRIR 1012-04. 2011. Class III Cultural Resources Inventory of Trail E, Coal Gulch Road to 16 Road Connector, Mesa and Garfield Counties, Colorado (LaForge 2011). Grand Junction Field Office. Grand Junction, Colorado.

CDPHE-WQCC. 2012. Water Quality Control Commission, 5 CCR 1002-37, Regulation No. 37, Classifications and Numeric Standards for Lower Colorado River Basin, Amended: 6/13/2011, Effective: 1/1/2012.

CDPHE-WQCC. 2010a. "Integrated Water Quality Monitoring and Assessment Report-State of Colorado" The Update to the 2008 305(b) Report," Colorado Department of Public Health and Environment -Water Quality Control Commission, Effective April 30, 2010.

CDPHE-WQCC. 2010b. Water Quality Control Commission, 5 CCR 1002-93, Regulation #93, Colorado's Section 303(D) List of Impaired Waters and Monitoring and Evaluation List, Adopted March 9, 2010, Effective April 30, 2010.

IMBA. 2004. "Trail Solutions, IMBA's Guide to Building Sweet Singletrack"

Kingery, H.E., ed. 1998. Colorado Breeding Bird Atlas. Colorado Bird Atlas Partnership/Colorado Division of Wildlife. Denver CO.

Topper, R., K.L. Spray, W. H. Bellis, J.L. Hamilton, and P.E. Barkmann. 2003. Ground Water Atlas of Colorado. Colo. Geol. Surv. Special Pub. 53.

**UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
GRAND JUNCTION FIELD OFFICE
FINDING OF NO SIGNIFICANT IMPACT**

**North Fruita Desert SMA Trails
DOI-BLM-CO-130 2012-0013-EA**

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 Proposed Action will not have a significant effect on the human environment. An environmental impact statement is therefore not required.

BACKGROUND

This EA has been prepared by the BLM to analyze the proposed addition of 5.1 miles of new singletrack trails in the North Fruita Desert Special Management Area (SMA). During the SMA planning process NFD was identified as having many singletrack trail opportunities for recreational users. A bicycle emphasis area was designated for targeted management of mountain biking opportunities.

In the spring of 2011 a working group was formed to develop a strategy for continued implementation of trail development actions identified in the 2004 NFD SMA plan. The working group consisted of representatives from the City of Fruita, the Colorado Plateau Mountain Bike Trail Association (COPMOBA), Fruita business owners and the BLM. This group identified additional trail construction in the NFD as a way to meet increasing demand for trail-based recreation opportunities in the area, along with the associated economic benefits to the community.

The EA was made available for a 30-day public review on January 30, 2012. No public comments were received.

Intensity

I have considered the potential intensity/severity of the impacts anticipated from the North Fruita Desert SMA Trails Proposal relative to each of the ten areas suggested for consideration by the CEQ. With regard to each:

1. Impacts that may be both beneficial and adverse.

This project may have minor short term impacts to soils, vegetation, and wildlife; however these impacts are not significant. This project will have a long term net benefit for recreation.

2. The degree to which the proposed action affects public health and safety.

The proposed action is not expected to impact public health and safety.

3. *Unique characteristics of the geographic area such as proximity of historic or cultural resources, park lands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas.*

There are no significant impacts to riparian vegetation, parklands, prime farmlands, wetlands, or wild and scenic rivers within the project area. The project has been modified to avoid impacts to cultural and historic resources. There are no municipal water supplies in the project area.

4. *The degree to which the effects on the quality of the human environment are likely to be highly controversial.*

The environmental effects are not likely to be controversial.

5. *The degree to which the possible effects on the human environment are highly uncertain or involve unique or unknown risks.*

Trail construction has a long history in the region and poses no unique or unknown risks.

6. *The degree to which the action may establish a precedent for future actions with significant effects or represents a decision in principle about a future consideration.*

This decision is like one of many that have previously been made and will continue to be made by BLM responsible officials regarding trail construction on public lands. The decision is within the scope of the Resource Management Plan and is not expected to establish a precedent for future actions. The decision does not represent a decision in principle about a future consideration.

7. *Whether the action is related to other actions with individually insignificant but cumulatively significant impacts.*

There are no significant cumulative effects on the environment, either when combined with the effects created by past and concurrent projects, or when combined with the effects from natural changes taking place in the environment or from reasonably foreseeable future projects.

8. *The degree to which the action may adversely affect districts, sites, highways, structures, or objects listed in or eligible for listing in the National Register of Historic Places or may cause loss or destruction of significant scientific, cultural, or historic resources.*

There would be no adverse impacts to the above resources. The project has been modified to avoid impacts to cultural and historic resources.

9. *The degree to which the action may adversely affect an endangered or threatened species or its habitat that has been determined to be critical under the Endangered Species Act of 1973.*

No impacts are expected to endangered or threatened species or their designated critical habitats.

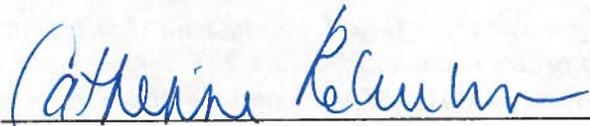
10. *Whether the action threatens a violation of Federal, State, or local law or requirements imposed for the protection of the environment.*

This decision complies with other Federal, State, or local laws and requirements imposed for the protection of the environment.

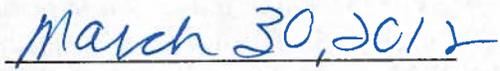
FINDING OF NO SIGNIFICANT IMPACT

On the basis of the information contained in the EA, and all other information available to me, it is my determination that: 1) the construction of Trails A and D will not have significant environmental impacts beyond those already addressed in the "Record of Decision and Resource Management Plan," (*January 1987*); (2) the Proposed Action is in conformance with the Resource Management Plan; and (3) the Proposed Action does not constitute a major federal action having a significant effect on the human environment. Therefore, an environmental impact statement or a supplement to the existing environmental impact statement is not necessary and will not be prepared.

This finding is based on my consideration of the Council on Environmental Quality's (CEQ) criteria for significance (40 CFR '1508.27), both with regard to the context and to the intensity of the impacts described in the EA.



Field Manager
Grand Junction Field Office



Date

THE UNIVERSITY OF CHICAGO
DEPARTMENT OF POLITICAL SCIENCE
POL 301 - THE POLITICAL SYSTEM

EXERCISES

1. The political system is a complex of institutions and actors that interact to produce public policy.

2. The political system is a complex of institutions and actors that interact to produce public policy. The political system is a complex of institutions and actors that interact to produce public policy. The political system is a complex of institutions and actors that interact to produce public policy.

3. The political system is a complex of institutions and actors that interact to produce public policy. The political system is a complex of institutions and actors that interact to produce public policy. The political system is a complex of institutions and actors that interact to produce public policy. The political system is a complex of institutions and actors that interact to produce public policy.

4. The political system is a complex of institutions and actors that interact to produce public policy. The political system is a complex of institutions and actors that interact to produce public policy. The political system is a complex of institutions and actors that interact to produce public policy. The political system is a complex of institutions and actors that interact to produce public policy.

5. The political system is a complex of institutions and actors that interact to produce public policy. The political system is a complex of institutions and actors that interact to produce public policy. The political system is a complex of institutions and actors that interact to produce public policy. The political system is a complex of institutions and actors that interact to produce public policy.

**UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
GRAND JUNCTION FIELD OFFICE**

**DECISION RECORD
North Fruita Desert SMA Trails
DOI-BLM-CO-130-2010-0013-EA**

DECISION: It is my decision to authorize the construction of Trails A (Zip-off) and D (Pumptrack Trail) as described in the proposed action in this EA and not authorize Trail C (Campground Trail). This decision is contingent on meeting all mitigation measures and monitoring requirements listed below. The EA was made available for a 30-day public review on January 30, 2012. No public comments were received. This office completed an Environmental Assessment and reached a Finding of No Significant Impact.

RATIONALE: Trail A would improve the recreation experience by providing a singletrack alternative to the existing pipeline road. The original alignment of Trail A was adjusted to address impacts to potential burrowing owl nest sites. Trail D would add technical trail features that increase trail difficulty and enhance the recreational experience for highly skilled riders. The proximity of Trail C to the campground would impact the experience of campers, as there would be frequent mountain bike traffic passing within as little as 20 feet from campsites. Additionally, it is highly likely that social trails would develop between campsites and the new trail, increasing the likelihood of additional traffic directly through campsites. Scoping identified the potential social impacts of trail development in close proximity to the campground, both for trail users and campers. These concerns may warrant further consideration and public input. Current challenges in managing social trailing throughout the campground would be amplified with the addition of Trail C.

MITIGATION MEASURES/MONITORING:

Cultural Resource Stipulations

1. The BLM project lead shall ensure that all persons in the area who are associated with this project shall be informed that any person who, without a permit, injures, destroys, excavates, appropriates or removes any historic or prehistoric ruin, artifact, object of antiquity, Native American remains, Native American cultural item, or archaeological resources on public lands is subject to arrest and penalty of law (16 USC 433, 16 USC 470, 18 USC 641, 18 USC 1170, and 18 USC 1361). Strict adherence to the confidentiality of information concerning the nature and location of archeological resources would be required of the proponent and all of their subcontractors (Archaeological Resource Protection Act, 16 U.S.C. 470hh)
2. Inadvertent Discovery: The National Historic Preservation Act (NHPA) [16 USC 470s., 36 CFR 800.13], as amended, requires that if newly discovered historic or archaeological materials or other cultural resources are identified during the Proposed Action implementation, work in that area must stop and the BLM Authorized Officer (AO) must

be notified immediately. Within five working days the AO will determine the actions that will likely have to be completed before the site can be used (assuming in place preservation is not necessary).

3. The Native American Graves Protection and Repatriation Act (NAGPRA) [25 USC 3001 et seq., 43 CFR 10.4] requires that if inadvertent discovery of Native American Human Remains or Objects of Cultural Patrimony occurs, any activity must cease in the area of discovery, a reasonable effort made to protect the item(s) discovered, and immediate notice be made to the BLM Authorized Officer, as well as the appropriate Native American group(s) (IV.C.2). Notice may be followed by a 30-day delay (NAGPRA Section 3(d)).
4. The BLM may relocate activities to avoid the expense of mitigation and delays associated with this process, as long as the new area has been appropriately inventoried and has no resource concerns, and the exposed materials are recorded and stabilized. The BLM shall be responsible for mitigation costs. The BLM authorized officer will provide technical and procedural guidelines for relocation and/or to conduct mitigation in consultation with the SHPO. Upon verification from the BLM authorized officer that the required mitigation has been completed, the BLM will be allowed to resume construction. Ensure proper drainage from and adjacent to all recreation facilities by implementing standard BLM design, construction, and maintenance plans for the project area.
5. Include adequate signage at and around parking areas and trailheads to effectively communicate rules and regulations regarding cross country travel in the planning area.
6. Continue to enforce rules and regulations governing travel management within the watershed.
7. Barricade unauthorized routes within the watershed.
8. BLM will be required to obtain a stormwater discharge permit from the State if the project's R-factor would be greater than 5 or the disturbance exceeds 5 acres.
9. Any additional trail construction in the North Fruita Desert will require a stormwater discharge permit and a Storm Water Pollution Prevention Plan.
10. Trail crossings should be monitored to ensure that trails do not migrate out of the approved footprint and to ensure that new crossings are not created. If excessive erosion is found to be occurring at the two crossings then they should be armored or relocated as necessary to protect the riparian zone. Recreation staging at the crossings should be discouraged. Discouraging staging in the riparian zone would protect soils from compaction and bank sheering and would protect vegetation from trampling.
11. The BLM project lead will inform all of the trail builders that collection of vertebrate fossil resources is not allowed without a BLM issued permit. The trail builders will also be instructed to halt construction in an area if vertebrate fossil resources are discovered and immediately notify the BLM project lead. The BLM project lead will notify the BLM paleontology coordinator, who will examine the site to determine the appropriate action.

12. All spills of fuel and lubricants used during construction of the trails should be promptly reported to the BLM. Any contaminated soil should be promptly removed and either disposed of or treated, as determined appropriate by the BLM.

PROTEST/APPEALS: This decision shall take effect immediately upon the date it is signed by the Authorized Officer, and shall remain in effect while any appeal is pending unless the Interior Board of Land Appeals issues a stay (43 CFR 2801.10(b)). Any appeal of this decision must follow the procedures set forth in 43 CFR Part 4. Within 30 days of the decision, a notice of appeal must be filed in the office of the Authorized Officer at Grand Junction Field Office, 2815 H Road, Grand Junction, Colorado, 81506. 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.

NAME OF PREPARER: Michelle Bailey

NAME OF ENVIRONMENTAL COORDINATOR: Collin Ewing

DATE: 3/30/12

SIGNATURE OF AUTHORIZED OFFICIAL:

Catherine Reuter

Field Manager
Grand Junction Field Office

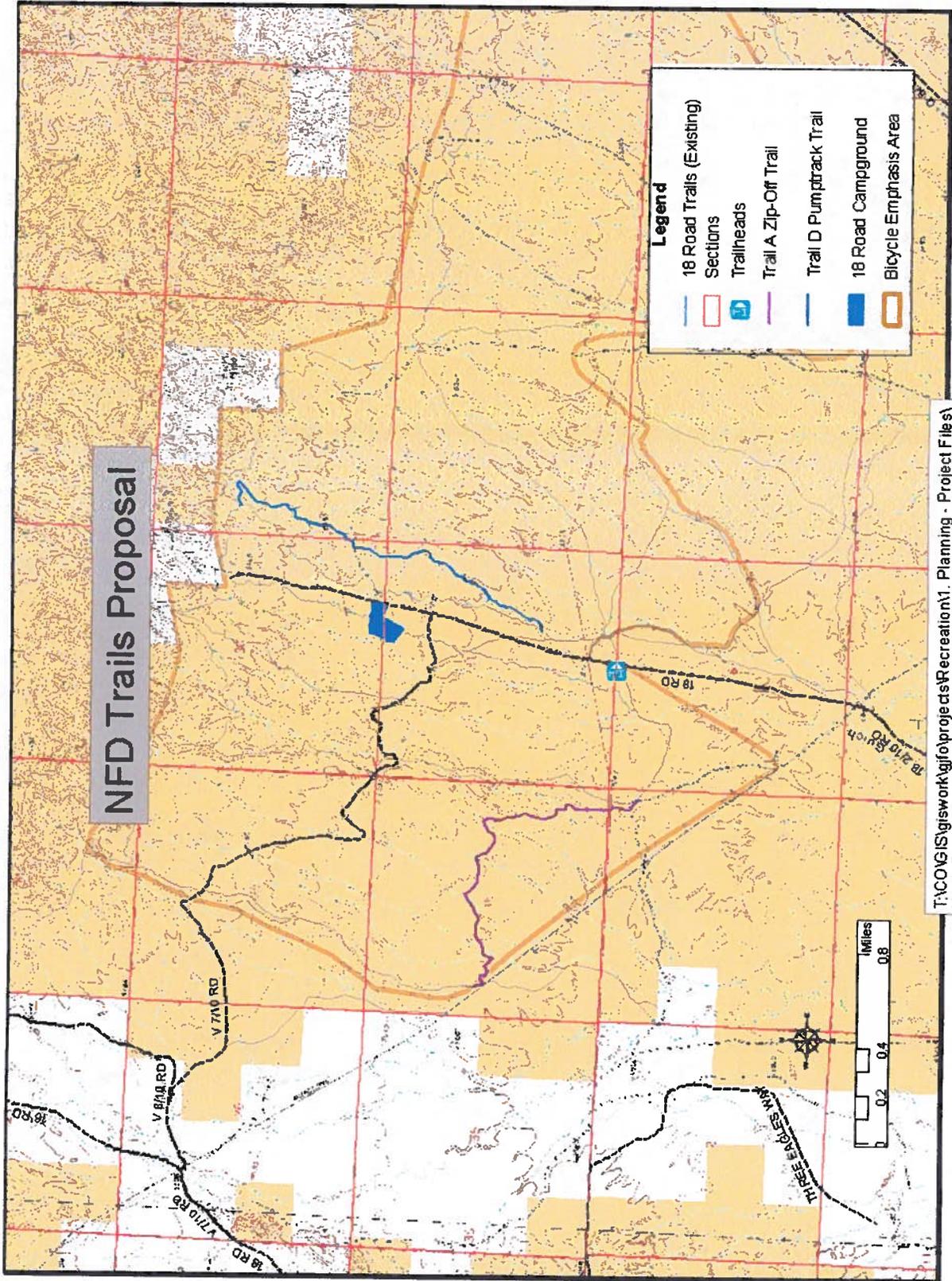
3/30/12

Date

ATTACHMENTS:

A - Project Map

NFD Trails Proposal



Legend

- 18 Road Trails (Existing)
- Sections
- Trailheads
- Trail A Zip-Off Trail
- Trail D Pumptrack Trail
- 18 Road Campground
- Bicycle Emphasis Area



T:\COGIS\gwork\proj\projects\Recreation\1. Planning - Project Files\North Fruita Desert\Maps\Workmaps\NFD_New_Proposed_090111

