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United States Department of Agriculture | Forest Service | Fishlake National Forest Supervisor's Office | 115 East 900 North Richfield, UT 84701
Fax: (435) 896-9347 | Phone: (435) 896-9233

File Code: 1950
Date: March 9, 2006

Incoming
C/041/0002

Dear Interested Public Land User,

Enclosed is a copy of the Fishlake National Forest Record of Decision (ROD) for the Quitchupah Creek Road Final Environmental Impact Statement (FEIS), the Bureau of Land Management, Richfield Field Office ROD, and an ERRATA to the FEIS.

These Decisions are the culmination of several years of environmental analysis and coordination with many interested parties, including formal consultation with the Paiute Tribe of Utah.

In summary, both agencies have selected to approve the **Alternative D- Water Hollow** route, along with its design and mitigation. Both agencies have decided that after a review of the potential impacts of all of the build Alternatives, the Water Hollow route would have the least impact on the human environment and still meet the elements of the Purpose and Need for the project.

Due to an oversight in the editing and printing of the FEIS, some of the updated and ongoing information and data were not incorporated into the FEIS. The ERRATA replaces the section in the FEIS that describes and summarizes the effects to Federally Listed plant and wildlife species, as well as species listed as sensitive in the Intermountain Region of the USDA Forest Service. Since there was a considerable delay between the Draft Environmental Impact Statement and the Final, the ERRATA replaces the summary in the FEIS with the more accurate and up-to-date analysis and data contained in the Biological Assessment and the Biological Evaluation.

All of the afore mentioned documents are available for inspection at the Fishlake National Forest Supervisors Office, 115 E. 900 N. Richfield, UT 84701 or on the Fishlake website at: http://www.fs.fed.us/r4/fishlake/projects/quitchupah/index.shtml

For additional information concerning these documents, contact Christopher Wehrli, Environmental Coordinator, at the Fishlake National Forest Supervisor's Office, (435) 896-9233

Sincerely,

Mary C Erickson

MARY C. ERICKSON
Forest Supervisor

RECEIVED
MAR 17 2006
DIV. OF OIL, GAS & MINING

Mine # C/041/0002
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Record # 0025
Doc. Date 3/9/2006
Recd. Date 3/17/2006

Quitchupah Creek Road
Final Environmental Impact Statement
January 2006

ERRATA

March 8, 2006

Errata: Replace **Section 3.7 Threatened, Endangered, and Sensitive Species** (pg. 3-56 to 3-69) in its entirety with the following, attached pages:

3.7 Threatened, Endangered, and Sensitive Species

The area of analysis for special status species encompasses the Project Area. As required by the Endangered Species Act (ESA), a Biological Assessment (BA) has been prepared under separate cover and is on file at the Fishlake National Forest Office and the BLM Richfield Field Office in Richfield, Utah. The BA evaluates the potential effects of a Proposed Action on Federally listed threatened, endangered, proposed and candidate species, and determines whether any such species and habitat are likely to be adversely affected by the action. The species accounts and discussion of potential impacts on these species resulting from the Proposed Action and alternatives, as discussed below, are taken from the BA.

The USFS requires a Biological Evaluation (BE) for the assessment/summary of the effects of a Proposed Action on USFS Sensitive Species. The information presented below has been utilized by the USFS for preparing a BE of the Proposed Action and alternatives.

In the case of species which occur or may occur in the Project Area, and species which may be directly or indirectly affected by the Proposed Action or alternatives, a further evaluation of potential impacts was prepared.

THREATENED, ENDANGERED, AND CANDIDATE SPECIES

A total of 10 Federally protected plant and animal species and one candidate species were listed by the USFWS as having the potential to occur within Emery and Sevier Counties and are shown in **Table 3.7-1**. The following discussion evaluates the likelihood for these species to occur in the area, based on habitats present, known occurrences, and the results of dedicated surveys for these species. If a species is known to occur in the area or has the potential to occur, the potential impacts resulting from the Project on that species are discussed.

A literature search reviewed the preferred habitats, elevational ranges, and occurrence records for each of these species. Based upon this information, a determination was made regarding the potential for each species to occur within the Project Area or to be directly or indirectly affected by the Proposed Action or alternatives (i.e. for the species to occur within the Action Area). The basis for these determinations is presented in the following discussion. In the case of species that clearly do not occur in the Project Area and have no potential to be directly or indirectly impacted by the Proposed Action or alternatives (e.g. plant species occurring only at high elevations), a "No Effect" determination was made.

In the case of species that occur or may occur in the Project Area and species that may be directly or indirectly affected by the Proposed Action or alternatives, a further evaluation of potential impacts was prepared.

Table 3.7-1 Federally Listed and Candidate Species Potentially Occurring within the Project Area

Common Name	Specific Name	Federal Status
Jones Cycladenia	*Cycladenis humilis* var. *jonesii*	Threatened
Maquire Daisy	*Erigeron maguirei*	Threatened
Last Chance Townsendia	*Townsendia aprica*	Threatened

Common Name	Specific Name	Federal Status
Barneby Reed-Mustard	*Schoenocrambe barnebyi*	Endangered
San Rafael Cactus (Despain Footcactus)	*Pediocactus despainii*	Endangered
Winkler Cactus (Winkler Footcactus)	*Pediocactus winkleri*	Threatened
Wright Fishhook Cactus	*Sclerocactus wrightae*	Endangered
Heliotrope Milkvetch	*Astragalus montii*	Threatened
Bald Eagle	*Haliaeetus leucocephalus*	Threatened
Mexican Spotted Owl	*Strix occidentalis lucida*	Threatened
Western Yellow-billed Cuckoo	*Coccyzus americanus occidentalis*	Candidate

THREATENED AND ENDANGERED PLANTS

Several of the listed plant species which have the potential to occur in the Project Area are restricted to, or most commonly occur on, particular soil or geological formation types. Soils in the area are generally derived by deposits of Quaternary alluvium and gravel deposits. The Project Area cuts through numerous sedimentary geologic formations that include the Mesaverde Group and the Mancos Shale.

The following Federally Listed plant species would not be expected to occur in the project area due to lack of necessary soil types or geologic formations within the project area, or the elevation range of the species is outside that of the project area (Biological Assessment, 2005):

- **Jones Cycladenia (*Cycladenia humilis* var. *jonesii*) - Threatened**
- **Maguire Daisy (*Erigeron maguirei*) – Threatened**
- **Barneby Reed-Mustard (*Schoenocrambe barnebyi*) – Endangered**
- **Wright Fishhook Cactus (*Sclerocactus wrightae*) - Endangered**
- **Heliotrope Milkvetch (*Astragalus montii*) - Threatened**

Three Threatened or Endangered plant species are known to occur or have the potential to occur in the project area. Implementation of the Proposed Action or one of the Action Alternatives would result in a May Affect – Not Likely to Adversely Effect determination for the species listed below.

Last Chance Townsendia (*Townsendia aprica*) - Threatened

This species grows in salt desert shrub and pinyon-juniper habitats on clay or clay-silt exposures of the Arapien and the Blue Gate member of the Mancos Shale, at elevations between 6,100 to 8,000 feet (Welsh et al., 1987; Atwood et al., 1991). Flowering occurs in April and May. This species is known from locations near the Project Area (Section 13 of Township 22 South, Range 5 East) and habitat exists in portions of the project corridor. Field surveys in May 1999 and May 2003, however, did not find any occurrence of this species within the project corridor.

San Rafael Cactus (*Pediocactus despainii*) – Endangered

This species is generally solitary, though it may occur in colonies. Habitat for this cactus is open pinyon-juniper communities on limestone gravels, at an elevation of approximately 6,000 to 6,200 feet (Welsh et al., 1987; Atwood et al., 1991). Flowering occurs from late April to early May. The species occurs at elevations within those found in the Project Area (6,000 to 6,200 feet compared to 6,000 to 7,600 feet in

the Project Area). Conversations with the Botanist for the BLM's Richfield Field Office, indicate that this species has the potential to occur within the Project Area (Armstrong, personal communication June 15, 1999); however, none were located during a May 1999 field visit.

Winkler Cactus (*Pediocactus winkleri*) – Threatened
This diminutive species, also known as the Winkler footcactus, is usually solitary. The species occurs in salt desert shrub communities at 4,800 to 5,200 feet AMSL, in fine textured, poor-quality saline substrates (Welsh et al., 1987). Flowering occurs in late March to mid-May. The Winkler cactus generally occurs at elevations below that found in the Project Area. Although this species may be found near the lower boundary of the Project Area (Armstrong, personal communication June 15, 1999), none were located during a May 1999 field survey .

THREATENED AND ENDANGERED WILDLIFE
Only three Federally listed wildlife species were identified by the USFWS has having the potential to occur within the Project Area. All three species are birds. They include: the bald eagle, Mexican spotted owl, and western yellow-billed cuckoo. The Mexican spotted owl and the western yellow-billed cuckoo do not occur in the project area due to lack of suitable habitat (Biological Assessment, 2005), and will not be discussed further in this EIS.

Bald Eagle (*Haliaeetus leucocephalus*) - Threatened
The bald eagle is also known as the American eagle, black eagle, fishing eagle, gray eagle, Washington eagle, white-headed eagle, and white-headed sea eagle (Terres, 1980). During their breeding season, bald eagles are closely associated with water occurring along coasts, lakeshores, or riverbanks, where they feed primarily on fish. Bald eagles typically nest in large trees, primarily cottonwoods (*Populus* sp.) and conifers, although they have also been known to nest on projections or ledges of cliff faces (Call, 1978). Due to the large size of their nests, bald eagles usually build these structures in a tree which is the largest or stoutest in the immediate vicinity (Call, 1978). Two characteristics common to most nesting sites are a clear flight path to at least one side of the nest and excellent visibility, often with an unobstructed view of water. Most nests are in the top third of a living tree, with live foliage above the nest providing shade and protection during poor weather (Green, 1985). Breeding territories, including the nest tree and favored nearby perches, are defended against other eagles. Alternate nests are also common within the territory. Breeding territories are typically 250 to 500 acres in size (Swenson et al., 1986).

No bald eagle nests are known to occur within or in the general vicinity of the Project Area. Most sightings have been made in the Joes Valley Reservoir and Huntington Canyon areas, the closest of which (Joes Valley Reservoir) is approximately 20 miles north of the Project Area (USDA-USFS, 2000). A bald eagle nest has been reported in the vicinity of Castle Dale, approximately 20 miles northeast of the Project Area boundary. No roost sites have been found in the Project Area, and bald eagles are not expected to occur in the area except as transient birds, most commonly occurring in the winter months.

SENSITIVE SPECIES
Each land management agency maintains their own region-specific sensitive species lists. The purpose of the listings for sensitive species is to identify those species in the managed area that are the most vulnerable to population or habitat loss. Typically, the conservation strategies recommend that proposed developments avoid sensitive species and their habitat so as not to render the species potentially threatened or endangered species under the ESA. The sensitive listed species are not afforded protection required under the ESA for Federally listed threatened or endangered species. Based upon agency consultation, it has been determined that the sensitive species shown in **Table 3.7-2** have the potential to occur within the Project Area.

Under Policy Number W2AQ-4, the UDWR also develops and maintains a list of sensitive species. Designated as the Utah Sensitive Species List, it identifies sensitive species as belonging to one of the following defined categories: extinct, extirpated, State-endangered, State-threatened, of special concern, or conservation species.

In addition, the Utah Natural Heritage Program maintains a list of "rare" species. Several of the listed rare species are also land management agency sensitive species and are addressed below. However, those species that are not sensitive are not afforded protection under the ESA or any land management agency conservation strategy and are, therefore, not discussed further.

Table 3.7-2 USFS, BLM, & UDWR State Sensitive Species Potentially Occurring in the Project Area

Common Name	Specific Name
Fishlake National Forest Sensitive Species	
Flammulated owl	*Otus flammeolus*
Northern three-toed woodpecker	*Picoides tridactylus*
BLM Richfield Field Office Sensitive Species	
Basalt milkvetch	*Astragalus subcinereus var. basalticus*
Flannelmouth sucker	*Catostomus latipinnis*
Leatherside chub	*Gila copei*
UDWR State Sensitive Species	
Bluehead sucker	*Catostomus discobolus*
Flannelmouth sucker	*Catostomus latipinnis*

FISHLAKE NATIONAL FOREST SENSITIVE SPECIES

Flammulated Owl (*Otus flammeolus*)

This diminutive owl, approximately six inches in length, inhabits the montane coniferous forests of North and Central America, ranging from southern British Columbia to Guatemala (Ryser, 1985). In most areas, this owl occurs in close association with ponderosa pine (*Pinus ponderosa*) and Jeffery pine (*Pinus jefferyi*), though it has been recorded less commonly in other forest types (Johnsgard, 1988). This small and secretive owl is a cavity nester, and thus requires natural or woodpecker-excavated cavities as a component of its habitat. Flammulated owls are almost exclusively insectivorous, preying on small to medium sized moths, beetles, caterpillars, and crickets (Reynolds and Linkhart, 1987; Johnsgard, 1988; Bull et al., 1990). Like most insectivores, but unlike most owls, flammulated owls are migratory (Winter, 1974; Balda et al., 1975; Collins et al., 1986; Gaines, 1988).

Three-toed Woodpecker (*Picoides tridactylus*)

The three-toed woodpecker is a permanent resident of the taiga or circumboreal forests of Eurasia and North America, ranging southward into the continental United States (Ryser, 1985). The species is found in northern coniferous and mixed forest types up to 9,000 feet elevation. Forests containing spruce, grand fir, ponderosa pine, tamarack and lodgepole pine are used. Nests may be found in spruce, tamarack, pine,

cedar, and aspen trees. Three-toed woodpeckers forage mainly on dead trees, although they will feed in live trees. About 75 percent of their diet is woodboring insect larvae, mostly beetles, but they also eat moth larvae. Three-toed woodpeckers are major predators of the spruce bark beetle.

Three-toed woodpeckers are known to occur in the general area from dedicated surveys conducted during 1992 through 1996 throughout suitable habitat in adjacent forested areas. Limited habitat occurs within or adjacent to the upper portions of the Project Area.

BLM RICHFIELD FIELD OFFICE SENSITIVE SPECIES

Basalt Milkvetch (*Astragalus subcinereus var. basalticus*)

The Basalt milkvetch is known to occur within pinyon-juniper and ponderosa pine communities between 4,520 to 7,970 feet elevation (Atwood et al., 1991). Because the appropriate habitat and the Mancos Shale formation for this species does occur within the Project Area, preconstruction surveys for this species will be conducted during appropriate flowering times in the spring/summer prior to construction activities in suitable habitat.

UDWR UTAH SENSITIVE SPECIES LIST

The UDWR Utah Sensitive Species List includes several fish species that are endemic to the Colorado River Basin in which the Project Area occurs, or whose known historical range does not exclude the Project Area. These species are: bonytail (*Gila elegans*), Colorado squawfish (*Ptychocheilus lucius*), humpback chub (*Gila cypha*), razorback sucker (*Xyrauchen texanus*), woundfin (*Plagopturus argantissumus*), Lahontan cutthroat trout (*Oncorhynchus clarki henshawi*), roundtail chub (*Gila robusta*), leatherside chub (*Gila copei*), flannelmouth sucker (*Catostomus latipinnus*), bluehead sucker (*Catostonus discobolus*), Colorado River cutthroat trout (*Oncorhynchus clarki pleuriticus*), Bonneville cutthroat trout (*Oncorhynchus clarki utah*), Virgin spinedace (*Lepidomeda mollispinis*), and least chub (*Iotichthys phlegethontis*). The flannelmouth sucker and leatherside chub are also on the BLM sensitive species list. The bluehead sucker and flannelmouth sucker are covered under a Range-Wide Conservation Agreement (UDWR, 2004) under which several western states have agreed to work cooperatively on conservations measures to ensure the persistence of these species.

As discussed in more detail in the Final Aquatic Resources Technical Report (JBR, 2001c), two of these listed fish species were found in Quitchupah Creek during July 1999 fish sampling. At one out of five total locations that were electroshocked, 13 individual flannelmouth suckers and one leatherside chub were captured. At the other four locations, these species were absent. During 2004 surveys, flannelmouth suckers were determined as 'not present' in Quitchupah Creek (UDWR, 2005a). None of the other fish species on the Utah Sensitive Species List were found during the fish sampling. However, the bluehead sucker was found during a separate survey by UDWR at the confluence of Quitchupah Creek with Ivie Creek.

Potential Impacts To Threatened, Endangered, And Sensitive Species

The Environmental Consequences of each Alternative, in regard to TES species, are discussed below. First, regulatory consequences are described and then potential impacts to the resource itself.

REGULATORY

The BA has been reviewed and approved by the USFWS (**Appendix F**). A Biological Opinion was not required as the determination was that none of the threatened or endangered plant or animal species or habitat would be impacted or adversely affected by the proposed project. Similar review and approval of the BE by the USFS was conducted. Appropriate environmental measures as outlined in Chapter 2 and monitoring as detailed in Monitoring Plan would be implemented if sensitive species might be impacted

by the proposed project.

POTENTIAL IMPACTS TO SPECIAL STATUS SPECIES

This assessment evaluates the potential for each Special Status Species to be directly or indirectly impacted by the Alternatives. This assessment is based on a review of the species' preferred habitats and their recorded occurrence. Based upon this information, a determination can be made regarding the potential for each species to be directly or indirectly affected by the Alternatives.

In the case of species that clearly do not occur in the Project Area and have no potential to be directly or indirectly impacted by the Alternatives (plant species occurring at elevations outside that of the Project Area, for example), a "No Effect" (in the case of listed species) or "No Impact" (in the case of Sensitive Species) determination was made. In the case of species that occur or may occur in the Project Area and which may be directly or indirectly affected by the Alternatives, a further evaluation of potential impacts was prepared.

NO ACTION ALTERNATIVE - ALTERNATIVE A

Selection of the No Action Alternative would not result in any direct, indirect, or cumulative impacts to Federally listed or sensitive species occurring in the Project Area. The road would not be constructed in the Quitchupah Creek drainage or the Water Hollow Benches area, and thus related disturbances would not occur in those areas. The existing land uses and environment in the Quitchupah Creek drainage would continue for the near future.

QUITCHUPAH CREEK ROAD ALIGNMENT - ALTERNATIVE B

Threatened, Endangered, and Candidate Species

Table 3.7-3, developed from the BA, summarizes the occurrence and effects analysis for threatened, endangered, and candidate species potentially occurring in the Project Area. This table includes the rationale for the determinations shown.

Last Chance Townsendia - Threatened is known to occur near the project area and habitat exists in portions of the project area; however, field surveys in 1999 and 2003 did not find any occurrence of this species within the project area. Implementation of Alternative B would have a May Affect – Not Likely to Adversely Affect impact on last chance townsendia.

San Rafael Cactus - Endangered is found at elevations within those found in the project area and has potential to occur in the project area; however during a field visit, none were located. Potential habitat is within the project area but no plants have been located. Implementation of any of the action Alternatives (B, C, & D) would have a May Affect – Not Likely to Adversely Affect impact on San Rafael cactus.

Winkler Cactus – Threatened may be found at the lower boundary of the project area, a field survey confirmed that none were located in the project area. Potential habitat is within the project area but no plants have been located. Implementation of any of the action Alternatives (B, C, & D) would have a May Affect – Not Likely to Adversely Affect impact on Winkler cactus.

Bald Eagles - Threatened that winter near the project area may utilize the roadway for the scavenging of big game road kill. This would lead to potential collisions of bald eagles with coal trucks. As outlined the Applicant-Committed Environmental Protection Measures in Section 2.2, all animal carcasses would be removed daily from the roadway to minimize the potential of bald eagle collisions with coal trucks. Implementation of any of the action Alternatives (B, C, & D) would have a May Affect – Not Likely to Adversely Affect impact on bald eagles.

Sensitive Species

Table 3.7-4 summarizes the occurrence and effects analysis for Forest Service Sensitive Species potentially occurring in the Project Area. The table also includes the rationale for the determinations shown.

Limited suitable habitat for the flammulated owl and three-toed woodpecker would be impacted. In addition, approximately 1.0 acre of riparian habitat and .33 acres of wetlands, potential foraging habitat for flammulated owls, would be disturbed during construction and would be replaced though Applicant-Committed Mitigation Measures.

Table 3.7-3 Potential Occurrence and Effects Analysis of Federally Listed Species - Summary of BA

Species	ALT A	ALT B	ALT C	ALT D	RATIONALE
Jones Cycladenia	NE	NE	NE	NE	Not known to occur in the Project Area; geologic formations on which this species occurs do not occur in the Project Area.
Maguire Daisy	NE	NE	NE	NE	Not known to occur in the Project Area; geologic formations on which this species occurs do not occur in the Project Area.
Last Chance Townsendia	NE	MA-NLAA	MA-NLAA	NE	Suitable habitat near Project Area, but not discovered during dedicated surveys. No critical habitat has been designated for this species.
Barneby Reed-Mustard	NE	NE	NE	NE	Not known to occur in the Project Area; geologic formations on which this species occurs are not found in the Project Area.
San Rafael Cactus	NE	MA-NLAA	MA-NLAA	MA-NLAA	Potential habitat near Project Area, but not discovered during dedicated surveys. No critical habitat has been designated for this species.
Winkler Cactus	NE	MA-NLAA	MA-NLAA	MA-NLAA	Potential habitat near Project Area, but not discovered during dedicated surveys. No critical habitat has been designated for this species.
Wright Fishhook Cactus	NE	NE	NE	NE	Not known to occur within the Project Area.
Heliotrope Milkvetch	NE	NE	NE	NE	Not known to occur in the Project Area.
Bald Eagle	NE	MA-NLAA	MA-NLAA	MA-NLAA	Does not make regular use of the Project Area; construction impacts would not alter the limited use. Animal carcasses would be removed daily from the roadway but still may attract foraging eagles. No critical habitat has been designated for this species.
Mexican Spotted Owl	NE	NE	NE	NE	Potential suitable habitat near Project Area, but none were discovered during 2002 dedicated surveys.
Yellow-billed Cuckoo	NE	NE	NE	NE	Does not occur in Project Area.

NE = No Effect
MA-NLAA = May Affect -Not Likely to Adversely Affect
MA-LAA = May Affect -Likely to Adversely Affect
BE = Beneficial Effect

Table 3.7-4 Potential Occurrence and Effects Analysis of Forest Service Sensitive Species - Summary of BE

Species	ALT A	ALT B	ALT C	ALT D	RATIONALE
Barneby Woody Aster	NI	NI	NI	NI	Not known to occur in the Project Area; suitable habitat not present.
Bicknell Milkvetch	NI	NI	NI	NI	Not known to occur in the Project Area; suitable habitat not present.
Tushar Paintbrush	NI	NI	NI	NI	Not known to occur in the Project Area; suitable habitat not present.
Pinnate Spring-Parsley	NI	NI	NI	NI	Not known to occur in the Project Area; suitable habitat not present.
Creeping Draba	NI	NI	NI	NI	Not known to occur in the Project Area; suitable habitat not present.
Nevada Willowherb	NI	NI	NI	NI	Not known to occur in the Project Area; suitable habitat not present.
Elsinore Buckwheat	NI	NI	NI	NI	Not known to occur in the Project Area; suitable habitat not present.
Rabbit Valley Gilia	NI	NI	NI	NI	Not known to occur in the Project Area; suitable habitat not present.
Fishlake Naiad	NI	NI	NI	NI	Not known to occur in the Project Area; suitable habitat not present.
Little Penstemon	NI	NI	NI	NI	Not known to occur in the Project Area; suitable habitat not present.
Ward Beardtongue	NI	NI	NI	NI	Not known to occur in the Project Area; suitable habitat not present.
Arizona Willow	NI	NI	NI	NI	Not known to occur in the Project Area; suitable habitat not present.
Beaver Mountian Groundsel	NI	NI	NI	NI	Not known to occur in the Project Area; suitable habitat not present.
Maguire Campion	NI	NI	NI	NI	Not known to occur in the Project Area; suitable habitat not present.
Bicknell Thelesperma	NI	NI	NI	NI	Not known to occur in the Project Area; suitable habitat not present.
Sevier Townsendia	NI	NI	NI	NI	Not known to occur in the Project Area; suitable habitat not present.
Pygmy Rabbit	NI	NI	NI	NI	Not recorded in Project Area, suitable habitat not present.
Townsend's Big-eared Bat	NI	NI	NI	NI	Not recorded in Project Area, suitable habitat not present.
Spotted Bat	NI	NI	NI	NI	Not recorded in Project Area, suitable habitat not present.

Peregrine Falcon	NI	NI	NI	NI	Known eyrie in Link Canyon area, approximately 5 miles to the north, not recorded in Project Area.
Northern Goshawk	NI	NI	NI	NI	Not recorded in Project Area, suitable habitat not present.
Flammulated Owl	NI	MIIH	MIIH	MIIH	Limited available habitat in area, foraging areas could be impacted.
Northern Three-toed Woodpecker	NI	MIIH	MIIH	MIIH	Known to occur in general area, available habitat could be impacted.
Greater Sage Grouse	NI	NI	NI	NI	Not recorded in Project Area, suitable habitat not present.
Colorado Cutthroat Trout	NI	NI	NI	NI	Does not occur in Project Area; historic range includes North Fork.
Bonneville Cutthroat Trout	NI	NI	NI	NI	Not recorded in Project Area, suitable habitat not present.

NI = No Impact **BI** = Beneficial Impact
MIIH = May Impact Individuals or Habitat, But Will Not Likely Contribute to a Trend Towards Federal Listing or of Viability to the Population or Species
WIFV = Will Impact Individuals or Habitat with a Consequence such that the Action May Contribute to a Trend Toward Federal Listing or Loss of Viability to the Population or Species

ALTERNATE JUNCTION WITH SR-10 AND ALTERNATE DESIGN - ALTERNATIVE C

Similar impacts to Federally listed and sensitive species would occur as described for Alternative B.

WATER HOLLOW ALTERNATE ALIGNMENT - ALTERNATIVE D

Similar impacts to Federally listed and sensitive species would occur as described for Alternative B. There would be a No Effect impact to last chance townsendia (threatened plant species) under Alternative D.

MITIGATION AND MONITORING FOR BUILD ALTERNATIVES

As outlined in the Applicant Committed Measures in Chapter 2, the haul route would be patrolled daily, during daylight hours, to pick up and dispose of all animal carcasses (wild and domestic, large and small) in order to keep the road surface clear. This would reduce scavenging on the road surface by raptors and vultures.

Mitigation for the creation and enhancement of wetlands and riparian zones described in Section 2.2 would be identical for all Alternatives, and in the case of wetlands would provide additional habitat for wildlife. The applicant-committed environmental protection measure of eliminating livestock grazing on 4.7 miles of stream would help restore the degraded riparian zone, providing additional quality habitat for wildlife.

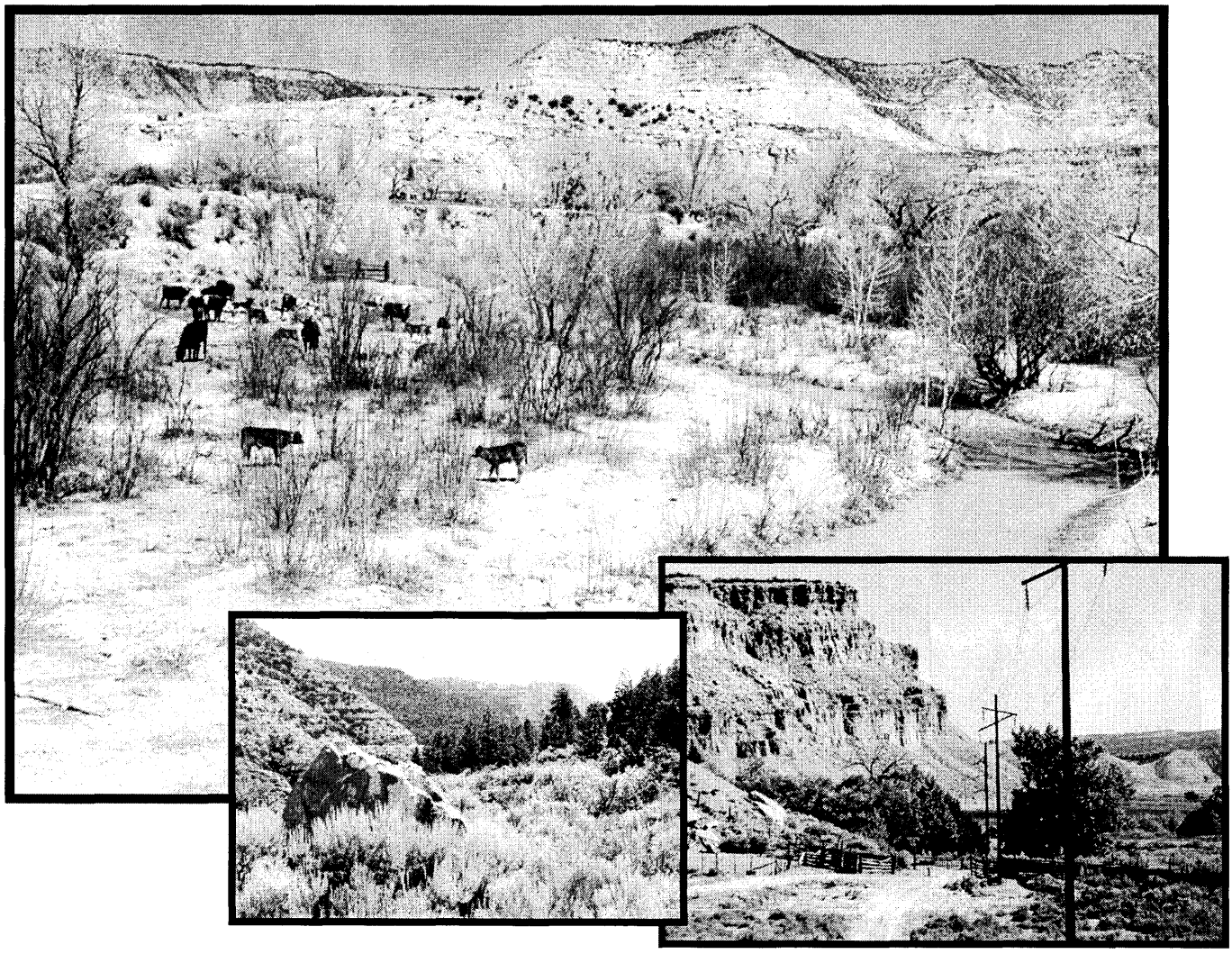
IRREVERSIBLE AND IRRETRIEVABLE COMMITMENT OF RESOURCES AND RESIDUAL ADVERSE IMPACTS

No irreversible commitment of habitats for TES species are anticipated to occur as a result of the Alternatives. An increase in noise levels and human activity would occur within the Alternatives area as a result of vehicle travel. No residual adverse impacts were identified for TES species within the Alternatives area.

CUMULATIVE EFFECTS

Past range improvements, such as the reservoir on Saleratus Bench, has provided a water source that benefits certain TES species. Increased public access would occur as a result of the Alternatives, which would increase noise and also disturbance to TES species' habitat. Increased hunting could occur as a result of increased public access. Reasonably foreseeable activities could include federal oil and gas lease exploration and drilling. Reclamation would occur on drilling sites that do not enter into production. A producing gas field would require additional roads increasing access to lands within the watershed.

The removal of livestock grazing on 4.7 miles of stream corridor would protect the riparian plant community allowing it to reach its full potential along this stretch of Quitchupah Creek



QUITCHUPAH CREEK ROAD

Record of Decision
For
Final Environmental Impact Statement
March 2006

Alternative Selected: Alternative D - Water Hollow Road Alignment
(Preferred Alternative)

U.S. Department of Agriculture
Forest Service
Fishlake National Forest

Record of Decision

Quitchupah Creek Road

Lead Agency:
United States Department of Agriculture
Forest Service
Fishlake National Forest
Richfield Ranger District
Richfield, Utah

Cooperating Agency:
United States Department of the Interior
Bureau of Land Management
Richfield Field Office
Richfield, Utah

March 2006

Introduction

A Draft and Final Environmental Impact Statement (EIS's) for the Quitchupah Creek Road Project have been prepared pursuant to the requirements of the National Environmental Policy Act (NEPA, 40 CFR 1500-1508), the National Forest Management Act (NFMA, 36 CFR 219), and the Fishlake National Forest Land and Resource Management Plan and amendments (Forest Plan). The Final EIS documents the analysis of four alternatives, including the "No Action" alternative and three action alternatives designed to meet the purpose and need for the project.

Background

In 1998, Sevier County Special Services District Number 1 (SSD) submitted formal right-of-way applications to the US Forest Service (USFS) and the Bureau of Land Management (BLM) for the construction of the Quitchupah Creek Road, to be used and indirectly funded by the Southern Utah Fuel Company Mine (SUFCO Mine). SSD proposed the upgrade and realignment of an existing 9.15 mile road, along Quitchupah Creek, which connects the Acord Lakes Road (Sevier County Road #010) in Convulsion Canyon, Sevier County with SR-10 in Emery County. The land ownership in this corridor is a combination of private, USFS, BLM, and State Institutional Trust Lands Administration (SITLA). The proposal had the potential to result in significant effects to the environment. As a result, the Quitchupah Creek Road FEIS was prepared. Four Alternatives were analyzed in detail; three action Alternatives and the No Action Alternative. The FEIS is a joint document between the United States Forest Service (USFS), Fishlake National Forest (Lead Agency) and the Bureau of Land Management (BLM), Richfield Field Office (Cooperating Agency). The Forest Supervisor for the Fishlake National Forest and the Richfield Field Office Manager for the BLM are the responsible officials for the EIS. The BLM Richfield Field Office will issue their own Record of Decision (ROD) and authorizations for those portions of the Quitchupah Creek Road that are located on public lands administered by the BLM.

Purpose and Need for the Project

The purpose of the project is to evaluate the potential environmental, social, and economic consequences of granting a right-of-way to construct a public road across Federal and other lands. The need for the proposed Federal action is to respond to a request from Sevier County SSD for granting a right-of-way to construct a public road.

Another need for the road project is to ensure the competitive productivity of the SUFCO Mine, as a source of economic stability for Sevier County, a potential source of additional income and revenue for Emery County, and a source of high quality coal for electrical power generating plants in eastern Utah and the Midwest. The mine is an important component of local economies. SUFCO and dependent trucking companies provided 20 percent of the non-farm employment and 28 percent of the personal income in Sevier County in 2002. The added profits, due to reduced transport costs, substantially lower risk of failure for the SUFCO Mine, and provide a buffer to economic consequences for Sevier County and to a lesser extent Emery County. The presence and stability of the SUFCO Mine, and the families who support it, guarantee a continued demand in both Sevier and Emery counties for bank loans, mortgages, utilities, and other goods and services.

Profitability of the SUFCO Mine, over time, also ensures that funds are available for further exploration, and maintains the Mine's level of production. Due to the Mine's location in rugged terrain, and the distance to railheads and loadouts, SUFCO relies on truck transport for all of its coal shipments.

Decision and Rationale for the Decision

Decision

I have decided to authorize a Right-of-Way for Sevier County Special Services District 1, for that portion of the road which will be located on National Forest System (NFS) lands as described in **Alternative D - Water Hollow Road, Preferred Alternative. Only that portion of Alternative D that is located on NFS lands will be authorized by this decision.**

As a condition of approval of the Quitchupah Creek Road Right-of-Way, SSD, its employees, contractors, agents, assignees, and operators shall comply with the Applicant-Committed Environmental Protection Measures, the Agency-Committed Environmental Protection Measures, and Best Management Practices (BMPs) for Alternative D as shown in Chapter 2 and Appendix B of the FEIS.

Attachment A of this document describes the details of my decision, including incorporated design features and additional mitigation. **Figure 1** and **Figure 2** identify the location of the road generally and specifically on the Fishlake National Forest, respectively. The legal land description is as follows:

Junction Quitchupah Creek Road:	SE1/4 of Section 18, T.22 South, R.5 East, SLBM
through:	Sections 18, 17, 20, 21, 28 and 33, T.22 South, R.5 East, SLBM
	Sections 1, 2, 3, 4, T.23 South, R.5 East, SLBM
	Section 35, T.22 South, R.5 East, SLBM
Junction SR-10:	NW1/4 of Section 1, T.23 South, R.5 East, SLBM

Decisions on lands owned and/or administered by other agencies or entities are documented in other respective decision documents.

The Alternative D route generally follows an existing road in Convulsion Canyon for 2.1 miles where it crosses Quitchupah Creek and then continues for approximately .5 mile to the Fishlake National Forest boundary (Figure 2).

This decision is based on my review of the analysis presented in the Final EIS for the Quitchupah Creek Road Project, consideration of public and other agency comments received on the Draft EIS, and discussions about the project's anticipated effects with both the Interdisciplinary Team and Forest Staff.

This decision is one that involved a balancing of several considerations. When compared to the other alternatives, this alternative will fulfill the purpose and need for the project while minimizing the potential environmental impacts. The road will aid SUFCO Mine in being more cost-effective in the industry and continue to provide economic support for Sevier County while

addressing public interests, considering surface resources management, and implementing responsible environmental protection.

Rationale for the Decision

Some of the important considerations in reaching this decision are:

- Degree to which the proposed environmental protection measures reasonably minimize impacts to environmental resources
- The potential to mitigate adverse effects on historic properties and cultural values.
- Predicted effects on surface water quality in the area as compared to State and Federal requirements
- Coordinating the evaluation of environmental impacts in this FEIS with other ongoing and planned studies by State and Federal agencies.
- The economic impact on the local economies.
- The road will also serve as a public road in the state's rural collector system.

I believe that Alternative D, the Water Hollow Route, fulfills the statutory mission and responsibilities of the Forest Service, giving consideration to economic, environmental, technical, and other factors.

Alternative D avoids all known cultural sites, and will have a process in place to mitigate previously undiscovered sites if uncovered during construction. The effects of the project on cultural and/or historical properties have been considered relative to Section 106 of the National Historic Preservation Act and measures are incorporated to minimize impacts to cultural sites per Executive Order 13007. Native American concerns have been satisfied by selection of the Water Hollow route whereby the majority of road construction will be conducted outside the areas that the Paiute Tribe has claimed as sacred and where construction of the road along Quitchupah Creek as described in Alternative B has been opposed. In order to document and clarify the sacred claim, an ethnographic study of the Paiute and their association with the Quitchupah Creek area was undertaken. The study supports the Quitchupah Creek area as sacred to the Paiute Indian Tribe of Utah. The Alternative D – Water Hollow route avoids most of the rock art complex at North Fork, eliminating potential impacts to the rock art due to truck emissions, vibrations, and construction activities. The total avoidance of sites is consistent with requests made by the Paiute and Ute Tribes during consultation. Subsequently, the Paiute Tribe expressed their satisfaction with the study and stated their support of Alternative D.

Regarding water resources, there will be impacts to water resources in the Water Hollow drainage due to construction activities; however, road construction and maintenance for Alternative D will have less impact on the lower Quitchupah Creek channel than other alternatives. The environmental protection measures incorporated into the design of the project will improve water quality by decreasing salinity at the SR-10 bridge, positively affecting the downstream stretch designation as 303(D).

Fencing barriers to protect the riparian zones along Quitchupah Creek from livestock grazing would be installed on 4.7 miles of Federal and State administered land and maintained by the applicant. Wildlife friendly crossings would be provided on each side of the stream at designated locations.

Project implementation will not be allowed until all necessary Section 404 permitting requirements from the U.S. Army Corps of Engineers and the State of Utah for disturbance of stream channels and designated wetlands in Convulsion Canyon, East Spring Canyon, and Quitchupah Creek have been met and the permit has been approved and issued to the SSD. Under this Alternative, junction with SR-10 will require less turn lanes and much shorter acceleration lanes than the Proposed Action and will not require a doubling of the width of the bridge over Quitchupah Creek.

The estimated cost to construct the road, including environmental protection measures, monitoring, and a junction with SR-10, will be $14.4 million, the most expensive of the build alternatives. SUFCO Mine will benefit from a shorter route for transporting coal to eastern markets and will save from $4-9M annually that could be applied to exploration, and increasing efficiency in mining, which will continue their contribution to the local economy. Approximately 1.4M gallons of fuel will be conserved annually with this alternative. Utah Department of Transportation (UDOT) will also save about $0.5M annually on maintenance costs on SR-10.

This decision has been reviewed for compliance with the applicable land use plans and is in conformance with applicable County General Plans.

The Forest Service and BLM have coordinated with the U.S. Fish and Wildlife Service on Threatened and Endangered species. A biological assessment was prepared for the project which states that implementation of the Preferred Alternative and associated environmental protection measures may affect, but are not likely to adversely affect the *San Rafael cactus,* an Endangered plant species, the *Winkler cactus*, a Threatened plant species, and the *bald eagle*, a Threatened wildlife species.

The Three-toed woodpecker and the flammulated owl are the only species identified in the Biological Evaluation that have suitable habitat in the project area, located on the Fishlake NF. This alternative will result in a May Impact Individuals or Habitat, But Will Not Likely Contribute to a Trend Towards Federal Listing or of Viability to the Population or Species determination on the flammulated owl and the northern three-toed woodpecker.

The recently signed National Energy Policy Act of 2005 identifies an emphasis on reliable, affordable energy to our nation's consumers, and lessening the impact of energy price volatility and supply uncertainty on Americans. The demand for electricity in the U.S. is projected to increase by 45% over the next 20 years (National Energy Policy website). Access to coal reserves via any of the road alternatives proposed in the FEIS would reduce fuel consumption and help to maintain supplies of diverse and traditional forms of energy (domestic oil, gas, and coal) within the U.S. by shortening the transport routes. The National Energy Policy promotes such developments in the productive and efficient use of energy.

Environmentally Preferred Alternative

Based on the analysis contained in the FEIS, I have determined that Alternative A – No Action, is the environmentally preferred alternative. Alternative A would cause the least damage to the

biological and physical environment and best protect, preserve, and enhance historical, cultural, and natural resources. Under the No Action Alternative, current and ongoing uses would still have direct and indirect impacts, yet they would result in less total impact to the environment, specifically cultural and heritage resources located along Quitchupah Creek.

Other Alternatives Considered

In addition to Alternative D, I considered 3 other alternatives in detail, and 5 alternatives that were eliminated from detailed analysis, all of which are discussed below. The residual impacts to environmental resources would be similar for all of the build alternatives after application of the environmental protection measures proposed by SSD as described in the FEIS. Perhaps the most notable differences between alternatives are impacts to cultural resources, a major concern of Native Americans during consultation. A more detailed comparison of these alternatives can be found in the EIS on pages 2-1 through 2-35.

Alternatives B,C, and D (the build alternatives) would conform to the overall Standards and Guidelines of the Fishlake National Forest land and Resource Management Plan and FEIS. No Forest Plan amendments would be required. The proposed action and alternatives are also consistent with the Sevier County General Plan and the Emery County General Plan.

Summary Comparison of Alternatives Relative to Issues
A summary comparison of resources potentially affected by each Alternative is presented in Table 2.7-1 of the Quitchupah Creek Road Final Environmental Impact Statement. The information presented in this table is a summary comparison of the data presented in detail in Chapter 3 of the FEIS. The effects identified in this table also assume that applicant-committed measures and mitigation will be implemented. The comparison of effects also includes effects that are common to all build Alternatives to demonstrate the relative effect of each Alternative.

Alternative A - No Action

Under this Alternative, the entire existing road would remain in place and the existing uses and environment in Quitchupah Creek and Water Hollow would continue unchanged in the foreseeable future. The historic use of the area for livestock trailing and grazing, the general solitude of the environment, recreational uses, and generally undisturbed condition of the cultural resources would continue. Likewise, current activities in the project area would continue; these include livestock trailing and grazing, erosion, and road/power line maintenance. Emphasis on livestock grazing via intensive range management as identified in the Fishlake National Forest LRMP is likely to continue as the primary management for National Forest Systems lands in Convulsion Canyon.

Alternative B - Quitchupah Creek Road Alignment (Proposed Action)

This alternative would result in the upgrade of the existing road in Quitchupah Creek canyon, which would connect the Acord Lakes Road in Sevier County with SR-10 in Emery County (Figure 1). This alignment generally follows the existing two-track road in Convulsion Canyon/Quitchupah Creek area to the maintained county road in Emery County to junction with

SR-10 at the Quitchupah Creek Bridge. This alignment is approximately 8.9 miles long (.2 mile shorter than the original proposal due to construction design). The legal description is as follows:

Junction Acord Lakes Road:	SW1/4 of Section 11, T.22 South, R.4 East, SLBM
through:	Section 12, T.22 South, R.4 East, SLBM
	Sections 18, 17, 16, 15, 14, 13, 24, T.22 South, R.5 East, SLBM
	Section 19, T.22 South, R.6 East, SLBM
Junction SR-10:	NW1/4 of Section 30, T.22 South, R.6 East, SLBM

The historic use of the area for livestock trailing and grazing, the general solitude of the environment, recreational uses, and generally undisturbed condition of the cultural resources would be heavily modified or reduced. Under this Alternative, grazing and recreation activities and the cultural resources would be significantly affected by construction activities, the road itself, fencing, and other barriers; however, the distance to Acord lakes from Carbon and Emery counties would be reduced. Emphasis on livestock grazing via intensive range management as identified in the Fishlake National Forest LRMP would likely continue, in a modified manner, as the primary management for National Forest Systems lands in Convulsion Canyon.

Alternative C - Alternate Junction with SR-10 and Alternate Design

This alternative would result in the upgrade of the existing road in Quitchupah Creek canyon, which would connect the Acord Lakes Road in Sevier County with SR-10 in Emery County (Figure 1). This alignment follows Alternative B to a point on the western edge of Section 13 T. 22S R. 5E, then turns northeast to gain elevation the last two miles and junction with SR-10 at a favorable grade, 1.5 miles north of the Quitchupah Creek Bridge. The alternate junction allows loaded coal trucks to utilize their momentum to gain elevation and avoid the steep grade on Quitchupah Hill on SR-10. The alternate design includes additional wildlife fencing and underpasses to allow livestock and wildlife to move safely back and forth through the road corridor. The legal description is as follows:

Junction Quitchupah Creek Road:	SW1/4 of Section 13, T.22 South, R.5 East, SLBM
through:	Section 18, T.22 South, R.6 East, SLBM
Junction SR-10:	SW1/4 of Section 17, T.22 South, R.6 East, SLBM

The historic use of the area for livestock trailing and grazing, the general solitude of the environment, recreational uses, and generally undisturbed condition of the cultural resources would be heavily modified or reduced. Under this Alternative, grazing and recreation activities and the cultural resources would be significantly affected by construction activities, the road itself, fencing, and other barriers; however, the distance to Acord lakes from Carbon and Emery counties would be reduced. Emphasis on livestock grazing via intensive range management as identified in the Fishlake National Forest LRMP would likely continue, in a modified manner, as the primary management for National Forest Systems lands in Convulsion Canyon.

Alternatives Considered But Eliminated From Detailed Analysis

Alternate Road Access

Different routes proposed considered constructing a road across the Old Woman Plateau or through Link Canyon. The Old Woman Plateau is an area south of the SUFCO Mine portal mostly on National Forest system lands that are managed as a Research Natural Area (RNA), portions of which have restrictions prohibiting vehicle travel, so the construction of a transport

road would require an amendment to the Fishlake NF LRMP, and was not analyzed in detail based on environmental impacts.

The proposed Link Canyon route is located just west of the Town of Emery. Link Canyon has a good county-maintained road to the old mine workings where a portal could be located for loading trucks. The portal was identified in the Pines Tract EIS as a potential site for accessing coal in the Pines Tract. However, under the SUFCO mine plan and mining schedule this site is not economically feasible for construction and operation of a loadout. Issues such as constructing a way through naturally burned or oxidized coal at the portal site and restructuring the mine conveyor system to discharge at this portal site were cost prohibitive proposals. In a meeting on June 23, 2000, after reviewing the mine plans and conceptual plans for a Link Canyon Portal, mine engineers for the BLM advised the responsible USFS and BLM officials that this portal plan was not economically viable.

Conveyor Systems
Different methods to transport coal centered on constructing conveyor systems to convey coal to a loadout facility where trucks would transport the coal to destinations in Carbon County. One conveyor system suggested would begin at the SUFCO Mine portal; traverse down East Spring Canyon to Quitchupah Creek where a loadout facility would be constructed. The terrain in East Springs Creek Canyon is too rugged and steep for a conveyor system so this alternative is not feasible from an engineering standpoint.

A conveyor system in Link Canyon was also suggested, because a county road currently exists in the canyon. A conveyor system in Link Canyon would require a loadout facility in the vicinity of Emery Town to load the trucks destined for Carbon County. But because the portal facility was not economically feasible, a conveyor system in Link Canyon becomes a moot point. A slurry system was also considered but the water demands are beyond the area's capability to provide, so this system was also not considered feasible.

Muddy Creek, a deep canyon on the north side of the Pines Tract, which is now being mined through the SUFCO Mine, was also considered as a possible portal site and coal transport route. However, the two primary problems with this alternative are: 1) a route in the canyon would be rough and steep and located adjacent to a stream that provides culinary water, a problem for maintaining water quality, and 2) the mine plan as explained in the preceding discussion on a portal in Link Canyon is not economically feasible.

Public Involvement

On January 15, 1999, the agencies initiated public scoping for the Quitchupah Creek Road Project with the intent of preparing an Environmental Assessment (EA). A field meeting was held March 30, 1999 in the project area, along with informal meetings in Emery County. Other meetings, including the Quitchupah Grazing Association Meeting on January 27, 1999, and the Emery County Public Lands Council Meeting, June 8, 1999, were attended by agency and consultant representatives. Due to the level of public concern for the proposed project, and the issues identified during the scoping process, the USFS and the BLM determined that the proposed project warranted preparation of an EIS. On July 1, 1999, a Notice of Intent (NOI) to prepare an EIS for the Quitchupah Creek Road project was published in the Federal Register. A

scoping notice and request for comments, was published in the *Richfield Reaper* July 14, 1999; the *Emery County Progress* July 13, 1999; and the *Salt Lake Tribune* and *Deseret News* July 15, 1999.

A public mailing list was compiled and 160 letters were sent to interested individuals, agencies, and groups. Public meetings were held as scheduled in Castle Dale on July 21, 1999, and in Richfield on July 22, 1999. Comment forms were available at the meetings. Over 30 people attended the Castle Dale meeting and 23 people signed in at the Richfield meeting. A complete summary of public participation efforts is documented in the Public Involvement Plan which is included in the project record.

A total of 60 comments were received during scoping efforts. In January and February 1999, 25 comments were received for the EA. An additional, 35 comment letters or forms were received as a result of the EIS scoping effort. All of the comments received during both of the scoping efforts were analyzed and incorporated into the EIS.

Between December 11, 2001 and May 7, 2002, a total of 409 comment letters or forms were received as a result of the Notice and Comment period associated with the publication of the Draft EIS. These comments were analyzed, along with additional information developed throughout the duration of the environmental process, and were incorporated and addressed in Chapter 6.0 of the FEIS.

The following official site tours were conducted in Quitchupah Creek:

June 4, 1999	Representatives of the Paiute Indian Tribe of Utah
June 30, 1999	Agency and Sevier County SSD Representatives
July 15, 1999	Concerned Individuals of Emery County
August 6, 1999	Representatives of the Koosharem Band of Paiute Indian Tribe of Utah
March 30, 2000	Representatives of the Uinta and Ouray Ute Indian Tribe of Utah
October 18, 2000	Representatives of the Koosharem Band of Paiute Indian Tribe of Utah
August 22, 2002	Ranchers
June 3, 2003	Agency and State Director
August 28, 2003	Resource Development Coordinating Committee
September 14, 2004	Representatives of the Koosharem Band of Paiute Indian Tribe of Utah

Changes Between Draft And Final EIS

In addition to minor edits and corrections, a number of changes were made to the Draft EIS in preparing the Final EIS. These changes are reflected throughout the Final EIS. The updated information disclosed in the Final EIS falls within the scope of the analysis depicted in the Draft EIS, and in most cases simply provides additional explanation.

The resolution of issues related to this project has been an ongoing and lengthy process. After initial public scoping in 1999-2000, the Quitchupah Creek Road Draft EIS was circulated for public review and comment in November 2001 (See FEIS Chapter 6 – Public Comments and Responses). Since that time, the FEIS has been delayed due to consultation, the development of mitigation, and additional surveys and studies required for specific resources, such as the Ethnography Study conducted in 2004. The Final EIS takes into account numerous public and agency concerns, issues and views, as well as adaptation to changes in land use policy and guidelines, by both the USFS and BLM.

I do not believe that the edits, corrections, and/or additional analysis necessitate the development and issuance of a Supplemental EIS.

Findings Required by Other Laws and Regulations

The project will meet the requirements of the Endangered Species Act.

In order to comply with provisions of the Migratory Bird Treaty Act, incorporation of seasonal restrictions and buffers from active raptor nests on construction activity are required.

The incorporation of seasonal restrictions and buffers from active eagle nests on construction activity will comply with provisions of the Bald Eagle Act.

The project will not result in a violation of Clean Air Act standards.

This decision to authorize a right-of-way to the SSD is consistent with the intent of the long term goals and objectives listed in Chapter IV (Forest Management Direction) of the Fishlake Forest Plan. The Quitchupah Creek Road project was designed in conformance with Forest Plan standards and incorporates appropriate Forest Plan guidelines as indicated in the table below.

Management Activities	Page
Water Resource Improvement and Maintenance	IV-35
Special Use Management	IV-38
Rights-of-Way and Land Adjustments	IV-39
Local Road Construction and Reconstruction	IV-45

This decision is also in conformance with Management Area Direction (6B – Emphasis on Livestock Grazing) as described in the Forest Plan, pages IV-109 through IV-113.

Implementation

Implementation Date

If no appeals are filed within the 45-day time period, implementation of the decision may occur on, but not before, 5 business days from the close of the appeal filing period. If one or more

appeals are filed, implementation may occur on, but not before, the 15th business day following the date of the last appeal disposition.

Administrative Review or Appeal Opportunities

This decision is subject to appeal pursuant to Forest Service regulations at 36 CFR 215. Appeals must meet the content requirements of 36 CFR 215.14. Appeals must be postmarked or received by the Appeal Deciding Officer within 45 days of the publication of this notice in *Richfield Reaper*. The Appeal Deciding Officer is Jack Troyer, Regional Forester. Appeals must be sent to: Appeal Deciding Officer, Intermountain Region USFS, 324 25th Street, Ogden, Utah 84401; or by fax to 801-625-5277; or by email to: appeals-intermtn-regional-office@fs.fed.us. Emailed appeals must be submitted in rich text (rtf) or Word (doc) and must include the project name in the subject line. Appeals may also be hand delivered to the above address, during regular business hours of 8:00 a.m. to 4:30 p.m. Monday through Friday.

Contact Person

For additional information concerning this decision or the Forest Service appeal process, contact Christopher Wehrli, Environmental Coordinator, Fishlake National Forest, 115 E. 900 N. Richfield, UT 84701, (435)-896-9233.

Mary C Erickson

MARY C. ERICKSON
Forest Supervisor

3/9/06

APPENDIX A

Alternative D - Water Hollow Road Alignment

The Alternative D - Water Hollow Road will utilize the Quitchupah Creek Road Alignment for 2.0 miles of the westernmost portion of its alignment. At that point, it crosses Quitchupah Creek and follows to the south of this drainage for approximately .5 mile to the Forest boundary, the route continues in an easterly direction along an existing jeep trail to Water Hollow Benches where it then turns south to Saleratus Benches. From Saleratus Benches, the Water Hollow Road Alternative then turns north and east to connect with SR-10 (Figure 1).

The Water Hollow Road Alternative alignment begins at the junction with Acord Lakes Road (Sevier County Road #010), at an elevation of approximately 7,550 feet above mean sea level (AMSL); this alignment is 11.25 miles long and drops 1,430 feet in elevation for an average grade of 2.5 percent. The descent into Water Hollow has an average grade of 4 percent, and the ascent out of Water Hollow onto Water Hollow Bench is 7 percent for 900 feet.

The acreage of impact for the Water Hollow Alternative is 146.3 acres. The crossing of Water Hollow will require large cuts up to 65 feet deep on both approaches and a large fill 90 feet high and 350 feet wide. This alignment also crosses several other large perennial and ephemeral tributary drainages, for a total of 20 primary crossings.

Except for the western end where the Water Hollow road will obliterate the existing two-track road (approximately 2.1 miles), the existing road along Quitchupah Creek will remain in place. However, at the Fishlake National Forest boundary, motorized access to the paved road will be restricted and signs will be posted to discourage unauthorized access.

Lands

The lands crossed by this build alternative include mostly public lands and one parcel of private land. Table A-1 describes the length of the Water Hollow Road alternative within each jurisdiction and the estimated disturbance.

Table A-1

Alternative D -Water Hollow Road Land Status and Proposed Disturbance

Land Mgmt	Road Distance (miles)	County Jurisdiction	Construction Disturbance (acres)	Existing Road Disturbance (acres)	Staging Areas (acres)	Pull-Outs (acres)	Total New Surface Disturbance (acres)
USFS	2.52	Sevier	30.5	2.6	5.0	0.3	33.2
BLM	7.94	Sevier	95.3	0	10.0	0.6	105.9
SITLA	0.26	Sevier	2.4	0	0	0	2.4
Private	0.53	Sevier	4.8	0	0	0	4.8
Totals	11.25		133.0	2.6	15.0	0.9	146.3

The public lands include those managed by the BLM, Richfield Field Office headquartered in Richfield in Sevier County. The National Forest System lands are managed by the Fishlake National Forest headquartered in Richfield, Utah. SITLA has jurisdiction over the small portion of the route owned by the state of Utah. The private landowner is Castle Valley Ranches, LLC.

Details for design and construction are available for this alternative alignment Appendix B of the FEIS.

Pullouts
Each pullout will be 30 feet wide by 100 feet long unless the design is to use the existing road. Pullouts for Alternative D are proposed at the following stations:

Station 12+00 to 13+00	north side of proposed road
Station 60+00 to 63+50	north side, use existing road as pullout
Station 121+00 to 122+00	south side of road
Station 174+50 to 175+50	south side of road
Station 182+00	north side of road, access point from old road
Station 219+00 to 220+00	south side of road
Station 239+00 to 240+00	east side of road
Station 299+00 to 300+00	east side of road
Station 325+00 to 326+00	east side of road
Station 497+00 to 498+00	north side of road

SR-10 Junction
The proposed road will junction with SR-10 approximately 6.5 miles south of Emery Town and 2.0 miles south of the Quitchupah Creek bridge, creating a new intersection. Because the proposed road will carry coal truck traffic, both right and left turn lanes will be required for the proposed road. Since there is little grade for northbound traffic, an acceleration lane of 1,380 feet will be required for the coal truck traffic. Thus, there will be three lanes south of the intersection and four lanes north of the intersection. This construction will be under the direction of UDOT and according to UDOT and AASHTO standards. An access permit will be required from UDOT.

The disturbance for construction of the intersection and additional lanes will occur within the UDOT right-of-way or acquired right-of-way.

Wildlife Bridges, Stream Crossings, and Culverts
Big game animals cross this road area to access winter and summer ranges, therefore, wildlife crossings must be constructed at strategic locations along the route to facilitate migration patterns.

Utah Division of Wildlife Resource guidelines suggest the following: "Structures designed to allow wildlife passage below the road should meet an "openness ratio" of one or greater. This is to say that the width of the bridge multiplied by the height of the bridge, divided by the length of the bridge, should be at least "1". Since these bridges must accommodate mature bull elk, the height of the bridge must be at least 16 feet to allow for antler clearance (Jones, 2005, Letter from Derris Jones, Regional Supervisor, S.E. Region, UDWR, August 31, 2005).

The road alignment for Alternative D will require a total of 44 culvert crossings and five bridge crossings (UDWR, Mead 2005, email from Leroy Mead, UDWR, 3-30-2005). Figure 2-12 in the FEIS shows the locations of these crossings. This includes 20 primary crossings and 29 secondary crossings. Both primary and secondary culvert crossings, and bridges, will be designed to pass the 100-year flow, as calculated by UDOT methodology (UDOT, 2002). Table A-2 identifies the primary culvert crossing locations, design flows, and culvert diameters; as well as the recommended wildlife crossing bridge locations. Two additional wildlife bridge crossings are suggested by UDWR and shown in the table. Final number, placement, and design of the wildlife bridge crossing structures will be determined during project implementation in consultation with the UDWR and BLM biologists.

Table A-2

Primary Culvert Crossing Information - Alternative D

Station	Design Flow (cubic feet per second)	Minimum Culvert Diameter (inches)/ Bridge Crossing RCMP unless noted
11+00	123	60
18+00	173	72
66+00	234	84
94+00	252	84
121+50	419	Wildlife Bridge**
131+50	125	72
177+00	1060	Wildlife Bridge**
229+50	52	Wildlife Bridge**
255+00	56	Wildlife Bridge**
306+50	120	Wildlife Bridge**
338+00	75	54
339+50	75	54
341+50	58	48
366+50	66	48
384+50	42	48
412+50	324	72
419+00	9	96
432+00	173	48
463+00	356	96
471+00	53	96
359+40		Wildlife Bridge ** (Additional UDWR suggested)
507+80 or 491+90 or 493+10		Wildlife Bridge ** (Additional UDWR suggested)

*Crossing will provide for fish passage.

** These crossings are addressed in mitigation measures for wildlife.

Note: At crossings where fish passage is required, specialized culverts may be used, and diameter/type may vary from what is given above. However, in all cases, capacity will be capable of passing the 100-year flow at a minimum.

Additional Note: Structures designed to allow wildlife passage below the road should meet an "openness ratio" of one or greater. This is to say that the width of the bridge multiplied by the height of the bridge, divided by the length of the bridge, should be at least "1".

Depending upon the season of construction, three of these crossings can be expected to be wet. Best Management Practices (BMPs) that will be implemented during culvert design, placement, and maintenance are described in Appendix B.

In addition to the crossing culverts, numerous borrow ditch relief culverts will be used to direct and control road and upgradient runoff. These culverts will be spaced at 500-foot intervals or less, depending upon road slope and proximity to stream channels. BMPs that apply to borrow ditch relief and other road drainage issues are contained in Appendix B.

Applicant-Committed Environmental Protection Measures for Alternative D

Wetlands and Waters of the U.S.

The U.S. Army Corps of Engineers (COE) under authority of Section 404 of the Clean Water Act as amended and Executive Order 11990 requires that all impacts to jurisdictional wetlands be mitigated. The b(1) guidelines provide an established process for determining if the permit to be issued for filling wetlands and the accompanying mitigation plan is in the best interest of the Nation's wetlands. The b(1) guidelines offer three tiered steps: 1) to avoid impacts to wetlands, 2) if avoidance is not possible then minimize impacts, and 3) if avoidance and minimization of impacts is not possible then mitigate impacts.

There are five jurisdictional wetlands in the immediate vicinity of the proposed road; one 0.07-acres wetland at Station 44+00 and one 0.26-acre wetland at Station 67+00 in East Spring Canyon will be impacted. The COE has indicated that it will require a mitigation ratio of 3:1 on the acreage in the same watershed, and the conceptual mitigation plan more than meets that. The potential mitigation sites within the Quitchupah Creek watershed are somewhat limited mainly due to the dynamics of the channels, which either makes it difficult to divert sufficient water to establish a wetland, or thwarts efforts to permanently establish a wetland basin or area because of their instability.

In addition to the wetland near East Spring Creek, the creek also has a hydric fringe in the flat bottom of the channel. To compensate for the combined loss of approximately 0.33 acres of wetlands filled at Stations 44+00 and 67+00, three measures will be designed and installed as follows:

1. The existing wetland at Station 48+00 is located at the head of the perennial stream in Convulsion Canyon but downstream of the realigned ephemeral channel in the upper canyon. The source of water for the wetland is subsurface flows surfacing in the channel at Station 41+00 and a spring at the foot of a large rock adjacent to the existing two-track road. Headcutting has begun where the wetland discharges into the stream channel. The installation of a structure to elevate the discharge point four to five feet above the incised stream will enlarge the wetlands capacity by approximately 1,000 yds^3, and a hardened discharge point will stop the headcutting action. The enlarged capacity of the wetlands will allow for retention of the sediments generated upstream by realignment of the ephemeral channel. The enlarged wetlands will cover approximately 0.33 acres.

2. A potential wetland site exists at Station 62+50 where the stream coming out of Convulsion Canyon has created a willow community on a bench with a 2 percent gradient. An in-line

wetland system will be created at this location by allowing streamflow to fill behind several shallow dikes constructed across the channel/floodplain area. Upstream of each dike, excavated areas will be dug to increase saturated areas. The resulting ponds and saturated areas will create a diversified wetland complex, ranging from flowing water, ponded open water, and saturated soils. The dikes will be designed with spill points to discharge excess water. The combined wetland acreage to be created will be 1.2 acres. With a combined capacity of 2,000 yds^3 , the diked areas will also serve to retain sediments. They will use approximately 6 percent of the average annual flow of Convulsion Canyon.

Items 1 (0.33 acres) and 2 (1.2 acres) above will result in a total of 1.53 acres of wetlands that will be enhanced or increased as a result of mitigation. Subtracting the 0.31 acres of poor quality wetlands already present at station 48+00 gives a total of new wetland creation of 1.22 acres. Given the loss of 0.33 acres of wetlands due to filling at Stations 44+00 and 67+00, the proposed mitigation will exceed the Corps' minimum 3:1 replacement ratio. Final detailed wetland mitigation designs must be approved by the COE. The above conceptual plans have been discussed with the current COE representative assigned to this project, who has agreed in concept with the mitigation strategy. However, specific approval will not come until the formal application process is undertaken.

3. The East Spring Canyon stream will be brought under the proposed road through a 170-foot long culvert at Station 65+50. From the mouth of the culvert downstream for approximately 900 feet, the channel will be newly constructed and will parallel the road fill to rejoin the existing stream channel upstream of the juncture with Convulsion Canyon. Channel designs will be based upon BMPs given in Appendix B of the FEIS. The resultant constructed channel will emulate the existing channel in dimensions, cross-section, and gradient so the flows, hydric fringe, wetlands, and riparian zone will replace that covered with road fill. The placement of check dams, deflectors, and riprap will help stabilize the new channel as it adjusts to the flows. Salvage of riparian vegetation (such as cut willow, sedge clumps, etc.) from the abandoned channel will be used where practical to boost vegetative success along the new channel. The channel will not be as deep as the incised channel; it will be designed to contain bankfull flows, with overbank areas accommodating larger flood events.

For a more complete description of the wetlands mitigation, refer to Strip Map 2 in Appendix B of the FEIS.

Water

As a result of coal loading, coal trucks have coal dust and debris on the exterior of the truck that is blown off as the truck travels; this dust and debris becomes part of sediments along the roadbed. Since coal trucks traveling in Convulsion Canyon will be in close proximity to the stream, fugitive coal dust from the trucks would readily enter the stream system as airborne or waterborne sediments. To prevent this, the coal trucks loading at the SUFCO Mine will be cleaned after loading and prior to entering the public road system to remove fugitive coal particles from the exterior of the truck and trailer.

Raptor Protection

The haul route will be patrolled daily, during daylight hours, to pick up and dispose of all animal carcasses (wild and domestic, large and small) in order to keep the road surface clear. This will reduce scavenging on the road surface by raptors and vultures. The concern is that carcasses that aren't readily removed from the road will attract scavengers. Scavengers present on the road while feeding can cause unnecessary mortality among the protected raptors. The Sevier County Special Services District will be responsible for removing carcasses to a specified disposal area in accordance with the regulations of the State Board of Health. This will continue for the duration of the life of the mine. The SSD, or contractor employed by the SSD, will secure and maintain any necessary license or permits required by State or local authorities to perform this service.

Livestock

Cattle Trail

In order to accommodate cattle movement along the road corridor, a fenced cattle trail will be constructed within the road right-of-way on Forest lands, on the north side of the alignment, between the underpass at Broad Hollow and Station 60+00, approximately 1½ miles in length. The fenced trail will continue in intermittent sections below this Station in areas where terrain restricts movement of cattle outside the right of way. The trail will be 15 to 20 feet wide, and in some places narrowed to 10 feet wide. The trail width will be cleared of vegetation during right-of-way preparation; it will be seeded once road construction is completed. Access to the trail will be gated on either end; cattle will be trailed along the road to the fenced cattle trail entrance in the spring, and cattle will gather at Broad Hollow to be let back on the trail in September. At Station 60+00, the continuous fenced trail will end, but cattle will continue to trail down outside the fenced road right-of-way and into the intermittent fenced sections of cattle trail down to the holding facility at the Forest boundary. Holding facilities will be constructed and maintained by the SSD in Broad Hollow and at the east boundary of the Forest to hold cattle that drift prior to the opening of the cattle trail gate. Water will be provided at the holding facilities by the SUFCO Mine.

G.L. Olsen Allotment

Since a relatively high number of cattle are concentrated in this small allotment, the proposed road will need to be fenced to restrict cattle access to the road. Also the road in the allotment is mostly cut below the natural grade, creating a wide ditch with steep sideslopes making it difficult for cattle to enter and exit the ditch. To control the cattle and better manage the allotment, the proposed road will be fenced.

The fencing will extend on both sides of the cuts and/or fills from Station 187+00 on the west to Station 275+00 on the east, a distance of 8,800 feet (1.6 miles). Cattleguards on the proposed road and natural barriers at each end of the fence will restrict cattle movement past the fenced portions of the road. On the west, the cliffs and cattleguard will prevent cattle from entering Water Hollow. This will relieve grazing pressure on the narrow riparian zone in Water Hollow and on The Cove tributary. On the east, the cattleguard and natural barriers of the drainages with cliffs will prevent cattle drift into the Saleratus Allotment. Gates located every mile will allow cattle to be moved across the proposed road when needed and will allow cattle that did accidentally enter upon the roadway to be removed.

Since the cattle will be blocked from watering in Water Hollow, and the two ponds on the east are usually dry, a water system will be developed to provide water for the cattle during the short grazing season. The system will consist of 5,000 gallon (or larger) water storage tanks located at Stations 223+00 and 261+00 with a pipe system extending to water troughs located 500 to 1,300 feet away from the proposed road on both sides of the road. The system will be gravity-fed with water levels in the troughs controlled by float valves. The SSD will haul water to the storage tanks located along the road during the 4-6 week grazing season. Two watering systems are required because of deep drainages with cliffs blocking movement of cattle.

The allotment, divided by the road, with watering troughs on both sides of the road, will be fenced and managed as a two pasture allotment. The turn-in pasture will be rotated each year to better manage the forage. The cattle will be moved internally between pastures as stipulated in the allotment management plan and will cross the road at a designated time when coal transport was not scheduled or coal transport was halted to allow for the crossing. Cattle will enter and exit the allotment via a trail directly from Quitchupah Creek to the north.

Saleratus Allotment

Because the cattle concentrate on the lower elevations of this allotment, fencing will be needed to restrict cattle access to the proposed road. The fence will start at Station 435+00 on the west where steep terrain combined with a cattleguard on the road will block westward cattle movement. The fence will extend east across the lower slopes and valleys to Station 594+50 where it will join with the right-of-way fencing along SR-10. A cattleguard will also be installed here to prevent cattle on the road from entering the SR-10 roadway. Gates will be placed approximately every mile to allow for any needed cattle movement north and south or removal of trespass cattle on the road. There will be about 19,000 feet (3.6 miles) of fencing along the upper benches and no fencing along the rough terrain below the benches for approximately 16,000 feet (about 3 miles). Cattle will only be moved across this road, either by moving when coal transport is not scheduled or scheduling a halt to transport so the cattle will be moved at a designated time.

Riparian Protection

Riparian fencing along Quitchupah Creek will be installed and maintained by SSD on public lands (BLM, FS, and SITLA) adjacent to the road. This includes about 2.4 miles on National Forest System lands, about 1.2 miles on State lands, and about 1.1 miles on BLM lands contiguous to the State parcel, for a total of about 4.7 miles of Quitchupah Creek that will be fenced. The riparian fencing is expected to be 3-wire 42" standard wildlife fence. Wildlife friendly crossings will be provided on each side of the stream at locations correlated to migration corridors and/or wildlife trails. These crossings will be approximately 33 feet wide, the same height as the other fencing, and constructed of lodgepole or similar material. Fence design, installation, and maintenance will be meet agencies' specifications. Riparian fencing will exclude cattle from the stream except at designated watering locations.

Agency-Committed Environmental Protection Measures for Alternative D

The riparian zones of Quitchupah Creek and Convulsion Canyon have degraded over the years, due to several reasons. To alleviate this condition and restore the riparian zones, livestock grazing will be eliminated on approximately 4.7 miles of stream through a combination of

grazing permit changes, fencing along the proposed road, and cross-fencing where necessary. The actual fencing will be completed under an applicant-committed measure as described above; the permit actions related to this measure will be handled by the appropriate agencies. Fenced watering points will be provided where underpasses allow livestock to pass under the proposed road and access the stream. The construction of the proposed road is the primary catalyst for the changing management of grazing within the riparian zone.

Specifically, on National Forest System lands in Convulsion Canyon, the livestock will trail on the fenced livestock trail, to and from summer pasture in the Quitchupah Allotment and will no longer have access to the riparian zone or the mitigation wetlands and stream realignment. The spring trailing will begin in the private lands at the east boundary of the National Forest System lands. The fall trailing will begin at the holding facility adjacent to Acord Lakes Road.

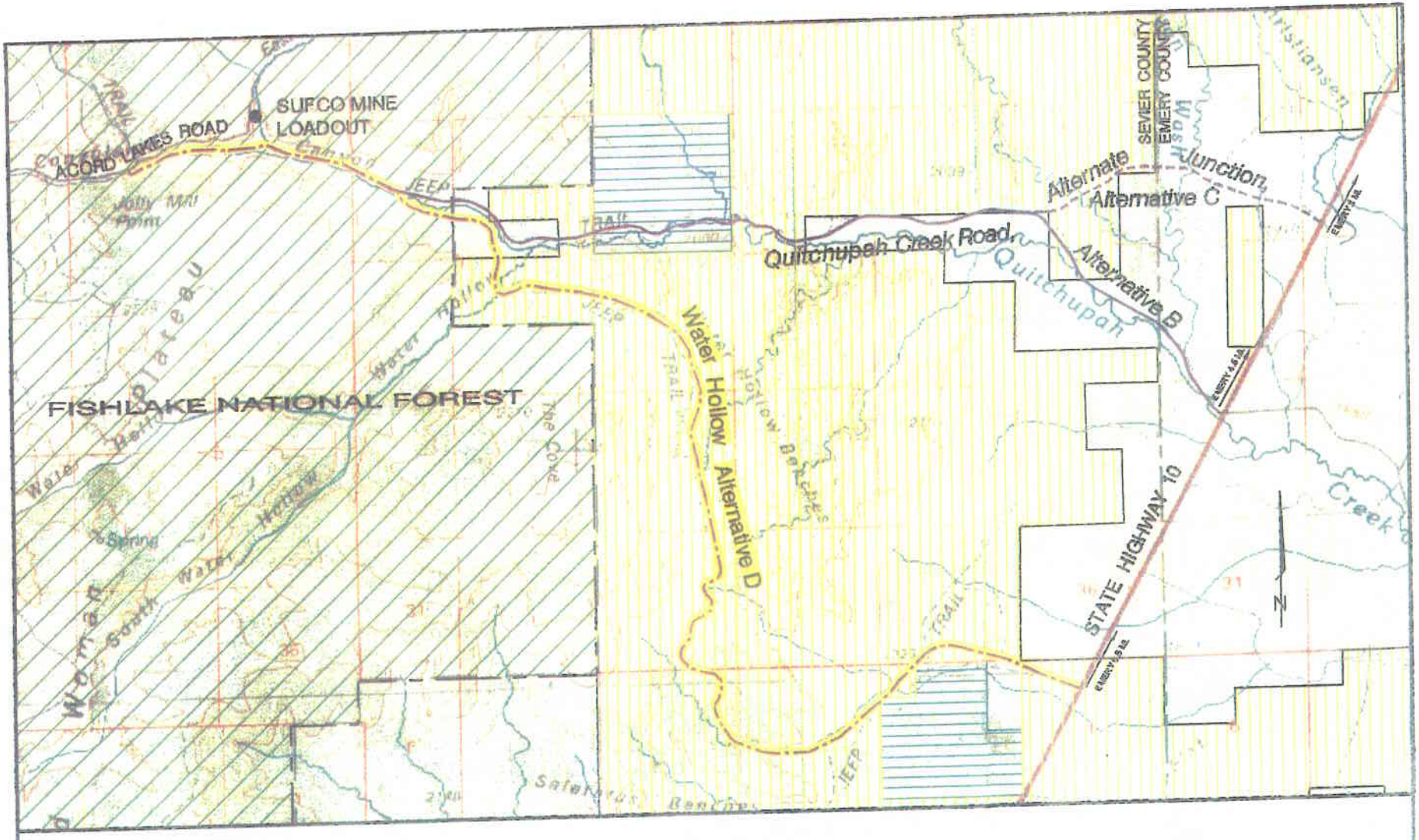

SUFCO MINE
LOADOUT
ACCORD LAKES ROAD
Alternate Junction
Alternative C
Quitchupah Creek Road
Alternative B
Water Hollow Alternative D
FISHLAKE NATIONAL FOREST
STATE HIGHWAY 10
SEVIER COUNTY
EMERY COUNTY
Quitchupah
Creek
ALTERNATIVES
QUITCHUPAH CREEK ROAD, ALTERNATIVE B
ALTERNATE JUNCTION, ALTERNATIVE C
WATER HOLLOW, ALTERNATIVE D
LANDSTATUS
FISHLAKE NATIONAL FOREST BOUNDARY
BLM LAND
STATE LAND
PRIVATE LAND
1 0 1 MILE

FIGURE 1

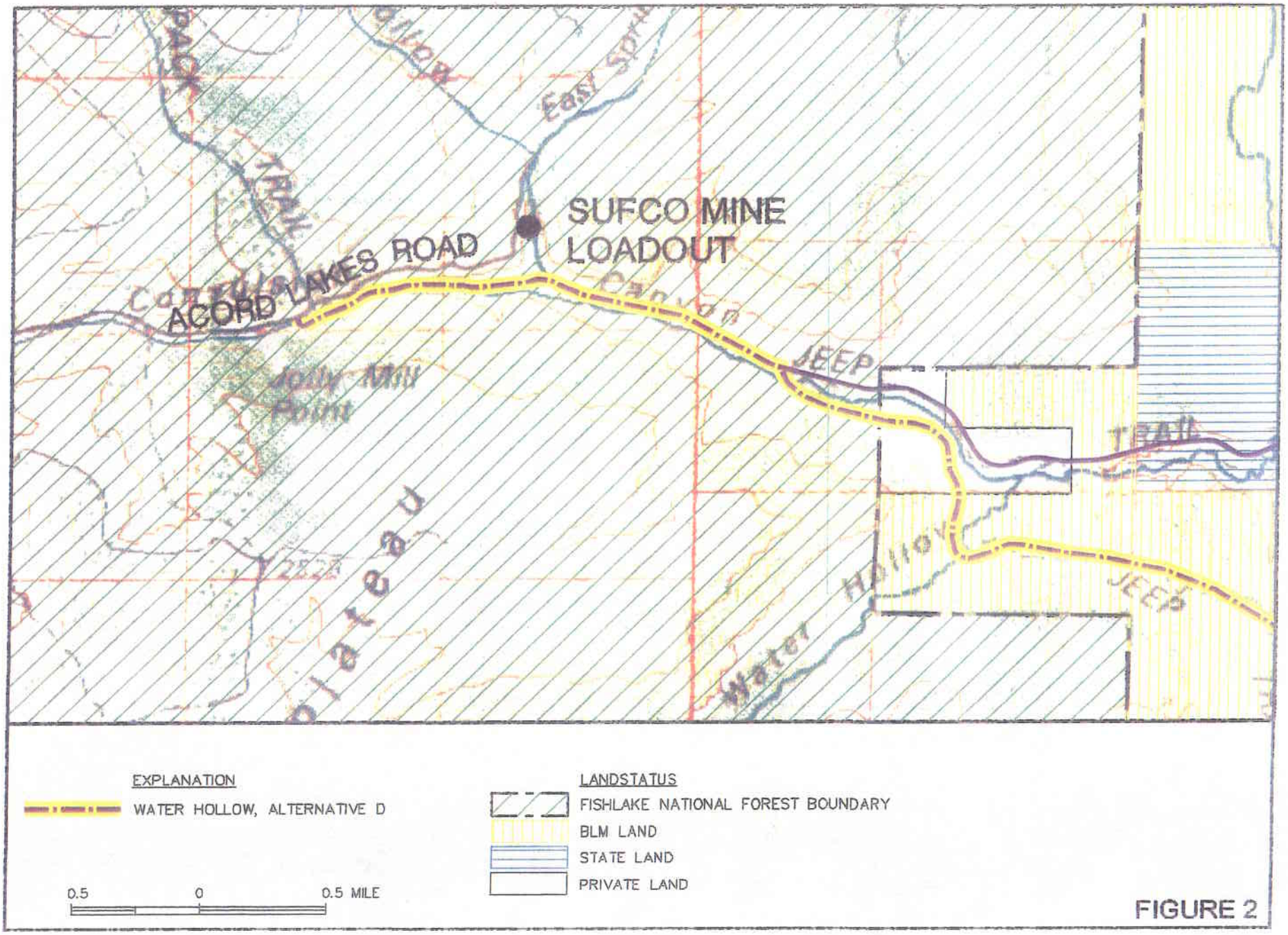

SUFCO MINE
LOADOUT
ACCORD LAKES ROAD
Canyon
JEEP
TRAIL
Water Hollow
JEEP
Plateau
EXPLANATION
WATER HOLLOW, ALTERNATIVE D
LANDSTATUS
FISHLAKE NATIONAL FOREST BOUNDARY
BLM LAND
STATE LAND
PRIVATE LAND
0.5
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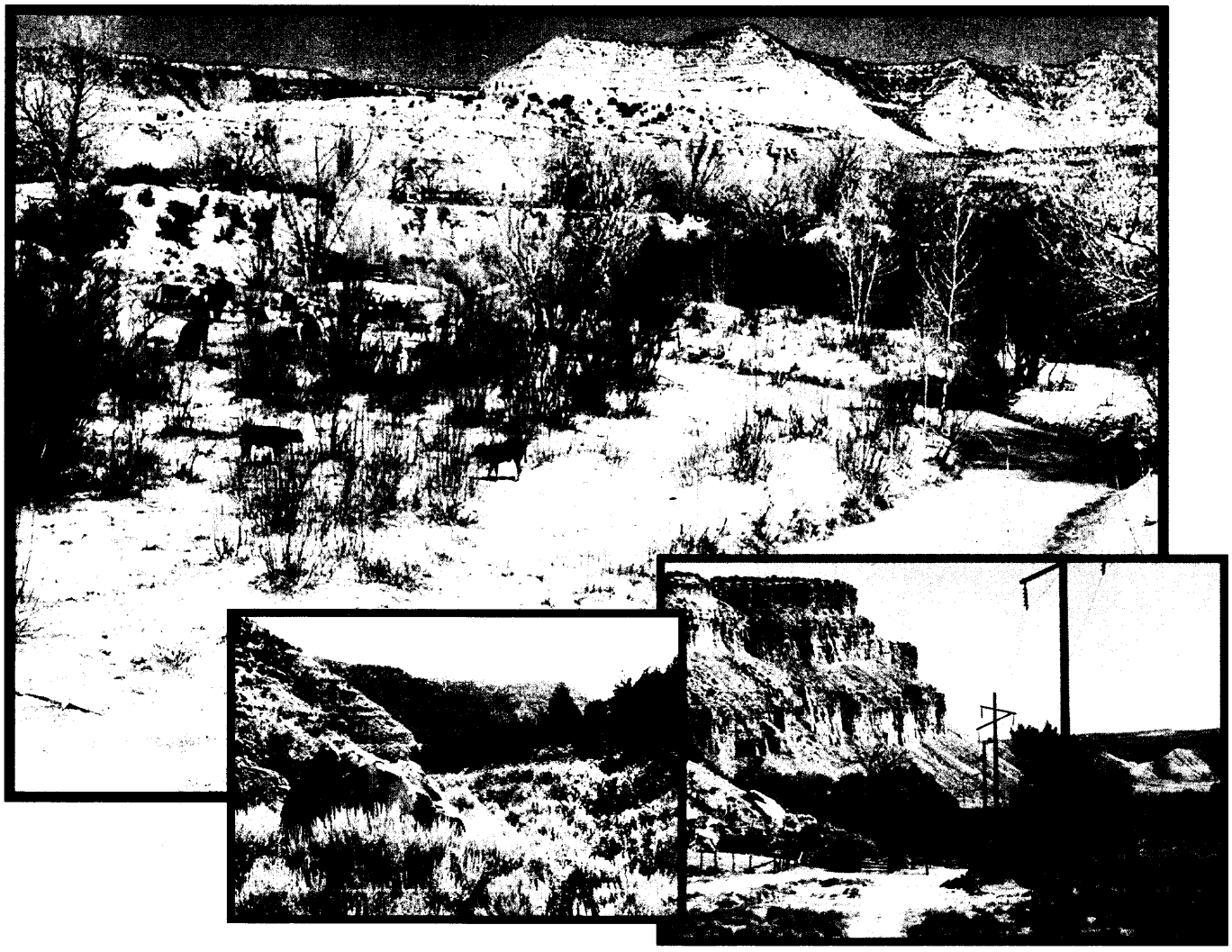
FIGURE 2



QUITCHUPAH CREEK ROAD

Record of Decision
For
Final Environmental Impact Statement
March 2006

Alternative Selected: Alternative D - Water Hollow Road Alignment
(Preferred Alternative)

U.S. Department of Interior
Bureau of Land Management
Richfield Field Office

RECORD OF DECISION

By
The Bureau of Land Management
Richfield Field Office

For
The Quitchupah Creek Road
Final Environmental Impact Statement

Alternative Selected:
Alternative D - Water Hollow Road Alignment (Preferred Alternative)

Lead Agency:
U.S. Department of Agriculture
Forest Service
Fishlake National Forest
Richfield Ranger District
Richfield, Utah

Cooperating Agency:
U.S. Department of the Interior
Bureau of Land Management
Richfield Field Office
Richfield, Utah

March 9, 2006

Introduction

The Quitchupah Creek Road Final Environmental Impact Statement (FEIS), issued on January 27, 2006, has been prepared pursuant to the requirements of the National Environmental Policy Act (NEPA, 40 CFR 1500-1508). This NEPA analysis addresses the need for Federal decisions approving the right-of-way applications, and evaluates the potential environmental impacts associated with implementing a No Action Alternative, or one of three Action (build) Alternatives designed to meet the purpose and need for the project. The FEIS is a joint document between the United States Forest Service (USFS), Fishlake National Forest (Lead Agency) and the Bureau of Land Management (BLM), Richfield Field Office (Cooperating Agency). The Forest Supervisor for the Fishlake National Forest and the Richfield Field Office Manager for the BLM are the responsible officials for the EIS. The rationale for each agency decision will be documented in separate Records of Decision.

This Record of Decision (ROD), after considering the comments, responses, and environmental consequences discussed in the FEIS, documents the Bureau of Land Management's (BLM) decision relative to issuing a right-of-way to the Sevier County Special Service District Number #1 (SCSSD) to construct a public road to connect Acord Lakes Road with State Route 10 (SR-10) for the purposes of coal transport. Such actions are authorized by the Federal Land Policy and Management Act of 1976 (FLPMA), as amended. The Fishlake National Forest (lead agency) will issue their own ROD and authorizations for the portions of the Quitchupah Creek Road that are located on Forest Service administered lands.

Project Summary

The SCSSD has submitted right-of-way applications to the USFS and the BLM for the construction, upgrade, and realignment of the existing 9.15 mile Quitchupah Creek Road, a public road, to be used and indirectly funded by the Southern Utah Fuel Company Mine (SUFCO Mine). The proposal had the potential to result in significant effects to the environment, necessitating the preparation of the Quitchupah Creek Road FEIS.

The Quitchupah Creek Road is generally an east-west alignment located in the Quitchupah Creek watershed. It connects the Acord Lakes Road (Sevier County Road #010) in Convulsion Canyon, Sevier County, with State Route 10 (SR-10) in Emery County. Lands along the route include federal lands that are administered by the United States Forest Service (Fishlake National Forest) and the Bureau of Land Management (Richfield Field Office). State-owned lands are administered by the Utah State School and Institutional Trust Lands Administration (SITLA). There are also private-owned lands involved in the project.

The proposed road (Alternative B) would be 8.9 miles long, with a 28-foot wide paved surface, and an operational right-of-way of 66 feet. Six pullouts for parking off the road shoulder are provided at various locations. The construction corridor would vary from 50 feet to 60 feet on the flatter ground (eastern end) to an average 100 feet for the remainder of the road. The road would be designed for a speed of 40 miles per hour, and constructed according to the standards of the American Association of State Highway and Transportation Officials (AASHTO) and the Utah Department of Transportation (UDOT) 2005 Standard Specifications for Road and Bridge construction.

No facilities would be built in association with this alignment. Total new disturbance within the proposed road corridor would be 92.3 acres. Once reclamation is complete, the net loss of vegetation would be 45 acres that are dedicated to the paved roadbed and road shoulder.

The requested rights-of-way for the permanent road corridor would include 24.3 acres of USFS lands, 18.7 acres of BLM lands, 12.3 acres on SITLA lands, and 33.7 acres private lands. Rights-of-way applications have been submitted to the USFS and BLM. Access across private lands is dependent upon individual negotiations.

Alternatives B,C, and D (the build alternatives) would conform to the overall guidance of the BLM San Rafael Resource Management Plan (RMP) and Final Environmental Impact Statement, and the BLM Forest Planning Unit Management Framework Plan (FPU MFP). This FEIS is in conformance to, and tiers to the decisions of these stated Land Use Plans, which are available for review at the BLM Field Office, located in Richfield, Utah. No plan amendments would be required for the BLM San Rafael Plan, or the BLM FPU MFP. The proposed action and alternatives are also consistent with the Sevier County General Plan and the Emery County General Plan.

Purpose and Need for the Project

The purpose of this FEIS is to evaluate the potential environmental, social, and economic impacts of granting a right-of-way to construct a public road across Federally-owned lands.

The need of the Federal action is to respond to a Title V right-of-way application from SCSSD for granting a right-of-way to construct a coal haul road. Southern Utah Fuel Company Mine (SUFCO Mine) would then be a toll user of this public road. Due to the SUFCO Mine location in rugged terrain, and the distance to railheads and loadouts, SUFCO Mine relies on truck transport for all of its coal shipments. The road project would enhance the immediate competitive productivity of the SUFCO Mine, a source of economic stability for Sevier County, a potential source of additional income and revenue for Emery County, and a source of high quality coal for electrical power generating plants in eastern Utah and the Midwest.

SUFCO and dependent trucking companies provided 20 percent of the non-farm employment and 28 percent of the personal income in Sevier County in 2002. The mine is an important component of local economies. The presence and stability of the SUFCO Mine, and the families who support it, guarantee a continued demand in both Sevier and Emery counties for bank loans, mortgages, utilities, and other goods and services.

Profitability of the SUFCO Mine over time ensures that funds are available for further exploration, and maintains the SUFCO Mine's level of production and competitive edge in the marketplace. The added profits, due to reduced transport costs, substantially lower risk of failure for the SUFCO Mine, and provide a buffer to economic consequences for Sevier County and to a lesser extent Emery County.

Decision and Rationale for the Decision

Decision:

I have reviewed the analysis presented in the Final EIS for the Quitchupah Creek Road Project, considered the comments and involvement received on the Draft EIS from the public, various groups, local governments, State government, other Federal agencies, and Native American Tribal leaders. I have also discussed the project's anticipated effects with the agency's Interdisciplinary Team members.

As a result of the EIS process, I have decided to select the Preferred Alternative, which is **Alternative D – the Water Hollow Road Alignment.** Accordingly, I will also authorize right-of-way grant UTU-75907 to the Sevier County Special Services District #1 (SCSSD) for only those portions of the proposed road that follow the Water Hollow Road Alignment and would be located on BLM administered public lands.

As a condition of approval of the Quitchupah Creek Road Right-of-Way, SCSSD, its employees, contractors, agents, assignees, and operators shall comply with the Applicant-Committed Environmental Protection Measures, the Agency-Committed Environmental Protection Measures, and Best Management Practices (BMPs) for Alternative D as shown and described in Chapter 2 and Appendix B of the FEIS.

Attachment A of this document describes the details of my decision, including incorporated design features and additional mitigation. Attached **Figure 1** and **Figure 2** identify the location of the road generally and specifically on both the Fishlake National Forest administered lands, and the Bureau of Land Management public lands. The legal land description is as follows:

Junction Quitchupah Creek Road:	SE1/4 of Section 18, T.22 South, R.5 East, SLBM
through:	Sections 18, 17, 20, 21, 28 and 33, T.22 South, R.5 East, SLBM
	Sections 1, 2, 3, 4, T.23 South, R.5 East, SLBM
	Section 35, T.22 South, R.5 East, SLBM
Junction SR-10:	NW1/4 of Section 1, T.23 South, R.5 East, SLBM

Rational For the Decision and Management Considerations:

This decision is one that involved a balancing of several considerations. The public interests, surface resources management, and responsible environmental protection were balanced with the cost-saving of delivering a needed coal supply and securing the SUFCO Mine a place in the competitive coal market. The road would also serve as a public road in the state's rural collector system.

The decision is based on the desire to support Sevier County in its projected economic stability. The road will aid SUFCO Mine to be cost-effective in the industry and to continue to provide a significant portion of the economy for Sevier County versus the management of the public lands for other resource values.

Some of the important considerations in reaching this decision include:

- Degree to which the proposed environmental protection measures reasonably minimize impacts to environmental resources;
- The potential to mitigate adverse effects on historic properties and cultural values.
- Predicted effects of the Proposed Action and Alternatives on surface water quality in the area as compared to State and Federal requirements
- Coordinating the evaluation of environmental impacts in this FEIS with other ongoing and planned studies by State and Federal agencies.
- The economic impact on the local economies.
- The impact to the energy industry in Utah and surrounding states.

I believe that Alternative D, the Water Hollow Route, fulfills the statutory mission and responsibilities of the BLM, giving consideration to economic, environmental, technical, and other factors. Alternative D results in more acreage of disturbance, and consequent physical impacts to soils, vegetation, wildlife, and grazing than the Proposed Action or Alternative C. Alternative D generally follows an existing road in Convulsion Canyon for 2.1 miles where it crosses the stream and enters terrain accessible only by an old dirt two-track trail, then drops down to Highway 10.

The effects of the project on cultural and/or historical properties have been considered relative to Section 106 of the National Historic Preservation Act and measures incorporated to minimize impacts to cultural sites per Executive Order *13007*. Measures will be taken to mitigate adverse effects on historic properties. Alternative D avoids all known cultural sites, and would have a process in place to mitigate previously undiscovered sites if uncovered during construction. The Paiute Tribe has claimed the Quitchupah Creek area as a sacred area and oppose the construction of the road down the canyon. Native American concerns have been satisfied by selection of this route whereby the majority of road construction will be conducted outside the areas considered sacred. In order to document and clarify the sacred claim, an ethnographic study of the Paiute and their association with the Quitchupah Creek area was undertaken. The study supports the Quitchupah Creek area as sacred to the Paiute Indian Tribe. Subsequently the Paiute Tribe expressed their satisfaction with the study and has given their support of Alternative D.

This route avoids most of the rock art complex at North Fork, eliminating potential impacts to the rock art due to truck emissions and vibrations. The total avoidance of sites is in compliance with documented concerns made by the Paiute and Ute Tribes during consultation.

Regarding water resources, there will be impacts to water resources in the Water Hollow drainage due to construction activities; however, road construction and maintenance for Alternative D will have less impact on the lower Quitchupah Creek channel than other alternatives. The environmental protection measures incorporated into the design of the project will improve water quality by decreasing salinity at the SR-10 bridge, positively affecting the downstream stretch designation as Section 303(D).

Fencing barriers to protect the riparian zones along Quitchupah Creek from livestock grazing would be installed and maintained by the applicant. Wildlife friendly crossings would be provided on each side of the stream at designated locations.

The junction with SR-10 would require less turn lanes and much shorter acceleration lanes than the Proposed Action and will not require a doubling of the width of the bridge over Quitchupah Creek.

The estimated cost to construct the road, including environmental protection measures, monitoring, and a junction with SR-10, will be $14.4 million, the most expensive of the build alternatives. SUFCO Mine will benefit from a shorter route for transporting coal to eastern markets and will save from $4-9M annually that could be applied to exploration, and increasing efficiency in mining, and continue contributing to the local economy. Also, approximately 1.4M gallons of fuel will be conserved annually with this alternative. Utah Department of Transportation will also save about $0.5M annually on maintenance costs on SR-10.

Alternative D of the FEIS would conform to the overall guidance of the BLM San Rafael Resource Management Plan (RMP) and FEIS, and the BLM Forest Planning Unit Management Framework Plan (FPU MFP). This Final Environmental Impact Statement is in conformance to, and tiers to the decisions of these Land Use Plans. The proposed action and alternatives are also consistent with the Sevier County General Plan and the Emery County General Plan.

The Forest Service and BLM have coordinated with the U.S. Fish and Wildlife Service on Threatened and Endangered species. A biological assessment was prepared for the project which states that implementation of the Preferred Alternative and associated environmental protection measures may affect, but are not likely to adversely affect the *San Rafael cactus,* an Endangered plant species, the *Winkler cactus*, a Threatened plant species, and the *bald eagle*, a Threatened wildlife species.

The project will meet the requirements of the Endangered Species Act.

The project would not result in any violation of Clean Air Act standards.

To comply with provisions of the Migratory Bird Treaty Act and the Bald Eagle Act, seasonal restrictions and buffers will be required on any construction activities near active raptor nests and active eagle nests.

The recently signed National Energy Policy Act of 2005 seeks to provide reliable, affordable energy to our nation's consumers, and to lessen the impact on Americans of energy price volatility and supply uncertainty. The demand for electricity in the U.S. is projected to increase by 45% over the next 20 years (National Energy Policy website). Access to coal reserves via any of the road alternatives proposed in the FEIS would reduce fuel waste by shortening the transport routes, and would help to maintain supplies of diverse and traditional forms of energy within the U.S. (domestic oil, gas, and coal). The National Energy Policy promotes such improvements in the productive and efficient use of energy.

Project implementation will not be allowed until all necessary Section 404 permitting requirements from the U.S. Army Corps of Engineers and the State of Utah for disturbance of stream channels and designated wetlands in Convulsion Canyon, East Spring Canyon, and Quitchupah Creek have been met and the permit has been approved and issued to the SCSSD.

Prior to construction or other surface disturbance associated with the right-of-way grant and any associated permits, the Bureau of Land Management (BLM) Authorized Officer (AO) or his delegated representative will issue written Notices to Proceed (NTPs) - Form 2800-15. NTPs will authorize construction or use only as therein expressly stated and only for the particular location, segment, area, or use described. BLM NTPs apply only to public lands managed by the BLM. Issuance of NTPs is conditioned on the following:

- Posting a bond for assurance all rehabilitation, mitigation measure, or grant stipulations are met to the satisfaction of the AO, if required.
- Obtaining required U.S. Army Corps of Engineers (COE) Section 404 permits, and any other necessary permits that may be required by the State of Utah.

Alternatives of the Proposed Project

Based on the issues, four alternatives were considered for analysis in this FEIS:
Alternative A: No Action Alternative (The Environmentally Preferred Alternative)
Alternative B: Quitchupah Creek Road Alignment (Proposed Action)
Alternative C: Alternate Junction with SR-10 and Alternate Design of Quitchupah Route
Alternative D: Water Hollow Road Alignment (Preferred Alternative)

Alternative A - *No Action*
Under this Alternative, a public road for transporting coal or providing alternate access to the SUFCO Mine would not be built in the Convulsion Canyon/Quitchupah Creek area, and the existing uses and environment in Quitchupah Creek and Water Hollow would continue unchanged in the foreseeable future. The existing road would remain in place and in use.

The historic use of the area by livestock, wildlife, various recreational uses, as well as the general solitude of the environment and the generally undisturbed condition of the cultural resources would continue. Current activities in the project area likewise would also continue, including livestock trailing and grazing, erosion, and road/power line maintenance.

Under the No Action Alternative, the current transportation routes to I-70 to SR-10 to power plants and railroad loadouts would continue to be utilized. SR-10 would receive increased use as mine coal production increases. To accommodate the increasing coal truck traffic, the southern 20 mile section of SR-10 from I-70 to Muddy Creek would need to be rebuilt and bridges replaced. According to the Utah Department of Transportation (UDOT) online construction report, the repaving and rehabilitation of the southern 10-mile section of SR-10 from milepost 0 (Fremont Junction, at I-70) to milepost 10 (Quitchupah Hill) (Project # STP-0010(20)0) was 92 percent complete in May 2005 (at a cost of $1,910,000). The Muddy Creek bridge replacement north of Emery is ongoing.

Alternative A would also preserve the cultural sites in the Quitchupah Creek area, including the important rock art complex at North Fork, considered sacred by Native Americans, specifically the Southern Paiute and the Ute Tribes. The sacred sites would still be available to the tribes for visitation and use according to their traditions.

Alternative A – No Action is also the environmentally preferred alternative because even though current and ongoing uses would still have direct and indirect impacts, it would not create new disturbances, it would cause the least damage to the biological and physical environment, and would best protect, preserve, and enhance historic, cultural, and natural resources

Alternative B - *Quitchupah Creek Road Alignment*
The construction of the proposed Quitchupah Creek road under Alternative B would upgrade and realign an existing road along Quitchupah Creek, connecting Acord Lakes Road (Sevier County Road #010) in Sevier County with SR-10 in Emery County. The proposed 8.9 mile road is the shortest route of the three project alternatives. The round-trip coal hauling transport distance would be decreased by approximately 50 miles, which would also shorten the trip for mine services located in Carbon and Emery counties. At the junction with SR-10, turn lanes and an acceleration lane would need to be added to the highway, which would require widening of the bridge over Quitchupah Creek. There would be temporary impacts to approximately 92.3 acres. Approximately 45 acres would be permanently impacted at the end of construction. The alignment would include 18 primary crossings. Applicant committed measures would include wetland mitigation, construction of a cattle trail, and riparian fencing.

Alternative C - *Alternate Junction with SR-10 and Alternate Design*
This alternate route would detour from the proposed route (Alternative B) in the southwest quarter of Section 13, Township 22 South, Range 5 East and proceed east across Section 18, Township 22 South, Range 6 East to the junction with SR-10 in the southwest corner of Section 17, Township 22 South, Range 6 East (approximately 1.5 miles north of the proposed Alternative B junction with SR-10). This would be slightly longer in length (9.1 miles) than the proposed road (Alternative B) but it would bypass the grade on SR-10 that now slows loaded coal trucks, which potentially reduces the speed of other northbound traffic on SR-10.
The total new surface disturbance would be 96.3 acres. This Alternate Design would incorporate features to facilitate livestock movements within allotments, and also facilitate wildlife movements to and from the winter range. The wildlife/livestock facilities would include fencing the road to keep the livestock off the roadway during the grazing season, and five proposed underpasses. The alignment would include 22 primary crossings. The total acreage impacted for Alternative C would be 106.3 acres.

Alternative D - *Water Hollow Road Alignment*
Water Hollow is a large northeast-southwest trending drainage which cuts through Old Woman Plateau on the Fishlake National Forest. The Water Hollow Road would utilize the Quitchupah Creek Road Alignment for 2.0 miles of the westernmost portion of its alignment. The alignment would then cross Quitchupah Creek and follow to the south of this drainage to Water Hollow. It then continues in an easterly direction along an existing jeep trail to Water Hollow Benches where it then turns south to Saleratus Benches. From Saleratus Benches, the Water Hollow Road Alternative then turns northward to connect with SR-10.

The proposed road alignment is 11.25 miles long and drops 1,430 feet in elevation for an average grade of 2.5 percent. The descent into Water Hollow from Acord Lakes Road has an average grade of four percent, and the ascent out of Water Hollow onto Water Hollow Bench is seven percent. This alignment crosses several perennial and ephemeral tributary drainages, for a total of 20 primary crossings. The acreage of new surface disturbance for the Water Hollow Road is 146.3 acres. In addition to the applicant committed measures described under Alternatives B and C, maintenance of existing road, increased fencing, crossings for wildlife movement, and seeding rangeland would also be done.

Other Alternatives Considered

Other alternatives or scenarios considered during agency review of the Proposed Action and during public scoping focused on different routes for the road or different methods to ship the coal to market. None of these other possible alternatives were considered feasible from either an economic, engineering, or practical standpoint.

Alternate Road Access: Different routes proposed basically considered constructing a road across the Old Woman Plateau or through Link Canyon. The Old Woman Plateau is an area south of the SUFCO Mine portal mostly on National Forest system lands that are managed as a Research Natural Area (RNA), portions of which have restrictions prohibiting vehicle travel, so the construction of a transport road would require an amendment to the Fishlake NF LRMP. This was not analyzed in detail based on environmental impacts.

The route through Link Canyon is located just west of the Town of Emery. Link Canyon has a good county-maintained road to the old mine workings where a portal could be located for loading trucks. The portal was identified in the Pines Tract EIS as a potential site for accessing coal in the Pines Tract. However, under the SUFCO mine plan and mining schedule this site is not economically feasible for construction and operation of a loadout. Issues such as constructing a way through naturally burned or oxidized coal at the portal site and restructuring the mine conveyor system to discharge at this portal site were cost prohibitive proposals. In a meeting on June 23, 2000, after reviewing the mine plans and conceptual plans for a Link Canyon Portal, mine engineers for the BLM advised the responsible USFS and BLM officials that this portal plan was not economically viable.

Conveyor Systems: Different methods to transport coal centered on constructing conveyor systems to convey coal to a loadout facility where trucks would transport the coal to destinations in Carbon County. One conveyor system suggested would begin at the SUFCO Mine portal, traverse down East Spring Canyon to Quitchupah Creek where a loadout facility would be constructed. The terrain in East Springs Creek Canyon is too rugged and steep for a conveyor system so this alternative is not feasible from an engineering standpoint.

A conveyor system in Link Canyon was also suggested, because a county road currently exists in the canyon. A conveyor system in Link Canyon would require a loadout facility in the vicinity of Emery Town to load the trucks destined for Carbon County. But because the portal facility was not economically feasible, a conveyor system in Link Canyon becomes a moot point. A slurry system was also considered but the water demands are beyond the area's capability to provide, so this system was also not considered feasible.

Muddy Creek, a deep canyon on the north side of the Pines Tract, which is now being mined through the SUFCO Mine, was also considered as a possible portal site and coal transport route. However, the two primary problems with this alternative are: 1) a route in the canyon would be rough and steep and located adjacent to a stream that provides culinary water, a problem for maintaining water quality, and 2) the mine plan as explained in the preceding discussion on a portal in Link Canyon is not economically feasible.

Summary Comparison of Alternatives Relative to Issues

Table 2.7-1 of the Quitchupah Creek Road Final Environmental Impact Statement presents a summary comparison of resources potentially affected by each Alternative. The information presented in this table is a summary comparison of the data presented in detail in Chapter 3 of the FEIS. The effects identified in this table also assume that applicant-committed measures and mitigation will be implemented. The comparison of effects also includes effects that are common to all build Alternatives to demonstrate the relative effect of each Alternative.

Public Involvement Process

Public involvement is an important part of the environmental analysis process. The public involvement plan describes the methods and techniques that will be used to involve the public in the environmental analysis. It allows the public to participate actively in the NEPA process and to communicate their concerns regarding the Proposed Action. In addition, involvement of local, State, other Federal agencies, and Native American Tribes helps these entities to anticipate the effects and benefits that could occur from the project, then make necessary plans and changes in public policy.

The USFS and BLM initiated public scoping for the Quitchupah Creek Road Project on January 15, 1999 with the intent of preparing an environmental assessment (EA). Informal meetings were held in Emery County, including a field meeting on March 30, 1999. Other meetings, including the Quitchupah Grazing Association Meeting on January 27, 1999, and the Emery County Public Lands Council Meeting, held on June 8, 1999, were attended by agency and consultant representatives.

Due to the level of public concern for the proposed project, and the issues identified during the scoping process, the USFS and the BLM determined that the proposed project warranted preparation of an EIS. A Notice of Intent (NOI) for the Quitchupah Creek Road EIS was published in the Federal Register on July 1, 1999. A scoping notice and request for comments, was published in the *Richfield Reaper* July 14, 1999; the *Emery County Progress* on July 13, 1999; and the *Deseret News* and *Salt Lake Tribune* on July 15, 1999.

A public mailing list was compiled and 160 letters were sent to interested individuals, agencies, and groups. Public meetings were held as scheduled in Castle Dale on July 21, 1999 at the Museum of the San Rafael, and in Richfield on July 22, 1999 at the Quality Inn Center. Comment forms were available at the meetings. Over 30 people attended the Castle Dale meeting and 23 people signed in at the Richfield meeting. A complete summary of the public participation is available in the Public Involvement Plan on file at the USFS Fishlake National Forest Office and the BLM Richfield Field Office.

A total of 60 comments were received during scoping efforts. In January and February 1999, 25 comments were received for the EA. An additional 35 comment letters or forms were received as a result of the EIS scoping effort. All of the comments received during both of the scoping efforts were analyzed and incorporated into the EIS.

Between December 11, 2001 and May 7, 2002, a total of 409 comment letters or forms were received as a result of the Notice and Comment period associated with the publication of the Draft EIS. These comments were analyzed, and along with additional information developed throughout the duration of the environmental process, were incorporated and addressed in Chapter 6.0 of the FEIS.

Comments received during the scoping process were analyzed and summarized to represent the issues and concerns of the respondents. Based on comments received and in response to the issues raised, the USFS and BLM developed three action Alternatives that met the purpose of and need for the project (as identified in Section 1.1 Purpose and Need in the FEIS). The No Action Alternative was also considered.

Several official site tours have been conducted in Quitchupah Creek, including the following:

June 4, 1999	Representatives of the Paiute Indian Tribe of Utah
June 30, 1999	Agency and Sevier County SSD Representatives
July 15, 1999	Concerned Individuals of Emery County
August 6, 1999	Representatives of the Koosharem Band of Paiute Indian Tribe of Utah
March 30, 2000	Representatives of the Uinta and Ouray Ute Indian Tribe of Utah
October 18, 2000	Representatives of the Koosharem Band of Paiute Indian Tribe of Utah
August 22, 2002	Ranchers
June 3, 2003	Agency and State Director
August 28, 2003	Resource Development Coordinating Committee (RDCC)
September 14, 2004	Representatives of the Paiute Indian Tribe of Utah

Rock art groups and Historical Society members have also visited the canyon.

Signature and Implementation

This document constitutes the Record of Decision (ROD) by the Richfield Field Office of the Bureau of Land management to select **Alternative D – The Water Hollow Road Alignment**, the Preferred Alternative of the Quitchupah Creek Road Final EIS.

Implementation of this decision may begin at the close of the 30 day appeal period which begins today and ends April 9, 2006.

Cornell M. Christensen
Richfield Field Manager
Richfield Field Office

March 9, 2006
Date

Appeal Rights

This decision may be appealed to the Interior Board of Land Appeals, Office of the Secretary, in accordance with the regulations contained in 43 CFR Part 4. Public notification of this decision will be considered to have occurred on March 9, 2006. Within 30 days of the decision, a notice of appeal must be filed in the office of the authorized officer at 150 E. 900 N., Richfield, Utah 84701. If a statement of reasons for the appeal is not included with the notice, it must be filed with the Interior Board of Land Appeals, Office of Hearings and Appeals, U.S. Department of the Interior, 801 North Quincy St., Suite 300, Arlington, VA 22203 within 30 days after the notice of appeal is filed with the authorized officer.

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

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

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

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

Attachments:
Appendix A, Figure 1, Figure 2

APPENDIX A

Alternative D - Water Hollow Road Alignment

The Alternative D - Water Hollow Road will utilize the Quitchupah Creek Road Alignment beginning at the junction with Acord Lakes Road (Sevier County Road #010) for 2.0 miles of the westernmost portion of its alignment (See Figure 2). At that point, it crosses Quitchupah Creek and follows to the south of this drainage for approximately .5 mile to the Forest boundary. The route then continues in an easterly direction along an existing jeep trail to Water Hollow Benches, where it then turns south to Saleratus Benches. From Saleratus Benches, this Alternative then turns north and east to connect with SR-10 (See Figure 1).

This alignment is 11.25 miles long and drops 1,430 feet in elevation for an average grade of 2.5 percent. The descent into Water Hollow has an average grade of 4 percent, and the ascent out of Water Hollow to Water Hollow Bench is 7 percent for 900 feet.

The acreage of impact for the Water Hollow Alternative is 146.3 acres. The crossing of Water Hollow will require large cuts up to 65 feet deep on both approaches and a large fill 90 feet high and 350 feet wide. This alignment also crosses several other large perennial and ephemeral tributary drainages, for a total of 20 primary crossings.

Except for the western end where the Water Hollow road will obliterate the existing two-track road (approximately 2.1 miles), the existing road along Quitchupah Creek will remain in place and in use on BLM administered public lands.

Lands

The lands crossed by this build alternative include mostly public lands (USFS, BLM), and also SITLA-owned lands and private land. Table A-1 describes the length of the Water Hollow Road alternative within each jurisdiction and the estimated disturbance.

Table A-1

Alternative D -Water Hollow Road Land Status and Proposed Disturbance

Land Mgmt	Road Distance (miles)	County Jurisdiction	Construction Disturbance (acres)	Existing Road Disturbance (acres)	Staging Areas (acres)	Pull-Outs (acres)	Total New Surface Disturbance (acres)
USFS	2.52	Sevier	30.5	2.6	5.0	0.3	33.2
BLM	7.94	Sevier	95.3	0	10.0	0.6	105.9
SITLA	0.26	Sevier	2.4	0	0	0	2.4
Private	0.53	Sevier	4.8	0	0	0	4.8
Totals	11.25		133.0	2.6	15.0	0.9	146.3

Details for design and construction are available for this alternative alignment in Appendix B of the FEIS.

Pullouts
Each pullout will be 30 feet wide by 100 feet long unless the design is to use the existing road. Pullouts for Alternative D are proposed at the following stations:

Station 12+00 to 13+00	north side of proposed road
Station 60+00 to 63+50	north side, use existing road as pullout
Station 121+00 to 122+00	south side of road
Station 174+50 to 175+50	south side of road
Station 182+00	north side of road, access point from old road
Station 219+00 to 220+00	south side of road
Station 239+00 to 240+00	east side of road
Station 299+00 to 300+00	east side of road
Station 325+00 to 326+00	east side of road
Station 497+00 to 498+00	north side of road

SR-10 Junction
The proposed road will junction with SR-10 approximately 6.5 miles south of Emery Town and 2.0 miles south of the Quitchupah Creek bridge, creating a new intersection. Because the proposed road will carry coal truck traffic, both right and left turn lanes will be required for the proposed road. Since there is little grade for northbound traffic, an acceleration lane of 1,380 feet will be required for the coal truck traffic. Thus, there will be three lanes south of the intersection and four lanes north of the intersection. This construction will be under the direction of UDOT and according to UDOT and AASHTO standards. An access permit will be required from UDOT. The disturbance for construction of the intersection and additional lanes will occur within the UDOT right-of-way or within acquired right-of-way.

Wildlife Bridges, Stream Crossings, and Culverts
Big game animals cross this road area to access winter and summer ranges, therefore, wildlife crossings must be constructed at strategic locations along the route to facilitate migration patterns.

Utah Division of Wildlife Resource guidelines suggest the following: "Structures designed to allow wildlife passage below the road should meet an "openness ratio" of one or greater. This is to say that the width of the bridge multiplied by the height of the bridge, divided by the length of the bridge, should be at least "1". Since these bridges must accommodate mature bull elk, the height of the bridge must be at least 16 feet to allow for antler clearance (Jones, 2005, Letter from Derris Jones, Regional Supervisor, S.E. Region, UDWR, August 31, 2005).

The road alignment for Alternative D will require a total of 44 culvert crossings and five bridge crossings (UDWR, Mead 2005, email from Leroy Mead, UDWR, 3-30-2005). Figure 2-12 in the FEIS shows the locations of these crossings. This includes 20 primary crossings and 29 secondary crossings. Both primary and secondary culvert crossings, and bridges, will be designed to pass the 100-year flow, as calculated by UDOT methodology (UDOT, 2002).

Table A-2 identifies the primary culvert crossing locations, design flows, and culvert diameters; as well as the recommended wildlife crossing bridge locations. Two additional wildlife bridge crossings have been suggested by UDWR and are shown in the table.

Final number, placement, and design of the wildlife bridge crossing structures will be determined during project implementation by BLM biologists, in consultation with the UDWR.

Table A-2

Primary Culvert Crossing Information - Alternative D

Station	Design Flow (cubic feet per second)	Minimum Culvert Diameter (inches)/ Bridge Crossing RCMP unless noted
11+00	123	60
18+00	173	72
66+00	234	84
94+00	252	84
121+50	419	Wildlife Bridge**
131+50	125	72
177+00	1060	Wildlife Bridge**
229+50	52	Wildlife Bridge**
255+00	56	Wildlife Bridge**
306+50	120	Wildlife Bridge**
338+00	75	54
339+50	75	54
341+50	58	48
366+50	66	48
384+50	42	48
412+50	324	72
419+00	9	96
432+00	173	48
463+00	356	96
471+00	53	96
359+40		Wildlife Bridge ** (Additional UDWR suggested)
507+80 or 491+90 or 493+10		Wildlife Bridge ** (Additional UDWR suggested)

*Crossing will provide for fish passage.

** These crossings are addressed in mitigation measures for wildlife.

Note: At crossings where fish passage is required, specialized culverts may be used, and diameter/type may vary from what is given above. However, in all cases, capacity will be capable of passing the 100-year flow at a minimum.

Additional Note: Structures designed to allow wildlife passage below the road should meet an "openness ratio" of one or greater. This is to say that the width of the bridge multiplied by the height of the bridge, divided by the length of the bridge, should be at least "1".

Depending upon the season of construction, three of these crossings can be expected to be wet. Best Management Practices (BMPs) that will be implemented during culvert design, placement, and maintenance are described in Appendix B.

In addition to the crossing culverts, numerous borrow ditch relief culverts will be used to direct and control road and upgradient runoff. These culverts will be spaced at 500-foot intervals or less, depending upon road slope and proximity to stream channels. BMPs that apply to borrow ditch relief and other road drainage issues are contained in Appendix B.

Applicant-Committed Environmental Protection Measures for Alternative D

Wetlands and Waters of the U.S.

The U.S. Army Corps of Engineers (COE) under authority of Section 404 of the Clean Water Act as amended and Executive Order 11990 requires that all impacts to jurisdictional wetlands be mitigated. The b(1) guidelines provide an established process for determining if the permit to be issued for filling wetlands and the accompanying mitigation plan is in the best interest of the Nation's wetlands. The b(1) guidelines offer three tiered steps: 1) to avoid impacts to wetlands, 2) if avoidance is not possible then minimize impacts, and 3) if avoidance and minimization of impacts is not possible then mitigate impacts.

There are five jurisdictional wetlands in the immediate vicinity of the proposed road; one 0.07-acres wetland at Station 44+00 and one 0.26-acre wetland at Station 67+00 in East Spring Canyon will be impacted. The COE has indicated that it will require a mitigation ratio of 3:1 on the acreage in the same watershed, and the conceptual mitigation plan more than meets that. The potential mitigation sites within the Quitchupah Creek watershed are somewhat limited mainly due to the dynamics of the channels, which either makes it difficult to divert sufficient water to establish a wetland, or thwarts efforts to permanently establish a wetland basin or area because of their instability.

In addition to the wetland near East Spring Creek, the creek also has a hydric fringe in the flat bottom of the channel. To compensate for the combined loss of approximately 0.33 acres of wetlands filled at Stations 44+00 and 67+00, three measures will be designed and installed as follows:

1. The existing wetland at Station 48+00 is located at the head of the perennial stream in Convulsion Canyon but downstream of the realigned ephemeral channel in the upper canyon. The source of water for the wetland is subsurface flows surfacing in the channel at Station 41+00 and a spring at the foot of a large rock adjacent to the existing two-track road. Headcutting has begun where the wetland discharges into the stream channel. The installation of a structure to elevate the discharge point four to five feet above the incised stream will enlarge the wetlands capacity by approximately 1,000 yds^3, and a hardened discharge point will stop the headcutting action. The enlarged capacity of the wetlands will allow for retention of the sediments generated upstream by realignment of the ephemeral channel. The enlarged wetlands will cover approximately 0.33 acres.

2. A potential wetland site exists at Station 62+50 where the stream coming out of Convulsion Canyon has created a willow community on a bench with a 2 percent gradient. An in-line wetland system will be created at this location by allowing streamflow to fill behind

several shallow dikes constructed across the channel/floodplain area. Upstream of each dike, excavated areas will be dug to increase saturated areas. The resulting ponds and saturated areas will create a diversified wetland complex, ranging from flowing water, ponded open water, and saturated soils. The dikes will be designed with spill points to discharge excess water. The combined wetland acreage to be created will be 1.2 acres. With a combined capacity of 2,000 yds^3 , the diked areas will also serve to retain sediments. They will use approximately 6 percent of the average annual flow of Convulsion Canyon.

Items 1 (0.33 acres) and 2 (1.2 acres) above will result in a total of 1.53 acres of wetlands that will be enhanced or increased as a result of mitigation. Subtracting the 0.31 acres of poor quality wetlands already present at station 48+00 gives a total of new wetland creation of 1.22 acres. Given the loss of 0.33 acres of wetlands due to filling at Stations 44+00 and 67+00, the proposed mitigation will exceed the Corps' minimum 3:1 replacement ratio. Final detailed wetland mitigation designs must be approved by the COE. The above conceptual plans have been discussed with the current COE representative assigned to this project, who has agreed in concept with the mitigation strategy. However, specific approval will not come until the formal application process is undertaken.

3. The East Spring Canyon stream will be brought under the proposed road through a 170-foot long culvert at Station 65+50. From the mouth of the culvert downstream for approximately 900 feet, the channel will be newly constructed and will parallel the road fill to rejoin the existing stream channel upstream of the juncture with Convulsion Canyon. Channel designs will be based upon BMPs given in Appendix B of the FEIS. The resultant constructed channel will emulate the existing channel in dimensions, cross-section, and gradient so the flows, hydric fringe, wetlands, and riparian zone will replace that covered with road fill. The placement of check dams, deflectors, and riprap will help stabilize the new channel as it adjusts to the flows. Salvage of riparian vegetation (such as cut willow, sedge clumps, etc.) from the abandoned channel will be used where practical to boost vegetative success along the new channel. The channel will not be as deep as the incised channel; it will be designed to contain bankfull flows, with overbank areas accommodating larger flood events.

For a more complete description of the wetlands mitigation, refer to Strip Map 2 in Appendix B of the FEIS.

Water

As a result of coal loading, coal trucks have coal dust and debris on the exterior of the truck that is blown off as the truck travels; this dust and debris becomes part of sediments along the roadbed. Since coal trucks traveling in Convulsion Canyon will be in close proximity to the stream, fugitive coal dust from the trucks would readily enter the stream system as airborne or waterborne sediments. To prevent this, the coal trucks loading at the SUFCO Mine will be cleaned after loading and prior to entering the public road system to remove fugitive coal particles from the exterior of the truck and trailer.

Raptor Protection

The haul route will be patrolled daily, during daylight hours, to pick up and dispose of all animal carcasses (wild and domestic, large and small) in order to keep the road surface clear. This will reduce scavenging on the road surface by raptors and vultures. The concern is that carcasses that aren't readily removed from the road will attract scavengers. Scavengers present on the road while feeding can cause unnecessary mortality among the protected raptors. The Sevier County Special Services District will be responsible for removing carcasses to a specified disposal area in accordance with the regulations of the State Board of Health. This will continue for the duration of the life of the mine. The SSD, or contractor employed by the SSD, will secure and maintain any necessary license or permits required by State or local authorities to perform this service.

Livestock

Cattle Trail

In order to accommodate cattle movement along the road corridor, a fenced cattle trail will be constructed within the road right-of-way on Forest lands, on the north side of the alignment, between the underpass at Broad Hollow and Station 60+00, approximately 1½ miles in length. The fenced trail will continue in intermittent sections below this Station in areas where terrain restricts movement of cattle outside the right of way. The trail will be 15 to 20 feet wide, and in some places narrowed to 10 feet wide. The trail width will be cleared of vegetation during right-of-way preparation; it will be seeded once road construction is completed. Access to the trail will be gated on either end; cattle will be trailed along the road to the fenced cattle trail entrance in the spring, and cattle will gather at Broad Hollow to be let back on the trail in September. At Station 60+00, the continuous fenced trail will end, but cattle will continue to trail down outside the fenced road right-of-way and into the intermittent fenced sections of cattle trail down to the holding facility at the Forest boundary. Holding facilities will be constructed and maintained by the SSD in Broad Hollow and at the east boundary of the Forest to hold cattle that drift prior to the opening of the cattle trail gate. Water will be provided at the holding facilities by the SUFCO Mine.

G.L. Olsen Allotment

Since a relatively high number of cattle are concentrated in this small allotment, the proposed road will need to be fenced to restrict cattle access to the road. Also the road in the allotment is mostly cut below the natural grade, creating a wide ditch with steep sideslopes making it difficult for cattle to enter and exit the ditch. To control the cattle and better manage the allotment, the proposed road will be fenced.

The fencing will extend on both sides of the cuts and/or fills from Station 187+00 on the west to Station 275+00 on the east, a distance of 8,800 feet (1.6 miles). Cattleguards on the proposed road and natural barriers at each end of the fence will restrict cattle movement past the fenced portions of the road. On the west, the cliffs and cattleguard will prevent cattle from entering Water Hollow. This will relieve grazing pressure on the narrow riparian zone in Water Hollow and on The Cove tributary. On the east, the cattleguard and natural barriers of the drainages with cliffs will prevent cattle drift into the Saleratus Allotment. Gates located every mile will allow cattle to be moved across the proposed road when needed and will allow cattle that did accidentally enter upon the roadway to be removed.

Since the cattle will be blocked from watering in Water Hollow, and the two ponds on the east are usually dry, a water system will be developed to provide water for the cattle during the short grazing season. The system will consist of 5,000 gallon (or larger) water storage tanks located at Stations 223+00 and 261+00 with a pipe system extending to water troughs located 500 to 1,300 feet away from the proposed road on both sides of the road. The system will be gravity-fed with water levels in the troughs controlled by float valves. The SSD will haul water to the storage tanks located along the road during the 4-6 week grazing season. Two watering systems are required because of deep drainages with cliffs blocking movement of cattle.

The allotment, divided by the road, with watering troughs on both sides of the road, will be fenced and managed as a two pasture allotment. The turn-in pasture will be rotated each year to better manage the forage. The cattle will be moved internally between pastures as stipulated in the allotment management plan and will cross the road at a designated time when coal transport was not scheduled or coal transport was halted to allow for the crossing. Cattle will enter and exit the allotment via a trail directly from Quitchupah Creek to the north.

Saleratus Allotment
Because the cattle concentrate on the lower elevations of this allotment, fencing will be needed to restrict cattle access to the proposed road. The fence will start at Station 435+00 on the west where steep terrain combined with a cattleguard on the road will block westward cattle movement. The fence will extend east across the lower slopes and valleys to Station 594+50 where it will join with the right-of-way fencing along SR-10. A cattleguard will also be installed here to prevent cattle on the road from entering the SR-10 roadway. Gates will be placed approximately every mile to allow for any needed cattle movement north and south or removal of trespass cattle on the road. There will be about 19,000 feet (3.6 miles) of fencing along the upper benches and no fencing along the rough terrain below the benches for approximately 16,000 feet (about 3 miles). Cattle will only be moved across this road, either by moving when coal transport is not scheduled or scheduling a halt to transport so the cattle will be moved at a designated time.

Riparian Protection
Riparian fencing along Quitchupah Creek will be installed and maintained by SSD on public lands (BLM, FS, and SITLA) adjacent to the road. This includes about 2.4 miles on National Forest System lands, about 1.2 miles on State lands, and about 1.1 miles on BLM lands contiguous to the State parcel, for a total of about 4.7 miles of Quitchupah Creek that will be fenced. The riparian fencing is expected to be 3-wire 42" standard wildlife fence. Wildlife friendly crossings will be provided on each side of the stream at locations correlated to migration corridors and/or wildlife trails. These crossings will be approximately 33 feet wide, the same height as the other fencing, and constructed of lodgepole or similar material. Fence design, installation, and maintenance will be meet agencies' specifications. Riparian fencing will exclude cattle from the stream except at designated watering locations.

Agency-Committed Environmental Protection Measures for Alternative D

The riparian zones of Quitchupah Creek and Convulsion Canyon have degraded over the years, due to several reasons. To alleviate this condition and restore the riparian zones, livestock grazing will be eliminated on approximately 4.7 miles of stream through a

combination of grazing permit changes, fencing along the proposed road, and cross-fencing where necessary. The actual fencing will be completed under an applicant-committed measure as described above; the permit actions related to this measure will be handled by the appropriate agencies. Fenced watering points will be provided where underpasses allow livestock to pass under the proposed road and access the stream. The construction of the proposed road is the primary catalyst for the changing management of grazing within the riparian zone.

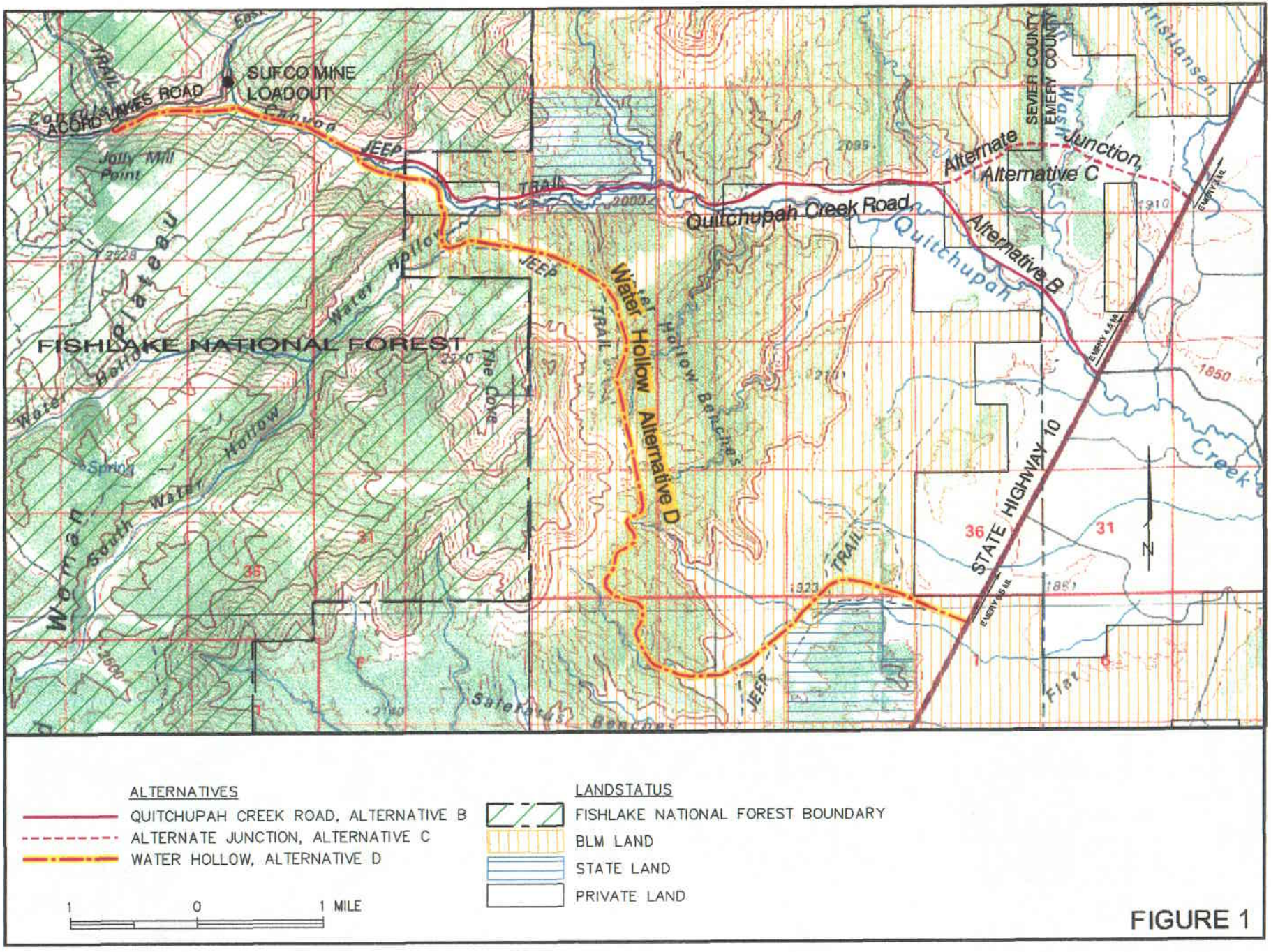

SUFCO MINE
LOADOUT
ACCESS ROAD
JEEP TRAIL
Quitchupah Creek Road,
Alternate Junction,
Alternative C
Alternative B
Water Hollow Alternative D
FISHLAKE NATIONAL FOREST
Jolly Mill Point
Water Hollow Plateau
Woman
South Water Hollow
The Cove
Hollow Benches
Quitchupah
STATE HIGHWAY 10
SEVIER COUNTY
EMERY COUNTY
Christiansen
Creek
Flat
Saleratus Benches
36
31
1
6
N
ALTERNATIVES
QUITCHUPAH CREEK ROAD, ALTERNATIVE B
ALTERNATE JUNCTION, ALTERNATIVE C
WATER HOLLOW, ALTERNATIVE D
1 0 1 MILE
LANDSTATUS
FISHLAKE NATIONAL FOREST BOUNDARY
BLM LAND
STATE LAND
PRIVATE LAND

FIGURE 1

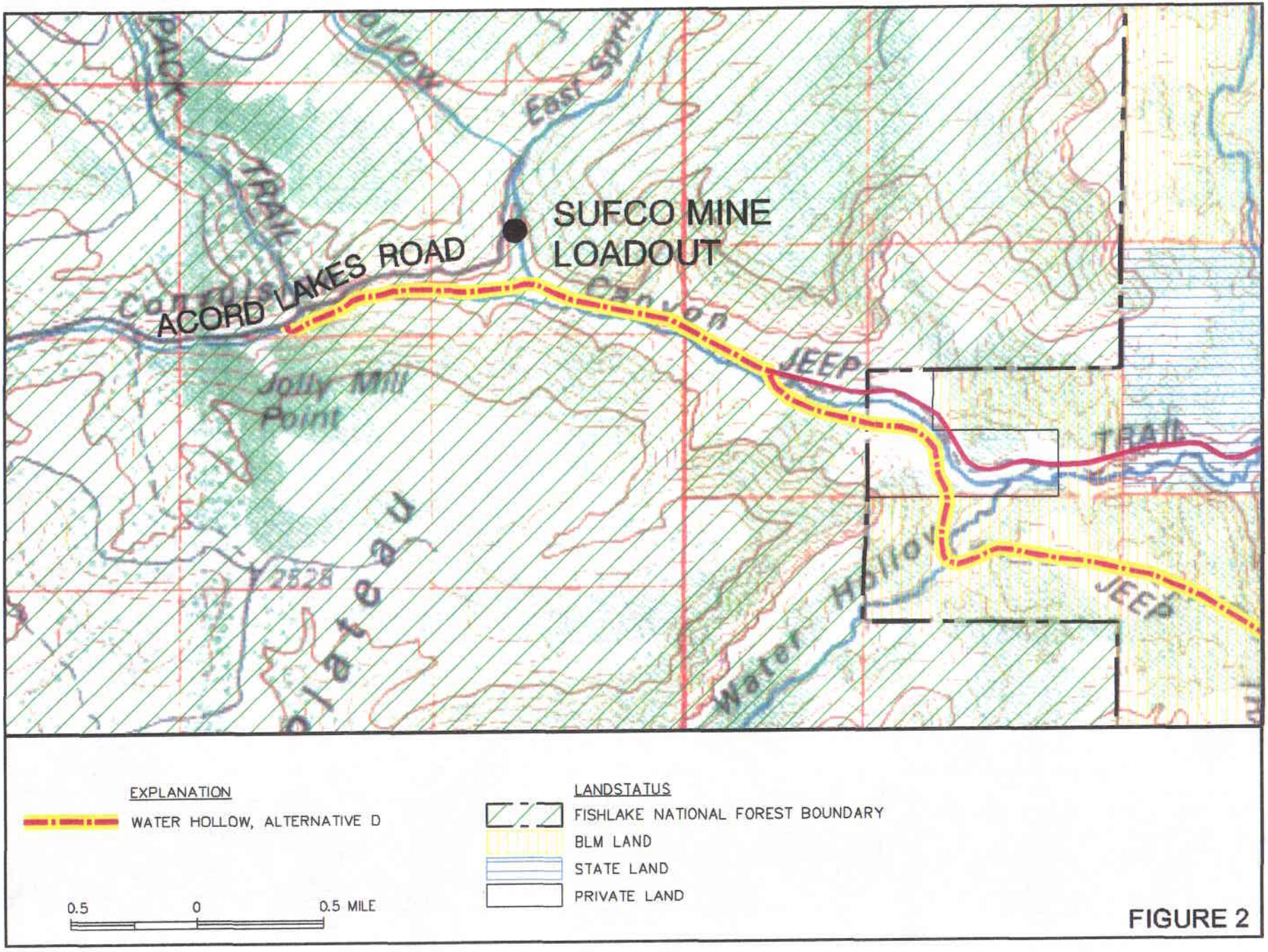

SUFCO MINE
LOADOUT
ACCORD LAKES ROAD
Canyon
JEEP
TRAIL
Jolly Mill
Point
Plateau
2828
Water Hollow
JEEP
EXPLANATION
WATER HOLLOW, ALTERNATIVE D
0.5
0
0.5 MILE
LANDSTATUS
FISHLAKE NATIONAL FOREST BOUNDARY
BLM LAND
STATE LAND
PRIVATE LAND

FIGURE 2