



United States  
Department of  
Agriculture

Forest  
Service

January 2007

## **Environmental Assessment Red Dirt Gravel Pit Expansion**

**YAMPA RANGER DISTRICT  
MEDICINE BOW-ROUTT NATIONAL FORESTS  
Grand County, Colorado  
Location: 040° 09' 10.40" N 106° 34' 10.49" W WGS 84**



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**TABLE OF CONTENTS**

**SUMMARY ..... 1**

**INTRODUCTION..... 1**

    DOCUMENT STRUCTURE ..... 1

    BACKGROUND..... 2

    PURPOSE AND NEED FOR THE ACTION..... 2

        Forest Plan Direction ..... 2

    PROPOSED ACTION..... 3

    SCOPE OF THE ACTION ..... 3

    DECISION FRAMEWORK..... 3

    PUBLIC INVOLVEMENT..... 3

        INCORPORATION BY REFERENCE..... 4

    ISSUES ..... 4

**COMPARISON OF ALTERNATIVES, INCLUDING THE PROPOSED ACTION ..... 5**

    ALTERNATIVE DEVELOPMENT ..... 5

        Alternative 1 – No Action ..... 5

        Alternative 2 – Proposed Action ..... 5

    COMPARISON OF ALTERNATIVES ..... 7

**ENVIRONMENTAL CONSEQUENCES ..... 8**

    ENVIRONMENTAL CONSEQUENCES ..... 8

        Threatened, Endangered or Sensitive Species ..... 8

        Management Indicator Species (MIS)..... 9

        Soils and Water ..... 11

        Heritage Resources ..... 11

        Visual Resources..... 12

        Range and Non-Native Invasive Species (NNIS)..... 13

        Timber..... 13

        Recreation..... 14

    OTHER CONSEQUENCES OR EFFECTS CONSIDERED..... 14

        Forest Plan Goals, Objectives, and Outputs ..... 14

        Civil Rights ..... 14

        Environmental Justice ..... 14

**CONSULTATION AND COORDINATION ..... 15**

    LIST OF PREPARERS..... 15

    FEDERAL, STATE AND LOCAL AGENCIES ..... 15

**APPENDIX A – PROJECT MAPS ..... 17**

**APPENDIX B – RESPONSE TO COMMENTS..... 20**

*Letter #1*..... 20

*Letter #2*..... 20

*Letter #2*..... 21

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## **SUMMARY**

The Yampa District of the Medicine Bow-Routt National Forests is proposing to expand the existing Red Dirt Gravel Pit. The gravel pit is located adjacent to milepost 6.0 off National Forest System Road 100 (Red Dirt Road), in Township 2 North, Range 82 West, Section 10, about five miles north of Gore Pass, and is within the Yampa Ranger District, Routt National Forest, Colorado. The Red Dirt Pit is an economical source of gravel because it is located in the general vicinity of several well-used Forest and County roads. The gravel has good durability and resistance to abrasion, making it a long-lasting road surface that reduces the need to resurface roads as frequently. A large portion of the pit is very steep and unstable. The expansion will allow reduction of the height and grade of the pit slope to increase stability. The height and grade of the existing pit slope needs to be reduced. A large portion of the slope is steep, unstable, and subject to slides. Hauling gravel and rock from outside the local area is expensive and cost prohibitive. In addition, hauling gravel from outside the local area increases truck traffic on area roads, increasing maintenance costs and safety concerns.

The proposal will expand the existing pit (4.3 acres) by 7.4 acres, making a total pit size of less than 12 acres. Rehabilitation would be ongoing with the pit expansion and would continue as appropriate, with the high points being rehabilitated as soon as feasible. This proposed expansion and future entries would provide for stable slopes and benches that can be more easily rehabilitated as excavation proceeds into the expansion area. Screening would be maintained to hide the pit from view of area users and the pit floor would be graded and shaped to provide drainage and prevent scouring and erosion. Rehabilitated areas will be reseeded with native vegetation to reestablish vegetation on disturbed areas. The information presented enables the Responsible Official to make an informed decision on the appropriate action to be taken. The decision will most likely be documented in a future Decision Notice.

## **INTRODUCTION**

### **DOCUMENT STRUCTURE**

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The Forest Service has prepared this Environmental Assessment in compliance with the National Environmental Policy Act (NEPA) and other relevant Federal and State laws and regulations. This Environmental Assessment discloses the direct, indirect, and cumulative impacts that would result from the proposed action and alternatives.

Additional documentation, including more detailed analysis, may be found in the planning record located at the Yampa Ranger District Office of the Medicine Bow-Routt National Forests and Thunder Basin National Grassland at 300 Roselawn, Yampa Colorado 80483.

## BACKGROUND

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The existing Red Dirt Gravel Pit was developed in the past to provide gravel for surfacing forest roads in the local area. There are no existing records of the original development, however, the pit was expanded in the mid 1980's and 1990's for purposes of providing surfacing material for NFSR 100 and 101. Both roads are popular with forest users accessing this portion of the forest. Forest Service policy in Forest Service Manual (FSM) 2800 provides direction for maintaining an inventory of mineral materials for use on forest projects. This direction is provided so that we have a reasonable supply of sand, gravel, other materials available for immediate and ongoing road maintenance needs. This allows road repairs to occur more rapidly if stockpiles of material are readily available. Presently, the Forest Service and Grand County are faced with a lack of gravel and borrow sources for road maintenance and road reconstruction needs.

## PURPOSE AND NEED FOR THE ACTION

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The purpose of the proposed action is to expand an existing gravel pit, where stockpiles of sand, gravel, and other materials are being depleted. Taking no action would compromise the Forest's ability to provide gravel and other material for future road maintenance and resource projects near this pit. In particular, surfacing gravels on NFSR 100 (28.2 miles) and NFSR 101 (3.2 miles) is becoming worn and degraded.

In keeping with the Forest Plan direction and management emphasis for the surrounding area, the Desired Future Condition for the pit is:

To have a planned and developed gravel pit serving as a long-term source of gravel and other materials for cooperative resurfacing and maintenance of forest and county roads and other resource projects in the local area. This proposed expansion and future entries would provide for stable slopes and benches that can be more easily rehabilitated as excavation proceeds into the expansion area. Screening would be maintained to hide the pit from view of area users, and the pit floor would be graded and shaped to provide drainage and prevent scouring and erosion. Rehabilitated areas will be reseeded with native vegetation to reestablish vegetation on disturbed areas.

### Forest Plan Direction

This action responds to the Forest goals and objectives outlined in the *Routt National Forest Land and Resource Management Plan Revision* (Forest Plan 1997), including:

Goal 1 – Ecosystem management on the Routt National Forest shall provide for multiple use outputs and the habitats and processes necessary to maintain the biological diversity found on the Forest. (Forest Plan 1-2)

Goal 3 – Cooperate with local governments and communities to develop opportunities that contribute to economic vitality. (Forest Plan 1-2)

- Support development and maintenance of a sustained flow of market and nonmarket products to regional and local economies.

- Develop programs and projects that are complementary to local community objectives and plans.
- Assist local governments in developing specific programs that promote economic stability.

The proposal shall comply fully with Forest wide standards and guidelines, Management Area 5.13: *Forest Products* direction, and the *Red Dirt Geographic Area* direction (Forest Plan 1997: 1-4, 2-44; 3-89).

The Forest Plan for the area surrounding the Red Dirt Gravel Pit places management emphasis on intensive timber management that may create high levels of disturbance. Motorized and non-motorized recreation is provided for on the existing road and trail systems.

## **PROPOSED ACTION**

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The proposed action is to expand the current Red Dirt Gravel Pit by 7.4 acres in order to maintain an economical source of material for Forest related projects in the vicinity of the existing Red Dirt Gravel pit.

## **SCOPE OF THE ACTION**

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This action would apply only to the Red Dirt Gravel Pit located on the Yampa Ranger District of the Routt National Forest Plan. The scope of the proposed action involves expanding the existing pit by 7.4 acres and rehabilitating the existing pit as work progresses.

## **DECISION FRAMEWORK**

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Given the purpose and need, the District Ranger reviews the proposed action, the other alternative(s), and the environmental consequences in order to make the following decisions:

- Whether or not to expand the existing gravel pit.
- What, if any, specific design features should be required.
- Does the proposed action pose significant risks that should be addressed in an Environmental Impact Statement.
- Does the proposed action require an amendment to the Forest Plan.

## **PUBLIC INVOLVEMENT**

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The proposal was listed in the Schedule of Proposed Actions on August 11, 2005 and each subsequent quarterly report. Scoping letters describing the proposed action and inviting comments were mailed to local citizens, interested agencies, and federally recognized tribal organizations on August 4, 2006. In addition, as part of the public involvement process, the agency issued a news release on August 14, 2006 providing notice of the opportunity to comment on the project. This news release was sent to the

*Middle Park Times* to help ensure that residents of Old Park Subdivision—located approximately one mile from the pit—were informed of the proposed action.

Using the comments received from the public, interested agencies, and federally recognized tribal organizations, the interdisciplinary team and District Ranger identified a list of issues to be addressed in the analysis. After reviewing the comments, the District Ranger did not identify any issues that would require the development of alternative actions. A summary of the comments received and the disposition of these comments is listed in Appendix B, Table B-1. All persons that commented on the proposed action were retained on the project mailing list to receive further information regarding this project.

## **INCORPORATION BY REFERENCE**

In order to eliminate repetition and focus on the key issues, the following documents are incorporated by reference:

- The 1997 Revision of the Land and Resource Management Plan for the Routt National Forest, (USDA Forest Service 1998a), and the Final Environmental Impact Statement (FEIS) (USDA Forest Service 1998b).
- Specialist Reports completed for the Red Dirt Gravel Pit Expansion.

These documents are available for review at the Yampa Ranger District Office of the Medicine Bow-Routt National Forests and Thunder Basin National Grassland at 300 Roselawn, Yampa Colorado 80483.

## **ISSUES**

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### **Key Issues**

Through the scoping process, and from intra- and interagency discussions, the Interdisciplinary Team identified the following key issues that were used to generate and assess the effects of the alternatives. These issues can be addressed with design features added to the project to ensure that the proposed action does not adversely impact forest resources.

Therefore, no additional alternatives need to be developed. The analysis will focus on two alternatives, the proposed action and no action alternative. Analysis will be focused on ensuring that the project is consistent with Forest Plan Standards and Guidelines, and that the Forest Service meets its obligations related to all laws, regulations and other policies governing the management of public lands.

Further, because this is a site-specific project within and adjacent to the existing pit, comments received during scoping that were larger in scope and directed as advice to the Forest Service on overall Forest Plan or policy direction were not directly incorporated into helping shape the current project. Written comments received are included in the administrative record for this action and are available for public review.

***Issue #1:** Threatened and endangered species may be adversely impacted by the pit expansion.*

The proposed expansion would occur in lodgepole pine and spruce-fir habitats and may cause some direct effects to the Canada lynx, American marten, boreal owl, Northern goshawk, and slender moonwort individuals. Canada lynx, American marten, boreal owl, and Northern goshawk may alter breeding, nesting, or foraging patterns during implementation due to disturbance created by heavy machinery.

The measurable indicator to address this issue will be whether the proposed action would likely cause a trend towards loss of viability, as determined in the biological evaluation (BE).

Specific design features have been included in the project proposal that address the level and timing of habitat disturbances.

*Issue #2: The potential effects on the hydrologic and sediment regimes from the proposed action include the potential for increased erosion related to the removal of vegetation and increases in the runoff potential from the site.*

Specific design features have been included in the project proposal that address the development of the pit to avoid erosions and to address pit reclamation.

## COMPARISON OF ALTERNATIVES, INCLUDING THE PROPOSED ACTION

### ALTERNATIVE DEVELOPMENT

#### Alternative 1 – No Action

In this case, the No Action alternative would be to continue processing the remaining material from the existing 4.3 acre Red Dirt Gravel pit until all material is exhausted. Rehabilitation on the existing steep slopes would not occur beyond what currently exists due to the difficulty of accessing these areas without additional disturbance. Rehabilitation of the existing work area would be completed after all workable material has been removed from lower slopes. The current pit is believed to have enough material for one additional entry before the workable slopes have been depleted of material.

#### Alternative 2 – Proposed Action

The proposed action will expand the existing pit (4.3 acres) by 7.4 acres, making a total pit size of less than 12 acres. Construction and rehabilitation would require that much of the surface area shown on the attached map be disturbed. Rehabilitation would be ongoing with the pit expansion and would continue as appropriate, with high points being rehabilitated as soon as feasible. This proposed expansion and future entries would provide for stable slopes and benches that can be more easily rehabilitated as excavation proceeds into the expansion area. Screening would be maintained to hide the pit from view of area users and the pit floor would be graded and shaped to provide drainage and prevent scouring and erosion. Rehabilitated areas will be reseeded with native vegetation to reestablish vegetation on disturbed areas.

Crushing operation may occur annually for up to seven weeks as needed to produce 40,000 tons of material per entry. Excavation, crushing, hauling, and stockpiling

operations may begin as early as 2007 and may require re-entry on an annual basis as stockpiles are exhausted. An estimated total amount of 350,000 to 400,000 tons of material is expected to be produced during the life of the pit.

Crushing, stockpiling and use of pit material will most likely occur in cooperation with Grand County over a period of 10 years. Entry and exit roads will be maintained and gated as needed to eliminate traffic congestion and to minimize safety concerns as the pit is expanded.

The following Design Criteria are included as conditions of the expansion:

- A Cooperative Mining Agreement and Operation Contract with Grand County will be completed for a minimum of 10 years (with the possibility of extensions).
- A Gravel Pit Development and Rehabilitation Plan will be completed prior to pit expansion.
- Limit crushing and hauling hours between 6:30 a.m. to 5:00 p.m. Monday through Friday.
- Operate equipment only within the established boundaries of the pit.
- Maintain all storage and stockpiles within the pit to reduce visibility and to minimize sediment runoff.
- Provide dust control along FDR 100 during periods of hauling.
- Notify the public and provide signing to warn forest users of crushing and hauling activities.
- Immediately discontinue work at the location of any archaeological, historical, or scientific discovery and notify the appropriate authorities.
- Strip and stockpile topsoil for use in pit rehabilitation.
- Rehabilitate areas of the pit with topsoil, native grasses and trees, and boulders as excavation proceeds.
- Identify and control weeds to minimize impacts to wildlife habitat and range resources.
- Begin rehabilitation of the completed northwest portion of the pit and the existing bench in concert with expansion operations.
- Shave down the high rocky protrusion in the pit by about 20 to 30 feet to reduce visibility and to establish grasses and trees on terraces.
- All slash, stumps, and root wads would be piled for future pit reclamation activities, or burned under close supervision.
- From mid August through October, limit crushing operations and major resurfacing/hauling projects two days prior to big game hunting season scheduled for that period.

- Screen stockpiles and disturbed ground using landforms and vegetation to minimize impacts on visual resources. Add or maintain secondary and tertiary screening to the existing trees northeast of the pit.

## COMPARISON OF ALTERNATIVES

Table 1. Comparison of Alternatives		
Purpose and Need	Alternative 1 – No Action	Proposed Action
Continue to provide a cost effective and reasonable supply of rock, sand, and gravel material available for immediate and ongoing road maintenance and resource projects	The existing pit currently has a limited amount of gravel material remaining, and does not meet the purpose and need to provide a greater range of materials now or into the future.	Would more adequately meet the purpose and need by increasing the size of the pit to allow for additional material extraction and development. It will also utilize available funding more efficiently and effectively by reducing hauling and material costs.
Key Issues		
Sensitive Species, Threatened and Endangered Species	No Impact beyond current conditions.	Potential habitat on an additional 7.4 acres of lodgepole pine habitat will be modified or removed during the short-term for the Canada lynx, marten, boreal owl, and goshawk during the harvest of trees and the expansion of the gravel pit. Over the long-term, the gravel pit will be rehabilitated and native vegetation will be planted on the site of the vacated gravel pit to minimize impacts to wildlife species.
Soils and Water	No Impact beyond current conditions.	Pit surface area would be increased by 7.4 acres. The pit floor will be graded and shaped to provide drainage and prevent scouring and erosion. Rehabilitated areas will be reseeded with native vegetation to reestablish vegetation on disturbed areas.

# ENVIRONMENTAL CONSEQUENCES

## ENVIRONMENTAL CONSEQUENCES

This section summarizes the physical, biological, social and economic environments of the affected project area and the potential changes to those environments due to implementation of the alternatives evaluated. Only the most relevant information on each resource is contained in this section. More specific information can be found in the project file at the Yampa Ranger District Office. Significant issues identified during scoping can be adequately addressed through design features. Therefore, no additional alternatives need to be developed. The analysis will focus on two alternatives, the proposed action and no action alternative. Analysis will be focused on ensuring that the project is consistent with Forest Plan Standards and Guidelines, and that we meet our obligations related to all laws, regulations and other policies governing the management of public lands.

### Threatened, Endangered or Sensitive Species

#### *Affected Environment*

The Forest Service considered and reviewed all Region 2 sensitive species as well as all Forest Service endangered, threatened, proposed, and candidate species (Miller, 2006). Those species likely to occur within or near the analysis area, with potential habitat in or near the analysis area, or potentially affected by the implementation of an action alternative are summarized in Table 2 below.

Table 2. Summary for USDA Forest Service Sensitive Species, and USFWS Endangered, Threatened, Proposed, and Candidate Species occurring, potentially occurring, or that may be influenced by management actions.			
Common Name	Scientific Name	Status	Determination
<b>Mammals</b>			
American marten	<i>Martes americana</i>	Sensitive	May impact individuals but is not likely to cause a trend toward federal listing or a loss of viability
Canada lynx	<i>Lynx canadensis</i>	Threatened	May affect, but is not likely to adversely affect
<b>Birds</b>			
Boreal owl	<i>Aegolius funereus</i>	Sensitive	May impact individuals but is not likely to cause a trend toward federal listing or a loss of viability individuals
Northern goshawk	<i>Accipiter gentiles</i>	Sensitive	May impact individuals but is not likely to cause a trend toward federal listing or a loss of viability
<b>Plants</b>			
Slender or Narrowleaf moonwort	<i>Botrychium lineare</i>	USFWS Candidate/Sensitive	May impact individuals but is not likely to cause a trend toward federal listing or a loss of viability

*Environmental Consequences*

**Alternative 1 (No Action)** would have “No Impacts” to wildlife or botany, because no new change to habitat would occur.

**Alternative 2 (Proposed Action)** Implementation of the proposed project has the potential to impact the species summarized in Table 2. The proposed project “May impact individuals of the American marten, boreal owl, Northern goshawk, and Slender moonwort, but is not likely to cause a trend toward federal listing or a loss of viability.” No direct impacts are expected, but indirect impacts may occur as a result of habitat modification or increased human disturbance during pit expansion.

The proposed action may affect, but is not likely to adversely affect, the Canada lynx. The proposed action will be reducing the amount of foraging habitat for secondary prey species such as the red squirrel over the short and mid-term. Direct effects to lynx may include disturbance to individuals during breeding, denning, rearing young, foraging, or during movement periods. The majority of the project will occur in the summer months which will avoid periods when lynx are winter denning, foraging, and movement periods. As most wildlife, lynx may avoid the site altogether during repeated disturbance.

However, it is unlikely that lynx would use the project area as denning habitat, because the action area and surrounding stands are mid-seral lodgepole pine or mixed conifer stands lacking coarse woody debris necessary for lynx denning. Therefore, disturbance during periods of denning or rearing young is not anticipated. Indirectly, the removal of Other Lynx Habitat and expanding the gravel pit would convert 7.4 acres of Other Lynx Habitat to Unsuitable Lynx Habitat. The short and mid-term loss of habitat is a negative, indirect effect to lynx by altering alternate prey species habitat for the red (pine) squirrel. Some red squirrel habitat will be removed during the short (1- 5 years) and mid-term (5- 20 years) reducing the amount of alternate prey for lynx. However over the long-term (20-50 years), the site of the gravel pit will be rehabilitated with the restoration of native plants, trees, and shrubs and it is likely that red squirrel will return to the site.

*Cumulative Effects*

The analysis concluded that although short- and mid-term impacts may occur at the individual level, the Red Dirt gravel pit expansion is not likely to cause any increased impacts to lynx, goshawk, marten, boreal owl, or slender moonwort individuals over the long-term. Cumulatively and over the long-term, the gravel pit will be restored to native habitats. The Forest contacted the US Fish and Wildlife Service and, in a letter dated November 22, 2006, the Wildlife Service concurred with the study’s determinations with regard to sensitive as well as threatened and endangered species. The Yampa Ranger District is not aware of any future state or private activities that are reasonably certain to occur.

**Management Indicator Species (MIS)***Affected Environment*

The National Forest Management Act directed the Forest Service to select certain plant, communities, and/or vertebrate or invertebrate species to monitor as indicators of maintenance, improvement, or decline in habitat for numerous species. The Code of Federal Regulations - 36 CFR 219.19(a) (6) states, population trends of the management

indicator species (MIS) will be monitored and relationships to habitat changes determined. All MIS species under the 1997 Routt National Forest Plan Revision were reviewed, and Table 3 lists those species further evaluated for the project based on potential presence of the species or availability of habitats (Miller, 2006).

Management indicator species are used to estimate the effects of proposed actions and alternatives to assess the effects of management activities on MIS populations and the populations of other species with similar habitat that they represent.

**Table 3: List of Routt National Forest Management Indicator Species and Rationale for Evaluation**

Common Name	Scientific Name	Species or Habitat Present in Project Area	Modification of Important Habitat Associations Occurring Under Proposed Action	Population Affected by Proposed Action with Display of Measurable Population Trend
Common Flicker	<i>Colaptes auratus</i>	X	-	-
Hairy Woodpecker	<i>Picoides villosus</i>	X	X	-
Warbling Vireo	<i>Vireo gilvus</i>	-	-	-
Blue Grouse	<i>Dendragapus obscurus</i>	X	-	-
Elk	<i>Cervus elaphus</i>	X	-	-
Mule Deer	<i>Odocoileus hemionus</i>	X	-	-
Northern Goshawk	<i>Accipiter gentiles</i>	X	X	-
Pine Marten	<i>Martes americana</i>	X	X	-

(X) = yes, (-) = no

*Environmental Consequences*

**Alternative 1 (No Action)** would have “No Impacts” to MIS, because no new change to habitat would occur.

**Alternative 2 (Proposed Action)** The project area does not have habitat present for the red-backed vole, pine grosbeak, warbling vireo, beaver, ptarmigan, vesper sparrow, sagebrush vole, brown-capped rosy finch, Wilson’s warbler, blue-gray gnatcatcher, green-tailed towhee, osprey, bald eagle, sandhill crane, sharp-tailed grouse, wood frog, or the Colorado River cutthroat trout, and so these species will not be carried forward in the analysis. The gravel pit expansion may modify habitat associations for hairy woodpecker, pine marten, and Northern goshawk. Pole-sized lodgepole pine stands present in the expansion area may be used by these three species as secondary foraging habitats.

These species were evaluated for potential affects of the proposed action and whether populations would display measurable population trends due to the proposed action. The proposed action was found not to have an influence on any of the MIS populations listed on the Routt MIS list. The hairy woodpecker, pine marten, and Northern goshawk were the only species that may have habitat modified. The pole-sized lodgepole pine habitats may be used by hairy woodpecker, pine marten and Northern goshawks as secondary

foraging habitat, but secondary foraging habitats are not a limiting factor for these species. Pine marten generally prefer late-seral conifer types with high amounts of down woody material for denning and foraging (Fitzgerald et al. 1994). The hairy woodpecker and Northern goshawk prefer mature conifer or aspen-conifer mix with high canopy closure (>70%) for nesting and foraging (Kingery 1998). The loss of 7.4 acres of secondary foraging habitat as a result of gravel pit expansion, continued maintenance, and operation of the pit are not expected to cause a measurable change in population trends for the hairy woodpecker, pine marten, or Northern goshawk.

#### *Cumulative Effects*

The proposed action is not expected to have any measurable effect on MIS population trends or cumulative effects when considered in conjunction with past and proposed management activities with the area.

### **Soils and Water**

#### *Affected Environment*

The proposed expansion area was ground-surveyed by Forest hydrology staff and soil scientists to determine potential effects on the hydrologic and sediment regimes (Kougioulis, 2006; Milner, 2006). The excavation and expansion activities are limited to a small area and are planned to proceed over several years. Changes in the hydrologic regime, erosion and mass wasting, and water quality are the primary concerns related to gravel pit excavation. These effects are related to the lowering of local ground and surface water levels related to pit dewatering, interruptions in ground water conduit flow paths resulted from rock removal, increased erosion related to vegetation removal and thermal and turbidity changes in surface and ground water resulting from quarry operations. Effects are largely dependent on the amount and type of ground disturbance associated within each phase of the expansion.

#### *Environmental Consequences*

**Alternative 1 (No Action)** would have “No Impacts” to hydrologic and sediment regimes, because no new ground disturbance would occur.

**Alternative 2 (Proposed Action)** The potential effects from the proposed action include the potential for increased erosion related to the removal of vegetation and increases in the runoff potential from the site. For this proposed action, the small size, low potential for changes to the hydrologic regime, rehabilitation efforts coincident with excavation, and specific design criteria will greatly reduce the potential for adverse effects.

#### *Cumulative Effects*

The proposed action, with the identified design features described, is not expected to have any measurable increases in water yield or significantly contribute to any cumulative effects of increased water yield resulting from past and proposed timber harvest activities with the area.

### **Heritage Resources**

#### *Affected Environment*

The proposed expansion area was ground-surveyed by Forest archeology staff to determine potential cultural materials. No evidence of heritage resources was found in any of the surveys. In addition, the Forest contacted the Colorado Historical Society to determine if additional heritage resources were located in the area. The Society responded on June 8, 2006, that no historical properties would be affected by the expansion.

#### *Environmental Consequences*

**Alternative 1 (No Action)** would have “No Impacts” to heritage resources, because no new ground disturbance would occur.

**Alternative 2 (Proposed Action)** No cultural resources were identified within the surveyed area of potential direct impact (KenCairn, 2006). The potential for direct impact to unidentified cultural resources on the small portion that was not surveyed is low. Potential indirect impacts from the proposed action, such as artifact collection, site vandalism, and erosion, on the unsurveyed portion of the project area are not expected to increase. The discovery and education stipulation, when placed in contracts and permits, may reduce potential indirect effects and may protect unidentified buried deposits during project implementation.

#### *Cumulative Effects*

As a result of this survey, no direct, indirect or cumulative effects would occur from the implementation of the proposed action. However, if additional cultural sites were discovered during implementation, provisions to ensure cultural resource protection would be enacted.

### **Visual Resources**

#### *Affected Environment*

Effects to visual resources could occur when forest visitors observe the active pit site from the Red Dirt Road. A Forest landscape architect conducted an analysis of the proposed expansion area to determine the impact on scenic quality and range of recreation opportunities (Tupala, 2006). The analysis area’s characteristic landscapes have been modified by human activities such as logging and associated road construction, mineral development, livestock grazing and recreational activities for several decades. Visitors within the Kasdorf area can view the existing Red Dirt gravel pit. It is partially noticed from the Red Dirt Road through the one existing entry road. The existing vegetative and landform screening between the road and pit site currently minimizes the visual impact.

#### *Environmental Consequences*

**Alternative 1 (No Action)** would have “No Impacts” to visual resources, because there would be no additional expansion, crushing and stockpiling.

**Alternative 2 (Proposed Action)** The proposed action would allow expansion of the existing Red Dirt gravel pit by approximately 7 acres. A Second entry at the east would be built to allow better truck traffic circulation. Crushing and stockpiling would occur within the existing pit. Direct effect could occur when forest visitors observe the active pit site from the Red Dirt Road. The visitors would find the expanded pit site contrast

with the natural surrounding landscape due to disturbed ground, dust and stockpiling during active operation. The temporary stockpiles would exist for several years until used up and visual impacts would be lessened. Once the gravel excavation is completed, the pit site would be rehabilitated to blend with the surrounding landscape. The height of the pit site would be reduced.

#### *Cumulative Effects*

Past, present and future management activities were reviewed for cumulative effects on visual resources. It was determined that cumulative effects would be negligible for the proposed action. The proposed action would be consistent with the adopted visual quality objectives when mitigation measures are followed and the Red Dirt pit site is rehabilitated and restored to blend with the surrounding landscape.

### **Range and Non-Native Invasive Species (NNIS)**

#### *Affected Environment*

The forest conducted an analysis (USDA, 2004) for the use of an integrated pest management strategy, including the use of spot application of herbicides, in 2004 to address NNIS species. Treatments approved for use include: hand pulling of individual plants; clipping or mowing; stabbing (using a shovel to cut the root below ground); and scorching using a propane weed torch. Herbicide use would entail either hand application directly to individual plants using sponge or similar application, or by spot spraying with the use of a backpack sprayer.

#### *Environmental Consequences*

**Alternative 1 (No Action)** would have “No Impacts” to range and NNIS because treatment of NNIS would continue in keeping with the forest’s existing integrated pest management strategy.

**Alternative 2 (Proposed Action)** The proposed action would continue this previously approved control method to ensure that spread of NNIS is minimized.

#### *Cumulative Effects*

No long-term cumulative effects are expected from the proposed action. Once existing stockpiles are depleted, normal restoration activities would be implemented, consisting of reshaping slopes to reduce erosion and maintain internal drainage, and allowing the pit areas to naturally re-vegetate. In cases where natural re-vegetation is unlikely to occur within an acceptable amount of time, the areas would be planted with an appropriate mixture of trees, shrubs, and forbs. Treatments to minimize the spread of NNIS would continue until the sites have completely revegetated.

### **Timber**

#### *Affected Environment*

Forest timber staff surveyed the expansion area to determine potential effects on timber production (Ondrejka, 2006). The suitable timber base would be reduced by 7.4 acres, as this area would become deforested. About 50 percent of the timber is of commercial size and would need to be marked, cruised and sold to a purchaser. The cost of the investment in pre-commercial thinning in this portion of the stand would be lost.

### *Environmental Consequences*

**Alternative 1 (No Action)** would have “No Impacts” to timber because the suitable timber base would not be reduced.

**Alternative 2 (Proposed Action)** The proposed action would reduce the suitable timber base by 7.4 acres.

### *Cumulative Effects*

The proposed action, with the identified design criteria related to slash and other materials is not expected to have any significant cumulative impact on timber production.

## **Recreation**

### *Affected Environment*

The existing Red Dirt gravel pit has been in existence for several years without a significant impact to people recreating on the NFSR 100 road. Activities that occur in the project area include outfitter/guide use, hunting, hiking, OHV use, and snowmobiling. Safety concerns are being addressed through signage and other forms of communication to the public.

### *Environmental Consequences*

**Alternative 1 (No Action)** would have “No Impacts” to recreation because no expansion would occur.

**Alternative 2 (Proposed Action)** Due to its limited size and scope, the proposed action is not likely to have a significant impact on recreational activities in the area.

### *Cumulative Effects*

The proposed action, with the identified design criteria, is not expected to have any significant impact on recreation

## **OTHER CONSEQUENCES OR EFFECTS CONSIDERED** \_\_\_\_\_

### **Forest Plan Goals, Objectives, and Outputs**

Neither alternative would make any changes in Forest Plan goals and objectives or affect any Forest Plan outputs.

### **Civil Rights**

There are no civil rights issues, and neither of the alternatives have any related effects because the pit expansion does not affect rights protected under civil rights law.

### **Environmental Justice**

Since the early 1970's, there has been increased concern over disproportionate environmental and human health impacts on minority populations and low-income populations. Executive Order 12898 (February 11, 1994, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations) directs each federal agency "to make achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human

health or environmental effects of its programs, policies, and activities on minority populations and low income populations."

Neither alternative considered in this EA has any disproportionate environmental or human health impacts on minority or low-income populations.

## CONSULTATION AND COORDINATION

### LIST OF PREPARERS

In accordance with 40 CFR 1501.2a, the Yampa District Ranger selected a team of resource specialists to utilize a systematic, interdisciplinary approach in planning and analyzing this project. The following ID Team members participated in the analysis process:

#### Core Team

Joanne Sanfilippo	Interdisciplinary Team Lead/NEPA/Writer/Editor
Mary Sanderson	Lands and Recreation
Jeff Tupala	Visuals
Rick Ondrejka	Timber
Melissa A Miller	Terrestrial Wildlife
Jody Kougioulis	Hydrology
Derek Milner	Soils
Claudia C Hill	Engineering
Angie KenCairn	Heritage Resources

#### Extended Team

Ken Robertson	Engineering
Liz Schnackenberg	Hydrology
Josh Voorhis	Range
Dave Cottle	Weeds
John Anarella	Recreation
Diann Ritschard	Public Affairs
Kathy Foster	Aquatic Wildlife
John G Proctor	Botany

### FEDERAL, STATE AND LOCAL AGENCIES

The Forest Service consulted the following individuals, Federal, State and local agencies, federally recognized tribes, and non-Forest Service persons during the development of the environmental assessment:

- US Fish and Wildlife Service
- USDA Forest Service
- Grand County
- Division of Wildlife, State of Colorado

Colorado Historical Society

Maxine Natchees, Chairwoman Northern Ute Tribal Council

Betsy Chapoose, Northern Ute Cultural Rights and Protection Department

Clement Frost, Chairman Southern Ute Tribal Council

Neil Cloud, Southern Ute Tribe NAGPRA Coordinator

Richard Brannan, Sr., Chairman Northern Arapaho Business Council

JoAnn White, Northern Arapaho Tribal Historic Preservation Officer

Robert J. Goggles and William C' Hair, Northern Arapaho Tribal Historic Preservation Office

Ivan Posey, Chairman Eastern Shoshone Business Council

Delphine Clair and Haman Wise Shoshone Cultural Committee

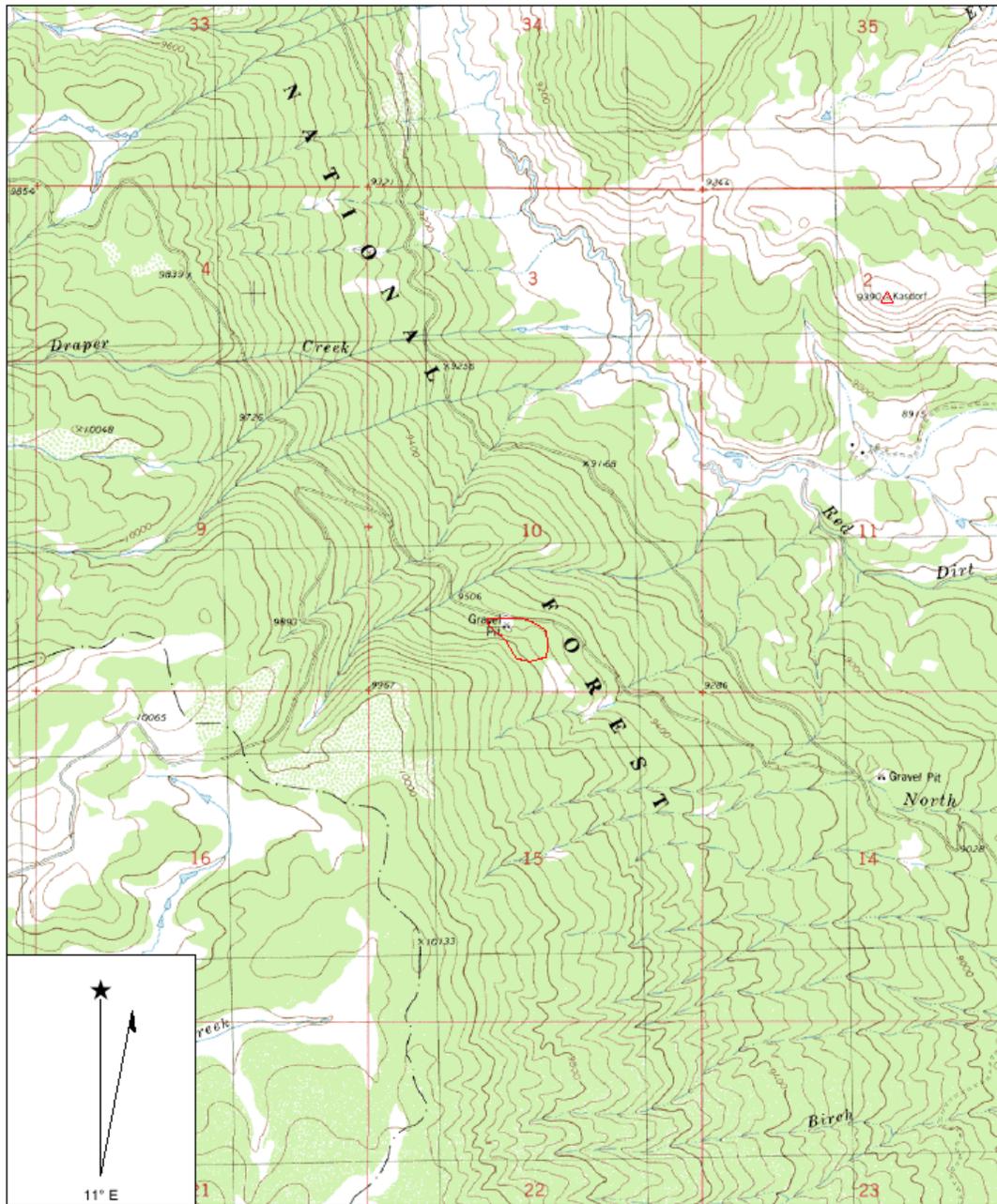
Eugene Little Coyote, President Northern Cheyenne Tribal Council

Gilbert Brady, Northern Cheyenne Cultural Commission

Bill Blind, Chairman Cheyenne & Arapaho Business Committee

Gordon Yellowman, Sr., Cultural Protection Program



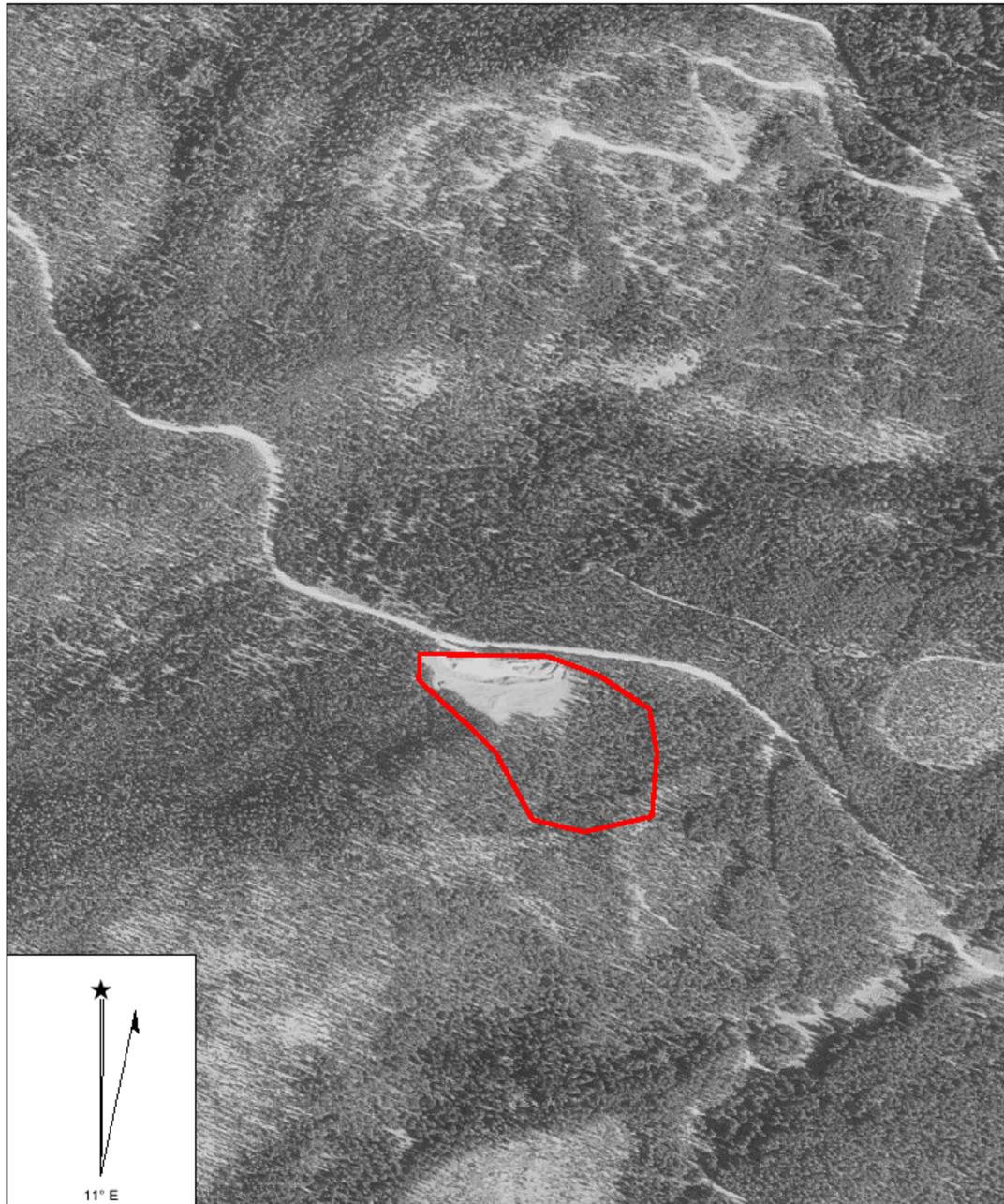


Name: TYLER MT. QUAD  
Date: 5/25/2006  
Scale: 1 inch equals 2000 feet

Location: 040° 09' 10.40" N 106° 34' 10.49" W WGS 84

RED DIRT EXPANSION AREA.

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Name: TYLER MOUNTAIN SW, CO  
Date: 5/25/2006  
Scale: 1 inch equals 500 feet

Location: 040° 09' 10.48" N 106° 34' 09.73" W WGS 84

RED DIRT EXPANSION AREA.

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## APPENDIX B – RESPONSE TO COMMENTS

During the initial scoping period (August 4, 2006), eight comments were received from individuals and organizations, Federal, State, and local agencies. The Interdisciplinary Team reviewed the comments and identified key issues that were used to generate and assess the effects of the alternatives.

On January 25, 2007, the Draft EA was available for public review. Interested parties were asked to submit specific comments on the proposed action, along with supporting reasons that the Responsible Official should consider in reaching a decision. During this public comment period two comment letters were received. Table B-1 lists comments received, while the following sections provide a summary of responses to key issues.

Table B-1. Scoping Comments	
Letter #	Commenter
1	Wendell Funk
2	Colorado Division of Wildlife

### Letter #1

<b>Comment #1</b>	“It is not the purpose of the Forest Service to provide an exhaustible, finite resource, aggregate, especially to local entities at little or no cost.”
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**Response:** Forest Service policy in Forest Service Manual (FSM) 2800 requires that we maintain an inventory of mineral materials at all times. This direction is provided so that we have a reasonable supply of sand and gravel available for immediate and ongoing road maintenance needs..

**Changes to FEA/Project Record:** No changes were made to the EA based on this comments.

### Letter #2

<b>Comment #1</b>	“Mining the site will have some impacts on wildlife, such as removal of habitat and disturbance due to mining activity. Returning the site to a condition similar to existing conditions after completion of mining can minimize impacts to wildlife. During stages of rehabilitation, care should be taken to incorporate contouring of slopes to allow for minimal erosion and ease of use for wildlife. The Division of Wildlife recommends planting a mix of native grasses and forbs species that closely matches the surrounding habitat. In addition, identification and control of weeds will minimize impacts to wildlife.”
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**Response:** Design criteria have been included to the project to address pit rehabilitation and weed concerns:

**Changes to FEA/Project Record:** Design criteria were added to the project design addressing these comments.

**Letter #2**

<b>Comment #1</b>	<p>“This area of the forest has heavy use during the summer months to fishing and wildlife watching. The area is also popular during hunting season for deer and elk. The Division of Wildlife requests that hauling and crushing be limited during the hunting season and ceased two days before a big game season begins.”</p>
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**Response:** Design criteria have been included to the project to address safety and timing concerns:

**Changes to FEA/Project Record:** Design criteria were added to the project design addressing these comments.