

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

**Environmental Assessment
for the Carnes Point Reservoir and Trail**

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

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The Bureau of Land Management is responsible for the stewardship of our public lands. It is committed to manage, protect, and improve these lands in a manner to serve the needs of the American people for all times. Management is based on the principles of multiple-use and sustained yield of our nation's resources within a framework of environmental responsibility and scientific technology. These resources include recreation; rangelands; timber; minerals; watershed; fish and wildlife; wilderness; air; and scenic, scientific and cultural values.

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CHAPTER 1 – INTRODUCTION

1.1 IDENTIFYING INFORMATION

BACKGROUND:

This Environmental Assessment (EA) has been prepared by the Bureau of Land Management (BLM) Grand Junction Field Office (GJFO) to analyze the impacts of constructing a moderate sized reservoir and livestock trail in the Carnes Point allotment as proposed by the grazing permittee. The Carnes Point allotment is a small “C” Custodial allotment based on management priority criteria. The public land managed by the BLM is used in conjunction with private land controlled by the permittee. The previous water source used by the permittee was located on private land adjacent to the allotment, but this property has been fenced off by another property owner and is no longer associated with the allotment. The permittee also controls private property to the west of the allotment which creates the need for the trail to that would be used move livestock to this other property. The allotment is primarily used for short periods of time for moving cattle between parcels of private property.

Authorized grazing on the Carnes Point allotment allows the following animal unit months (AUM):

| | | |
|-----------|--------------------------|----------------------------------|
| 21 Cattle | June 1 to June 7 | 100% Public Land = 5 AUMs |
| 21 Cattle | October 15 to October 21 | 100% Public Land = <u>5 AUMs</u> |
| | Total | = 10 AUMs |

CASEFILE/PROJECT NUMBER:

Carnes Point allotment # 06149

PROJECT NAME:

Carnes Point Reservoir and Trail

PLANNING UNIT:

Grand Junction Field Office

1.2 PROJECT LOCATION AND LEGAL DESCRIPTION

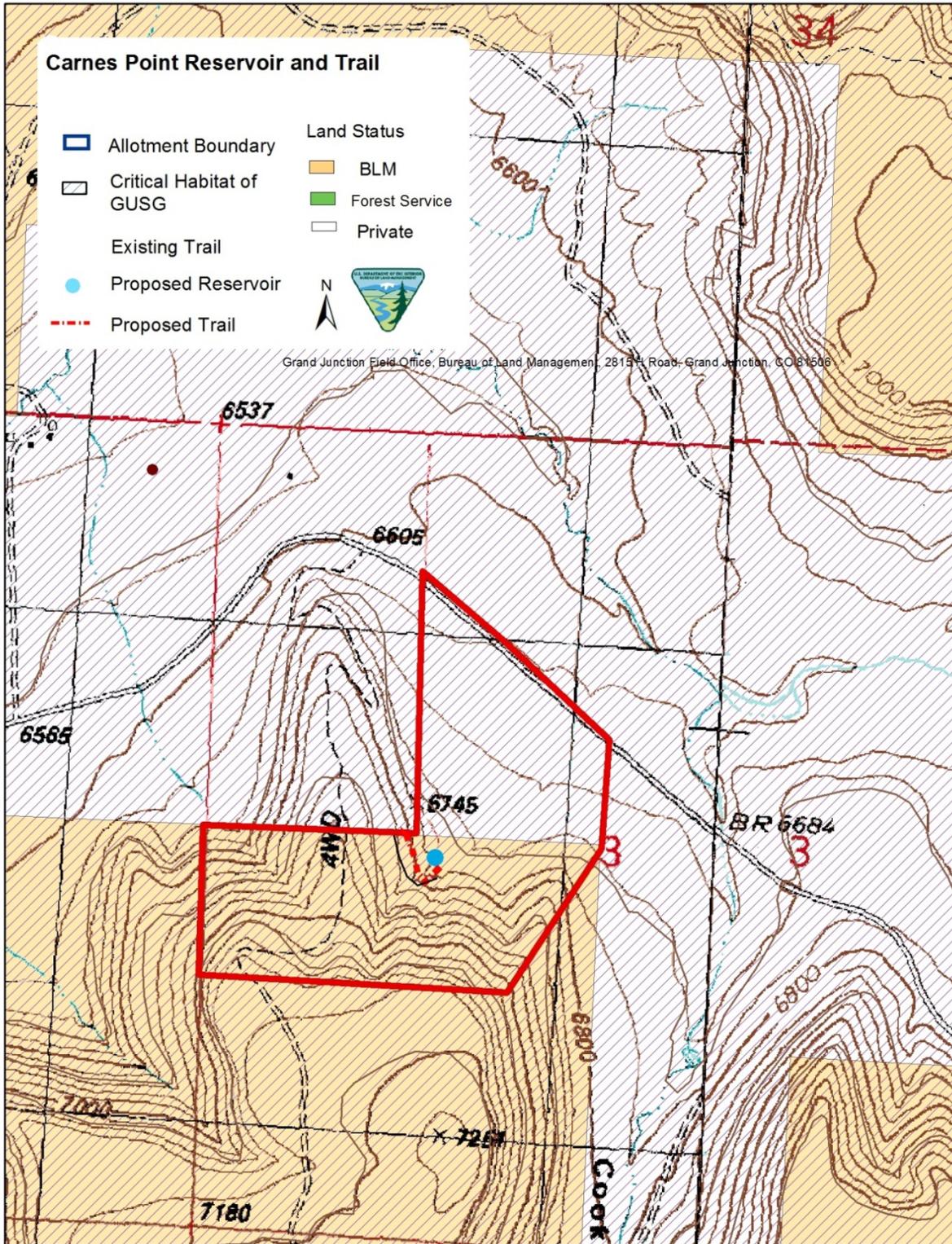
LEGAL DESCRIPTION:

6th Principle Meridian, Township 13 South, Range 104 West, Mesa County, Colorado.
See attached Figure (map) 1 for location of proposed reservoir and trail.

1.3 PURPOSE AND NEED

The purpose of the proposed action is to provide a water source on the Carnes Point allotment for livestock grazing. The project is necessary because the previous water source for the allotment was located on the adjacent private property and has been fenced out by current owner and is no longer available. The proposed reservoir will allow for the permitted livestock grazing use to continue on this allotment. The proposed action will also provide for improved grazing use of this allotment, and will provide access to an existing trail that leads to the western parcel of private property.

Figure 1: Carnes Point Proposed Reservoir and Trail



1.4 PUBLIC PARTICIPATION

1.4.1 Public Scoping: Public scoping, by posting this project on the GJFO National Environmental Policy Act (NEPA) website, was the primary mechanism used by the BLM to invite public involvement.

1.4.2 Internal Scoping: Maps of the parcel and description of the proposed action were distributed to the GJFO Interdisciplinary Team (IDT) and discussed at IDT meetings.

1.4.3 Issues Identified: The primary issues identified through internal scoping were that the proposed projects are located in an area identified as unoccupied Gunnison sage grouse habitat that has a visual classification of VRM III.

1.4.4 Public Comment Period: The preliminary draft of this EA has been posted to the GJFO website <http://www.blm.gov/co/st/en/fo/gjfo.html>.

1.5 DECISION TO BE MADE

The BLM will decide whether to approve the proposed Carnes Point reservoir and livestock trail project based on the analysis contained in this EA. This EA analyzes the impacts from the proposed projects to natural resources and other uses of the public lands involved. BLM may choose to: a) authorize the project as proposed, b) authorize the project with modifications/mitigation, c) authorize an alternative to the proposed action, or d) not authorize the project at this time. The finding associated with this EA may not constitute the final approval for the proposed action.

CHAPTER 2 – PROPOSED ACTION AND ALTERNATIVES

2.1 INTRODUCTION

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

2.2 ALTERNATIVES ANALYZED IN DETAIL

2.2.1 ALTERNATIVE A – No Action Alternative

Under the No Action alternative the proposed reservoir and trail would not be constructed. In order for the grazing permittee to utilize the allotment arrangements would have to be made to haul water to the allotment.

2.2.2 ALTERNATIVE B – Proposed Action

The proposed action is to construct a moderate sized (1/4 acre) reservoir for livestock use at the base of an ephemeral drainage in the Carnes Point allotment and to use short livestock trail. There are no other water sources available in the allotment. The reservoir and trail would be built using a mini-excavator. The reservoir will be designed as a pit type to accommodate large a large volume of water within a consolidated footprint or area. The approximate size of the pit would be 75 feet by 75 feet and 10 feet deep. In the event the reservoir spills the overflow would be directed to the flat terrain surrounding the project area. See the attached BLM specifications for a typical water retention pit design. The dam area of the proposed pit would be seeded lightly to improve vegetative cover on the dam. The BLM would provide the permittee with the small amount of necessary seed.

The proposed trail would connect to an existing trail that would provide access by livestock to other property to the west utilized by the permittee. The trail would be approximately 4 feet wide and just wide enough to allow livestock passage. The trail would not be used by any motorized vehicle. An attempt would be made to construct the trail in a manner where a buffer of vegetation would remain on the north side to minimize possible visibility of the trail from DS Road.

To avoid impacting nesting migratory birds and raptors, construction of the pond and trail would not occur between February 1 and August 15. If construction needs to occur in this time frame the permittee would coordinate with the field office biologist to arrange completion of a pre-construction survey. If nests are found during the pre-construction survey construction would not occur until young have fledged.

2.3 ALTERNATIVES CONSIDERED BUT NOT ANALYZED IN DETAIL

No alternatives were considered but not analyzed in detail.

2.4 PLAN CONFORMANCE REVIEW

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

Name of Plan: Grand Junction Field Office Resource Management Plan

Date Approved: August, 2015

Decision Number/Page: 90

Decision Language: **GRZ-MA-13:**

Construct range improvement projects on allotments to implement changes in grazing management to improve vegetative conditions, riparian conditions, or reduce conflicts with other resources or public land users.

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

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

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

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

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

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

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

CHAPTER 3 – AFFECTED ENVIRONMENT AND ENVIRONMENTAL CONSEQUENCES

3.1 INTRODUCTION

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

This EA draws upon information compiled in the Grand Junction Field Office RMP (BLM 2015)

3.1.1 Elements Not Affected

The following elements, identified as not being present or not affected are not brought forward for additional analysis in this EA:

Air and Climate – The proposed activities would not have any significant impacts to air quality or violate and state or federal air regulations. There could be some increased dust during construction of the dam, but would be for short duration and limited quantity.

Geology/Mineral Resources – No Geology or Mineral resources would be impacted.

Special Status Species Plants – No rare plants are known to occur within the Carnes Point grazing allotment. The proposed water development is not anticipated to have any effect on any federally listed plants or BLM sensitive plant species, as none are known to occur, or have suitable habitat in the action area.

Forestry – A Pinyon/juniper woodland is located within the project area, which is a firewood source but there is no public access to a woodcutting site.

Hazardous Waste – Assuming heavy equipment would be used, if proper fuels management is included in the project design, no mitigation would be necessary. No refueling within 100 feet of any drainage, report any spills and remove any contaminated soil from fuel/lubricant spills.

Riparian Zones/Wetlands – A review of BLM records indicate no recorded creeks, seeps, or springs on the BLM lands within the Carnes Point grazing allotment. The proposed water development would have no effect on riparian zones or wetlands, as none are known to exist in the project area.

Paleontological – There are no paleontological resources within the project area.

Social/Economic – The small scale and scope of this project would not have measureable economic impacts. The proposed activities are also located in a remote location outside of a very small community. There are no minority communities near the livestock grazing allotment.

Transportation and Access – The proposed action would not change public access to or across public lands managed by the BLM.

Recreation – Public access to the project area is limited to cross-country horse and foot travel. As such, there is little or no recreational use in the area, so no impacts to recreation are expected.

Special Designations (ACEC, RMAs, WSR) – There are no Wild and Scenic Rivers or other special designations in the project area.

Wilderness and Wilderness Characteristics – There are no wilderness areas, wilderness study areas, or areas determined to be lands with wilderness characteristics in the project area.

Wild Horse and Burros – There are no wild horses within the Carnes Point allotment.

Land Tenure, ROW, Other Uses – The proposed action would cause no change in land tenure or impact ROWs.

Fire and Fuels – There are no present or planned Fuels projects in the proposed action area.

Farmlands, Prime and Unique – There are no Unique or Prime Farmlands within the Grand Junction Field Office.

3.1.2 Past, Present, Reasonably Foreseeable Actions

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

Past Actions: The primary action that has occurred in the project area is livestock grazing. Limited public access does not allow for other action. Some hunting may occur in the area via foot or horse access.

Present Actions: Livestock grazing and hunting are the only permitted activities.

Reasonably Foreseeable Actions: Fuel Reduction could be a foreseeable action given the proximity to the urban interface of DS Road.

Table 1– Potentially Impacted Resources

| Resources | Not Present On Location | No Impact | Potentially Impacted | Mitigation Necessary? | BLM Evaluator Initial & Date | Comments |
|--|-------------------------------------|-------------------------------------|-------------------------------------|--|------------------------------|---|
| PHYSICAL RESOURCES | | | | | | |
| Air and Climate | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | Y <input type="checkbox"/> N <input type="checkbox"/> | KEH 7/16/15 | |
| Water (surface & subsurface, floodplains) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | Y <input type="checkbox"/> N <input checked="" type="checkbox"/> | KEH 10/9/15 | |
| Soils | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | Y <input type="checkbox"/> N <input checked="" type="checkbox"/> | KEH 10/9/15 | |
| Geological/Mineral Resources | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | Y <input type="checkbox"/> N <input type="checkbox"/> | DSG 6/10/15 | |
| BIOLOGICAL RESOURCES | | | | | | |
| Special Status Plants | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Y <input type="checkbox"/> N <input type="checkbox"/> | ARL 6/30/15 | |
| Special Status Wildlife | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | Y <input type="checkbox"/> N <input checked="" type="checkbox"/> | HLP 6/22/15 | See above, |
| Migratory Birds | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | Y <input checked="" type="checkbox"/> N <input type="checkbox"/> | HLP 6/22/15 | Timing restrictions/surveys required |
| Other Important Wildlife Habitat | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | Y <input type="checkbox"/> N <input checked="" type="checkbox"/> | | |
| Vegetation | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | Y <input type="checkbox"/> N <input type="checkbox"/> | JRD 9/1/15 | |
| Forestry | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | Y <input type="checkbox"/> N <input type="checkbox"/> | JAM 6/10/15 | |
| Invasive, Non-native Species | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | Y <input type="checkbox"/> N <input type="checkbox"/> | MT 10/13/15 | |
| Riparian Zones/ Wetlands | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Y <input type="checkbox"/> N <input type="checkbox"/> | ARL 6/30/15 | |
| HERITAGE RESOURCES AND HUMAN ENV. | | | | | | |
| Cultural or Historical | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | Y <input type="checkbox"/> N <input type="checkbox"/> | ALR 10/29/15 | |
| Paleontological | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | Y <input type="checkbox"/> N <input type="checkbox"/> | DSG 6/10/15 | |
| Tribal& American Indian Religious Concerns | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | Y <input type="checkbox"/> N <input type="checkbox"/> | ALR 10/29/2015 | |
| Visual Resources | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | Y <input type="checkbox"/> N <input type="checkbox"/> | | Project is in VRM II. Design features, for the trail especially, need to reduce visibility from DS Road |
| Social/Economic | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | Y <input type="checkbox"/> N <input type="checkbox"/> | CS 7/13/15 | |
| Transportation and Access | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | Y <input type="checkbox"/> N <input type="checkbox"/> | AW 7/28/15 | |
| Wastes, Hazardous or Solid | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | Y <input checked="" type="checkbox"/> N <input type="checkbox"/> | AEK 7/21/15 | See above |
| LAND RESOURCES | | | | | | |
| Recreation | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | Y <input type="checkbox"/> N <input type="checkbox"/> | AW 7/28/15 | |
| Special Designations (ACEC, SMAs, WSR) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Y <input type="checkbox"/> N <input type="checkbox"/> | AW 7/28/15 | |
| Wilderness & Wilderness Characteristics | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Y <input type="checkbox"/> N <input type="checkbox"/> | AW 7/28/15 | |
| Range Management | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | Y <input type="checkbox"/> N <input type="checkbox"/> | JRD 10/22/15 | |
| Wild Horse and Burros | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | Y <input type="checkbox"/> N <input type="checkbox"/> | JRD 6/17/15 | |
| Land Tenure, ROW, Other Uses | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | Y <input type="checkbox"/> N <input type="checkbox"/> | RBL 7/23/15 | |
| Fire/Fuels | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | Y <input type="checkbox"/> N <input type="checkbox"/> | JP 6/11/15 | |

3.2 PHYSICAL RESOURCES

3.2.1 Soils (includes a finding on Standard 1)

Current Conditions:

The semi-arid climate of the majority of the resource area is a primary influence on soil development. Low annual precipitation, hot summer temperatures, and high evaporation rates slow the chemical and biological processes needed for soil development and limit potential production of vegetation. Predominately shale and sandstone parent materials coupled with very active geologic erosion are also inhibiting soil potential. In the higher elevations of the resource area (Pinyon Mesa, Dominguez, and the Roan Cliffs/Douglas Plateau), annual precipitation is upwards of 20 inches, and soil potential is limited more by depth to bedrock and the steep slopes.

Soils within the project area watershed have been mapped by the Natural Resources Conservation Service (NRCS) and the Web Soil Survey (WSS) was accessed to obtain soils data (NRCS, 2015). Additionally, a field visit occurred on September 29th, 2015.

Soils within the affected area have been described by the soil survey in Mesa County Area, Colorado (CO680). The proposed actions would occur on soil map units Rock outcrop-Sedgran (MU6) and Palma fine sandy loam (MU8). Slopes vary ranging from 3% to 90%. This area contains several rock outcrops.

MU6 slopes range from 40% to 90%. Its primary landform is ledges and cliffs. Soils on the surface are developed from sandstone colluvium and typically have a very shallow, 0 to 9 inch, A horizon, a C horizon comprised of channery loamy fine sands and a R horizon comprised of unweathered bedrock. Soil texture is predominantly sandy loam.

MU8 slopes range from 3% to 12%. Its primary landform is described as fan remnants. Soils are developed from alluvium derived from sandstone. Soil horizons include A horizons with 0 to 9 inch depths. Bt horizons can be found and have some clay lenses or peds throughout. Depths range from 8 to 38 inches. Bk horizons occur below 38 inches and can be as deep as 60 inches. This horizon contain higher amount of calcium carbonate which has leached from the above horizons. Soil texture is predominantly sand and falls into the sandy loam category.

Bedrock and large bedrock fragments should be expected in the construction of the trail and in the construction of the pond. The location of the pond would be close to the boundary of the MU6 and MU8 soil map units and may limit the depth of the pond.

Finding on Land Health Standard 1:

Currently all soils in the project area are meeting Land Health Standard 1.

Alternative A – No Action:

If the no action alternative is selected there would be no direct indirect effects to soils.

Cumulative Effects:

If the no action alternative is selected there would be no cumulative effects to soils

Finding on Land Health Standard 1:

If the no action alternative is selected, Land Health Standard 1 would be expected to maintain a meeting rating.

Alternative B – Proposed Action:

Direct and indirect effects to soils include localized soil disturbance that could change infiltration and permeability rates, and increase soil erosion. Decreased infiltration could be caused by the use of mechanized equipment and cows compacting soils and through the reduction of soil cover which can increase overland surface flow. The changes in infiltration due to compaction can lead to erosion rates that are higher than would occur without the project occurring.

Accelerated erosion rates can also be caused by the installation of a cross slope trail concentrating water and increase erosional forces. Water concentration can lead to trail surface erosion and as water leaves the trail, it can cause rill and eventually gully erosion. Trail layout has some of the trail crossing steep slopes. Due to the steepness, trail length would need to increase creating more disturbed area that is susceptible to all of the soil impacts. The cross slope alignment could produce large cut and fill slopes along its length. These cut and fill slopes can be susceptible to erosion.

These effects would occur immediately and continue into the near future. Effects of compaction would most likely never improve due to the use of trail by cattle after construction. Potential for erosion would be greatest during and immediately after construction, but would remain a potential problem if trail monitoring and maintenance does not occur.

Due to the size of the project all direct and indirect effects are not substantial enough to cause watershed scale soil impacts.

Cumulative Effects:

Trail and pond construction would cumulatively increase the impacts to the soil resources in the area. Other actions in the area include cattle grazing, fuels projects and hunting. Combined, these actions could increase the total disturbed acres.

Finding on Land Health Standard 1:

The proposed action has the potential to create an area of not more than one acre not capable of meeting LHS 1 due to increased erosion and soil impacts. This potential could be reduced or eliminated with appropriate protection and mitigations measures.

Protective/Mitigation Measures:

- 1) Design the trail with appropriate drainage features to reduce the potential for water concentration. Appropriate drainage features can be found in the RMP and the Forest Service guidance documents (USDA, 2007).

- 2) Place the trail in such a way as to minimize the need for cut and fill slopes.
- 3) Place any cut vegetation over bare ground as protective cover.
Monitor and maintain the trail for potential issues.

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

Current conditions:

The Carnes Point trail and reservoir construction area is situated at the head of a relic alluvial fan created from sediment delivered by past geologic erosion in the now ephemeral swale. This alluvial fan is the result of decades of geologic erosion and has no active channel flowing over it. Additionally, the fan has been converted to an herbaceous pasture or hayfield. Surface water flow most likely consists of snow melt directly in the swale or high intensity storm runoff and may occur very sporadically.

The project watershed drainage area is about 30 acres. The area receives on average 10 to 24 inches of precipitation per year. The watershed is densely vegetated with Pinion and Juniper trees and various other shrubs. Dense vegetation and hot summer time temperature create high evapotranspiration (ET) rates. Additionally, the steep slopes and shallow soils on the slopes of the watershed create a lack of available soil moisture storage.

With a small watershed drainage area, low available soil moisture holding capacity, and high ET rates the availability of water for the pond may be limited. Additionally, the sandy soil may reduce the reservoirs water holding capacity and lining may be necessary.

Finding on Land Health Standard 5:

This area is currently meeting Land Health Standard 5.

Alternative A – No Action:

There would be no direct, indirect or cumulative effects to the water resource with the No Action alternative.

Cumulative Effects:

There would be no cumulative effects to water or water quality.

Alternative B – Proposed Action:

Due to the ephemeral nature of the system and the separation from any other surface waters, direct effects would not occur. Indirect effects could include a reservoir with nutrient loading and low dissolved oxygen due to lack of flowing water and would most likely only occur if the pond water perennial.

Cumulative Effects:

There would be no cumulative effects to water or water quality.

Finding on Land Health Standard 5:

This project should not cause any reduction in water quality and would have no impact on Land Health Standard 5.

3.3 BIOLOGICAL RESOURCES

3.3.1 Invasive, Non-native Species

Current Conditions:

The greater Glade Park region was inventoried for noxious weeds by BLM weed personnel in the early 2000s. There were no known noxious weeds found to occur within this allotment. However, since the inventory, the BLM, Mesa County, and the permittee co-labored on a project to treat houndstongue in the adjacent Coates Creek area. Future monitoring for this weed in the proposed pond location is recommended following construction.

Alternative A – No Action:

If the proposed trail and pond are not constructed, then there would be no new disturbance, and hence a lower chance of new weeds establishing in allotment.

Cumulative Effects:

Weeds are opportunistic plants that often thrive on new disturbance. On a landscape scale, decreased surface disturbance from any source (fire, range, recreation, etc.), leads to a decreased chance for weed establishment and expansion.

Alternative B – Proposed Action:

The proposed action would create surface disturbance that would open the area up for new weeds to become established, especially in the first growing season following the construction. The type of weeds that are most likely invade the site would be annuals such as cheatgrass, mustards, or Russian thistle. As the site heals or revegetates, and desirable perennial plants begin to occupy the disturbed area, the amount of these types of weeds should decrease. If houndstongue becomes established at the pond site, the permittee should alert the BLM Range Specialist so a plan of action can be established. This project is small in scope, and with proper maintenance, the impact should be negligible.

Cumulative Effects:

Conversely from the No Action alternative, the more disturbances there are on the landscape from any source, the more likely presence and abundance of weeds will increase.

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

Current conditions:

The Carnes Point grazing allotment is within unoccupied critical habitat for Gunnison sage-grouse habitat and is within the Glade Park Wildlife Emphasis area. The management emphasis in this area is sage-grouse, mule deer, and elk habitat. Of the 27, 218 acres in the Glade Park Wildlife Emphasis area, Carnes Point allotment makes up 50 acres. Sage-grouse have not been documented to occur here. The sagebrush habitat type

required to support sage-grouse does not occur in this location. The allotment consists of steep hillsides of pinyon, juniper, and mountain shrubs with only a small flat area containing grasses.

Finding on Land Health Standard 4:

The allotment is meeting Land Health Standards for threatened and endangered species, but does not contain the primary constituent elements needed for Gunnison sage-grouse habitat.

Alternative A – No Action:

Since sage-grouse and sage-grouse habitat do not occur within the allotment, the No Action alternative is not expected to impact grouse or grouse habitat.

Finding on Land Health Standard 4:

Ground disturbance around the water haul site would have a slightly negative impact on Land Health Standards for threatened and endangered species. This impact would be small and localized and the Land Health Standard for threatened and endangered species is not expected to have any measurable change due to the No Action alternative.

Cumulative Effects:

There would be no expected cumulative effects under the No Action alternative.

Alternative B – Proposed Action:

Impacts under the Proposed Action alternative are the same as those under the No Action alternative. The area of disturbance under the Proposed Action would be larger than that of the No Action alternative, but like the No Action alternative the impact would still be small and localized.

Finding on Land Health Standard 4:

Land Health Standards for threatened and endangered species would continue to be met.

Cumulative Effects:

No cumulative effects are expected under the Proposed Action.

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

Current conditions:

Upland vegetation on the Carnes Allotment is comprised of primarily of the Foothills Juniper ecological site. Below is a description of this ecological site:

| ECOLOGICAL SITE | PLANT COMMUNITY APPEARANCE | PREDOMINANT PLANT SPECIES IN THE PLANT COMMUNITY |
|------------------|----------------------------|--|
| Foothill Juniper | Pinyon/Juniper Woodland | Pinyon pine, Utah juniper, Indian ricegrass, needle-and-thread grass, western wheatgrass, galletta, bottlebrush squirelltail, wild buckwheats, hairy gold aster, and lupine. |

Land Health Assessment

In 2012, a Land Health Assessment was completed for the Carnes Point Allotment to determine acres Meeting Land Health Standards, Meeting with Problems, and Not Meeting. The entire allotment met Land Health Standard 3 for vegetation.

Alternative A – No Action:

Under the No Action alternative there would be no direct impact to vegetation in the project area since the reservoir or trail would be constructed. In the event water hauling would be necessary vegetation in the near vicinity of the haul spot would be impacted.

Finding on Public Land Health Standard 3:

Under the No Action alternative Standard 3 would continue to be met.

Cumulative Effects:

There would be no expected cumulative effects under the No Action alternative.

Alternative B – Proposed Action:

Under the proposed action vegetation would be permanently removed from the construction site of the pit. Over time vegetation would reestablish on then dam portion. In addition there would be a reduction in the vegetation surrounding the pit due to the concentration of livestock. Given the short period the livestock would be in the area this reduction would be minimal. Very little impact to vegetation would occur during the construction of the trail, and the impacts that are proposed would be in a small area. The equipment being used is small scale and would work in and around the trees and brush which is the primary type of vegetation present in the project area. Any disturbance to oakbrush would be short-term because they quickly resprout following disturbance. Overall, there would be a disturbance area of less than 1 acre.

Finding on Public Land Health Standard 3:

Under the proposed action the direct area (< 1 acre) of the disturbance would not be meeting Land Health Standard 3 due to the removal of vegetation. The overall area would continue to meet Standard 3 due to the small area impacted by the project.

Cumulative Effects:

Construction of the pit would increase the grazing pressure in the direct vicinity of the pit and trail. These impacts would be similar if the permittee were hauling water to the area. Given the small period of time allowed for livestock grazing in the allotment the impacts from this use would be minimal.

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

Current conditions:

The allotment includes winter range for mule deer and elk but is not considered critical or severe winter range. Other wildlife of management concerns known to occur in the area includes turkey, mountain lion, and black bear. Numerous migratory birds may utilize

the area including nesting raptors. The allotment is also within the Glade Park Wildlife Emphasis area. The management emphasis in this area includes mule deer and elk habitat.

Finding on Public Land Health Standard 3:

This area is meeting Land health standards and no evidence of livestock and wildlife conflicts are present.

Alternative A – No Action:

Under the No Action alternative, direct disturbance to nearby wildlife and migratory birds is expected anytime water is hauled to the allotment. Only a slight increase in disturbance is expected from water hauling and is not anticipated to create a significant impact to wildlife populations in the area. Indirectly, impacts to wildlife species may be beneficial through the addition of artificial water. Ground disturbance around the water haul site would have a slight negative impact on wildlife habitat. This impact would be small and localized and the Land Health Standard for plant and animal communities is not expected to undergo any significant change due to the No Action Alternative.

Finding on Public Land Health Standard 3:

Land Health Standards for plant and animal communities are not expected to change with the No Action alternative.

Cumulative Effects:

Livestock grazing and hunting would continue to be the main cumulative effect in the project area.

Alternative B – Proposed Action:

During construction of the pond and trail, wildlife are expected to be disturbed and avoid the vicinity of the construction area. This disturbance would be intense but short-term and localized. Like the No Action alternative, indirect impacts to wildlife species may be beneficial through the addition of artificial water. The project has the potential to result in denuded vegetation immediately around the proposed pond, which could negatively impact some species habitat; however standard proper grazing management is expected to minimize the potential for these impacts. Removal of vegetation for reservoir and trail construction would possibly impact migratory birds but with the timing limitations or surveys in the proposed action impacts would be minimized.

Overall, Land Health Standards for plant and animal communities are not expected to change with the implementation of the Proposed Action.

Cumulative Effects:

Cumulative effects are expected to be the same as the No Action alternative.

3.4 HERITAGE RESOURCES AND HUMAN ENVIRONMENT

3.4.1 Cultural Resources

Current conditions:

A records search of the general project area, and a Class III inventory of the Area of Potential Effect (APE), as defined in the National Historic Preservation Act (NHPA), was completed by the BLM Grand Junction archaeologist in Fall 2015 (GJFO CRIR 1015-15). Conditions of the existing cultural environment are incorporated by this reference but the following briefly summarizes cultural resources in the APE: Two cultural resources were found during inventory. One was an historic brush fence built by the permittee's father (5ME21042) and a prehistoric isolated piece of groundstone (5ME21043). Both resources were evaluated for inclusion to the National Register of Historic Places (NRHP), and both are determined to be not eligible for the NRHP. No further cultural resource work is required. The project inventory and evaluation is in compliance with the NHPA, the Colorado State Protocol Agreement, and other federal law, regulation, policy, and guidelines regarding cultural resources.

Alternative A – No Action:

Under the No Action alternative, cattle concentration would be expected anytime water is hauled to the allotment. No historic properties of significance are present in the project area and there would be no direct or indirect impacts to known cultural resources.

Cumulative Effects:

There would be no cumulative effects to cultural resources under this alternative because there are no historic properties are present in the APE.

Alternative B – Proposed Action:

Under the Proposed Action a stock pond and trail would be constructed. There are no cultural resources eligible or potentially eligible to the NRHP in the project APE and no historic properties would be impacted by the project directly or indirectly. Impacts to any unknown resources would be minimized from the protective mitigation measures described below.

Cumulative Effects:

There would be no cumulative effects because there are no known historic properties are present in the project area.

Protective/Mitigation Measures:

The following Standard Stipulations should protect any cultural resources unknown to the agency within the APE:

All persons in the area who are associated with this project shall be informed that any person who, without a permit, injures, destroys, excavates, appropriates or removes any historic or prehistoric ruin, artifact, object of antiquity, Native American remains, Native American cultural item, or archaeological resources on public lands is subject to arrest and penalty of law

(16 USC 433, 16 USC 470, 18 USC 641, 18 USC 1170, and 18 USC 1361). Strict adherence to the confidentiality of information concerning the nature and location of archeological resources would be required of the proponent and all of their subcontractors (Archaeological Resource Protection Act, 16 U.S.C. 470hh)

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

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

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

Antiquities, historic ruins, prehistoric ruins, and other cultural or paleontological objects of scientific interest that are outside the authorization boundaries but potentially affected, either directly or indirectly, by the proposed action shall also be included in this evaluation or mitigation. Impacts that occur to such resources as a result of the authorized activities shall be mitigated at the operator's cost, including the cost of consultation with Native American groups.

3.4.2 Tribal and Native American Religious Concerns

Current conditions:

American Indian religious concerns are legislatively considered under several acts and Executive Orders, namely the American Indian Religious Freedom Act of 1978 (PL 95-

341), the Native American Graves Environmental Assessment Protection and Repatriation Act of 1990 (PL 101-601), and Executive Order 13007 (1996; Indian Sacred Sites). In summary, these require, in concert with other provisions such as those found in the NHPA and ARPA, that the federal government carefully and proactively take into consideration traditional and religious Native American culture and life and ensure, to the degree possible, that access to sacred sites, the treatment of human remains, the possession of sacred items, the conduct of traditional religious practices, and the preservation of important cultural properties are considered and not unduly infringed upon. In some cases, these concerns are directly related to “historic properties” and “archaeological resources”. In some cases elements of the landscape without archaeological or other human material remains may be involved. Identification of these concerns is normally completed during the land use planning efforts, reference to existing studies, or via direct consultation. The Ute have a generalized concept of spiritual significance that is not easily transferred to Western models or definitions. As such the BLM recognizes that the Ute have identified sites that are of concern because of their association with Ute occupation of the area as part of their traditional lands.

Alternative A – No Action:

Under the No Action alternative, cattle concentration would be expected anytime water is hauled to the allotment. No traditional cultural properties, unique natural resources, or properties of a type previously identified as being of interest to local tribes, were identified during the cultural resources inventory of the project area. No additional Native American Indian consultation was conducted for the proposed project.

Cumulative Effects:

Livestock grazing will continue to be the main cumulative effects.

Alternative B – Proposed Action:

Impacts under the Proposed Action would be the same as those described for Alternative A. Impacts to sites that could be discovered during construction would be minimized by the protective mitigation measures described below.

Cumulative Effects:

Cumulative effects would be the same as those discussed under Alternative A

Protective/Mitigation Measures:

Tribal representatives have consulted with the BLM Field Office on similar projects and provided instructions for the protection of culturally sensitive sites should any be discovered during construction. If new information is provided or discovered additional or edited terms and conditions for mitigation may have to be negotiated or enforced, such as the following.

- If new information is brought forward any site-specific Native American mitigation measures suggested during notification/consultation would be considered during the implementation of the Proposed Action.

- Strict adherence to the confidentiality of information concerning the nature and location of archeological resources would be required of the grazing permittee and their subcontractors (Archaeological Resource Protection Act, 16 U.S.C. 470hh).
- Inadvertent Discovery: The NHPA, as amended, requires that if newly discovered cultural resources are identified during the Proposed Action implementation, work in that area must stop and the BLM Authorized Officer notified immediately (36 CFR 800.13). The Native American Graves Protection and Repatriation Act (NAGPRA) requires that if inadvertent discovery of Native American Remains or Objects occurs, any activity must cease in the area of discovery, a reasonable effort made to protect the item(s) discovered, and immediate notice be made to the BLM Authorized Officer, as well as the appropriate Native American group(s) (IV.C.2). Notice may be followed by a 30-day delay (NAGPRA Section 3(d)).
- On private lands, laws for Historic, Prehistoric, and Archaeological Resources, and for unmarked Human Graves (CRS 24-80-401 and CRS 24-80-1301) would be adhered to by grazing permittee and their subcontractors. These state statutes require that the federal Authorizing Officer be notified immediately of any historic or prehistoric finds or human grave. The find must be protected until the authorizing officer indicates the action may proceed.

3.4.3 Visual Resources

Current conditions:

The project area was inventoried as Visual Resource Inventory (VRI) Class II. VRI Class I are areas with the highest visual values, and VRI Class IV are areas with the lowest visual values. The landscape in the project area is characterized by a broad valley with steep slopes rising 200 – 300 feet to mesa tops. Vegetation includes agricultural fields in the valley (typically pastures) where the native sagebrush has been cleared. The slopes include pinyon-juniper and oak brush. The transition between the vegetation in the valley and the vegetation on the slopes creates a horizontal line in the landscape. The slopes include sandstone outcrops. These rock outcrops also create buff-colored horizontal lines in the landscape. The project area is visible from DS Road, the primary access road in the area. The VRI identified the area along DS Road as high sensitivity, meaning the public would be more sensitive to visible changes to the landscape.

The project area is managed with Visual Resource Management (VRM) Class II objectives. VRM Class objectives determine the level of change allowed in the landscape and how visible that change is to a casual observer. VRM objectives include:

Class I Objective: To preserve the existing character of the landscape. The level of change to the characteristic landscape should be very low and must not attract attention

Class II Objective: To retain the existing character of the landscape. The level of change to the characteristic landscape should be low. Management activities may be seen, but should not attract attention.

Class III Objective: To partially retain the existing character of the landscape. The level of change to the characteristic landscape should be moderate. Management activities may attract attention, but should not dominate the view of the landscape.

Class IV Objective: To provide for management activities which require major modification of the existing character of the landscape. The level of change to the characteristic landscape can be high. Management activities may dominate the view of the landscape.

Alternative A – No Action:

Direct and Indirect Effects: Under the No Action Alternative, the pond and the trail would not be constructed. As such there would be no changes to the visual landscape, so there would be no impacts to visual resources.

Cumulative Effects:

There would be no cumulative effects from this action.

Alternative B – Proposed Action:

Direct and Indirect Effects: Under the Proposed Action, a pond and a trail would be constructed. Both would create changes in the existing landscape. The dam for the pond would create a horizontal line that would repeat the existing lines created by the vegetation transition and the sandstone rock outcroppings. The dam would be visible from DS Road. That said, because it repeats the existing lines in the current landscape, it is not expected to attract the attention of the casual viewer.

The trail would cut diagonally across the slope above the pond. Due to the dense oak brush vegetation on the slope, most of the trail would likely not be visible. Where the trail cuts across steeper slopes, the backslope of the trail could be visible. This steeper section of trail is short, so the visible section would be a small change in the larger landscape. As such, the change created by the trail would likely not capture the attention someone viewing the landscape from DS Road.

Both the pond and the trail would be consistent with VRM Class II objectives.

Cumulative Effects:

Combined with other projects in the area (livestock grazing, vegetation manipulations, and hunting) the Proposed Action would incrementally change the landscape. As noted above these changes would be minor and likely not capture the attention of the casual observer from DS Road.

3.5 LAND RESOURCES

3.5.1 Range Management

Current conditions:

The proposed action is within the Carnes Point allotment. This allotment is a small custodial allotment consisting of only 50 acres of public land managed by the BLM. The authorized grazing use is for 10 AUMs. The permitted grazing use is as follows:

| | | | |
|-----------|--------------------------|------------------|-----------------|
| 21 Cattle | June 1 to June 7 | 100% Public Land | = 5 AUMs |
| 21 Cattle | October 15 to October 21 | 100% Public Land | = <u>5 AUMs</u> |
| | | Total | = 10 AUMs |

Alternative A – No Action:

Under the No Action the pond and trail would not be constructed making it difficult to use the allotment. Instead of the constructing the pond the permittee would request to haul water, which would have a similar impact to the land.

Cumulative Effects:

The hauling of water would increase the grazing pressure in the water hauling location.

Alternative B – Proposed Action:

The proposed action would improve the water availability for livestock and the trail would provide access to an adjoin area used for grazing. Both would provide the needs for better range management.

Cumulative Effects:

The construction of the pond and trail would provide for better management on the allotment and in surrounding areas.

CHAPTER 4 - CONSULTATION AND COORDINATION

4.1 LIST OF PREPARERS AND PARTICIPANTS

INTERDISCIPLINARY REVIEW

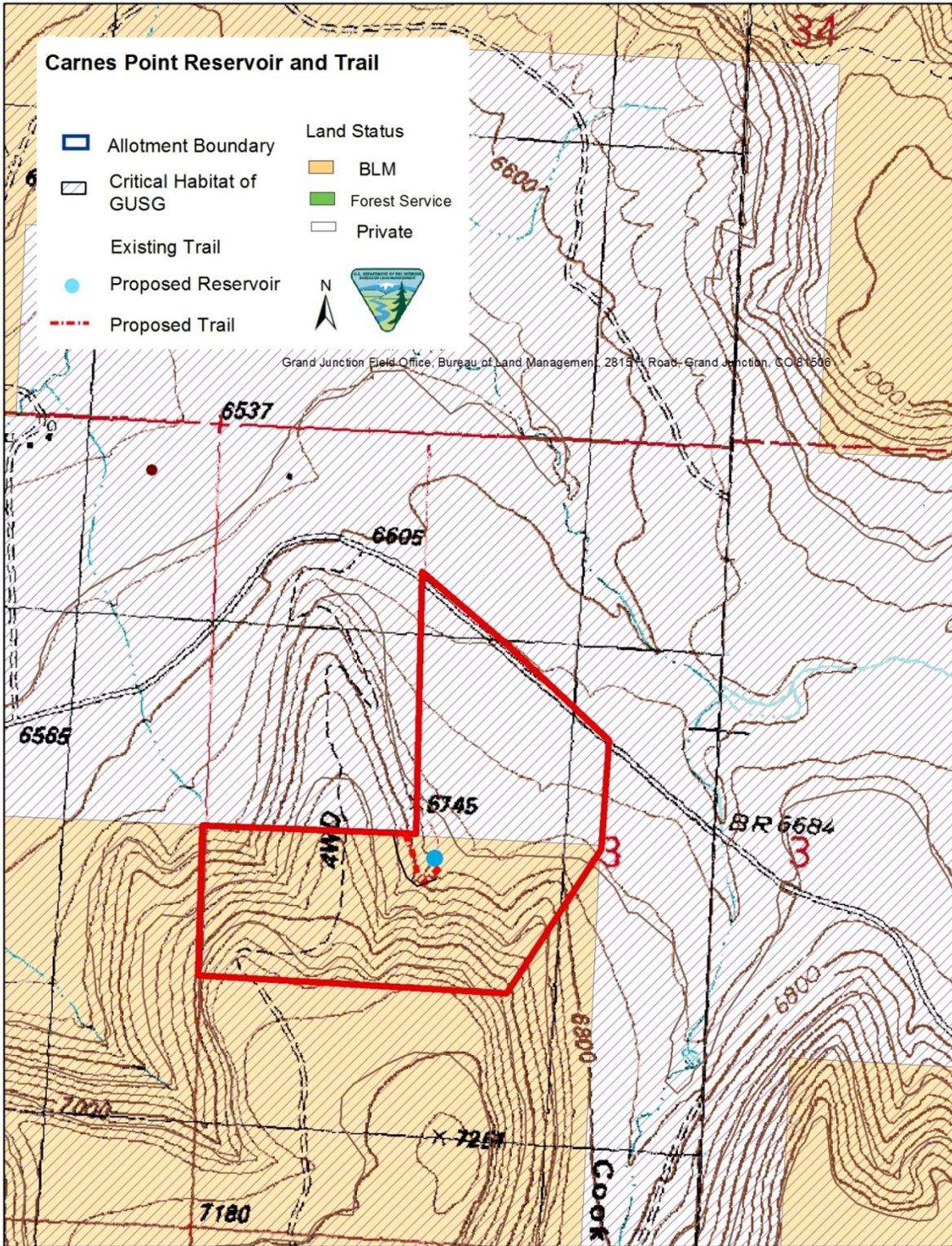
| NAME | TITLE | AREA OF RESPONSIBILITY |
|-------------------------|--|--|
| Julia Christiansen | Natural Resource Specialist | Surface Management and Permitting for Oil & Gas |
| Alissa Leavitt-Reynolds | Archaeologist Archaeologist | Cultural Resources, Native American Religious Concerns |
| Andy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

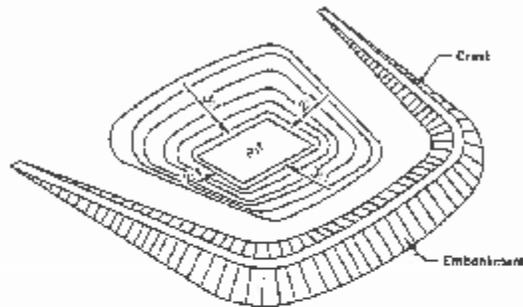
4.2 TRIBES, INDIVIDUALS, ORGANIZATIONS, OR AGENCIES CONSULTED

Dennis Carnes – Grazing Permittee
Colorado State Historic Preservation Officer

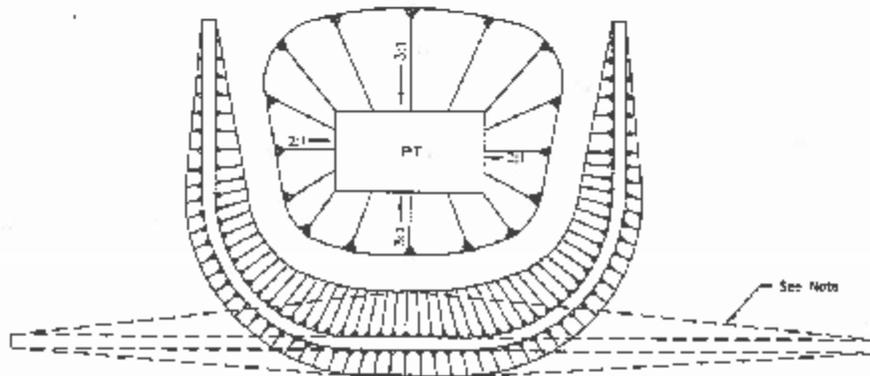
CHAPTER 5 - REFERENCES

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- Bureau of Land Management. 2015. Approved Resource Management Plan Record of Decision Grand Junction, Colorado.
- USDA. 2007. Trail Construction and Maintenance Notebook. United States Department of Agriculture, Forest Service, Technology and Development Program. 2300-Recreation 0723-2806-MTCD. 2007 Edition.

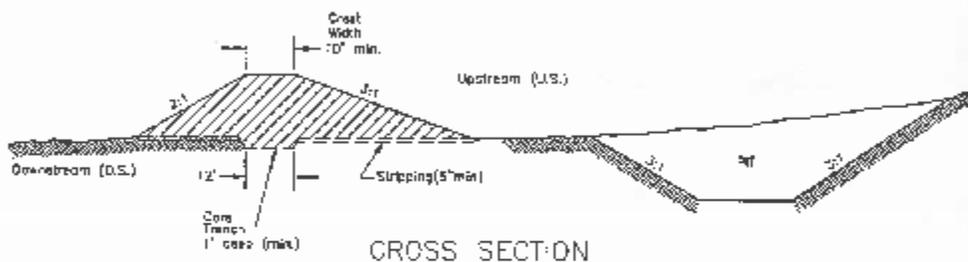




PERSPECTIVE VIEW



PLAN



CROSS SECTION

NOTES:

Embankment may be 1:1 or straight line slope.

UNITED STATES DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
ENGINEERING FIELD OFFICE COLORADO

TYPICAL
WATER RETENTION PIT

DESIGNED by others
REVIEWED
APPROVED

| | | | |
|-------------|-------------|-------|--------|
| DRAWN | JARS | SCALE | NONE |
| DATE | Apr 1, 1988 | SHEET | 1 OF 1 |
| DRAWING NO. | N/A | | |

ALWAYS THINK SAFETY