

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

**Environmental Assessment
DOI-BLM-CO-N05-2015-0033**

Curton Capital Storage Yard ROW and Pipeline Installation.

August 2015

U.S. Department of the Interior
Bureau of Land Management
Northwest District
White River Field Office
220 East Market St
Meeker, CO 81641



BLM

TABLE OF CONTENTS

1. Introduction.....	2
1.1. Identifying Information	2
1.2. Background.....	2
1.3. Purpose and Need for Action.....	2
1.4. Decision to be Made	3
1.5. Conformance with the Land Use Plan	3
1.6. Lease Stipulations & Lease Notices	3
2. Public involvement	4
2.1. Scoping	4
3. Proposed Action and Alternatives	4
3.1. Proposed Action.....	4
3.2. No Action Alternative	6
3.3. Alternatives Considered but Eliminated from Detailed Analysis.....	6
4. Issues	6
4.1. Issues Analyzed.....	7
4.2. Issues Considered but not Analyzed	7
5. Affected Environment and Environmental Consequences.....	11
5.1. General Setting & Access to the Project Area	11
5.2. Cumulative Impacts	11
5.3. Vegetation.....	13
5.4. Invasive, Non-Native Species	16
5.5. Cultural Resources	18
5.6. Paleontological Resources.....	19
5.7. Realty Authorizations	20
5.8. Hazardous or Solid Wastes.....	22
5.9. Colorado Standards for Public Land Health.....	24
6. Supporting Information	25
6.1. Interdisciplinary Review.....	25
6.2. References	26
Appendix A. Figures	27

1. INTRODUCTION

1.1. Identifying Information

Project Title: Curton Capital Storage Yard ROW and Pipeline Installation

Legal Description: T. 1N. R. 102W Section 5

T. 1N. R. 101W Section 7

Applicant: Curton Capital Corporation

NEPA Document Number: DOI-BLM-CO-N05-2014-0033-EA

Lease/Casefile/Project Number: COD-052605; COD-051529; COC-06412 and COC-40786

1.2. Background

The lease on which the storage yard is located was originally leased in the 1940s. In January of 1991, the Bureau of Land Management (BLM) approved a storage yard for Blue Bell Oil Company. This original storage yard was approved for 300 feet by 258 feet for the NWSW corner of Section 5. However, no map was attached and was only for lease COD-052605. The original boundaries of the storage yard were not marked. During well inspections in 2013, it was discovered that storage existed outside the approved acreage. The storage yard had expanded onto adjacent abandoned well pads, well beyond the original approved size. It was also determined that a numerous items being stored were for use on all four of the leases that Curton Capital operates in the White River Field Office (WRFO). Additionally, many of the stored items were no longer being used, and waiting to be scrapped as waste. In response to Written Orders and collaboration with the BLM, Curton Capital made many improvements and is still working on the area. Curton Capital has submitted an application for a Right-of-Way (ROW) for the storage yard. The tank on the A-4 well was removed when it was found to be leaking and Curton Capital is currently using a temporary tank. Approval of the pipeline will allow the removal of the temporary tank and interim reclamation to be initiated.

1.3. Purpose and Need for Action

The purpose of the action is to provide the applicant the opportunity to develop oil and gas resources consistent with their federal oil and gas lease. The need for the action is established by the BLM's responsibility under the Mineral Leasing Act of 1920 (MLA), as amended [30 USC 181 et seq.], the Onshore Oil and Gas Leasing Reform Act of 1987, and the Energy Policy Act of 2005. The MLA authorizes the BLM to issue oil and gas leases for the exploration of oil and gas and permit the development of those leases. It is the policy of the BLM to make mineral resources available for disposal and to encourage development of mineral resources to meet national, regional, and local needs while protecting other natural resources. The existing lease is a binding legal contract that allows development of the mineral by the lessee. The Federal Land Management and Policy Act and the Mineral Leasing Act allows for use of public land for

rights-of-way for oil and gas infrastructure, with appropriate consideration of other public resources.

1.4. Decision to be Made

Based on the analysis contained in this EA, the BLM will decide whether to approve or deny the Proposed Action, and if so, under what terms and conditions. Under the National Environmental Policy Act (NEPA), the BLM must determine if there are any significant environmental impacts associated with the Proposed Action warranting further analysis in an Environmental Impact Statement (EIS). The Field Manager is the responsible officer who will decide one of the following:

- To approve the pipeline installation and ROW grant with design features as submitted;
- To approve the pipeline installation and ROW grant with additional mitigation added;
- To analyze the effects of the Proposed Action in an EIS; or
- To deny the pipeline installation and ROW grant.

1.5. Conformance with the Land Use Plan

The Proposed Action is subject to and is in conformance (43 CFR 1610.5) with the following land use plan:

Land Use Plan: White River Record of Decision and Approved Resource Management Plan (ROD/RMP)

Date Approved: July 1997

Decision Language: “Make federal oil and gas resources available for leasing and development in a manner that provides reasonable protection for other resource values.” (page 2-5)

“To make public lands available for the siting of public and private facilities through the issuance of applicable land use authorizations, in a manner that provides for reasonable protection of other resource values.” (page 2-49)

1.6. Lease Stipulations & Lease Notices

Lease Serial Number: COD-052605; COD-051529; COC-06412 and COC-40786

Effective Date of Lease: January 1, 1944; June 1, 1941; March 5, 1953 and January 1, 1951

Lease Stipulations: Due to the early dates on these leases there were not any lease stipulations other than the standard terms and conditions.

2. PUBLIC INVOLVEMENT

2.1. Scoping

National Environmental Policy Act (NEPA) regulations (40 CFR 1500-1508) require that the BLM use a scoping process to identify potential significant issues in preparation for impact analysis. The principal goals of scoping are to identify issues, concerns, and potential impacts that require detailed analysis. Scoping is both an internal and external process.

Internal scoping was initiated when the project was presented to the White River Field Office (WRFO) interdisciplinary team on January 27, 2015. External scoping was conducted by posting this project on the WRFO's on-line NEPA register on January 27, 2015.

3. PROPOSED ACTION AND ALTERNATIVES

3.1. Proposed Action

3.1.1. Project Components and General Schedule

Curton Capital has submitted an application for a Right-of-Way (ROW) for a storage yard and proposed pipeline installation from Murphy A-4 to Murphy A-2 (Figure 1 in Appendix A). This ROW would be for storing equipment (dozers, grader, backhoe pump jacks, pipe, tubing, rods, and other miscellaneous equipment needed for lease operations) for leases COD-052605, COD-051529, COC-06412 and COC-40786 (Figure 2 in Appendix A). This new ROW would be for 365 feet by 315.5 feet, for a total of 2.64 acres. This would be an increase in acreage by 0.86 acres from the original yard. A reclamation plan for interim and final reclamation of the storage yard has been submitted.

Curton proposes to install a buried pipeline from the Murphy A-4 well, down an existing road, to the Murphy A-2 pad production tanks (Figure 3 in Appendix A). The pipeline would be a two-inch polypipe, buried to a depth of three feet. A trencher would be used in order to keep the disturbance in the current access road; the trench width would be between 4-12 inches, depending on the type of trencher used. The length of the proposed pipeline would be approximately 2,129.5 feet. Currently, the road width varies from 16.5 feet to 20.5 feet. A typical trencher would have a footprint of 33 inches to 96 inches (2.75 feet to 8 feet), allowing for the disturbance to stay within the two track. Acreage of the full estimated width of the two-track (20.5 feet), with the length of the pipeline (2,129.5 feet), would estimate one acre of disturbance that actually would be within the existing access road.

The total acreage for this Proposed Action would be approximately 3.64 acres; 2.64 acres for the storage yard and one acre for the pipeline installation. However, a large portion of the disturbance would occur within already disturbed areas.

Table 1. Anticipated Surface Disturbance for the Proposed Action

Project Component	Disturbance During the Construction Phase (acres)	Disturbance After Final Reclamation (acres)
Storage Yard	2.64	0.0
Pipeline	1.0	0.0
Total	3.64	0.0

3.1.2. Design Features

1. A trencher will be utilized for the pipeline installation to maintain most, if not all, disturbance of the pipeline installation in the existing disturbance of the current road and pads.
2. A reclamation plan has been submitted for the storage yard for interim and final reclamation.

3.1.3. BLM Required Conditions of Approval to Mitigate Impacts to Cultural and Paleontological Resources

1. The operator is responsible for informing all persons who are associated with the project that they will be subject to prosecution for knowingly disturbing archaeological sites or for collecting artifacts.
2. If any archaeological materials are discovered as a result of operations under this authorization, activity in the vicinity of the discovery will cease, and the BLM WRFO Archaeologist will be notified immediately. Work may not resume at that location until approved by the AO. The operator will make every effort to protect the site from further impacts including looting, erosion, or other human or natural damage until BLM determines a treatment approach, and the treatment is completed. Unless previously determined in treatment plans or agreements, BLM will evaluate the cultural resources and, in consultation with the State Historic Preservation Office (SHPO), select the appropriate mitigation option within 48 hours of the discovery. The operator, under guidance of the BLM, will implement the mitigation in a timely manner. The process will be fully documented in reports, site forms, maps, drawings, and photographs. The BLM will forward documentation to the SHPO for review and concurrence.
3. Pursuant to 43 CFR 10.4(g), the operator must notify the AO, by telephone and written confirmation, immediately upon the discovery of human remains, funerary items, sacred objects, or objects of cultural patrimony. Further, pursuant to 43 CFR 10.4(c) and (d), the

operator must stop activities in the vicinity of the discovery and protect it for 30 days or until notified to proceed by the AO.

4. The operator is responsible for informing all persons who are associated with the project operations that they will be subject to prosecution for disturbing or collecting vertebrate or other scientifically-important fossils, collecting large amounts of petrified wood (over 25lbs./day, up to 250lbs./year), or collecting fossils for commercial purposes on public lands.
5. If any paleontological resources are discovered as a result of operations under this authorization, the operator or any of his agents must stop work immediately at that site, immediately contact the BLM Paleontology Coordinator, and make every effort to protect the site from further impacts, including looting, erosion, or other human or natural damage. Work may not resume at that location until approved by the AO. The BLM or designated paleontologist will evaluate the discovery and take action to protect or remove the resource within 10 working days. Within 10 days, the operator will be allowed to continue construction through the site, or will be given the choice of either (a) following the Paleontology Coordinator's instructions for stabilizing the fossil resource in place and avoiding further disturbance to the fossil resource, or (b) following the Paleontology Coordinator's instructions for mitigating impacts to the fossil resource prior to continuing construction through the project area.

3.2. No Action Alternative

The No Action Alternative constitutes denial of the pipeline installation associated with the Proposed Action and denial of the ROW grants. Under the No Action Alternative, none of the proposed project components described in the Proposed Action would take place.

3.3. Alternatives Considered but Eliminated from Detailed Analysis

No feasible alternative surface locations were identified for the proposed project that would result in less impact than the proposed location.

4. ISSUES

The CEQ Regulations state that NEPA documents "must concentrate on the issues that are truly significant to the action in question, rather than amassing needless detail" (40 CFR 1500.1(b)). While many issues may arise during scoping, not all of the issues raised warrant analysis in an environmental assessment (EA). Issues will be analyzed if: 1) an analysis of the issue is necessary to make a reasoned choice between alternatives, or 2) if the issue is associated with a significant direct, indirect, or cumulative impact, or where analysis is necessary to determine the significance of the impacts. The following sections list the resources considered and the determination as to whether they require additional analysis.

4.1. Issues Analyzed

The following issues were identified during internal scoping as potential issues of concern for the Proposed Action. These issues will be addressed in this EA.

- **Vegetation**: Initial surface disturbance associated with the storage yard and the pipeline would result in 3.64 acres of vegetation removed. After final reclamation, disturbance for both proposed projects would be zero acres.
- **Invasive, Non-Native Species**: Surface disturbance associated with the storage yard and pipeline would result in disturbance of local soils, thus increasing the possibility of invasive, non-native plant species being introduced.
- **Cultural Resources**: Surface disturbance would not impact any known cultural resources.
- **Paleontological Resources**: If excavations for the pipeline are deep enough to impact the underlying sedimentary rock, there is a potential to impact scientifically noteworthy fossil resources, resulting in some loss of fossils and their scientific data.
- **Realty Authorizations**: The storage yard would require a right-of-way (ROW) because off-lease equipment would be stored at the site. The pipeline is on-lease; therefore, a ROW would not be required.
- **Hazardous or Solid Wastes**: The potential for harm to human health or the environment would be presented by the risks associated with storage of heavy equipment and other equipment. This equipment, if left unused, could result in spills of fuel, oil, and/or hazardous substances. If left over time, this equipment would also result in increased amounts of solid waste and illegal dumping. Accidental releases could cause soil, surface water, and/or groundwater contamination.

4.2. Issues Considered but not Analyzed

- **Air Quality**: Impacts to air quality from implementation of the Proposed Action would be short term, approximately two weeks or less in duration for the construction of each site, and temporary. Combustion of fossil fuels from equipment during construction activities would locally increase carbon monoxide, ozone (secondary pollutant formed photo-chemically from volatile organic compounds (VOCs) and nitrogen oxides (NOx)), nitrogen dioxide, sulfur dioxide, and dust. The small quantity of emissions that would be produced as a result of the Proposed Action would be unlikely to result in an exceedance of national ambient air quality (NAAQ) and Colorado ambient air quality (CAAQ).

Implementation of the proponent's proposed reclamation plans would help reduce the sources of fugitive dust within the project areas.

- **Wetlands and Riparian Zones:** The Proposed Action would involve the authorization and consolidation of an existing storage yard that is separated from the lower White River by about 0.65- to 0.75-mile of incised ephemeral channel. The project area is located in an extensive, xeric salt desert basin that has supported heavy oil and gas development activity since the early 1940's. Although the facility does not appear to have developed serious erosion features, proposed stabilization and reclamation efforts would aid in reducing sediments transported to the river.

The proposed pipeline would be installed within an existing barren roadbed that is separated from Douglas Creek by about 0.3-mile of ephemeral channel. Douglas Creek is a large, intermittent and sediment-rich system that empties into the White River about three channel miles downstream. This lower reach of Douglas Creek is predominantly privately owned and is dominated by heavy tamarisk growth, with an increasing complement of Russian olive. The Proposed Action would not be expected to change the quantity or pattern of sediments that may presently originate from the roadbed and reach Douglas Creek and the White River. Considering reclamation commitments, compliance with State and federal contaminant and stormwater regulations, and separation of project work from perennial streams that support riparian vegetation, there is no foreseeable likelihood that the Proposed Action would contribute sediments or contaminants that would change current background levels, much less be capable of altering current riparian resources or processes.

- **Aquatic Wildlife:** The lower White River is designated critical habitat for the endangered Colorado pikeminnow and a number of other native fish (i.e., mountain and bluehead sucker, roundtail chub), and an amphibian (i.e., northern leopard frog) that are regarded as special status (e.g., BLM-sensitive). However, similar to the discussion for Wetlands and Riparian Zones (above), and based on physical separation and management controls applied to the Proposed Action, the risk of the Proposed Action altering background levels of sediments or contaminants at levels capable of adversely influencing aquatic or riparian resources, processes, or organisms would be negligible.
- **Special Status Animal Species:** Reintroduction and recovery efforts for the endangered black-footed ferret have been conducted since 2001 in Coyote Basin, approximately six miles west of the project site. Although no ferrets are known to have dispersed to and occupied the Rangely Oil Field, there is physical potential that ferrets may have reached Coal Oil Basin. A plague epizootic in 2009/2010 decimated WRFO's ferret population, as well as the prairie dog prey base, and although individuals are known to have survived in neighboring Utah, it is extremely unlikely that ferret populations have acquired the capability to disperse and colonize distant habitat. However, the proposed project sites do not constitute habitat suited for the support of black-footed ferret or their prairie dog

habitat base, being separated from the nearest mapped white-tailed prairie dog habitat by 1,500 feet (> 0.25 mile), and are situated beyond the outer margin of the Coal Oil Basin prairie dog complex. See Aquatic Wildlife section (above) for discussion of project influence on special status aquatic species and habitats.

- **Migratory Birds:** The Proposed Action involves the authorization and consolidation of an existing storage yard and the installation of a pipeline within an existing roadbed in a heavily travelled and degraded recreation/industrial travel corridor. These actions would not measurably add to further influence on migratory bird populations or their reproductive activities.
- **Terrestrial Wildlife:** The Proposed Action involves the authorization and consolidation of an existing storage yard, whose land base serves no important wildlife habitat or seasonal use activity. Although the pipeline route is encompassed by mule deer severe winter range, work would be confined to an existing roadbed in the heavily travelled and degraded RBC 104 travel corridor that lies between State Highway 139 and all-season RBC 23 less than 0.5-mile outside Rangely's town limit. The project locale, which is already disturbed, does not contribute functionally to the support of local wintering deer populations. There is no potential raptor nest substrate capable of being adversely influenced by proposed project work.
- **Geology and Minerals:** The continued use of the Proposed Action area as a storage yard area and installation of the pipeline would have little to no impacts on the affected and surrounding geologic and mineral resources.
- **Soil Resources:** Disturbance of soils in the Proposed Action would occur in existing disturbance within the storage area and an existing road for the buried pipeline. The storage area is located on saline soils in an area that has a Controlled Surface Use Stipulation (CSU) for fragile soils on slopes greater than 35 percent and Saline soils derived from Mancos Shale (CSU-1). It is topographically situated on top of a knoll between two ephemeral drainages on 12 percent or less slopes. The drainage area is the same as the storage site (2.64 acres) and would have minor impacts from storm events, due to the small areal extent of the site drainage. The proponent's reclamation plans include storm water control, interim and final reclamation designs that incorporate erosion control measures, which would limit soil loss and encourage the establishment of vegetation. Implementation of the reclamation plans would meet the exception criteria for CSU-1 and improve current site conditions. It is unlikely burying the pipeline, as described in the proposed pipeline plan, along the centerline of the existing road would have any additional impacts to the soils associated with the existing road.
- **Surface and Ground Water Quality:** It is unlikely surface and ground water quality would be impacted by the Proposed Action from soil erosion (Please see the discussion above in Soil Resources). The yard would be used to store heavy equipment, pipe and related material (e.g., rods, well heads), and miscellaneous tools or equipment. Potential of spills could occur from leaks of equipment stored on site (e.g. broken hydraulic or fuel

lines) and be limited to the capacity of the particular piece of equipment. Any spills would likely remain on site and the proponent would be required to clean up any spills that occurred. Storm water control features and spill mitigation would limit adverse impacts to surface or ground water quality.

- **Floodplains, Hydrology, and Water Rights:** The Proposed Action is not located within a 100 year Flood Plain. It is unlikely the Proposed Action would impact the surface hydrology due to the small areal extent, less than four acres, and the physical locations of the project sites. Fresh water used during construction and reclamation activities would be obtained through permitted water rights.
- **Native American Religious Concerns:** No Native American religious concerns are known in the area, and none have been noted by Northern Ute tribal authorities. Should recommended inventories or future consultations with Tribal authorities reveal the existence of such sensitive properties, appropriate mitigation and/or protection measures may be undertaken.
- **Social and Economic Conditions:** There would not be any substantial changes to local social or economic conditions.
- **Environmental Justice:** According to the most recent Census Bureau statistics (2010) and guidelines provided in WO-IM-2002-164, there are no minority or low income populations within the WRFO.
- **Prime and Unique Farmlands:** There are no prime and unique farmlands within the project area.
- **Wilderness:** There are no designated Wilderness areas or Wilderness Study Areas located near the Proposed Action.
- **Special Status Plant Species:** There are no special status plant species issues or concerns associated with the Proposed Action.
- **Forestry and Woodland Products:** There are no forestry or woodland issues or concerns associated with the Proposed Action.
- **Fire Management:** The Proposed Action would not knowingly impact the Northwest Colorado Fire Management Plan.
- **Areas of Critical Environmental Concern:** The nearest ACEC to the storage yard and proposed pipeline is the White River Riparian. The pipeline would be approximately 1.86 miles to the south of the ACEC and the storage yard is approximately 0.5 miles to the north of the ACEC. There would be no known impacts from the Proposed Action.

- **Wild Horses:** The Proposed Action is not located within the Piceance-East Douglas Herd Management Area or the North Piceance and West Douglas Herd Areas, therefore this project would generate no impacts to wild horses.
- **Livestock Grazing:** The Proposed Action would occur on two different grazing allotments; Douglas Creek (06342) (pipeline) and Coal Oil Basin (06313) (storage yard). The Proposed Action would not reduce any AUMs associated with these two allotments. No range improvements or trend plots would be damaged as a result of the Proposed Action.
- **Visual Resources:** During the written order process previously with the Operator, it was determined that a field-wide color of “covert green” from the Standard Environmental Color Chart would be used. The temporary tank removal and burial of the pipeline would have minimal impact of the Visual Resources. The storage yard currently exists and would not have any additional impact to Visual Resources.
- **Recreation:** The Proposed Action would have minimal impacts to recreation. The storage yard already exists, the pipeline would be installed into the already existing access road, and the duration of the installation would be a short duration.
- **Access and Transportation:** The access road for the Murphy A-4 well would be closed for the short duration of installing the pipeline, but this two-track only goes to the Murphy A-4 well.
- **Lands with Wilderness Characteristics:** There are no lands with wilderness characteristics in or near the project area.
- **Wild and Scenic Rivers:** There are no Wild and Scenic Rivers within the WRFO.
- **Scenic Byways:** There are no Scenic Byways within the project area.

5. AFFECTED ENVIRONMENT AND ENVIRONMENTAL CONSEQUENCES

5.1. General Setting & Access to the Project Area

The storage yard is located west of the town of Rangely in the salt desert/alkaline slope ecological site, and the pipeline would be located south of Rangely off of Colorado State Highway 139 in the foothills ecological site.

5.2. Cumulative Impacts

5.2.1. Cumulative Impacts Analysis Areas

The geographic extent of cumulative impacts varies by the type of resource and impact. The timeframes, or temporal boundaries, for those impacts may also vary by resource. Different

spatial and temporal cumulative impact analysis areas (CIAAs) have been developed and are listed with their total acreage in Table 2

Table 2 Cumulative Impact Analysis Areas by Resource

Resource	CIAA	Total CIAA Acreage	Temporal Boundary
Vegetation	NRCS Ecological Sites for salt deserts, foothills and alkaline slopes	9,637 acres	Effects to this resource would generally remain until successful final reclamation of the well pad (+35 years).
Invasive and Non-Natives	White River BLM Field Office Rangeland Grazing Allotments	9,637 acres	Effects to this resource would have the potential to be permanent.
Hazardous or Solid Wastes	6 th Hydrological Level- Subwatersheds	51,770	From the start of installation activities through meeting reclamation success standards.
Paleontological resources	Mesaverde Formation	276,558 acres	Only the time needed to install the pipeline and operate it, this considers any potential maintenance requiring re-excavation of the pipeline.
Cultural resources	White River BLM Field Office	White River BLM Field Office	No "Historic Properties" as defined by regulation would be impacted during the life of the project.

5.2.2. Past, Present, and Reasonably Foreseeable Future Actions

Cumulative effects are defined in the 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 (Federal or non-Federal) or person undertakes such other actions."

The two leases involved with the Proposed Action disturbance are COD-052605 and COD-04786. These two leases have had oil and gas activity since the 1950s. The acreages of these

leases are approximately 318 acres. Using NAIP imagery and digitizing disturbance for oil and gas activity (not including county roads) the disturbance is approximately 15 acres. The Proposed Action would be 3.64 acres primarily in existing disturbance. This would be approximately 6 percent of the acreage of the leases. This project is located outside of the MPA. The BLM assumed that only 5 percent of oil and gas development would occur outside of the MPA and that it would be primarily limited to single-well pads.

Other past, present, and reasonably foreseeable actions in the project area include livestock grazing and associated range improvement projects, vegetation treatments, and both wildfires and prescribed burns. Recreation use is characterized by dispersed camping, OHV use, and hunting.

5.3. Vegetation

5.3.1. Affected Environment

The Curton Capital projects encompass two different ecological sites. [Table 3](#) outlines each of the ecological sites located within the project area. Vegetative communities within the project area are in areas highly degraded and dominated by invasive annual species such as cheatgrass, halogeton, and various mustards. These areas are currently not meeting public land health standards for vegetative communities, and have crossed a threshold that cannot be repaired without intensive management such as ripping, seeding and herbicide treatments.

Table 3 Ecological Sites Associated with the Proposed Action.

Ecological Site	Plant Community Appearance	Predominant Plant Species in the Plant Community
Alkaline Slopes	Sagebrush/grass Shrubland	Wyoming big sagebrush, winterfat, low rabbitbrush, wheat grasses, Indian rice grass, squirreltail
Clayey Salt desert	Salt Desert Shrubland	Gardner saltbush, shadscale, mat saltbush, galleta, Salina wildrye, squirreltail, Indian rice grass

5.3.2. Environmental Consequences – Proposed Action

Direct and Indirect Impacts

The total disturbance associated with the Proposed Action (storage yard and pipeline) is 3.64 acres. However, a large portion of the disturbances occur within already disturbed areas; the pipeline is within an existing access road, and the storage yard, although approved in 1991, the original boundaries were not marked and storage exists outside the approved 1991 acreage. These disturbances, for the most part, are expected to completely be devoid of vegetation throughout the life of the proposed projects until final abandonment. Some interim reclamation is planned to occur at the storage yard, but would be minimal. Upon final reclamation, these areas could experience an increase in desirable vegetative cover. However, this would not be expected until

well into the future. Successful re-vegetation efforts would slightly increase desirable plant species within the ecological sites.

Cumulative Impacts

The areas associated with the storage yard and pipeline have had considerable impacts from several entities; oil and gas, recreation and livestock grazing. All activities have resulted in a fragmentation and reduction of available vegetation, which helps provide productive ecological sites. It is expected that oil and gas development, recreation, and livestock grazing in the areas of the proposed projects would continue into the future creating the potential for further degradation of vegetative communities.

5.3.3. Environmental Consequences – No Action Alternative

Direct and Indirect Impacts

No new disturbance to vegetative communities would occur under the No Action Alternative. However, since the pipeline and storage yard already occur on existing disturbance the vegetation in the area has been removed or damaged.

Cumulative Impacts

Cumulative effects would be the same as those analyzed in the Proposed Action in terms of the type of disturbance in the areas.

5.3.4. Mitigation Measures and Residual Impacts

In addition to the vegetative measures identified by the applicant in the reclamation plan, the following mitigation will be applied:

For interim reclamation, the BLM recommends Seed Mix #8, outlined in Table 4Table-4. It is recommended that seeding occur between September 1 and March 31. If an alternate date of seeding is requested, contact the designated Natural Resource Specialist prior to seeding for approval. Drill seeding is the preferred method of application and drill seeding depth must be no greater than ½ inch. If drill seeding cannot be accomplished, seed should be broadcast at double the rate used for drill seeding, and harrowed into the soil. Final reclamation will be completed using the reclamation practices and seed mixes recommended at that time.

Table 4 Modified Seed Mix 8 for Interim Reclamation of the Curtin Capital storage yard.

Cultivar	Common Name	Scientific Name	Application Rate (lbs PLS/acre)
Viva Florets	Galleta Grass	<i>Pleuraphis jamesii</i>	3
Rimrock	Indian Ricegrass	<i>Achnatherum hymenoides</i>	3
Toe Jam Creek	Bottlebrush Squirreltail	<i>Elymus elymoides</i>	2.5

Rosana	Western Wheatgrass	<i>Pascopyrum smithii</i>	4
	Scarlet Globemallow	<i>Sphaeralcea coccinea</i>	0.25
	Annual Sunflower	<i>Helianthus annuus</i>	2.5

All seed tags will be submitted via Sundry Notice (SN) to the designated Natural Resource Specialist within 14 calendar days from the time the seeding activities have ended. The SN will include the purpose of the seeding activity (i.e., seeding well pad, cut and fill slopes, seeding pipeline corridor, etc.). In addition, the SN will include the location/ROW number associated with the seeding activity, if applicable, the name of the contractor that performed the work, his/her phone number, the method used to apply the seed (e.g., broadcast, hydro-seeded, drilled), whether the seeding activity represents interim or final reclamation, the total acres seeded, an attached map that clearly identifies all disturbed areas that were seeded, and the date the seed was applied.

Each year by January 1st, Curton Capital will submit a Reclamation Status Report to the WRFO that includes the ROW/project number, legal description, UTM coordinates, project description (e.g., well pad, pipeline, etc.), reclamation status (e.g., interim or final), whether the ROW or project has been re-vegetated and/or re-contoured, date seeded, photos of the reclaimed site, acres seeded, seeding method (e.g., broadcast, drilled, hydro-seeded, etc.), and contact information for the person responsible for developing the report. The report will include maps showing each point (i.e., storage yard), polygon, and/or polyline (i.e., pipeline) feature that was included in the report. The data must be submitted in UTM Zone 13N, NAD 83, in units of meters. In addition, scanned copies of seed tags that accompanied the seed bags will be included with the report. Internal and external review of the WRFO Reclamation Status Report and the process used to acquire the necessary information will be conducted annually, and new information or changes in the reporting process will be incorporated into the report.

The operator will meet the following reclamation success criteria, and these standards apply to both interim and final reclamation:

- a) Self-sustaining desirable vegetative groundcover consistent with the site Desired Plant Community (DPC) (as defined by the range site, WRFO Assessment, Inventory, and Monitoring (AIM) protocol site data (BLM TN 440), ecological site or an associated approved reference site) is adequately established as described below on disturbed surfaces to stabilize soils through the life of the project.
- b) Vegetation with eighty percent similarity of desired foliar cover, bare ground, and shrub and/or forb density in relation to the identified DPC. Vegetative cover values for woodland or shrubland sites are based on the capability of those sites in an herbaceous state.
- c) The resulting plant community must have composition of at least five desirable plant species, and no one species may exceed 70 percent relative cover to ensure that site species diversity is achieved. Desirable species may include native species from the surrounding site, species listed in the range/ecological site description,

AIM data, reference site, or species from the BLM approved seed mix. If non-prescribed or unauthorized plant species (e.g., yellow sweetclover, *Melilotus officinalis*) appear in the reclamation site BLM may require their removal.

d) Bare ground does not exceed the AIM data, range site description or if not described, bare ground will not exceed that of a representative undisturbed DPC meeting the Colorado Public Land Health Standards.

Residual impacts: There would be no residual impacts.

.4. Invasive, Non-Native Species

.4.1. Affected Environment

The Colorado Noxious Weed Act (Title 35 Article 5.5, enacted 1996) defines noxious weeds as plant species that are not indigenous to the State of Colorado and which aggressively invade or are detrimental to economic crops or native plants; are poisonous to livestock; are carriers of detrimental insects, diseases, or parasites; or the presence of the plant is detrimental to the environmentally sound management of natural or agricultural ecosystems. Recognized noxious weeds are grouped into three categories: Lists A, B, and C (Colorado Weed Management Association 2009). List B includes species for which a state noxious weed management plan is required to stop their spread. List C includes species that are common in Colorado, prevention of these weed species is not state-mandated.

The proposed storage yard is an already existing disturbance, with various disturbances surrounding the yard. The storage yard was inventoried by Great Basin Environmental and Aquatics in 2014 for invasive and non-native weed species. Plant species found on the Colorado State Weed lists found during the inventory included; cheatgrass (*Bromus tectorum*), halogeton (*Halogeton glomeratus*), and tamarix (*Tamarix* spp.). Additional weed plant species that are not on the Colorado State Weed lists that occur in the area are Russian thistle (*Salsola* spp.), kochia (*Bassia sieversiana*) and various mustard species.

The proposed pipeline would be placed within an existing road disturbance that is surrounded by developed roads and several other well pads in the area. The pipeline was not surveyed for invasive non-native weed species, but similar weed species that were found at the Curtain Capital storage yard are expected.

.4.2. Environmental Consequences – Proposed Action

Direct and Indirect Impacts

The disturbances associated with the Proposed Action could create new noxious weed infestations by importing weed seed on vehicles and equipment or by having suitable conditions present (non-vegetated disturbed areas) for introduction of noxious weeds by other vectors (i.e. wildlife or livestock). In addition to noxious weeds, invasive non-native species such as cheatgrass and halogeton, which are already present in the area, could also establish on these new disturbed areas. Increased weed seed production and presence of noxious or invasive plants

could aggressively compete with or exclude desired vegetation during final reclamation. If not controlled, new infestations of weeds could result in the spread of these undesirables into the adjacent native plant communities.

Cumulative Impacts

Noxious and invasive weeds present in the general area are primarily associated with existing areas of development/disturbance and livestock grazing. Further development actions associated with the Proposed Action would create additional opportunity for noxious/invasive weed establishment. Existing roads, development and livestock grazing throughout the general area are common sources of weeds, so elimination of these species from the general area is unlikely. The extent of infestation and persistence of weeds would be dependent on monitoring and treatment as part of future projects and activities in the general area. Proposed mitigation including long term weed control would reduce the likelihood of long term negative impacts associated with the Proposed Action.

.4.3. Environmental Consequences – No Action Alternative

Direct and Indirect Impacts

Noxious and invasive plants would continue to be present within the vicinity of the proposed developments and, depending on the aggressiveness of weed treatment activities, may continue to spread.

Cumulative Impacts

Cumulative effects would be similar to those from the Proposed Action.

.4.4. Mitigation Measures and Residual Impacts

In addition to the weed measures identified by the applicant in the reclamation plan, the following mitigation should be applied:

1. All equipment that may act as a vector for weeds will be cleaned before entering the project area.
2. Application of herbicides must comply with the Vegetation Treatments on Bureau of Land Management Lands in 17 Western States Programmatic Environments Impact Statement (EIS), and the WRFO Integrated Weed Management Plan (DOI-BLM-CO-110-2010-0005-EA).
3. All seed, straw, mulch, or other vegetative material to be used on BLM lands will comply with United States Department of Agriculture (USDA) state noxious weed seed requirements and must be certified by a qualified Federal, State, or county office as free of noxious weeds. Any seed lot with test results showing presence of State of Colorado A or B list species will be rejected in its entirety and a new tested lot will be used instead. All areas identified to be disturbed under this proposal will be monitored and

treated for noxious weeds on an annual basis for the life of the project until Final Abandonment has been approved by the Authorized Officer.

4. Pesticide Use Proposals (PUPs) must be submitted to and approved by the BLM before applying herbicides on BLM lands. The PUP will include target weed species, the herbicides to be used, application rates and timeframes, estimated acres to be treated, as well as maps depicting the areas to be treated and known locations of weeds. The WRFO recommends that all PUPs be submitted no later than March 1st of the year anticipating herbicide application.

Residual impacts: There are no residual impacts.

.5. Cultural Resources

.5.1. Affected Environment

Curton Capital Storage Yard: The original Bluebell storage yard was approved, based on a Programmatic Agreement between Chevron, BLM, the Colorado State Historic Preservation Office (SHPO) and the Advisory Council on Historic Preservation (ACHP), which was based on a Class II cultural resource inventory (Larralde 1981 compliance date 2/18/1981) that suggested that the Rangely Weber Sand Unit oil and gas field had been so extensively disturbed as a result of oil and gas development over the preceding decades that there was very little likelihood of undamaged historic properties being present (*ibid.*). The agreement, which was perpetual, has since been cancelled by the ACHP on procedural grounds. An examination of Google Earth photography and a field visit were sufficient to determine that no further inventory was warranted under the BLM inventory waiver at BLM manual 8110.23(B)(2), due to the extensive existing ground disturbance.

Curton Capital Pipeline project: The proposed well locations and the pipeline route have been inventoried at the Class III (100 percent pedestrian) level (Jennings *et al* in prep) that identified the wells as non-eligible resources that contribute to a historic landscape. The pipeline route has no surface manifestations of cultural resources. The road route may be related to the original drilling of the wells but records are not adequate to confirm the truth of the hypothesis.

.5.2. Environmental Consequences – Proposed Action

Direct and Indirect Impacts

The proposed storage yard and pipeline projects do not appear to have any impacts to any historic properties, as defined by the regulations at 36 CFR 800. The two well pads that are being tied together by the proposed pipeline are more than fifty years of age but have been extensively modified and upgraded since original construction. There may be a slight potential for previously unidentified subsurface remains along the pipeline route that could be impacted by the construction project. The exact extent of impacts cannot be accurately quantified but should be less than the one acre of total anticipated acreage expected for the surface disturbance identified for the pipeline project.

Cumulative Impacts

There are no known cumulative impacts from the Proposed Actions, unless previously undetected subsurface remains are identified during pipeline trenching operations. If undetected resources are impacted during pipeline trenching does occur, it would represent a long term, permanent, irreversible, irretrievable and currently unquantifiable loss of data from the regional archaeological database.

.5.3. Environmental Consequences – No Action Alternative

Direct and Indirect Impacts

There would be no new impacts to cultural resources anticipated under the No Action Alternative.

Cumulative Impacts

None.

.5.4. Mitigation Measures and Residual Impacts

See mitigation measures/Conditions of Approval in Section 3.1.3.

Residual Impacts: Unless previously unknown and identified subsurface remains are encountered during any of the operations necessary for the construction of the pipeline or the storage yard there should be no residual impacts to cultural resources.

.6. Paleontological Resources

.6.1. Affected Environment

Proposed Curton Capital Storage yard: The proposed storage yard is located in an area generally mapped as Mancos Shale (Tweto 1979), which the BLM has categorized as a Potential Fossil Yield Classification (PFYC) 3 formation, indicating the potential for recovery of scientifically noteworthy fossil resources is currently unknown in the area. In other areas, the Mancos Shale is known to produce a variety of vertebrate fossil resources (c. Armstrong and Wolny 1989).

Proposed Curton Capital well tie pipeline: The proposed pipeline route lies in an area generally mapped as the Upper Mesa Verde Formation (Tweto 1979), which the BLM has categorized as a PFYC 5 formation indicating that it is known to produce scientifically noteworthy fossil resources (c. Armstrong and Wolny 1989).

.6.2. Environmental Consequences – Proposed Action

Direct and Indirect Impacts

Proposed Storage Yard: The location of the yard is in an area with an unknown amount of soil overburden over the Mancos Shale. Unless there is some reason to excavate into the soil and underlying sedimentary formation for the storage facility, there should be no construction-related impacts to the formation or any fossils that might be present in the shale.

Proposed pipeline route: The soil overburden depth is not adequately known for this project. If it becomes necessary to excavate to such a depth as to impact the underlying sedimentary rock to bury the pipeline, there is a potential to impact scientifically important and noteworthy fossil resources. Fossils can be crushed and displaced by the trenching equipment, especially the smaller and more fragile fossils. Larger fossils can be broken and scattered as the trencher cuts through the remnants of the larger fossils. These impacts not only destroy the fossil resources, but the paleo-environmental data that is associated with the fossil remains.

Cumulative Impacts

Direct impacts to paleontological resources as a result of project implementation would add less than 0.5 acres to the existing impacts to the Upper Mesa Verde formation in the field office area. Any loss of fossils and paleontological data as a result of excavations into the formation would be permanent, long term, irreversible, irretrievable and additive to losses that have already occurred as a result of oil and gas development outside the MPA.

.6.3. Environmental Consequences – No Action Alternative

Direct and Indirect Impacts

There would likely be no new anticipated impacts to fossil resources under the No Action Alternative. Since there are no currently visible outcrops of the fossil bearing formations exposed there is little likelihood that any impacts from unlawful collection in the area would occur due to the current improved access into the area.

Cumulative Impacts

None.

.6.4. Mitigation Measures and Residual Impacts

See the mitigating measures/Conditions of Approval in section 3.1.3.

1. In the event that the trencher encounters the underlying sedimentary rock during trenching, operators must stop and await the arrival of a paleontological monitor before trenching can continue.

Residual Impacts: Residual impacts, in the event the underlying sedimentary rock formation is impacted by pipeline trenching, would likely be less than 0.5 acres of the Upper Mesaverde formation, and, unless a fossil is encountered, would be non-existent. If a fossil is identified in the pipeline trench, the scientific value could result in a long term loss of scientific data within the area of impacts, less than 0.5 acres in the Upper Mesaverde formation. The additional impact would not likely be important in the overall acreage of the Mesaverde formation (ca. 276,558 acres).

.7. Realty Authorizations

.7.1. Affected Environment

The storage yard requires a right-of-way (ROW) because off-lease equipment would be stored at the site. The pipeline is on-lease; therefore, a ROW is not required. Curton Capital has access to the site across BLM lands authorized in existing access road ROW COC74689. Curton Capital would need to negotiate any access across the private lands with the landowner.

.7.2. Environmental Consequences – Proposed Action

Direct and Indirect Impacts

The storage yard, ROW COC76609, would be 365 feet by 316 feet and would contain approximately 2.64 acres. Damage to the facilities or rights of existing ROW holders could occur if construction activities are not properly planned and other ROW facilities are not properly identified prior to construction. If accurate “as built” mapping is not provided to BLM, conflicts may develop in the future.

Cumulative Impacts

If the number of ROW holders in the project area increased, competition for suitable locations for facilities would increase. Increased ROW densities would also lead to a higher probability of conflict between ROW users.

.7.3. Environmental Consequences – No Action Alternative

Direct and Indirect Impacts

Failure to authorize the proposed project would not result in any increased impacts to realty authorizations in the area.

Cumulative Impacts

There would not be any cumulative effects from not authorizing the proposed project.

.7.4. Mitigation Measures and Residual Impacts

1. The holder will provide the BLM AO with data in a format compatible with the WRFO’s ESRI ArcGIS Geographic Information System (GIS) to accurately locate and identify the ROW and all constructed infrastructure, (as-built maps) within 60 days of construction completion. Acceptable data formats are: (1) corrected global positioning system (GPS) files with sub-meter accuracy or better; (2) ESRI shapefiles or geodatabases; or at last resort, (3) AutoCAD .dwg or .dxf files. Option 2 is highly preferred. In ALL cases the data must be submitted in Universal Transverse Mercator (UTM) Zone 13N, NAD 83, in units of meters. Data may be submitted as: (1) an email attachment; or (2) on a standard compact disk (CD) in compressed (WinZip only) or uncompressed format. All data will include metadata, for each submitted layer, that conforms to the Content Standards for Digital Geospatial Metadata from the Federal Geographic Data Committee standards. Questions should be directed to WRFO BLM GIS staff at (970) 878-3800.

2. The holder will conduct all activities associated with the construction, operation, and termination of the right-of-way within the authorized limits of the right-of-way.

3. At least 90 days prior to termination of the ROW, the holder will contact the AO to arrange a joint inspection of the ROW. The inspection will result in the development of an acceptable termination and rehabilitation plan submitted by the holder. This plan will include, but is not limited to, removal of facilities, drainage structures, and surface material (e.g., gravel or concrete), as well as final recontouring, spreading of topsoil, and seeding. The Authorized Officer must approve the plan in writing prior to the holder's commencement of any termination activities.

4. The holder will protect all survey monuments found within the right-of-way. Survey monuments include, but are not limited to, General Land Office and Bureau of Land Management Cadastral Survey Corners, reference corners, witness points, U.S. Coastal and Geodetic benchmarks and triangulation stations, military control monuments, and recognizable civil (both public and private) survey monuments. In the event of obliteration or disturbance of any of the above, the holder will immediately report the incident, in writing, to the authorized officer and the respective installing authority if known. Where General Land Office or Bureau of Land Management right-of-way monuments or references are obliterated during operations, the holder will secure the services of a registered land surveyor or a Bureau cadastral surveyor to restore the disturbed monuments and references using surveying procedures found in the Manual of Surveying Instructions for the Survey of the Public Lands in the United States, latest edition. The holder will record such survey in the appropriate county and send a copy to the authorized officer. If the Bureau cadastral surveyors or other Federal surveyors are used to restore the disturbed survey monument, the holder will be responsible for the survey cost.

.8. Hazardous or Solid Wastes

.8.1. Affected Environment

During well inspections in 2013, it was discovered that the storage yard had expanded onto adjacent abandoned well pads, well beyond the original approved size. It was also determined that many of the stored items were no longer being used, and waiting to be scrapped as waste. The tank from the A-4 well was removed when it was found to be leaking and Curton Capitol Corporation is currently using a temporary tank on location. Soil testing and remediation activities associated with contaminated soils have been completed, in accordance with COGCC 9-10 rules.

There are no known hazardous wastes on the subject lands. However, the area has been used as a disposal area for a number of solid wastes, which resulted in the larger expansion of the storage area by the previous owner of the lease. Based on field visits and inspections, it was determined that while some hazardous materials may have been used, stored, or disposed of at sites included in the project area, none were observed to constitute a release and the current owner has worked to clean up the areas and remove the solid and potentially hazardous wastes through a combination of recycling and disposal at approved disposal locations.

.8.2. Environmental Consequences – Proposed Action

Direct and Indirect Impacts

The proposed action includes the storage of heavy equipment, pipe, and drill stem, which does not necessarily result in the generation of waste nor would it result in harm to human health or the environment. However, allowing equipment to become unused and/or degraded could result in the release of fuels, lubricants, and other chemicals into the environment. The proposal does not request the ability to store chemicals (i.e. drilling muds, methanol, ethalyn glycol, unused frac chemicals etc.) that would be associated with typical drilling and production activities, So the potential for harm to human health or the environment is limited by the risks associated with spills of fuel, oil, lubricants, and/or other potentially hazardous substances found within the heavy equipment. Other accidents and mechanical breakdowns of machinery could result in releases to the environment and would require identification and clean-up immediately upon discovery.

The proposed activities could pose direct and indirect impacts to soil, water, air, and biological resources that occur in close proximity to individual disturbance features. Impacts to these resources could also occur at farther distances from individual disturbance features, though it is assumed that these impacts would be reduced because of proximity to the point source. Accidents and mechanical breakdown could also have direct and indirect effects to resources, depending on the type of accidents or mechanical breakdown and when and where the occur temporally and spatially.

The proposed location soils are heavy clay, which would typically limit the extent of releases to a few inches of the soil surface. This, in combination with the fact that soils would be compacted on the location, would further limit the typical spill contamination extent.

Storage yards may also become the site of illegal dumping as storing of equipment, limited visitation and appearance of a dump can entice this use.

Cumulative Impacts

Effects to soil, water, air, and biological resources as a result of cumulative release of hazardous materials into the environment are unknown. Because some hazardous substances persist in the environment, it is reasonable to assume that multiple activities, which may occur throughout the project area that result in the release of individual hazardous material spills or discharge events, could cumulatively result in impacts to soil, water, air, and biological resources.

.8.3. Environmental Consequences – No Action Alternative

Direct and Indirect Impacts

No hazardous or other solid wastes would be used, stored, generated, or disposed under the No Action Alternative.

Cumulative Impacts

Cumulative effects would be the same as those analyzed in the Proposed Action in terms of the type of disturbance. In terms of duration and extent, however, this alternative would most likely result in reduced cumulative impacts because of the existing development in the project area.

.8.4. Mitigation Measures and Residual Impacts

1. Comply with all Federal, State and/or local laws, rules, regulations, statutes, standards and implementation plans. This includes but is not limited to, Onshore Orders, Surface Use Plans, State and Rio Blanco County permits.
2. Where required by law or regulation to develop a plan for the prevention of releases or the recovery of a release of any substance that poses a risk of harm to human health or the environment, provide a current copy of said plan to the BLM WRFO.
4. The location will not be used to for storage of chemicals, drums, or other substances that pose a risk of harm to human health or the environment.
5. All equipment stored on location will be maintained in working order and semi-annually inspected for leaks and other equipment failures. The Operator will document and keep record of these inspections throughout the life of the authorization. Leaks would be immediately cleaned up and removed to an approved disposal location.
6. Lessee/Operator/ROW holder will install a fence surrounding the approved storage area, which will discourage illegal dumping, and ensure that the storage area will not be re-enlarged over time.
7. Lessee/Operators and ROW holders will report all emissions, releases, spills, leakages, blowouts, fires that may pose a risk of harm to human health or the environment, regardless of a substances' status as exempt or nonexempt and regardless of fault, to the BLM WRFO (970) 878-3800.
8. As a reasonable and prudent lessees/operator and/or ROW holder in the oil and gas industry, acting in good faith, all lessees/operators and ROW holders will provide for the immediate clean-up and testing of air, water (surface and/or ground) and soils contaminated by the emission or release of any substance that may pose a risk of harm to human health or the environment, regardless of that substance's status as exempt or non-exempt. Where the lessee/operator or ROW holder fails, refuses or neglects to provide for the immediate clean-up and testing of air, water (surface and/or ground) and soils contaminated by the emission or release of any quantity of a substance that poses a risk of harm to human health or the environment, the BLM WRFO may take measures to clean-up and test air, water (surface and/or ground) and soils at the lessee/operator's expense. Such action will not relieve the lessee/operator of any liability or responsibility.

Residual Impacts: Any transportation of production fluids would retain the potential for spill.

.9. Colorado Standards for Public Land Health

In January 1997, the Colorado BLM approved the Standards for Public Land Health. These standards cover upland soils, riparian systems, plant and animal communities, special status species, and water quality. Standards describe conditions needed to sustain public land health and relate to all uses of the public lands. If there is the potential to impact these resources, the

BLM will note whether or not the project area currently meets the standards and whether or not implementation of the Proposed Action would impair the standards.

.9.1. Standard 1 – Upland Soils

Implementation of the proposed reclamation plans and mitigation would likely improve the overall productivity of soils associated with the Proposed Action.

.9.2. Standard 3 – Plant and Animal Communities

The Proposed Action (storage yard and pipeline) already exists on previously disturbed vegetative areas. A minimal amount new vegetation would be removed and/or damaged as a result of these projects. As such, the Proposed Action should have no influence on the status of applicable Land Health Standards.

.9.3. Standard 4 – Special Status Species

The Proposed Action (storage yard and pipeline) would not affect populations or habitats of plants associated with the Endangered Species Act or BLM sensitive species and, as such, should have no influence on the status of applicable Land Health Standards.

.9.4. Standard 5 – Water Quality

It is unlikely the continued use of the proposed storage yard and the activities associated with the buried pipeline would result in an exceedance of state water quality standards.

6. SUPPORTING INFORMATION

.10. Interdisciplinary Review

Table 5 . List of Preparers

Name	Title	Area of Responsibility	Date Signed
Paul Daggett	Mining Engineer	Air Quality; Geology and Minerals; Soil Resources; Surface and Ground Water Quality; Floodplains, Hydrology, and Water Rights; Prime and Unique Farmlands	2/19/2015
Heather Woodruff	Ecologist	Vegetation, Invasive, Non-Native Species, Special Status Plant Species, Wild Horses, Forestry and Woodland Products, Livestock Grazing, Areas of Critical Environmental Concern	2/12/2015
Michael Selle	Archaeologist	Cultural Resources, Paleontological Resources, Native American Religious Concerns	2/5/2015
Kyle Frary	Fire Management Specialist	Fire Management	6/18/2015
Ryan Snyder	Natural Resource Specialist/Project Lead	Visual Resources, Hazardous or Solid Wastes, Social and Economic	6/17/2015

Name	Title	Area of Responsibility	Date Signed
		Conditions, Lands with Wilderness Characteristics, Recreation, Access and Transportation, Wilderness, Scenic Byways	
Stacey Burke	Realty Specialist	Realty Authorizations	2/17/2015
Joe David	Planning & Environmental Coordinator	NEPA Compliance	7/30/2015

.11. References

Armstrong, Harley J., and David G. Wolny

1989 Paleontological Resources of Northwest Colorado: A Regional Analysis. Museum of Western Colorado, Grand Junction, Colorado.

Jennings, Sarah, Jenny Stahl, Nicole Sauvageau, Stephanie Slaughter, and Melissa Elkins

In prep Chevron Corporation Rangely 3D Seismic: A Class III Cultural Resource Inventory, Rio Blanco County, Colorado. Metcalf Archaeological Consultants, Inc., Golden, Colorado. (13-54-05: OAH # RB.LN.R1357)

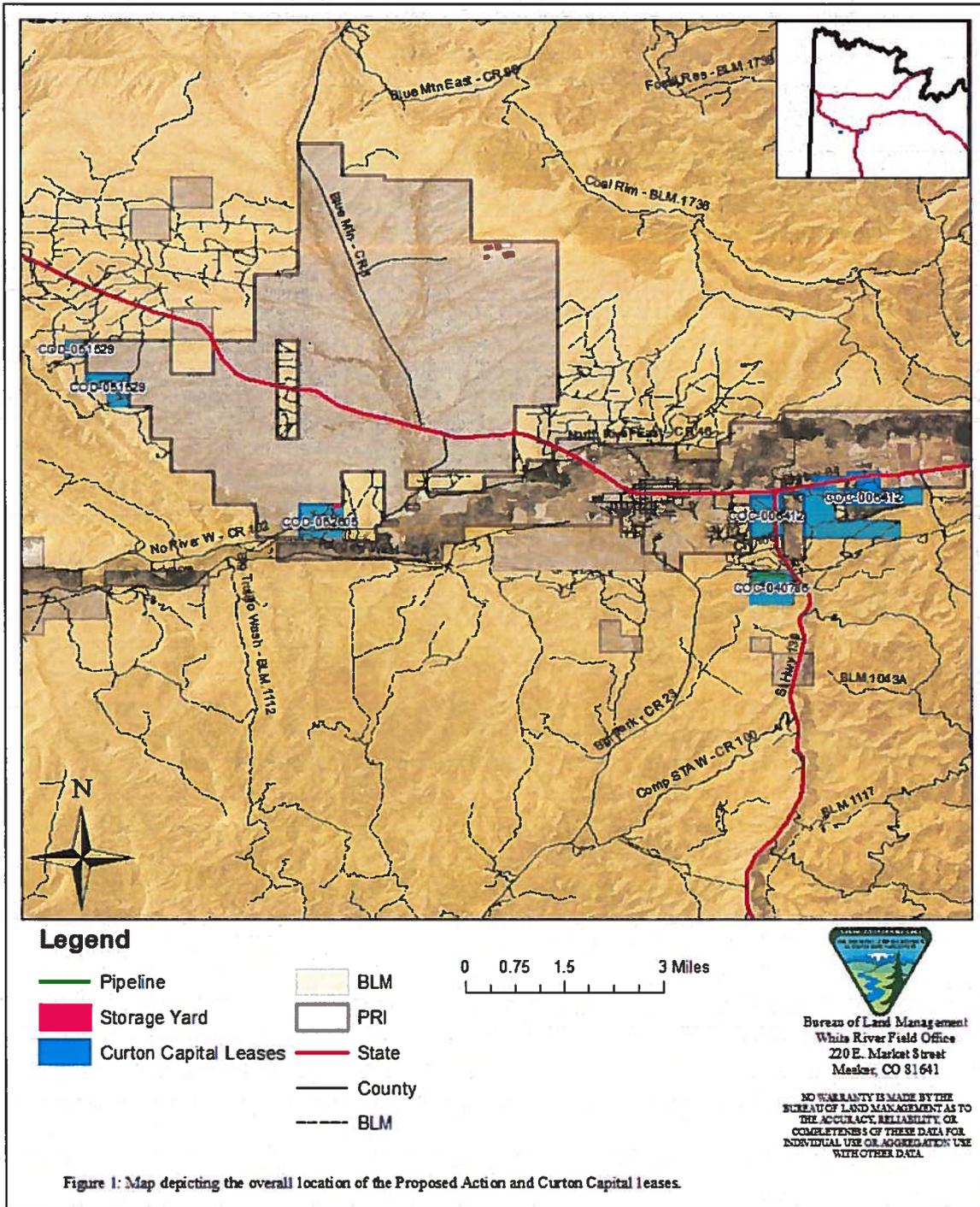
Larralde, Signa L.

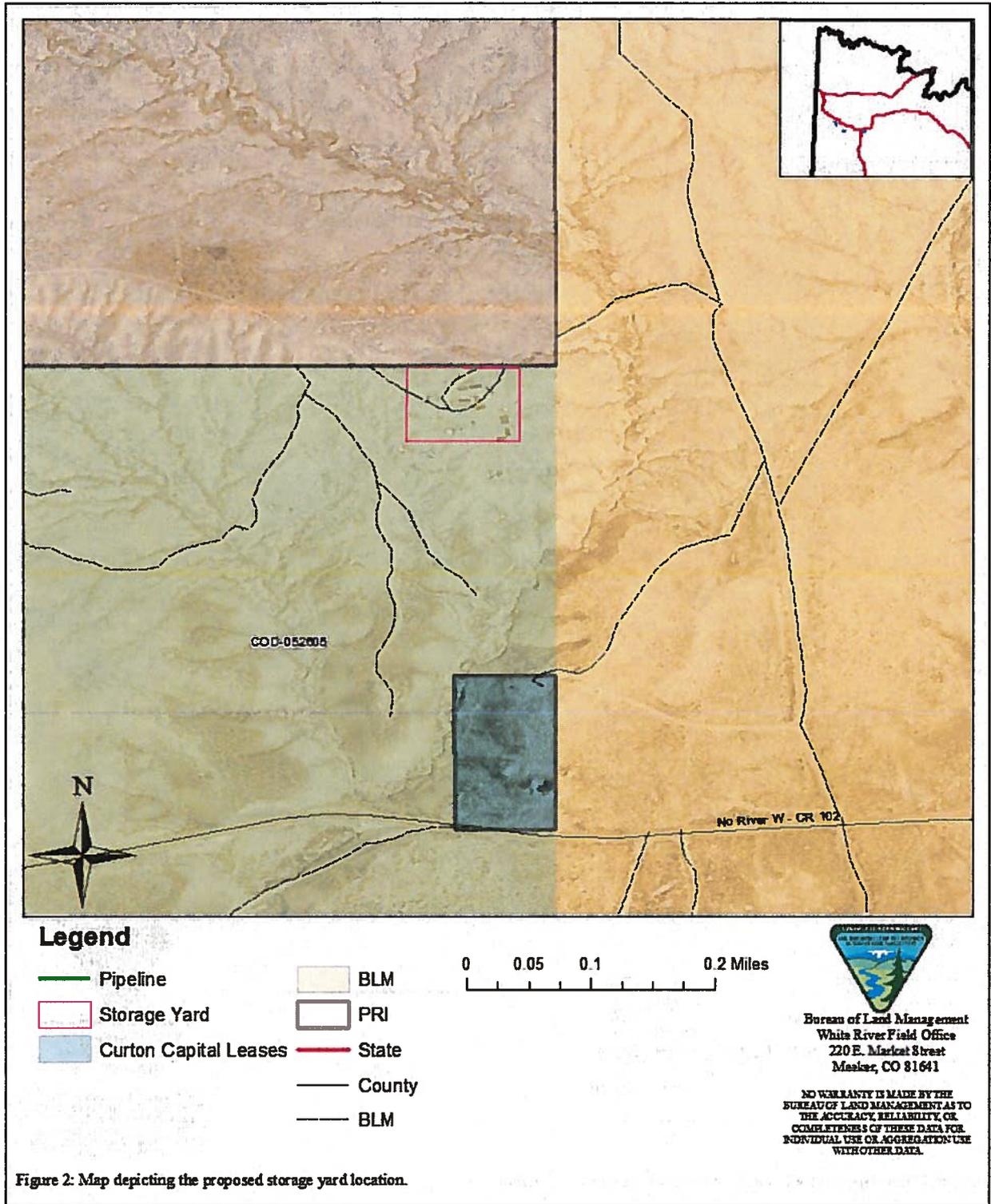
1981 Cultural Resource Inventory of a Sample of BLM Lands in the Rangely Oil Field, Rio Blanco County, Northwestern Colorado. Nickens and Associates Consulting Archaeologist, Montrose, Colorado. (81-05-01: OAH # RB.LM.R857)

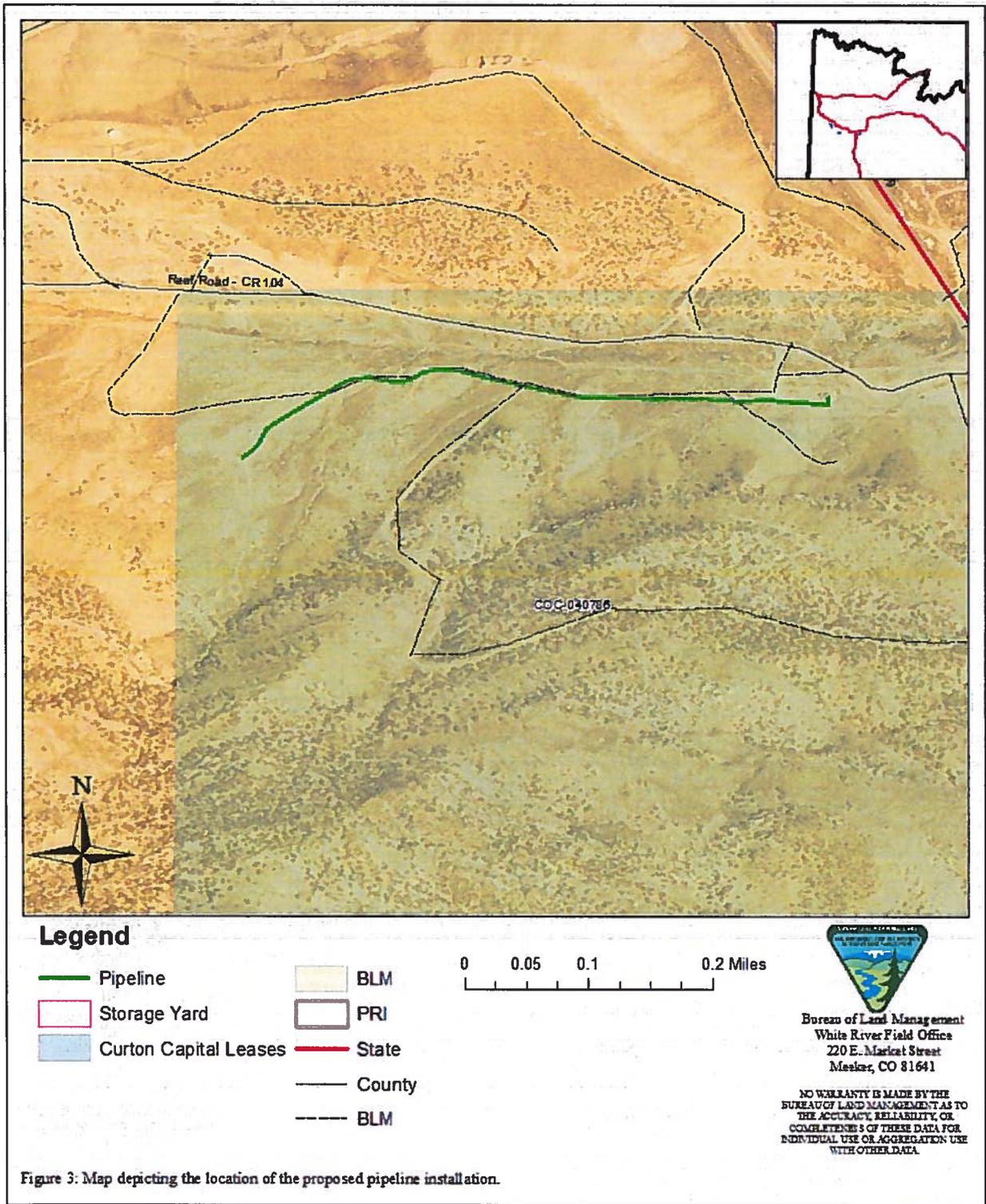
Tweto, Ogden

1979 Geologic Map of Colorado. United States Geologic Survey, Department of the Interior, Reston, Virginia.

APPENDIX A. FIGURES







U.S. Department of the Interior
Bureau of Land Management
White River Field Office
220 E Market St
Meeker, CO 81641

FINDING OF NO SIGNIFICANT IMPACT (FONSI)

Curton Capital Storage Yard ROW and Pipeline Installation DOI- BLM-CO-N05-2015-0033-EA

Background

Curton Capital has submitted an application for a Right-of-Way (ROW) for a storage yard and proposed a pipeline installation from Murphy A-4 to Murphy A-2. This storage yard was approved originally in 1991 for Bluebell Oil Company; however, it was only for the use of lease COD-052605 and for 300 feet by 258 feet. This ROW would be used for storing equipment (dozers, grader, backhoe pump jacks, pipe, tubing, rods, and other miscellaneous equipment needed for lease operations) for leases COD-052605, COD-051529, COC-06412 and COC-40786. Curton proposes to install a buried pipeline from the Murphy A-4 well along an existing road to the Murphy A-2 pad production tanks.

Finding of No Significant Impact

Based upon a review of the EA and supporting documents, I have determined that the Proposed Action will not have a significant effect on the quality of the human environment, individually or cumulatively with other actions in the general area. No environmental effects meet the definition of significance in context or intensity, as defined at 40 CFR 1508.27 and do not exceed those effects as described in the White River Resource Area Proposed Resource Management Plan and Final Environmental Impact Statement (1996). Therefore, an environmental impact statement is not required. This finding is based on the context and intensity of the project as described below.

Context

The project is a site-specific action directly involving BLM-administered public lands that do not in and of themselves have international, national, regional, or state-wide importance. The storage yard has been present since the nineties and Oil and Gas activity was in the yard vicinity since the mid-1900s. The wells in the area of the associated pipeline installation have been active since the early sixties. The Rangely area in general, has been active with Oil and Gas activity for several decades. Items in the Proposed Action are not uncommon or unique practices.

Intensity

The following discussion is organized around the 10 Significance Criteria described at 40 CFR 1508.27. The following have been considered in evaluating intensity for this Proposed Action:

1. Impacts that may be both beneficial and adverse.

The storage yard had become an area used to store not only equipment, but also scrap and other debris. The yard had expanded outside its original boundaries and onto two adjacent abandoned well locations. Equipment was being stored not only from this lease, but from all nearby Curton Capital leases. The beneficial impacts would be reclamation plans for interim and final reclamation, accurate boundaries for the yard itself, and removal of scrap and debris on location. The pipeline installation would allow for the temporary tank on the Murphy A-4 to be removed, and product would be piped to the A-2 location; three pads would be using the tanks on the one location. This would result in allowing the Murphy A-4 location to undergo interim reclamation to a greater extent than if a tank was still on location.

2. The degree to which the Proposed Action affects public health or safety.

There would be no impact to public health and safety, if the safety measures described in the operator's drilling plan and Surface Use Plan of Operations are properly implemented, and the developed mitigation is followed.

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

There are no historic or cultural resources, park lands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas that are in the project area.

4. Degree to which the possible effects on the quality of the human environment are likely to be highly controversial.

No comments or concerns have been received regarding possible effects on the quality of the human environment during scoping.

5. Degree to which the possible effects on the quality of the human environment are highly uncertain or involve unique or unknown risk.

No highly uncertain or unknown risks to the human environment were identified during analysis of the Proposed Action.

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

The Proposed Action neither establishes a precedent for future BLM actions with significant effects, nor represents a decision in principle about a future consideration. This action is similar to many actions proposed and reviewed in the NEPA process in the BLM WRFO that involve construction of a well pad, constructing an access road, and drilling one or more wells, or to similar actions for maintenance and operations of wells and associated facilities.

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

The Proposed Action was considered in the context of past, present, and reasonably foreseeable actions. No cumulative impacts related to other actions that would have a significant adverse impact were identified or are anticipated.

8. The degree to which the action may adversely affect districts, sites, highways, structures, or objects listed on the National Register of Historic Places or may cause loss or destruction of significant scientific, cultural, or historical resources.

An examination of the storage yard location via Google Earth photography and a field visit were sufficient to determine that no further inventory was warranted under the BLM inventory waiver in BLM manual 8110.23(B)(2), due to the extensive existing ground disturbance.

The proposed well locations and the pipeline route have been inventoried at the Class III (100 percent pedestrian) level (Jennings *et al* in prep) that identified the wells as non-eligible resources that contribute to a historic landscape. The pipeline route has no surface manifestations of cultural resources. The road route may be related to the original drilling of the wells, but records are not adequate to confirm the truth of the hypothesis.

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

No issues or concerns were brought forth for analysis for any Special Status Animal or Plant Species.

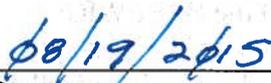
10. Whether the action threatens a violation of Federal, State, or local law or requirements imposed for the protection of the environment.

Neither the Proposed Action nor impacts associated with it violate any laws or requirements imposed for the protection of the environment.

Signature of Authorized Official



Field Manager



Date

U.S. Department of the Interior
Bureau of Land Management
White River Field Office
220 E Market St
Meeker, CO 81641

DECISION RECORD

Curton Capital Storage Yard ROW and Pipeline Installation.

DOI-BLM-CO-N05-2015-0033-EA

Decision

It is my decision to implement the Proposed Action, as mitigated in DOI-BLM-CO-N05-2015-0033-EA, authorizing the installation, operation, and maintenance of the Curton Capital storage yard and pipeline installation between the Murphy A-4 and A-2 wells.

Applicant Committed Design Features

1. A trencher will be utilized for the pipeline installation to maintain most, if not all disturbance of the pipeline installation in the existing disturbance of the current road and pads.
2. A reclamation plan has been submitted for the storage yard for interim and final reclamation.

BLM Required Conditions of Approval to Mitigate Impacts to Cultural and Paleontological Resources

1. The applicant is responsible for informing all persons who are associated with the project that they will be subject to prosecution for knowingly disturbing archaeological sites or for collecting artifacts.
2. If any archaeological materials are discovered as a result of operations under this authorization, activity in the vicinity of the discovery will cease, and the BLM WRFO Archaeologist will be notified immediately. Work may not resume at that location until approved by the AO. The applicant will make every effort to protect the site from further impacts including looting, erosion, or other human or natural damage until BLM determines a treatment approach, and the treatment is completed. Unless previously determined in treatment plans or agreements, BLM will evaluate the cultural resources and, in consultation with the State Historic Preservation Office (SHPO), select the

appropriate mitigation option within 48 hours of the discovery. The applicant, under guidance of the BLM, will implement the mitigation in a timely manner. The process will be fully documented in reports, site forms, maps, drawings, and photographs. The BLM will forward documentation to the SHPO for review and concurrence.

3. Pursuant to 43 CFR 10.4(g), the applicant must notify the AO, by telephone and written confirmation, immediately upon the discovery of human remains, funerary items, sacred objects, or objects of cultural patrimony. Further, pursuant to 43 CFR 10.4(c) and (d), the operator must stop activities in the vicinity of the discovery and protect it for 30 days or until notified to proceed by the AO.
4. The applicant is responsible for informing all persons who are associated with the project operations that they will be subject to prosecution for disturbing or collecting vertebrate or other scientifically-important fossils, collecting large amounts of petrified wood (over 25lbs./day, up to 250lbs./year), or collecting fossils for commercial purposes on public lands.
5. If any paleontological resources are discovered as a result of operations under this authorization, the applicant or any of his agents must stop work immediately at that site, immediately contact the BLM Paleontology Coordinator, and make every effort to protect the site from further impacts, including looting, erosion, or other human or natural damage. Work may not resume at that location until approved by the AO. The BLM or designated paleontologist will evaluate the discovery and take action to protect or remove the resource within 10 working days. Within 10 days, the operator will be allowed to continue construction through the site, or will be given the choice of either (a) following the Paleontology Coordinator's instructions for stabilizing the fossil resource in place and avoiding further disturbance to the fossil resource, or (b) following the Paleontology Coordinator's instructions for mitigating impacts to the fossil resource prior to continuing construction through the project area.

Mitigation Measures

Vegetation

1. For interim reclamation the BLM recommends Seed Mix #8 outlined in Table 4. It is recommended that seeding occur between September 1 and March 31. If an alternate date of seeding is requested, contact the designated Natural Resource Specialist prior to seeding for approval. Drill seeding is the preferred method of application and drill seeding depth must be no greater than ½ inch. If drill seeding cannot be accomplished, seed should be broadcast at double the rate used for drill seeding, and harrowed into the soil. Final reclamation will be completed using the reclamation practices and seed mixes recommended at that time.

Table 4. Modified Seed Mix 8 for Interim Reclamation of the Curton Capital storage yard.

Cultivar	Common Name	Scientific Name	Application Rate (lbs PLS/acre)
Viva Florets	Galleta Grass	<i>Pleuraphis jamesii</i>	3
Rimrock	Indian Ricegrass	<i>Achnatherum hymenoides</i>	3
Toe Jam Creek	Bottlebrush Squirreltail	<i>Elymus elymoides</i>	2.5
Rosana	Western Wheatgrass	<i>Pascopyrum smithii</i>	4
	Scarlet Globemallow	<i>Sphaeralcea coccinea</i>	0.25
	Annual Sunflower	<i>Helianthus annuus</i>	2.5

2. All seed tags will be submitted via Sundry Notice (SN) to the designated Natural Resource Specialist within 14 calendar days from the time the seeding activities have ended. The SN will include the purpose of the seeding activity (i.e., seeding well pad, cut and fill slopes, seeding pipeline corridor, etc.). In addition, the SN will include the location/ROW number associated with the seeding activity, if applicable, the name of the contractor that performed the work, his/her phone number, the method used to apply the seed (e.g., broadcast, hydro-seeded, drilled), whether the seeding activity represents interim or final reclamation, the total acres seeded, an attached map that clearly identifies all disturbed areas that were seeded, and the date the seed was applied.

3. Each year by January 1st, Curton Capital will submit a Reclamation Status Report to the WRFO that includes the ROW/project number, legal description, UTM coordinates, project description (e.g., well pad, pipeline, etc.), reclamation status (e.g., interim or final), whether the ROW or project has been re-vegetated and/or re-contoured, date seeded, photos of the reclaimed site, acres seeded, seeding method (e.g., broadcast, drilled, hydro-seeded, etc.), and contact information for the person responsible for developing the report. The report will include maps showing each point (i.e., storage yard), polygon, and/or polyline (i.e., pipeline) feature that was included in the report. The data must be submitted in UTM Zone 13N, NAD 83, in units of meters. In addition, scanned copies of seed tags that accompanied the seed bags will be included with the report. Internal and external review of the WRFO Reclamation Status Report and the process used to acquire the necessary information will be conducted annually, and new information or changes in the reporting process will be incorporated into the report.

4. The operator will meet the following reclamation success criteria, and these standards apply to both interim and final reclamation:
 - a) Self-sustaining desirable vegetative groundcover consistent with the site Desired Plant Community (DPC) (as defined by the range site, WRFO Assessment, Inventory, and Monitoring (AIM) protocol site data (BLM TN 440), ecological site or an associated approved reference site) is adequately established as described below on disturbed surfaces to stabilize soils through the life of the project.

- b) Vegetation with eighty percent similarity of desired foliar cover, bare ground, and shrub and/or forb density in relation to the identified DPC. Vegetative cover values for woodland or shrubland sites are based on the capability of those sites in an herbaceous state.
- c) The resulting plant community must have composition of at least five desirable plant species, and no one species may exceed 70 percent relative cover to ensure that site species diversity is achieved. Desirable species may include native species from the surrounding site, species listed in the range/ecological site description, AIM data, reference site, or species from the BLM approved seed mix. If non-prescribed or unauthorized plant species (e.g., yellow sweetclover, *Melilotus officinalis*) appear in the reclamation site BLM may require their removal.
- d) Bare ground does not exceed the AIM data, range site description or if not described, bare ground will not exceed that of a representative undisturbed DPC meeting the Colorado Public Land Health Standards.

Invasive, Non-Native Species

5. All equipment that may act as a vector for weeds will be cleaned before entering the project area.
6. Application of herbicides must comply with the Vegetation Treatments on Bureau of Land Management Lands in 17 Western States Programmatic Environmental Impact Statement (EIS), and the WRFO Integrated Weed Management Plan (DOI-BLM-CO-110-2010-0005-EA).
7. All seed, straw, mulch, or other vegetative material to be used on BLM lands will comply with United States Department of Agriculture (USDA) state noxious weed seed requirements and must be certified by a qualified Federal, State, or county office as free of noxious weeds. Any seed lot with test results showing presence of State of Colorado A or B list species will be rejected in its entirety and a new tested lot will be used instead. All areas identified to be disturbed under this proposal will be monitored and treated for noxious weeds on an annual basis for the life of the project until Final Abandonment has been approved by the Authorized Officer.
8. Pesticide Use Proposals (PUPs) must be submitted to and approved by the BLM before applying herbicides on BLM lands. The PUP will include target weed species, the herbicides to be used, application rates and timeframes, estimated acres to be treated, as well as maps depicting the areas to be treated and known locations of weeds. The WRFO recommends that all PUPs be submitted no later than March 1st of the year anticipating herbicide application.

Paleontological Resources

9. In the event that the trencher encounters the underlying sedimentary rock during trenching, operators must stop and await the arrival of a paleontological monitor before trenching can continue.

Realty Authorizations

10. The holder will provide the BLM AO with data in a format compatible with the WRFO's ESRI ArcGIS Geographic Information System (GIS) to accurately locate and identify the ROW and all constructed infrastructure, (as-built maps) within 60 days of construction completion. Acceptable data formats are: (1) corrected global positioning system (GPS) files with sub-meter accuracy or better; (2) ESRI shapefiles or geodatabases; or at last resort, (3) AutoCAD .dwg or .dxf files. Option 2 is highly preferred. In ALL cases the data must be submitted in Universal Transverse Mercator (UTM) Zone 13N, NAD 83, in units of meters. Data may be submitted as: (1) an email attachment; or (2) on a standard compact disk (CD) in compressed (WinZip only) or uncompressed format. All data will include metadata, for each submitted layer, that conforms to the Content Standards for Digital Geospatial Metadata from the Federal Geographic Data Committee standards. Questions should be directed to WRFO BLM GIS staff at (970) 878-3800.
11. The holder will conduct all activities associated with the construction, operation, and termination of the right-of-way within the authorized limits of the right-of-way.
12. At least 90 days prior to termination of the ROW, the holder will contact the AO to arrange a joint inspection of the ROW. The inspection will result in the development of an acceptable termination and rehabilitation plan submitted by the holder. This plan will include, but is not limited to, removal of facilities, drainage structures, and surface material (e.g., gravel or concrete), as well as final recontouring, spreading of topsoil, and seeding. The Authorized Officer must approve the plan in writing prior to the holder's commencement of any termination activities.
13. The holder will protect all survey monuments found within the right-of-way. Survey monuments include, but are not limited to, General Land Office and Bureau of Land Management Cadastral Survey Corners, reference corners, witness points, U.S. Coastal and Geodetic benchmarks and triangulation stations, military control monuments, and recognizable civil (both public and private) survey monuments. In the event of obliteration or disturbance of any of the above, the holder will immediately report the incident, in writing, to the authorized officer and the respective installing authority if known. Where General Land Office or Bureau of Land Management right-of-way monuments or references are obliterated during operations, the holder will secure the services of a registered land surveyor or a Bureau cadastral surveyor to restore the disturbed monuments and references using surveying procedures found in the Manual of Surveying Instructions for the Survey of the Public Lands in the United States, latest edition. The holder will record such survey in the appropriate county and send a copy to the authorized officer. If the Bureau cadastral surveyors or other Federal surveyors are used to restore the disturbed survey monument, the holder will be responsible for the survey cost.

Hazardous or Solid Wastes

14. Comply with all Federal, State and/or local laws, rules, regulations, statutes, standards and implementation plans. This includes but is not limited to, Onshore Orders, Surface Use Plans, State and Rio Blanco County permits.
15. Where required by law or regulation to develop a plan for the prevention of releases or the recovery of a release of any substance that poses a risk of harm to human health or the environment, provide a current copy of said plan to the BLM WRFO.
16. The location will not be used for storage of chemicals, drums, or other substances that pose a risk of harm to human health or the environment.
17. All equipment stored on location will be maintained in working order and semi-annually inspected for leaks and other equipment failures. The Operator will document and keep record of these inspections throughout the life of the authorization. Leaks would be immediately cleaned up and removed to an approved disposal location.
18. Lessee/Operator/ROW holder will install a fence surrounding the approved storage area, which will discourage illegal dumping, and ensure that the storage area will not be re-enlarged over time.
19. Lessee/Operators and ROW holders will report all emissions, releases, spills, leakages, blowouts, fires that may pose a risk of harm to human health or the environment, regardless of a substance's status as exempt or nonexempt and regardless of fault, to the BLM WRFO (970) 878-3800.
20. As a reasonable and prudent lessees/operator and/or ROW holder in the oil and gas industry, acting in good faith, all lessees/operators and ROW holders will provide for the immediate clean-up and testing of air, water (surface and/or ground) and soils contaminated by the emission or release of any substance that may pose a risk of harm to human health or the environment, regardless of that substance's status as exempt or non-exempt. Where the lessee/operator or ROW holder fails, refuses or neglects to provide for the immediate clean-up and testing of air, water (surface and/or ground) and soils contaminated by the emission or release of any quantity of a substance that poses a risk of harm to human health or the environment, the BLM WRFO may take measures to clean-up and test air, water (surface and/or ground) and soils at the lessee/operator's expense. Such action will not relieve the lessee/operator of any liability or responsibility.

Compliance with laws & Conformance with the Land Use Plan

This decision is in compliance with the Endangered Species Act and the National Historic Preservation Act. It is also in conformance with the 1997 White River Record of Decision/Approved Resource Management Plan.

Environmental Analysis and Finding of No Significant Impact

The Proposed Action was analyzed in DOI-BLM-N05-2015-0033-EA and it was found to have no significant impacts, thus an EIS is not required.

Public Involvement

This project was posted on the WRFO's on-line National Environmental Policy Act (NEPA) register on January 30, 2015. No comments or inquiries have been received.

Rationale

Analysis of the Proposed Action has concluded that there are no significant negative impacts and that it meets Colorado Standards for Public Land Health.

The storage yard had become an area used to store not only equipment, but also scrap and other debris. The yard had expanded outside its original boundaries and onto two adjacent abandoned well locations. Equipment was being stored from not only this lease, but from all nearby Curton Capital leases. The pipeline installation will allow for the temporary tank on the Murphy A-4 to be removed, and product will be piped to the A-2 location; three pads will be using the tanks on the one location: resulting in the Murphy A-4 location to undergo interim reclamation.

Monitoring and Compliance

On-going compliance inspections and monitoring of drilling, production, and post-production activities will be conducted by White River Field Office staff during construction of well pads, access roads, and pipelines. The Operator will be notified of compliance related issues in writing, and depending on the nature of the issue(s), will be provided 30 days to resolve such issues.

Administrative Remedies

There are different administrative remedy processes for authorizations issued under the authority of 43 CFR 3100 (on-lease oil and gas development) or 43 CFR 2800 (rights-of-way).

On-Lease or On-Unit Activities

State Director Review

Under regulations addressed in 43 CFR 3165.3(b), any adversely affected party that contests a decision of the Authorized Officer may request an administrative review, before the State Director, either with or without oral presentation. Such request, including all supporting documentation, shall be filed in writing with the BLM Colorado State Office at 2850 Youngfield Street, Lakewood, Colorado 80215 within 20 business days of the date such decision was received or considered to have been received. Upon request and showing of good cause, an extension may be granted by the State Director. Such review shall include all factors or circumstances relevant to the particular case.

Appeal

Any party who is adversely affected by the decision of the State Director after State Director review, under 43 CFR 3165.3(b), of a decision may appeal that decision to the Interior Board of Land Appeals pursuant to the regulations set out in 43 CFR Part 4.

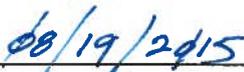
Off-Lease or Off-Unit Activities Requiring a Right-of-Way Grant

This decision shall take effect immediately upon the date it is signed by the Authorized Officer and shall remain in effect while any appeal is pending unless the Interior Board of Land Appeals issues a stay (43 CFR 2801.10(b)). Any appeal of this decision must follow the procedures set forth in 43 CFR Part 4. Within 30 days of the decision, a Notice of Appeal must be filed in the office of the Authorized Officer at White River Field Office, 220 East Market St., Meeker, CO 81641 with copies sent to the Regional Solicitor, Rocky Mountain Region, 755 Parfet St., Suite 151, Lakewood, CO 80215, and to the Department of the Interior, Board of Land Appeals, 801 North Quincy St., MS300-QC, Arlington, VA, 22203. If a statement of reasons for the appeal is not included with the notice, it must be filed with the Interior Board of Land Appeals at the above address within 30 days after the Notice of Appeal is filed with the Authorized Officer.

Signature of Authorized Official



Field Manager



Date



The first part of the document discusses the importance of maintaining accurate records of all transactions. It emphasizes that every entry should be supported by a valid receipt or invoice. This not only helps in tracking expenses but also ensures compliance with tax regulations.

In the second section, the author outlines the various methods used to collect and analyze data. These include direct observation, interviews, and the use of specialized software tools. Each method has its own set of advantages and limitations, and the choice of which to use depends on the specific requirements of the study.

The third part of the document focuses on the results of the research. It presents a series of tables and graphs that illustrate the trends and patterns observed in the data. The findings suggest that there is a significant correlation between the variables being studied, and this relationship can be used to make informed decisions in the future.

Finally, the document concludes with a summary of the key points and a list of references. It acknowledges the limitations of the study and suggests areas for further research. The author expresses their gratitude to the participants and the funding organization for their support.

