

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

ENVIRONMENTAL ASSESSMENT

NUMBER: DOI-BLM-CO-110-2010-0143-EA

CASEFILE/PROJECT NUMBER: FEE (8,700 ft) and COD-0032683A (1,300 ft)

PROJECT NAME: Produced Water Line- Emerald 56X to near Main Water Plant

LEGAL DESCRIPTION: T2N, R102W, Sections 30, 31, and 32, 6th PM

APPLICANT: Chevron USA, Inc.

ISSUES AND CONCERNS: None

DESCRIPTION OF PROPOSED ACTION AND ALTERNATIVES:

Background/Introduction: This proposal is located partially within the original 40 ft right-of-way (ROW) that was approved, and partially in an area of new disturbance due to an off-set of 15-20 ft. The majority of the proposed new line is located on private surface (8,700 ft) with only a small segment (1,300 ft) of the route crossing over the Bureau of Land Management (BLM) surface in sections 30 and 31 of T2N, R102W.

Proposed Action: Chevron USA, Inc. (hereafter Chevron) proposes to install a new produced water line that would replace the existing line. This is a main produced water trunk line for the Rangely Weber Sand Unit field, and would transport produced water from a central part of the field near well location Emerald 56x (T2N, R102W, Section 30, SESW) to a common header manifold south of the Main Water Plant (T2N, R102W, Section 32, NESE). Currently, the existing line has many small leaks, which necessitates the replacement of this line. The existing line would be left in place, and the new line would be installed approximately 15-20 ft offset the existing line. The old line would be flushed with fresh water, with both ends capped and abandoned in place.

The new line would consist of 16 inch steel pipe with a poly pipe internal lining. The line will be buried within a new typical right-of-way of 40 ft to a depth of 42 inches. The total length of the line will be approximately 10,000 ft; of which **1,300 ft is on BLM surface** and 8,700 ft is on Private surface.

No Action Alternative: The proposed produced water line installation would be denied.

ALTERNATIVES CONSIDERED BUT NOT CARRIED FORWARD: None

PURPOSE & NEED FOR THE ACTION: The purpose of the proposed action is to manage the exploration and development of mineral resources on Public Lands in a manner that avoids, minimizes, reduces, or mitigates potential impacts to other resource values.

The purpose of the action is to provide the opportunity to transport produced water across BLM surface. The need for the action is established under the authority of the Federal Land Policy and Management Act of 1976 (FLPMA) to respond to the request to transport produced water across BLM surface.

Decision to be Made: The BLM will decide whether or not to approve the produced water line installation, and if so, under what conditions.

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

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

Date Approved: July 1, 1997

Decision Number/Page: 2-5

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

**AFFECTED ENVIRONMENT / ENVIRONMENTAL CONSEQUENCES /
MITIGATION MEASURES**

STANDARDS FOR PUBLIC LAND HEALTH: In January 1997, Colorado Bureau of Land Management (BLM) approved the Standards for Public Land Health. These standards cover upland soils, riparian systems, plant and animal communities, threatened and endangered species, and water quality. Standards describe conditions needed to sustain public land health and relate to all uses of the public lands. Because a standard exists for these five categories, a finding must be made for each of them in an environmental analysis. These findings are located in specific elements listed below:

NATURAL, BIOLOGICAL, AND CULTURAL RESOURCES

AIR QUALITY

Affected Environment: This proposed action is located in rural northwest Colorado in the White River Basin, more than ten miles from special designation air sheds or non-attainment areas. Industrial facilities in White River Basin include coal mines, soda ash mines, natural gas processing plants and power plants. The White River Basin has been classified as either attainment or unclassified for all air pollutants National Ambient Air Quality and Colorado Ambient Air Quality (NAAQS and CAAQS) standards, and most of the area has been designated for the prevention of significant deterioration class II for the prevention of significant deterioration (PSD) areas nearby at Dinosaur National Monument. Because the historic air quality in the White River Basin has been good, small changes in air quality may have noticeable localized effects, especially on visibility.

Environmental Consequences of the Proposed Action: Pipeline installation will require removing topsoil over the trench, trenching and soil storage, installation of the pipeline, refilling the trench, spreading the topsoil, reclamation and installation of stormwater BMPs as needed. As vegetation establishes in the reclaimed areas, the only dust production that is likely is due to vehicles traveling into sites for pipeline maintenance.

The proposed action would result in very minor increases in the level of inhalable particulate matter during installation and construction, specifically particles ten microns or less in diameter (PM₁₀) associated with fugitive dust. In addition, increases in the following criteria pollutants: carbon monoxide, ozone (secondary pollutant), nitrogen dioxide, and sulfur dioxide would also occur due to combustion of fossil fuels during installation and recoat activities. Non-criteria pollutants such as visibility, nitric oxide, air toxics (e.g. benzene) and total suspended particulates (TSP) may also experience slight, temporary increases as a result of the Proposed Action (no national ambient air quality standards have been set for non-criteria pollutants). Even with these increased pollutants, this project is unlikely to result in an exceedance of NAAQ and CAAQ standards and is likely to be under PSD thresholds.

Environmental Consequences of the No Action Alternative: No impacts would occur

Mitigation: None Identified

SOILS

Affected Environment: This area is almost entirely in soils identified as being saline with extensive disturbance in and near the proposed pipeline right of way (ROW). Many of these areas have poor and saline soils that would likely be difficult to reclaim, soil types are shown below.

Soil Classifications within 30 Meters of the Project (greater than 1 Acre in size)

Soil Classification	Range Site Description	Potentially Impacted
Chipeta silty clay loam, 3-25% slopes	Clayey Saltdesert	28
Billings-Torrifluvents complex, gullied, 0-5% slopes	Alkaline Slopes	17

Environmental Consequences of the Proposed Action: The installation of the pipeline would result in the loss of vegetative cover, increasing the potential for water erosion and soil loss during excavation. Compaction due to construction activities would reduce aeration, permeability and water-holding capacities of the soils. An increase in surface runoff could be expected from these areas and they are likely to be less resilient to erosion from surface runoff, potentially causing increased sheet, rill and gully erosion. During reclamation activities surface runoff should be minimized through the site or the soils would become destabilized before reclamation succeeds.

Potential impacts to soils from the pipeline installation would include removal of vegetation, mixing of soil horizons, soil compaction, increased susceptibility to erosion, loss of topsoil productivity and contamination of soils with petroleum constituents. If reclamation is successful, impacts from this project will be minor and localized to disturbed areas. Many of these areas have saline and unstable soils that would likely be more difficult to reclaim. The use of the BLM seed mix number 1, specified in the vegetation section for reclamation activities will increase the likelihood of success. Some of the species such as Fourwing saltbush and Nutall saltbush are specifically suited to saline soils.

Contamination of surface and subsurface soils can occur from leaks or spills of chemicals during both activities fuels and lubricants and could also result in soil contamination. Such leaks or spills could compromise the productivity of the affected soils. Depending on the size and type of spill, the impact to soils would primarily consist of the loss of soil productivity. Typically contaminated soils would be removed and disposed of in a permitted facility or would be bioremediated.

Environmental Consequences of the No Action Alternative: Contamination of surface and subsurface soils can occur from leaks or spills of chemicals during both activities fuels and lubricants and could also result in soil contamination. Such leaks or spills could compromise the productivity of the affected soils. Depending on the size and type of spill, the impact to soils would primarily consist of the loss of soil productivity. Typically contaminated soils would be removed and disposed of in a permitted facility or would be bioremediated.

Mitigation: The following should be attached as conditions of approval.

- 1) All construction and drilling activity shall cease when soils or road surfaces become saturated to a depth of three inches unless there are safety concerns or activities are otherwise approved by the Authorized Officer.

- 2) If salt is observed on the surface of soils during reclamation activities the AO will be notified and a plan will be developed with approval of the BLM to improve reclamation on the site.
- 3) If erosion features such as riling, gullyng, piping and mass wasting occur on disturbed surfaces subject to reclamation, the erosion features will be addressed immediately after observation by contacting the AO and submitting a plan to assure successful soil stabilization with BMPs to address the erosion problems.

Finding on the Public Land Health Standard for upland soils: With mitigation this action is unlikely to reduce the productivity of soils impacted by surface disturbing activities.

WASTES, HAZARDOUS OR SOLID

Affected Environment: There are no known hazardous or other solid wastes on the subject lands. No hazardous materials are known to have been used, stored, or disposed of at sites included in the project area. The operator does not identify in their APD submissions any hazardous substances to be used during operations associated with this project.

Environmental Consequences of the Proposed Action: No listed or extremely hazardous materials in excess of threshold quantities are proposed for use in this project. While commercial preparations of fuels and lubricants proposed for use may contain some hazardous constituents, they would be stored, used, and transported in a manner consistent with applicable laws such that generation of hazardous wastes is not anticipated. All left-over chemicals and materials will be hauled off-site for use or disposal. Solid wastes would be properly disposed of off-site at an approved facility.

Accidental releases associated with equipment failures, equipment maintenance and refueling, and storage of fuel, oil, other fluids, and chemicals could cause soil, surface water, and/or groundwater contamination. With implementation of the mitigation measures described below, impacts would likely be temporary.

Environmental Consequences of the No Action Alternative: No hazardous or other solid wastes would be generated under the no-action alternative. Accidental releases of produced water are likely to occur under the no-action alternative as a result of not replacing the existing pipes which are currently leaking.

Mitigation: The following items should be added as conditions of approval.

1. The release of any chemical, oil, petroleum product, produced water, or sewage, etc, must be contained immediately, cleaned up as soon as possible, and reported by the project proponent to the Bureau of Land Management according requirements specified in the Notice to Lessees and Operators of Onshore Federal and Indian Oil and Gas Leases (NTL-3A).

WATER QUALITY, SURFACE AND GROUND (includes a finding on Standard 5)

Affected Environment: The pipeline installation is within the Stinking Water Creek watershed which is a tributary to the White River. Stinky Water Creek is in Segment 22 which includes all tributaries to the White River from a point above Douglas Creek to the Utah border. This section is use-protected and is classified for the protection of aquatic life warm 2, primary contact recreation, and agriculture.

Environmental Consequences of the Proposed Action: Potential impacts to the surface waters include increased runoff; increased erosion and sedimentation due to soil disturbance associated with construction activities. The magnitude of the impacts to surface water resources would depend on the proximity of the disturbance to drainage channels; slope, aspect and gradient; degree and area of soil disturbance; soil character; duration of construction activities; and the timely implementation and success/failure of mitigation measures.

Environmental Consequences of the No Action Alternative: No impacts identified.

Mitigation: The following should be attached as conditions of approval.

1. Provide for erosion-resistant surface drainage by adding necessary drainage facilities and armoring prior to fall rain or snow. When erosion is anticipated, sediment barriers shall be constructed to slow runoff, allow deposition of sediment, and prevent it from leaving the site. In addition, straining or filtration mechanisms may also contribute to sediment removal from runoff.

Finding on the Public Land Health Standard for water quality: It is unlikely that the pipeline installation would result in an exceedence of state water quality standards. Cumulative impacts from this activity and others may eventually impact sediment yields to the degree that they impact listing.

WETLANDS AND RIPARIAN ZONES (includes a finding on Standard 2)

Affected Environment: The nearest known system which supports riparian habitat is the White River, which is separated from the project area by over three miles of ephemeral channel (privately owned). The nearest BLM-administered reach of the White River is located over five miles from the project area.

Environmental Consequences of the Proposed Action: The pipeline installation would have no direct impact on riparian or wetland resources. With the application of BMPs associated with soil erosion there is no reasonable likelihood that fugitive sediments would have any influence on the function or condition of the White River or its associated riparian resources.

Environmental Consequences of the No Action Alternative: There would be no action authorized that would have any direct or indirect influence on downstream riparian habitats.

Mitigation: None

Finding on the Public Land Health Standard for riparian systems: The nearest BLM-administered reach is approximately five miles from the project area. Neither the proposed or no-action alternative would have any reasonable potential to influence the function or condition of the White River or its riparian values.

VEGETATION (includes a finding on Standard 3)

The proposed action is located within Alkaline Slope and Clayey Saltdesert ecological sites, which are dominated by salt tolerant vegetation. The dominate plant community for these sites consist of greasewood (*Sarcobatus vermiculatus*) and various saltbrushes such as shadscale (*Atriplex confertifolia*), Gardner saltbrush (*Atriplex gardneri*), mat saltbush (*Atriplex corrugate*), and fourwing saltbrush (*Atriplex canescens*). Other brushes intermixed in the area are rabbitbrush (*Chrysothamnus viscidiflorus*) and big sagebrush (*Artemisia tridentata*). The understory of these shrubs is dominated by western wheatgrass (*Agropyron smithii*), Colorado wildrye (*Elymus salinus*), and squirreltail (*Sitanion hystrix*). Cheatgrass (*Bromus tectorum*) is an undesirable, invasive, and alien plant species that is present within the locality of the proposed action.

Drought conditions are very prevalent within the Coal Oil Basin area, which has hampered the successful establishment of reclaimed plant species of other projects in this area. Therefore, undesirable and invasive annual plant species (i.e. halogeton (*Halogeton glomeratus*), cheatgrass) have become dominate in portions of previously disturbed areas which provide little resource value and hinder efforts to meet Public Land Health Standards.

Environmental Consequences of the Proposed Action: The proposed action would disturb a mid to low seral class of desert shrub community for a total of 1.19 acres. The short-term soil and vegetation disturbances would be offset in the long-term by reclaiming the disturbed area with a seed mix that is suited for this ecological site. As this area has a component of cheatgrass and halogeton within the plant community, successful re-vegetation efforts would slightly increase desirable plant species within the rangelands.

Previously this area has entailed considerable impacts from oil and gas activities from a network of well pads, pipeline corridors, and access roads, which have resulted in a fragmentation and reduction of available, productive ecological sites.

Environmental Consequences of the No Action Alternative: None

Mitigation: Promptly revegetate all disturbed areas associated with the proposed action, including all cut and fill slopes and topsoil stockpiles, with Standard Seed Mix #1 of the White River ROD/RMP (B-19, Appendix B). Seeding rates in the White River ROD/RMP are shown as pounds of Pure Live Seed (PLS) per acre and apply to drill seeding. For broadcast application, double the seeding rate and then harrow to insure seed coverage. Applied seed must

be certified and free of noxious weeds and seed certification tags must be submitted to the Field Manager within 14 days of seeding.

The applicant will be responsible for eradicating cheatgrass, noxious weeds, and/or problem weeds should they occur and/or increase in density as a result of the proposed action. The applicant will use materials and methods as outlined in the White River ROD/RMP or authorized in advance by the authorized officer (AO).

Finding on the Public Land Health Standard for plant and animal communities (partial, see also Wildlife, Aquatic and Wildlife, Terrestrial): The proposed action would disturb a small segment of the Alkaline Slope and Clayey Salt-desert ecological sites. Therefore, the action would further fragment these areas to a minimal degree.

Early seral ecological sites associated with the proposed action lacks desirable plant species at an appreciable density and frequency level, thus are not meeting standards. This is due to the prevalence of cheatgrass and halogeton within the vegetative understory. A slight positive benefit would be received through a successful re-vegetation effort, thus increasing preferred plant species within this low producing rangeland. Mid seral ecological sites at the proposed action locality have acceptable components within the plant community and are meeting standards.

INVASIVE, NON-NATIVE SPECIES

Affected Environment: The proposed action is located within Alkaline Slope and Clayey Salt-desert ecological sites, which are dominated by salt tolerant vegetation. The dominate plant community for these sites consist of greasewood, and various saltbrushes such as shadscale, Gardner saltbrush, mat saltbush, and fourwing saltbrush. The understory of these shrubs is dominated by western wheatgrass, Colorado wildrye, and squirrel-tail. Cheatgrass is an undesirable, invasive, and alien plant species that is present within the locality of the proposed action.

Noxious/invasive weeds which occur in the area include halogeton and cheatgrass. Both of these species are highly adapted to disturbed soils.

Drought conditions are very prevalent within the Coal Oil Basin area, which has hampered the successful establishment of reclaimed plant species of other projects in this area. Therefore, undesirable and invasive annual plant species (i.e. halogeton, cheatgrass) have become dominate in portions of previously disturbed areas which provide little resource value and hinder efforts to meet Public Land Health Standards.

Environmental Consequences of the Proposed Action: Both of the weed species found in the area are effectively controlled by establishment of seeded species within disturbed areas. The proposed seed mix, which includes non-native species, is recommended because its associated plant species are highly adapted to this site and offer the greatest opportunity to

establish vegetation cover and the resultant soil stabilization, thereby providing a competitive interaction between seeded species and noxious/invasive weeds.

There is always the opportunity for other noxious weed species to be transported onto the proposed action locations by construction and support equipment

Prompt reclamation with successful establishment would prevent cheatgrass and halogeton from establishing on disturbed sites. If other noxious weeds were to invade the site, prompt control would prevent movement to the adjacent plant communities.

Environmental Consequences of the No Action Alternative: None

Mitigation: Use standard seed mix #1 for reclamation. The applicant will be responsible for eradicating cheatgrass, noxious weeds, and/or problem weeds should they occur and/or increase in density as a result of the proposed action. The applicant will use materials and methods as outlined in the RMP or authorized in advance by the AO. Application of herbicides must be under field supervision of an EPA certified pesticide applicator. Herbicides must be registered by the EPA and pesticide use proposals (PUP's) must be approved by the BLM.

THREATENED, ENDANGERED, AND SENSITIVE PLANT SPECIES (includes a finding on Standard 4)

Affected Environment: There are no plant species listed, proposed, or candidate to the Endangered Species Act, or plants considered sensitive by the BLM, that are known to inhabit areas influenced by the proposed action.

Environmental Consequences of the Proposed Action: The proposed action should have no influence on special status plant species or associated habitats.

Environmental Consequences of the No Action Alternative: The no action alternative should have no influence on special status plant species or associated habitats.

Mitigation: None

Finding on the Public Land Health Standard for Threatened & Endangered species: The proposed and no-action alternatives should have no influence on 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.

THREATENED, ENDANGERED, AND SENSITIVE ANIMAL SPECIES (includes a finding on Standard 4)

Affected Environment: The project area is broadly encompassed by white-tailed prairie dog habitat. Prairie dogs and their burrow systems are important components of burrowing owl

habitat, as well as potential habitat for reintroduced populations of black-footed ferret. Burrowing owls, a State threatened species are uncommon in this Resource Area. These birds return to occupy a maintained burrow system in early April and begin nesting soon after. Most birds have left the area by September. The nearest known burrowing owl nest is located nearly three miles from the project area.

Under the auspices of a non-essential, experimental population rule, black-footed ferrets have been released annually in Coyote Basin (eight miles southwest) and Wolf Creek (13 miles northeast) of Rangely Oil Field since 1999 and 2001, respectively. The rule applies to any ferrets that may occupy or eventually be released in northwest Colorado and northeast Utah. Although there is no direct continuity between Coyote Basin or Wolf Creek and the project site (i.e., lesser physical barriers and habitats unoccupied by prairie dog) there is a strong likelihood that ferrets have colonized and successfully breed in Rangely Oil Field. Ferrets are wholly reliant on prairie dogs for food and shelter. Ferret breeding activities begin in early March, with birthing beginning in early May. Young ferrets generally begin to emerge by mid-July. There have been no verified sightings of ferrets, nor any known reproduction occurring in Rangely Oil Field.

Ferruginous hawks, a BLM sensitive species, are commonly associated with prairie dog communities. The nearest known nest, which has not been active within the past two decades, is located nearly eight miles from the project area.

Brewer's sparrow, recently recognized as a BLM sensitive species, are common throughout the oil field where appropriate habitat exists (sagebrush communities). The vegetation communities that are involved with the proposed action are predominately salt desert shrub types which typically do not provide suitable nesting habitat for this species. Any involvement with sagebrush types would be nominal.

The Colorado pikeminnow is listed as endangered under the Endangered Species Act. The White River and its 100-year flood plain from Rio Blanco Lake Dam to the confluence with the Green River are designated as critical habitat, although present occupation is confined to the reach below the Taylor Draw dam. The project area is separated by over three miles of ephemeral channel from the White River.

Environmental Consequences of the Proposed Action: This project would have no short or long term influence on prairie dog abundance or distribution by itself or as habitat for black-footed ferret or burrowing owl. Prairie dogs use if often concentrated along existing pipeline corridors. Offsetting the proposed pipeline right-of-way 15-20 feet effectively avoids most prairie dogs burrows. It is highly unlikely that any subsurface disturbance associated with this proposed action would intersect a prairie dog burrow system occupied by a ferret. Prompt and effective pipeline reclamation would provide an herbaceous component that would benefit white-tailed prairie dogs, their associates and other resident wildlife.

Installation of the proposed pipeline would have no direct or indirect impact on Colorado pikeminnow or designated critical habitat. With the application of best management practices (BMPs) associated with soil erosion there is no reasonable likelihood that fugitive sediments

would have any influence on the function or condition of the White River (< three miles from project area), its aquatic wildlife or associated habitats.

Environmental Consequences of the No Action Alternative: There would be no potential influence on threatened, endangered or BLM sensitive animal species under the no action alternative.

Mitigation: All flowlines and rights-of-way involved in this action will be reclaimed and reseeded with the appropriate seed blend recommended by the Authorized Officer.

Finding on the Public Land Health Standard for Threatened & Endangered species: Public Land Health Standards for those special status species associated with white-tailed prairie dogs, including black-footed ferret and burrowing owl, in addition to Brewer's sparrow in the Rangely Oil Field are currently met. As conditioned, this project would have no adverse influence on populations, available extent of suitable habitat, or the reproductive activities of these five species. Thus, there would be no influence on meeting the land health standard. Small incremental gains in perennial grass cover associated with successful reclamation and subsurface tillage associated with flowline installation may be expected to bolster local populations of prairie dogs and potentially benefit individual burrowing owl and black-footed ferret—effects consistent with continued meeting of the Land Health Standards.

MIGRATORY BIRDS

Affected Environment: The project area is encompassed by arid salt desert shrublands consisting principally of shadscale, matt and Gardner saltbush, rabbitbrush and snakeweed. Herbaceous groundcover is a mix of perennial grasses, with a heavy cheatgrass component. These salt desert communities typically support several migratory bird species which fulfill nesting functions between late-May through mid-July including vesper and sage sparrow, western meadowlark, sage thrasher and horned lark. The majority of earthwork associated with the proposed action will occur on or immediately adjacent to previously disturbed areas (existing right-of-way).

Environmental Consequences of the Proposed Action: Earthwork associated with the proposed action will occur outside the migratory bird breeding season and as such would have no direct influence on nesting success/outcomes. The proposed action will remove approximately 1.2 acres (BLM administered land) of desert shrubland communities and herbaceous understory, much of which is in a degraded state. Any involvement with suitable nest habitat would be minor, as these community types comprise about 10,000 acres in Rangely Oil Field. Prompt and effective reclamation of the pipeline right-of-way would provide the opportunity to increase perennial grass cover in the short term (1-3 years), benefiting grassland/ground nesting species in addition to all resident wildlife.

Environmental Consequences of the No Action Alternative: There would be no action authorized that would have potential to influence the reproductive activities or habitat of migratory birds.

Mitigation: See mitigation in the Threaten, Endangered and Sensitive (TES) species section above.

WILDLIFE, AQUATIC (includes a finding on Standard 3)

Affected Environment: The project area is separated by over three miles of ephemeral channel from the White River. Nearly all of the White River, the closest system that supports native fisheries and higher order aquatic populations, is privately owned. The closest public-administered reach is located approximately five miles downstream from the project area. The White River provides habitat for several fish species including: speckled dace, flannelmouth sucker, roundtailed chub (both BLM sensitive species) and Colorado pikeminnow (see discussion in TES section).

Environmental Consequences of the Proposed Action: Installation of the proposed pipeline would have no direct impact on aquatic resources. With the application of best management practices (BMPs) associated with soil erosion there is no reasonable likelihood that fugitive sediments would have any influence on the function or condition of the White River, its aquatic wildlife or associated habitats.

Environmental Consequences of the No Action Alternative: There would be no action authorized that would have any direct or indirect influence on downstream aquatic wildlife or associated habitats.

Mitigation: None

Finding on the Public Land Health Standard for plant and animal communities (partial, see also Vegetation and Wildlife, Terrestrial): The nearest BLM-administered reach is approximately five miles from the project area. Neither the proposed or no-action alternative would have any reasonable potential to influence the function or condition of the White River or its aquatic habitat values.

WILDLIFE, TERRESTRIAL (includes a finding on Standard 3)

Affected Environment: This heavily developed portion of Coal Oil Basin is inhabited year-round by a small resident herd of pronghorn. These animals are acclimated to routine oil and gas production activities. A number of raptors forage opportunistically throughout Coal Oil Basin, the most common being rough-legged hawks, red-tailed hawks, and golden eagle. The project area and the surrounding area provide no special or unique habitat features for nesting raptors.

Environmental Consequences of the Proposed Action: This project, as mitigated, would have no conceivable adverse consequences on big game distribution or habitat quality. Right-of-way reclamation normally provides herbaceous forage opportunity in excess of that previously

existing and in many cases will replace cheatgrass and halogeton-dominated understories almost immediately after construction is complete. While surface disturbance would cause a longer-term reduction in woody forage supply, the incremental shrub reductions are wholly insignificant with respect to the available forage base. Standard reclamation procedures would provide the opportunity to increase the perennial grass component on the corridor in the short term (1-3 years), increasing ground cover and seed production and prolonging the availability of green herbaceous forage for resident big and non-game animals.

Environmental Consequences of the No Action Alternative: There would be no potential influence on big game distribution or habitat quality in the case of a no action alternative.

Mitigation: See mitigation in TES section.

Finding on the Public Land Health Standard for plant and animal communities (partial, see also Vegetation and Wildlife, Aquatic): Much of the ground cover within the Rangely Field is dominated by annual weeds. Although these sites in and of themselves cannot be considered meeting the definition of the land health standard, the majority of the shrubland communities comprising this landscape likely retain sufficient character to support viable populations of resident wildlife, although likely at populations reduced from potential. Subsequent reclamation offers an opportunity to reestablish herbaceous forage and cover conditions (i.e., redevelopment of a perennial bunchgrass component) more consistent with the proper functioning of these arid salt desert communities as wildlife habitat, thus better opportunity to meet the land health standard.

CULTURAL RESOURCES

Affected Environment: The proposed pipeline is located in the Rangely Field an oil producing area that has been in production for many decades. The area was examined for cultural resources in 1980 at which time it was determined that much of the surface had been extensively damaged by oil field activities and collector activities by oil field workers (Larralde 1981). The closest known resource to the pipeline is the old Raven Oil Company Camp dating to about the 1940's. The site has been heavily vandalized and impacted by construction and was evaluated as not eligible for nomination to the National Register during the field evaluation (Larralde 1981). There are no other known resources near the proposed pipeline project.

Environmental Consequences of the Proposed Action: The proposed pipeline replacement will not be near any known eligible cultural resources. The one resource that is located within an estimated 308 meters has been determined to be ineligible for nomination to or listing on the NRHP due to extensive vandalism and damage from oil field development and should not be impacted by the project.

Environmental Consequences of the No Action Alternative: There would be no new impacts to any cultural resources under the No Action Alternative.

Mitigation: The following should be added as conditions of approval:

- 1) The operator is responsible for informing all persons who are associated with the project operations that they will be subject to prosecution for knowingly disturbing historic or archaeological sites, or for collecting artifacts. If historic or archaeological materials are uncovered during any project or construction activities, the operator is to immediately stop activities in the immediate area of the find that might further disturb such materials, and immediately contact the authorized officer (AO). Within five working days the AO will inform the operator as to:
 - whether the materials appear eligible for the National Register of Historic Places
 - the mitigation measures the operator will likely have to undertake before the site can be used (assuming in situ preservation is not necessary)
 - a timeframe for the AO to complete an expedited review under 36 CFR 800-11 to confirm, through the State Historic Preservation Officer, that the findings of the AO are correct and that mitigation is appropriate.

If the operator wishes, at any time, to relocate activities to avoid the expense of mitigation and/or the delays associated with this process, the AO will assume responsibility for whatever recordation and stabilization of the exposed materials may be required. Otherwise, the operator will be responsible for mitigation cost. The AO will provide technical and procedural guidelines for the conduct of mitigation. Upon verification from the AO that the required mitigation has been completed, the operator will then be allowed to resume construction.

- 2) Pursuant to 43 CFR 10.4(g) the holder of this authorization must notify the AO, by telephone, with 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), you must stop activities in the vicinity of the discovery and protect it for 30 days or until notified to proceed by the authorized officer.

PALEONTOLOGY

Affected Environment: The portion of the pipeline that is located in the east half of section 32 is located in an area generally mapped as Quaternary Alluviums (Tweto 1979). The rest of the pipeline is located in an area generally mapped as Mancos Shale (Tweto 1979). The BLM WRFO has classified the Quaternary Alluviums as a PFYC 1 formation indicating that it is not considered to produce scientifically important fossil resources. The Mancos Shale is known, from other regions, to produce vertebrate fossils such as sharks, mosasaurs, and plesiosaurs; none of these species are known from the Rangely area. Mancos shale also produces large quantities marine invertebrates such as clams and oysters (Armstrong and Wolny 1989) therefore the formation is considered a PFYC 3 formation in WRFO.

Environmental Consequences of the Proposed Action: It is unlikely that the proposed action will impact any scientifically important fossil resources.

Environmental Consequences of the No Action Alternative: There would be no new impacts to fossil resources under the No Action Alternative.

Mitigation: The following should be added as a condition of approval:

- 1) The operator is responsible for informing all persons who are associated with the project operations that they will be subject to prosecution for knowingly disturbing paleontological sites, or for collecting fossils. If fossil materials are uncovered during any project or construction activities, the operator is to immediately stop activities in the immediate area of the find that might further disturb such materials, and immediately contact the authorized officer (AO). Within five working days the AO will inform the operator as to:
 - whether the materials appear to be of noteworthy scientific interest
 - the mitigation measures the operator will likely have to undertake before the site can be used (assuming in situ preservation is not feasible)

If the operator wishes, at any time, to relocate activities to avoid the expense of mitigation and/or the delays associated with this process, the AO will assume responsibility for whatever recordation and stabilization of the exposed materials may be required. Otherwise, the operator will be responsible for mitigation cost. The AO will provide technical and procedural guidelines for the conduct of mitigation. Upon verification from the AO that the required mitigation has been completed, the operator will then be allowed to resume construction.

ELEMENTS NOT PRESENT OR NOT AFFECTED:

No flood plains, prime and unique farmlands, exist within the area affected by the proposed action. There are also no Native American religious or environmental justice concerns associated with the proposed action.

OTHER ELEMENTS: For the following elements, only those brought forward for analysis will be addressed further.

Other Element	NA or Not Present	Applicable or Present, Not Brought Forward for Analysis	Applicable & Present and Brought Forward for Analysis
Visual Resources			X
Fire Management		X	
Forest Management	X		
Hydrology/Water Rights	X		
Rangeland Management		X	
Wild Horses	X		
Realty Authorizations		X	
Recreation	X		

Other Element	NA or Not Present	Applicable or Present, Not Brought Forward for Analysis	Applicable & Present and Brought Forward for Analysis
Access and Transportation		X	
Geology and Minerals	X		
Areas of Critical Environmental Concern	X		
Wilderness	X		
Wild and Scenic Rivers	X		
Cadastral	X		
Socio-Economics		X	
Law Enforcement		X	

VISUAL RESOURCES

Affected Environment: The proposed action is located within a Visual resource Management (VRM) IV classified area. The visual resource objective within VRM Class IV areas is to provide for activities that may have major modifications to the character of the landscape and to the casual observer the activities may attract attention and may dominate the view but they are mitigated to lessen the visual impact.

Environmental Consequences of the Proposed Action: The area of the proposed action has a history of oil drilling and the presence of the required infrastructure to develop this resource. The main time of visual impact is during the construction of the pipeline when the heavy equipment required for completing the task will contrast in color with the surrounding area and the activity will generate dust. Traffic on the natural surface and graveled roads will also generate dust which will be visible to the casual observer traveling Colorado State Highway 64. The disturbance that is generated as a result of the proposed action will add to the overall disturbance of the area but the added presence of disturbance related to development will not dominate the view. Because the disturbance is related to the pipeline and there is no above ground features, the level of change to the characteristic landscape would be low, and the objectives of the VRM IV classification would be retained.

Environmental Consequences of the No Action Alternative: Under this alternative there would be no addition impacts to the visual resources.

Mitigation: None

CUMULATIVE IMPACTS SUMMARY: This action is consistent with the scope of impacts addressed in the White River ROD/RMP. The cumulative impacts of oil and gas activities are addressed in the White River ROD/RMP for each resource value that would be affected by the proposed action.

REFERENCES CITED:

Armstrong, Harley J, and David G. Wolny
 1989 Paleontological Resources of Northwest Colorado: A Regional Analysis. Museum of Western Colorado, Grand Junction, Colorado.

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.

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

PERSONS / AGENCIES CONSULTED: Rio Blanco County, Colorado Division of Wildlife

INTERDISCIPLINARY REVIEW: The proposed action was presented to, and reviewed by the White River Field Office interdisciplinary team on 04/13/2010.
 Date

Name	Title	Area of Responsibility	Date Signed
Bob Lange	Hydrologist	Air Quality, Wastes (Hazardous or Solids), Water Quality (Surface and Ground), Hydrology and Water Rights, and Soils	7/9/2010
Jill Schulte	Botanist	Areas of Critical Environmental Concern, Threatened and Endangered Plant Species	5/24/10
Matthew Dupire	Rangeland Management Specialist	Invasive, Non-Native Species, Vegetation , Rangeland Management	06/14/2010
Lisa Belmonte	Wildlife Biologist	Migratory Birds, Threatened, Endangered and Sensitive Animal Species, Terrestrial and Aquatic Wildlife, Wetlands and Riparian Zones	07.06.10
Jim Michels	Outdoor Recreation Planner	Wilderness, Access and Transportation, Recreation,	6/29/2010
Jim Michels	Forester /Fire / Fuels Technician	Fire Management, Forest Management	6/29/2010
Paul Daggett	Mining Engineer	Geology and Minerals	06/24/2010
Linda Jones	Realty Specialist	Realty Authorizations	7/9/2010
Jim Michels	Natural Resource Specialist / Outdoor Recreation Planner	Visual Resources	6/29/2010
Melissa J. Kindall	Range Technician	Wild Horse Management	04/20/10

Finding of No Significant Impact/Decision Record (FONSI/DR)

DOI-BLM-CO-110-2010-0143-EA

FINDING OF NO SIGNIFICANT IMPACT (FONSI)/RATIONALE: The environmental assessment and analysis of the environmental effects of the proposed action have been reviewed. The approved mitigation measures (listed below) result in a Finding of No Significant Impact on the human environment. Therefore, an environmental impact statement is not necessary to further analyze the environmental effects of the proposed action.

DECISION/RATIONALE: It is my decision to approve the proposed action with the addition of the mitigation listed below.

MITIGATION MEASURES:

Resource Mitigation

Soils

- 1) All construction and drilling activity shall cease when soils or road surfaces become saturated to a depth of three inches unless there are safety concerns or activities are otherwise approved by the Authorized Officer
- 2) If salt is observed on the surface of soils during reclamation activities the AO will be notified and a plan will be developed with approval of the BLM to improve reclamation on the site.
- 3) If erosion features such as riling, gulying, piping and mass wasting occur on disturbed surfaces subject to reclamation, the erosion features will be addressed immediately after observation by contacting the AO and submitting a plan to assure successful soil stabilization with BMPs to address the erosion problems.

Wastes, Hazardous and Solid

- 4) The release of any chemical, oil, petroleum product, produced water, or sewage, etc, must be contained immediately, cleaned up as soon as possible, and reported by the project proponent to the Bureau of Land Management according requirements specified in the Notice to Lessees and Operators of Onshore Federal and Indian Oil and Gas Leases (NTL-3A).

Water Quality, Surface and Ground

- 5) Provide for erosion-resistant surface drainage by adding necessary drainage facilities and armoring prior to fall rain or snow. When erosion is anticipated, sediment barriers shall be constructed to slow runoff, allow deposition of sediment, and prevent it from leaving the site. In addition, straining or filtration mechanisms may also contribute to sediment removal from runoff.

Vegetation

- 6) Promptly revegetate all disturbed areas associated with the proposed action, including all cut and fill slopes and topsoil stockpiles, with Standard Seed Mix #1 of the White River ROD/RMP (B-19, Appendix B). Seeding rates in the White River ROD/RMP are shown as pounds of Pure Live Seed (PLS) per acre and apply to drill seeding. For broadcast application, double the seeding rate and then harrow to insure seed coverage. Applied seed must be certified and free of noxious weeds and seed certification tags must be submitted to the Area Manager within 14 days of seeding.
- 7) The applicant will be responsible for eradicating cheatgrass, noxious weeds, and/or problem weeds should they occur and/or increase in density as a result of the proposed action. The applicant will use materials and methods as outlined in the RMP or authorized in advance by the authorized officer (AO).

Invasive, Non-Native Species

- 8) The applicant will be responsible for eradicating cheatgrass, noxious weeds, and/or problem weeds should they occur and/or increase in density as a result of the proposed action. The applicant will use materials and methods as outlined in the White River ROD/RMP or authorized in advance by the White River Field Office Manager. Application of herbicides must be under field supervision of an EPA certified pesticide applicator. Herbicides must be registered by the EPA and pesticide use proposals (PUP's) must be approved by the BLM.

Threatened, Endangered, and Sensitive (TES) Species

- 9) All flowlines and rights-of-way involved in this action will be reclaimed and reseeded with the appropriate seed blend recommended by the Authorized Officer.

Paleontology

- 10) The operator is responsible for informing all persons who are associated with the project operations that they will be subject to prosecution for knowingly disturbing paleontological sites, or for collecting fossils. If fossil materials are uncovered during any project or construction activities, the operator is to immediately stop activities in the immediate area of the find that might further disturb such materials, and immediately contact the authorized officer (AO). Within five working days the AO will inform the operator as to:
 - whether the materials appear to be of noteworthy scientific interest
 - the mitigation measures the operator will likely have to undertake before the site can be used (assuming in situ preservation is not feasible)

If the operator wishes, at any time, to relocate activities to avoid the expense of mitigation and/or the delays associated with this process, the AO will assume responsibility for whatever recordation and stabilization of the exposed materials may be required. Otherwise, the operator will be responsible for mitigation cost. The AO will provide technical and procedural guidelines for the conduct of mitigation. Upon verification from the AO that the required mitigation has been completed, the operator will then be allowed to resume construction.

Cultural Resources

11) The operator is responsible for informing all persons who are associated with the project operations that they will be subject to prosecution for knowingly disturbing historic or archaeological sites, or for collecting artifacts. If historic or archaeological materials are uncovered during any project or construction activities, the operator is to immediately stop activities in the immediate area of the find that might further disturb such materials, and immediately contact the authorized officer (AO). Within five working days the AO will inform the operator as to:

- whether the materials appear eligible for the National Register of Historic Places
- the mitigation measures the operator will likely have to undertake before the site can be used (assuming in situ preservation is not necessary)
- a timeframe for the AO to complete an expedited review under 36 CFR 800-11 to confirm, through the State Historic Preservation Officer, that the findings of the AO are correct and that mitigation is appropriate.

If the operator wishes, at any time, to relocate activities to avoid the expense of mitigation and/or the delays associated with this process, the AO will assume responsibility for whatever recordation and stabilization of the exposed materials may be required. Otherwise, the operator will be responsible for mitigation cost. The AO will provide technical and procedural guidelines for the conduct of mitigation. Upon verification from the AO that the required mitigation has been completed, the operator will then be allowed to resume construction.

12) Pursuant to 43 CFR 10.4(g) the holder of this authorization must notify the AO, by telephone, with 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), you must stop activities in the vicinity of the discovery and protect it for 30 days or until notified to proceed by the authorized officer.

Notifications, Information Sharing, & SOPs

13) The *designated Natural Resource Specialist* will be notified 24 hours prior to beginning all construction-related activities associated with this project that result in disturbance of surface soils via email or by phone. Construction-related activities may include, but are not limited to, pad and road construction, clearing pipeline corridors, trenching, etc. Notification of all construction-related activities, regardless of size, that result in disturbance of surface soils as a result of this project is required.

14) In an attempt to track interim and final reclamation of federal actions related to the development of federal mineral resources, the operator shall provide the *designated Natural Resource Specialist* with geospatial data in a format compatible with the WRFO's ESRI ArcGIS Geographic Information System (GIS); GIS point and polygon features. These data will be used to accurately locate and identify all geographic as-built (i.e., constructed and design implemented) features associated with this project and included in the Application for Permit to Drill (APD) or Sundry Notice (SN), as appropriate.

- These data shall be submitted within 60 days of construction completion. If the operator is unable to submit the required information within the specified time period, the operator shall notify the *designated Natural Resource Specialist* via email or by phone, and provide justification supporting an extension of the required data submission time period.
- GIS *polygon* features may include, but are not limited to; full well pad footprints (including all stormwater and design features), constructed access roads/widths, existing roads that were upgraded/widths, and pipeline corridors.
- Acceptable data formats are: (1) corrected global positioning system (GPS) files with sub-meter accuracy or better; (2) ESRI shapefiles or geodatabases; or, (3) AutoCAD .dwg or .dxf files. If possible, both (2) and (3) should be submitted for each as-build feature. Geospatial data must be submitted in 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 shall include metadata, for each submitted layer, that conforms to the *Content Standards for Digital Geospatial Metadata* from the Federal Geographic Data Committee standards. Questions shall be directed to WRFO BLM GIS staff at (970) 878-3800.

If the operator is unable to send the data electronically, the operator shall submit the data on compact disk(s) to:

BLM, White River Field Office
 Attn: Natural Resource Specialist
 220 East Market Street
 Meeker, Colorado 81641

Internal and external review of the reporting process and the adequacy of the associated information to meet established goals will be conducted on an on-going basis. New information or changes in the reporting process will be incorporated into the request, as appropriate. Subsequent permit application processing may be dependent upon successful execution of this request, as stated above.

- 15) If for any reason the location or orientation of the geographic feature associated with the **proposed action changes**, the operator shall submit updated GIS “As-Built” data to *designated Natural Resource Specialist* within 7 calendar days of the change. This information shall be **submitted via Sundry Notice**.
- 16) The *designated Natural Resource Specialist* will be notified 24 hours prior to beginning all reclamation activities associated with this project via email or by phone. Reclamation activities may include, but are not limited to, seed bed preparation that requires disturbance of surface soils, seeding, constructing exclosures (e.g., fences) to exclude livestock from reclaimed areas.
- 17) All seed tags will be submitted to the *designated Natural Resource Specialist* within 14 calendar days from the time the seeding activities have ended via Sundry Notice. The sundry 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 well or well pad number associated with the seeding activity, if applicable, the name of the contractor that performed the work, his or 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, an estimate of the total acres seeded, an attached map that clearly identifies all disturbed areas that were seeded, and the date the seed was applied.

- 18) The Reclamation Status Report will be submitted electronically via email and as a hard-copy to WRFO Reclamation Coordinator, Brett Smithers (brett_smithers@blm.gov). Please submit the hardcopy to:

BLM, White River Field Office
220 East Market Street
Meeker, Colorado 81641
Attn: Brett Smithers

The Reclamation Status Report will be submitted annually for all actions that require disturbance of surface soils on BLM-administered lands as a result of the proposed action. Actions may include, but are not limited to, well pad and road construction, construction of ancillary facilities, or power line and pipeline construction. The Reclamation Status Report will be submitted by September 30th of each calendar year, and will include the well number, API number, legal description, UTM coordinates (using the NAD83 datum, Zone 13N coordinate system), project description (e.g., well pad, pipeline, etc.), reclamation status (e.g., Phase I Interim, Phase II Interim, or Final), whether the well pad or pipeline has been re-vegetated and/or re-contoured, percent of the disturbed area that has been reclaimed, method used to estimate percent area reclaimed (e.g., qualitative or quantitative), technique used to estimate percent area reclaimed (e.g., ocular, line-intercept, etc.), date seeded, photos of the reclaimed site, estimate of acres seeded, seeding method (e.g., broadcast, drilled, hydro-seeded, etc.), and contact information for the person(s) responsible for developing the report. The report will be accompanied with maps and GIS data showing each discrete point (i.e., well pad), polygon (i.e., area where seed was applied for Phase I and/or Phase II interim reclamation or area reclaimed for final reclamation), or polyline (i.e., pipeline) feature that was included in the report. Geospatial data shall be submitted: for each completed activity electronically to the designated BLM staff person responsible for the initial request and in accordance with WRFO geospatial data submittal standards (available from WRFO GIS Staff, or on the WRFO website). 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.

- 19) The operator will be required to meet with the WRFO reclamation staff in March or April of each calendar year and present a comprehensive work plan. The purpose of the plan is to provide information pertaining to reclamation activities that are expected to occur during the current growing season. Operators shall also provide a map that shows all reclamation sites where some form of reclamation activity is expected to occur during the current growing season.

COMPLIANCE/MONITORING: On-going compliance inspections and monitoring will be conducted by the BLM White River Field Office staff during and after construction. Specific mitigation developed in this document will be followed. 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.

NAME OF PREPARER: Briana Potts

NAME OF ENVIRONMENTAL COORDINATOR: Caroline Hollowed

SIGNATURE OF AUTHORIZED OFFICIAL:



Field Manager

DATE SIGNED:

07/16/2010

ATTACHMENTS: Project Map

Produced Water Line from Emerald 56X to Main Water Plant

