

U.S. Department of the Interior
Bureau of Land Management
White River Field Office
73544 Hwy 64
Meeker, CO 81641

ENVIRONMENTAL ASSESSMENT

NUMBER: CO-110-2006-041-EA

CASEFILE/PROJECT NUMBER (optional): COC69536

PROJECT NAME: Sonterra Energy Flowline

LEGAL DESCRIPTION: Sixth Principal Meridian, Colorado
T. 2 N., R. 97 W., Sec. 31 and 32
T. 1 N., R. 97 W., Sec. 4 and 5

APPLICANT: Sonterra Energy, L.L.C.

ISSUES AND CONCERNS (optional): None

DESCRIPTION OF PROPOSED ACTION AND ALTERNATIVES:

Background/Introduction: An Application for Transportation and Utility Systems and Facilities on Federal Lands (SF 299) has been submitted for a natural gas flowline.

Proposed Action: The proposed action is for the construction and operation of a natural gas flowline for Sonterra Energy, L.L.C.'s (Sonterra's) Federal 1-30 gas well to an existing flowline which originates from the Federal 22x17 well located in the SENW of section 17, Township 2 North, Range 97 West. The pipeline will be constructed entirely on Bureau of Land Management (BLM) land and will parallel BLM Road 1509 and Rio Blanco County (RBC) Road 77 as shown on the attached topographic map. The right-of-way (ROW) will extend 30 feet from the edge of the roads to one side of the roads. The pipeline centerline will be approximately 20 feet from the edge of the road. There are no other utility lines in the ROW. The facilities will consist of approximately 3.4 miles (~17,952 feet) of pipeline with 3 drips. Throughout most of its length, the pipeline will be 2-inch internal diameter (i.d.) poly pipe that will be buried to a depth of 48 inches. The trench will be cut with a backhoe and/or trackhoe. In the rocky area shown on the map between the cattle guards, the pipeline will consist of 2-inch i.d. steel pipe laid on the surface. Road crossings will be open cut and compacted. Colorow Gulch, the only stream crossing, will most likely be dry at the time of construction and will be open cut. There will not be any directional drills or bores. There will be no temporary use areas outside the ROW. Total ground disturbance during construction will be approximately 12.4 acres, and all disturbed areas will be re-seeded with a seed mix recommended by BLM. The

integrity of the pipeline will be tested using gas. The normal operating pressure of the pipeline will be approximately 250 pounds per square inch (psi), while the maximum allowable operating pressure will be 800 psi. Construction is expected to take 2 weeks and will commence immediately upon approval by BLM. Access for construction will be entirely from the existing roads paralleled by the pipeline. The pipeline will transport approximately 150,000 standard cubic feet of gas per day. All maintenance activities will be confined to the ROW.

No Action Alternative: Under the no action alternative there would not be any additional impacts.

ALTERNATIVES CONSIDERED BUT NOT CARRIED FORWARD: None

NEED FOR THE ACTION: The Federal 1-30 natural gas well has been constructed and is currently shut in because of the absence of a flowline to transport the gas.

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: Pages 2-49 thru 2-52

Decision Language: “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.”

AFFECTED ENVIRONMENT / ENVIRONMENTAL CONSEQUENCES / MITIGATION MEASURES:

STANDARDS FOR PUBLIC LAND HEALTH: In January 1997, Colorado 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:

CRITICAL ELEMENTS

AIR QUALITY

Affected Environment: The project area is within a Class II Prevention of Significant Deterioration (PSD) air quality area. The nearest Class I PSD area, the Flat Tops Wilderness Area, is more than 50 miles from the project area.

The principal air quality parameter likely to be affected by construction of the pipeline is the inhalable particulate level (PM₁₀ - particles ten microns or less in diameter) associated with fugitive dust. Although monitoring data is not available for the project area, it can be surmised that the air quality is good because the Colorado Air Pollution Control Division (APCD) estimates the maximum PM₁₀ levels (24-hour average) in rural portions of western Colorado to be less than 50 micrograms per cubic meter. This estimate is well below the National Ambient Air Quality Standard (NAAQS) for PM₁₀ (24-hour average) of 150 µg/m³.

Impact of Proposed Action: The proposed action would result in very minor, short term, local impacts to air quality during the construction phase. These impacts would be possible dust being blown into the air and exhaust from vehicles.

Impact of No Action Alternative: Impacts to air quality are not expected as a result of permitting the proposed action.

Mitigation: Permitting of all regulated air pollution sources through the Colorado Department of Public Health and Environment (CDPHE), Air Pollution Control Division, will assure compliance with all federal and state standards. The proponent will provide evidence to BLM that necessary permits have been acquired.

CULTURAL RESOURCES

Affected Environment: A Class I literature review was conducted by Alpine Consultants through the Colorado Office of Archaeology and Historic Preservation (OAHP), Denver on October 17, 2005 and at the Bureau of Land Management, White River Field Office in Meeker, Colorado on October 18, 2005. Site and survey files and maps in the vicinity of the pipeline right-of-way were reviewed for information regarding previous cultural resource inventory projects and previously documented sites in the area. The results of the review indicated that none of the ROW had been previously inventoried but that several cultural resource inventories had been conducted in the general vicinity of the project area. No sites have been previously recorded in the project area. Sites have been recorded within ¼ mile of the project corridor. The literature search also included a review of the 1883 and 1907 (resurvey) General Land Office (GLO) maps. No historic sites were identified on the GLO maps within the project area. Based on previous inventories of the area it was anticipated that site density would be low. Prehistoric sites and isolates, historic Ute, and historic sites related to livestock grazing were anticipated, particularly in the pinyon-juniper woodlands.

A Class III inventory was completed by three Archaeologists walking 10 m (33 feet) transects. Because the pipeline route had not been flagged, a line of green flagging was left along the

presumed centerline of the pipeline on the north and east sides of existing roads. The location of the survey was mapped with a Trimble GeoExplorer Global Positioning System (GPS) unit. The survey corridor for the proposed pipeline was offset so that the center of the 100 foot wide (30 m wide) ROW corridor is at the north/east edge of the disturbed corridor of the road rather than the center of the road because the contractor said that the road would only be crossed at the tie-ins at either end of the pipeline. Where the ROW departed from the road at each end, the centerline of the area inventoried was also flagged with green flagging and mapped with a GPS unit. The Class III survey of the project area resulted in the documentation of one site and one isolated find. The site contains no archaeological data with the potential for yielding information significant to the history of the region and is not recommended as eligible to the National Historic Register.

Environmental Consequences of the Proposed Action: Construction of the proposed pipeline would not impact any known eligible cultural resources. There will be no new impacts to cultural resources under the Proposed Action.

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

Mitigation: 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 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), 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.

INVASIVE, NON-NATIVE SPECIES

Affected Environment: In the area of the proposed action, there is a strong presence of the invasive annual cheatgrass, which is highly adapted to and thrives in disturbed soils. Ongoing drought conditions and the erosive nature of these soils hamper re-vegetation efforts and favor establishment of adapted undesirable invasive species such as cheatgrass. In addition, along the eastern half of the planned route, there are spot infestations of what appears to be Canada thistle and curlycup gumweed. No known noxious weeds have been noted along the western half of the planned route.

Environmental Consequences of the Proposed Action: With aggressive and successful re-vegetation the proposed action would have little or no impact on noxious weeds and invasive species. Establishment of desired species included in the proposed seed mix (See VEGETATION MANAGEMENT) offers the best opportunity to provide a competitive interaction against further domination of the project area by invasive and noxious species.

Environmental Consequences of the No Action Alternative: There would be no change from the present situation.

Mitigation: The permit holder will be required to control noxious weeds resulting from construction and use activities throughout the project area. 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 and/or authorized in advance by the White River Field Office Manager. Application of herbicides must be under field supervision of an Environmental Protection Agency (EPA) certified pesticide applicator. Herbicides must be registered by the EPA and application proposals must be approved by the BLM.

MIGRATORY BIRDS

Affected Environment: The proposed project route is adjacent to roads that cross sagebrush flats, grasslands comprised of mixed grasses, and pinyon-juniper woodlands which would be expected to provide potential nesting sites typical of these habitats.

Environmental Consequences of the Proposed Action: Because the project will be installed in winter, well before the migratory bird nesting season, and because the site will be revegetated and allowed to return to its existing condition, there is no reasonable likelihood that any migratory bird nesting activity would be impacted by installation of the proposed action.

Environmental Consequences of the No Action Alternative: No action will be authorized that would have potential to influence migratory birds.

Mitigation: If the project start is delayed beyond April 1, 2006; a migratory bird survey would need to be completed by a qualified biologist and the report submitted to the White River wildlife biologist for review.

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 along this route.

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 will be stored, used and transported in a manner consistent with applicable laws, and the generation of hazardous wastes would not be anticipated.

Environmental Consequences of the No Action Alternative: No hazardous or other solid wastes will be generated under the no-action alternative.

Mitigation: The operator will collect and properly dispose of any solid wastes generated by this project.

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

Affected Environment: The proposed action is located in an area drained by Crooked Wash, Smizer Gulch tributary to Colorow Gulch and Colorow Gulch, all of which are tributary to the White River. The State has included these drainages in White River Segment 13a, all tributaries to the White River, including all wetlands, lakes and reservoirs from a point immediately above the confluence with Piceance Creek to a point immediately above the confluence with Douglas Creek, except for those waters specifically listed in Segments 13b through 20. The Status of Water Quality in Colorado – 2004 (the update to the 2002 305(b) Report) and the 303(d) list indicate that both Crooked Wash and Colorow Gulch are free of known water quality impairments. The designated beneficial uses of these two stream segments are Aquatic Life Warm 2, Recreation 2, and Agriculture. For these stream segments, minimum standards for the following parameters have been established: dissolved oxygen = 5.0 mg/l; pH = 6.5 - 9.0; fecal coliform = 2,000/100ml; and E. coli = 630/100 ml E. In addition, standards for metals and other inorganic parameters have also been established and can be found in the table of stream classifications and water quality standards.

Environmental Consequences of the Proposed Action: Pipeline construction will result in temporary exposure of soils to erosional processes. Heavy equipment used during construction combined with the removal of ground cover will result in increased compaction, reduced infiltration and permeability rates, and accelerating erosion. Elevated erosion rates will decrease water quality in the affected stream segments by increasing sediment and salt concentrations to Crooked Wash, Colorow Gulch and ultimately to the White River.

Environmental Consequences of the No Action Alternative: Impacts are not anticipated from not allowing the proposed action.

Mitigation: Oil and gas development activities require a stormwater discharge permit from the Colorado Department of Public Health and Environment, Water Quality Control Division, for construction associated with well pads, pipelines, roads and other facilities. As a condition of the permit, a Stormwater Management Plan (SWMP) would be developed showing how Best Management Practices (BMPs) are to be used to control runoff and sediment transport. The applicant is required to have a copy of the SWMP on file with the Meeker Field Office and to implement the BMPs in that plan as on-site conditions warrant.

Finding on the Public Land Health Standard for water quality: Water quality in the stream segment within the project area meets the criteria established in the standard. With successful reclamation, the proposed action would not change this status.

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

Affected Environment: The planned route crosses only one mapped stream, Colorow Gulch. Colorow Gulch is an intermittent stream that will likely be dry at the time the project is constructed. Colorow Gulch is devoid of riparian vegetation where it is crossed by the ROW. The planned route does not cross any wetlands.

Environmental Consequences of the Proposed Action: This project will be constructed during the winter when there will likely be no flow in Colorow Gulch. In addition, the pipeline will be buried 48 inches below the channel, and disturbed areas will be revegetated. These actions, in addition to the absence of riparian vegetation or wetlands along the planned route, would result in the project having virtually no influence on wetlands and riparian zones.

Environmental Consequences of the No Action Alternative: No action will be authorized that would have potential to influence riparian conditions or channel function.

Mitigation: None.

Finding on the Public Land Health Standard for riparian systems: The portion of Colorow Gulch that will be crossed by this project has little riparian character. Downstream BLM-administered channel reaches would not be influenced by installation of the proposed project and, as such, neither the proposed or no-action alternatives would have any bearing on the present or long-term status of Colorow Gulch from the public land health perspective.

CRITICAL ELEMENTS NOT PRESENT OR NOT AFFECTED:

No ACEC's, flood plains, prime and unique farmlands, Wilderness, Wild and Scenic Rivers, or populations of threatened, endangered or sensitive plants and animals species exist within the area affected by the proposed action. For threatened, endangered and sensitive species, the

Public Land Health Standard is not applicable since neither the proposed nor the no-action alternative would have any influence on populations of, or habitats potentially occupied by, special status plants or animals. There are also no Native American religious or environmental justice concerns associated with the proposed action.

NON-CRITICAL ELEMENTS

The following elements **must** be addressed due to the involvement of Standards for Public Land Health:

SOILS (includes a finding on Standard 1)

Affected Environment: The proposed action crosses 6 mapped soil units: Abor clay loam, 5 to 30 percent slopes; Forelle loam, 3 to 8 percent slopes; Patent loam, 3 to 8 percent slopes; Rentsac-Moyerson-Rock outcrop complex, 5 to 65 percent slopes; Tisworth fine sandy loam, 0 to 5 percent slopes; and Torrifluvents, gullied.

SUMMARY OF SOILS AFFECTED BY THE PROPOSED ACTION

Soil Number	Soil Name	Slope	Ecological site	Salinity	Run Off	Erosion Potential	Bedrock
1	Abor Clay Loam	5-30%	Clayey Foothills	<4	Rapid	High	20-40
33	Forelle loam	3-8%	Rolling Loam	<2	Medium	Moderate	>60
61	Patent loam	3-8%	Rolling Loam	<2	Medium	Moderate	>60
74	Rentsac-Moyerson-Rock Outcrop complex	5-65%	PJ Woodlands/ Clayey Slopes	<2	Medium	Moderate to very high	10-20
89	Tisworth fine sandy loam	0-5%	Alkaline Slopes	>4	Rapid	Moderate	>60
90	Torrifluvents gullied	-----	None	-----	Rapid	Very high	>60

Soil mapping unit 1 - Abor clay loam, 5 to 30 percent slopes. This moderately deep, well drained soil is on foothills and uplands. It formed in residuum derived dominantly from clayey shale. The native vegetation is mainly grasses and low shrubs. Elevation is 5,800 to 6,500 feet. The average annual precipitation is 14 to 16 inches, the average annual air temperature is 42 to 44 degrees F, and the average frost-free period is 85 to 105 days. Typically, the surface layer is pale brown clay loam 4 inches thick. The upper 8 inches of the subsoil is silty clay loam, and the lower 12 inches is silty clay. The substratum is silty clay loam that has some gypsum and is 9 inches thick. Clayey shale is at a depth of 33 inches. Depth to shale ranges from 20 to 40 inches. In some areas the surface layer is channery clay loam.

Permeability of this Abor soil is slow to very slow. Available water capacity is low. Effective rooting depth is 20 to 40 inches. Runoff is rapid, and the hazard of water erosion is high. This map unit is in capability subclass VIe. It is in Clayey Foothills range site.

Soil mapping unit 33 - Forelle loam, 3 to 8 percent slopes. This deep, well drained soil is on terraces and uplands. It formed in eolian and alluvial material derived dominantly from

sedimentary rock. Areas are irregular in shape and are 20 to 600 acres in size. The native vegetation is mainly low shrubs and grasses. Elevation is 5,800 to 7,200 feet. The average annual precipitation is 15 to 18 inches, the average annual air temperature is 42 to 45 degrees F, and the average frost-free period is 80 to 105 days. Typically, the surface layer is pale brown loam 4 inches thick. The upper 12 inches of the subsoil is yellowish brown clay loam, and the lower 5 inches is light yellowish brown loam. The substratum to a depth of 60 inches or more is very pale brown loam.

Permeability of this Forelle soil is moderate. Available water capacity is high. Effective rooting depth is 60 inches or more. Runoff is medium, and the hazard of water erosion is moderate. This map unit is in capability subclass IVe. It is in Rolling Loam range site.

Soil mapping unit 61 - Patent loam, 3 to 8 percent slopes. This deep, well drained soil is on fans and toe slopes. It formed in alluvium, colluvium, and a thin mantle of eolian material. Areas are irregular in shape and are 20 to 200 acres in size. The native vegetation is mainly low shrubs and grasses. Elevation is 5,800 to 6,800 feet. The average annual precipitation is 15 to 17 inches. The average annual air temperature is 42 to 45 degrees F, and the average frost-free period is 85 to 105 days. Typically, the surface layer is brown loam 3 inches thick. The next layer is brown loam 7 inches thick. The upper 14 inches of the underlying material is very pale brown loam, and the lower part to a depth of 60 inches or more is very pale brown very fine sandy loam. The soil is calcareous throughout, and it contains varying amounts of gypsum.

Permeability of this Patent soil is moderate. Available water capacity is high. Effective rooting depth is 60 inches or more. Runoff is medium, and the hazard of water erosion is moderate. This map unit is in capability subclass IIIe. It is in Rolling Loam range site.

Soil mapping unit 74 - Rentsac-Moyerson-Rock outcrop complex, 5 to 65 percent slopes. This map unit is on foothills and ridges. Areas are irregular in shape and are 160 to 5,000 acres in size. The native vegetation is mainly pinyon and juniper trees with an understory of shrubs and grasses. Elevation is 5,800 to 7,200 feet. The average annual precipitation is 13 to 16 inches, the average annual air temperature is 42 to 45 degrees F, and the average frost-free period is 75 to 105 days. This unit is 40 percent Rentsac channery loam that has slopes of 5 to 50 percent, 25 percent Moyerson stony clay loam that has slopes of 15 to 65 percent, and 20 percent Rock outcrop that has slopes of 5 to 65 percent. The Moyerson soil is mainly in the lower lying areas of the unit. The components of this unit are so intricately intermingled that it was not practical to map them separately at the scale used.

The Rentsac soil is shallow and well drained. It formed in residuum derived dominantly from sandstone. Typically, the surface layer is grayish brown channery loam about 5 inches thick. The next layer is brown very channery loam about 4 inches thick. The underlying material is very pale brown extremely flaggy loam 7 inches thick. Sandstone is at a depth of 16 inches. Depth to sandstone ranges from 10 to 20 inches. In some areas the surface layer is quite variable in texture. Permeability of the Rentsac soil is moderately rapid. Available water capacity is very low. Effective rooting depth is 10 to 20 inches. Runoff is medium, and the hazard of water erosion is moderate to very high.

The Moyerson soil is shallow and well drained. It formed in residuum derived dominantly from shale. Typically, the surface layer is light gray stony clay loam about 2 inches thick. The next layer is gray clay loam about 8 inches thick. The underlying material is gray clay 7 inches thick. Shale is at a depth of 17 inches. Depth to shale ranges from 10 to 20 inches. In some areas the surface layer is silty clay loam, silty clay, light clay, or bouldery clay loam. Permeability of the Moyerson soil is slow. Available water capacity is low. Effective rooting depth is 10 to 20 inches. Runoff is medium to rapid, and the hazard of water erosion is very high.

Rock outcrop consists of ridge caps, ridge points, and long vertical bluffs 3 to 25 feet thick and 25 to 1,500 feet long.

This map unit is in capability subclass VIIe, nonirrigated. The Rentsac soil is in Pinyon-Juniper woodland site, and the Moyerson soil is in Clayey Slopes range site.

Soil mapping unit 89 - Tisworth fine sandy loam, 0 to 5 percent slopes. This deep, well drained soil is on valley floors and broad fans. It formed in alluvium derived dominantly from sedimentary rock with a high content of gypsum and alkaline salt. Areas are elongated and are 30 to 300 acres. The native vegetation is mainly salt-tolerant shrubs and grasses. Elevation is 5,800 to 7,000 feet. The average annual precipitation is 13 to 15 inches, the average annual air temperature is 42 to 45 degrees F, and the average frost-free period is 80 to 105 days. Typically, the surface layer is pale brown fine sandy loam 4 inches thick. The subsoil is light yellowish brown clay loam 7 inches thick. The upper 9 inches of the underlying material is very pale brown fine sandy loam that has fine crystals and seams of gypsum and calcium carbonate, and the lower part to a depth of 60 inches or more is very pale brown fine sandy loam. In some areas the surface layer is loam or clay loam.

Permeability of this Tisworth soil is slow. Available water capacity is moderate. Effective rooting depth is 60 inches or more. Runoff is rapid, and the hazard of water erosion is moderate. This map unit is in capability subclasses IVs, irrigated, and VIIs, nonirrigated. It is in Alkaline Slopes range site.

Soil mapping unit 90 - Torrifluents, gullied. This map unit is along narrow valley bottoms, in swales, and on eroded fans. Slope is 0 to 5 percent. Areas are long and narrow or irregular in shape and are 40 to 200 acres in size. The native vegetation is mainly sparse desert shrubs and annual grasses. Elevation is 5,100 to 7,000 feet. The average annual precipitation is 8 to 16 inches, the average annual air temperature is 40 to 50 degrees F, and the average frost-free period is 75 to 130 days. This unit is 80 percent Torrifluents that are characterized by gullies and headcuts 3 to 35 feet deep and 5 to 150 feet wide.

Torrifluents are moderately deep and deep and are well drained and somewhat excessively drained. They formed in highly calcareous and gypsiferous, stratified sandy, loamy, and clayey alluvium derived dominantly from sandstone and shale. Permeability of the Torrifluents is moderately rapid to slow. Available water capacity is moderate to high. Effective rooting depth is 60 inches or more. Runoff is rapid, and the hazard of water erosion is very high, which results in high production of sediment during rainstorms and periods of snowmelt. This map unit is in capability class VIII.

Environmental Consequences of the Proposed Action: Clearing of vegetation for pipeline construction will leave soils exposed to erosion processes. Soils will exhibit lower infiltration and permeability rates after construction which will elevate erosive potential. Due to the duration of the construction and the minimal amount of disturbance, the only reasonable impact to soils would be a possible increase in erosion and sedimentation, from overland flows due to soil compaction. This impact would be short term, during construction and until revegetated.

SOIL DISTURBANCE FROM PROPOSED ACTION (ACRES)

Soil Mapping Unit Number						Total Acres
1	33	61	74	89	90	
Pipeline						
2.20	1.35	1.55	5.85	1.0	0.45	12.4

Environmental Consequences of the No Action Alternative: None

Mitigation: The operator shall prepare and implement a stormwater management plan and successfully re-vegetate the ROW using the seed mix specified in the vegetation section below.

Finding on the Public Land Health Standard for upland soils: Infiltration and permeability rates will be reduced with increased soil compaction. Following suggested mitigation techniques and reclamation procedures, soil health will remain unchanged from current conditions. Installation and operation of the proposed pipeline adjacent to BLM and county roads would have no measurable influence on upland soils and would not interfere with continued meeting of the standard.

VEGETATION (includes a finding on Standard 3)

Affected Environment: The proposed action incorporates four ecological sites including alkaline slopes, clayey foothills, PJ woodland, and rolling loam. These sites are generally open shrubland and woodland sites with woody vegetation components dominated by greasewood, Wyoming big sagebrush, or stands of pinyon-juniper with mountain mahogany, and bitterbrush interspersed throughout. The herbaceous component includes western wheatgrass, June grass, needle-and-thread grass, mutton grass, Indian rice grass. As a result of historic grazing practices all of these ecological sites also have a strong presence of the invasive annual cheatgrass, which is highly adapted to and thrives in disturbed soils. On-going drought conditions and the erosive nature of these soils hamper re-vegetation efforts and favor establishment of adapted undesirable invasive species such as cheatgrass.

Soils within the project area are primarily Abor clay loam, Forelle loam, Patent loam, Rentsac-Moyerson-Rock outcrop complex, Tisworth fine sandy loam, and Torrfluents. These soils are moderately to highly erosive with rapid runoff. These factors combined with ongoing drought limits vegetative production and will hamper re-vegetation efforts.

Environmental Consequences of the Proposed Action: The proposed action would disturb a mid to low seral class plant communities. However, this level of vegetation disturbance would be offset in the long-term by successful reclamation and re-vegetation of disturbed areas with a seed mix that is suited for these ecological sites. As the project area has a strong component of cheatgrass in the plant community, successful re-vegetation efforts would slightly increase desirable plant species within the rangelands.

Environmental Consequences of the Proposed Action: The proposed action would not have any significant impact on the existing vegetation.

Mitigation: Promptly re-seed and assure successful re-vegetation of all disturbed areas associated with the proposed action, including all cut and fill slopes and topsoil stockpiles, with recommended Native Seed Mix #1 of the White River ROD/RMP, B-19; Appendix B (see table below). 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 is covered by mineral soil. Applied seed must be certified and free of noxious weeds and seed certification tags must be submitted to the Area Manager within 30 days of seeding.

Seed Mix #	Species (Variety)	Lbs. PLS per Acre	Ecological Sites
Combo	Western wheatgrass (Rosanna)	3	Alkaline Slopes, Clayey Foothills, Clayey Slopes, Claypan, Mountain Shale
	Indian ricegrass (Rimrock)	2	
	Thickspike wheatgrass (Critana)	2	
	Fourwing saltbush (Wytana, Rincon)	2	
	Winterfat	0.5	

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 segment of Alkaline Slope, Clayey Foothill and Rolling Loam ecological sites. With successful re-vegetation, construction of the proposed pipeline would have no measurable long-term influence on vegetation and would not interfere with continued meeting of the standard.

Early seral ecological sites associated with the proposed action currently lack desirable plant communities primarily due to the presence of cheatgrass and are not meeting standards. A successful re-vegetation effort would result in a slight positive benefit by increasing desired plant species in low producing ecological sites. Mid and late seral ecological sites within the proposed project area have acceptable plant community composition and are meeting standards

WILDLIFE, AQUATIC (includes a finding on Standard 3)

Affected Environment: The proposed route crosses one waterbody, Colorow Gulch. Colorow Gulch is an ephemeral stream that will likely be dry in the winter when the pipeline is constructed. The pipeline will be buried at a depth of 48 inches. At the point the stream will be crossed, its banks are devoid of riparian vegetation. Because of its intermittent character, Colorow Gulch does not support populations of fish, aquatic invertebrates, or other aquatic

vertebrates in the vicinity of the planned crossing. Colorow Gulch maintains its intermittent character downstream to its confluence with the White River, approximately 3 miles downstream from the planned pipeline crossing.

Environmental Consequences of the Proposed Action: Excessive delivery of sediments into aquatic habitats can destabilize bank and channel features and degrade water quality. By implementing the SWMP, the operator will avoid erosion and sedimentation problems and subsequent sediment delivery to Colorow Gulch.

Environmental Consequences of the No Action Alternative: No action will be authorized that would have potential to influence aquatic habitat conditions.

Mitigation: None

Finding on the Public Land Health Standard for riparian systems: As there is no aquatic wildlife to be impacted within the project area, the standard is not applicable.

WILDLIFE, TERRESTRIAL (includes a finding on Standard 3)

Affected Environment: The proposed pipeline ROW is located in the winter range of both mule deer and elk. In addition, the proposed action will occur in areas classified as elk severe winter range. Approximately 1.9 miles of the proposed pipeline will intersect elk severe winter range. Because the planned ROW is immediately adjacent to county roads, the affected area has limited functional value as habitat, for deer, elk, sage grouse, and other terrestrial species typically found in the habitats crossed by the ROW.

No raptor nests were recorded during raptor surveys, but the area can be expected to support wintering raptor use (primarily rough-legged, red-tailed hawks and prairie falcon).

Environmental Consequences of the Proposed Action: Any wildlife present in the planned ROW or adjacent areas would be temporarily displaced during construction, which is expected to take approximately two weeks. Because the planned route crosses habitat typical of the project area, affected wildlife would be able to disperse into adjacent similar habitats during construction and would not be significantly affected. The prevailing 2004 and 2005 winter weather conditions have been marked by unseasonably mild temperatures, including diminished snow pack and early emergence of herbaceous forage. It is recommended that no condition of approval be applied to this action as these conditions meet the exception criteria for the WRFO severe winter range timing limitation stipulation. By implementing reclamation measures recommended in the mitigation section, short and long term habitat integrity, particularly for big game, would remain essentially unaffected. Moreover, after construction, the re-vegetated ROW will be allowed to return to its pre-construction vegetative condition, resulting in no adverse long term impacts to wildlife.

Environmental Consequences of the No Action Alternative: No action will be authorized that would have potential to influence resident wildlife or associated habitat.

Mitigation: None

Finding on the Public Land Health Standard for plant and animal communities (partial, see also Vegetation and Wildlife, Aquatic): On a landscape scale, the general project area meets the public land health standard for animal communities. Construction of this pipeline would have no influence on the condition or function of these lands for terrestrial wildlife communities, and as such, the project would not interfere with continued meeting of the land health standard.

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

Non-Critical Element	NA or Not Present	Applicable or Present, No Impact	Applicable & Present and Brought Forward for Analysis
Access and Transportation			X
Cadastral Survey	X		
Fire Management			X
Forest Management			X
Geology and Minerals	X		
Hydrology/Water Rights	X		
Law Enforcement		X	
Noise		X	
Paleontology			X
Rangeland Management			X
Realty Authorizations		X	
Recreation			X
Socio-Economics		X	
Visual Resources			X
Wild Horses	X		

ACCESS AND TRANSPORTATION

Affected Environment: The proposed action parallels a portion of BLM Road 1509 and Rio Blanco County (RBC) Road 77. Public travel of these roads are generally very low in spring and summer months and increases dramatically during fall hunting seasons (August through December). BLM 1509 and RBC Road 77 are native surface routes thereby susceptible to significant rutting due to traffic combined with high soil moisture conditions after precipitation and spring thaw.

Environmental Consequences of the Proposed Action: If BLM Road 1509 and RBC Road 77 are wet during construction periods; roads may become rutted or slick making roads impassable to most public users. Road damage may occur due to rutting and/or erosion.

Environmental Consequences of the No Action Alternative: None.

Mitigation: BLM Road 1509 will be maintained by project proponent during pipeline construction to assure public travel can continue in a safe manner. Road should be graded to BLM standards if road damage occurs due to pipeline construction.

FIRE MANAGEMENT

Affected Environment: The proposed project is located in the B4 Crooked Wash/Indian Valley fire management polygon where fire is not desired. This is due to cultural resources, unnatural fuel loading due to cheatgrass. The fuels that the proposed action would traverse include sagebrush/greasewood with a large cheatgrass understory, juniper woodlands with limited understory of native grasses and forbs with cheatgrass present and scattered throughout the stands.

Environmental Consequences of the Proposed Action: In total the project would disturb 7.5 acres of juniper woodland and 5 acres of sage/greasewood vegetation type. The juniper woodlands that the project goes through average approximately 6-10 tons per acre of aboveground woody biomass. If not adequately treated, these trees will result in elevated hazardous fuels conditions and remain on-site for many years. These accumulations of dead material are very receptive to fire brands and spotting from wind driven fires and can greatly accelerate the rate of spread of the fire front. The road(s) associated with this project may be used by the general public for a variety of uses, including access for fire wood gathering, hunting and other dispersed recreational activities. Increased public use of an area will nearly always result in an increased potential for man-caused wildland fires. If not treated the slash and woody debris will create an elevated hazardous dead fuel loading which could pose significant control problems in the event of a wildfire. Large uncontrolled wildland fires are not desired in the area of the proposed action due to invasive species and cultural resources; any action which creates large uncharacteristic fuel accumulations will hinder fire suppression activities and could result in unwanted ecological degradation.

Environmental Consequences of the No Action Alternative: There would be no impacts.

Mitigation: See the FOREST MANAGEMENT mitigation; material placed back on the right-of-way after construction and seeding should be evenly scattered and not exceed 3-5 tons per acre. Promptly reseed as per vegetation mitigation to preempt cheatgrass proliferation and resulting uncharacteristic fuel loading and fire return interval.

FOREST MANAGEMENT

Affected Environment: The proposed project is located in the Crooked Wash/Deep Channel Geographic Reference Area (GRA) on which the White River Resource Management Plan of 1997 determined that the woodland resources within this GRA are not commercial in terms of production of material. Woodlands in this area are important to the local communities

for harvest of firewood and juniper fence posts. The predominate woodland species on the project area is Utah juniper.

Environmental Consequences of the Proposed Action: In total the project would disturb 7.5 acres of juniper woodland of this acreage 6.5 acres produce approximately 8 cords per acre and 1 acre producing approximately 5 cords per acre. Removal of the juniper is not expected to create any forest pest problems in terms of insects or disease with the mitigation proposed. Following reclamation junipers are expected to colonize the site within 30 years and establish a mature structure in 150 to 300 years. Mitigation described below would prevent vehicle travel of the right-of way and provide litter for soil protection and protection for seeded species from grazing.

Environmental Consequences of the No Action Alternative: There would be no impacts.

Mitigation: From the White River Resource Management Plan of 1997, Appendix B, Number 7. All trees removed in the process of construction shall be purchased from the Bureau of Land Management. The trees shall be cut with a maximum stump height of six inches, cut into four-foot lengths, down to four inches in diameter and placed along the edge of the disturbance. Root balls will be placed on the right-of-way following seeding to prevent vehicle access of the right-of-way.

PALEONTOLOGY

Affected Environment: The proposed action crosses three geologic formations. The portion of the route along BLM Road 1509 (except along Colorow Gulch) crosses the Fort Union formation, and the portion of the route along County Road 77 crosses the Wasatch formation. Along Colorow Gulch, the underlying Fort Union formation is overlain with alluvium and colluvium of Quaternary age. BLM has classified both the Fort Union and Wasatch formations as Class I formations, meaning they are known to produce scientifically important fossil resources. Quaternary alluviums are not considered to be fossil bearing in this portion of Colorado.

Environmental Consequences of the Proposed Action: Burial of the pipeline in the Quaternary alluvium and colluvium is not expected to impact fossil resources. Construction of the pipeline in other areas may impact rocks of the Fort Union and Wasatch formations and therefore potentially impact fossil resources. However, the proposed construction process (underground burial in soil and eroded bedrock, and surface installation over bedrock outcrops) would minimize impacts to bedrock where the potential damage to significant fossils is the greatest.

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

Mitigation: 1. The operator will install steel pipeline on the surface in areas where bedrock outcrops.

2. If paleontological materials (fossils) are uncovered during project activities, the operator is to immediately stop activities that might further disturb such materials, and contact the AO. The operator and the AO will consult and determine the best option for avoiding or mitigating paleontological site damage.

RANGELAND MANAGEMENT

Affected Environment: The proposed action is located primarily in the Keystone allotment (06605) and partially in the McAndrews Gulch (06600) and River (06602) allotments, which are all authorized for cattle use. Grazing use in these allotments is authorized from 7/2 – 8/10 (Keystone); 4/15 – 1/15 (McAndrews Gulch); and 11/16 – 12/30 and 4/1 – 4/30 (River).

Soils within the project area are Arbor Clay Loam (Clayey Foothills), Forelle loam (Rolling Loam), Patent loam (Rolling Loam), Rentsac-Moyerson Rock Outcrop complex (PJ Woodlands Clayey Slopes), Tisworth fine sandy loam (Alkaline Slopes), and Torrifluents gullied (no ecological site) that are generally open grassland, shrubland and woodland sites with woody vegetation components dominated by greasewood, Wyoming big sagebrush, or stands of pinyon-juniper with mountain mahogany, and bitterbrush interspersed throughout. The herbaceous component includes western wheatgrass, June grass, needle-and-thread grass, mutton grass, Indian rice grass. As a result of historic grazing practices all of these ecological sites also have a strong presence of the invasive annual cheatgrass, which is highly adapted to and thrives in disturbed soils. These brush/grass communities are utilized by cattle for meeting forage requirements throughout the year. On-going drought conditions and the erosive nature of these soils hamper re-vegetation efforts and favor establishment of adapted undesirable invasive species such as cheatgrass.

Environmental Consequences of the Proposed Action: The action would have minimal impacts on long-term authorized grazing use because the amount of new surface disturbance (12.4 acres) is minimal compared to the sizes of the allotments involved.

Short-term soil and vegetation disturbances (12.4 acres) would be offset in the long-term by successful reclamation of disturbed areas with a seed mix suited for these ecological sites. As this area has a strong component of cheatgrass in the plant community, successful re-vegetation efforts would slightly increase desirable forage species within the rangelands.

If the proposed action was authorized during the grazing period, it could have some limited impacts while cattle are grazing. This is in part due to the increased activity associated with the construction of the proposed pipeline and a temporary decrease in rangelands available for grazing. Also, BLM grazing permit holders have experienced injury and losses of livestock due to heavy truck travel. Other impacts to livestock grazing may include such influences as short term modifications in livestock distribution, reduction in available forage, injury/loss to livestock, and impediments to livestock grazing and movement.

Overall, this individual proposed action would have no significant direct impact on the

authorized AUMs in the allotments. A slight positive benefit would result from successful re-vegetation efforts, thus increasing preferred forage plants within this rangeland. However, cumulative impacts from past, present, and possible future oil and gas activities may have a long-term effect on native rangeland carrying capacity, thus influencing the authorized animal unit months (AUMs). This possible affect would be determined during the grazing permit renewal process which includes an evaluation of forage capacity available for livestock. It is foreseeable that the grazing permit holder could lose a portion of permitted active AUMs due to a loss of forage associated with oil and gas development within the BLM grazing allotments.

Environmental Consequences of the No Action Alternative: None

Mitigation: Fences intersected by the pipeline will be braced to BLM specifications prior to cutting. Temporary wire gates will be constructed. This work will take place prior to pipeline ROW construction. Any livestock control facilities and/or rangeland improvements impacted during this operation will be replaced or repaired. All fence re-construction will conform to BLM Manual H 1737-1. A copy of these specifications will be included as part of the conditions of approval.

RECREATION

Affected Environment: The proposed action occurs within the White River Extensive Recreation Management Area (ERMA). BLM custodially manages the ERMA to provide for unstructured recreation activities such as hunting, dispersed camping, hiking, horseback riding, wildlife viewing and off-highway vehicle use. Many campsites are used during the fall hunting seasons (September through December) and are adjacent to both BLM 1509 and RBC 77.

The project area has delineated a Recreation Opportunity Spectrum (ROS) class of Semi-Primitive Motorized (SPM). SPM physical and social recreation setting is typically characterized by a natural appearing environment with few administrative controls, low interaction between users but evidence of other users may be present. SPM recreation experience is characterized by a high probability of isolation from the sights and sounds of humans that offers an environment that offers challenge and risk.

The proposed pipeline corridor most resembles a Recreation Opportunity Spectrum (ROS) class of Rural (R) due to it's proximity to roads. Rural physical and social recreation setting is culturally modified to the point that it is dominant to the sensitive travel route observer. This may include pastoral, agricultural, intensively managed wildland resource landscapes, or utility corridors. Pedestrian or other slow moving observers are constantly within view of culturally changed landscape. There is strong evidence of designed roads and/or highways. Structures are readily apparent and may range from scattered to small dominant clusters including utility corridors, farm buildings, microwave installations, and recreation sites. Frequency of contact is moderate to high at developed sites and on roads and trails; moderate away from developed sites. Rural recreation experience is characterized by a low probability of isolation from the sights and sounds of humans.

Environmental Consequences of the Proposed Action: If action coincides with hunting seasons (September through December) it will most likely disrupt the experience sought by those recreationists. Campsites may be made inaccessible if pipeline installation occurs with hunting seasons (September through December) and public will likely be very vocal about their loss of camping opportunities however short term they may be.

Environmental Consequences of the No Action Alternative: No loss of dispersed recreation potential and no impact to hunting recreationists.

Mitigation: None.

VISUAL RESOURCES

Affected Environment: The proposed action is located within an area that has been classified as VRM III. The objective of this classification is to partially retain the existing character of the landscape. The level of change to the characteristic landscape should be moderate. Management activities may attract attention but should not dominate the view of the casual observer. Changes should repeat the basic elements found in the predominant natural features of the characteristic landscape.

Environmental Consequences of the Proposed Action: The proposed action will be adjacent to existing roads for its entire length. A casual observer traveling on the adjacent roads might note the cleared areas, but the visual impact would diminish with time. Seeded vegetation would begin to appear during the first growing season after construction, and, over time, the ROW would be re-populated by adjacent plant communities, taking on the pre-construction character of the ROW. The only above ground components of the project will be the surface steel pipe in areas where bedrock outcrops. Surface pipe will be uncoated and unpainted and would quickly acquire a thin coat of rust that would make the 2-inch pipe less visually obtrusive. Thus, the level of change to the characteristic landscape would be low, and the objectives of the VRM III classification would be retained.

Environmental Consequences of the No Action Alternative: There would be no environmental consequences.

Mitigation: The operator will leave all surface pipe uncoated and unpainted.

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:

Chandler, Susan M. 2005. Class III Cultural Resource Inventory of a Proposed Pipeline for Sonterra Energy's Federal 1-30, Rio Blanco County, Colorado. Alpine Archaeological Consultants, Inc., Montrose, Colorado.

PERSONS / AGENCIES CONSULTED: None

INTERDISCIPLINARY REVIEW:

Name	Title	Area of Responsibility
BLM Oversight		
Nate Dieterich	Hydrologist	Air Quality, Soils; Water Quality, Surface and Ground Water Hydrology and Water Rights
Tamara Meagley	Natural Resource Specialist	Areas of Critical Environmental Concern; Threatened and Endangered Plant Species
Gabrielle Elliott	Archaeologist	Cultural Resources, Paleontological Resources
Mary Taylor	Rangeland Management Specialist	Invasive, Non-Native Species, Vegetation, Rangeland Management,
Brett Smithers	Wildlife Biologist	Migratory Birds, Threatened, Endangered and Sensitive Animal Species, Wildlife, Wetlands and Riparian Zones, Wildlife Terrestrial and Aquatic
Melissa Kindall	Hazmat Collateral	Wastes, Hazardous or Solid
Chris Ham	Outdoor Recreation Planner	Wilderness, Access and Transportation, Recreation
Ken Holsinger	Natural Resource Specialist	Fire Management
Bob Fowler	Forester	Forest Management
Paul Daggett	Mining Engineer	Geology and Minerals
Penny Brown	Realty Specialist	Realty Authorizations
Keith Whitaker	Natural Resource Specialist	Visual Resources
Valerie Dobrich	Natural Resource Specialist	Wild Horses
O&G Environmental Consulting, LLC (Third Party Contractor)		
Jack Sosebee	Principal Scientist	Air Quality; Cultural Resources; Wastes; Water Quality
Will Mahoney	Senior Scientist	Soils; Geology and Minerals; Paleontological Resources
Chris Hines	Biologist	Invasive Species; Migratory Birds; Wetlands and Riparian Zones; Vegetation; Wildlife; Threatened and Endangered Species
Daniel Padilla	Senior Scientist	Visual Resources

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

CO-110-2006-041-EA

FINDING OF NO SIGNIFICANT IMPACT (FONSI)/RATIONALE: The environmental assessment and analyzing 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.

O&G Environmental Consulting, LLC, an environmental consulting firm, with the guidance, participation, and independent evaluation of the Bureau of Land Management (BLM) prepared this document. The BLM, in accordance with 40 CFR 1506.5 (a) and (c), is in agreement with the findings of the analysis and approves and takes responsibility for the scope and content of this document.

DECISION/RATIONALE: It is my decision to approve the proposed action with the mitigation measures listed below. The proposed action is in concert with the objectives of the White River ROD/RMP in that they would allow development of federal oil and gas resources in a manner that provides reasonable protection for other resource values. Protection for other resource values will be assured by implementation of the mitigation measures described below and to the right-of-way grant as stipulations.

MITIGATION MEASURES:

1. Permitting of all regulated air pollution sources through the Colorado Department of Public Health and Environment (CDPHE), Air Pollution Control Division, will assure compliance with all federal and state standards. The proponent will provide evidence to BLM that necessary permits have been acquired.

2. The operator is responsible for informing all persons who are associated with the project 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.

3. 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), 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 permit holder will be required to produce successful establishment and re-vegetation of desirable species and to control noxious weeds resulting from construction and use activities throughout the project area. Revegetation operations will start immediately following the completion of recontouring/dirt work operations. 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 and/or authorized in advance by the White River Field Office Manager. Application of herbicides must be under field supervision of an Environmental Protection Agency (EPA) certified pesticide applicator. Herbicides must be registered by the EPA and application proposals must be approved by the BLM.

5. The operator will collect and properly dispose of any solid wastes generated by this project.

6. Oil and gas development activities require a stormwater discharge permit from the Colorado Department of Public Health and Environment, Water Quality Control Division, for construction associated with well pads, pipelines, roads and other facilities. As a condition of the permit, a Stormwater Management Plan (SWMP) would be developed showing how Best Management Practices (BMPs) are to be used to control runoff and sediment transport. The applicant is required to have a copy of the SWMP on file with the Meeker Field Office and to implement the BMPs in that plan as on-site conditions warrant.

7. If the project start is delayed beyond April 1, 2006; a migratory bird survey would need to be completed by a qualified biologist and the report submitted to the White River wildlife biologist for review.

8. Promptly re-seed and assure successful re-vegetation of all disturbed areas associated with the proposed action, including all cut and fill slopes and topsoil stockpiles, with recommended Native Seed Mix #1 of the White River ROD/RMP, B-19; Appendix B (see table below). 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 is covered by mineral soil. Applied seed must be certified and free of

noxious weeds and seed certification tags must be submitted to the Area Manager within 30 days of seeding.

Seed Mix #	Species (Variety)	Lbs. PLS per Acre	Ecological Sites
1	Western wheatgrass (Rosanna)	3	Alkaline Slopes, Clayey Foothills, Clayey Slopes, Claypan, Mountain Shale
	Indian ricegrass (Rimrock)	2	
	Thickspike wheatgrass (Critana)	2	
	Fourwing saltbush (Wytana, Rincon)	2	
	Winterfat	0.5	
	Alternates: Winterfat, shadscale, globemallow		

9. BLM Road 1509 will be maintained by project proponent during pipeline construction to assure public travel can continue in a safe manner. Road should be graded to BLM standards if road damage occurs due to pipeline construction.

10. From the White River Resource Management Plan of 1997, Appendix B, Number 7. All trees removed in the process of construction shall be purchased from the Bureau of Land Management. The trees shall be cut with a maximum stump height of six inches, cut into four-foot lengths, down to four inches in diameter and placed along the edge of the disturbance. Root balls will be placed on the right-of-way following seeding to prevent vehicle access of the right-of-way.

11. Material placed on right-of-way should not exceed 3-5 tons per acre.

11. The operator will install steel pipeline on the surface in areas where bedrock outcrops.

13. If paleontological materials (fossils) are uncovered during project activities, the operator is to immediately stop activities that might further disturb such materials, and contact the AO. The operator and the AO will consult and determine the best option for avoiding or mitigating paleontological site damage.

14. Fences intersected by the pipeline will be braced to BLM specifications prior to cutting. Temporary wire gates will be constructed. This work will take place prior to pipeline ROW construction. Any livestock control facilities and/or rangeland improvements impacted during this operation will be replaced or repaired. All fence re-construction will conform to BLM Manual H 1737-1. A copy of these specifications will be included as part of the conditions of approval.

15. The operator will leave all surface pipe uncoated and unpainted.

16. In addition to the FOREST MANAGEMENT mitigation; material placed back on the right-of-way after construction and seeding should be evenly scattered and not exceed 3-5 tons per acre. Promptly reseed as per vegetation mitigation to preempt cheatgrass proliferation and resulting uncharacteristic fuel loading and fire return interval.

COMPLIANCE/MONITORING: Compliance will be conducted by the realty staff, every five years.

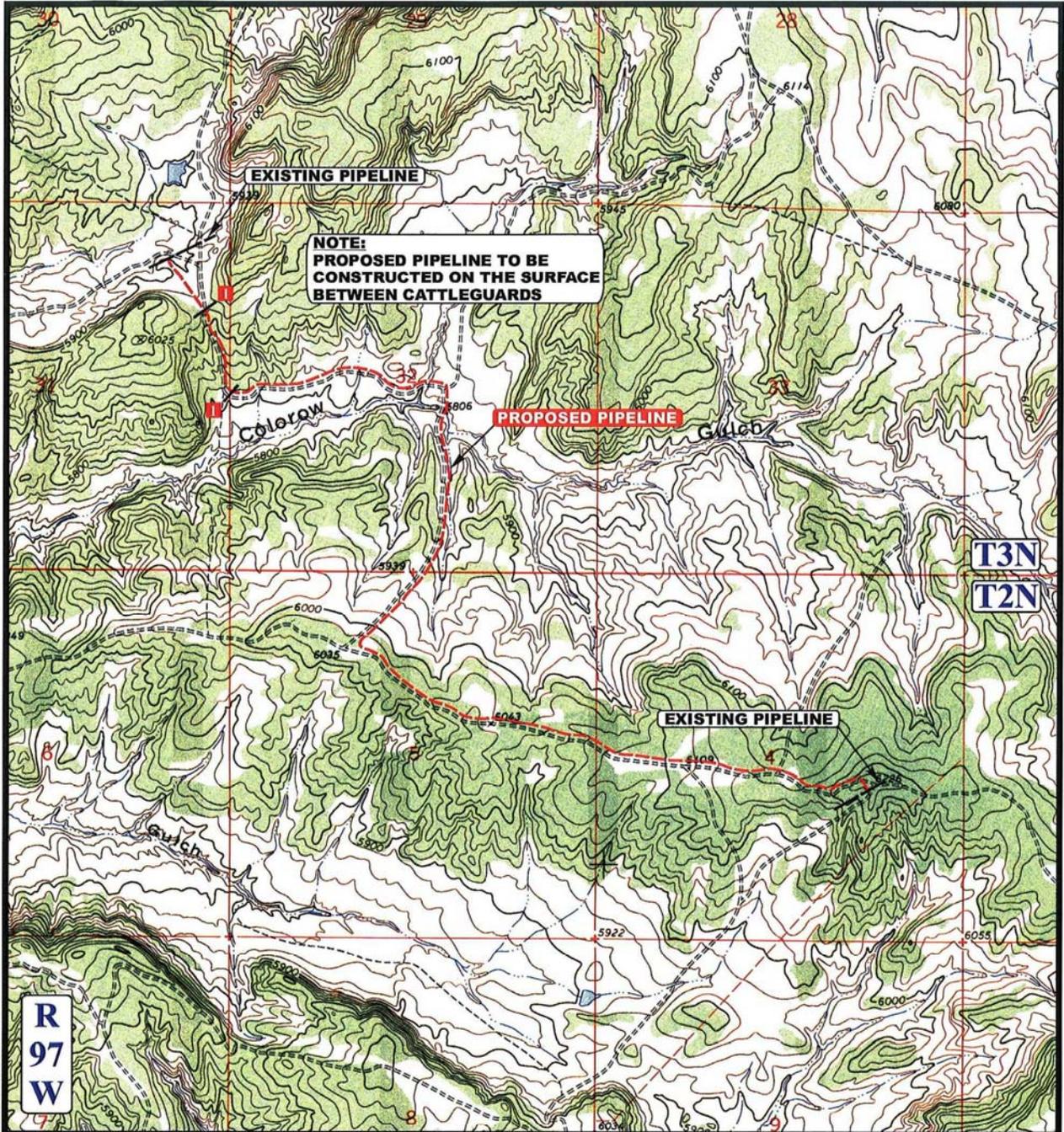
NAME OF PREPARER: O&G Environmental Consulting, LLC
11 Inverness Way South
Englewood, CO 80112
Telephone: (720) 529-9777

NAME OF ENVIRONMENTAL COORDINATOR: Caroline P. Hollowed

SIGNATURE OF AUTHORIZED OFFICIAL: *Kent C. Walter*
Field Manager

DATE SIGNED: 01/13/06

ATTACHMENTS: Location map of the Proposed Action.



Location of Proposed Action: CO-110-2006-041-EA

LEGEND:

-  PROPOSED ACCESS ROAD
-  EXISTING PIPELINE
-  PROPOSED PIPELINE
-  CATTLE GUARD

