

U.S. Department of the Interior
Bureau of Land Management
Colorado River Valley Field Office
2300 River Frontage Road
Silt, Colorado 81652

Categorical Exclusion

NEPA LOG NUMBER: DOI-BLM-CO-N040-2014-0068-CX

A. Background

Bureau of Land Management (BLM) Office: Colorado River Valley Field Office

CASEFILE/PROJECT NUMBER: COC076527

PROPOSED ACTION TITLE/TYPE: Proposal to Install a 6-to-8-inch Diameter Temporary Surface Water Pipeline to Transport Water to the Piceance Fed 29-11 Well Pad for Five Federal Well Completions Southwest of Rifle, Garfield County, Colorado.

LOCATION OF THE PROPOSED ACTION:

| Table 1. Proposed Natural Gas Pipeline ROW Renewals | | |
|--|---|--|
| <i>Serial Number</i> | <i>Description</i> | <i>Legal Description (6th Principal Meridian, Colorado)</i> |
| COC076527 | Piceance Energy, LLC 6-to-8-inch Diameter Temporary Surface Water Pipeline to Support the Completion of 5 Federal Wells on the Piceance Fed 29-11 Well Pad located in Helmer Gulch, Southwest of Rifle, Colorado. (25-foot wide ROW/3.5 miles/10.58 acres) | T. 6 S., R. 93 W., sec. 29, NE ¹ / ₄ SW ¹ / ₄ , SW ¹ / ₄ SW ¹ / ₄ , SE ¹ / ₄ SW ¹ / ₄ ; sec. 30, SE ¹ / ₄ SE ¹ / ₄ ; T. 7 S., R. 93 W., Sec. 5, Lot 2, NE ¹ / ₄ SW ¹ / ₄ , SW ¹ / ₄ SW ¹ / ₄ , SE ¹ / ₄ SW ¹ / ₄ ; Sec. 7, Lot 5; Sec. 8, NW ¹ / ₄ NW ¹ / ₄ , SW ¹ / ₄ SE ¹ / ₄ , SE ¹ / ₄ SE ¹ / ₄ ; Sec. 9, SW ¹ / ₄ SW ¹ / ₄ . |

DESCRIPTION OF PROPOSED ACTION:

Piceance Energy, LLC (“Piceance”) proposes to install a 6-inch diameter flex steel and an 8-12-inch diameter high-density polyethylene (HDPE) temporary surface water pipeline to transport production water between Encana’s Fox Pond water storage facility located on private land to the Piceance Fed 29-11 well pad located on BLM land for completing five Federal wells (29-06D, 29-10C, 29-12B, 29-13B, and 29-15C) (Figure 1 and 2). The use of each pipe specification is based on the anticipated pump pressure to move the water and overcome hydrostatic pressure. The 6-inch flex steel pipeline would be used for those sections of pipeline needing higher pressure ratings and the 8-inch HDPE pipeline would be used in sections of pipeline needing lower rated pressure ratings. Installation of the temporary surface water

pipeline would reduce the amount of water truck traffic on roads and would allow Piceance to use produced and flowback water, thus reducing the need to acquire fresh water for completion operations.

The Piceance Fed 29-11 well pad was analyzed as a new well pad in the 2008 Helmer Gulch MDP. Because the Piceance Fed 29-11 well pad has limited space, Piceance proposes to re-open an old completion pit on the Piceance Fed 31-01 well pad for temporary water storage (Figure 3). The Piceance Fed 31-01 well pad is located both on private (Fee surface/Fed minerals) and BLM land and was analyzed as an existing well pad in the 2008 Helmer Gulch MDP. The proposed completion pit is located on private land and would be excavated and lined within the original completion pit location. The completion pit would be used to store produced and flowback water from Piceance's current operations and would be used as completion fluid for the five Federal wells on the Fed 29-11 well pad. The completion pit would also hold transferred water from the temporary surface water pipeline for the same purpose. The completion pit would reduce the number of 500 bbl frac tanks needed to support the completions by 80.

Using the same alignment as the Encana pipeline ROW COC066459 from the Fox Pond water storage facility located on Encana's land to the Encana K8W well pad on private land, Piceance would install approximately 2,000 feet of 6-inch flex steel temporary surface pipeline which would then transition to an 8-inch HDPE temporary surface pipeline proceeding to the Encana K8W well pad. Piceance would continue to install the 8-inch HDPE temporary surface pipeline along existing lease roads (both BLM and private) to another transition point in the NE $\frac{1}{4}$ NE $\frac{1}{4}$ of section 5 (Figure 1). At this location, the temporary surface water pipeline would transition into a 6-inch flex steel temporary surface pipeline and would proceed to the Piceance Fed 31-01 well pad located both on private and BLM land. From the Piceance Fed 31-01 well pad an 8-inch HDPE temporary surface waterline would continue and terminate on the Piceance Fed 29-11 well pad located on BLM land.

The temporary surface water pipeline would be installed within and existing previously disturbed pipeline corridor, along existing well pad access roads and lease roads, and on existing two-track roads with no new surface disturbance. Installation and operation of the proposed temporary surface water pipeline would require issuance to Piceance by the BLM of a right-of-way (ROW) grant for the portion on Federal surface. The temporary surface water pipeline would be authorized with the BLM ROW grant pursuant to Title V of the Federal Land Policy and Management Act (FLPMA) of October 21, 1976 (90 Stat. 2776; 43 U.S.C. 1761). The total length of the temporary surface water pipeline on BLM would be approximately 18,429 feet (3.5 miles) with a 25-foot temporary ROW width.

The 6-inch flex steel temporary surface water pipeline is spooled into 500-foot rolls on a trailer and is rolled out on the ground while the trailer is being pulled by a truck or light equipment. Once a spool is empty, another roll is installed and the 6-inch flex steel temporary surface water pipeline is rolled onto the ground until the spool is empty and is replaced again. If needed, in areas with sensitive resources, the spool can remain stationary and the 6-inch flex steel temporary surface water pipeline can be unrolled and pulled for a distance.

The HDPE pipeline comes in variable lengths of up to 40-feet and is transported by truck and trailer. The pipe is laid out on the ground and then a small welding trailer, pulled by a pickup or 1 ton truck, is used to fuse the pipe segments together. If the terrain is not compatible for the truck and trailer, the pipe can be transported and lain down by smaller vehicles. Depending on the efficiency, the HDPE pipeline can be fused at one location and pulled for a distance, in areas with sensitive resources and depending on curves.

Access to the project location from the north would be from an existing private road that comes off of County Road 317(Beaver Creek Road) crossing Helmer Gulch and entering BLM lands (existing Piceance access) in the NE $\frac{1}{4}$ SW $\frac{1}{4}$ of section 30, T.6S., R.93W. Access to the project location from the

south would be from an existing private road that comes off County Road 317 (Beaver Creek Road) crossing Beaver Creek and entering BLM lands in Lot 5, Section 6, T.7S., R.93W. Piceance has a road sharing agreement in place with WPX and Encana for this access. Staging areas would include the following well pads Encana N9W, Encana K8W, Piceance Leverich 31-12, Piceance Fed 31-01, and Piceance Fed 29-11. Equipment would include 0.75- to 1-ton trucks and spool trailers for the 6-inch flex steel pipeline, trailers with extra spools (500-feet per roll), 0.75- to 1-ton trucks and welding (fuse) trailers for the 8-inch HDPE pipeline, float trailers for 8-inch HDPE, and a front loader with forks for transporting the 8-inch HDPE pipeline.

Resource surveys for portions of this project were completed previously for the Helmer Gulch MDP and the Helmer Gulch GAP. New biological surveys were conducted by WestWater Engineering (WestWater) on April 30 and May 1 and 2, 2014. Project work on BLM would be subject to a big game winter timing limitation identified in lease #COC64181 covering the period from January 1 to April 30.

Piceance proposes to install the temporary surface water pipeline and to complete the five Federal wells during the summer of 2014. Once the temporary surface water pipeline is removed, Piceance would inspect the alignment to determine if any reclamation would be required. Any area needing reclamation would be re-seeded in accordance to BLM or landowner specifications.

B. Land Use Plan Conformance

The Proposed Action is subject to and has been reviewed for and is in conformance with (43 CFR §1610.5 and § 2800, BLM 1617.3) the following plan:

Land Use Plan (LUP) Name: The current land use plan is the *Glenwood Springs Resource Management Plan (RMP)* (BLM 1984, revised 1988). Relevant amendments include the *Oil and Gas Plan Amendment to the Glenwood Springs Resource Management Plan* (BLM 1991) and the *Oil & Gas Leasing & Development Record of Decision and Resource Management Plan Amendment* (BLM 1999).

Date Approved/Amended: *Oil and Gas Plan Amendment to the Glenwood Springs Resource Management Plan* (BLM 1991) – approved November 27, 1991; *Oil & Gas Leasing & Development Record of Decision and Resource Management Plan Amendment* (BLM 1999) – approved March 24, 1999.

Determination of Conformance: The Proposed Action is subject to and has been reviewed for and is in conformance with (43 CFR §1610.5 and § 2800, BLM 1617.3) the following plan:

Name of Plan: Record of Decision and Glenwood Springs Resource Management Plan.

Date Approved: January 1984; revised 1988; amended November 1991 – Oil and Gas Leasing and Development - Final Supplemental Environmental Impact Statement; amended November 1996 – Colorado Standards and Guidelines; amended in August 1997 – Castle Peak Travel Management Plan; amended in March 1999 - Oil & Gas Leasing & Development Final Supplemental Environmental Impact Statement; amended November 1999 – Red Hill Plan Amendment; and amended September 2002 – Fire Management Plan for Wildland Fire Management and Prescriptive Vegetation Treatment Guidance.

Decision Number/Page: Page 41, Utility and Communication Facility Management.

Decision Language: To respond, in a timely manner, to requests for utility and communication facility authorizations on public land while considering environmental, social, economic, and interagency concerns.

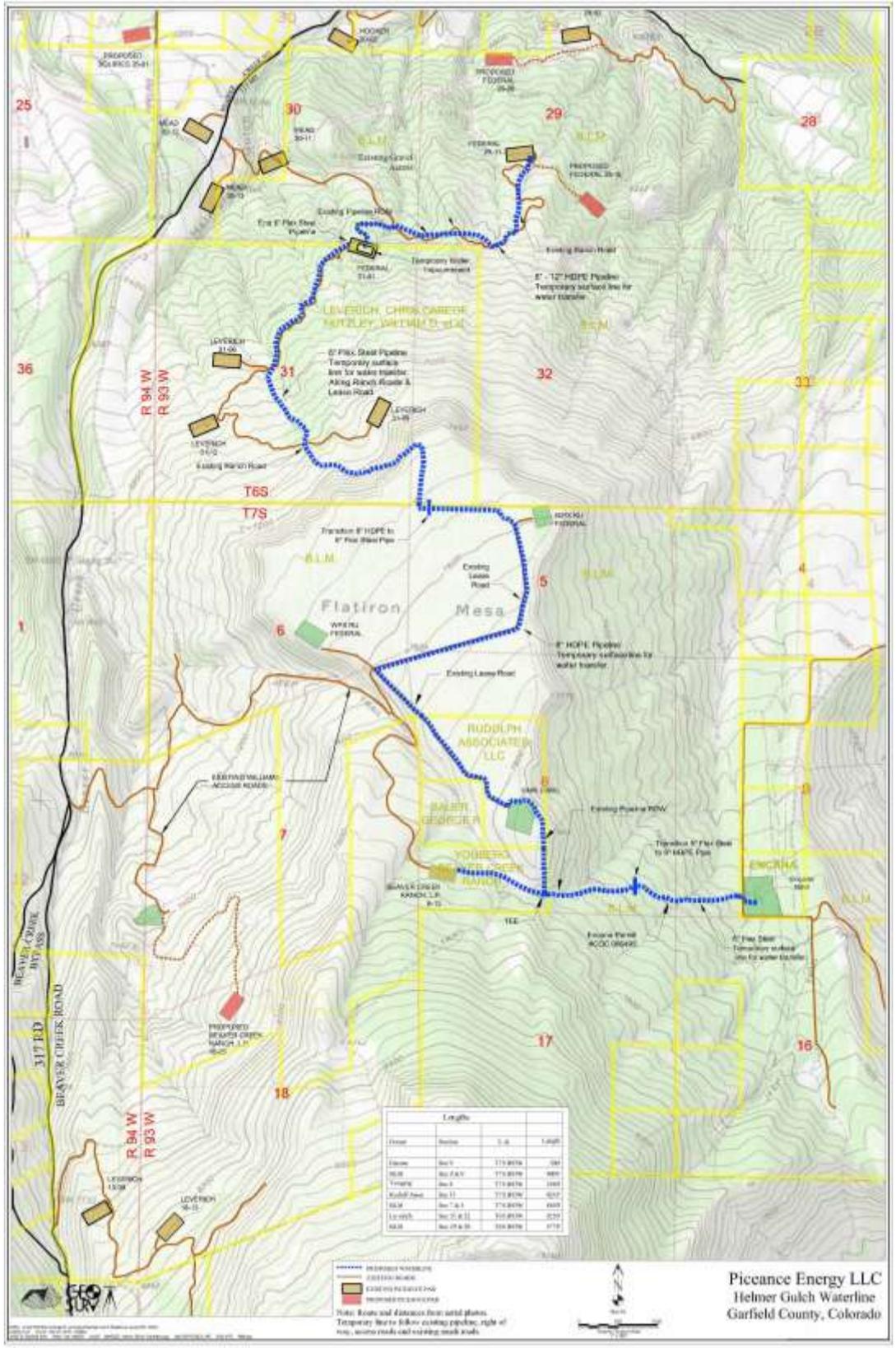


Figure 1. Proposed Temporary Surface Water Pipeline Alignment.

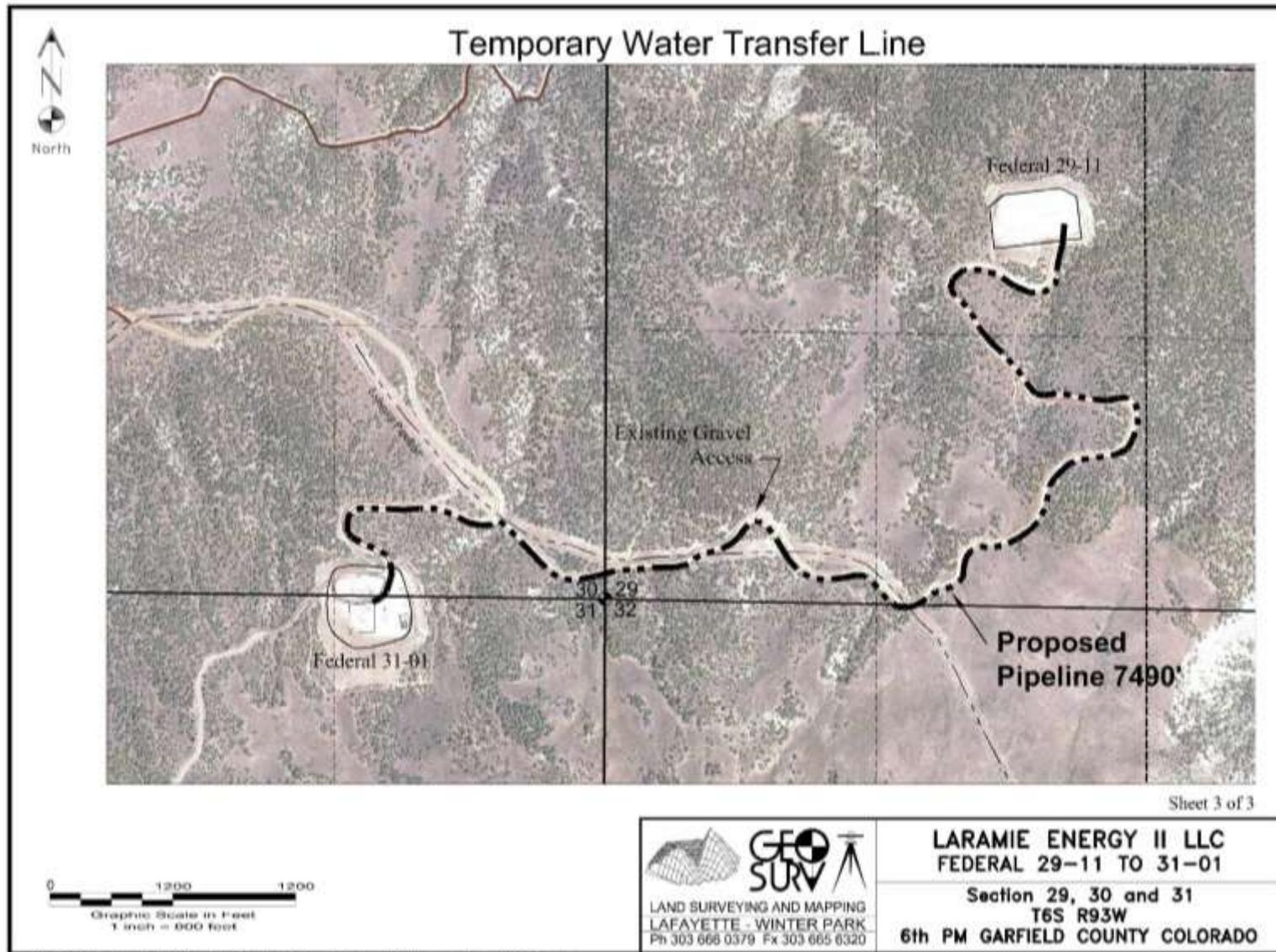


Figure 2. Proposed Temporary Surface Water Pipeline Alignment.

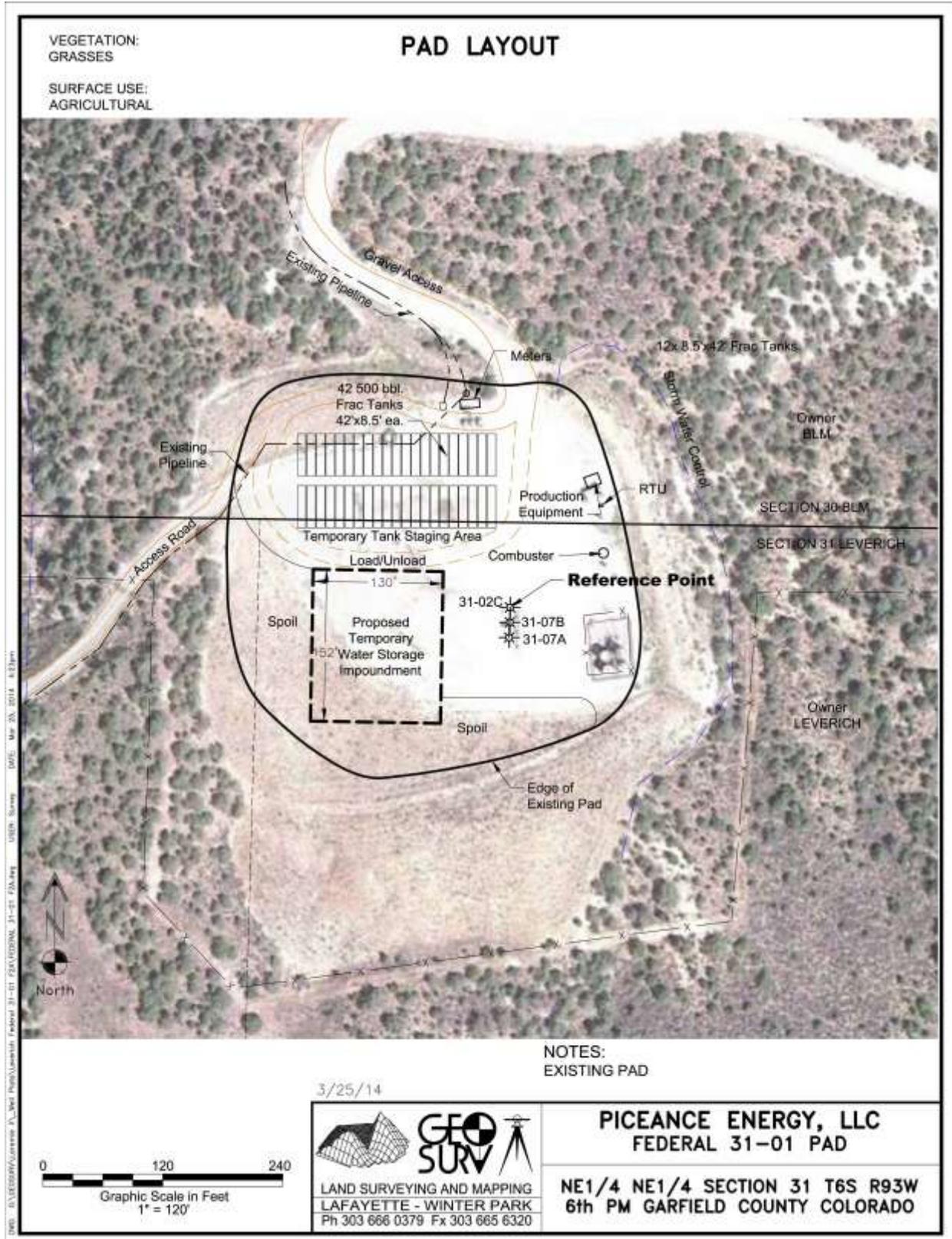


Figure 3. Proposed Completion Pit and Pad Layout.

C. Compliance with NEPA

The Proposed Action is categorically excluded from further documentation under the National Environmental Policy Act (NEPA) in accordance with 516 DM 11.9, E. Realty Numbers:

(9) Renewals and assignments of lease, permits, or rights-of-way where no additional rights are conveyed beyond those granted by the original authorizations.

This categorical exclusion is appropriate in this situation because there are no extraordinary circumstances potentially having effects that may significantly affect the environment. The proposed action has been reviewed, and none of the extraordinary circumstances described in 516 DM 2 apply.

| Table 2. Exclusions | Yes | No |
|---|-----|----|
| 1. Have significant impacts on public health or safety. | | X |
| 2. Have significant impacts on such natural resources and unique geographic characteristics as historic or cultural resources; park, recreation or refuge lands; wilderness areas; wild or scenic rivers; national natural landmarks; sole or principal drinking water aquifers; prime farmlands; wetlands (Executive Order 11990); floodplains (Executive Order 11988); national monuments; migratory birds; and other ecologically significant or critical areas. | | X |
| 3. Have highly controversial environmental effects or involve unresolved conflicts concerning alternative uses of available resources [NEPA Section 102(2)(E)]. | | X |
| 4. Have highly uncertain and potentially significant environmental effects or involve unique or unknown environmental risks. | | X |
| 5. Establish a precedent for future action or represent a decision in principle about future actions with potentially significant environmental effects. | | X |
| 6. Have a direct relationship to other actions with individually insignificant but cumulatively significant environmental effects. | | X |
| 7. Have significant impacts on properties listed, or eligible for listing, on the National Register of Historic Places as determined by either the bureau or office. | | X |
| 8. Have significant impacts on species listed, or proposed to be listed, on the List of Endangered or Threatened Species, or have significant impacts on designated Critical Habitat for these species. | | X |
| 9. Violate a Federal law, or a State, local, or tribal law or requirement imposed for the protection of the environment. | | X |
| 10. Have a disproportionately high and adverse effect on low income or minority populations (Executive Order 12898). | | X |
| 11. Limit access to and ceremonial use of Indian sacred sites on Federal lands by Indian religious practitioners or significantly adversely affect the physical integrity of such sacred sites (Executive Order 13007). | | X |
| 12. Contribute to the introduction, continued existence, or spread of noxious weeds or non-native invasive species known to occur in the area or actions that may promote the introduction, growth, or expansion of the range of such species (Federal Noxious Weed Control Act and Executive Order 13112). | | X |

| Table 3. BLM Interdisciplinary Team Authors and Reviewers | | |
|--|-----------------------------|---|
| <i>Name</i> | <i>Title</i> | <i>Areas of Participation</i> |
| John Brogan | Archaeologist | Cultural Resources, Native American Religious Concerns |
| Allen Crockett, Ph.D., J.D. | Supervisory NRS | NEPA Review |
| Shauna Kocman, Ph.D., P.E. | Hydrologist | Air Quality, Noise, Soils, Surface Water, Waters of the U.S. |
| Julie McGrew | Natural Resource Specialist | EA Project Lead, Access & Transportation, Socioeconomics, Wastes-Hazardous or Solid, Visual Resources |
| Judy Perkins, Ph.D. | Botanist | Invasive Non-native Species, Special-status Species (Plants), Vegetation |
| Sylvia Ringer | Wildlife Biologist | Migratory Birds, Special-status Species (Animals), Wildlife, Aquatic and Terrestrial |

Interdisciplinary Review: BLM staff listed in Table 3 participated in the preparation of this CX, including review of resource survey results submitted by the operator’s consultants, evaluation of impacts likely to occur from implementation of the proposed action, and identification of appropriate stipulations. The Proposed Action was presented to the Colorado River Valley Field Office interdisciplinary team on April 22, 2014.

REMARKS/MITIGATION:

Cultural Resources: The CX will not impact cultural resources because the CX does not authorize ground-disturbing activities. Any future ground-disturbance associated with maintenance or non-emergency repairs would be authorized pursuant to subsequent project- and site-specific NEPA analysis and conducted in conformance with the attached stipulations. If the project is situated on lands that have previously been disturbed and no additional surface disturbance is anticipated, the project is exempt from additional inventory requirements under the provisions of 8110.23B2, and no further work is required.

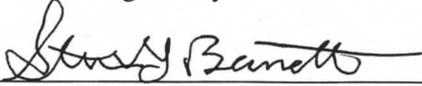
Native American Religious Concerns: The CX will not impact Native American Religious Concerns because the CX does not authorize ground-disturbing activities. Any future ground disturbance associated with maintenance or non-emergency repairs would be authorized pursuant to subsequent project- and site-specific NEPA analysis and conducted in conformance with the attached stipulations.

Threatened, Endangered, or BLM Sensitive Species: The CX will not impact T&E species because there are no known occurrences or suitable habitat for any Federally listed species within or adjacent to the project area. However, the pipeline will negatively impact an unknown number of the BLM sensitive plant species, Harrington’s penstemon (*Penstemon harringtonii*). Surveys conducted in April 2014 found Harrington’s penstemon plants adjacent to and within the existing disturbance area along the pipeline corridor. Because the survey was conducted prior to the full emergence season for this species, the number of plants expected to be impacted exceeds the number identified during the April survey. As mitigation for the negative impacts, a biological monitor shall be required during pipeline installation to minimize the number of plants impacted. Pipeline removal shall not occur until the end of the Harrington’s penstemon growing season. Noxious weeds shall be treated prior to seed production to prevent spread of existing infestations. Any future ground disturbance associated with maintenance or non-emergency repairs would be authorized pursuant to subsequent project- and site-specific NEPA analysis and conducted in conformance with the attached stipulations.

Name of Preparer: Julie McGrew, Natural Resource Specialist Date Prepared: April 22, 2014

Decision and Rationale for Action

I considered the action and determined that it may be categorically excluded. I have evaluated the action relative to the 12 criteria listed above and have determined that it does not represent an exception and is, therefore, categorically excluded from further environmental analysis.



ser Allen Crockett, Ph.D.
Supervisory Natural Resource Specialist

5/22/2014

Date

Contact Person: For additional information concerning this CX review, contact Monte Senor, Realty Specialist, Colorado River Valley Field Office, 2300 River Frontage Road, Silt, CO 81652, (970) 876-

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RIGHT-OF-WAY STIPULATIONS

1. The holder shall contact the BLM at least 180 days prior to the non-emergency anticipated start of any surface disturbing activities. It is the holder's responsibility to comply with all applicable Federal, State, and local laws and regulations existing or hereafter enacted or promulgated. The BLM will determine if any surveys or inventories are required. As necessary, the holder shall demonstrate compliance in writing, i.e., with surveys and inventories completed by qualified individuals, with the following laws including, but not limited to, the Endangered Species Act (if potential habitat is determined to be present), the National Historic Preservation Act, and the Native American Graves Protection and Repatriation Act. Evaluations and inventories can be completed by BLM, or by the holder in order to meet the holder's schedule and subject to approval by the BLM. Inventories may be time sensitive and may require US Fish and Wildlife Service concurrence, therefore this process could take longer than 60 days to complete. The holder shall not initiate any surface disturbing activities on the right-of-way without a "Notice to Proceed," as determined necessary by the BLM.
2. Cultural Resources, Education/Discovery Stipulation: All persons in the area who are associated with this project shall be informed that if anyone is found disturbing historic, archaeological, or scientific resources, including collecting artifacts, the person or persons will be subject to prosecution.

Cultural Resources

If in connection with operations under this contract, the operator, its contractors, their subcontractors, or the employees of any of them discovers, encounters, or becomes aware of any objects or sites of cultural value or scientific interest such as historic ruins or prehistoric ruins, graves or grave markers, fossils, or artifacts, the operator shall immediately suspend all operations in the vicinity of the cultural resource and shall notify the BLM of the findings (16 USC 470h-3, 36 CFR 800.112). Operations may resume at the discovery site upon receipt of written instructions and authorization by the BLM. Approval to proceed will be based upon evaluation of the resource. Evaluation shall be by a qualified professional selected by the BLM from a Federal agency insofar as practicable. When not practicable, the operator shall bear the cost of the services of a non-Federal professional.

Within five working days, the BLM will inform the operator as to:

- whether the materials appear eligible for the National Register of Historic Places
- what mitigation measures the holder will likely have to undertake before work can continue in that location (assuming that *in-situ* preservation is not necessary)
- the timeframe for the BLM to complete an expedited review under 36 CFR 800.11, or any agreements in lieu thereof, to confirm through the SHPO State Historic Preservation Officer that the findings of the BLM are correct and that mitigation is appropriate

The operator may relocate activities to avoid the expense of mitigation and delays associated with this process, as long as the new area has been appropriately cleared of resources and the exposed materials are recorded and stabilized. Otherwise, the operator shall be responsible for mitigation costs. The BLM will provide technical and procedural guidelines for relocation and/or to conduct mitigation. Upon verification from the BLM that the required mitigation has been completed, the operator will be allowed to resume construction.

Native American Human Remains

Pursuant to 43 CFR 10.4(g), the holder must notify the BLM, by telephone, with written confirmation, immediately upon the discovery of human remains, funerary items, sacred objects, or objects of cultural patrimony on federal land. Further, pursuant to 43 CFR 10.4 (c) and (d), the holder must stop activities in the vicinity of the discovery that could adversely affect the discovery. The holder shall make a reasonable effort to protect the human remains, funerary items, sacred objects, or objects of cultural patrimony for a period of thirty days after written notice is provided to the BLM, or until the BLM has issued a written notice to proceed, whichever occurs first. Any relocation, additional construction, or use that is not in accord with the approved conditions shall not be initiated without the prior written approval of the BLM. A copy of the complete right-of-way grant, including all plans and stipulations shall be made available at the right-of-way site during construction. Noncompliance with the above will be grounds for an immediate temporary suspension of activities if it constitutes a threat to public health or the environment.

3. BLM Sensitive Plants

Harrington's Penstemon (Penstemon harringtonii)

a. A botany monitor, approved by the BLM botanist, shall be present on site during all pipeline installation work on Flatiron Mesa from the WPX RU Federal pad west and north to the rim of the mesa. The botany monitor shall direct the placement of the surface pipe to avoid Harrington's penstemon plants to the extent possible.

b. Removal of the pipeline shall occur outside of the Harrington's penstemon growing season, and shall occur between September 1 and May 1.

c. Noxious weeds within the pipeline corridor shall be treated prior to seed set, to prevent spread of existing noxious weed infestations. A BLM approved Pesticide Use Proposal identifying sensitive plant restrictions must be in place prior to herbicide application, and herbicide use shall be restricted to spot spraying or wicking only. No broadcast spray of herbicide shall be permitted. Noxious weeds may be treated manually.

4. The holder shall comply with applicable State standards for public health and safety, environmental protection and siting, construction, operation and maintenance, if these State standards are more stringent than Federal standards for similar projects.
5. The holder shall comply with all applicable Federal laws and regulations existing or hereafter enacted or promulgated regarding toxic substances or hazardous materials. In any event, the holder shall comply with the Toxic Substances Control Act of 1976, as amended (15 U.S.C. 2601, *et seq.*) with regard to any toxic substances that are used, generated by or stored on the right-of-way or on facilities authorized under this right-of-way grant. (See 40 CFR, Part 702-799 and especially, provisions on polychlorinated biphenyls, 40 CFR 761.1-761.193.) Additionally, any release of toxic substances (leaks, spills, etc.) in excess of the reportable quantity established by 40 CFR, Part 117 shall be reported as required by the Comprehensive Environmental Response, Compensation and Liability Act of 1980, section 102b. A copy of any report required or requested by any federal agency of state government as a result of a reportable release or spill of any toxic substances shall be furnished to the BLM concurrent with the filing of the reports to the involved Federal agency of State government.
6. All construction, operation, and maintenance shall be within the authorized limits of the right-of-way granted herein.

7. No construction or routine maintenance activities shall be performed during periods when the soil is too wet to adequately support such equipment. If the equipment creates ruts in excess of four (4) inches deep, the soil shall be deemed too wet to adequately support the construction equipment.
8. In the event that ground-disturbing activities are required for maintenance in connection with this contract, standard BLM Reclamation requirements shall be adhered to:
 - a. Reclamation Plans. In areas that have low reclamation potential or are especially challenging to restore, reclamation plans will be required prior to APD approval. The plan shall contain the following components: detailed reclamation plans, which include contours and indicate irregular rather than smooth contours as appropriate for visual and ecological benefit; timeline for interim reclamation earthwork, and seeding; soil test results and/or a soil profile description; amendments to be used; soil treatment techniques such as roughening, pocking, and terracing; erosion control techniques such as hydromulch, blankets/matting, and wattles; and visual mitigations if in a sensitive VRM area.
 - b. Deadline for Interim Reclamation Earthwork and Seeding. Reclamation, including seeding, of temporarily disturbed areas along roads and pipelines, shall be completed within 30 days following completion of construction. Any such area on which construction is completed prior to December 1 shall be seeded during the remainder of the early winter season instead of during the following spring, unless BLM approves otherwise based on weather.

If requested by the project lead NRS for a specific section of pipeline, the operator shall contact the NRS by telephone or email approximately 72 hours before reclamation and reseeding begin. This will allow the NRS to schedule a pre-reclamation field visit if needed to ensure that all parties are in agreement and provide time for adjustments to the plan before work is initiated.

The deadlines for seeding described above is subject to extension upon approval of the BLM based on season, timing limitations, or other constraints on a case-by-case basis. If the BLM approves an extension for seeding, the operator may be required to stabilize the reclaimed surfaces using hydromulch, erosion matting, or other method until seeding is implemented.

- c. Topsoil Stripping, Storage, and Replacement. All topsoil shall be stripped following removal of vegetation during construction of well pads, pipelines, roads, or other surface facilities. In areas of thin soil, a minimum of the upper 6 inches of surficial material shall be stripped. The BLM may specify a stripping depth during the onsite visit or based on subsequent information regarding soil thickness and suitability. The stripped topsoil shall be stored separately from subsoil or other excavated material and replaced prior to final seedbed preparation. The BLM best management practice (BMP) for the Windrowing of Topsoil shall be implemented for well pad construction whenever topography allows.
- d. Seedbed Preparation. For cut-and-fill slopes, initial seedbed preparation shall consist of backfilling and recontouring to achieve the configuration specified in the reclamation plan. For compacted areas, initial seedbed preparation shall include ripping to a minimum depth of 18 inches, with a maximum furrow spacing of 2 feet. Where practicable, ripping shall be conducted in two passes at perpendicular directions. Following final contouring, the backfilled or ripped surfaces shall be covered evenly with topsoil.

Final seedbed preparation shall consist of scarifying (raking or harrowing) the spread topsoil prior to seeding. If more than one season has elapsed between final seedbed preparation and seeding, and if the area is to be broadcast-seeded or hydroseeded, this step shall be repeated no more than 1 day prior to seeding to break up any crust that has formed.

If directed by the BLM, the operator shall implement measures following seedbed preparation (when broadcast-seeding or hydroseeding is to be used) to create small depressions to enhance capture of moisture and establishment of seeded species. Depressions shall be no deeper than 1 to 2 inches and shall not result in piles or mounds of displaced soil. Excavated depressions shall not be used unless approved by the BLM for the purpose of erosion control on slopes. Where excavated depressions are approved by the BLM, the excavated soil shall be placed only on the downslope side of the depression.

If directed by the BLM, the operator shall conduct soil testing prior to reseeding to identify if and what type of soil amendments may be required to enhance revegetation success. At a minimum, the soil tests shall include texture, pH, organic matter, sodium adsorption ratio (SAR), cation exchange capacity (CEC), alkalinity/salinity, and basic nutrients (nitrogen, phosphorus, potassium [NPK]). Depending on the outcome of the soil testing, the BLM may require the operator to submit a plan for soil amendment. Any requests to use soil amendments not directed by the BLM shall be submitted to the CRVFO for approval.

- e. Seed Mixes. A seed mix consistent with BLM standards in terms of species and seeding rate for the specific habitat type shall be used on all BLM lands affected by the project (see Attachments 1 and 2 of the letter provided to operators dated October 23, 2012).

For private surfaces, the menu-based seed mixes are recommended, but the surface landowner has ultimate authority over the seed mix to be used in reclamation. The seed shall contain no prohibited or restricted noxious weed seeds and shall contain no more than 0.5 percent by weight of other weed seeds. Seed may contain up to 2.0 percent of “other crop” seed by weight, including the seed of other agronomic crops and native plants; however, a lower percentage of other crop seed is recommended. Seed tags or other official documentation shall be submitted to BLM at least 14 days before the date of proposed seeding for acceptance. Seed that does not meet the above criteria shall not be applied to public lands.

- f. Seeding Procedures. Seeding shall be conducted no more than 24 hours following completion of final seedbed preparation.

Where practicable, seed shall be installed by drill-seeding to a depth of 0.25 to 0.5 inch. Where drill-seeding is impracticable, seed may be installed by broadcast-seeding at twice the drill-seeding rate, followed by raking or harrowing to provide 0.25 to 0.5 inch of soil cover or by hydroseeding and hydromulching. Hydroseeding and hydromulching shall be conducted in two separate applications to ensure adequate contact of seeds with the soil. If revegetation is unsuccessful, the operator shall implement subsequent reseeding until reclamation standards are met.

- g. Mulch. Mulch shall be applied within 24 hours following completion of seeding. Mulch may consist of either hydromulch or of certified weed-free straw or certified weed-free native grass hay crimped into the soil. NOTE: Mulch is not required in areas where erosion potential mandates use of a biodegradable erosion-control blanket (straw matting).

- h. Erosion Control. Cut-and-fill slopes shall be protected against erosion with the use of water bars, lateral furrows, or other BMPs approved by the BLM. Additional BMPs such as biodegradable wattles, weed-free straw bales, or silt fences shall have be employed as necessary to reduce transport of sediments into the drainages. The BLM may, in areas with high erosion potential, require use of hydromulch or biodegradable blankets/matting to ensure adequate protection from slope erosion and offsite transport of sediments and to improve reclamation success.
- j. Monitoring. The operator shall conduct annual monitoring surveys of all sites categorized as “operator reclamation in progress” and shall submit an annual monitoring report of these sites, including a description of the monitoring methods used, to the BLM by **December 31** of each year. The monitoring program shall use the four Reclamation Categories defined in Appendix I of the 1998 DSEIS to assess progress toward reclamation objectives. The annual report shall document whether attainment of reclamation objectives appears likely. If one or more objectives appear unlikely to be achieved, the report shall identify appropriate corrective actions. Upon review and approval of the report by the BLM, the operator shall be responsible for implementing the corrective actions or other measures specified by the BLM.
8. The operator shall regularly monitor and promptly control noxious weeds or other undesirable plant species as set forth in the Glenwood Springs Field Office *Noxious and Invasive Weed Management Plan for Oil and Gas Operators*, dated March 2007. A Pesticide Use Proposal (PUP) must be approved by the BLM prior to the use of herbicides. Annual weed monitoring reports, including GPS shapefiles of treatment areas and Pesticide Application Records (PARs) (see the letter provided to operators dated February 27, 2014), shall be submitted to BLM by **December 1**.
9. Bald and Golden Eagles. It shall be the responsibility of the operator to comply with the Bald and Golden Eagle Protection Act (Eagle Act) with respect to “take” of either eagle species. Under the Eagle Act, “take” includes to pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, molest and disturb. “Disturb” means to agitate or bother a bald or golden eagle to a degree that causes, or is likely to cause, based on the best scientific information available, (1) injury to an eagle; (2) a decrease in its productivity by substantially interfering with normal breeding, feeding, or sheltering behavior; or (3) nest abandonment by substantially interfering with normal breeding, feeding, or sheltering behavior. Avoidance of eagle nest sites, particularly during the nesting season, is the primary and preferred method to avoid a take. Any oil or gas construction, drilling, or completion activities planned within 0.5 mile of a bald or golden eagle nest, or other associated activities greater than 0.5 miles from a nest that may disturb eagles, should be coordinated with the BLM project lead and BLM wildlife biologist and the USFWS representative to the BLM Field Office (970-876-9051).
10. Raptor Nesting. To protect nesting raptors, a survey shall be conducted prior to construction, drilling, or completion activities that are to begin during the raptor nesting season (February 1 to August 15). The survey shall include all potential nesting habitat within 0.25 mile of a well pad or 0.125 mile of an access road, pipeline, or other surface facility. Results of the survey shall be submitted to the BLM. If a raptor nest is located within the buffer widths specified above, a 60-day raptor nesting TL will be applied by the BLM to preclude initiation of construction, drilling, and completion activities during the period of **April 1 to May 31**. The operator is responsible for complying with the MBTA, which prohibits the “take” of birds or of active nests (those containing eggs or young), including nest failure caused by human activity (see COA for Migratory Birds).

11. Migratory Birds – Birds of Conservation Concern. Pursuant to BLM Instruction Memorandum 2008-050, all vegetation removal or surface disturbance in previously undisturbed lands providing potential nesting habitat for Birds of Conservation Concern (BCC) is prohibited from **May 15 to July 15**. An exception to this TL may be granted if nesting surveys conducted no more than one week prior to surface-disturbing activities indicate that no BCC species are nesting within 30 meters (100 feet) of the area to be disturbed. Nesting shall be deemed to be occurring if a territorial (singing) male is present within the distance specified above. Nesting surveys shall include an aural survey for diagnostic vocalizations in conjunction with a visual survey for adults and nests. Surveys shall be conducted by a qualified breeding bird surveyor between sunrise and 10:00 AM under favorable conditions for detecting and identifying a BCC species. This provision does not apply to ongoing construction, drilling, or completion activities that are initiated prior to May 1 and continue into the 60-day period at the same location.
12. Migratory Birds – General. It shall be the responsibility of the operator to comply with the Migratory Bird Treaty Act (MBTA) with respect to “take” of migratory bird species, which includes injury and direct mortality resulting from human actions not intended to have such result. To minimize the potential for the take of a migratory bird, the operator shall take reasonable steps to prevent use by birds of fluid-containing pits associated with oil or gas operations, including but not limited to reserve pits, produced-water pits, hydraulic fracturing flowback pits, evaporation pits, and cuttings trenches. Liquids in these pits—whether placed or accumulating from precipitation—may pose a risk to birds as a result of ingestion, absorption through the skin, or interference with buoyancy and temperature regulation. All mortality or injury to birds shall be reported immediately to the BLM project lead and to the USFWS representative to the BLM Field Office at 970-628-7187.
13. For access and maintenance of facilities, the holder shall use existing roads. When existing roads are not available, the holder may use the right-of-way for access. BLM roads should not be maintained without first consulting with the BLM.
14. Prior to termination of the right-of-way, the holder shall contact the BLM to arrange a joint inspection of the right-of-way. This inspection will be held to agree to an acceptable termination and rehabilitation plan as necessary. This plan shall include, but is not limited to, removal of facilities, drainage structures, or surface material, recontouring, topsoiling, or seeding. The BLM must approve the plan in writing prior to the holder's commencement of any termination activities.