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BUREAU OF LAND MANAGEMENT
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ENVIRONMENTAL ASSESSMENT

1. Introduction

NUMBER: **DOI-BLM-CO-N040-2013-0020 EA**

CASEFILE NUMBER: 277119

PROJECT NAME: Twinky Bee Pipeline Extension

LOCATION: Garfield County, approximately 5 miles south of Rifle, CO.

LEGAL DESCRIPTIONS: T7S R93W Sec 8 & 17

APPLICANT: Grazing Permittee

BACKGROUND:

This project is a follow-up to the Twinky Bee spring development that occurred in 2009. The initial phase of the project resulted in the development of one spring source, approximately one mile of pipeline and two water troughs. Environmental Assessment (EA) #CO-140-2005-057 analyzed the impacts of the spring development and initial phase of pipeline construction.

PURPOSE AND NEED FOR ACTION:

The Action is needed to improve the water distribution on the Beaver Mamm grazing allotment. The project would add two additional water troughs and provide a consistent source of water to three existing ponds. This would help with livestock distribution during the summer months and would support the achievement of land health standards.

Decision to be made: Whether or not issue a Cooperative Agreement authorizing the construction of approximately 1 mile of additional pipeline onto the Twinky Bee spring development.

SCOPING AND PUBLIC INVOLVEMENT AND ISSUES:

This action was scoped internally with the NEPA Interdisciplinary Team on September 8, 2010. The grazing permittee was also involved with the project planning. Adjacent landowners were notified of the proposed action. Issues raised during the scoping process are itemized in table 3-1 and analyzed in Section 3 Affected Environment and Environmental Effects.

The Colorado River Valley Field Office Internet NEPA Register lists grazing NEPA documents that have been initiated. They are generally posted approximately one month prior to the estimated completion date. No public comments specific to this proposed action have been received.

2. Proposed Action and Alternatives

DESCRIPTION OF PROPOSED ACTION

The proposed action is to extend the Twinky Bee pipeline for an additional 1 mile. The pipeline would feed three existing ponds which typically dry up during the summer months when cows are in this pasture. The pipeline would also feed two new water troughs (see map provided). A majority of the pipeline would be installed in an existing road. Approximately ¼ mile would be outside of an existing road. Construction would include clearing vegetation (mostly oakbrush) for ¼ mile. Clearing would be done with a small dozer, backhoe or mini trackhoe. The pipeline would be buried approximately 2 feet deep. Where the pipeline crosses an existing gas line right-of-way the pipeline would only be buried just below the surface and will be well marked to avoid future maintenance problems with the right-of-way. Valves would be installed along the pipeline to control water flow to ponds and will allow water to bypass ponds when needed.

The following terms and conditions would be included in the Cooperative Agreement:

Maintenance of range improvements is required and shall be in accordance with all approved cooperative agreements and range improvement permits. Maintenance shall be completed prior to turnout. Maintenance activities shall be restricted to the footprint (previously disturbed area) of the project as it existed when it was initially constructed. The Bureau of Land Management shall be given 48 hours advance notice of any maintenance work that will involve heavy equipment. Disturbed areas will be reseeded with a certified weed-free seed mixture of native species adapted to the site.

The permittee and all persons associated with grazing operations must be informed that any person who injures, destroys, excavates, appropriates or removes any historic or prehistoric ruin, artifact, object of antiquity, Native American remains, Native American cultural item, or archaeological resources on public lands is subject to arrest and penalty of law. If in connection with allotment operations under this authorization any of the above resources are encountered, the proponent shall immediately suspend all activities in the immediate vicinity of the discovery that might further disturb such materials and notify the BLM authorized officer of the findings. The discovery must be protected until further notified in writing to proceed by the authorized officer.

Reseed disturbed areas with a certified weed free native seed mix approved by BLM to prevent the establishment weeds along the pipeline route. The permittee will monitor the project area for noxious weeds and promptly treat any weeds on the Colorado Noxious Weed List.

DESCRIPTION OF NO ACTION ALTERNATIVE

The No Action Alternative would be to not issue a Cooperative Agreement for a pipeline extension. This would result in no additional water sources outside of existing ponds. Ponds would continue to be dry during parts of the summer months when precipitation is minimal.

ALTERNATIVES CONSIDERED BUT NOT ANALYZED IN DETAIL

An alternative to leave the pipeline on the surface of the ground and not bury it was considered. Leaving the pipeline above ground would prevent the need for surface disturbing activities such as vegetation clearing and trench construction. Since most of the vegetation that will be cleared is oakbrush and several mechanical treatments have been implemented in the same area to reduce the cover of oakbrush, the clearing of oakbrush for the pipeline corridor was considered consistent with other objectives. Visually the pipeline would be less impacting when buried as it would be out of sight. Also, the lifespan of the pipeline would be extended if it was buried and less maintenance would be required. For these reasons an alternative to leave the pipeline on the surface and not bury it was not further analyzed.

PLAN CONFORMANCE REVIEW

The proposed action is subject to the following plan:

Name of Plan: Glenwood Springs Resource Management Plan

Date Approved: Jan. 1984, revised 1988, amended in November 1991 - Oil and Gas Leasing and Development - Final Supplemental Environmental Impact Statement; amended Nov. 1996 - Colorado Standards and Guidelines; amended in August 1997 - Castle Peak Travel Management Plan; amended in March 1999 - Oil and Gas Leasing & Development Final Supplemental Environmental Impact Statement; amended in November 1999 - Red Hill Plan Amendment; and amended in September 2002 – Fire Management Plan for Wildland Fire Management and Prescriptive Vegetation Treatment Guidance; amended in September 2009; and amended in October 2012 - Approved Resource Management Plan Amendments/ Record of Decision (ROD) for Solar Energy Development in Six Southwestern States.

The Proposed Action is in conformance with the LUP because it is specifically provided for in the following LUP decision(s):

The Proposed Action is in conformance with the LUP, even though it is not specifically provided for, because it is clearly consistent with the following LUP decisions (objectives, terms, and conditions):

“Construct facilities such as springs, reservoirs, fences, corrals, and livestock trails where necessary to control and distribute livestock. Appendix A lists range improvement techniques that can be used.” (p. 18)

RELATIONSHIP TO STATUTES, REGULATIONS, OTHER PLANS

- Taylor Grazing Act of 1934 as amended;
- Federal Land Policy and Management Act of 1976;

- Public Rangelands Improvement Act of 1978;
- Title 43 of the Code of Federal Regulations Subpart 4100 – Grazing Administration;
- Noxious Weed Act of 1974;
- Endangered Species Act of 1973;
- National Environmental Policy Act of 1969;
- Migratory Bird Treaty Act of 1918;
- National Historic Preservation Act (16 USC 470f);
- Archeological Resources Protection Act;
- Native American Graves Protection and Repatriation Act;
- Indian Sacred Sites – EO 13007; and
- Consultation and Coordination with Indian Tribal Governments – EO 13175
- Colorado Public Health Standards and Livestock Grazing Management Guidelines - March 1997

STANDARDS FOR PUBLIC LAND HEALTH

In January 1997, Colorado Bureau of Land Management (BLM) approved the Standards for Public Land Health. The five 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.

A formal Land Health Assessment (LHA) titled “Rifle West Watershed” (BLM 2005) was completed on the lands affected by the actions addressed in this EA. Portions of these lands were found not to be meeting the standards. Specific concerns related to the condition of the sagebrush and pinyon-juniper habitats that comprise important big game winter range. Furthermore, habitat fragmentation, loss of habitat, and increased human use associated with natural gas exploration and development were resulting in a failure to meet Standard 3, or a trend away from meeting Standard 3 for wildlife. Mule deer numbers, in particular, are lower than Colorado Division of Wildlife (CDOW) population objectives for the landscape, and lower than the habitat carrying capacity in the absence of fragmentation issues.

The proposed action is in conformance with Colorado Livestock Grazing Management Guidelines by implementing the following: grazing management practices that address distribution (Guideline No. 2), range improvements are designed consistent with overall ecological functions and processes with minimal adverse impacts to other resources or uses of riparian/wetland and upland sites (Guideline No. 5), and grazing management that occurs in a manner that does not encourage the establishment or spread of noxious weeds (Guideline No. 6). The improved grazing distribution may help to maintain/improve current rangeland conditions and maintain or make progress towards achieving Standard 3 for healthy plant communities. Standard 3 relative to healthy wildlife populations was not being met primarily due to habitat fragmentation issues and the proposed action would have little effect on this attribute. Project stipulations will also help maintain the Standards for Public Land Health by requiring reseeding of the area of disturbance with a certified weed-free mix of native seed and the control of noxious weeds within the project boundary.

The impact analysis addresses whether the proposed action or any alternatives being analyzed would result in impacts that would maintain, improve, or deteriorate land health conditions for

each of the five standards. These analyses are located in the program-specific analysis in this document.

3. Affected Environment & Environmental Effects

DIRECT AND INDIRECT EFFECTS, MITIGATION MEASURES

This section provides a description of the human and natural environmental resources that could be affected by the proposed action and alternatives. In addition, the section presents comparative analyses of the direct and indirect effects on the affected environment stemming from the implementation of the various actions.

A variety of laws, regulations, and policy directives mandate the evaluation of the effects of a proposed action and alternative(s) on certain environmental elements. Not all programs, resources or uses are present in the area, or if they are present, may not be affected by the proposed action and alternatives (Table 3-1). Only those elements that are present and potentially affected are described and brought forth for detailed analysis.

<i>Table 3-1. Programs, Resources, and Uses (Including Supplemental Authorities)</i>	<i>Potentially Affected?</i>	
	Yes	No
Access and Transportation		X
Air Quality		X
Areas of Critical Environmental Concern		X
Cadastral Survey		X
Cultural Resources	X	
Native American Religious Concerns	X	
Environmental Justice		X
Farmlands, Prime or Unique		X
Fire/Fuels Management		X
Floodplains		X
Forests		X
Geology and Minerals		X
Law Enforcement		X
Livestock Grazing Management	X	
Noise		X
Paleontology		X
Plants: Invasive, Non-native Species (Noxious Weeds)	X	
Plants: Sensitive, Threatened, or Endangered	X	
Plants: Vegetation	X	
Realty Authorizations		X
Recreation		X

Social and/or Economics		X
Soils	X	
Visual Resources		X
Wastes, Hazardous or Solid		X
Water Quality, Surface and Ground	X	
Water Rights		X
Wetlands and Riparian Zones	X	
Wild and Scenic Rivers		X
Wilderness/WSAs/Wilderness Characteristics		X
Wildlife: Aquatic / Fisheries	X	
Wildlife: Migratory Birds	X	
Wildlife: Sensitive, Threatened, and Endangered Species	X	
Wildlife: Terrestrial	X	

Cultural Resources

Affected Environment

A records search of the general project area, and a Class III inventory of the Area of Potential Effect (APE), as defined in the National Historic Preservation Act (NHPA), was completed by the CRVFO BLM archaeologist and crew (CRVFO CRIR# 1012-32 and 1013-38). No cultural resources were identified during project inventory. Vegetation cover (mainly oak brush) was thick and dense in areas and ground visibility was 0% at times. The area has previous oil and gas disturbances, including a road from which the pipeline is being extended. The project inventory and evaluation is in compliance with the NHPA, the Colorado State Protocol Agreement, and other federal law, regulation, policy, and guidelines regarding cultural resources.

Environmental Effects

Proposed Action

No cultural resources were identified during project inventory and therefore, no cultural resources will be affected by project implementation. The proposed action has a determination of *no historic properties affected* if mitigation measures are followed (see mitigation).

No Action

If no action occurs, potential adverse impacts to unknown cultural resources through project implementation, such as soil disturbance from machinery or soil erosion from vegetation removal, would not occur.

Mitigation

Additional areas or changes in the project implementation may require additional archaeological inspection by a qualified archaeologist. These changes include but are not limited to extension of the pipeline, additional water features, or rerouting the pipeline outside of the surveyed area.

Cultural Resource Stipulations

If subsurface cultural values are uncovered during operations, all work in the vicinity of the resource will cease and the authorized officer with the BLM notified immediately. The operator

shall take any additional measures requested by the BLM to protect discoveries until they can be adequately evaluated by the permitted archaeologist. Within 48 hours of the discovery, the State Historic Preservation Officer (SHPO) and consulting parties will be notified of the discovery and consultation will begin to determine an appropriate mitigation measure. BLM in cooperation with the operator will ensure that the discovery is protected from further disturbance until mitigation is completed. Operations may resume at the discovery site upon receipt of written instructions and authorization by the authorized officer.

Native American human remains

Pursuant to 43 CFR 10.4(g), the holder must notify the authorized officer, 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 authorized officer, or until the authorized officer has issued a written notice to proceed, whichever occurs first.

Native American Religious Concerns

Affected Environment

American Indian religious concerns are legislatively considered under several acts and Executive Orders, namely the American Indian Religious Freedom Act of 1978 (PL 95-341), the Native American Graves Environmental Assessment Protection and Repatriation Act of 1990 (PL 101-601), and Executive Order 13007 (1996; Indian Sacred Sites). In summary, these require, in concert with other provisions such as those found in the NHPA and ARPA, that the federal government carefully and proactively take into consideration traditional and religious Native American culture and life and ensure, to the degree possible, that access to sacred sites, the treatment of human remains, the possession of sacred items, the conduct of traditional religious practices, and the preservation of important cultural properties are considered and not unduly infringed upon. In some cases, these concerns are directly related to “historic properties” and “archaeological resources”. In some cases elements of the landscape without archaeological or other human material remains may be involved. Identification of these concerns is normally completed during the land use planning efforts, reference to existing studies, or via direct consultation.

Environmental Effects

Proposed Action

Native American tribal consultation was conducted for the proposed undertaking with the Ute Indian Tribe of the Uintah and Ouray Reservation, Southern Ute Indian Tribe, and the Ute Mountain Ute Tribe on April 15, 2013. No concerns or comments were received regarding this project. No areas of concern to Native American tribes were identified during project inventory or during tribal consultation.

No Action

Under this alternative, the pipeline would not be installed. Therefore there would be no potential to impact areas of concern to Native Americans.

Mitigation

Additional areas or changes in the project implementation may require additional tribal consultation. These changes include but are not limited to extension of the pipeline, additional water features, or rerouting the pipeline outside of the surveyed area.

Livestock Grazing Management

Affected Environment

The Proposed Action occurs within the Beaver Mamm grazing allotment. The grazing permittee in coordination with the BLM has planned the project to improve water sources on the middle and upper pastures of the allotment. There are two grazing permits authorizing the following use on the allotment:

Authorization	Livestock #	Dates	AUMs
0500001	79 Cattle	5/15 to 10/15	400
0503869	45 Cattle	5/15 to 10/15	228

Environmental Effects

Proposed Action

The construction of the pipeline and water troughs would improve the ability of the permittees to distribute cattle more evenly across the allotment. The additional water sources will help protect sensitive areas such as spring sources where cattle may tend to concentrate when water is short.

No Action Alternative

Under this alternative, no pipeline would be installed beyond what currently exists. Livestock grazing would continue to be focused in areas where there is a sufficient source of water during the summer months. This would concentrate use in smaller areas on the allotment increasing the potential for highly impacted riparian areas near spring sources.

Plants: Invasive Non-Native Species (Noxious Weeds)

Affected Environment

The proposed action occurs within the Beaver Mamm allotment where infestations of several species of noxious weeds and invasive non-native species occur and are reflected in Table 3-3.

Scientific Name	Common Name	Statewide List Type
<i>Acroptilon repens</i>	Russian knapweed	B List
<i>Centaurea maculosa</i>	Spotted knapweed	B List
<i>Centaurea diffusa</i>	Diffuse knapweed	B List
<i>Cirsium arvense</i>	Canada thistle	B List
<i>Cynoglossum officinale L.</i>	Houndstongue	B List
<i>Carduus acanthoides L.</i>	Plumeless thistle	B List
<i>Tamarix spp.</i>	Salt cedar	B List
<i>Verbascum Thapsus L.</i>	Common mullein	C List
<i>Arctium minus Bernh.</i>	Common burdock	C List

Environmental Effects

Proposed Action

Under the Proposed Action, pipeline installation would result in approximately ¼ mile of new vegetation removal and soil disturbance. This would create site conditions conducive to the establishment of noxious weeds because weeds generally germinate and become established in areas of surface disturbing activities.

Noxious weed infestations are common in areas where livestock concentrations are high. Three existing ponds filled by the new pipeline and the addition two watering troughs have the potential to create additional areas where livestock may congregate. These areas are typically small patches of disturbed vegetation and soil that provide favorable conditions for noxious weed establishment. Generally, seed is transported and introduced to these new areas by fecal deposition or by plant propogules that cling to coats, hooves of livestock. Livestock handlers, their horses, and equipment may serve as vectors transporting noxious weeds and invasive plant species.

Concentrated and repeated utilization can cause a decline in desirable native plant species and ground cover. These areas of reduced herbaceous cover provide a niche for noxious weeds and non-native invasive species to establish. Conversely, proper grazing can increase vigor and health of native plants that creates a rangeland more resistant to noxious weeds and invasive non-native plant species invasion. The proposed action improves the water distribution on the Beaver Mamm allotment which will help with livestock distribution during the summer months and decrease the potential for over-grazed areas to occur.

Many abiotic and biotic factors contribute to the presence and spread of noxious weeds. The proposed action does not alter these factors. It would not be expected that the noxious weeds or non-native invasive plant species will radically increase due to the result of the proposed action. The effects of the proposed action are minimal when compared to other ground disturbing activities and seed dispersal vectors associated with oil and gas pipelines, well pad construction, and vehicle traffic occurring on the allotment.

No Action Alternative

Under this alternative, no pipeline or additional water sources would be installed beyond what currently exists. Livestock grazing would continue to be focused in areas where there is a sufficient source of water during the summer months. This would concentrate use in smaller areas on the allotment increasing the possibility for weed establishment in high use areas. Under this alternative, the risk of noxious weeds and invasive non-native plant species would occur from current activities on the allotment.

Plants: Sensitive, Threatened, and Endangered

Affected Environment

The proposed action area does not encompass any occupied or suitable habitat for any listed or proposed plant species. The action area is within suitable habitat for the BLM sensitive plant, Harrington's penstemon, and known occurrences are found within 900 feet (270 meters) of the project area. A botanical survey was conducted on June 23, 2011. No Harrington's penstemon plants were found in the immediate project area; however, a small new population was located

within 540 feet (165 meters) of an existing pond at the northern terminus of the proposed pipeline.

Environmental Effects

Proposed Action

There will be no direct impacts to Harrington's penstemon from the proposed action since no plants would be directly disturbed during construction of the pipeline. Indirect impacts could occur if new water sources attract additional livestock grazing use in areas occupied by Harrington's penstemon plants. The flowering stalks of Harrington's penstemon are highly palatable to livestock and wildlife and reductions in Harrington's penstemon populations could result if excessive grazing removes a high percentage of the flower stalks annually thereby inhibiting seed dissemination and reproduction. The pond at the northern terminus of the proposed pipeline already exists, and usually holds water until mid to late summer. Livestock currently use this area during the flowering period for Harrington's penstemon plants, so the proposed action would not create new impacts on the reproductive potential of this special status plant. The two new proposed troughs would draw livestock further away from any known occurrences of Harrington's penstemon. The objective of the proposed action is to improve livestock distribution throughout the allotment and reduce areas of concentrated use. This should benefit Harrington's penstemon by drawing livestock use to areas without sensitive plants in the vicinity and reducing trampling and grazing of Harrington's penstemon flower stalks in other parts of the allotment.

No Action Alternative

No additional water developments would be constructed and there would be no direct impacts to any special status plants. Livestock use would concentrate around the existing water developments on the allotment which may create some localized impacts on Harrington's penstemon in the vicinity.

Land Health Standards

The proposed action falls within the Beaver-Mamm allotment which was included in the Rifle-West Watershed Land Health Assessment (BLM 2005). The allotment was found to be meeting Standard 4 for threatened, endangered and BLM sensitive plants at the time of the assessment. Implementation of the proposed action should not result in a failure to achieve this standard.

Plants: Vegetation

Affected Environment

Vegetation in the area of the proposed action includes large sagebrush/mixed mountain shrub meadows intermingled with small patches and stringers of Gambel oak dominated shrublands.

Environmental Effects

Proposed Action

A majority of the pipeline would be installed in an existing road. Approximately 0.25 miles of the pipeline would be constructed outside of an existing road, mostly through oakbrush. Implementation of the proposed action would involve clearing less than 0.5 acres of vegetation. All disturbed areas would be reseeded with a certified weed-free mix of native species approved by BLM. The permittee would monitor the disturbed areas for noxious weeds and would treat

any Colorado noxious weeds at the most appropriate time of year for effective control. If seeding of native species and the recruitment of vegetation from adjacent undisturbed areas are successful, then native herbaceous cover should reestablish within 2-3 years. Shrubs may take longer to reoccupy the site, although oakbrush is expected to resprout quickly following completion of the pipeline. The proposed action would improve livestock distribution throughout the allotment which would likely reduce areas of concentrated use and maintain or improve overall vegetative cover and species composition.

No Action Alternative

Under this alternative, no pipeline would be installed beyond what currently exists and there would be no direct impacts to soils. Livestock grazing would continue to be focused in areas where there is a sufficient source of water during the summer months, in which trampling and removal of plant material may still occur and potentially increase soil compaction.

Land Health Standards

The proposed action falls within the Beaver-Mamm allotment which was assessed as part of the Rifle-West Watershed Land Health Assessment (BLM 2005). The allotment was found to be meeting Standard 3 for healthy plant communities on a site-specific basis. Fragmentation was listed as a land health concern across the landscape but this allotment was less fragmented than adjoining private lands. Implementation of the proposed action would result in the temporary loss of a small amount of vegetation, but desirable, native vegetation is expected to reoccupy the site within 2-3 years. The additional water sources should improve livestock distribution throughout the allotment which would create more even livestock grazing and lessen the areas of concentrated use. Implementation of the proposed action should maintain or improve vegetative conditions throughout the allotment and should continue to achieve Standard 3 for healthy plant communities.

Soils

Affected Environment

A review of the soil survey by the NRCS for the *Rifle Area, Colorado, Parts of Garfield and Mesa Counties* indicate one soil map unit occurs along the proposed pipeline footprint (NRCS 1985). The NRCS soil map unit description (NRCS 2011) is provided below:

Morval-Tridell complex (45) – These soils develop on alluvial fans and sides slopes of mesas on 6-25% slopes. Morval soil is typically a brown clay loam at the surface occurring on flatter terrain within the soil complex area. Tridell soils are typically brown stony loams at the surface, occurring on steeper areas. This soil complex is considered deep and well drained.

Soils along the proposed action area have been mapped by the BLM as “fragile” soils, meaning that the slope and soil characteristics are either steeper than 30 percent and/or contain areas of very severe erosion hazard, fragile and saline soils regardless of slope, based on the NRCS soil survey data. Soil health and vegetation was evaluated in 2004 during the Rifle-West Land Health Assessment. BLM staff concluded that soils were meeting land health standards throughout the Beaver-Mamm allotment (BLM 2005).

Environmental Effects

Proposed Action

The proposed action will extend the Twinky Bee pipeline for 1 mile in order to feed three existing stock ponds and two new water troughs. Since the majority of the pipeline would be installed in an existing road, only ¼ mile would be new surface disturbance. Direct impacts include clearing vegetation (mostly oakbrush) for ¼ mile and excavation and compaction of a 2 feet deep pipeline trench. Most of the soils removed from excavation work would be replaced back near its original location as fill material. The disturbed area would be reseeded with a BLM approved seed mix to prevent soil erosion. However, some soil erosion may occur in the interim while new vegetation becomes established. Soil erosion is expected to be minimal in the long-term, if best management practices are successfully implemented.

No Action Alternative

Under this alternative, no pipeline would be installed beyond what currently exists and there would be no direct impacts to soils. Livestock grazing would continue to be focused in areas where there is a sufficient source of water during the summer months, in which trampling and removal of plant material may still occur and potentially increase soil compaction and erosion.

Land Health Standards

Based on the Rifle-West Land Health Assessment, BLM staff concluded that soils are meeting Standard 1 (BLM 2005). Implementation of the proposed action is not anticipated to degrade soil health from current conditions.

Water Quality, Surface and Ground

Affected Environment

The Twinky Bee spring is located in the Ramsey Gulch 6th level watershed which has intermittent stream flow. The spring flows for only a short distance on the ground surface. It is doubtful that flow from the spring ever reaches the main channel of Ramsey Gulch. The BLM has an absolute adjudicated water right (04CW218), on the Twinky Bee Spring for 0.07cfs for livestock watering. The spring is currently developed with a spring box, buried pipeline and functioning water troughs. The proposed action would extend the current uses. No water quality data has been collected on the Twinky Bee spring. However, an adjacent spring (Ramsey Spring) was found to have good water quality, with EC=633 ppm, pH=6.76 and Temp = 7.7°C. It is assumed that Twinky Bee spring would have similar water quality, as these two water sources are only ½ mile apart with similar soils and geology.

The State of Colorado has developed *Stream Classifications and Water Quality Standards* that identify beneficial uses of water and numeric standards used to determine allowable concentrations of water quality parameters (CDPHE 2010a). Ramsey Gulch is listed under the Lower Colorado River Basin (Region 11) and has water use classifications described below:

Table 3-4	Stream Segment Description	Classifications
4a.	All tributaries, including wetlands, to the Colorado River from the confluence with the Roaring Fork River to a point immediately below the confluence with Parachute Creek.	Aquatic Life Cold 2 Recreation N Water Supply Agriculture

Aquatic life cold 2 are waters that are not capable of sustaining a wide variety of cold water biota, including sensitive species, due to physical habitat, water flows, or uncorrectable water quality conditions that result in substantial impairment of the abundance and diversity of species. The Recreation N refers to stream segments with surface waters that are not suitable or intended to become suitable for primary contact recreation uses. Water supply and agriculture refer to stream segments that are suitable or intended to become suitable for potable water supplies and suitable for irrigation or livestock use.

The State of Colorado has developed a *303(d) List of Water Quality Limited Segments Requiring TMDLS and Monitoring and Evaluation List* (CDPHE 2010b) that identifies stream segments that are not currently meeting water quality standards with technology based controls alone. Ramsey Gulch is currently listed for selenium impairment and given a moderate priority by the State of Colorado.

Environmental Effects

Proposed Action

The proposed action would fill three existing stock ponds, which has a slight potential to impact water quality in Ramsey Gulch, by prolonging a means for deep water percolation of soils that may have potential to leach selenium into Ramsey Gulch. Based on the site-specific locations of the stock ponds, the proposed action is not thought to be in selenium or saline rich soil types. However, saline soil types (i.e. Wasatch shale) do surface further downstream from the proposed action. Trenching one mile of new pipeline, should have minimal impacts to water quality if BMPs are successful to minimize erosion and surface runoff. In addition, piping the water, rather than open ditch, is an effective means to limit potential selenium transport. Overall, it is unlikely that the proposed action would significantly contribute to potential selenium leaching into the watershed above current levels.

No Action Alternative

Under this alternative, no pipeline would be installed beyond what currently exists and there would be no direct impacts to water quality. Livestock grazing would continue to be focused in areas where there is a sufficient source of water during the summer months, in which trampling and removal of plant material may still occur and potentially increase soil compaction and erosion, which can indirectly affect water quality, if sediment is transported into the drainage network.

Mitigations

To minimize any potential selenium leaching through the watershed, the existing stock ponds in the Ramsey Gulch watershed shall be maintained with a bentonite liner (or other effective liner approved by BLM), each time the ponds are cleaned out.

Land Health Standards

The 2004 Rifle-West Land Health Assessment did not specifically address the Ramsey Gulch selenium water quality issues. Deferring to Colorado State Water Quality Standards, Ramsey Gulch would not be considered to be meeting Land Health Standard 5. However, based on the existing water quality data from adjacent sources and soil types, the Twinky Bee spring is not likely a significant source for selenium transport. The proposed action is not anticipated to

degrade water quality from current conditions if BMPs and mitigation measures are successful implemented.

Wetlands and Riparian Zones

Affected Environment

Proper Functioning Condition assessments were conducted within the watershed of the Beaver Mamm Allotment in 2004 with no lentic or lotic riparian observations were recorded because they do not exist within the allotment. Yet water used to fill this pipeline originates from the developed Twinky Bee spring.

Environmental Effects

Proposed Action

The pipeline extension is not expected to impact riparian areas. The spring site is currently developed and removes water that would naturally be available at its current location and traps a portion of that water into a pipeline for distribution to other sites. The proposed action adds additional pipeline and increases the opportunities for water storage at other locations to better distribute cattle on the allotment.

No Action Alternative

The spring site is currently developed and piped to two existing water troughs. Impacts to the spring site under this alternative would be the same as or similar to the proposed action.

Land Health Standards

Standard #2 for healthy riparian zones was being met in 2004. Implementation of the proposed action would not prevent the continued achievement of this standard.

Wildlife: Aquatic / Fisheries

Affected Environment

The proposed action includes potential water depletion activities to the Ramsey Gulch watershed that could directly and indirectly impact aquatic wildlife specifically tied to invertebrate production and in-stream flows. Two new troughs equally 1,000 gallons of water capacity and 3 ponds equal to $\frac{3}{4}$ acre feet water capacity. Given that the proposed action would result in the depletion of 0.75 acre-feet of water from within the Colorado River basin, this project falls under BLM Colorado's Programmatic Biological Assessment (PBA) for water depleting activities (excluding fluid minerals development) on BLM lands in the Colorado River basin in Colorado (BLM 2008).

In response to BLM's PBA, the U. S. Fish and Wildlife Service (FWS) issued a Programmatic Biological Opinion (PBO)(ES/GJ-6-CO-08-F-0010) on February 25, 2009, which concurred with BLM's determination that water depletions are "Likely to Adversely Affect" the Colorado pike minnow, humpback chub, bonytail, and razorback sucker. Likewise, the project is also likely to adversely affect designated critical habitats for these endangered fish along the Green, Yampa, White, Colorado, and Gunnison rivers. However, the FWS also determined that BLM water depletions from the Colorado River Basin are not likely to jeopardize the continued existence of the Colorado pike minnow, humpback chub, bonytail, or razorback sucker, and that BLM water depletions are not likely to destroy or adversely modify designated critical habitat.

A Recovery Implementation Program for Endangered Fish Species in the Upper Colorado River Basin was initiated in January 1988. The Recovery Program serves as the reasonable and prudent alternative to avoid jeopardy and aid in recovery efforts for these endangered fishes resulting from water depletions from the Colorado River Basin. The PBO addresses internal and external BLM projects including impoundments, diversions, water wells, pipelines, and spring developments. The FWS determined that projects that fit under the umbrella of the PBO would avoid the likelihood of jeopardy and/or adverse modification of critical habitat for depletion impacts to the Upper Colorado River Basin if they deplete relatively small amounts of water (less than 100 AF) and BLM makes a one-time contribution to the Recovery Implementation Program for Endangered Fish Species in the Upper Colorado River Basin (Recovery Program) in the amount equal to the average annual acre-feet depleted by each project. The PBO instructed BLM to make an annual payment to the National Fish and Wildlife Foundation (NFWF) to cover all BLM authorized actions that result in water depletions. [Include statement here with project name, average annual depletion amount, and depletion fee amount. The Twinky Bee pipeline supporting 3 new ponds and two stock tanks equally 0.75 acre foot of water use. The depletion fee for this project is \$14.87 (\$19.82 per AF). This project has been entered into the Colorado River Field Office water depletion log which will be submitted to the Colorado State Office at the end of the Fiscal Year. The CSO is responsible for paying depletion fees based on the annual statewide total.

Amphibians likely present in ponds, seeps and springs would include various species of frogs (e.g., western chorus frog (*Pseudacris triseriata*)), and toads (e.g., Great Basin spadefoot (*Spea intermontana*)), which are adapted to seasonal flow regimes in arid environments. Tiger salamander (*Ambystoma tigrinum*) was observed in an existing pond along this line on May 14, 2013. Aquatic macroinvertebrates most likely to occur in the allotment include water striders, water boatmen, predaceous diving beetles, and the aquatic larvae of caddisflies and true flies.

Environmental Effects

Proposed Action

Given the lack of special status aquatic species in the area of influence associated with the proposed pipeline, there would be no direct effects to special status aquatic species or their habitats resulting from pipeline installation. Although not exceeding water depletion thresholds, the proposed action would create new water sources that could indirectly impact special status aquatic species as discussed in the affected environment. Tiger salamanders are not expected to be impacted by pond maintenance as they would typically be cleaned when ponds are dry and salamanders are residing in their subterranean hibernaculum. Ponds would be expected to benefit tiger salamanders by creating a more consistent habitat and increase genetic material dispersal.

No Action Alternative

This alternative would not have an impact on aquatic wildlife species.

Mitigation

All water depletions have been reported and would be handled under agreements established in the PBO described in the affected environment.

Land Health Standards

Given the potential of the streams located within the watershed, overall, Standard 3 is being met for aquatic wildlife. However, as natural gas production and development continues to increase, it will be increasingly difficult to maintain Standard 3 for aquatic wildlife as more roads, pipelines, and well pads result in increased risk of erosion of sediments into resident streams.

Wildlife: Migratory Birds

Affected Environment

BLM Instruction Memorandum No. 2008-050 provides guidance toward meeting the Bureau of Land Management's (BLM) responsibilities under the Migratory Bird Treaty Act (MBTA) and the Executive Order (EO) 13186. The guidance directs Field Offices to promote the maintenance and improvement of habitat quantity and quality. To avoid, reduce or mitigate adverse impacts on the habitats of migratory bird species of conservation concern to the extent feasible, and in a manner consistent with regional or statewide bird conservation priorities.

The 1988 amendment to the Fish and Wildlife Conservation Act mandates the U.S. Fish and Wildlife Service (USFWS) to "identify species, subspecies, and populations of all migratory nongame birds that, without additional conservation actions, are likely to become candidates for listing under the Endangered Species Act (ESA) of 1973." The "*BIRDS OF CONSERVATION CONCERN 2008*" (U.S. Fish and Wildlife Service 2009) is the most recent effort to carry out this mandate.

The MBTA prohibits the "take" of a protected species. Under the Act, the term "take" means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct. The USFWS interprets "harm" and "kill" to include loss of eggs or nestlings due to abandonment or reduced attentiveness by one or both adults as a result of disturbance by human activity, as well as physical destruction of an occupied nest.

The conservation concerns are the result of population declines - naturally or human-caused, small ranges or population sizes, threats to habitat, or other factors. Although there are general patterns that can be inferred, there is no single reason why any species is on the list. Habitat loss is believed to be the major reason for the declines of many species. When considering potential impacts to migratory birds the impact on habitat, including: 1) the degree of fragmentation/connectivity expected from the proposed project relative to before the proposed project; and 2) the fragmentation/connectivity within and between habitat types (e.g., within nesting habitat or between nesting and feeding habitats. Continued private land development, surface disturbing actions in key habitats (e.g. riparian areas) and the proliferation of roads, pipelines, powerlines and trails are local factors that reduce habitat quality and quantity for many species.

The Colorado River Valley Field Office (CRVFO) is within the Southern Rockies/Colorado Plateau Bird Conservation Region (BCR). The 2008 list of Birds of Conservation Concern include the following:

Table 3-5 2008 List of Birds of Conservation Concern

Species	Habitat Description	Potential Occurrences in Project Area	Potentially Impacted by the Proposed Action or Alternatives
Gunnison Sage-Grouse (<i>Centrocercus minimus</i>)	Sagebrush communities for hiding and thermal cover, food, and nesting; open areas with sagebrush stands for leks; sagebrush-grass-forb mix for nesting; wet meadows for rearing chicks. Year-round resident, breeding	Not Present	No
American Bittern (<i>Botaurus lentiginosus</i>)	Marshes and wetlands; ground nester. Summer resident.	Not Present	No
Bald Eagle (<i>Haliaeetus leucocephalus</i>)	Nests in forested rivers and lakes; winters in upland areas, often with rivers or lakes nearby. Generally winter resident, occasional breeding.	Unlikely	No
Ferruginous Hawk (<i>Buteo regalis</i>)	Open, rolling and/or rugged terrain in grasslands and shrubsteppe communities; also grasslands and cultivated fields; nests on cliffs and rocky outcrops. Fall/ winter resident, non-breeding.	Not Present	No
Golden Eagle (<i>Aquila chrysaetos</i>)	Open country, grasslands, woodlands, and barren areas in hilly or mountainous terrain; nests on rocky outcrops or large trees. Year-round resident, breeding.	Present	No
Peregrine Falcon (<i>Falco peregrines</i>)	Open country near cliff habitat, often near water such as rivers, lakes, and marshes; nests on ledges or holes on cliff faces and crags. Spring/summer resident, breeding.	Unlikely	No
Prairie Falcon (<i>Falco mexicanus</i>)	Open country in mountains, steppe, or prairie; winters in cultivated fields; nests in holes or on ledges on rocky cliffs or embankments . Spring/summer resident, breeding.	Not Present	No
Snowy Plover (<i>Charadrius alexandrinus nivosus/tenuirostris</i>)	Sparsely vegetated sand flats associated with pickleweed, greasewood, and saltgrass. Spring migrant, non-breeding. Spring migrant, non-breeding.	Not Present	No
Mountain Plover (<i>Charadrius montanus</i>)	High plain, cultivated fields, desert scrublands, and sagebrush habitats, often in association with heavy grazing, sometimes in association with prairie dog colonies ; short vegetation.	Not Present	No
Long-billed Curlew (<i>Numenius americanus</i>)	Lakes and wetlands and adjacent grassland and shrub communities. Spring/ fall migrant, non-breeding.	Not Present	No
Yellow-billed Cuckoo (<i>Coccyzus americanus</i>)	Riparian, deciduous woodlands with dense undergrowth; nests in tall cottonwood ,mature willow riparian, moist thickets, orchards, abandoned pastures. Summer resident, breeding.	Not Present	No
Burrowing Owl (<i>Athene cunicularia</i>)	Open grasslands and low shrublands often in association with prairie dog colonies; nests in abandoned burrows created by mammals; short vegetation.	Not Present	No
Lewis's Woodpecker (<i>Melanerpes lewis</i>)	Open woodland, often logged or burned, including oak, coniferous forest (often ponderosa), riparian woodland, and orchards, less often in pinyon-juniper.	Present	Potential
Willow Flycatcher (<i>Empidonax traillii</i>)	Riparian and moist, shrubby areas; winters in shrubby openings with short vegetation. Summer resident, breeding.	Present	No
Gray Vireo (<i>Vireo vicinior</i>)	Open pinyon-juniper woodlands. Uncommon summer resident, breeding.	Present	Potential

Pinyon Jay (<i>Gymnorhinus cyanocephalus</i>)	Pinyon-juniper woodland. Year-round resident, breeding.	Present	Potential
Juniper Titmouse (<i>Baeolophus ridgwayi</i>)	Pinyon-juniper woodlands, especially juniper; nests in tree cavities. Year-round resident, breeding.	Present	Potential
Veery (<i>Catharus fuscescens</i>)	Dense riparian thickets and hillside brush near streams. Uncommon spring/fall migrant in Eastern Colorado.	Unlikely	No
Bendire's Thrasher (<i>Toxostoma bendirei</i>)	Desert, especially areas of tall vegetation, cholla cactus, creosote bush and yucca, and in juniper woodland. Possible summer resident.	Unlikely	No
Grace's Warbler (<i>Dendroica graciae</i>)	Breeds in ponderosa pine forests. Uncommon summer resident in southwest Colorado.	Not Present	No
Brewer's Sparrow (<i>Spizella breweri</i>)	Summer resident that primarily breeds in sagebrush-grass stands and shrublands. Migrant at low elevations.	Present in Summer	Potential
Grasshopper Sparrow (<i>Ammodramus savannarum</i>)	Open grasslands and cultivated fields. Spring migrant, non-breeding.	Present	No
Chestnut-collared Longspur (<i>Calcarius ornatus</i>)	Open grasslands and cultivated fields. Spring migrant, non-breeding.	Not Present	No
Black Rosy-Finch (<i>Leucosticte atrata</i>)	Open country including mountain meadows, high deserts, valleys, and plains; breeds/ nests in alpine areas near rock piles and cliffs. Winter resident, non-breeding.	Present	No
Brown-capped Rosy-Finch (<i>Leucosticte australis</i>)	Alpine meadows, cliffs, and talus and high-elevation parks and valleys. Summer residents, breeding.	Present	No
Cassin's Finch (<i>Carpodacus cassinii</i>)	Open montane coniferous forests; breeds/ nests in coniferous forests. Year-round resident, breeding.	Present	No

The CRVFO planning area provides both foraging and nesting habitat for a variety of migratory birds that summer, winter, or migrate through the area. The habitat diversity provided by the broad expanses of sagebrush, mixed mountain shrub, oakbrush, aspen, pinyon-juniper woodlands, other types of coniferous forests and riparian and wetland areas support many bird species. The gray vireo, pinyon jay, juniper titmouse, Lewis's woodpecker, Cassin's finch and Grace's warbler are characteristically found in pinyon/juniper woodlands and the Brewer's sparrow (*Spizella breweri*) is found within sagebrush habitats. Many species of raptors (e.g. red-tailed hawks, Cooper's hawks, kestrels and owls) not on the Fish & Wildlife Service's Birds of Conservation Concern list also could occur in the area. Raptor surveys have been conducted in the area and Sharp-shinned and Red-tailed hawks both have nesting sites within one mile of the proposed action and would be expected to forage and expand territories in the project area.

Environmental Effects

Proposed Action

Ripping of a new pipeline would likely include the removal of vegetation that could support nesting migratory birds. Stock ponds do not create a suitable substrate for perching birds and could result in entrapment and ultimately death of some individuals of migratory birds. These actions could result in the "take" of migratory bird(s) as further defined in the MBTA of 1918. (See mitigation measures)

No Action Alternative

Migratory birds would not be impacted by this alternative.

Mitigation

The “ripping” and installation of the proposed pipeline would take place outside of the primary migratory bird nesting season of May 15 – July 15 to avoid conflict. Bird ladders would be installed in the proposed stock troughs to avoid entrapment/drowning of migratory birds.

Wildlife: Sensitive, Threatened, and Endangered

Affected Environment

The proposed action area does not encompass any occupied or suitable habitat for any listed or proposed wildlife species. The Midget-faded rattlesnake is a BLM sensitive species that could occupy the project area. Little is known about this snake species, particularly within the watershed area. This species ranges from across Utah and portions of Wyoming into west-central Colorado. Colorado’s populations make up the eastern margin of the range for this species. Midget faded rattlesnakes are found within most habitat types within the range but mostly prefer sage communities with rocky outcrops. There are no published records of trend or abundance in Colorado. This species are of concern in Colorado because of the small number of records and restricted range. Populations may be higher to the west in and around Grand Junction, Colorado. The main threats to these species are development, outright killing, and illegal collection of individuals for commercial purposes.

Environmental Effects

Proposed Action

Equipment use and actual pipe “ripping” activities have the potential to harm individual midget-faded rattlesnakes or destroy den sites.

No Action Alternative

This alternative would have no impact on Threatened, Endangered or sensitive species.

Mitigation

A wildlife biologist from the Colorado River Valley Field Office will determine if it is necessary to do a field survey of the proposed lay of the pipeline to determine if rattlesnake den sites are present or within the footprint of the project area. If snakes are present they would be re-located by the proper personnel prior to project implementation.

Land Health Standards

The assessment indicates that Standard 4 is currently being met for each Special Status species across the landscape and on an allotment-specific basis. Standard 3 limiting factors such as nearby oil and gas development/fragmentation could cumulatively cause negative impacts to individuals but are unlikely to harm population levels based on the proposed action.

Wildlife: Terrestrial

Affected Environment

The main concern with wildlife and wildlife habitats located north of the river is the proliferation of intensive natural gas exploration and development. This activity has resulted in large landscape/watershed scale habitat fragmentation. The physical loss of habitat is due primarily to the abundance of roads, well pads, pipelines, compressor stations and other ancillary facilities required to produce and transport natural gas. In addition habitat for some species is “effectively

lost” as animals are displaced from preferred habitats in areas with intense human activity associated with natural gas development. Human use, primarily in the form of vehicular activity, has increased and continues to expand into areas that prior to natural gas development were seldom visited due to limited or non-existent access. This increase in human activity is occurring at varying levels within the watershed during any given year, but is occurring year round including time periods critical to many wildlife species. Activity is occurring on both private and public lands within the watershed.

Big Game: The proposed project lies within Data Analysis Unit (DAU) 12 for Mule deer and 14 for elk. The DAU are used by Colorado Parks and Wildlife (CPW) to identify distinct populations based off of a degree of site fidelity and herd movement. Within this DAU for Mule deer, populations are thought to be within the higher limit of herd objectives of 17,000-23,000 animals. Within this DAU for elk, this herd is thought to be exceeding herd objectives by approximately 7,000 animals. Within these DAUs are Game Management Units (GMU) that CPW assigns harvests quotas to manage big game numbers within the DAUs which are also based on movement patterns and population densities. The proposed project is within GMU 42 for both Mule deer and elk. Rifle West land health indicated that browse species were showing early signs of heavy use back in 2004 when big game numbers were under objectives. It is expected that forage and browse are expressing more signs of use with greater big game numbers.

Black bears: Black bears are also considered a big game species known to frequent the area and are likely drawn in by water and oakbrush mast resources. Although not expected to be negatively impacted by the proposed action they may cause conflict with the proposed infrastructure as they have been reported to tamper with water developments of the area in the past.

Resident Raptors and Other Birds: As mentioned in the above migratory bird section, raptor surveys have been conducted in the area and Sharp-shinned and Red-tailed hawks both have nesting sites within one mile of the proposed action and would be expected to forage and expand territories in the project area. Dusky grouse (*Dendragapus obscurus*) are known to use this area in the spring and males may use the surrounding habitat for “drumming” and other courtship behavior.

Environmental Effects

Proposed Action

Under the timing limitation described in the below mitigation, the proposed action is not anticipated to have negative impacts to wildlife. Wildlife are expected to benefit from the available water created by the proposed action. Cumulatively speaking, the proposed action would also benefit Land Health conditions by facilitating movement of both livestock and big game.

No Action Alternative

Wildlife watering may compete with cattle watering for existing water sources but is expected to be minimal. Big game numbers are meeting and exceeding herd objectives in the area and using

the project area for winter concentration use. Indirect effects could include localized damage at existing watering sites.

Mitigation

There is currently a big game timing restriction for the project area from December 1st - April 30th. This restriction is based off of neighboring oil and gas activities that are similar to the proposed action (installing a pipeline) to protect wintering wildlife. As described in MBTA mitigation, proposed and existing stock tanks will have bird ladders installed to also protect small terrestrial wildlife from entrapment/drowning hazards.

Land Health Standards

The Beaver Mamm allotment is meeting standard 3 on a site-specific basis with regard to habitat condition related to vegetative structure and species composition. The proposed project would provide additional water sources for wildlife and would complement the existing habitat treatments in the area. Current natural gas development activities in the area have the potential to deteriorate habitat conditions by fragmenting the landscape.

CUMULATIVE EFFECTS

Range. Range improvements on the Beaver Mamm grazing allotment include ponds, spring developments, fences, and vegetation manipulation projects. Two grazing permits are authorized use from 5/15 to 10/15. The long season of use requires sufficient water sources and pasture rotations to keep cattle distributed evenly across the allotment and to maintain land health standards. Development activities have increased within the last 10 years including new roads, pipelines, and well pads. Development activities have also included mitigation projects such as hydro-axing oakbrush to reduce oakbrush cover and installing gates and cattle guards in new roadways to help control livestock. Recreational impacts are minimal outside of hunting season. Public access is from the southern end of the allotment; although public also access the area through Grass Mesa subdivision on the east and Beaver Creek on the west. One privately owned ditch is known which would also be crossed by the proposed pipeline.

Soil and Water. Cumulative impacts to soil and water resources can occur from existing roads and trails throughout the allotment. Roads and trails can contribute to increased surface runoff and accelerated erosion, especially where proper drainage is lacking. Natural gas development, which includes construction and maintenance of road, pads and pipelines have both direct and indirect effects to soil and water resources. There is a substantial amount of gas development and infrastructure on adjacent private lands that are suspected of contributing to soil and water cumulative impacts. On BLM lands, there are four active well pads and associated infrastructure in the watershed. Proper stormwater management and successful BMPs are critical to mitigating soil loss, erosion, and water quality cumulative impacts.

RESIDUAL EFFECTS

None

5. Tribes, Individuals, Organizations, or Agencies Consulted

Erin Leifeld consulted with the Southern Ute Tribe, Ute Tribe of the Uinta and Ouray Bands, and Ute Mountain Ute Tribe regarding this proposal.

Grazing permittees

6. List of Preparers

Members of the CRVFO Interdisciplinary Team who participated in the impact analysis of the Proposed Action and alternatives, development of appropriate mitigation measures, and preparation of this EA are listed in Table 6-1, along with their areas of responsibility.

Table 6-1. BLM Interdisciplinary Team Authors and Reviewers		
<i>Name</i>	<i>Title</i>	<i>Areas of Participation</i>
Isaac Pittman	Rangeland Management Specialist	NEPA Lead, Range Management
Carla DeYoung	Ecologist	ACEC, Vegetation, T/E/S Plants, Land Health Standards
Greg Wolfgang	Outdoor Recreation Planner	VRM, Recreation, Travel Management
Kimberly Miller	Outdoor Recreation Planner	Wild and Scenic Rivers, Wilderness, Recreation
Erin Leifeld	Archaeologist	Cultural Resources and Native American Concerns
Darren Long	Wildlife Biologist	Migratory Birds, Terrestrial Wildlife and T/E/S Terrestrial Wildlife, Aquatic Wildlife and T/E/S Aquatic Wildlife
Everett Bartz	Rangeland Management Specialist	Wetlands & Riparian Zones
Pauline Adams	Hydrologist	Air Quality, Water Quality, Soils
Kristy Wallner	Rangeland Management Specialist	Invasive, Non-native Species

7. References

Bartlett, E. Tom, L. Allen Torell, Neil R. Rimbey, Larry W. Van Tassell, Daniel W. McCollum. 2002. *Valuing Grazing Use on Public Land*. Journal of Range Management, Vol. 55, No.5, pp.426-438.

Bureau of Land Management (BLM). 1984. Glenwood Springs Resource Management Plan. Glenwood Springs Field Office, Colorado.

Bureau of Land Management (BLM). 2005. BLM Land Health Assessment Report, Rifle-West Watershed. Unpublished report, Colorado River Valley Field Office, Colorado.

Bureau of Land Management (BLM). 2007a. Record of Decision for the Approval of Portions of the Roan Plateau Resource Management Plan Amendment and Environmental Impact Statement.

Bureau of Land Management (BLM). 2007b. North-Central Colorado Community Assessment Report for the Bureau of Land Management Glenwood Springs Field Office and Kremmling Field Office.

Bureau of Land Management (BLM). 2009a. Information Bulletin No. CO-2010-007. State Director's Sensitive Species List, December 15, 2009.

Census 2010 U.S. Census. County-Level Unemployment and Median Household Income for Colorado <http://www.ers.usda.gov/Data/Unemployment/RDList2.asp?ST=CO>

Church, Minette C., Steven G. Baker, Bonnie J. Clark, Richard F. Carrillo, Johnathon C. horn, Carl D. Spath, David R. Guifoyle, and E. Steve Cassells. 2007. *Colorado History: A Context for Historical Archaeology*. Colorado Council of Professional Archaeologists, Denver, Colorado.

Colorado Department of Public Health and the Environment (CDPHE). 2010a. Regulation No. 37, Classifications and Numeric Standards for Lower Colorado River Basin (5 CCR 1002-37). Water Quality Control Commission. Available online: <http://www.cdphe.state.co.us/regulations/wqcregs/>

Colorado Department of Public Health and the Environment (CDPHE). 2010b. Regulation No. 93, Colorado's 303 (d) List of Impaired Waters and Monitoring and Evaluation List, (5 CCR 1002-93). Water Quality Control Commission. Available online: <http://www.cdphe.state.co.us/regulations/wqcregs/>

Gentner, Bradley J. and John A. Tanak. 2002. *Classifying Federal Public Land Grazing Permittes*. Journal of Range Management, Vol. 55, No.1, pp.2-11.

Gruver, J.C. and D.A. Keinath. 2006. Townsend's Big-eared Bat (*Corynorhinus townsendii*): a technical conservation assessment. [Online]. USDA Forest Service, Rocky Mountain Region. Available: http://www.fs.fed.us/r2/projects/scp/assessments/_townsendsbigeardbat.pdf . Accessed on 12-3-2011.

Huntsinger, Lynn and Peter Hopkinson. 1996. *Sustaining Rangeland Landscapes: A Social and Ecological Process*. Journal of Range Management, Vol. 49, No.2, pp.167-173.

Natural Resource Conservation Service (NRCS). 1985. Soil Survey of Rifle Area, Colorado, Parts of Garfield and Mesa Counties. Available online: http://soils.usda.gov/survey/online_surveys/colorado/

Natural Resource Conservation Service (NRCS). 2011. Soil Map Unit Descriptions for *Rifle Area, Colorado, Parts of Garfield and Mesa Counties*. Soil Map Data Viewer application. Available online: <http://soils.usda.gov/sdv/>.

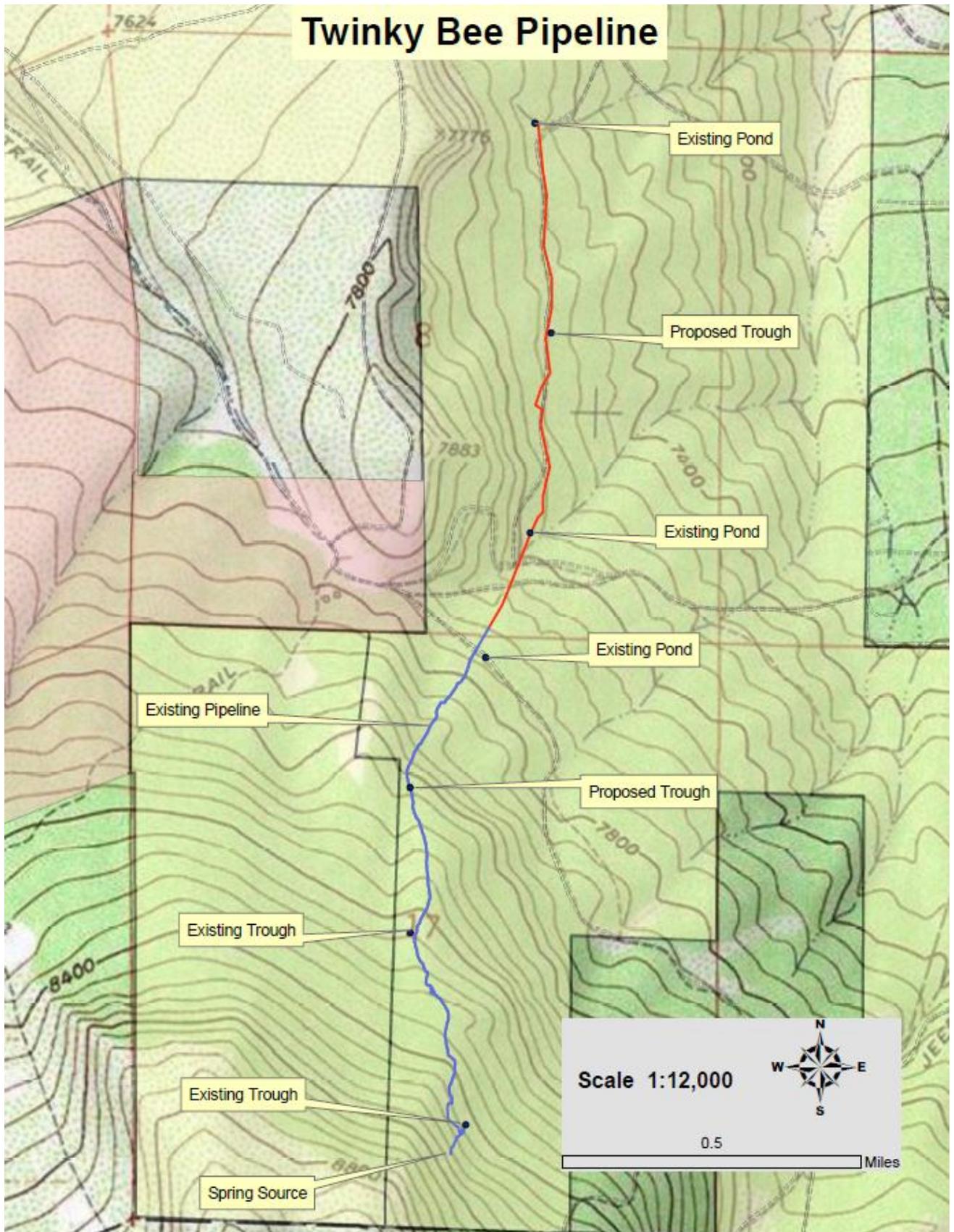
Rowe, Helen Ivy, E. T. Bartlett, Louis E. Swanson, Jr., 2001. *Ranching Motivations in 2 Colorado Counties*. Journal of Range Management, Vol. 54, No.4, pp.314-321.

Smith, Arthur H. and William E. Martin. 1972. *Socioeconomic Behavior of Cattle Ranchers, with Implications for Rural Community Development in the West*. American Journal of Agricultural Economics, Vol.54, No.2,pp.217-225.

U.S. Fish and Wildlife Service (USFWS). 2008. Birds of Conservation Concern 2008. United States Department of Interior, Fish and Wildlife Service, Division of Migratory Bird Management, Arlington, Virginia. 85 pp. http://library.fws.gov/bird_publications/bcc2008.pdf. [Accessed on 12-7-2011].

U.S. Fish and Wildlife Service. 2010. [Online]. Website: <http://www.fws.gov/mountain-prairie/endspp/countylists/colorado.pdf>. [Accessed on 12-7-2011].

Twinky Bee Pipeline



UNITED STATES DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
COLORADO RIVER VALLEY FIELD OFFICE
SILT, COLORADO

FINDING OF NO SIGNIFICANT IMPACT

Twinky Bee Pipeline Extension

DOI-BLM-N040-2013-0020-EA

Finding of No Significant Impact

I have reviewed the direct, indirect and cumulative effects of the proposed action documented in the EA referenced above. The effects of the proposed action are disclosed in the Alternatives and Environmental Effects sections of the EA. Implementing regulations for NEPA (40 CFR 1508.27) provide criteria for determining the significance of the effects. Significant, as used in NEPA, requires consideration of both *context* and *intensity* as follows:

(a) Context. This requirement means that the significance of an action must be analyzed in several contexts such as society as a whole (human, national), the affected region, the affected interests, and the locality. Significance varies with the setting of the proposed action. For instance, in the case of a site-specific action, significance would usually depend upon the effects in the locale rather than in the world as a whole. Both short and long-term effects are relevant (40 CFR 1508.27):

(b) Intensity. This requirement refers to the severity of the impact. Responsible officials must bear in mind that more than one agency may make decisions about partial aspects of a major action. The following are considered in evaluating intensity (40 CFR 1508.27).

1. Impacts that may be both beneficial and/or adverse.

The extension of the pipeline and construction of new water troughs would have some short-term adverse impacts on vegetation due to construction activities. The long-term benefits of the water developments will improve the distribution of livestock on the Beaver Mamm allotment and reduce the concentration of livestock at other existing water sources.

2. The degree to which the proposed action affects health or safety.

Health or Safety is not affected by the proposed action.

3. Unique characteristics of the geographic area such as prime and unique farmlands, caves, wild and scenic rivers, wilderness study areas, or ACECs.

None.

4. The degree to which the effects are likely to be highly controversial.

The effects are not likely to be highly controversial.

5. The degree to which the effects are highly uncertain or involve unique or unknown risks.

The possible effects are not highly uncertain nor do they involve unique or uncertain risks.

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

This EA is specific to the Twinky Bee pipeline extension. It is not expected to set precedent for future actions with significant effects or represent a decision in principle about a future management consideration in or outside of this allotment.

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

The area covered by the proposed action only comprises a small portion of the watershed. Cumulatively, many of the future actions planned on private and other lands may have some undetermined effect on wildlife including special status species habitat. The proposed action would create negligible landscape-level cumulative impacts to wildlife when viewed in conjunction with those activities currently occurring and reasonably certain to occur on adjacent private/other lands.

8. The degree to which the action may adversely affect scientific, cultural, or historical resources, including those listed in or eligible for listing in the National Register of Historic Places.

No cultural resources were identified during project inventory and therefore, no cultural resources will be affected by project implementation. Mitigation measures will ensure no undiscovered historical resources will be damaged or lost during construction activities.

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

There is no endangered or threatened species or its habitat included within the assessment area.

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

The proposed action does not violate or threaten to violate any Federal, State or local laws or requirements imposed for the protection of the environment.

Based upon the review of the test for significance and the environmental analyses conducted, I have determined that the actions analyzed in the EA will not significantly affect the quality of the

human environment. Accordingly, I have determined that the preparation of an Environmental Impact Statement is not necessary for this proposal.



Authorized Officer
Colorado River Valley Field Office

6-27-2013
Date

DECISION RECORD

DOI-BLM-CO-N040-2013-0020 EA

FINAL DECISION: It is my decision to adopt the proposed action to extend the Twinky Bee pipeline including the construction of two new water troughs and the improved water distribution to three existing ponds.

RATIONALE: The proposed action would provide cattle and wildlife with additional sources of water, help improve grazing distribution, decrease grazing pressure on a small riparian area at the spring source, and help meet Colorado Public Land Health Standards.

MITIGATION MEASURES:

Additional areas or changes in the project implementation may require additional archaeological inspection by a qualified archaeologist. These changes include but are not limited to extension of the pipeline, additional water features, or rerouting the pipeline outside of the surveyed area.

If subsurface cultural values are uncovered during operations, all work in the vicinity of the resource will cease and the authorized officer with the BLM notified immediately. The operator shall take any additional measures requested by the BLM to protect discoveries until they can be adequately evaluated by the permitted archaeologist. Within 48 hours of the discovery, the State Historic Preservation Officer (SHPO) and consulting parties will be notified of the discovery and consultation will begin to determine an appropriate mitigation measure. BLM in cooperation with the operator will ensure that the discovery is protected from further disturbance until mitigation is completed. Operations may resume at the discovery site upon receipt of written instructions and authorization by the authorized officer.

Pursuant to 43 CFR 10.4(g), the holder must notify the authorized officer, 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 authorized officer, or until the authorized officer has issued a written notice to proceed, whichever occurs first.

To minimize any potential selenium leaching through the watershed, the existing stock ponds in the Ramsey Gulch watershed shall be maintained with a bentonite liner (or other effective liner approved by BLM), each time the ponds are cleaned out.

The “ripping” and installation of the proposed pipeline would take place outside of the primary migratory bird nesting season of May 15 – July 15 to avoid conflict. Bird ladders would be installed in the proposed stock troughs to avoid entrapment/drowning of migratory birds.

A wildlife biologist from the Colorado River Valley Field Office will determine if it is necessary to do a field survey of the proposed lay of the pipeline to determine if rattlesnake den sites are present or within the footprint of the project area. If snakes are present they would be re-located by the proper personnel prior to project implementation.

There is currently a big game timing restriction for the project area from December 1st- April 30th. This restriction is based off of neighboring oil and gas activities that are similar to the proposed action (installing a pipeline) to protect wintering wildlife. As described in MBTA mitigation, proposed and existing stock tanks will have bird ladders installed to also protect small terrestrial wildlife from entrapment/drowning hazards.

RIGHT OF PROTEST AND / OR APPEAL:

All of the documents supporting this decision are available for the review by the public. Appeal procedures for this decision are outlined in Title 43 of the Code of Federal Regulations (CFR), Part 4. In accordance with Title 43 CFR 4.410 any party to a case who is adversely affected by the decision of an officer of the Bureau of Land Management shall have a right to appeal to the Interior Board of Land Appeals (Board). The Notice of Appeal must be filed in the Bureau of Land Management office that issued the decision within 30 days after the date of service (43 CFR 4.411). Procedures for filing an appeal are described on BLM Form 1842-1 (September 2005) and available online at:

http://www.blm.gov/pgdata/etc/medialib/blm/co/field_offices/slvplc/travel_managemet/final_tm_p.Par.46660.File.dat/BLM_1842-1%5B1%5D.pdf

NAME OF PREPARER: Isaac Pittman, Rangeland Management Specialist

SIGNATURE OF AUTHORIZED OFFICIAL



Matthew Thorburn
Supervisory Natural Resource Specialist

DATE: 6-27-2013