BLM

U.S. Department of the Interior
Bureau of Land Management

Environmental Assessment

DOI-BLM-UT-G010-2014–0037–EA
QEPs KJ 2–2–7–22 Gas Well

PREPARING OFFICE

U.S. Department of the Interior
Bureau of Land Management

Environmental Assessment
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Prepared by
U.S. Department of the Interior
Bureau of Land Management

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Finding of No Significant Impact

Finding of No Significant Impact:

Based on the analysis of potential environmental impacts DOI-BLM-UT-G010-2014–0037–EA, I have determined that the proposed action will not have any significant impacts on the environment, and an environmental impact statement is not required.

Signatures:

Recommended by: 1/23/14

Kevin Sadlier [Date]
Natural Resource Specialist

Approved by: JAN 23 2014

Authorized Officer [Date]
AFM for Minerals

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Decision Record - Memorandum

Selected Action:

It is my decision to approve QEP Energy Company's proposal to drill one gas well KJ 2–2–7–22 located in section 2, T. 7S., R. 22E. which is a SITLA section overlaying a federal lease. The associated power lines and pipelines are located on BLM lands located in sections 8, 9, 10, 11, 12, and 13 T.7S., R.22E., and sections 18, 19, 20, and 29 T.7S., R.23E., Uintah County, Utah, The proposed project area is located approximately 22 miles south of Vernal, Utah. The proposed well would be drilled utilizing a new location. Approximately 2,332 feet of road would be built on BLM land. Additionally 40,973 feet of 10 inch or smaller surface pipeline, and 8,771 feet of overhead power lines would be constructed. as described in the proposed action alternative of DOI-BLM-UT-G010-2014-0037–EA. This decision is subject to the below conditions of approval.

Conditions of Approval:

This decision is contingent on meeting all stipulations and monitoring requirements listed below, which were designed to minimize and/or avoid impacts.

- Water or other approved dust suppressants will be used at construction sites and along roads, as determined appropriate by the Authorized Officer.
- Open burning of garbage or refuse will not occur at well sites or other facilities.
- Drill rigs will be equipped with Tier II or better diesel engines.
- Well site telemetry will be utilized as feasible for production operations.
- If historic or archaeological materials are uncovered during construction, the operator is to immediately stop work that might further disturb such materials and contact the Authorized Officer.
- QEP Energy Company will provide a permitted paleontologist approved by the authorized officer be present to monitor the construction process of the well pad, access road, pipeline, and powerline.
- All new and replacement internal combustion gas field engines of less than or equal to 300 design-rated horse power must not emit more than 2 grams of NOx per horsepower-hour. This requirement does not apply to gas field engines of less than or equal to 40 design-rated horsepower-hour.
- All vehicles and equipment shall be cleaned either through power-washing, or other approved method, if the vehicles or equipment were brought in from areas outside the Uinta Basin, to prevent weed seed introduction.
- QEP Field Service will provide a monitor for the HWY 45 road bore crossing.
- During pipeline construction and placement in occupied Horseshoe milkvetch habitat, a BLM-approved botanist will be on site to minimize negative impacts to Horseshoe milkvetch individuals. The BLM-approved botanist will mark individual plants or areas for avoidance with pin flags, which will be removed immediately after construction is completed. Placing

the pipeline directly on plants will be avoided to the maximum extent possible. If more than 20 individual plants will be directly impacted, the BLM botanist will be contacted so that additional mitigation measures (such as transplanting, seed collection, or additional monitoring) can be implemented.

- If pipeline installation occurs during snow cover, the BLM-approved botanist will use previous survey data to mark avoidance areas. They will revisit occupied habitat areas after snowmelt to document any plants that were directly impacted by pipeline placement, to be included in the final monitoring report.
- After construction is completed, the BLM-approved botanist will provide a report to the BLM summarizing the methods and results of the avoidance measures. The report will include specifics of how many plants were directly (i.e., damaged) and indirectly impacted.
- The pipeline section west of Highway 45 will follow an existing access road and will be placed in the ROW from the road.
- The pipeline section east of Highway 45 will be welded and placed in the ROW, but vehicles will drive cross country to place the pipe. No blading will occur. The BLM-approved botanist will mark plants and identify a driving path that impacts the fewest plants.
- To minimize damage to vegetation, only rubber-tired vehicles will be used to install the pipeline unless otherwise approved by a BLM authorized officer.

Rationale:

The subject lands were leased for oil or gas development under authority of the Mineral Leasing Act of 1920, as modified by the Federal Land Policy and Management Act of 1976, and the Federal Onshore Oil and Gas Leasing Reform Act of 1987. The lessee/operator has the right to explore for oil and gas on the lease as specified in 43 CFR 3103.1-2, and if a discovery is made, to produce oil and/or natural gas for economic gain.

The selected alternative meets the BLM's need to acknowledge and allow development of valid existing leases. The BLM objective to reduce impacts is met by the imposing of mitigation measures to protect other resource values.

Land Use Plan Conformance:

The selected alternative is in conformance with the Vernal Field Office Resource Management Plan and Record of Decision (BLM 2008).

The selected alternative is consistent with *Uintah County General Plan* (published in 2007) that encompasses the location of the proposed wells. In general, the plan indicates support for development proposals such as the selected alternative through the plan's emphasis of multiple-use public land management practices, responsible use and optimum utilization.

There are no comprehensive State of Utah plans for the vicinity of the selected alternative. However, the State of Utah School and Institutional Trust Lands Administration (SITLA) have leased much of the nearby state land for oil and gas production. Because the objectives of SITLA are to produce funding for the state school system, and because production on federal leases could

further interest in drilling on state leases in the area, it is assumed that the selected alternative is consistent with the objectives of the State.

Public Involvement:

The proposed project was posted on the Eplanning NEPA Register on 12/2/2013. No comments have been received.

Alternatives Considered:

The EA analyzed the proposed action and no action alternatives. Onsite visits were conducted by Vernal Field Office Personnel. The onsite inspection reports do not indicate that any other locations be proposed for analysis. The no action alternative was not selected because it would not best meet the BLM's need to acknowledge and allow development of valid existing leases.

Appeal or Protest Opportunities:

This decision is effective upon the date it is signed by the authorized officer. The decision is subject to appeal. Under BLM regulation, this decision is subject to administrative review in accordance with 43 CFR 3165. Any request for administrative review of this decision must include information required under 43 CFR 3165.3(b) (State Director Review), including all supporting documentation. Such a request must be filed in writing with the State Director, Bureau of Land Management, Utah State Office, P.O. Box 45155, Salt Lake City, Utah, 84145-0155, within 20 business days of the date this Decision is received or considered to have been received.

If you wish to file a petition for stay, the petition for stay should accompany your notice of appeal and shall show sufficient justification based on the following standards:

1. The relative harm to the parties if the stay is granted or denied;
2. The likelihood of the appellant's success on the merits;
3. The likelihood of irreparable harm to the appellant or resources if the stay is not granted; and,
4. Whether the public interest favors granting the stay.

Signature:

Authorizing Official:

JAN 23 2014

Authorized Officer — Date

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Chapter 1. Introduction

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1.1. Identifying Information:

This Environmental Assessment (EA) has been prepared to analyze the potential impacts of QEP Energy Company's gas well drilling project in the Red Wash area of Uintah County, Utah. The EA is a site-specific analysis of potential impacts that could result from the implementation of the Proposed Action or alternatives to the Proposed Action. The EA assists the Bureau of Land Management (BLM) in project planning and ensuring compliance with the National Environmental Policy Act (NEPA), and in making a determination as to whether any "significant" impacts could result from the analyzed actions. ("Significance" is defined by NEPA and is found in regulation 40 CFR 1508.27.) An EA provides evidence for determining whether to prepare an Environmental Impact Statement (EIS) or a Finding of No Significant Impact (FONSI) statement. A FONSI statement is a document that briefly presents the reasons why implementation of the selected alternative would not result in "significant" environmental impacts (effects) beyond those already addressed in Vernal Field Office Resource Management Plan (BLM 2008). If the decision maker determines that this project has "significant" impacts following the analysis in the EA, then an EIS would be prepared for the project. If not, a Decision Record (DR) may be signed for the EA approving the alternative selected.

QEP Energy Company proposes to drill one gas well, KJ 2–2–7–22, located in section 2, T. 7S., R. 22E. which is a SITLA section overlaying a federal lease. The associated power lines and pipelines are located on BLM lands located in sections 8, 9, 10, 11, 12, and 13 T.7S., R.22E., and sections 18, 19, 20, and 29 T.7S., R.23E., Uintah County, Utah, The proposed project area is located approximately 22 miles south of Vernal, Utah. The proposed well would be drilled utilizing a new location. Approximately 2,332 feet of road would be built on BLM land. Additionally 41,024 feet of 10 inch or smaller surface pipeline, and 8,771 feet of overhead power lines would be constructed. Table 2.1, "Surface Disturbance Summary On BLM" (p. 5) and Table 2.2, "Surface Disturbance Summary On SITLA" (p. 5) list the well and its associated disturbance.

1.1.1. Title, EA number, and type of project:

Title: QEPs KJ 2-2-7-22 Gas Well

NEPA #: DOI-BLM-UT-G010-2014–0037–EA

Project Type: Environmental Assessment

1.1.2. Location of Proposed Action:

The proposed project area is located in sections 8, 9, 10, 11, 12, and 13, T.7S., R.22E., and sections 18, 19, 20, and 29, T.7S., R.23E. Uintah County, Utah. The proposed project area is located approximately 22 miles south of Vernal, Utah.

1.1.3. Name and Location of Preparing Office:

Vernal Field Office

170 South 500 East

Vernal, Ut. 84078

(435) 781–4400

1.1.4. Identify the subject function code, lease, serial, or case file number:

Lease Number: UTU-74423

1.1.5. Applicant Name:

QEP Energy Company

1.2. Purpose and Need for Action:

Private exploration and production from federal oil and gas leases is an integral part of the BLM oil and gas leasing program under authority of the Mineral Leasing Act of 1920, as amended by the Federal Land Policy and Management Act of 1976 and the Federal Onshore Oil and Gas Leasing Reform Act of 1987. The operator has a valid existing right to extract mineral resources from Federal Lease UTU-74423 subject to the lease's terms and conditions. The BLM oil and gas leasing program encourages development of domestic oil and gas reserves and the reduction of U.S. dependence on foreign energy sources. The BLM's purpose is to allow beneficial use of the applicant's lease in an environmentally sound manner.

The underlying need for the proposed action is for QEP to develop Federal Lease UTU-74423 by drilling the proposed wells, and if successful, to produce commercial quantities of gas or oil from the federal oil and gas leases. There are known hydrocarbon-trapping mechanisms within QEP's development program, based on previously drilled wells and reasoned geologic formation and mineral potential.

1.3. Scoping, Public Involvement and Issues:

The proposed project was posted on the Eplanning NEPA Register on 12/2/2013. No inquiries have been received.

Chapter 2. Proposed Action and Alternatives

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2.1. Description of the Proposed Action:

QEP Energy Company proposes to drill one gas well KJ 2–2–7–22 located in section 2, T. 7S., R. 22E. which is a SITLA section overlaying a federal lease. The associated power lines and pipelines are located on BLM lands located in sections 8, 9, 10, 11, 12, and 13 T.7S., R.22E., and sections 18, 19, 20, and 29 T.7S., R.23E., Uintah County, Utah, The proposed project area is located approximately 22 miles south of Vernal, Utah. The proposed well would be drilled utilizing a new location. Approximately 2,332 feet of road would be built on BLM land. Additionally 41,024 feet of 10 inch or smaller surface pipeline, and 8,771 feet of overhead power lines would be constructed. If dry, the well would be plugged and abandoned as per BLM and State of Utah requirements. Table 2.1, "Surface Disturbance Summary On BLM" (p. 5) and Table 2.2, "Surface Disturbance Summary On SITLA" (p. 5) lists the well and its associated disturbance. Two rights-of-way would be issued for this project. The first would be issued to QEP Energy Company for the portion of the power line that is located off of the Kilimanjaro Unit. The second would be issued to QEP Field Service for the entire pipeline system associated with this project.

Table 2.1. Surface Disturbance Summary On BLM

Well Name	Surface Gas Pipeline (feet)*	Surface Gas Pipe Line (acres)*	Over Head Power Lines (feet)	Over Head Power Lines During Construction (acres)	Over Head Power Lines Permanent Access (acres)	Access Road (feet)	Access Road (acres)	Total Acres of New Surface Disturbance (acres)
KJ 2–2–7–22	41,024	47.09	8,771	10.07	3.02	2,332	1.60	11.67

*Surface pipelines are not considered new surface disturbance.

Table 2.2. Surface Disturbance Summary On SITLA

Well Name	New Well Pad Disturbance (acres)	Surface Gas Pipeline (feet)*	Surface Gas Pipe Line (acres)*	Over Head Power Lines (feet)	Over Head Power Lines During Construction (acres)	Over Head Power Lines Permanent Access (acres)	Access Road (feet)	Access Road (acres)	Total Acres of New Surface Disturbance (acres)
KJ 2–2–7–22	4.53	6,909	4.76	6,106	7.01	2.10	6,107	4.21	15.75

*Surface pipelines are not considered new surface disturbance.

2.1.1. Access

A new road would be built to access the proposed well. Approximately 6,107 feet of the access road would be located on SITLA administered lands and 2,332 feet of the access road would be built on BLM administered lands. The new road would be crowned (2 to 3%), ditched, and

maintained with a running surface of 18 feet and a maximum disturbed width of 30 feet during construction and maintenance.

2.1.2. Well Site Layout

The proposed well would be constructed on a new well pad. This would result in approximately 15.75 acres of new surface disturbance during the construction of the well pad, reserve pit, and access road on SITLA administered lands. Topsoil stockpiled from construction of the pad and reserve pit would be stripped to a depth determined on the onsite for each well and placed on determined sites for the well, segregated from the subsoil. The topsoil piles would be signed for identification. A surface use agreement from SITLA would be required before the proposed project could be built on SITLA lands.

2.1.3. Pipelines

A Right-of-Way application has been submitted by QEP Field Service for all of the pipeline associated with this project. There would be 41,024 feet of surface pipeline installed for this project located on BLM administered lands. Additionally 6,909 feet of pipeline would be installed on SITLA administered lands. The pipeline would be steel with a thickness as required by code.

Access to the proposed pipeline would be from existing roads. All construction and vehicular traffic would be confined to the right-of-way corridor or designated county and\or BLM roads unless otherwise authorized by the BLM authorized officer.

2.1.4. Power Lines

There would be 8,771 feet of overhead power installed on BLM administered lands and 6,106 feet of overhead power installed on SITLA administered lands for this project. Access for proposed power lines would be from existing roads. All construction and vehicular traffic will be confined to the authorized access corridor and designated county and/or BLM roads unless otherwise authorized and approved by the regulating agency. All work would be done according to standards outlined in "Suggested Practices for Raptor Protection" (REA). QEP is proposing a 50 foot temporary authorized access, and a 15 foot permanent authorized access, for maintenance of the power line. Minimal to no disturbance is required for the power lines following roads and existing disturbance.

A Right-of-Way would be required for 1,853 feet of the power line located in Section 13, T. 7S., R. 23E.. The Right-of-Way would be granted to QEP Energy Company for the section of pipeline that is off the Kilimanjaro Unit.

2.1.5. Invasive Plants and Noxious Weeds

The operator would control noxious/invasive weeds along their roads, pipelines, well sites, or other applicable facilities by the application of herbicides or by mechanical removal until reclamation is considered to be successful by the Authorized Officer (AO) and the bond for the well is released. A list of noxious weeds would be obtained from the BLM or the appropriate county extension office. On BLM-administered land, the operator would submit a Pesticide Use

Proposal and obtain approval prior to the application of herbicides, other pesticides, or possible hazardous chemicals.

2.1.6. Water Supply and Disposal

Fresh water for drilling would be obtained from Wonsits Valley water right 49-251 (which was filed on May 7, 1964), or Red Wash water right 49-2153 (which was filed on March 25, 1960). Water would be hauled by a licensed trucking company. Water wells would not be drilled on the lease.

On January 21–22, 1988, the Secretary of the Interior; the Governors of Wyoming, Colorado, and Utah; and the Administrator of the Western Area Power Administration were cosigners of a cooperative agreement to implement the Recovery Implementation Program for Endangered Fish Species in the Upper Colorado River Basin (USFWS 1987). An objective of the Recovery Program was to identify reasonable and prudent alternatives that would ensure the survival and recovery of the four endangered Colorado River fish species, while providing for new water development in the Upper Colorado River Drainage Basin.

Wonsits Valley, and Red Wash water rights are historic depletions (permitted prior to January 1988). The U.S. Fish and Wildlife Service (USFWS 1994) address's new and historic depletions differently. Under the Section 7 agreement of March 11, 1993, historic depletions, regardless of size, do not pay a depletion fee to the Recovery Program. Also, consultation for historic depletions was conducted in association with that 1993 agreement.

2.1.7. Waste Disposal

Drill cuttings would be contained and buried in the reserve pits. Drilling fluids, including salts and chemicals, would be contained in the reserve pits. Upon termination of drilling and completion operations, the liquid contents of the reserve pits would be used at the next drill site or would be removed and disposed of at an approved waste disposal facility within 6 months after drilling is terminated. Immediately upon well completion, any hydrocarbons in the pit would be removed in accordance with 43 CFR 3162.7-1.

Unless specified in the site specific APD, the reserve pits would be constructed on the location and not be located within natural drainages, where a flood hazard exists or surface runoff would destroy or damage the pit walls. The reserve pits would be constructed so that they would not leak, break, or allow discharge of liquids.

After first production, wastewater would be confined to the approved pit or storage tank for a period not to exceed 90 days. During the 90 day period, in accordance with Onshore Order #7, all produced water would be contained in tanks on location and then hauled to an approved facility for disposal.

Produced water, oil, and other by-products would not be applied to roads or well pads for control of dust or weeds. The dumping of produced fluids on roads, well sites, or other areas would not be allowed.

A chemical porta-toilet would be furnished with the drilling rig. The chemical porta-toilet wastes would be hauled to Ashley Valley Sewer and Water System for disposal.

No hazardous wastes (as defined in 40 CFR 355 or subject to reporting under SARA Title III) would be used, produced, stored, transported, or disposed of annually in association with the drilling, testing, or completing of this well.

Trash would be confined in a covered container and hauled to an approved landfill. No waste or oil would be burned. Human waste would be contained and disposed of at an approved sewage treatment facility.

2.1.8. Reclamation

2.1.8.1. Producing Location

Immediately upon well completion, the locations and surrounding areas would be cleared of all unused tubing, equipment, debris, materials, and trash. Any hydrocarbons in the pit would be removed in accordance with 43 CFR 3162.7-1.

2.1.8.2. Interim Reclamation

Interim reclamation of the surface environment would take place after drilling and completion and well is put into production. The reserve pit and the portion of the well not needed for production facilities/operations would be recontoured to the approximate natural contours. The reserve pit would be reclaimed within 120 days from the date of well completion, or as soon as environmental conditions allow. The stockpiled pit topsoil would then be spread over the pit area and broadcast-seeded/drill seeded (preferred method) with a seed mixture that would be submitted via sundry. The seed mixture would be worked into the topsoil with a drill seeder, bulldozer or other heavy equipment. If initial seeding is not successful, reseeding may be required.

2.1.8.3. Dry Hole / Abandoned Locatoin

Abandoned well sites, roads and other disturbed areas would be restored as near as practical to their natural condition. Stockpiled topsoil would be spread across the recontoured area then seeded with the seed mixture submitted via sundry. Seed application would follow all guidelines in the interim seed mix bullet statement above, and in Green River Reclamation Guidelines (BLM 2009). If reclamation seeding should take place using the broadcast method, the seed at a minimum would be walked into the soil with a dozer or other heavy equipment immediately after the seeding is completed. Reclamation of the well pad and access road would be done within six months, weather permitting, after final abandonment.

2.1.8.4. Monitoring

Prior to any surface disturbance, vegetative monitoring locations and reference sites would be identified by QEP and approved by the BLM Authorized Officer. Vegetation monitoring protocol would be developed by QEP and approved by the BLM Authorized Officer prior to implementation of revegetation techniques and would be designed to monitor percent basal vegetative cover. Revegetated areas would be inspected annually and monitored to document location and extent of areas with successful revegetation, and areas needing further reclamation. A reclamation report would be submitted to the Authorized Officer by March 31 of each year. On Federal lands, the reclamation objective would be a vegetation community that within 5 years is

comprised of desired and/or seeded species, and where the basal vegetative cover is 75 percent of a similar undisturbed adjacent native vegetation community. If after 3 years basal cover is less than 30 percent, then additional seeding and reclamation efforts may be required.

2.1.9. Applicant Committed Environmental Protection Measures (ACEPMS)

2.1.9.1. Air Quality

QEP agrees to implement the following measures to reduce emissions:

- Water or other approved dust suppressants would be used at construction sites and along roads, as determined appropriate by the Authorized Officer.
- Open burning of garbage or refuse would not occur at well sites or other facilities.
- Drill rigs would be equipped with Tier II or better diesel engines.
- Well site telemetry would be utilized as feasible for production operations.

2.1.9.2. Cultural Resources

Class III archeological surveys were conducted by Montgomery Archaeology Consultants. Copies of the reports have been submitted directly to the appropriate agencies by Montgomery Archaeology Consultants. Cultural resource clearance has been recommended for this project. If historic or archaeological materials are uncovered during construction, the Operator is to immediately stop work that might further disturb such materials and contact the Authorized Officer.

2.1.9.3. Paleontological Resources

Paleontological surveys have been conducted by Intermountain Paleo Consulting. A copy of this report was submitted to the BLM by Stephen D. Sandau. The surveys resulted in the finding of scientifically important fossil resources. Due to the number of fossils found during the surveys QEP Energy Company would fund a permitted paleontologist to monitor the construction process of the well pad, access road, pipeline, and powerline.

2.1.9.4. Plants: BLM Sensitive

- Water or other approved dust suppressants would be used at construction sites and along roads, as determined appropriate by the Authorized Officer.
- Open burning of garbage or refuse would not occur at well sites or other facilities.
- Drill rigs would be equipped with Tier II or better diesel engines.
- Well site telemetry would be utilized as feasible for production operations.

- If historic or archaeological materials are uncovered during construction, the Operator is to immediately stop work that might further disturb such materials and contact the Authorized Officer.
- QEP Energy Company will provide a permitted paleontologist approved by the authorized officer be present to monitor the construction process of the well pad, access road, pipeline, and powerline.
- All new and replacement internal combustion gas field engines of less than or equal to 300 design-rated horse power must not emit more than 2 grams of NOx per horsepower-hour. This requirement does not apply to gas field engines of less than or equal to 40 design-rated horsepower-hour.
- All vehicles and equipment shall be cleaned either through power-washing, or other approved method, if the vehicles or equipment were brought in from areas outside the Uinta Basin, to prevent weed seed introduction.
- QEP Field Service would provide a monitor for the HWY 45 road bore crossing.
- During pipeline construction and placement in occupied Horseshoe milkvetch habitat, a BLM-approved botanist would be on site to minimize negative impacts to Horseshoe milkvetch individuals. The BLM-approved botanist would mark individual plants or areas for avoidance with pin flags, which wouldl be removed immediately after construction is completed. Placing the pipeline directly on plants would be avoided to the maximum extent possible. If more than 20 individual plants would be directly impacted, the BLM botanist would be contacted so that additional mitigation measures (such as transplanting, seed collection, or additional monitoring) can be implemented.
- If pipeline installation occurs during snow cover, the BLM-approved botanist would use previous survey data to mark avoidance areas. They would revisit occupied habitat areas after snowmelt to document any plants that were directly impacted by pipeline placement, to be included in the final monitoring report.
- After construction is completed, the BLM-approved botanist would provide a report to the BLM summarizing the methods and results of the avoidance measures. The report should include specifics of how many plants were directly (i.e., damaged) and indirectly impacted.
- The pipeline section west of Highway 45 would follow an existing access road and would be placed in the ROW from the road.
- The pipeline section east of Highway 45 would be welded and placed in the ROW, but vehicles would drive cross country to place the pipe. No blading would occur. The BLM-approved botanist would mark plants and identify a driving path that impacts the fewest plants.
- To minimize damage to vegetation, only rubber-tired vehicles would be used to install the pipeline unless otherwise approved by a BLM authorized officer.

2.2. No Action Alternative

Under the No Action Alternative, QEP would not drill the KJ 2–2–7–22 or it associated power lines or pipelines in sections 8, 9, 10, 11, 12, and 13, T.7S., R.22E., and sections 18, 19, 20, and

29, T.7S., R.23E. Uintah County, Utah. However, other oil and gas development in the area would be expected to continue. Other current resource trends and land use practices would also continue. The BLM's authority to implement the No Action Alternative may be limited because oil and gas leases allow drilling in the lease area subject to the stipulations of the specific lease agreement. The BLM can deny the application for permit to drill (APD) if the proposal would violate lease stipulations and applicable laws and/or regulations. The BLM can also impose conditions of approval to prevent undue or unnecessary environmental degradation. If the BLM were to deny the APD, the applicant could attempt to reverse the BLM's decision through administrative appeals, seek to exchange its lease for leases in other locations, or seek compensation from the federal government. The outcome of these actions is beyond the scope of this EA because they cannot be projected or meaningfully analyzed at this time.

2.3. Alternatives Considered but not Analyzed in Detail

There were no other alternatives identified aside from the Proposed Action and No Action Alternatives that were identified.

2.4. Conformance

The alternatives are in conformance with the Vernal Field Office RMP/ROD (October 31, 2008) and the terms of the lease. The RMP/ROD decision allows leasing of oil and gas while protecting or mitigating other resource values (RMP/ROD p. 97-99). The Minerals and Energy Resources Management Objectives encourage the drilling of oil and gas wells by private industry (RMP/ROD, p. 97). The RMP/ROD decision also allows for processing applications, permits, operating plans, mineral exchanges, and leases on public lands in accordance with policy and guidance and allows for management of public lands to support goals and objectives of other resources programs, respond to public requests for land use authorizations, and acquire administrative and public access where necessary (RMP/ROD p. 86). It has been determined that the proposed action and alternative(s) would not conflict with other decisions throughout the plan.

2.5. Relationships to Statutes, Regulations, or Other Plans

2.5.1. Federal Laws and Statutes

The subject lands were leased for oil or gas development under authority of the Mineral Leasing Act of 1920, as modified by the Federal Land Policy and Management Act of 1976, and the Federal Onshore Oil and Gas Leasing Reform Act of 1987. The lessee/operator has the right to explore for oil and gas on the lease as specified in 43 CFR 3103.1-2, and if a discovery is made, to produce oil and/or natural gas for economic gain.

2.5.2. State and Local Laws and Statutes

There are no comprehensive State of Utah plans for the vicinity of the Proposed Action.

The proposed project is consistent with the *Uintah County General Plan,* 2011 (Plan) that encompasses the location of the proposed well. In general, the Plan indicates support for

development proposals such as the Proposed Action through the Plan's emphasis on multiple-use public land management practices, responsible use and optimum utilization.

The State of Utah School and Institutional Trust Lands Administration (SITLA) have leased much of the nearby state land for oil and gas production. Because the objectives of SITLA are to produce funding for the state school system, and because production on federal leases could further interest in drilling on state leases in the area, it is assumed that the alternatives analyzed, except the No Action Alternative, are consistent with the objectives of the state.

Chapter 3. Affected Environment:

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3.1. Air Quality

The Project Area is located in the Uinta Basin, a semiarid, mid-continental climate regime typified by dry, windy conditions, limited precipitation and wide seasonal temperature variations subject to abundant sunshine and rapid nighttime cooling. The Uinta Basin is designated as unclassified/attainment by the EPA under the Clean Air Act. This classification indicates that the concentration of criteria pollutants in the ambient air is below National Ambient Air Quality Standards (NAAQS), or that adequate air monitoring is not available to determine attainment.

NAAQS are standards that have been set for the purpose of protecting human health and welfare with an adequate margin of safety. Pollutants for which standards have been set include ground level ozone, (O_3), sulfur dioxide (SO_2), nitrogen dioxide (NO_2), and carbon monoxide (CO), and particulate matter less than 10 microns in diameter (PM_{10}) or 2.5 microns in diameter ($PM_{2.5}$). Airborne particulate matter consists of tiny coarse-mode (PM_{10}) or fine-mode ($PM_{2.5}$) particles or aerosols combined with dust, dirt, smoke, and liquid droplets. $PM_{2.5}$ is derived primarily from the incomplete combustion of fuel sources and secondarily formed aerosols, whereas PM_{10} is primarily from crushing, grinding, or abrasion of surfaces. Table 3.1, "Air Quality Background Values" (p. 15) lists ambient air quality background values for the Uinta Basin and NAAQS standards.

Table 3.1. Air Quality Background Values

Pollutant	Averaging Period(s)	Uinta Basin Background Concentration (g/m^3)	NAAQS (g/m^3)
SO_2	Annual	0.8[2]	--[1]
	24-hour	3.9[2]	--[1]
	3-hour	10.1[2]	1,300
	1-hour	19.0[2]	197
NO_2	Annual	8.1[3]	100
	1-hour	60.2[3]	188
PM_{10}	Annual	7.0[4]	--[6]
	24-hour	16.0[4]	150
$PM_{2.5}$	Annual	9.4[3]	15
	24-hour	17.8[3]	35
CO	8-hour	3,450[4]	10,000
CO	1-hour	6,325[4]	40,000

Pollutant	Averaging Period(s)	Uinta Basin Background Concentration (g/m^3)	NAAQS (g/m^3)
O_3	8-hour	100.0[3,5]	75

1 – The 24-hour and annual SO_2 NAAQS have been revoked by USEPA

2 – Based on 2009 data from Wamsutter Monitoring Station Data (USEPA AQS Database)

3 – Based on 2010/2011 data from Redwash Monitoring Station (USEPA AQS Database)

4 – Based on 2006 data disclosed in the Greater Natural Buttes FEIS. (BLM, 2012)

5 – Ozone is measured in parts per billion (ppb)

6 – The annual PM_{10} NAAQS has been revoked by USEPA

Existing point and area sources of air pollution within the Uinta Basin include the following:

- Exhaust emissions (primarily CO, NO_x, $PM_{2.5}$, and HAPs) from existing natural gas fired compressor engines used in transportation of natural gas in pipelines;
- Natural gas dehydrator still-vent emissions of CO, NO_x, $PM_{2.5}$, and HAPs;
- Gasoline and diesel-fueled vehicle tailpipe emissions of VOCs, NO_x, CO, SO_2, PM_{10}, and $PM_{2.5}$;
- Oxides of sulfur (SO_x), NO_x, fugitive dust emissions from coal-fired power plants, and coal mining/ processing;
- Fugitive dust (in the form of PM_{10} and $PM_{2.5}$) from vehicle traffic on unpaved roads, wind erosion in areas of soil disturbance, and road sanding during winter months; and,
- Long-range transport of pollutants from distant sources.

Two year-round air quality monitoring sites were established in summer 2009 near Red Wash (southeast of Vernal, Utah) and Ouray (southwest of Vernal). These monitors were certified as Federal Reference Monitors in fall of 2011, which means they can be used to make a NAAQS compliance determination. The complete EPA Ouray and Redwash monitoring data can be found at: http://www.epa.gov/airexplorer/index.htm

Both monitoring sites have recorded numerous exceedences of the 8-hour ozone standard during the winter months (January through March 2010, 2011, and 2013). It is thought that high concentrations of ozone are being formed under a "cold pool" process. This process occurs when stagnate air conditions form with very low mixing heights under clear skies, with snow-covered ground, and abundant sunlight. These conditions, combined with area precursor emissions (NO_x and VOCs), can create intense episodes of ozone. The high numbers did not occur in January through March 2012 due to a lack of snow cover. This phenomenon has also been observed in similar locations in Wyoming. Winter ozone formation is a newly recognized issue, and the methods of analyzing and managing this problem are still being developed. Existing photochemical models are currently unable to reliably replicate winter ozone formation. This is due to the very low mixing heights associated with unique meteorology of the ambient conditions.

Further research is needed to definitively identify ozone precursor sources that contribute to observed ozone concentrations.

The UDAQ conducted limited monitoring of $PM_{2.5}$ in Vernal, Utah in December 2006. During the 2006-2007 winter seasons, $PM_{2.5}$ levels were higher than the $PM_{2.5}$ health standards that became effective in December 2006. The $PM_{2.5}$ levels recorded in Vernal were similar to other areas in northern Utah that experience wintertime inversions. The most likely causes of elevated $PM_{2.5}$ at the Vernal monitoring station are those common to other areas of the western U.S. (combustion and dust) plus nitrates and organics from oil and gas activities in the Basin. $PM_{2.5}$ monitoring that has been conducted in the vicinity of oil and gas operations in the Uinta Basin by the Red Wash and Ouray monitors beginning in summer 2009 have not recorded any exceedences of either the 24 hour or annual NAAQS.

HAPs are pollutants that are known or suspected to cause cancer or other serious health effects, such as reproductive effects or birth defects, or adverse environmental impacts. The EPA has classified 187 air pollutants as HAPs. Examples of listed HAPs associated with the oil and gas industry include formaldehyde, benzene, toluene, ethylbenzene, isomers of xylene (BTEX) compounds, and normal-hexane (n-hexane). There are no applicable Federal or State of Utah ambient air quality standards for assessing potential HAP impacts to human health.

3.1.1. Greenhouse Gases

Greenhouse gases keep the planet's surface warmer than it otherwise would be. However, as concentrations of these gases increase the Earth's temperature is climbing above past levels. According to NOAA and NASA data, the Earth's average surface temperature has increased by about 1.2 to 1.4° F in the last 100 years. The eight warmest years on record (since 1850) have all occurred since 1998, with the warmest year being 1998. However, according to the British Meteorological Office's Hadley Centre (BMO 2009), the United Kingdom's foremost climate change research center, the mean global temperature has been relatively constant for the past nine years after the warming trend from 1950 through 2000. Predictions of the ultimate outcome of global warming remain to be seen.

The analysis of the Regional Climate Impacts prepared by the U.S. Global Change Research Program (USGCRP) in 2009 suggests that recent warming in the region (including the project area) was nationally among the most rapid. Past records and future projections predict an overall increase in regional temperatures, largely in the form of warmer nights and effectively higher average daily minimum temperatures. They conclude that this warming is causing a decline in spring snowpack and reduced flows in the Colorado River. The USGCRP projects a region-wide decrease in precipitation, although with substantial variability in interannual conditions. For eastern Utah, the projections range from an approximate 5 percent decrease in annual precipitation to decreases as high as 40 percent of annual precipitation.

3.2. Invasive Plants/Noxious Weeds, Soils, and Vegetation

The invasive species, cheat grass *(Bromus tectorum)*, Russian thistle *(Salsola iberica)*, and halogeton *(Halogeton glomeratus)* are present at these locations.

The soils are a sandy clay loam. Soils in the Project Area tend to be shallow and well drained.

The vegetation in the Project Area consists of fairly short shrubs, grasses and some forbs. Species include Indian ricegrass *(Achnatherum hymenoides)*, Wyoming big sagebrush *(Artemisia tridenta ssp. wyomingensis)*, shadscale (*Atriplex confertifolia*), mat saltbush *(Atriplex corrugata)*, Gardner saltbush *(Atriplex gardneri)*, rubber rabbitbrush (*Chrysothamnus nauseosus*), squirreltail *(Elymus elymoides)*, needle and thread grass *(Hesperostipa comata)*, prickly pear cactus sp. (*Opuntia sp.*), galleta grass *(Pleuraphis jamesii)*, black greasewood *(Sarcobatus vermiculatus)*, and scarlet globemallow (*Sphaeralcea coccinea*).

3.3. Plants: BLM Sensitive

Horseshoe milkvetch *(Astragalus equisolensis)*

Horseshoe milkvetch is a Utah BLM sensitive plant species (former candidate for federal listing) that is narrowly endemic to two known locations: the Horseshoe Bend area of the Green River in Uintah County, Utah, and the rim above the Dolores River in Mesa County, Colorado. This member of the pea family is a small herbaceous perennial, producing 4 to 13 purplish pea-type flowers from April to May and later, hairy curled seed pods.

Horseshoe milkvetch grows in mixed desert and salt desert shrub communities and occurs on three types of substrate: 1) river terrace sands and gravels overlying the Duchesne River Formation; 2) sandy-silty soils that weather directly from the Duchesne River Formation; 3) and in crevices of Duchesne River Formation.

The entire project is located within the potential range for Horseshoe milkvetch. Surveys of the project area plus a 300 foot buffer conducted September—November, 2013, located approximately 630 individual plants.

3.4. Wildlife

3.4.1. Migratory Birds

The Migratory Bird Treaty Act (MBTA) was implemented for the protection of migratory birds. Unless permitted by regulations, the MBTA makes it unlawful to pursue, hunt, kill, capture, possess, buy, sell, purchase, or barter any migratory bird, including the feathers or other parts, nests, eggs, or migratory bird products. In addition to the MBTA, Executive Order 13186 sets forth the responsibilities of Federal agencies to further implement the provisions of the MBTA by integrating bird conservation principles and practices into agency activities and by ensuring that Federal actions evaluate the effects of actions and agency plans on migratory birds.

Those migratory bird species that are BLM sensitive or are otherwise of special interest that may occupy the proposed project area are addressed below. This section identifies all other migratory birds that may inhabit the project area, including those species classified as High-Priority birds by Utah Partners in Flight (Parrish et al 2002). High-Priority species are denoted by an asterisk (*).

Sagebrush -Steppe

Migratory bird species commonly associated with the sagebrush-steppe community within the project area include: the Brewer's sparrow* (*Spizella breweri*), grasshopper sparrow* (*Ammodramus savannarum*), green-tailed towhee* (*Pipilo chlorurus*), mountain bluebird*

(*Sialia currocoides*), sage sparrow* (*Amphispiza belli*), sage thrasher* (*Oreoscoptes montanus*), Virginia's warbler* (*Vermivora virginiae*), horned lark (*Eremophila alpestris*), loggerhead shrike (*Lanius ludovicianus*), western kingbird (*Tyrannus verticalis*), northern mockingbird (*Mimus polyglottos*), vesper sparrow (*Pooecetes gramineus*) and western meadowlark (*Sturnella neglecta*) (Parrish et al 2002).

3.5. Fish and Wildlife Species Excluding USFWS Designated Species

3.5.1. Roundtail Chub, Flannelmouth Sucker, and Bluehead Sucker (BLM Sensitive)

These three fish species are endemic to the Colorado River Basin, including the Green and White Rivers. All three species are listed as BLM sensitive species due to declining population numbers and distribution.

3.6. Threatened, Endangered or Candidate Animal Species

3.6.1. Colorado River Fish Species

The U.S. Fish & Wildlife Service (USFWS) has identified four federally listed fish species historically associated with the Upper Colorado River Basin, including the Green and White Rivers. These fish are the Colorado pikeminnow, humpback chub, bonytail, and razorback sucker. The four fish species are federally and state-listed as endangered and have experienced severe population declines due to flow alterations, habitat loss or alteration, and introduction of non-native fish species. The Green and White River and their 100-year floodplains have been designated critical habitat for these four endangered fish species (USFWS 1994).

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Chapter 4. Environmental Effects:

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4.1. Direct and Indirect Impacts

The potential direct, indirect, and cumulative impacts from Alternative A (the Proposed Action) and Alternative B (the No Action Alternative) are discussed in the following sections of Chapter 4. Direct impacts to soils and vegetation in the following analyses are described as short-term and long-term impacts. In areas where interim reclamation is implemented, ground cover by herbaceous and woody species could be re-established to approximately 75 percent of initial basal cover within five years following seeding of native plant species and diligent weed control efforts. These reclaimed areas are categorized as short-term disturbance.

4.2. Proposed Action

4.2.1. Air Quality

This Proposed Action is considered to be a minor air pollution source under the Clean Air Act and is not controlled by regulatory agencies. At present, control technology is not required by regulatory agencies since the Uinta Basin is designated as unclassified/attainment. The Proposed Action would result in different emission sources associated with two project phases: well development and well production. Annual estimated emissions from the Proposed Action are summarized in Table 4.1, "Proposed Action Annual Emissions (tons/year) " (p. 23).

Table 4.1. Proposed Action Annual Emissions (tons/year)

Pollutant	Development[1]	Production	Total
NO_x	14.20	2.20	16.40
CO	3.20	3.20	6.40
SO^2	0.90	0.00	0.90
PM_{10}	0.70	0.03	0.73
$PM_{2.5}$	0.30	0.01	0.31
VOC	2.50	6.50	9.00
Benzene	0.03	0.13	0.16
Toluene	0.2	0.09	0.11
Ethylbenzene	0.02	0.22	0.24
Xylene	0.00	0.07	0.07
n-Hexane	0.05	0.08	0.13
Formaldehyde	0.00	0.00	0.00

[1] Emissions include 1producing well(s) and associated operations traffic during the year in which the project is developed.

Well development includes NO_x, SO_2, and CO tailpipe emissions from earth-moving equipment, vehicle traffic, drilling, and completion activities. Fugitive dust concentrations would occur from vehicle traffic on unpaved roads and from wind erosion where soils are disturbed. Drill rig and fracturing engine operations would result mainly in NOx and CO emissions, with lesser amounts of SO_2. These emissions would be short-term during the drilling and completion phases.

During well production, continuous NO_x, CO, VOC, and HAP emissions would originate from well pad separators, condensate storage tank vents, and daily tailpipe and fugitive dust emissions from operations traffic. Road dust (PM_{10} and $PM_{2.5}$) would also be produced by vehicles servicing the wells.

Under the proposed action, emissions of NO_x and VOC, ozone precursors, are 16.40 tons/yr for NO_x, and 9.00 tons/yr of VOC (**Table 4.1, "Proposed Action Annual Emissions (tons/year) " (p. 23)**). Emissions would be dispersed and/ or diluted to the extent where any local ozone impacts from the Proposed Action would be indistinguishable from background conditions.

The primary sources of HAPs are from oil storage tanks and smaller amounts from other production equipment. Small amounts of HAPs are emitted by construction equipment. These emissions are estimated to be minor and less than 1 ton per year.

4.2.1.1. Greenhouse Gases

The assessment of greenhouse gas emissions and climate change remains in its earliest stages of formulation. Applicable EPA rules do not require any controls and have yet to establish any emission limits related to GHG emissions or impacts. The lack of scientific models that predict climate change on regional or local level prohibits the quantification of potential future impacts of decisions made at the local level, particularly for small scale projects such as the Proposed Action. Drilling and development activities from the Proposed Action are anticipated to release a negligible amount of greenhouse gases into the local air-shed.

4.2.1.1.1. Mitigation

All new and replacement internal combustion gas field engines of less than or equal to 300 design-rated horse power must not emit more than 2 grams of NOx per horsepower-hour. This requirement does not apply to gas field engines of less than or equal to 40 design-rated horsepower-hour.

4.2.2. Plants: BLM Sensitive

Horseshoe milkvetch (*Astragalus equisolensis*)

About 11.67 acres of new disturbance on BLM land and 15.75 acres of new disturbance on SITLA land from new well pads, access roads, powerlines, and pipelines would occur within potential Horseshoe milkvetch habitat. Approximately 14,600 feet of the proposed surface pipeline running east to west, west of Highway 45, and located within occupied Horseshoe milkvetch habitat would be placed from an existing road. An additional 3,400 feet of cross-country surface pipeline east of Highway 45 would be placed using vehicles, but no blading will occur. Across the total proposed project area, approximately 630 individual plants are estimated to occur within 300 feet of proposed surface pipeline, as per surveys conducted September-November 2013. We expect very few of these plants will be directly disturbed by placement of the surface pipeline. Up to 20 plants may be directly disturbed by pipeline placement, and applicant-committed mitigation measures outlined in Chapter 2 will minimize the number of plants that are directly disturbed by this project. Three bore holes with disturbance areas of 100 feet by 150 feet would be drilled to cross the pipeline under existing roads, for a total of about 1 acre of surface disturbance where vegetation will be driven over. One of the bore hole locations would be within 200 feet of approximately 200 individuals of Horseshoe milkvetch. At this site, a BLM-approved botanist will be onsite during construction to mark plants for avoidance and ensure that individual plants will not be directly disturbed.

The 630 Horseshoe milkvetch plants within 300 feet of the proposed project area (about 2 percent of all known individuals) will experience dispersed negative impacts from the construction. Possible dispersed direct and indirect negative impacts which may result from implementation of the proposed action include: loss of suitable habitat, loss of habitat and forage opportunities for pollinators of the species, habitat modification by invasive weed species which may compete with individuals, accidental spray or drift of herbicides used during invasive plant control, and the deposition of fugitive dust from construction activities and vehicle traffic on unpaved roads. The responses to these impacts will range from sub-lethal to lethal, depending on the distance form the disturbance, the local level of the impact, and the temporal period over which the impact is experienced. However, as several viable, reproducing subpopulations of this species are located in close proximity to surface disturbance—including along surface pipelines, on infrequently used well pad access roads, and along the margins of maintained Uintah county B and D roads—it is expected that the populations in the vicinity of the proposed project will not experience negative population trends at a level great enough to result in the extirpation of any of the impacted subpopulations.

Based on these direct and indirect negative impacts and the applicant-committed environmental measures, the proposed action may affect, but is not likely to lead to federal listing for Horseshoe milkvetch.

4.2.3. Invasive Plants/Noxious Weeds, Soils, and Vegetation

In addition to the applicant committed measures outlined within QEP's reclamation plan, the Plan of Development for this project, the below mitigation measures would reduce the risk of establishment or spread of non-native invasive plant species.

The Proposed Action would disturb approximately 11.67 acre of soils and vegetation. The portions of the disturbed area that would not be utilized for production and product transportation would be subject to interim reclamation. If interim reclamation is successful, direct long-term impacts to vegetation would not occur. If interim reclamation is not successful, the entire area could remain disturbed for the long term. Long-term impacts to vegetation are expected for the life of the well (an average of 25 years or until reclamation is successful).

Each well in the project would contribute an estimated additional 3.0 tons of soil per acre per year above the current natural erosion rate for the first year of development. After the first year, the soil erosion attributed to the project would reduce to 1.5 tons per acre per year until the access roads and well pads are fully reclaimed. Erosion rates are higher during the first year due to disturbance during construction.

Direct impacts to soils include mixing of soil horizons, soil compaction, short-term loss of topsoil and site productivity, and loss of soil/topsoil through wind and water erosion. Loss of soil/topsoil in disturbed areas would reduce the revegetation success of seeded native species due to increased competition by annual weed species. Annual weed species are adapted to disturbed conditions, and have less stringent moisture and soil nutrient requirements than do perennial native species.

Additional direct impacts to vegetation are primarily associated with clearing of vegetation during construction. Indirect impacts to vegetation resources include the invasion and establishment of introduced, undesired plant species. The severity of these invasions would depend on the success of reclamation and revegetation, and the degree and success of noxious weed control efforts.

The area's poor soil reclamation potential, has made successful reclamation efforts challenging. BLM field inspections indicate that short-term impacts may be more accurately portrayed as long-term impacts. However, most of these issues should be addressed in the BLM approved Questar Exploration and Production Company Uinta Basin Division Reclamation Plan. A copy of this plan is on file at the BLM Vernal Field Office.

Impacts to soils and vegetation would be partially mitigated by reclamation of disturbed areas with native vegetation and control of noxious and invasive weeds by mechanical and chemical treatment (see 2.1.6). Under the Proposed Action, reclamation would occur on approximately 25 percent of the well pad upon completion of drilling. The remaining 75 percent of the well pad would be revegetated after abandonment of the well (approximately 25 years).

Mitigation

- All vehicles and equipment shall be cleaned either through power-washing, or other approved method, if the vehicles or equipment were brought in from areas outside the Uinta Basin, to prevent weed seed introduction.

4.3. Wildlife

4.3.1. Migratory Birds

The proposed action would result in a loss of habitat, including fragmentation, for migratory birds. Direct impacts to nesting and breeding migratory species may occur, depending upon the time of construction and location(s). If construction occurs in the spring, during the nesting season, impacts would be greater than if ground disturbing activities occurred between late summer and winter. Impacts to birds during the spring could include nest abandonment, reproductive failure, displacement, destruction of nests, and mortality of individuals. Construction would likely have a greater impact on Utah Partners in Flight high-priority migratory bird species that may be utilizing the project area due to their declining populations, habitat requirements dependence in restricted or vulnerable habitats and limited distribution. If reclamation efforts are successful, (which may take from 5-10 years) indirect impacts to migratory bird species occurring in the project area would be reduced. Successful reclamation efforts would return disturbed habitats to pre-disturbance levels and loss of vegetation would be a temporary impact to migratory bird habitat.

4.3.2. Roundtail Chub, Flannelmouth Sucker, and Bluehead Sucker

The analysis for the three special status fish species is the same as the analysis for threatened, endangered or candidate fish species.

4.4. Threatened, Endangered or Candidate Animal Species

4.4.1. Colorado River Fish Species:

Water depletion will occur to the Upper Colorado system in association with the drilling of the wells in the project area.

Water depletions from the Upper Colorado River Drainage System, along with a number of other factors, have resulted in such drastic reductions in the populations of the Colorado pikeminnow, humpback chub, bonytail, and razorback sucker. The U. S. Fish and Wildlife Service (USFWS) has listed these species as endangered and has implemented programs to prevent them from becoming extinct.

Water depletions reduce the ability of the river to create and maintain the primary constituent elements that define critical habitats. Food supply, predation, and competition are important elements of the biological environment. Food supply is a function of nutrient supply and productivity, which could be limited by reduction of high spring flows brought about by water depletions. Predation and competition from nonnative fish species have been identified as factors in the decline of the endangered fishes. Water depletions contribute to alterations in flow regimes that favor nonnative fishes.

The proposed action would result in water depletion from removal of water from the Upper Colorado River Drainage System for construction and drilling operations. Therefore, the proposed action would have a ***"may affect, likely to adversely affect"*** determination for the endangered Colorado pikeminnow, humpback chub, bonytail, and razorback sucker.

The Wonsits Valley water right # A36125 (which was filed on May 7, 1964), and Red Wash water right 49-2153 (which was filed on March 25, 1960) are historic depletions (permitted prior to January 1988). The USFWS address's new and historic depletions differently under the Section 7 agreement of March 11, 1993. Historic depletions, regardless of size, do not pay a depletion fee to the Recovery Program. Also, consultation for historic depletions was conducted in association with that 1993 agreement.

4.5. No Action Alternative

4.5.1. Air Quality

Under the No Action Alternative, the proposed gas well(s) would not be drilled and there would be no additional impacts to air quality. Effects on ambient air quality would continue at present levels from existing oil and gas development in the region and other emission producing sources.

4.5.2. Invasive Plants/Noxious Weeds, Soils, and Vegetation

Under the No Action Alternative, there would be no direct disturbance or indirect effects to soils and vegetation from surface-disturbing activities associated these wells. Current land use trends in the area would continue, including increased industrial development, increased traffic, and increased recreation use for hunting, bird watching, and sightseeing.

4.5.3. Plants: BLM Sensitive

Horseshoe Milkvetch (*Astragalus equisolensis*)

Under the No Action Alternative, there would be no direct disturbance or indirect effects to Horseshoe milkvetch or its associated habitat from surface-disturbing activities associated with the proposed project. Current land use trends in the area would continue, including increased

industrial development, increased off-highway vehicles (OHV) traffic, and increased recreation use.

4.6. Wildlife

Under the No Action Alternative there would be no impacts to wildlife species including; migratory birds, fish and wildlife species, and threatened, endangered or candidate animal species. There would be no additional water depletion to the Green or White River systems.

4.7. Reasonably Foreseeable Development and Cumulative Impacts Analysis

4.7.1. Cumulative Impacts

4.7.1.1. Air Quality

The cumulative impact area for air quality is the Uinta Basin. The potential impact of the Proposed Action to Uinta Basin ozone levels cannot be accurately modeled. In lieu of accurate modeling, the Greater Natural Buttes (GNB) air quality study, which is the most recent regional air model available for the Uinta Basin, and the GNB Final EIS section 5.3.1, is incorporated by reference and summarized below. The GNB Final EIS discloses that most of the cumulative emissions in the Uinta Basin are associated with oil and gas exploration and production activities. Consequently, past, present and reasonably foreseeable wells in the Uinta Basin are a part of the cumulative actions considered in this analysis. **Table 4.2, "2006 Uinta Basin Oil and Gas Operations Emissions Summary" (p. 28)** summarizes the 2006 Uinta Basin emissions as well as the incremental impact of this project's alternatives. The Proposed Action comprises a small percentage of the Uinta Basin emissions summary.

Table 4.2. 2006 Uinta Basin Oil and Gas Operations Emissions Summary

County	NO_x (tpy)	CO (tpy)	SO_x (tpy)	PM (tpy)	VOC (tpy)
Uintah	6,096	4,133	247	344	45,646
Carbon	995	814	22	40	2,747
Duchesne	3,053	2,448	96	173	19,019
Grand	337	207	16	22	2,360
Emery	273	199	9	14	453
Uinta Basin Total	10,754	7,800	391	592	70,226
Proposed Action	16.40	6.40	0.90	1.04	9.00
No Action	0	0	0	0	0

The GNB model predicted the following impacts to air quality and air quality related values for the GNB proposed action, which encompassed 3,675 new wells:

- Cumulative impacts from criteria pollutants to ambient air quality are well below the NAAQS at Class I airsheds and selected Class II areas;
- The incremental impacts to visibility would be virtually impossible to discern and would not contribute to regional haze at the Class I areas;

- The 2018 projected baseline emissions would result in impacts of 1.0 deciview for at least 201 days per year at the Class II areas;
- Discernible impacts at Flaming Gorge National Recreation Area and Dinosaur National Monument are anticipated under the GNB Final EIS proposed action;
- The GNB Final EIS proposed action would contribute less than 1 percent to the acid deposition in Class I areas, and 4.3 percent at the Flaming Gorge Class II area;
- Project-related acid deposition impacts at sensitive lakes were below the USFS screening threshold; and,
- Ozone levels are below the current ozone standard of 75 ppb for the fourth highest annual level in the Uinta Basin for the 2018 projected baseline, and the proposed action would be approximately 3.2 percent of the cumulative ozone impact within the Uinta Basin.

Based on the GNB model results, it is anticipated that the impact to ambient air quality and air quality related values associated with the Proposed Action would be indistinguishable from, and dwarfed by, the margin of uncertainty associated with the model and Uinta Basin emission inventory. The No Action alternative would not result in an accumulation of impacts.

4.7.1.2. Greenhouse Gases

Inconsistent results based on scientific models used to predict global climate change prohibit the BLM from quantifying cumulative impacts. Drilling and development activities from the Proposed Action are anticipated to release a negligible amount of greenhouse gases, into the local airshed, resulting in a negligible cumulative impact. The No Action Alternative would not result in an accumulation of impacts.

4.7.2. Invasive Plants/Noxious Weeds, Soils, and Vegetation

The CIAA for soils and vegetation is the boundary of the Final Environmental Impact Statement (FEIS) for the Greater Deadman Bench Oil and Gas Producing Region . The Greater Deadman Bench Oil and Gas Producing Region project area is located 20 miles south of Vernal, Utah.

The project area encompasses approximately 11.67 acres of land within Uintah County. The project area is located in section 8, 9, 10, 11, 12, and 13, T.7S., R.22E., and sections 18, 19, 20, and 29, T.7S., R.23E., Uintah County, Utah Salt Lake Base Meridian. The town of Vernal is approximately 22 miles north of the project boundary. The foreseeable activity for the QEP FEIS is the drilling of up to 1,239 new wells. Future total area of disturbance due to oil and gas activity for the FEIS project area is approximately 98,785 acres.

Soil erosion would be increased due to the disturbance associated with oil and gas activities in the area. Each acre of disturbance adds to a cumulative effect by increasing erosion and destroying native vegetation, and through the invasion of undesired plant species. In general, soils in the Uinta Basin are very thin, slow to develop, and difficult to reclaim because of the arid climate and lack of organic material.

Direct surface disturbances to vegetation indicated by past, present, and reasonably foreseeable developments are primarily attributable to oil and gas development and vegetation management by various federal agencies. Oil and gas development, however, would continue to degrade local

habitat by direct disturbance and slow reclamation of disturbed areas. Surface disturbance within the CIAA would be approximately 98,785 acres. The Proposed Action would add approximately 11.67 acre of surface disturbance. The No Action alternative would not result in an accumulation of impacts.

4.7.3. Plants: BLM Sensitive

Horseshoe milkvetch (*Astragalus equisolensis*)

The CIAA for Horseshoe milkvetch is the potential range of the species. This area covers approximately 72,868 acres on BLM, state of Utah, and privately held lands. Within the CIAA, there are approximately 243 miles of roads. Past, present and reasonably foreseeable disturbance from oil and gas (including this proposed action) will affect 3,031 acres (4.1% of the CIAA), as shown in ???. Cumulative impacts include dust impacts to plants, and plant and pollinator habitat destruction. Surface disturbance is a good indicator of the extent of these cumulative impacts.

Table 4.3. Cumulative Impact Analysis for Horseshoe Milkvetch

	Project Area Acreage	Surface Disturbance Analyzed	Project Area Acreage within the CIAA	Surface Disturbance within the CIAA[1]
Ongoing Field Development				
Gusher Field Development EA	34,951	471	11,374	153 acres
Greater Deadman Bench Oil and Gas Producing Region EIS	98,785	4,561	29,432	1,359 acres
Past Developments and Current and Future Developments Not Covered by a Field Development NEPA Document				
146 abandoned wells[2,3]	NA4	NA	NA	749 acres
133 producing wells[2,3]	NA	NA	NA	722 acres
7 proposed wells[2,3]	NA	NA	NA	36 acres
Total CIAA disturbance from oil and gas				
	--	--	--	3,019 acres (4.1%)
Current Project				
Proposed Action	NA	NA	NA	27.42 acres
No Action	NA	NA	NA	0 acres
Total CIAA disturbance from oil and gas including this project				
	--	--	--	3,046 acres (4.1%)

[1]Assumes surface disturbance was authorized evenly across the analysis area of the document.

[2]Uses the assumption contained within the Greater Uinta Basin Cumulative Impacts Technical Support Document.

[3]As of 04/29/2013

[4]NA = not applicable

Due to inclusions of areas of unsuitable habitat within the potential habitat area, the total acreage of suitable habitat is less than 72,868 acres. However, a complete survey of suitable habitat has not been performed and thus the amount of suitable habitat has not been quantified. Impacts to the species from past, current, and reasonably foreseeable actions may be greater or smaller than

those described for the total area depending upon the exact distribution of actions relative to suitable habitat.

4.7.4. Wildlife

The CIAA for wildlife would be the same as the invasive plants/noxious weeds, soils, and vegetation section.

4.7.4.1. Migratory Birds, White-tailed Prairie Dogs

Impacts to these species would continue by construction activities(s). Habitat fragmentation, degradation and habitat loss would continue across the landscape and would increase. Harassment to wildlife would increase by noise and activities associated with construction.

4.7.5. Threatened, Endangered or Candidate Animal Species

The cumulative impact area for special status fish is the Green and White Rivers and their floodplains. Cumulative water depletions from ongoing agricultural municipal and oil and gas activities have the potential to reduce or alter critical habitat. Reasonably foreseeable future activities that may affect affected river-related resources in the area include oil and gas exploration and development, irrigation, and urban development. Implementation of all or any of these projects has affected and continues to affect the environment including but not limited to water quality, water rights, socioeconomic and wildlife resources.

Cumulative effects to this species would include the following types of impacts:

- Changes in land use patterns that would further fragment , modify, or destroy potential spawning sites or designated critical habitat;
- Shoreline recreational activities and encroachment of human development that would remove upland or riparian/wetland vegetation and potentially degrade water quality;
- Competition with, and predation by, exotic fish species introduced by anglers or other sources.

The proposed action would result in 6 acre feet per year of water depletion from the Colorado River Basin. The No Action would not result in an accumulation of impacts.

4.7.6. Roundtail Chub, Flannelmouth Sucker, and Bluehead Sucker

Impacts would be the same as Threatened, Endangered or Candidate Animal Species.

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Chapter 5. Tribes, Individuals, Organizations, or Agencies Consulted:

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Table 5.1. List of Persons, Agencies and Organizations Consulted

Name	Purpose & Authorities for Consultation or Coordination	Findings & Conclusions
State Historic Preservation Office (SHPO)	Historic Preservation Act.	BLM recommended a No Effect determination based on Class III surveys and asked for concurrence on all of the wells listed in this EA. Concurrence was received, documentation of this can be found in the individual well/APD files.
Ute Mountain Ute Tribe, Hopi Tribe, Goshute Indian Tribe, Zia Pueblo Tribe, White Mesa Ute Tribe, Navajo Nation, Northwest Band of Shoshone Tribe, Southern Ute Tribe, Eastern Shoshone Tribe, Ute Indian Tribe, Santa Clara Pueblo Tribe, and Pueblo of Laguna Tribe.	Consultation with Native American Tribes.	Tribal consultation for this area was done during preparation of the Greater Deadman Bench EIS (2004). No concerns were raised at that time.

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Chapter 6. List of Preparers

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Table 6.1. List of Preparers

Name	Title	Responsible for the Following Section(s) of this Document
Kevin Sadlier	Natural Resource Specialist/ Environmental Scientist	Chapters 1 & 2 Chapters 3 & 4: Soils and vegetation
Jessica Brunson	Botanist	Plants: BLM Sensitive Plants: Threatened, Endangered, Proposed, or Candidate
Stephanie Howard	Environmental Coordinator	Air Quality

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Chapter 7. References Cited

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BLM. 2008. Vernal Field Office Resource Management Plan, U.S. Department of the Interior, Bureau of Land Management, Vernal District Office.

BLM. 2008. Final Environmental Impact Statement for the Greater Deadman Bench Oil and Gas Producing Region Project, U.S. Department of the Interior, Bureau of Land Management, Vernal District Office.

BLM. 2009. Green River District Reclamation Guidelines, U.S. Department of the Interior, Bureau of Land Management, Vernal District Office.

British Meteorological Office (BMO). 2009. British Meteorological Office's Hadley Centre, 2009. Accessed January 2009 at http://www.metoffice.gov.uk/climatechange/science/monitoring/.

Uintah County. 2011. Uintah County General Plan. Amended Number 02-27. i – xiv + 302 pp.

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Appendix A. Interdisciplinary Team Checklist

Project Title: Red Wash Two Oil and Two Gas Well Project

NEPA Log Number: DOI-BLM-UT-G010-2014–0013–EA

File/Serial Number:

Project Leader: Kevin Sadlier

DETERMINATION OF STAFF: (Choose one of the following abbreviated options for the left column)

NP = not present in the area impacted by the proposed or alternative actions

NI = present, but not affected to a degree that detailed analysis is required

PI = present with potential for relevant impact that need to be analyzed in detail in the EA

NC = (DNAs only) actions and impacts not changed from those disclosed in the existing NEPA documents cited in Section D of the DNA form. The Rationale column may include NI and NP discussions.

Determination	Resource/Issue	Rationale for Determination	Signature	Date
RESOURCES AND ISSUES CONSIDERED (INCLUDES SUPPLEMENTAL AUTHORITIES APPENDIX 1 H-1790-1)				
PI	Air Quality & Greenhouse Gas Emissions	Emissions from earth-moving equipment, vehicle traffic, drilling and completion activities, separators, oil storage tanks, dehydration units, and daily tailpipe and fugitive dust emissions could adversely affect air quality. No standards have been set by EPA or other regulatory agencies for greenhouse gases. In addition, the assessment of greenhouse gas emissions and climate change is still in its earliest stages of formulation. Global scientific models are inconsistent, and regional or local scientific models are lacking so that it is not technically feasible to determine the net impacts to climate due to greenhouse gas emissions. It is anticipated that greenhouse gas emissions associated with this action and its alternative(s) would be negligible.	Kevin Sadlier	1/16/2014
NP	BLM Natural Areas	None are present in the project area per the Vernal Field Office RMP and GIS review.	Kevin Sadlier	1/16/2014
NP	Cultural: Archaeological Resources	No eligible cultural resources were identified within the APE of the proposed project area.	Jimmy McKenzie	1/14/2013

Determination	Resource/Issue	Rationale for Determination	Signature	Date
NP	Cultural: Native American Religious Concerns	No Traditional Cultural Properties (TCPs) are identified within the APE. The proposed project will not hinder access to or use of Native American religious sites.	Jimmy McKenzie	1/14/2013
NP	Designated Areas: Areas of Critical Environmental Concern	None are present in the project area per the Vernal Field Office RMP and GIS review.	Kevin Sadlier	1/16/2014
NP	Designated Areas: Wild and Scenic Rivers	None are present in the project area per the Vernal Field Office RMP and GIS review.	Kevin Sadlier	1/16/2014
NP	Designated Areas: Wilderness Study Areas	None are present in the project area per the Vernal Field Office RMP and GIS review.	Kevin Sadlier	1/16/2014
NI	Environmental Justice	No minority or economically disadvantaged communities or populations would be disproportionately adversely affected by the proposed action or alternatives.	Kevin Sadlier	1/16/2014
NP	Farmlands (prime/unique)	No prime or unique farmlands, as identified by the NRCS, based on soil survey data for the county are located in the project area; therefore, this resource will not be carried forward for analysis.	Kevin Sadlier	1/16/2014
NI	Fuels/Fire Management	No fuel management activities planned for the project area. The proposed project would not conflict with fire management activities following GIS/field office review.	Kevin Sadlier	1/16/2014
NI	Geology/Minerals/ Energy Production	Natural gas, oil, gilsonite, oil shale, and tar sand are the only mineral resources that could be impacted by the project. Production of natural gas or oil would deplete reserves, but the proposed project allows for the recovery of natural gas and oil per 43 CFR 3162.1(a), under the existing Federal lease. Compliance with "Onshore Oil and Gas Order No. 2, Drilling Operations" will assure that the project will not adversely affect gilsonite, oil shale, or tar sand deposits. Due to the state-of-the-art drilling and well completion techniques, the possibility of adverse degradation of tar sand or oil shale deposits by the proposed action will be negligible. Well completion must be accomplished in compliance with "Onshore Oil and Gas Order No. 2, Drilling Operations". These guidelines specify the following: *... proposed casing and cementing programs shall be conducted as approved*	Betty Gamber	1/16/2014

Determination	Resource/Issue	Rationale for Determination	Signature	Date
		to protect and/or isolate all usable water zones, potentially productive zones, lost circulation zones, abnormally pressured zones, and any prospectively valuable deposits of minerals. Any isolating medium other than cement shall receive approval prior to use.		
IP/NW: PI Soils: PI Veg: PI	Invasive Plants/ Noxious Weeds, Soils & Vegetation	IP/NW: Proposed disturbance would provide suitable habitat for the establishment and spread of non-native plant species. Operator would control invasive species in all disturbed areas as discussed in Chapter 2 and QEP approved reclamation plan. Soils: 11.67 acres of soil disturbance would occur during construction until reclamation is successful.Soils would be recontoured and reseeded during reclamation. The locations would be reclaimed and monitored in accordance with the Questar Exploration and Production Company Uintah Basin Division Reclamation Plan on file with the Vernal Field Office of the BLM. Locations would be seeded with the seed mix approved by the BLM Authorized Officer. Veg: 11.67 acres of initial vegetation disturbance/removal. Upon construction completion, the disturbed area would be reseeded and re-contoured to the approximate natural contours. This would reduce the effects of the disturbance when the seeding becomes established. The locations would be reclaimed and monitored in accordance with the Questar Exploration and Production Company Uintah Basin Division Reclamation Plan on file with the Vernal Field Office of the BLM. Locations would be seeded with the seed mix approved by the BLM Authorized Officer.	Kevin Sadlier	1/16/2014

Determination	Resource/Issue	Rationale for Determination	Signature	Date
NI	Lands/Access	Pipelines and powerlines paralleling and crossing roads would have to be taken into account. QEP Energy Company and QEP Field Services Company would need to coordinate with the existing ROW holders during the implementation of the proposed action. BLM needs to notify all potentially affected ROW holders of the proposal and provide QEP Energy Company and QEP Field Services Company a list of affected ROW holders. QEP Energy Company and QEP Field Services Company will coordinate with all ROW holders if any possible reroutes are anticipated, and the BLM will be notified of the reroutes. Revised maps will be submitted to the BLM with the proposed reroute, and include the length and width identified on the maps. If reroutes are outside of the proposed analyzed area, those areas will be analyzed and all documentation (clearances, permits, maps, reports, etc.) will be included in this EA so approval of the reroutes can be authorized.	Denise Ohler	1/16/2014
NP	Lands with Wilderness Characteristics (LWC)	None are present in the project area per the Vernal Field Office RMP and GIS review.	Kevin Sadlier	1/16/2014
NI	Livestock Grazing & Rangeland Health Standards	Livestock Grazing: The proposed project is located within the Antelope Draw sheep and Split Mountain sheep and Cattle allotments. The allotments are seasonally permitted from October 1 to May 15 with up to 5621 AUMs. This area has many existing well sites and the proposed will have very little effect on the livestock grazing as the area is bisected by numerous roads and other oil and gas projects. The proposal is consistent with multiple use of public lands and other oil & gas activities in the area. It is not anticipated that this proposal would negatively impact grazing operations. There are no known range improvements in this allotment that would be impacted by this proposal. Rangeland Health Standards: This proposal is within the Antelope Draw and Split Mountain Allotments. This proposal is not expected to affect Rangeland Health Standards in this allotment.	Craig Newman	1/6/2014

Determination	Resource/Issue	Rationale for Determination	Signature	Date
NI	Paleontology	As outlined in Chapter 2 applicant committed measures QEP Energy Company has agreed to provide a permitted paleontologist to be present to monitor the beginning of the construction process of the proposed access road, pipeline, powerline and well pad and thereafter a paleontologist would conduct a spot-monitor of the previously mentioned areas. (access road and well pad on state land; powerline on BLM) (IPC, 9–24–2013)	Betty Gamber	1/16/2014
PI	Plants: BLM Sensitive	The following UT BLM sensitive plant species are present or expected in the same or an adjacent sub-watershed as the proposed project: Horseshoe milkvetch (*Astragalus equisolensis*), and *(Yucca sterilis*). • Horseshoe milkvetch individuals were located within the project area during surveys conducted in 2013. • Sandy soils in the vicinity of the proposed project may provide suitable habitat for *Yucca sterilis.* However, no populations were identified in the vicinity of the proposed project on Nov 14, 2013.	Jessica Brunson	1/9/2014
NP	Plants: Threatened, Endangered, Proposed, or Candidate	The proposed project is located outside of the 2013 potential habitat polygon for Uinta Basin hookless cactus. Furthermore, analysis of aerial imagery in GIS indicates no potential habitat is present.	Jessica Brunson	1/9/2014
NP	Plants: Wetland/Riparian	None are present in the project area per the Vernal Field Office RMP and GIS review.	Kevin Sadlier	1/16/2014
NI	Recreation	Proposed project is in a developed area with numerous infrastructures currently in place. Recreation access will not be restricted by the proposed project.	Keivn Sadlier	1/16/2014
NI	Socio-Economics	No impact to the social or economic status of the county or nearby communities would occur from this project due to its small size in relation to ongoing development throughout the Basin.	Kevin Sadlier	1/16/2016

Determination	Resource/Issue	Rationale for Determination	Signature	Date
NI	Visual Resources	The proposed project is in a VRM Class IV area, per the Vernal Field Office GIS Data Base & RMP/ROD. A contrast rating worksheet was not completed as the area has not been identified within class III sensitive areas which are the current standard for site visits with VRM evaluations taking place. Class IV objective states: The objective of this class is to provide for management activities which require major modifications of the existing character of the landscape. The level of change to the characteristic landscape can be high. These management activities may dominate the view and be the major focus of viewer attention. However, every attempt should be made to minimize the impact of these activities through careful location, minimal disturbance, and repeating the basic elements. The proposal will follow existing form, line and texture in the landscape, but will contrast in color temporarily with the landscape. The contrast in color, form, line and texture is within the class IV objectives.	Kevin Sadlier	1/16/2014
NI	Wastes (hazardous/solid)	Hazardous Waste: No chemicals subject to reporting under SARA Title III in an amount equal to or greater than 10,000 pounds will be used, produced, stored, transported, or disposed of annually in association with the project. Solid Wastes: Trash would be confined in a covered container and hauled to an approved landfill. Burning of waste or oil would not be done. Human waste would be contained and be disposed of at an approved sewage treatment facility.	Kevin Sadlier	1/16/2014
NP	Water: Floodplains	None are present in the project area per the Vernal Field Office RMP and GIS review.	Kevin Sadlier	1/16/2014
NI	Water: Groundwater Quality	Compliance with "Onshore Oil and Gas Order No. 1, will assure that the project will not adversely affect groundwater quality. Due to the state-of-the-art drilling and well completion techniques, the possibility of adverse degradation of groundwater quality or prospectively valuable mineral deposits by the proposed action will be negligible.	Betty Gamber	1/16/2014

Determination	Resource/Issue	Rationale for Determination	Signature	Date
NP	Water: Hydrologic Conditions (stormwater)	The proposed construction of the well pads, and roads, would alter the topography of the area to a small degree. It is not expected that surface water or stormwater would be created to the level of concern for Clean Water Act Section 402 (stormwater) review. In addition federal law has exempted energy development from stormwater requirements.	Kevin Sadlier	1/16/2014
NI	Water: Surface Water Quality	Surface Waters: The only potential for the proposed project to negatively impact water quality would be increased potential for chemical spills or increased disturbance to surface soils which could cause soil erosion. This would not be expected to occur in a way that would be a relevant impact to surface waters. The site is in an upland area and more than 3 miles from perennial waters.	Kevin Sadlier	1/16/2014
NP	Water: Waters of the U.S.	Waters of the U.S. are not present per USGS topographic map and GIS data review. The proposed project would not impact any drainage where a high water mark can be distinguished, drainages which regularly run water, or wetlands/riparian areas, per onsite.	Kevin Sadlier	1/16/2014
NP	Wild Horses	No herd areas or herd management areas are present in the project area per BLM GIS database.	Kevin Sadlier	1/16/2014
PII	Wildlife: Migratory Birds (including raptors)	Potential impacts to migratory bird species. There will be no new disturbance with the surface line on BLM administered lands.	Dixie Sadlier	1/6/2014
NP	Wildlife: Non-USFWS Designated	No big game crucial ranges were identified within the project area.	Dixie Sadlier	1/6/2014
PI	Wildlife: Threatened, Endangered, Proposed or Candidate	Is the proposed project in sage grouse PPH or PGH? Yes ☐ No **X** If the answer is yes, the project must conform with WO IM 2012-043. No Threatened, Endangered, Proposed, or Candidate species/habitat was identified within the project area. The proposed action is consistent with the guidelines established in Utah IM-2012-043. No PPI habitat was identified within the project area. Water depletion will occur for this project so T&E Fish species will need to be analyzed.	Dixie Sadlier	1/6/2014
NP	Woodlands/Forestry	None are present in the project area per BLM GIS database.	Kevin Sadlier	1/16/2014

FINAL REVIEW:			
Reviewer Title	**Signature**	**Date**	**Comments**
Environmental Coordinator	Stephanie S Howard	1/23/14	
Authorized Officer		1-23-2014	