

Decision on Action and Application for Categorical Exclusion 3
Section 390, Energy Policy Act of 2005
Diamond Run II POD, Wold Oil Properties Inc.
WY-070-CX11-3-213
Bureau of Land Management, Buffalo Field Office

Description of the Proposed Action

Wold Oil Properties, Inc., (Wold) submitted 13 applications for permit to drill (APDs) for coalbed natural gas (CBNG) wells and their infrastructure, located in Johnson County. The surface owner is Dry Fork Land & Livestock.

The wells will be vertical bores proposed on an 80-acre spacing with one well per location. Each well will produce from the Big George coal zone to depths of approximately 1,345 - 1,560 feet. The wells are expected to produce for approximately 10 years. Well house dimensions are 8' wide x 8' long x 8' height. Well house color will be Covert Green, to blend into the surrounding landscape. The wells, collectively, are the Diamond Run II plan of development (POD).

The list of wells are:

Well Name	Well	QTR	Sec	TWP	RNG	Lease #
FED (JOHNSON)	14-26	SWSW	26	43N	77W	WYW50143
JOHNSON FED	23-26	NESW	26	43N	77W	WYW50143
JOHNSON FED	34-26	SWSE	26	43N	77W	WYW50143
JOHNSON FED	41-26	NENE	26	43N	77W	WYW50143
JOHNSON FED	43-26	NESE	26	43N	77W	WYW50143
JOHNSON FED	43-27	NESE	27	43N	77W	WYW50143
JOHNSON FED	14-35	SWSW	35	43N	77W	WYW50143
JOHNSON FED	21-35	NENW	35	43N	77W	WYW50143
JOHNSON FED	23-35	NESW	35	43N	77W	WYW50143
JOHNSON FED	32-35	SWNE	35	43N	77W	WYW50143
JOHNSON FED	34-35	SWSE	35	43N	77W	WYW50143
JOHNSON FED	41-35	NENE	35	43N	77W	WYW50143
JOHNSON FED	43-35	NESE	35	43N	77W	WYW50143

Wold proposes using federal water in the following impoundments:

Impoundment Name	Size, acres	QtrQtr	Sec	TWP	RNG	Lease Number
JOHNSON FORK - primary		SENE	26	43N	77W	WYW50143
SUNDANCE KID - secondary		SWNE	26	43N	77W	WYW50143

Drilling and Construction:

- Wold anticipates completing drilling and construction in two years. Drilling and construction is year-round in the region. Weather may cause delays but delays rarely last multiple weeks. Timing limitations in the form of conditions of approval (COAs) and/or agreements with surface owners may impose longer temporal restrictions on portions of this POD, but rarely do these restrictions affect an entire POD.
- Wold's water management plan (WMP) includes this infrastructure: 2 discharge points and 2 stock water reservoirs in the Upper Powder River watershed.

- A road network consisting of improved road and primitive roads.
- An existing and proposed above and below ground power line network.
- A buried gas, water and power line network will be constructed.

The total surface disturbance for this action consists of:

Proposed Improved Roads – no utility corridor	0.1 acres
Proposed Improved Roads – with utility corridor	0.4
Proposed Unimproved Roads – no corridor	0.4
Proposed Unimproved Roads – with utility corridor	7.1
Existing Roads – with proposed utility corridor	21.3
Proposed Utility – with corridor	1.0
Proposed Pipeline – no corridor	2.1
Proposed Overhead	2.4
Proposed Impoundments (2)	9.0
Proposed wells (13)	6.5
Proposed staging area	<u>0.6</u>
Total Acres Disturbed	51.0

(acres disturbed is both long and short term)

Plan Conformance, Compliance, and Justification with the Energy Policy Act of 2005

The proposed action conforms to the terms and conditions of the resource management plan (RMP) for the public lands administered by the Bureau of Land Management, Buffalo Field Office (BFO), 1985, 2001, the Powder River Basin Final Environmental Impact Statement (PRB FEIS), January 2003, the Record of Decision (ROD), and its Resource Management Plan Amendment for the Powder River Oil and Gas Project, 2003, as required by 43 CFR 1610.5. The Diamond Run II POD area is clearly lacking in wilderness characteristics as it is in the midst of extensive CBNG development with miles of mechanically maintained improved roads, (DOI Order 3310, FLPMA Sec 201). This proposal is a form of NEPA compliance without the analysis that occurs in an environmental assessment (EA) or EIS. BLM H-1790, p. 17. This proposal is categorically excluded from further NEPA analysis. Id.

The applicable categorical exclusion from the Energy Policy Act of 2005, Section 390, is exclusion number (b)(3) which is *drilling an oil or gas well within a developed field for which an approved land use plan or any environmental document prepared pursuant to NEPA analyzed such drilling as a reasonably foreseeable activity, so long as such plan or document was approved within 5 years prior to the date of spudding the well. Each proposed well will be within developed oil and gas federal units/fields that have existing and/or approved state, fee and federal wells and associated infrastructure.*

There are 3 requirements to use a Section 390 Categorical Exclusion 3:

- 1) Each proposed APD is within a developed CBNG field. The following represents a list of existing/approved wells, specifically the projects for the wells and their associated infrastructure, by POD and EA that are within the proposed Diamond Run II POD:

Approved POD	NEPA Document	Approval Date
Ridgeline/Bullwhacker II Add I POD	WY-070-EA09-150	9/22/09
Bullwhacker III POD	WY-070-05-198	5/13/05
Bullwhacker II POD	WY-070-04-333	9/30/04

- 2) There must be one existing NEPA document (and the RMP) containing the reasonably foreseeable development scenario for this action. There is one existing NEPA document that

reasonably foresaw development to spud additional wells to fill in 80 acre well-spacing. A review of these documents determined those EAs considered potential environmental effects associated with the proposed activity at a site specific level. In addition, all approved EAs tier into the Powder River Basin (PRB) EIS of March of 2003. The PRB EIS analyzed foreseeable development in the PRB. The foreseeable development included drilling a CBNG well on 80 acre spacing resulting in approximately 50,000 CBNG wells in the PRB. The Diamond Run II POD falls within the foreseeable development scenario of 80 acre well spacing that was analyzed in the tiered EA listed above.

- 3) Spudding of the proposed APD must occur within five years of the approval of the tiered EA. The BFO approved the above tiered-to EA (WY-070-EA09-150) for Diamond Run II POD within the five-year timeframe.

There are no new major direct, indirect, or cumulative environmental effects resulting from the approval of the Diamond Run II POD. The Ridgeline/Bullwhacker II Add I POD EA analyzed these applicable environmental effects - for there is extensive use and sharing of existing infrastructure through the drilling of these new proposed wells. The BFO reviewed the tiered EA and found that the EA considered potential environmental effects associated with the proposed activity at a site specific level. No extraordinary circumstances apply to these APDs.

Each individual well must be spudded by September 22, 2014. If the individual well is not spudded by September 22, 2014 the individual APD approval will expire and the operator is to cease all operations related to preparing to drill that individual well.

Plan of Operations

The proposal is designed in conformance with all bureau standards and incorporates appropriate best management practices, required and designed mitigation measures determined to reduce the effects on the environment.

BFO reviewed and approves Wold's surface use plan of operations that described all proposed surface-disturbing activities, pursuant to Section 17 of the Mineral Leasing Act.

Water Resources:

The operator submitted a comprehensive water management plan (WMP) for the project which incorporates sound water management practices, monitoring of downstream impacts within the Dry Fork Creek watershed (tributary of the Upper Powder River), and commitment to comply with Wyoming State water laws and regulations. It also addresses potential impacts to the environment and landowner concerns. Qualified hydrologists, in consultation with the BLM, developed the WMP. Adherence with the plan, in addition to BLM applied mitigation (in the form of COAs), will reduce project area and downstream impacts from proposed water management strategies.

The operator proposes two on-channel impoundments that are for full containment. The impoundments are on tributaries of the Dry Fork Creek watershed. The water extracted in the production of CBNG is water of the state, per Wyoming Law (W.S. 41-3-101). BLM policy 1982 directs the BLM's cooperation and full compliance with State water laws. The Wyoming Department of Environmental Quality (WDEQ) permits and regulates the disposal of produced water. The BLM is responsible for analyzing the proposed action with available data provided in the WMP for the POD and disclose potential impacts of the proposed action. The surface use agreement (SUA) addresses the responsibility, liability, monitoring, mitigation measures, and reclamation.

Groundwater:

The average anticipated water production per well is 8 gpm; which equates to a combined 104 gpm (0.2 cfs or 167.8 acre-feet per year) for the 13 wells in the Diamond Run Phase II project. The water quality of the produced water should be similar to a reference water sample analysis that came from a well producing from the Big George coal zones (see table below).

There are 21 permitted water wells within 1 mile of the Dry Willow Phase II project area, which range from 0 to 665 feet in depth with producing water zones ranging from 0 to 665 feet depth at the time they were completed, compared to the 1,345 to 1,560 feet depth to the coal zones. The operator offered water well agreements to holders of properly permitted domestic and stock wells within the circle of influence (0.5 mile of a federal CBNG producing well) of the proposed wells, (see master surface use plan (MSUP), p. 8).

Surface Water:

The following table shows the average values of electrical conductivity (EC) and sodium adsorption ratio (SAR) as measured at selected USGS gauging stations at high and low monthly flows as well as the Wyoming groundwater quality standards for total dissolved solids (TDS) and SAR for Class I to Class III water (there is no current standard for EC). It also shows constituent limits for TDS, SAR and EC detailed in the project area WYPDES permits, and the concentrations found in the POD's representative water sample.

Comparison of Existing and Predicted Water Quality

Sample location or Standard	TDS mg/l	SAR	EC µmhos/cm
Upper Powder River Watershed at Arvada, WY Gauging station Historic Data Average at Maximum Flow Historic Data Average at Minimum Flow		4.76 7.83	1,797 3,400
WDEQ Quality Standards for Wyoming Groundwater (Chapter 8) Drinking Water (Class I) Agricultural Use (Class II) Livestock Use (Class III)	500 2,000 5,000	8	
WDEQ Water Quality Requirement for WYPDES Permit: #WY0056456	5	Calculated as unadjusted ratio	5,000
Predicted Produced Water Quality Big George Coal Seam	1,230	16.2	1,910

WDEQ Permit Parameters

Parameters	POD Water Quality 10/07/09	WYPDES Permit WY0056456 Maximum Concentrations
pH	7.5	6.5 to 9.0
Specific Conductance	1,880 µmhos	3,570 µmhos/cm max
Dissolved Iron	ND µg/l	1,000 µg/l max
Total Arsenic	0.002 ug/l	8.4 ug/l
Chlorides	7 mg/l	150 mg/l
Total Dissolved Solids	1220 mg/l	NA

ND – Not detected at the reporting limit. NA – Not applicable.

The PRB FEIS projected the total amount of water produced from CBNG development per year (see PRB FEIS, Table 2-8 Projected Amount of Water Produced from CBM Wells under Alternatives 1, 2A and 2B, p. 2-26). For the Upper Powder River drainage, the projected volume produced within the watershed area was 44,169 acre feet in 2011 (maximum production is estimated in 2006 at 171,423 acre-feet). As such, the volume of water resulting from the production of these wells is 0.4% of the total volume projected for 2011. This volume of produced water is within the predicted parameters of the PRB FEIS.

Cultural:

The Diamond Run II POD received a Class III cultural resource inventory prior to on-the-ground project work (BFO project no. 70100032). Wold provided the inventory which followed the Archeology and Historic Preservation, Secretary of the Interior's Standards and Guidelines (48CFR190) and the *Wyoming State Historic Preservation Office Format, Guidelines, and Standards for Class II and III Reports*. Ardeth Hahn, BLM Archaeologist, reviewed the report for technical adequacy, compliance with BLM standards, and determined it was adequate. The following resources are in or near the project area.

Site Number	Site Type	Eligibility
48JO134/ 48JO3059	Bozeman Trail/Ft. Fetterman to Ft. McKinney Telegraph Line, ACR East Bullwhacker Segment 5, Section 9	Listed on the NRHP, contributing
48JO134/ 48JO3059	Bozeman Trail/Ft. Fetterman to Ft. McKinney Telegraph Line, ACR East Bullwhacker Segment 6, Section 10	Listed on the NRHP, non-contributing
48JO134/ 48JO3059	Bozeman Trail/Ft. Fetterman to Ft. McKinney Telegraph Line, ACR East Bullwhacker Segment 6, Section 11	Listed on the NRHP, contributing
48JO2292	Deadwood Road, ACR East Bullwhacker Segment 1	Eligible, non-contributing
48JO2292	Deadwood Road, ACR East Bullwhacker Segment 2	Eligible, contributing
48JO134/ 48JO3059	Bozeman Trail/Ft. Fetterman to Ft. McKinney Telegraph Line, ACR East Bullwhacker Segment 5, Section 9	Listed on the NRHP, contributing
48JO2336	Historic Site	Not Eligible

Site 48JO134 (Bozeman Trail) is listed on the National Register of Historic Sites, and sites 48JO2292 (Deadwood Road) and 48JO3059 (Ft. Fetterman to Ft. McKinney Telegraph Line) are eligible for the National Register. Contributing portions (typically expressed as wagon ruts) of each site are located within one mile of the project area. None of the contributing portions of the sites retain their integrity of setting due to modern additions to the landscape including CBM wells, upgraded roads, pipelines, reservoirs, POD buildings, compressor stations, etc.

Non eligible site 48JO2336 will be impacted by the proposed project. No contributing portions of NRHP listed site 48JO134 (Bozeman Trail), or of eligible sites 48JO2292 (Deadwood Road) and 48JO3059 (Ft. Fetterman to Ft. McKinney Telegraph Line) will be physically impacted. None of the historic properties adjacent to the project area retain their integrity of setting. The proposed project will not diminish any other aspects of integrity of the historic properties. Following the Wyoming State Protocol Section VI(B)(1) the BLM determined that the project will result in “No Adverse Effect”. The Wyoming State Historic Preservation Officer (SHPO) concurred with the Bureau’s determination on May 6, 2011.

Some of the project area analyzed in this CX occurs on deep alluvial deposits. Alluvial deposits typically have a high potential for buried cultural resources, which are nearly impossible to locate during a Class III inventory (Ebert & Kohler 1988:123; Eckerle 2005:43).

If any cultural values [sites, artifacts, human remains (Appendix L PRB FEIS)] are observed during operation of this lease/permit/right-of-way, they will be left intact and the Buffalo Field Manager notified. Standard COA (General)(A)(1) explains further discovery procedures.

When a project is constructed in an area with a high potential for buried cultural material, archaeological monitoring is often included as a condition of approval. Construction monitoring is performed by a qualified archeologist working in unison with construction crews. If buried cultural resources are located by the archeologist, construction is halted and the BLM consults with SHPO on mitigation or avoidance. Due to the presence of alluvial deposits identified by the NRCS soil survey (NRCS n.d.), and areas of High to Very High Sensitivity Zones per the PUMP III Model (Eckerle 2005), the operator will be required to have an archeologist monitor all earth moving activities associated with certain construction, as described in the site specific COA’s.

Wildlife:

The BLM wildlife biologist has reviewed the proposed APDs. The wildlife biologist determined that the proposed APDs, combined with the COAs are: (1) consistent with the FEIS and its supplements (WY-070-02-065), the RMP and its amendments, and the above tiered EA; and (2) consistent with programmatic biological opinion (ES-6-WY-07-F012) from the PRB Oil and Gas Project and does not change the determinations in that consultation. Site-specific wildlife issues amplified here are site specific mitigation measures for raptors, sage grouse, and mountain plover.

Mountain Plover

The affected environment for mountain plover (plover) is discussed in the PRB FEIS on pp. 3-177 to 3-178. At the time the PRB FEIS was written, the mountain plover was proposed for listing as a threatened species under the ESA. In 2003, USFWS withdrew the proposal, finding that the population was larger than thought and was no longer declining.

On June 29, 2010 the USFWS reinstated a December 5 2002 proposed rule (67 FR 72396) to list the mountain plover as a threatened species. On May 12, 2011, the USFWS, once again, withdrew the proposal to list the mountain plover as a threatened species. The mountain plover is listed as a Wyoming BLM sensitive species, a WGFD SGCN, with a rating of NSS4, because

population status and trends are unknown but are suspected to be stable, habitat is vulnerable without ongoing loss, and the species is sensitive to human disturbance. The Wyoming Bird Conservation Plan rates them as a Level I species, indicating they are clearly in need of conservation action. They are also listed by USFWS as a BCC for Region 17.

Approximately 333.28 total acres of prairie dog colonies are identified within the project area providing suitable mountain plover breeding or nesting habitat. According to the USFWS (2007), habitat should be classified as medium suitability when prairie dog colonies of at least 40 acres are present and at least three of the following criteria are met:

- Minimum habitat patch size: 160 acres
- Habitat type: bare ground, grassland, low scrub
- Maximum average vegetation height: 4 inches
- Amount of bare ground: minimum 25 percent
- Topography: less than 5 percent slope

Two of the five mapped prairie dog colonies meet the requirements which suggest that habitat is of medium suitability for mountain plover. Grouse Mountain Environmental Consultants had no mountain plover observations during 2009 surveys although due to presence of suitable habitat, mountain plover are expected to occur within the project area.

Direct and Indirect Effects

Suitable habitat is present within the Diamond Run II project area. The project “may affect, but is not likely to adversely affect individuals or habitat” for mountain plover.

Two mapped prairie dog colonies provide 314.7 acres of suitable plover habitat. This habitat will be directly impacted due to loss of approximately 3.7 acres resulting from construction of two proposed well locations (Federal 41-26, Federal 23-26) and 0.6 miles of proposed road and utility construction.

Cumulative Effects

The PRB FEIS discusses impacts to mountain plover are on p. 4-254.

Mitigation Measures

Proposed infrastructure was located in manner to minimize impacts to plover habitat.

No surface-disturbing activities shall occur within 0.25 mile of potential mountain plover nesting habitat, annually, from 15 March through 31 July, prior to a nesting survey.

A disturbance-free buffer zone of 0.25 mile will be established around all occupied mountain plover habitat between March 15 and July 31.

Work schedules and shift changes will avoid the periods from 30 minutes before to 30 minutes after sunrise and sunset during June and July, when mountain plovers are most active.

Residual Effects

There is a potential for plovers to be impacted by project related traffic outside the project boundary.

Raptors

The affected environment for raptors is discussed in the PRB FEIS on pp. 3-141 to 3-148. Four

raptor species are known to nest within 0.5 miles of the project area: golden eagle, red-tailed hawk, great horned owl, and ferruginous hawk. The affected environment for golden eagles is discussed in the PRB FEIS on pp. 3-145 to 3-146. Golden eagles are listed as a bird of conservation concern (BCC) by USFWS for Bird Conservation Region (BCR) Region 17, which encompasses the project area. BCCs are those species that represent USFWS’s highest conservation priorities, outside of those that are already listed under ESA. The goal of identifying BCCs is to prevent or remove the need for additional ESA bird listings by implementing proactive management and conservation actions. Golden eagles were also identified as a Level III species in the Wyoming Bird Conservation Plan. Golden eagles are sensitive to extensive human activity around nest sites and are threatened by loss of nesting habitat to industrial development, powerline executions, and other factors (Nicholoff 2003). The WGFD Wyoming Bird Conservation Plan habitat objectives for golden eagles include maintaining open country to provide habitat for small mammals as a food source. Recommendations for management include restricting human activities near nests during peak breeding season; protecting, enhancing, and restoring prey populations; and protecting known nesting territories.

BFO documented 17 raptor nests within 0.5 mile of the project boundary, Table 1.2. Two nests were active in 2010.

Table 1.2. Documented Raptor Nests within 0.5 mi. of the Diamond Run II Project Area.

BLM ID	UTMs	Legal	Substrate	Year	Condition	Status	Species
1967	411672E 4836480N	S27 T43N R77W	CTL	2010	Poor	INAC	RETA
				2009	Good	OCCU	RETA
				2008	Good	INAC	n/a
				2007	Fair	INAC	n/a
				2006	Unknown	INAC	n/a
				2005	Fair	INAC	n/a
				2004	Good	INAC	n/a
1972	412887E 4833644N	S35 T43N R77W	CTL	2010	Fair	INAC	RETA
				2009	Good	INAC	n/a
				2008	Poor	INAC	n/a
				2007	Good	INAC	n/a
				2006	Unknown	INAC	n/a
				2005	Good	ACTI	RETA
				2004	Good	ACTI	RETA
1974	413180E 4837240N	S23 T43N R77W	CTD	2010	Nest Gone	INAC	n/a
				2009	Poor	INAC	n/a
				2008	Poor	INAC	n/a
				2007	Fair	INAC	n/a
				2006	Poor	INAC	n/a
				2005	Remnants	INAC	n/a
				2004	Fair	INAC	n/a

3775	413690E 4833150N	S2 T42N R77W	CTL	2010	Poor	INAC	GRHO
				2009	Poor	INAC	n/a
				2008	Good	OCCU	GRHO
				2007	Fair	INAC	n/a
				2006	Good	INAC	n/a
				2005	Good	INAC	n/a
4722	413035E 4833440N	S35 T43N R77W	CTL	2010	Good	ACTI	RETA
				2007	Good	INAC	n/a
				2006	Unknown	INAC	n/a
				2005	Unknown	ACTI	RETA
4724	412062E 4836430N	S27 T43N R77W	CTL	2010	Fair	INAC	RETA
				2008	Good	ACTI	RETA
				2007	Good	INAC	n/a
				2006	Unknown	ACTI	RETA
				2005	Nest Gone	INAC	n/a
4727	412840E 4833264N	S2 T42N R77W	CTL	2010	Fair	GONE	UNRA
				2007	Fair	INAC	n/a
				2006	Unknown	INAC	n/a
				2005	Unknown	INAC	n/a
4900	414083E 4833702N	S36 T43N R77W	CTL	2010	Fair	INAC	RETA
				2009	Fair	INAC	n/a
				2008	Good	ACTI	RETA
				2007	Good	INAC	n/a
5642	412135E 4836498N	S27 T43N R77W	CTL	2010	Nest Gone	INAC	RETA
				2009	Good	INAC	n/a
				2005	Good	ACTI	RETA
5646	413153E 4837229N	S23 T43N R77W	CTD	2010	Nest Gone	INAC	RETA
10649	412887E 4833639N	S35 T43N R77W	CTL	2010	Unknown	INAC	GRHO
				2009	Fair	INAC	n/a
10650	413668E 4833139N	S2 T42N R77W	CTL	2010	Poor	INAC	GRHO
				2009	Fair	INAC	n/a
10666	412675E 4834936N	S35 T43N R77W	CTL	2010	Good	INAC	UNRA
				2009	Good	INAC	n/a

10667	412138E 4836488N	S27 T43N R77W	CTD	2010	Nest Gone	INAC	UNRA
				2009	Fair	INAC	n/a
10671	414065E 4833742N	S36 T43N R77W	CTL	2010	Good	ACTI	RETA
				2009	Good	ACTI	RETA
12230	412354E 4835334N	S26 T43N R77W	CTD	2010	Poor	INAC	UNRA
12237	412208E 4835612N	S27 T43N R77W	CTD	2010	Poor	INAC	UNRA
Nest Substrate Codes: GHS- Ground/Hillside CTL- Cottonwood Tree Live CTD- Cottonwood Tree Dead BOX- Box Elder Tree POL- Ponderosa Tree Live JUN- Juniper				Activity Codes: INAC- Inactive ACTI- Active OCCU- Occupied DNLO- Did Not Locate			

Direct and Indirect Effects

Human activities in close proximity to active raptor nests may interfere with nest productivity. Romim and Muck (1999) indicate that activities within 0.5 miles of a nest are prone to cause adverse impacts to nesting raptors. If mineral activities occur during nesting, they could be sufficient to cause adult birds to remain away from the nest and their chicks for the duration of the activities. This absence can lead to overheating or chilling of eggs or chicks and can result in egg or chick mortality. Prolonged disturbance can also lead to the abandonment of the nest by the adults. Routine human activities near these nests can also draw increased predator activity to the area and resulting in increased nest predation.

To reduce the risk of decreased productivity or nest failure, the BLM BFO requires a 0.5 mile radius timing limitation during the breeding season around active raptor nests and recommends all infrastructures requiring human visitation be located in such a way as to provide adequate biologic buffer for nesting raptors. A biologic buffer is a combination of distance and visual screening that provides nesting raptors with security such that they will not be flushed by routine activities.

The PRB FEIS analyzed additional direct and indirect impacts to raptors from oil and gas development, pp. 4-216 to 4-221.

Cumulative Effects

The cumulative effects from this project are within the analysis parameters and impacts described in the PRB FEIS. For details on expected cumulative impacts, refer to the PRB FEIS, p. 4-221.

Mitigation Measures

To reduce the risk of decreased productivity or nest failure (PRB FEIS, p. 4-218), the BLM BFO requires a 0.5 mile radius timing limitation during the breeding season around active raptor nests. In addition, well metering, maintenance, and other site visits within 0.5 mile of raptor nests should also be minimized during the breeding season around active nests. In order to further understand the degree of potential population effects to raptor species (PRB FEIS, pp. 4-219 to 4-220), annual surveys for new raptor nests and nest occupancy checks shall be completed.

Residual Impacts

In spite of design by Wold and BLM during project planning and mitigation measures applied as COAs by BLM, there will be an increase in traffic, construction activity and human presence in the area throughout the life of the project which will affect the area for nesting raptors.

Decision and Rationale on Action

I approve the Diamond Run II POD with the following COAs:

Site Specific Conditions of Approval

1. To help protect fragile soils, disturbance from the access/pipeline corridor to the Johnson Fed 21-35 will need additional stabilization measures i.e. straw crimping, erosion blankets, mulching etc.
2. The Johnson Fed 43-26 and 41-35 will require slotted pads. The slotted pads must be constructed per the design provided in the approved plan of development. No other pad construction is authorized.
3. As per the PRB FEIS, impoundments constructed over federal minerals or on federal surface to manage CBNG-produced water must be reclaimed when the production phase concludes. In order to establish soil chemistry goals for eventual reclamation (or release to the private landowner), baseline soil samples will be collected from all impoundments carrying water from this federal action located over federal minerals or on federal surface (impoundments listed below):

Impoundment Name	Size, acres	QtrQtr	Sec	TWP	RNG	Lease Number
JOHNSON FORK - primary		SENE	26	43N	77W	WYW50143
SUNDANCE KID - secondary		SWNE	26	43N	77W	WYW50143

Samples will be taken from the approximate proposed deepest point in the pool area prior to any construction. The recommended location is 10 feet upstream of the proposed low level outlet within the reservoir pool. Discrete samples will be taken from 0 to 6 inches, 6 to 24 inches and 24 to 48 inches for analysis for the following 10 parameters:

- Texture, pH, EC, Soluble Ca, Soluble Mg, Soluble Na, Soluble K, SAR, Total Organic Carbon (TOC), Total metals including: Al, Ba, B, Cd, Cu, Fe, Mn, , Mo, Ra-226, Se, and Zn.
- Standard soil sampling protocol will be used. Analysis results will be sent to the BFO Authorized Officer.
- After the construction of the impoundment, an additional surface sample will be taken from 0 to 6 inches at the lowest point in the pool area and analyzed for the same parameters.
- This baseline analysis will characterize existing soil chemistry and set reclamation target ranges. If the operator does not establish baseline parameters prior to impoundment construction, it would be required to do so at the time of reclamation by sampling a location upstream of the facility.

Archaeological Monitoring: All surface disturbing activity (including excavation of pit(s), blading, trenching, etc.) in the following areas will be monitored by a BLM cultural resource use permit (CRUP) holder or permitted crew chief. The BLM identified these areas as having a high

potential for buried cultural deposits (areas containing alluvial deposits identified by the NRCS soil survey (NRCS n.d.), and areas of High Sensitivity Zones per the PUMP III Model (Eckerle 2005)). Some portions of the monitoring areas as described may lie outside alluvial deposits and exact monitoring areas are left to the discretion of the archeological monitor. All monitored areas must be plotted on the map provided with the monitoring report. The submission of two copies of a monitoring report to BFO is required within 30 days of the completion of all monitoring work.

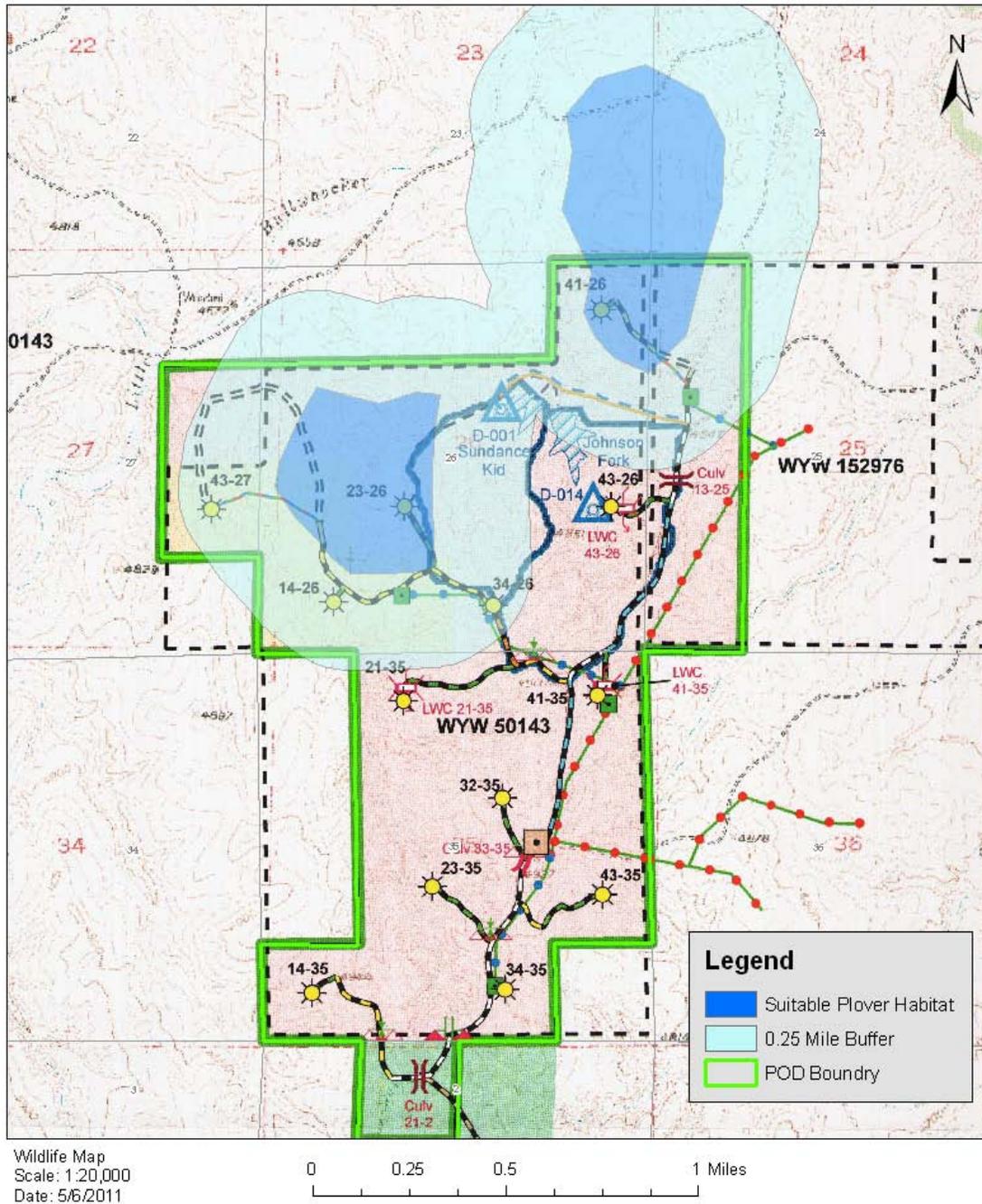
1. All surface disturbing activity associated with the construction of the 43-27 Federal Well and the associated water/gas/electric corridor heading east from the 43-27 Federal Well location to the tie in with the 14-26 Federal Well (T43N R77W Sections 26 and 27).
2. All surface disturbing activity associated with the construction of the 14-26 Federal Well (T43N R77W Section 26).

Mountain Plover

The following conditions will alleviate impacts to mountain plover:

1. No surface-disturbing activities shall occur within 0.25 mile of potential mountain plover nesting habitat, annually, from 15 March through 31 July, prior to a nesting survey. This timing limitation will be in effect unless surveys determine the habitat to be unoccupied. Refer to map, below, for affected wells and infrastructure for the 2011 year.
2. A disturbance-free buffer zone of 0.25 mile will be established around all occupied mountain plover habitat between March 15 and July 31.
3. Mountain plover nesting surveys shall be conducted by a biologist following the most current USFWS Mountain Plover Survey Guidelines. All survey results shall be submitted in writing to a Buffalo BLM biologist and approved prior to surface disturbing activities.
4. Work schedules and shift changes will be set to avoid the periods from 30 minutes before to 30 minutes after sunrise and sunset during June and July, when mountain plovers and other wildlife are most active.

Diamond Run II: Mountain Plover COA Map

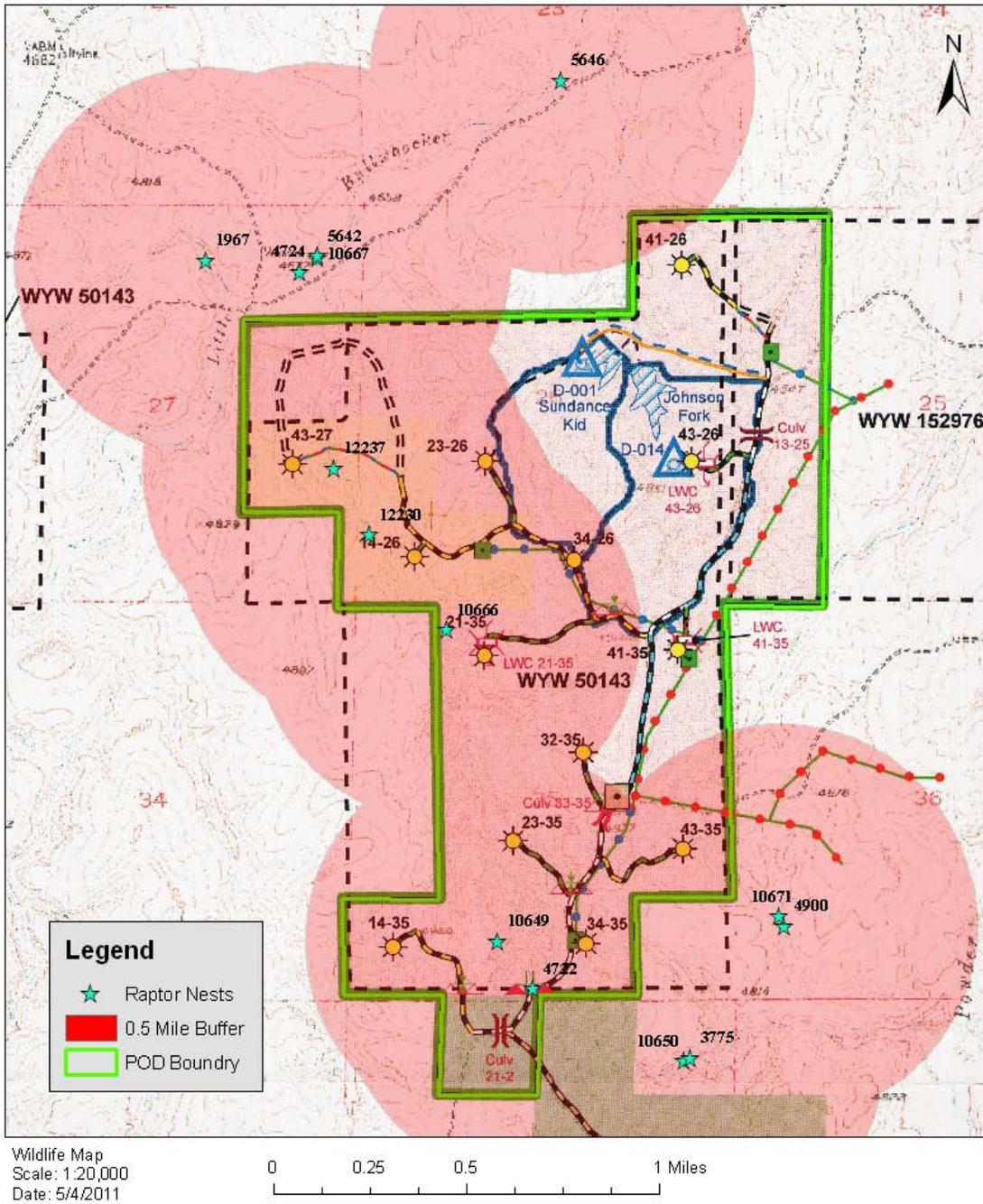


Raptors

The following conditions will alleviate impacts to raptors:

1. No surface disturbing activity shall occur within 0.5 mile of all identified raptor nests from February 1 through July 31, annually, prior to a raptor nest occupancy survey for the current breeding season. This timing limitation will affect the following (Refer to Map, below):

Diamond Run II: Raptor COA Map



- a. Surveys to document nest occupancy shall be conducted by a biologist following BLM protocol, between April 15 and June 30. All survey results shall be submitted in writing to a BFO biologist and approved prior to surface disturbing activities. Surveys outside this window may not depict nesting activity. If a survey identifies active raptor nests, a 0.5 mile timing buffer will be implemented. The timing buffer

restricts surface disturbing activities within 0.5 mile of occupied raptor nests from February 1 to July 31.

- b. Nest occupancy and productivity checks shall be completed for nests within a 0.5 mile of any surface disturbing activities across the entire POD for as long as the POD is under construction. Once construction of the POD ceased, nest occupancy and productivity checks shall continue for the first 5 years on all nests that are within 0.5 mile of locations where any surface-disturbing activities took place. Wold will submit survey results in writing to a BFO biologist no later than July 31 of each survey year. The nests that are checked each year are subject to change, pending results of prior years' surveys.

2. Wold will notify BLM within 24 hours if an undocumented raptor nest is found during project construction or operation, (307-684-1100).

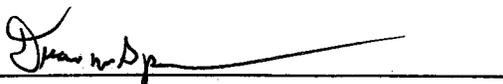
Greater Sage-Grouse

The following conditions will alleviate impacts to sage-grouse and were previously analyzed in the tiered EA: WY-070-EA09-150. The original COAs from that EA were modified in a 2009 BFO RMP maintenance action. The modification is for sage-grouse habitat conservation and timing limitations. It is found at: http://www.blm.gov/style/medialib/blm/wy/field-offices/buffalo/plan.Par.5338.File.dat/BFO_RMP_RaptorGrouse9_10.pdf

1. No surface disturbing activities are permitted in high quality sage grouse habitat between March 15 and June 30. This condition will be implemented on an annual basis for the life of the project. This timing limitation will affect the entire POD.

The above COAs and/or terms and conditions provide support and mitigation for this decision and may not be segregated from project implementation without further NEPA review. I reviewed the APDs, plan conformance statement, and determine that the proposed activity conforms to the land use plan. Further, I reviewed the proposal to ensure the appropriate exclusion category as described in Section 390 of the Energy Policy Act of 2005 is correctly applied. I determine that there is no need for further environmental analysis and that no extraordinary circumstances apply.

Each individual well must be spudded by September 22, 2014. If the individual well is not spudded by September 22, 2014 the individual APD approval will expire and the operator is to cease all operations related to preparing to drill that individual well.



Duane W. Spencer
Field Manager

5/20/11

Date

Administrative Review or Appeal Opportunities

This decision is subject to administrative review in accordance with 43 CFR 3165. Request for administrative review of this decision must include information required under 43 CFR 3165.3(b) (State Director Review), including all supporting documentation. A request must be filed in writing with the State Director, Bureau of Land Management, P.O. Box 1828, Cheyenne, Wyoming 82003, no later than 20 business days after this Decision Record is received or considered to have been received. Any party who is adversely affected by the State Director's decision may appeal that decision to the Interior Board of Land Appeals, as provided in 43 CFR 3165.4.

Contact Person

For additional information concerning this decision contact:

Casey Freise, Supervisor Natural Resource Specialist

Buffalo Field Office, 1425 Fort St. Buffalo, WY 82834 (307) 684-1189

Persons and Agencies Consulted: Mary Hopkins, Wyoming State Historic Preservation Officer

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