

Decision on Categorical Exclusion 3, Section 390, Energy Policy Act of 2005
SCHOONOVER ROAD UNIT 4 ADDITION 1 APDs
Williams Production RMT Company
WY-070-390CX3-10-333 through WY-070-390CX3-10-367
Bureau of Land Management, Buffalo Field Office

Description of the Proposed Action

Williams Production RMT Company (Williams or operator) proposes to drill 35 coal bed natural gas (CBNG) wells and construct their associated infrastructure. The proposed wells are in Johnson County at T47N R76W Sections 2, 4, T48N R76W Sections 23-27, 35, 36, and in T48N R75W Section 31.

Surface owners: BLM, State of Wyoming, Flying T Land Company, Trigg Marquiss, and John Iberlin.

The Proposed Action is to explore by drilling for, and possibly develop, natural gas reserves within geologic mineral formations leased by Williams.

Williams requested the Schoonover Road Unit 4 Addition 1 (SRU 4 ADD 1) proposal of development (POD) on October 13, 2009 to the BFO. A list of proposed wells is included in Table 2.1, below.

The SRU 4 ADD 1 POD has 35 Federal applications for permit to drill (APDs) to develop and produce natural gas within the coal bearing formations of the Powder River Basin (PRB). The wells are vertical bores proposed on an 80 acre spacing pattern with 1 well per location. Each well will produce from the Big George coal seams.

A wildlife onsite visit occurred on August 12, 2010. A Surface Management onsite visit occurred on September 1, 2010. Both onsites evaluated the proposal and modified it as necessary to mitigate environmental impacts. The BLM sent a post-onsite deficiency letter to Williams on September 14, 2010.

Table 2.1 Proposed Wells

#	Well Name	Well #	Qtr/Qtr	Sec	TWP	RNG	Lease #	CX #
1	SRU 4 ADD 1	43-4	NESE	4	47N	76W	WYW71546	WY-070-CX3-10-333
2	SRU 4 ADD 1	21-2	NENW	2	47N	76W	WYW147327	WY-070-CX3-10-334
3	SRU 4 ADD 1	23-2	NESW	2	47N	76W	WYW147327	WY-070-CX3-10-335
4	SRU 4 ADD 1	12-31	SWNW	31	48N	75W	WYW131222	WY-070-CX3-10-336
5	SRU 4 ADD 1	21-31	NENW	31	48N	75W	WYW131222	WY-070-CX3-10-337
6	SRU 4 ADD 1	41-31	NENE	31	48N	75W	WYW131222	WY-070-CX3-10-338
7	SRU 4 ADD 1	34-23	SWSE	23	48N	76W	WYW130623	WY-070-CX3-10-339
8	SRU 4 ADD 1	14-24	SWSW	24	48N	76W	WYW146287	WY-070-CX3-10-340
9	SRU 4 ADD 1	23-24	NESW	24	48N	76W	WYW146287	WY-070-CX3-10-341
10	SRU 4 ADD 1	34-24	SWSE	24	48N	76W	WYW134225	WY-070-CX3-10-342
11	SRU 4 ADD 1	12-25	SWNW	25	48N	76W	WYW137923	WY-070-CX3-10-343
12	SRU 4 ADD 1	14-25	SWSW	25	48N	76W	WYW146287	WY-070-CX3-10-344
13	SRU 4 ADD 1	21-25	NENW	25	48N	76W	WYW137923	WY-070-CX3-10-345
14	SRU 4 ADD 1	23-25	NESW	25	48N	76W	WYW146287	WY-070-CX3-10-346
15	SRU 4 ADD 1	31-25	NWNE	25	48N	76W	WYW146287	WY-070-CX3-10-347
16	SRU 4 ADD 1	32-25	SWNE	25	48N	76W	WYW146287	WY-070-CX3-10-348
17	SRU 4 ADD 1	34-25	SWSE	25	48N	76W	WYW146287	WY-070-CX3-10-349
18	SRU 4 ADD 1	43-25	NESE	25	48N	76W	WYW146287	WY-070-CX3-10-350
19	SRU 4 ADD 1	12-26	SWNW	26	48N	76W	WYW146288	WY-070-CX3-10-351

#	Well Name	Well #	Qtr/Qtr	Sec	TWP	RNG	Lease #	CX #
20	SRU 4 ADD 1	14-26	SWSW	26	48N	76W	WYW130623	WY-070-CX3-10-352
21	SRU 4 ADD 1	21-26	NENW	26	48N	76W	WYW146288	WY-070-CX3-10-353
22	SRU 4 ADD 1	23-26	NESW	26	48N	76W	WYW130623	WY-070-CX3-10-354
23	SRU 4 ADD 1	32-26	SWNE	26	48N	76W	WYW130623	WY-070-CX3-10-355
24	SRU 4 ADD 1	34-26	SWSE	26	48N	76W	WYW128760	WY-070-CX3-10-356
25	SRU 4 ADD 1	41-26	NENE	26	48N	76W	WYW130623	WY-070-CX3-10-357
26	SRU 4 ADD 1	43-26	NESE	26	48N	76W	WYW128760	WY-070-CX3-10-358
27	SRU 4 ADD 1	43-27	NESE	27	48N	76W	WYW130623	WY-070-CX3-10-359
28	SRU 4 ADD 1	12-35	SWNW	35	48N	76W	WYW138443	WY-070-CX3-10-360
29	SRU 4 ADD 1	14-35	SWSW	35	48N	76W	WYW129041	WY-070-CX3-10-361
30	SRU 4 ADD 1	21-35	NENW	35	48N	76W	WYW138443	WY-070-CX3-10-362
31	SRU 4 ADD 1	23-35	NESW	35	48N	76W	WYW138443	WY-070-CX3-10-363
32	SRU 4 ADD 1	32-35	SWNE	35	48N	76W	WYW146288	WY-070-CX3-10-364
33	SRU 4 ADD 1	34-35	SWSE	35	48N	76W	WYW146288	WY-070-CX3-10-365
34	SRU 4 ADD 1	41-35	NENE	35	48N	76W	WYW146288	WY-070-CX3-10-366
35	SRU 4 ADD 1	43-35	NESE	35	48N	76W	WYW146288	WY-070-CX3-10-367

Estimated surface disturbance for the roads and wells is shown in Table 2.2, below.

Table 2.2 Wells and Roads Estimated Disturbance

Facility	Number or Miles	Factor	Acreage of Disturbance
Non-constructed Pad (pit construction, crushed vegetation, soil compaction)	14	0.75/acre	10.5
Constructed Pad	10	0.75 acre	7.5
Slot Pad	11	0.75 acre	8.3
Proposed Improved Roads With Corridor	2.8	65' Width	22.3
Proposed 2 - Track Roads With Corridor	3.1	40' Width	15.0
Total Estimated Surface Disturbance (wells & roads)			63.6
<i>For all infrastructure disturbances associated, with this proposed action, see the Surface Use Data Summary Form (SUDS) in the Master Surface Use Plan (MSUP).</i>			

Williams will use existing water management infrastructure to dispose of the produced water generated from the wells listed in Table 2.1, above. The NEPA documents used to analyze and permit the water management infrastructure these wells will tie into are in Table 2.3, below.

Table 2.3 Intermingled, Contiguous PODs for Water Management and Their NEPA Documents

Approved POD	NEPA Document	Approval Date
Schoonover Road Unit I & II	WY-070-04-018	11/26/03
Schoonover Road Unit 3	WY-070-05-156	4/24/05
Schoonover Road Unit 5	WY-070-06-295	9/27/06
South Prong Unit 3	WY-070-07-70	7/19/07
CD/SRU/SPU Waterline	WY-070-08-013	10/19/07

Realty

The SRU 4 ADD 1 POD proposal requested 2 amended rights-of-ways. The BFO approves the amended right-of-way, WYW-169994, per the Mineral Leasing of Act. The BFO approves the amended right-of-way, WYW-169995, per the Federal Land Policy and Management Act., see below. Construction on the following rights-of-ways will begin after issuance of the authorized rights-of-ways. The constraints of the appropriate stipulations and conditions of approval of the POD apply to these rights-of-ways.

Amend ROW Grant	ROW Action	SEC.	T.	R.	Length	Width
WYW-169994	Gas	4 and 35	47/48N	76W	5,836'	20'
WYW-169995	Road, Water & Electric	35,4, 30, 1	47/48N	75/76W	7,919'	30',20',20'

For a detailed description of design features, construction practices, and water management strategies associated with the proposed action, refer to the Master Surface Use Plan (MSUP), Drilling Plan, and Water Management Plan (WMP) in the POD and in individual APDs. Also see the POD proposal for maps showing proposed well locations and associated facilities described above. More information on CBNG well drilling, production and standard practices also is available in the PRB FEIS, Volume 1, pages 2-9 through 2-40 (January 2003).

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

The proposed action conforms with the terms and conditions of the Approved Resource Management Plan (RMP) for the public lands administered by the Bureau of Land Management, Buffalo Field Office (BFO), April 2001, the PRB FEIS, January 2003, and the Record of Decision and Resource Management Amendments for the Powder River Oil and Gas Project, April 2003, as required by 43 CFR 1610.5 The SRD 4 ADD 1 APDs and area are clearly lacking in wilderness characteristics as it is in the midst of extensive natural gas development with miles of mechanically maintained improved roads, (see DOI Order 3310). This proposal is a form of NEPA compliance without the analysis that occurs in an 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 three requirements to use a Section 390 Categorical Exclusion 3:

- 1) Each proposed APD is within a developed coal bed natural gas field unit that is actively producing. The following is 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 SRU 4 ADD 1 APDs:

Approved POD	NEPA Document	Approval Date
South Prong Unit 3	WY-070-07-70	7/19/07
CD/SRU/SPU Waterline	WY-070-08-013	10/19/07
Veranda	WY-070-09-039	7/27/09
Beaver Creek Addition II SGP	WY-070-09-65	5/27/09
Schoonover Road Unit 4	WY-070-08-179	9/19/08

- 2) There must be one existing NEPA document (and the RMP) containing the reasonably foreseeable development scenario for this action. Here there are several existing NEPA documents 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 SRU 4 ADD 1 APDs fall within the foreseeable development scenario of 80 acre well spacing that was analyzed in the tiered EAs listed above.
- 3) Spudding of the proposed APDs must occur within 5 years of the approval of the tiered EAs. The BFO approved the above tiered-to EAs for SRU 4 ADD 1 within the 5 year timeframe.

There are no new major direct, indirect, or cumulative environmental effects resulting from the approval of the SRU 4 ADD 1 APDs. The Schoonover Road Unit 4, Beaver Creek Addition II, and Veranda POD EAs 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 these EAs and found that the EAs considered potential environmental effects associated with the proposed activity at a site specific level.

Each individual well must be spudded by July 26, 2014. If the individual well is not spudded by July 26, 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.

A surface use plan of operations describing all proposed surface-disturbing activities was reviewed and is approved pursuant to Section 17 of the Mineral Leasing Act, as amended.

Cultural

Class III cultural resource inventory was performed for the SRU 4 ADD 1 APDs prior to on-the-ground project work (BFO project no. 70070090109). ACR Consultants, Inc. conducted a block class III cultural resource inventory following 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*. A BLM Archaeologist reviewed and determined the report was satisfactory for technical adequacy and compliance with Bureau of Land Management (BLM) standards. The cultural resources listed below, are found in or near the project area.

Site Number	Site Type	Eligibility
48CA1587	Prehistoric Site	Not Eligible
48CA5933	Historic and Prehistoric Site	Not Eligible
48CA5934	Historic Site	Not Eligible
48CA5937	Historic Site	Not Eligible
48CA6129	Historic and Prehistoric Site	Not Eligible

Site Number	Site Type	Eligibility
48CA6232	Historic and Prehistoric Site	Not Eligible
48CA6234	Historic Site	Not Eligible
48CA6235	Prehistoric Site	Not Eligible
48CA6240	Prehistoric Site	Not Eligible

A condition of approval is that archaeological monitoring occurs during project construction because this area has a high potential for buried cultural material. A qualified archeologist conducts construction monitoring by working in unison with construction crews. Construction halts if cultural resources are found while the BLM consults with the State Historic Preservation Office (SHPO) on mitigation or avoidance. Due to the presence of alluvial deposits, the operator must have an archeologist monitor all earth moving activities associated with certain construction, as described in the site specific COA's.

The proposed project will impact non-eligible sites 48CA1587, 49CA5933, 48CA6129, 48CA6234, and 48CA6240. The proposed project will not impact historic properties. The BLM, on September 22, 2010 electronically notified the Wyoming State Historic Preservation Officer (SHPO), per Protocol, Section VI(A)(1), that no historic properties exist within the proposed APDs. If operators find any cultural values, [sites, artifacts, human remains (Appendix L PRB FEIS)], during the operation of this lease/permit/rights-of-way, the cultural values will remain intact and the Buffalo Field Manager notified. Standard COA (General)(A)(1), explains further discovery procedures.

Wildlife

BLM wildlife biologist reviewed the proposed APDs. The wildlife biologist determined that the proposed APDs, combined with the Conditions of Approval are: (1) consistent with the FEIS and its supplements, the RMP and its Amendments, and the above tiered EAs; and (2) consistent with the effects analyzed in the site specific Endangered Species Act section 7 consultation and does not change the determinations in that consultation. Site-specific wildlife issues amplified here are mitigation measures for raptors and a bald eagle roost.

Raptors

Raptor nests identified within a 0.5 mile of POD boundary are listed in the table, below:

BLM ID	UTMs	Legal	Substrate	Year	Condition	Status	Species
2531	426735E 4881817N	S31 T48N R75W	ERR	2010	Good	ACTF	FEHA
				2009	Good	INAC	n/a
				2008	Good	INAC	n/a
				2007	Good	INAC	n/a
				2006	Good	INAC	n/a
				2005	Good	ACTI	FEHA
				2004	Good	INAC	n/a

BLM ID	UTMs	Legal	Substrate	Year	Condition	Status	Species
3829	424896E 4884718N	S25 T48N R76W	CTL	2010	Poor	ACTI	BBMA
				2009	Fair	INAC	n/a
				2008	Poor	INAC	n/a
				2007	Poor	INAC	n/a
				2006	Poor	INAC	n/a
				2005	Nest Gone	INAC	n/a
				2004	Nest Gone	INAC	n/a
3830	424665E 4884903N	S24 T48N R76W	CTL	2010	Poor	INAC	n/a
				2009	Unknown	UNK	n/a
				2008	Poor	INAC	n/a
				2007	Poor	INAC	n/a
				2006	Poor	INAC	n/a
				2005	Nest Gone	INAC	n/a
				2004	Nest Gone	INAC	n/a
3831	424688E 4884983N	S24 T48N R76W	CTL	2010	Fair	INAC	n/a
				2009	Good	INAC	n/a
				2008	Unknown	DNLO	n/a
				2007	Poor	INAC	n/a
				2006	Poor	INAC	n/a
				2005	Nest Gone	INAC	n/a
				2004	Nest Gone	INAC	n/a
3836	425589E 4885697N	S19 T48N R75W	CTL	2010	Poor	INAC	UNRA
				2009	Good	INAC	n/a
				2007	Good	ACTI	GRHO
				2006	Good	ACTI	GRHO
				2005	Nest Gone	INAC	n/a
				2004	Nest Gone	INAC	n/a
4371	422828E 4884144N	S26 T48N R76W	CTD	2010	Substrate Gone	INAC	n/a
				2009	Remnants	INAC	n/a
				2008	Remnants	INAC	n/a
				2007	Remnants	INAC	n/a
				2006	Remnants	INAC	n/a
4372	421798E 4883667N	S27 T48N R76W	CTL	2010	Good	INAC	n/a
				2009	Good	INAC	n/a
				2008	Fair	INAC	n/a
				2007	Fair	INAC	n/a
				2006	Fair	INAC	n/a

BLM ID	UTMs	Legal	Substrate	Year	Condition	Status	Species
4373	422326E 4881123N	S2 T47N R76W	CTL	2010	Good	INAC	n/a
				2009	Good	ACTI	RETA
				2008	Good	ACTI	GRHO
				2007	Good	ACTI	GRHO
				2006	Good	INAC	n/a
4375	423967E 4880282N	S1 T47N R76W	CTL	2010	Poor	INAC	UNRA
				2009	Fair	INAC	n/a
				2008	Fair	UNK	n/a
				2007	Nest Gone	INAC	n/a
				2006	Fair	INAC	n/a
4376	423082E 4880441N	S2 T47N R76W	CTL	2010	Good	INAC	n/a
				2009	Fair	INAC	n/a
				2008	Fair	INAC	n/a
				2007	Nest Gone	INAC	n/a
				2006	Good	ACTI	RETA
4377	422176E 4881914N	S34 T48N R76W	CTL	2010	Fair	INAC	n/a
				2009	Fair	INAC	n/a
				2008	Fair	INAC	n/a
				2007	Fair	INAC	n/a
				2006	Fair	INAC	n/a
4708	425825E 4881084N	S6 T47N R75W	CTL	2010	Fair	INAC	n/a
				2009	Poor	INAC	n/a
				2008	Good	ACTI	RETA
				2007	Good	INAC	n/a
				2006	Good	ACTI	RETA
5868	426000E 4880980N	S6 T47N R75W	CTL	2010	Poor	INAC	n/a
				2009	Fair	INAC	n/a
				2008	Good	ACTI	RETA
6295	422210E 4883229N	S34 T48N R76W	CTL	2010	Good	INAC	n/a
				2009	Good	INAC	n/a
				2008	Good	ACTI	GRHO

BLM ID	UTMs	Legal	Substrate	Year	Condition	Status	Species
6296	422502E 4882504N	S35 T48N R76W	CTD	2010	Good	INAC	n/a
				2009	Good	INAC	n/a
				2007	Fair	ACTI	UNRA
6405	424881E 4881662N	S1 T47N R76W	CTL	2010	Good	INAC	n/a
				2009	Good	ACTI	RETA
				2008	Good	ACTI	GRHO
6406	424830E 4881456N	S1 T47N R76W	CTL	2010	Good	INAC	n/a
				2009	Good	ACTI	GRHO
				2008	Good	ACTI	RETA
6407	423465E 4880726N	S2 T47N R76W	CTD	2010	Substrate Gone	INAC	n/a
				2009	Substrate Gone	INAC	n/a
				2008	Nest Gone	INAC	n/a
6409	422337E 4879876N	S10 T47N R76W	CTL	2010	Fair	INAC	n/a
				2009	Good	INAC	n/a
				2008	Unknown	UNK	n/a
6423	422742E 4880658N	S2 T47N R76W	CTL	2010	Poor	INAC	n/a
				2009	Good	INAC	n/a
				2008	Poor	INAC	n/a
6425	422991E 4880858N	S2 T47N R76W	CTL	2010	Good	INAC	n/a
				2009	Good	ACTF	RETA
				2008	Good	ACTI	RETA
8350	426276E 4880842N	S6 T47N R75W	CTD	2010	Nest Gone	INAC	n/a
8351	423349E 4880577N	S2 T47N R76W	CTD	2010	Good	INAC	n/a
				2009	Good	INAC	n/a
8352	423706E 4880934N	S2 T47N R76W	CTL	2010	Good	INAC	n/a
				2009	Good	INAC	n/a
8353	426618E 4881742N	S31 T48N R75W	GHS	2010	Fair	INAC	UNRA
				2009	Fair	INAC	n/a
				2008	Fair	INAC	n/a

BLM ID	UTMs	Legal	Substrate	Year	Condition	Status	Species
8354	426372E 4882573N	S31 T48N R75W	GHS	2010	Fair	INAC	UNRA
				2009	Excellent	ACTI	FEHA
				2008	Good	ACTI	FEHA
8355	425706E 4882278N	S31 T48N R75W	CTD	2010	Fair	INAC	n/a
				2009	Good	INAC	n/a
8356	426605E 4881984N	S31 T48N R75W	GHS	2010	Poor	INAC	UNRA
				2009	Poor	INAC	n/a
				2008	Poor	INAC	n/a
8357	424769E 4885569N	S24 T48N R76W	CTL	2010	Nest Gone	INAC	UNRA
				2009	Good	INAC	n/a
8358	425315E 4884697N	S25 T48N R76W	CTL	2010	Good	INAC	n/a
				2009	Good	INAC	n/a
8359	425235E 4884652N	S25 T48N R76W	CTL	2010	Good	INAC	n/a
				2009	Good	INAC	n/a
8362	425180E 4882059N	S36 T48N R76W	CTL	2010	Good	INAC	n/a
				2009	Good	INAC	n/a
8363	424309E 4882768N	S36 T48N R76W	CTL	2010	Good	INAC	n/a
				2009	Good	INAC	n/a
8364	424704E 4882204N	S36 T48N R76W	CTL	2010	Good	INAC	n/a
8365	424745E 4882172N	S36 T48N R76W	CTL	2010	Good	INAC	n/a
				2009	Good	INAC	n/a
8366	425041E 4882003N	S36 T48N R76W	CTD	2010	Poor	INAC	n/a
				2009	Good	INAC	n/a
8386	422835E 4880925N	S2 T47N R76W	CTL	2010	Good	INAC	n/a
				2009	Good	INAC	n/a
10271	425307E 4884697N	S25 T48N R76W	CTL	2010	Good	INAC	n/a
				2009	Good	INAC	n/a
				2008	Good	ACTI	RETA

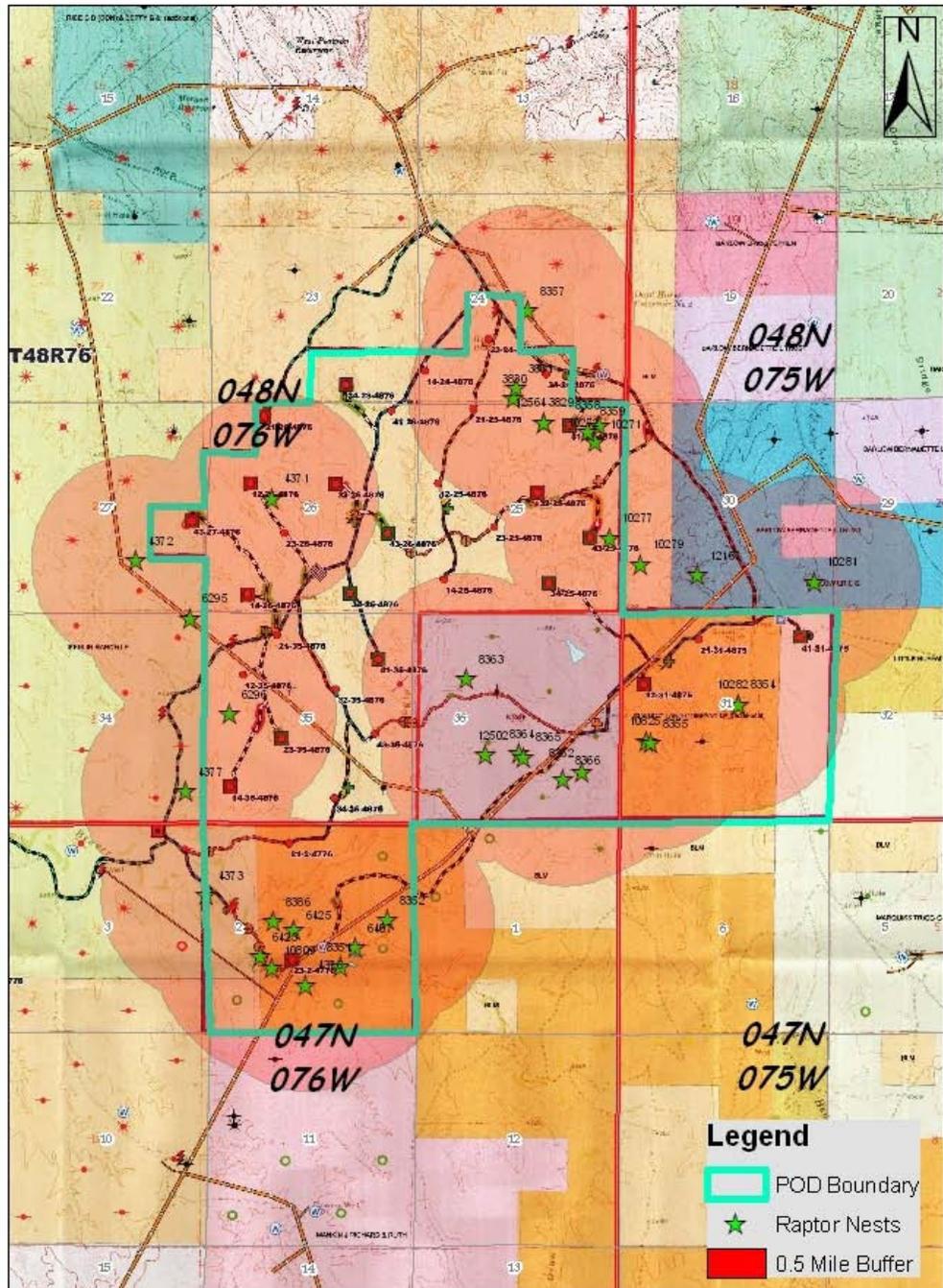
BLM ID	UTMs	Legal	Substrate	Year	Condition	Status	Species
10272	425287E 4884570N	S25 T48N R76W	JUN	2010	Poor	INAC	n/a
				2009	Good	INAC	n/a
				2008	Fair	INAC	n/a
10277	425391E 4883843N	S25 T48N R76W	CTL	2010	Poor	INAC	n/a
				2009	Poor	INAC	n/a
				2008	Poor	INAC	n/a
10279	425631E 4883643N	S30 T48N R75W	CTL	2010	Good	INAC	n/a
				2009	Good	INAC	n/a
				2008	Good	INAC	n/a
10281	426950E 4883510N	S30 T48N R75W	CTL	2010	Good	ACTI	RETA
				2009	Good	ACTI	RETA
10282	426371E 4882572N	S31 T48N R75W	ERR	2010	Good	INAC	n/a
10283	426606E 4881986N	S31 T48N R75W	ROK	2010	Unknown	UNK	UNRA
10284	426617E 4881744N	S31 T48N R75W	GHS	2010	Unknown	UNK	UNRA
10809	422824E 4880568N	S2 T47N R76W	CTL	2010	Fair	INAC	n/a
10825	425676E 4882298N	S31 T48N R75W	CTL	2010	Fair	INAC	n/a
12167	426058E 4883560N	S30 T48N R75W	CTD	2010	Poor	INAC	n/a
				2008	Fair	INAC	n/a
12564	424896E 4884718N	S25 T48N R76W	CTL	2010	Fair	INAC	n/a
				2009	Fair	INAC	n/a
				2008	Poor	INAC	n/a
				2007	Poor	INAC	n/a
				2006	Poor	INAC	n/a
				2005	Nest Gone	INAC	n/a
				2004	Nest Gone	INAC	n/a
Nest Substrate Codes: GHS- Ground/Hillside CTL- Cottonwood Tree Live CTD- Cottonwood Tree Dead BOX- Box Elder Tree POL- Ponderosa Tree Live JUN- Juniper ERR- Erosion Remnant				Activity Codes: INAC- Inactive ACTI- Active ACTF- Active Failed OCCU- Occupied DNLO- Did Not Locate			

Raptors Direct and Indirect Effects

Human activities in close proximity to active raptor nests may interfere with nest productivity. Romin 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 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 an 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. Nests within a half mile of proposed surface disturbing activity are shown in map below:

Schoonover Road Number 4 Add 1: Existing Raptor Nests and Proposed Infrastructure



Wildlife Map
Scale: 1:42,000
Date: 1/14/2011

0 0.25 0.5 1 Miles

Well 23-2-4776 is in close proximity to six documented raptor nests (BLM nest ID: 8386, 6425, 6423, 4376, 8351, and 10809). Also well 31-25-4876 is adjacent to six documented raptor nests (BLM nest ID: 12564, 3829, 10271, 10272, 8358, and 8359). Disturbance related to maintenance and metering activities

for the above named wells may inhibit future nest initiation and nest success due to avoidance of the area by raptors.

The PRB FEIS analyzed additional direct and indirect impacts from oil and natural gas development to raptors, to further understand the degree of potential population effects to raptor species (Id., p. 4-219 to 4-220).

Raptor Cumulative Effects

The cumulative effects associated with proposed action are within the analysis parameters and impacts described in the PRB FEIS. For details on expected cumulative impacts, refer to the PRB FEIS, pg. 4-221.

Raptor Mitigation Measures

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. The operator will complete annual surveys for new raptor nests and nest occupancy checks to further BLM and operator understanding of the degree of potential development effects to raptor species (PRB FEIS, p. 4-219 to 4-220).

An operator committed measure to meter two of the proposed wells at alternate locations which are in close proximity to numerous raptor nests will mitigate routine disturbance by reducing visitation rates. The 31-25-4876 well will be metered approximately 0.25 mile north of the proposed well location near the Napier county road, and the 23-2-4776 well is to be metered at an existing fee well location which is approximately 0.38 miles northwest of the proposed well location.

Raptor Residual Impacts

In spite of design by Williams 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.

Bald Eagles

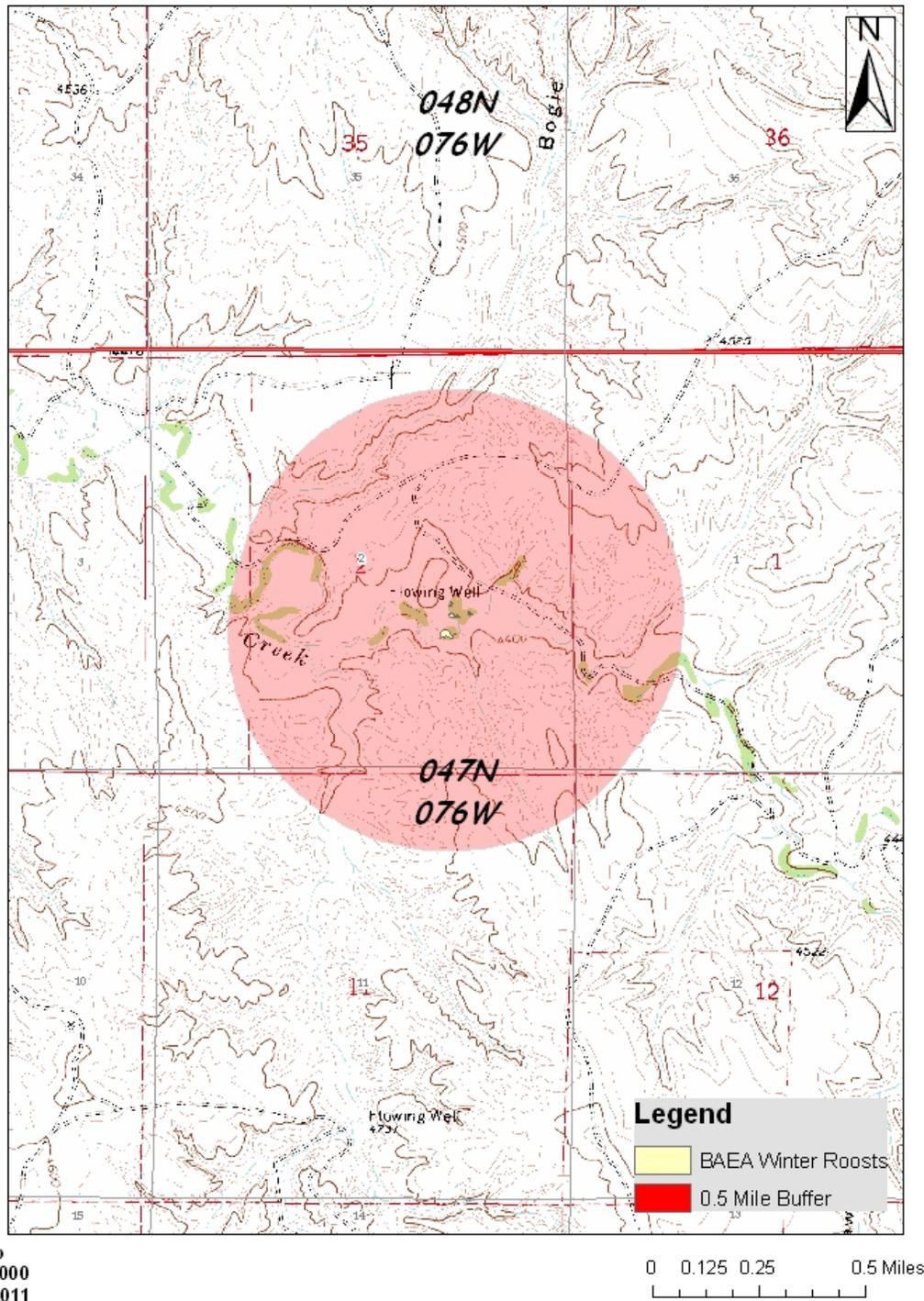
The PRB FEIS describes the affected environment for bald eagles on pg. 3-175. The bald eagle received protection as a threatened species under the ESA at the time of writing the PRB FEIS. The bald eagle ESA protection ended on August 8, 2007. The bald eagle remains under the protection of the Bald and Golden Eagle Protection Act and the Migratory Bird Treaty Act.

Bald eagles are a Wyoming BLM sensitive species. Bald eagles are a Wyoming Game and Fish Department (WGFD) Species of Greatest Conservation Need (SGCN) with a Native Species Status (NSS)2 rating, due to populations being restricted in numbers and distribution, ongoing loss of habitat, and eagles' sensitivity 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 a bird of conservation concern for the Fish and Wildlife Service (FWS) for Region17.

Draws containing cottonwood galleries are present within the project area and provide suitable nesting/roosting habitat, though there are no known eagle nests in the project area. The Beaver Creek drainage in the southern portion of the project area also provides the water sources that the species are known to frequent for foraging and nesting. The closest documented eagle winter roost occurs in the southern portion of the project area adjacent to Beaver Creek. The BLM expects that bald eagles use the project area.

Bald Eagle Winter Roost Location

Schoonover Road Number 4 Add 1
Bald Eagle Winter Roosts Location



Bald Eagle Direct and Indirect Effects

The PRB FEIS discussed impacts to bald eagles on p. 4-251 to 4-253. A more recent study completed in 2004 suggests that two-tracks and improved project roads pose minimal collision risk to bald eagles. In one year of monitoring road-side carcasses the BLM BFO reported 439 carcasses, 226 along Interstates (51%), 193 along paved highways (44%), 19 along gravel county roads (4%), and 1 along an improved CBNG road (<1%) (Bills 2004). No road-killed eagles were reported; bald and golden eagles were observed feeding on 16 of the reported road-side carcasses (<4%). The risk of big-game vehicle-related mortality along CBNG project roads is so insignificant or discountable that when combined with the lack of bald eagle mortalities associated with highway foraging leads to the conclusion that CBNG project roads do not affect bald eagles.

Activities associated with the SRU 4 ADD 1 project may impact bald eagles by disturbing documented winter roost locations and foraging activities in the area. The project will not impact any identified bald eagle nests.

Cumulative Effects

The cumulative effects for bald eagles associated with this project are described in the PRB FEIS (pp. 4-251 to 4-253).

Mitigation Measures

Operator committed measures to reduce impacts to the winter roost include metering for the proposed 23-2-4776 well at an existing fee location which is approximately 0.63 miles from the nearest known winter roost location. This mitigation alleviates disturbance related to metering activities for the above named well which falls within 0.5 mile of a mapped winter roost.

The bald eagle winter roost site has a seasonal minimum disturbance-free buffer zone of 1.0 mile, (November 1 – April 1).

Residual Effects

Traffic in the general area will increase, which may increase disturbance to bald eagles foraging in the area.

Water

The operator submitted comprehensive Water Management Plan (WMP) for the project which incorporates sound water management practices, monitoring of downstream impacts within the Upper Powder River and Beaver Creek watersheds, 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 will use existing water management infrastructure to dispose of the produced water from this project. Table 2.3, above, summarizes the existing water infrastructure, along with the approved Waterline Sundry (October 19, 2007). The water disposal method includes a combination of impoundment/evaporation, ion-exchange treatment with direct discharge to Beaver Creek, land application via irrigation, and deep well injection. Apart from the installation of pipelines from the 35 wells to the existing pipeline infrastructure and one new stock tank installation, the WMP for this project has no new surface disturbance. The proposed stock tank is near CBNG well # 41-31-4875 at NENE Sec 31, T48N, R75W. There is no discharge permitted from this tank.

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.

Long term produced water injection creates the potential for impacts to deep groundwater aquifers. Impacts to these resources are difficult to predict or model. However, the targeted aquifers are generally of poorer quality than the injectate, and are typically economically unusable. The WDEQ has the authority to address water quality impacts that may occur. The underground injection control (UIC) permit summarizes monitoring and reclamation standards.

Groundwater

The average anticipated water production per well is 10.4 gpm; which equates to a combined 364 gpm (0.8 cfs or 587.1 acre-feet per year) for the 35 wells in SRU 4 ADD 1 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).

The PRB FEIS predicted that only 5% of the CBNG produced water would be injected into disposal wells in the Upper Powder River watershed (PRB FEIS pg 2-46). For this project, it may be assumed from the WMP that a maximum of 364 gpm will be injected into the deep, underlying Lance Formation. This water will mix with water that will potentially mix with water in the Fort Union sandstones which may be used for stock and domestic purposes. According to the PRB FEIS, “the increased volume of water recharging the underlying aquifers of the Wasatch and Fort Union Formations would be chemically similar to alluvial groundwater.” (PRB FEIS pg 4-54.) Therefore, the chemical nature and the volume of the discharged water may not degrade the groundwater quality.

There are 21 permitted water wells within 1 mile of SRU 4 ADD 1 project area, which range from 0 to 1,705 feet in depth with producing water zones ranging from 0 to 728 feet depth at the time they were completed, compared to the 1,110 to 1,524 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 MSUP).

Surface Water

The following table shows the average values of EC and SAR as measured at selected USGS gauging stations at high and low monthly flows as well as the Wyoming groundwater quality standards for 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		4.76	1,797
Historic Data Average at Minimum Flow		7.83	3,400

Sample location or Standard	TDS mg/l	SAR	EC µmhos/cm
WDEQ Quality Standards for Wyoming Groundwater (Chapter 8)			
Drinking Water (Class I)	500		
Agricultural Use (Class II)	2,000	8	
Livestock Use (Class III)	5,000		
WDEQ Water Quality Requirement for WYPDES Permit: #WY0056049 at Beaver Creek discharge point	AC*	AC*	AC*
WDEQ Water Quality Requirement for WYPDES Permit: #WY0046922 at Beaver Creek discharge point	AC*	AC*	7,500
WDEQ Water Quality Requirement for WYPDES Permit: #WY0048321 at Dead Horse Creek discharge points	NA	NA	2,315
Predicted Produced Water Quality Big George Coal Seam	1,230	16.2	1,910

AC* = Assimilative Capacity. Numbers vary per month. (WMP Attachment F)
NA = Not Applied

The operator identified one spring/seep within the SRU 4 ADD 1 POD boundary or within 0.5 mile radius. The operator states that during their field visit of the spring on September 24, 2009 it was more of a seep which pooled water within cattle tracks. A viable water sample was unobtainable (WMP p. 11).

The operator has Wyoming Pollutant Discharge Elimination System (WYPDES) permits #WY0056049 & #WY0046922 for the discharge of ion-exchange water to Beaver Creek, and WYPDES permit #WY0048321 for the discharge of produced water to on-channel impoundments located in the Dead Horse Creek Watershed. The injection wells are also permitted by the WDEQ for water disposal under the Class V permit #08-144. In addition, the operator uses land application via irrigation pivots to dispose of the produced water. The WDEQ permit parameters for the water disposal and the representative well water quality sample parameters are shown below for comparison.

WDEQ Permit Parameters

Parameters	POD Water Quality 7/30/09	WYPDES Permit WY0048321 Maximum Concentrations	UIC Permit 08-144 Limit
pH	7.7	6.5 to 9.0	6.5 to 8.5
Specific Conductance	1,910 µmhos	2,315 µmhos/cm max	NA
Dissolved Iron	57 µg/l	1,000 µg/l max	NA
Total Arsenic	1 ug/l	8.4 ug/l	NA
Chlorides	6 mg/l	150 mg/l	NA
Total Dissolved Solids	1230 mg/l	NA	5,000 mg/l
Sulfate	NA	NA	3,000 mg/l

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 pg 2-26). For the Upper Powder River drainage, the projected volume produced within the watershed area was 60,319 acre-feet in 2010 (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 0.97% of the total volume projected for 2010. This volume of produced water is within the predicted parameters of the PRB FEIS.

Produced water land application may occur via existing irrigation pivots CBNG produced water for irrigation is an optional beneficial use at the landowners' discretion. Soil character and composition can be possibly adversely affected from the application of the CBNG water within and surrounding the pivot. Discussions of potential impacts of the CBNG water irrigation pivots, the surface water runoff, and spray drift from the irrigation applications were disclosed and analyzed under the SRU 5 EA.

Decision and Rationale on Action

The COAs provide mitigation and further the justification for this decision and may not be segregated from project implementation without further NEPA review. In addition, I reviewed the plan conformance statement and determined that the proposed SRU 4 ADD1 APDs and infrastructure are in conformance with the applicable land use plans. Further, I reviewed the proposal to ensure the appropriate exclusion category as described in Section 390 of the Energy Policy Act of 2005 is correct. It is my determination that there is no requirement for further environmental analysis.

Implementation Date and Expiration to Spud

This project will be implemented on or after the below signature date.
Each individual well must be spudded by July September 19, 2013. If the individual well is not spudded by July 26, 2014 the individual APD approval will expire and the operator is to cease all operations related to preparing to drill that individual well.



Duane Spencer
Field Manager

2/7/11

Signature Date

Administrative Review or Appeal Opportunities

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, 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
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