

**FINDING OF NO SIGNIFICANT IMPACT & DECISION RECORD
FOR
Williams Production Company
Carr Draw Federal POD V Addition II
ENVIRONMENTAL ASSESSMENT – WY-070-EA09-123**

DECISION: BLM’s decision is to approve a combination of alternatives C and D as summarized below and described in the attached EA and authorize Williams’ Carr Draw Federal V Addition II Coal Bed Natural Gas (CBNG) POD comprised of the following 8 Applications for Permit to Drill (APDs):

The following 8 wells will be approved, as follows:

	Well Name	Well #	Qtr/Qtr	Sec.	TWP	RNG	Lease #
1	CARR DRAW V ADD 2 CARU	21-1BG*	NENW	1	50N	76W	WYW146290
2	CARR DRAW V ADD 2 CARU	21-1GW	NENW	1	50N	76W	WYW146290
3	CARR DRAW V ADD 2 CARU	34-1BG	SWSE	1	50N	76W	WYW146290
4	CARR DRAW V ADD 2 CARU	34-1GW	SWSE	1	50N	76W	WYW146290
5	CARR DRAW V ADD 2 CARU	32-1GW	SWNE	1	50N	76W	WYW146290
6	CARR DRAW V ADD 2 CARU	32-1BG	SWNE	1	50N	76W	WYW146290
7	CARR DRAW V ADD 2 CARU	12-12BG	SWNW	12	50N	76W	WYW147336
8	CARR DRAW V ADD 2 CARU	12-12GW	SWNW	12	50N	76W	WYW147336

The following access road, infrastructure and associated facilities are not being approved as proposed:

- The entire engineered access road beginning from the 21-1BG/GW well location through the state section 16, and access to the Carr Draw V Addition II POD utilizing the existing primitive road through the SW of section 25, T51N, R76W within 0.25 mile of the Fortification lek.
- All proposed over head power.

This approval is subject to adherence with all of the operating plans and mitigation measures contained in the Master Surface Use Plan of Operations, Drilling Plan, Water Management Plan, and information in individual APDs. This approval is also subject to operator compliance with all mitigation and monitoring requirements contained within the Powder River Oil and Gas Project Final Environmental Impact Statement and Resource Management Plan Amendment (PRB FEIS) approved April 30, 2003.

Project History:

The cumulative effects analysis was completed in September 2007 and is described in the BLM’s 2007 environmental report (BLM 2007). With the cumulative effects analysis completed, Williams requested that the BLM reconsider the 14 deferred wells. The environmental report (BLM 2007) discussed the importance of security patches to elk, areas of greater than 250 acres which provide hiding cover from disturbance sources such as CBNG development, and identified security habitat south of the Carr Draw V Addition II wells. During the Carr Draw V Addition II analysis, it was discovered that six of the proposed wells could impact elk security habitat and therefore need further analysis. No action will be taken on these six wells at this time. These six wells have been removed from the analysis of the Carr Draw V Addition II Federal POD and have been added into the analysis of the Carr Draw III West Federal POD to the south.

These six wells below were analyzed and approved within the Carr Draw III West Federal POD:

	Well Name	Well #	Qtr/Qtr	Sec.	TWP	RNG	Lease #
1	CARR DRAW V ADD 2 CARU	21-3BG*	NENW	3	50N	76W	WYW135623
2	CARR DRAW V ADD 2 CARU	21-3GW	NENW	3	50N	76W	WYW135623
3	CARR DRAW V ADD 2 CARU	23-2BG	NESW	2	50N	76W	WYW135623
4	CARR DRAW V ADD 2 CARU	23-2GW	SWSE	2	50N	76W	WYW135623
5	CARR DRAW V ADD 2 CARU	41-3GW	NENE	3	50N	76W	WYW135623
6	CARR DRAW V ADD 2 CARU	41-3BG	NENE	3	50N	76W	WYW135623

This approval is subject to adherence with all of the operating plans and mitigation measures contained in the Master Surface Use Plan of Operations, Drilling Plan, Water Management Plan, and information in individual APDs. This approval is also subject to operator compliance with all mitigation and monitoring requirements contained within the Powder River Oil and Gas Project Environmental Impact Statement and Resource Management Plan Amendment (PRB FEIS) approved April 30, 2003.

SUMMARY OF SELECTED ALTERNATIVE

The selected alternative includes Alternative C and appropriate components of Alternative D as described in the EA that will alleviate site specific impacts to sage-grouse and habitat. Timing restrictions on surface-disturbing activities are incorporated from Alternative C.

The following items summarize components of Alternative D included in the selected alternative:
(Need to summarize components of alternative D)

1. No surface use will be permitted within the 0.25 mile CSU for the Fortification lek.

RATIONALE: The decision to authorize the selected alternative, as summarized above, is based on the following:

1. The Operator, in their POD, has committed to:
 - Comply with all applicable Federal, State and Local laws and regulations.
 - Obtain the necessary permits from other agencies for the drilling, completion and production of these wells including water rights appropriations, the installation of water management facilities, water discharge permits, and relevant air quality permits.
 - Offer water well agreements to the owners of record for permitted water wells within ½ mile of a federal CBNG producing well in the POD.
 - Provide water analysis from a designated reference well in each coal zone.
2. The Operator has certified that a Surface Use Agreement has been reached with the Landowners.
3. The selected alternative will not result in any undue or unnecessary environmental degradation.
4. It is in the public interest to approve these wells, as the leases are being drained of federal gas, resulting in a loss of revenue for the government. Furthermore, approval of this development will help meet the nation’s future needs for energy reserves, and will help to stimulate local economies by maintaining stability for the workforce.
5. The selected alternative incorporates appropriate local sage-grouse research and the best available science from across the species’ range in development of the attached conditions of approval.

Mitigation measures from the range of alternatives were selected to best meet the purpose and need, and will be applied by the BLM to alleviate environmental impacts. Mitigating measures designed to reduce impacts to sage-grouse and sage-grouse habitat include: eliminate existing and proposed overhead power; utility pipelines only constructed along existing access roads to reduce habitat fragmentation; 30-day site-stabilization and interim reclamation for soils with poor reclamation potential, and elimination of surface use within the 0.25 mile CSU for the Fortification lek.

6. Approval of this alternative is in conformance with the PRB FEIS, and the Approved Resource Management Plan for the Public Lands Administered by the Bureau of Land Management, Buffalo Field Office, April 2001 (refer to Appendix E of that document relative to adaptive management).
7. The selected alternative incorporates components of the Wyoming Governor's Sage Grouse Implementation Team's "core population area" strategy and executive order and local research to provide appropriate protections for sage-grouse, while meeting the purpose and need for the Carr Draw Federal POD V Addition II.

FINDING OF NO SIGNIFICANT IMPACT: Based on the analysis of the potential environmental impacts, I have determined that NO significant impacts are expected from the implementation of the selected alternative, and, therefore, an environmental impact statement is not required.

In conformance with Appendix E, *Record of Decision, Powder River Oil and Gas Project Environmental Impact Statement and Resource Management Plan Amendment* BLM Buffalo Field Office has initiated actions within the PRB FEIS analysis area in response to additional information regarding impacts to sage-grouse. These measures include:

1. Early initiation of a Resource Management Plan (RMP) revision, based on the evaluation of monitoring data generated under the mitigation monitoring and reporting plan (MMRP) in the PRB FEIS Record of Decision
2. Establishment of sage-grouse "focus" areas, encompassing approximately 1 million acres of sage-grouse habitat. These areas are managed under strict guidelines designed to preserve sage-grouse habitat for development of alternatives during the RMP process (Appendix B).
3. Initiation of a population viability analysis in the Powder River Basin. This is a 24-month project involving the USGS, BLM Miles City Field Office, BLM Buffalo Field Office, and the University of Montana.
4. Development of alternatives that modify the proposed action to reflect the best available science in sage-grouse management.
5. Development of conditions of approval, specific to sage-grouse management, that incorporate some recommendations from recent research, the NE Local Sage-grouse Working Group, and the Petroleum Association of Wyoming.

The implementation of the selected alternative best meets the stated purpose and need for the proposed action. With the application of mitigating measures selected from alternatives C and D, sage-grouse population viability in the Powder River Basin will not be compromised due to the larger scope of planning actions and research initiated by the BLM, Buffalo Field Office.

ADMINISTRATIVE REVIEW AND APPEAL: Under BLM regulations, 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.

Field Manager: John W. A. _____ Date: 9/25/09

**BUREAU OF LAND MANAGEMENT
BUFFALO FIELD OFFICE
ENVIRONMENTAL ASSESSMENT (EA)
FOR
Williams Production Company
Carr Draw Federal POD V Addition II
PLAN OF DEVELOPMENT
WY-070-EA09-123**

INTRODUCTION

This site-specific analysis tiers into and incorporates by reference the information and analysis contained in the Powder River Basin Oil and Gas Project Environmental Impact Statement and Resource Management Plan Amendment (PRB FEIS), #WY-070-02-065 (approved April 30, 2003), pursuant to 40 CFR 1508.28 and 1502.21. This document is available for review at the Buffalo Field Office. This project EA addresses site-specific resources and impacts that were not covered within the PRB FEIS.

While this document tiers into and incorporates by reference the Carr Draw Federal POD III West Environmental Assessment (WY-070-09-066), Carr Draw III East Environmental Assessment (WY-070-09-078), and Carr Draw Federal POD V Addition I Environmental Assessment (WY-070-06-306) this project EA addresses only site-specific impacts and new information that was not covered within the Buffalo Field Office planning documents or the Carr Draw Federal POD III West EA, Carr Draw III East EA, and the Carr Draw Federal POD V Addition I EA.

1. PURPOSE AND NEED

The purpose and need of the proposed action is to determine how, and under what conditions, to allow Williams' Production Company to exercise lease rights granted by the United States to develop the oil and gas resources on two federal leaseholds (WYW146290 and WYW147336).

Development of the Carr Draw Federal POD V Addition II wells would return royalties to the federal Treasury as well as stimulate local economies.

The BLM recognizes the extraction of natural gas is essential to meeting the nation's future needs for energy. As a result, private exploration and development of federal gas reserves are integral to the agencies' oil and gas leasing programs under the authority of the Mineral Leasing Act of 1920, as amended, and the Federal Land Policy Management Act (FLPMA) of 1976. The oil and gas leasing program managed by BLM encourages the development of domestic oil and gas reserves and reduction of the U.S. dependence on foreign sources of energy.

This action responds to the goals and objectives outlined in the Resource Management Plan for the Public Lands Administered by the Bureau of Land Management (BLM), Buffalo Field Office, April 2001 and the Powder River Oil and Gas Project Environmental Impact Statement and Resource Management Plan Amendment (PRB FEIS) approved April 30, 2003. This action helps move the Project Area towards desired conditions for mineral development with appropriate mitigation consistent with the goals, objectives and decisions outlined in these two documents.

1.1. Conformance with Applicable Land Use Plan and Other Environmental Assessments:

The proposed action conforms to the terms and the conditions of the 1985 Buffalo RMP and the PRB FEIS, as required by 43 CFR 1610.5. The BFO RMP is currently under revision.

For the RMP revision, BFO established focus areas with rigorous interim protections in order to preserve “decision space” during the revision process. Outside the focus areas, BFO continues to apply appropriate, but far less rigorous, site-specific mitigating measures for high-quality sage-grouse habitat with well densities up to 80-acre spacing, and may include site-specific mitigating measures suggested by the best available science. Actions within BFO focus areas will be limited to impacts consistent with 640 acre spacing, and must have a plan of development that demonstrates that the proposal can be managed in a manner that effectively conserves sage-grouse habitats (in focus areas) affected by the proposal.

The Carr Draw Federal POD V Addition II does not occur within a sage-grouse core or focus area. However, sage-grouse habitat models indicate that 63 percent of the project area contains high quality sage-grouse nesting habitat (Walker et al. 2007).

Relationship to Other Environmental Documents:

This site-specific analysis tiers into and incorporates by reference the information and analysis contained in the Carr Draw Federal POD III West EA WY-070-09-066 approved on 9/4/2009.

2. ALTERNATIVES INCLUDING THE PROPOSED ACTION

Four alternatives, A, B, C and D, were evaluated in determining how to best meet the stated purpose and need of the proposed action. A brief description of each alternative follows. For the complete detailed description of each alternative, including the alternatives considered but not analyzed in detail, see Appendix A.

2.1. Alternative A - No Action

A No Action Alternative was considered in the PRB FEIS, Volume 1, pages 2-54 through 2-62. This alternative would consist of no new federal wells. An oil and gas lease grants the lessee the “right and privilege to drill for, mine, extract, remove, and dispose of all oil and gas deposits” in the lease lands, “subject to the terms and conditions incorporated in the lease.” Thus, under this alternative, the operator’s proposal would be denied.

2.2. Alternative B Proposed Action

Alternative B, the “proposed action” alternative, summarizes the Carr Draw Federal POD V Addition II project as originally submitted to the BLM by Williams Production RMT, prior to any BLM review or modifications. See Appendix A for full description.

2.3. Alternative C – Modified Proposed Action

Alternative C represents a modification of Alternative B based on the operator and BLM working cooperatively to reduce environmental impacts. The description of Alternative C is the same as Alternative B with the addition of the project modifications identified by BLM and the operator following the initial project proposal (Alternative B). At the on-sites, all areas of proposed surface disturbance were inspected to insure that the project would meet BLM multiple use objectives to conserve natural resources while allowing for the extraction of Federal minerals. In some cases, access roads were re-routed, and well locations, pipelines, and facilities were moved, modified, mitigated or dropped from further consideration to alleviate environmental impacts. Alternatives to the different aspects of the proposed action are always considered and applied as pre-approval changes, site specific mitigation and/or Conditions of Approval (COAs), if they will alleviate environmental effects of the operator’s proposal. The specific changes identified for Carr Draw Federal POD V Addition II are described in detail in Appendix A.

Alternative C also incorporates the results of sage-grouse habitat mapping efforts in the project area and on-site verification of habitat suitability. This alternative represents BFO efforts to mitigate project-

specific impacts to sage-grouse habitat, while maintaining proposed spacing and infrastructure requirements consistent with the purpose and need of the proposed action.

2.4. Alternative D-Sage-Grouse and Fortification Creek Elk Emphasis

Alternative D represents a modification of Alternative C based on the application of mitigating measures designed to further reduce impacts to sage-grouse and sage-grouse habitat. Alternative D is the same as Alternative C with the addition of the project modifications identified by BLM, guided by seven years of sage-grouse research in the project area. Alternative D represents BFO efforts to mitigate project-specific impacts to sage-grouse habitat, while maintaining proposed spacing and infrastructure requirements consistent with the purpose and need of the proposed action.

In conjunction with project-level modifications, site-specific measures applied to specific wells and infrastructure would maintain open corridors for sage-grouse, provide contiguous habitat patches, and reduce disturbance in and adjacent to sage-grouse habitat.

This alternative incorporates mitigation designed around site-specific habitat characteristics to minimize habitat fragmentation and accelerate return to habitat effectiveness at reclamation.

It should also be noted that the mitigation applied to sage grouse in turn also benefits the elk within the project area. The project area is within elk crucial winter, parturition and yearlong ranges. The eight wells that will be analyzed within the Carr Draw Federal POD V Addition II are located within yearlong elk range.

For a description of the project-level details of Alternative D, see Appendix A.

2.5. Summary of Alternatives

A summary of the infrastructure currently existing within the POD area (Alternative A), the infrastructure originally proposed by the operator (Alternative B), and the infrastructure within the BLM/operator modified proposal (Alternative C), and the infrastructure within the modified proposal (Alternative D) are presented in Table 2.5 below:

Table 2.5 Summary of Alternatives

Summary of the Alternatives Facility	Alternative A (No Action) Existing Number or Miles	Alternative B (Original Proposal) Proposed Number or Miles	Alternative C (Environmental Alt.1) Revised Number or Miles	Alternative D (Environmental Alt.2) Revised Number or Miles
Total CBNG Wells	24	14	8	8
Well Locations	12	7	4	4
Non-constructed	(1.2 acres total)	2 (0.2 acres ea.)	3(2.77 acres)	3(2.77acres)
Constructed		3(2.62 acres)	1 (0.1 acres ea.)	1 (0.1 acres ea)
Slotted		2 (0.2 acres ea.)		
Conventional Wells	0	0	0	0

Summary of the Alternatives Facility	Alternative A (No Action) Existing Number or Miles	Alternative B (Original Proposal) Proposed Number or Miles	Alternative C (Environmental Alt.1) Revised Number or Miles	Alternative D (Environmental Alt.2) Revised Number or Miles
Gather/Metering Facilities	0	0	0	0
Compressors	1 (3 acres)	0	0	0
Ancillary (Staging/Storage Areas)	0	1 (2.0 acres)	1 (2.0 acres)	1 (2.0 acres)
Template/Spot Upgrade Roads	6.48 mi	2.99 mi	0.22 mi	0.22 mi
No Corridor	0.00	0.00	0.00	0.00
With Corridor	0.00	2.99 mi	0.22 mi	0.22 mi
Engineered Roads	0	1.30 mi	1.30 mi	0
No Corridor	0	1.30 mi	1.30 mi	0
With Corridor	0	0	0	
Primitive Roads	0.00	2.62 mi	2.21 mi	2.21 mi
No Corridor	0.00	0.27 mi	0.20 mi	0.20 mi
With Corridor	0.00	2.35 mi	2.01 mi	2.01 mi
Buried Utilities	1.41 mi	5.95 mi	2.84 mi	2.84 mi
No Corridor		0.61 mi	0.61 mi	0.61 mi
With Corridor		5.34 mi	2.23 mi	2.23 mi
Overhead Powerlines	2.56 mi	2.86 mi	2.86 mi	0.00 mi
Buried power	0.00 mi	5.34 mi	2.23 mi	5.09 mi
Power Drops	0	4 (0.16 acres)	4 (0.16 acres)	4 (0.16 acres)
Communication Sites	0	0	0	0
Monitor Wells	0	1	1	1
Land Application Disposal	0	0	0	0
Subsurface Drip Irrigation	0	0	0	0
Treatment Facilities	0	0	0	0
Impoundments	0	0	0	0
On-channel	0	1 (4.4 acres)	0	0
Water Discharge Points	0	1 (0.05 acres)	0	0
Channel Disturbance Low Water Crossing (LWC)	2 (0.04 acres)	2 (0.04 acres)	4 (0.08 acres)	4 (0.08 acres)
TOTAL ACRES DISTURBANCE	Approx. 45.02 acres	Approx. 53.50 acres	Approx. 36.27 acres	Approx.19.57 acres

3. AFFECTED ENVIRONMENT & ENVIRONMENTAL CONSEQUENCES

Applications to drill were received on March 13, 2008. Field inspections of the proposed Carr Draw Federal POD V Addition II CBNG project were conducted on January 13, 2009 by the following personnel:

NAME	Agency	Title
Allen Aksamit	Western Land Services	Wildlife Biologist
Patrick Barker	Western Land Services	Project Manager
Chris Crow	MC2	PE
Randee Jespersen	Williams Production RMT CO	Landman
Jerry Means	Magna	Dirt Work Contractor
Gabe Gill	Williams Production RMT CO	Production
Dan King	Western Land Services	Operations
Mike Lindsley	Western Land Services	Operations
Kerry Hayden	Land Owner	
Ralph Demel	Williams Production RMT CO	Construction Supervisor
Ted Hamersma	BLM	Road Technician
Jenny Morton	BLM	Wildlife Biologist
Jenny Spegon	BLM	NRS
Andy Perez	BLM	NRS
Casey Freise	BLM	NRS/Hydrologist
Ray Stott	BLM	NRS/Hydrologist

This section describes the environment that would be affected and the environmental consequences that would result by implementation of the Alternatives described in Section 2. Aspects of the affected environment described in this section focus on the relevant major issues.

3.1. Topographic Characteristics of Project Area

The Carr Draw Federal POD V Addition II is located off of Kingsbury Road, approximately 18 miles west of Gillette on US Interstate 90. The project area lies in Township 76 North, Range 76 West, in Sections 1 and 12. This is the southeast boundary of the Carr Draw Federal POD V Addition II, which lies within the central portion of the Powder River Basin, Wyoming. The project area lies directly west of the approved Carr Draw Federal POD V Addition I approved 9/29/2006. The POD topography consists of 85% rough to moderately rough terrain with numerous ridges and deep draws. The remaining 15% consists of rolling hills and flats cut by steep to moderately steep draws. The elevation within the project area ranges from approximately 4400 to 4800 feet above sea level. The climate is semi-arid, averaging approximately 11-14 inches of precipitation annually. The mean annual air temperature is approximately 43.8 degrees Fahrenheit. Wildlife habitat, livestock grazing, and oil and gas development are the primary land uses in the area. Land ownership within the POD is held by private land owned by Kerry and Stephanie Hayden.

3.2. Vegetation & Soils

The primary habitat is sagebrush grassland, dominated by big sagebrush (*Artemisia tridentata*). The areas in the creek bottoms and ravine bottoms consist of primarily silver sagebrush (*Artemisia cana*). The Juniper (*Juniperus* sp.) is the dominate tree species and are present in many of the steep draws and their north facing aspects. There are a variety of grasses within the project area such as: western wheat grass (*Pascopyrum smithii*), junegrass (*Koeleria macrantha*), needle and thread grass (*hesperostipa comate*), Sandberg bluegrass (*Poa secunda*, prickly pear cactus (*Opunita* spp.), scarlet globemallow (*Sphaeralcea coccinea*), and rabbit brush (*Chrysothamnus* spp.). Differences in dominant species within the project area vary with soil type, aspect and topography. Please refer to the Carr Draw Federal POD III West EA WY-

070-09-066 approved on 9/4/2009, for further details. The environmental consequences to vegetation and soils will be similar to those identified in the Carr Draw Federal POD III West EA.

Cumulative Effects: Most soil disturbances would be short term impacts with expedient, successful interim reclamation and site stabilization, as committed to by the operator in their POD Surface Use Plan and as required by BLM in COAs.

Impacts to vegetation and soils from surface disturbance will be reduced by following the operator's plans and BLM applied mitigation. Of the 4 proposed well locations, 1 can be drilled without a well pad being constructed, and will only require a slot. The remaining three well locations will utilize a pad built to best fit the surrounding topography. The total estimated disturbance for 4 proposed CBM wells will 2.87 acres in long term disturbance.

Approximately 0.22 miles of improved roads would be constructed to provide access to various well locations. Approximately 2.21 miles of new two-track trails would be utilized to access well sites. Approximately 2.23 miles of proposed pipelines have been located in "disturbance corridors." Disturbance corridors involve the combining of 2 or more utility lines (water, gas, power) in a common trench, usually along access routes. This practice results in less surface disturbance and overall environmental impacts. Approximately 0.61 miles of waterline will be constructed outside of a corridor. Expedient reclamation of disturbed land with stockpiled topsoil, proper seedbed preparation techniques, and appropriate seed mixes, along with utilization of erosion control measures would ensure land productivity/stability is regained and maximized, for further detail please refer to the Carr Draw Federal POD V Addition II Interim Reclamation Management Plan. The 21-1BG/GW, 34-1BG/GW, and 32-1BG/G well locations that will utilize a well pad will be required to be stabilized within 30 days of construction. Site specific COAs require these locations to be stabilized in a manner which eliminates accelerated erosion until a self-perpetuating native community has stabilized the site in accordance with the Wyoming Reclamation Policy.

Proposed stream crossings, including culverts and (low water crossings) are shown on the MSUP and the WMP maps (see the POD). These structures would be constructed in accordance with sound engineering practices and BLM standards.

For a detailed record of surface disturbance associated with the Carr Draw Federal Pod V Addition II, see table 2.5.

3.2.1. Invasive Species

State-listed noxious weeds and invasive/exotic plant infestations were discovered by a search of inventory maps and/or databases and during subsequent field investigation by the proposed project proponent and the BLM.

Specific species of concern include:

- Canada thistle, which was found and identified in channel bottoms throughout the entire POD.
- Scotch thistle, which was identified and found near existing roads and oil infrastructure throughout the POD.
- Cheat grass has invaded the state of Wyoming, and has been identified occurring throughout the project area.

The operator has developed an Integrated Weed and Pest Management Plan, as well as mapped existing weed infestations for education and control of noxious weeds within this project.

The state-listed noxious weeds are listed in PRB FEIS Table 3-21 (p. 3-104) and the Weed Species of Concern are listed in Table 3-22 (p. 3-105).

The effects of state-listed noxious weeds and/or weed species of concern infestations will be similar to those identified in the Carr Draw Federal POD III West EA, Carr Draw III East EA, and Carr Draw Federal POD V Addition I EA.

The operator has committed to the control of noxious weeds and species of concern in an Integrated Pest Management Plan (IPMP) included in the proposal. In addition, mitigation as required by BLM applied COAs will reduce potential impacts from noxious weeds and invasive plants.

3.3. Wildlife

A habitat assessment and wildlife inventory surveys were performed by Western Land Services (WLS) (2005, 2006, 2007, 2008, 2009). WLS performed surveys for mountain plover, sharp-tailed grouse, greater sage-grouse, raptor nests, and prairie dog colonies according to Powder River Basin Interagency Working Group (PRBIWG) accepted protocol in 2005, 2006, 2007, 2008, and 2009. Surveys were conducted for Ute ladies'-tresses orchid. Blowout penstemon surveys have not yet been completed for the Carr Draw V Add 2 project area. PRBIWG accepted protocol is available on the CBM Clearinghouse website (www.cbmclearinghouse.info).

A BLM biologist conducted field visits on January 13, 2009. During this time, the biologist reviewed the wildlife survey information for accuracy, evaluated impacts to wildlife resources, and provided project modification recommendations where wildlife issues arose.

3.3.1. Big Game

Big game species expected to be within the Carr Draw Federal POD V Addition II project area include pronghorn antelope, mule deer, and elk. The WGFD has determined that the project area contains yearlong and winter range for pronghorn antelope, winter yearlong for mule deer, and yearlong, crucial winter, and parturition range for elk. Impacts to pronghorn antelope and mule deer will be similar to those identified in the Carr Draw III West POD EA (WY-070-09-066).

3.3.1.1. Elk

The project area is within elk crucial winter, parturition and yearlong ranges. Based on data from the Wyoming Oil and Gas Commission, as of August 31, 2009, there were approximately 12 existing gas well locations and associated infrastructure within the Carr Draw Federal POD V Addition II project area of 2.3 square miles. The 12 gas well locations are located throughout the eastern half of the project area.

Approximately 11% (169 acres) of the Carr Draw Federal POD V Addition II is within crucial winter range. Crucial winter elk range is located in the western portions of the project area in S2 and S3. Elk parturition range covers 26% (392 acres) of the project area. Parturition elk range encompasses the western and southwestern portions of the project area in S2, S3, and S11. The entire project area is located within elk yearlong range. The eight proposed wells are located within only yearlong elk range.

An analysis of elk habitat indicates that in 2005 approximately 41,976 acres of security habitat (19 patches) existed within the elk Yearlong range; 926 contiguous acres within the vicinity of the Carr Draw Federal POD V Addition II, none of which lies within the project area boundary.

Data from the GPS collars recorded 403 elk observations with the Carr Draw Federal POD V Addition II project area over an 18 month window from March 2008 to August 2009. During this time period, 6 individual collared elk were located within the project area. Three of these collars were deployed during the collaring operation conducted March 2008, and the other three collars were deployed December 2008.

One of the collars from the three deployed in March 2008 failed in May 2008. Though the data points indicate usage of the project area year-round, intensity increases within the southern portion (SE S2, SW S1, NE S11 and NW S12, T50N, R76W) of the project area throughout the winter and early spring months (November through March), indicating a likely reliance on this area for winter cover and calving. The data points from the 6 collared elk located within the project area represents >1% of all data points collected from all of the collared elk. Table 3.1 indicates the percentage of data points collected inside the project area in relation to all data points collected from each of the 6 individual elk that have spent some time within the project area boundaries.

Table 3.1 Percent data points collected from inside the project area.

Elk collar number	Percent data points from inside project area	Elk collar number	Percent data points from inside project area
317530	2%	330448	3%
330465	5%	332416	11%
335399	11%	335672 (failed 5/2/08)	14%

Elk

Direct Habitat Loss

Impacts to elk from direct habitat loss will be similar to those identified in the Carr Draw III West POD EA (WY-070-09-066).

Security Habitat/Habitat Effectiveness

As of May, 2009, 37,874 acres of security habitat (15 patches) remained in the Yearlong range; 926 contiguous acres within the vicinity of the Carr Draw Federal POD V Addition II. No security habitat exists within the project area or will be impacted by project components. Seventy-seven acres of effective habitat is present within the draws that bisect the project area.

The foreseeable development within the Carr Draw Federal POD V Addition II project area includes an additional 8 wells, at 4 locations, resulting in a well density of 8 well locations/section. Proposed project elements that are anticipated to impact the Fortification elk herd: 8 CBNG wells on 4 locations, 3.73miles of new roads, 2.23 miles of new pipeline which corridors with proposed and existing roads, 0.61 miles of new waterline not in corridors, increased vehicle traffic on established roads, and increased noise from compressor stations. There is 0.8 mile of proposed overhead power within the elk crucial winter range, and approximately 4.8 acres of surface disturbance associated with the powerline. The operator proposes 2.4 miles of overhead power within the elk parturition range, and approximately 14.5 acres of surface disturbance associated with the powerline.

A view shed analysis utilizing the geographic information system (GIS) model was conducted to determine habitat effectiveness within the Carr Draw Federal POD V Addition II project boundary following the field visits confirming the existing oil and gas roads. The following statistics summarize the outcome of the habitat effectiveness analysis:

1. Effective habitat existing prior to initiating non-federal oil development was approximately 77 acres or 5% of the Carr Draw Federal POD V Addition II project area, with no parcels in excess of 250 acres.
2. Prior to the proposed federal CBNG development, the habitat effectiveness within the eastern half of the project area had been compromised by wells and access roads that have fragmented the habitat and reduced connectivity.

3. Loss of security habitat anticipated with the implementation of the operator's federal CBNG development is 0% within the Carr Draw Federal POD V Addition II.
4. Loss of effective habitat anticipated with the implementation of the operator's federal CBNG development is approximately 50% within the Carr Draw Federal POD V Addition II.

The Carr Draw Federal POD V Addition II is expected to impact elk occupying the Fortification Creek area and the immediate surrounding habitat. There is likely to be a larger amount of habitat effectiveness loss than is indicated above due to avoidance and displacement of animals and their altered behavior reacting to the CBNG activities, with most of this occurring during the actual development stages.

It is likely that elk will also be displaced from the Carr Draw Federal POD V Addition II project area by human disturbance for prolonged periods of time or will avoid the area altogether with loss of security areas.

Population

Impacts to the Fortification Creek elk herd will be similar to those identified in the Carr Draw III West POD EA (WY-070-09-066).

Mitigation

Timing limitation stipulations for drilling, construction and other activities, with the exception of well monitoring, will be applied to protect elk during critical winter (November 15 to April 30) and calving periods (May 1 to June 30) for those portions of the project area within the identified ranges. However, it is anticipated that big game will continue to avoid those areas of frequent human disturbance during the production phase of the CBNG development.

3.3.1.2. Big Game Cumulative effects

Cumulative impacts to big game will be similar to those identified in the Carr Draw III West POD EA (WY-070-09-066).

3.3.2. Aquatics

In addition to the water management plan discussed in the Carr Draw III West POD EA (WY-070-09-066), Williams Production RMT Company may also utilize the water management system analyzed and approved in the Carr Draw V/IIA (WY-070-05-384) and Carr Draw V Add I (WY-070-06-306) POD EAs for removal of produced water from the Carr Draw Federal POD V Addition II.

Because the Carr Draw Federal POD V Addition II does not include any changes to existing or approved water management, no additional impacts to aquatic communities are expected to occur as a result of implementation of the Carr Draw III West POD.

Impacts to aquatics will be similar to those identified in the Carr Draw III West POD EA (WY-070-09-066).

3.3.3. Migratory Birds

Impacts to migratory birds will be similar to those identified in the Carr Draw III West POD EA (WY-070-09-066).

3.3.4. Raptors

Five raptor nest sites were identified by WLS (WLS 2009) and BLM within 0.5 mile of the project boundary. These are listed in the table below. Of the nests listed, one was active in 2009. This nest (2663) has been active with golden eagles for four out of the last six years.

Table 3.2 Documented raptor nests within the Carr Draw V Add II project area.

BLM ID	UTMS	LEGAL	SUB-STRATE	YEAR	CON-DITION	STATUS	SPECIES
3700	424985E 4907160N	S13 T50N R76W	JUN	2009	Excellent	Inactive	n/a
				2009	Good	Inactive	n/a
				2008	Excellent	Active	COHA
				2007	Excellent	Inactive	n/a
				2007	Good	Inactive	n/a
				2006	Unknown	Inactive	n/a
				2005	Excellent	Active	COHA
				2004	Gone	Inactive	n/a
3704	424992E 4910390N	S1 T50N R76W	CTL	2009	Good	Inactive	n/a
				2008	Good	Inactive	n/a
				2007	Good	Active	GRHO
				2007	Good	Active	RETA
				2005	Good	Inactive	n/a
				2004	Gone	Inactive	n/a
5883	424941E 4910642N	S36 T51N R76W	CTL	2009	Excellent	Inactive	n/a
				2008	Excellent	Active	RETA
6443	424942E 4910606N	S36 T51N R76W	CTL	2009	Good	Inactive	n/a
				2008	Unknown	Active	GRHO
2663	424679E 4913178N	S25 T51NR76W	CTL	2009	Excellent	Active	GOEA
				2008	Excellent	Active	GOEA
				2007	Fair	Inactive	n/a
				2006	Good	Active/F	GOEA
				2005	Good	Active	GOEA
				2004	Good	Inactive	n/a

Table 3.3 Proposed and existing infrastructure within 0.5 mile of documented raptor nests within the Carr Draw III West project area

BLM ID	Infrastructure
3700	<ul style="list-style-type: none"> • 1 proposed overhead powerline segment • 1 proposed power drop
3704	<ul style="list-style-type: none"> • 2 well locations (21-1-5076 and 32-1-5076) • 1 existing primitive/proposed engineered road segment • 2 existing primitive road/proposed utility corridor segments

BLM ID	Infrastructure
6443	<ul style="list-style-type: none"> • 2 well locations (21-1-5076 and 32-1-5076) • 1 existing primitive/proposed engineered road segment • 1 existing primitive road/proposed utility corridor segments
5883	<ul style="list-style-type: none"> • 2 well locations (21-1-5076 and 32-1-5076) • 1 existing primitive/proposed engineered road segment • 1 existing primitive road/proposed utility corridor segments
2663	<ul style="list-style-type: none"> • 1 existing primitive road segment

Use of nests 6443, 5883, and 3704 will likely continue to not occur as traffic associated with the Carr Draw V and fee and state development has likely already caused abandonment of these nests. Infrastructure within 0.5 mile of all other was either not proposed within or removed from a distance considered potentially disturbing to those species.

3.3.5. Plains Sharp-tailed Grouse

Impacts to plains sharp-tailed grouse will be similar to those identified in the Carr Draw III West POD EA (WY-070-09-066).

3.3.6. Sagebrush Obligates

Impacts to sagebrush obligates will be similar to those identified in the Carr Draw III West POD EA (WY-070-09-066).

3.3.7. Threatened and Endangered and Sensitive Species

3.3.7.1. Threatened and Endangered Species

Within the BLM Buffalo Field Office there are three species that are Threatened or Endangered under the Endangered Species Act, described as follows:

3.3.7.1.1. Black-footed ferret

No black-tailed prairie dog colonies exist within the project area or within 0.25 miles of the Carr Draw Federal POD V Addition II project boundary. Effects to black-footed ferrets will be similar to those identified in the Carr Draw III West POD EA (WY-070-09-066).

3.3.7.1.2. Blowout penstemon

On May 22, 2009 the Buffalo Field Office received a species list from the US Fish and Wildlife (USFWS) that included Blowout penstemon. This plant occurs on sand dunes or blowouts. At the time the Carr Draw Federal POD V Addition II was visited, this species was not on the USFWS list for the BFO administrative area and was not looked for. The operator was subsequently notified of the addition of this plant to the listed species list. Surveys for suitable Blowout penstemon habitat have not been conducted within the project area. Though it is unlikely that the plant occurs within the project area because of the general soil characteristics within the area, due to the lack of surveys it is difficult to conclusively assess the effect to this species. Implementation of the proposed coal bed natural gas project “*may affect, but is not likely to adversely affect*” blowout penstemon. Williams Production RMT Company will be required to submit a survey assessing habitat for blowout penstemon before beginning any construction within the project area.

3.3.7.1.3. Ute Ladies'-Tresses Orchid

There are no proposed actions associated with the Carr Draw Federal POD V Addition II that have not been analyzed under NEPA that will impact perennial systems. Effects to the Ute ladies'-tresses orchid will be similar to those identified in the Carr Draw III West POD EA (WY-070-09-066).

3.3.7.2. Sensitive Species

Impacts will be similar to those identified in the Carr Draw III West POD EA (WY-070-09-066) for the following sensitive species: northern leopard frogs, Columbia spotted frogs, sturgeon chub, Yellowstone cutthroat trout, Baird's sparrows, Brewer's sparrows, ferruginous hawks, loggerhead shrike, long-billed curlew, mountain plover, northern goshawk, peregrine falcon, sage sparrow, sage thrasher, trumpeter swan, western burrowing owl, white-faced ibis, yellow-billed cuckoo, black-tailed prairie dogs, fringed myotis, long-eared myotis, spotted bat, swift fox, Townsend's big-eared bat, Porter's sagebrush, and William's wafer parsnip.

3.3.7.2.1. Bald Eagle

Bald eagle nesting and roosting habitat is present within one mile of the Carr Draw Federal POD V Addition II project area on the southwestern side of Kinney Divide Road. The area with the greatest potential is Maycock Draw (Sec. 3 and 10, T50N, R76W), south of Kinney Divide Road. Roosting habitat is found in the form of large ponderosa pine (both dead and alive). Additional habitat can be found in cottonwood trees in Bull Draw in SWSE Section 36, T50N, R76W (WLS 2008). No bald eagle observations have ever been recorded within the project area or within one mile of the project boundary. Impacts to bald eagles will be similar to those identified in the Carr Draw III West POD EA (WY-070-09-066).

3.3.7.2.2. Greater Sage-Grouse

Suitable sage-grouse habitat is present in the Carr Draw Federal POD V Addition II project area. Nesting habitat does occur in sagebrush communities, mainly in the eastern portion of the project area. The terrain is rough with mixed ponderosa pine and juniper trees in most areas in the western and central portion of the project area. In addition, sign in the form of droppings was observed in the east portion of the project area, primarily in Section 1, T50N, R76W (WLS 2008). Sage-grouse habitat models indicate that approximately 63% of the project area, 929 acres, contains high quality sage-grouse nesting habitat (Doherty 2008). According to a statewide population density model that was developed based on lek attendance (Doherty 2008), the portions of the project area in E ½ of S1, T50N, R76W are contained in an area, that when combined with other similar areas, is predicted to contain 85% of the state's sage-grouse population. The portions of the project in the SW, SE, NE and SENW of S12, T50N, R76W, when combined with other similar areas, are predicted to contain 70% of the state's sage-grouse population.

The State Wildlife Agencies' Ad Hoc Committee for Consideration of Oil and Gas Development Effects to Nesting Habitat (2008) recommends that impacts be considered for leks within four miles of oil and gas developments. WGFD records indicate that three sage-grouse leks occur within four miles of the project area. These three lek sites are identified in Table 3.4.

Table 3.4 Sage-grouse leks within 4 miles of the Carr Draw Federal POD V Addition II.

Lek Name	Legal Location	Distance from Project Area (mi)	Occupied?
Fortification	SWNW S25 51/76	Existing primitive road proposed for use within 0.1 mile of this lek	Yes
Hayden II	SWSE S31 51/75	0.9	Yes
Hayden I	SESW S17 50/75	2.7	Yes

Alternative C

3.4. Greater sage-grouse Direct and Indirect Effects

Impacts from the project to the local sage-grouse population may occur through a reduction of overall habitat quality, increased predation risk, and increased direct mortalities and will likely be manifested through declines in lek attendance as sage-grouse avoid these developed areas and seek out less disturbed leks. The additional infrastructure may impact sage-grouse through the addition of potential raptor

perches, shelters and burrows for mammalian predators, and travel routes for predators, thereby increasing chances of sage-grouse mortalities cause by predation. Overhead powerlines and increased traffic will increase collision hazards for sage-grouse moving across the landscape. In addition, noise and human activities will further reduce habitat quality. Direct impacts to sage-grouse will occur with the use of the existing primitive road within 0.25 mile of the Fortification lek to access the Carr Draw Federal POD V Addition II. Direct and indirect impacts are also likely to occur from the proposed overhead powerline. Direct impacts to sage-grouse habitat will occur with the removal of sagebrush. Fragmentation of habitat patches as a result of the proposed project will be limited because infrastructure will be placed in areas directly adjacent to existing roads and/or other infrastructure.

Additional impacts to sage-grouse will be similar to those identified in the Carr Draw III West POD EA (WY-070-09-066).

Alternative D

3.5. Greater sage-grouse Direct and Indirect Effects

Direct and indirect impacts to greater sage-grouse are the same as alternative C, with the following exceptions:

Alternative D would create the least amount of disturbance to and fragmentation of sage-grouse habitat while meeting the purpose and need of the proposed action. Trenching construction associated with burying proposed and existing overhead power outside of existing corridors will temporarily remove habitat. This will cause a short-term disturbance and direct habitat loss; however, effective reclamation should provide some habitat value, as these areas are reclaimed, and native vegetation becomes established. BLM has established 0.25 mile controlled surface use (CSU) policy for sage-grouse leks (BLM 2001). No surface disturbance is to occur within the CSU. Denial of access to the project area via the existing primitive road within 0.25 mile of the Fortification lek would be in keeping with BLM policy as increased traffic (from periodic ranch use to CBNG traffic) on this road would likely change the nature of this road and the surrounding vegetation.

Alternative D will reduce the negative impact to breeding sage-grouse and nesting and wintering habitat. This alternative will maintain sage-grouse habitat use by not increasing vertical intrusions on the landscape. Eliminating surface disturbing or disruptive activities from March 1 to July 15 will enhance nesting success.

3.6. Water Resources

The Carr Draw V Additions II POD lies entirely within the upper reaches of the Fortification Creek watershed which is tributary to the Upper Powder River. Numerous ephemeral drainages dissect the project area and ultimately drain directly into Fortification Creek. These drainages are moderate to steep with no defined channels. Fortification Creek is ephemeral with a well defined channel and floodplain.

Primarily, water produced from the proposed federal wells located within the Carr Draw V Additions II POD will be managed within a common pipeline system associated with the Carr Draw V and Carr Draw V Additions I PODs approved by BLM on 10/7/05 and 9/29/06 respectively. All wells outlined in this proposal will have the ability to discharge to any of the 14 approved outfalls and reservoirs located in the above project areas.

In addition to the approved water management infrastructure outlined above, portions of the produced water may be transported by a common waterline system to off-project facilities associated with the approved PODs that are located south and east of the project area. These PODs include Carr Draw II, Carr Draw II Additions II, Schoonover Road Unit 1, 2, 3, & 5, South Prong Unit 1, 2, & 3 and the Black

Bullet waterline sundry. Information pertaining to the specific water management infrastructure for these projects can be reviewed in their respective POD water management plans.

The average well site pumping rate is 12.3 gpm based on planned production rates and historic initial production rates from the wells completed to the proposed target formations located within the Carr Draw Unit. The production rate of 172.2 gpm for the 14 proposed wells is a maximum case scenario where all wells are completed and activated simultaneously. However, due to drilling schedules, permitting timelines, and operator schedules, drilling and production of all well sites would occur over an extended period of time.

Previously approved water structures and infrastructure in the Carr Draw II, Carr Draw II Additions II, Schoonover Road Unit 1, 2, 3, & 5, South Prong Unit 1, 2, & 3 PODs and the Black Bullet waterline sundry will provide adequate storage capacity for the proposed wells. The water management plans for the PODs listed above predicted a range of water production from 8.5 to 15gpm (Carr Draw Unit), 9 to 12 gpm (South Prong Unit), and up to 40 gpm in the Schoonover Road Unit. Current water production in these units varies from 0 to 15gpm. Actual water production in the aforementioned units is below the predicted water production. This decline in water production supports the assumption that the existing infrastructure will provide adequate storage capacity for the proposed POD.

3.7. Economics and Recovery of CBNG Resources

Development of this project would have effects on the local, state, and national economies. Based on the estimates in the PRBEIS, the drilling of the 8 proposed wells in the Carr Draw Federal POD V Addition II will generate approximately 0.35 billion cubic feet of gas (BCFG) per well, over the life of the well. Actual revenue from this amount of gas is difficult to calculate, as there are several variables contributing to the price of gas at any given time. Regardless of the actual dollar amount, the royalties from the gas produced in the Carr Draw Federal POD V Addition II would have wide-ranging benefit. The federal government collects 12.5% of the royalties from all federal wells, which helps offset the costs of maintaining the federal agencies that oversee permitting. In addition to generating federal income, approximately 49% of the royalties from the Carr Draw Federal POD V Addition II wells would return to the State of Wyoming. This revenue from mineral development has contributed to Wyoming’s strong economy for the past several years, allowing for improvements in state funded programs such as infrastructure and education. The development of the Carr Draw Federal POD V Addition II project would also provide revenue locally by employing an array of workers, both directly and indirectly. People would be employed to build the roads and project infrastructure, drill the wells, and maintain and monitor the project area. The large pool of individuals employed to work on the Carr Draw Federal POD V Addition II project would also have the secondary effect of increased demand for goods and services from nearby communities, primarily those of Northeast Wyoming.

3.8. Cultural Resources

A Class III cultural resource inventory was performed for the Carr Draw V Add II POD prior to on-the-ground project work (BFO project no. 70090035). Western Land Services, 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*. Clint Crago, BLM Archaeologist, reviewed the report for technical adequacy and compliance with Bureau of Land Management (BLM) standards, and determined it to be adequate. The following resources are located in or near the project area.

Site Number	Site Type	Eligibility
48CA5820	Prehistoric Lithic Scatter	Not Eligible

Site Number	Site Type	Eligibility
48CA5824	Prehistoric Lithic Scatter	Not Eligible
48CA5825	Historic Can Scatter	Not Eligible
48CA5826	Historic Artifact Scatter and Prehistoric Flake	Not Eligible
48CA5829	Historic Artifact Scatter	Not Eligible

Non eligible sites 48CA5820, 48CA5825, 48CA5826, and 48CA5829 will be impacted by the proposed project. No historic properties will be impacted by the proposed project. Following the Wyoming State Protocol Section VI(A)(1) the Bureau of Land Management electronically notified the Wyoming State Historic Preservation Officer (SHPO) on 3/11/2009 that no historic properties exist within the APE. 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. Further discovery procedures are explained in the Standard COA (General)(A)(1).

3.9. Air Quality

Existing air quality throughout most of the Powder River Basin is in attainment with all ambient air quality standards. Although specific air quality monitoring is not conducted throughout most of the Powder River Basin, air quality conditions in rural areas are likely to be very good, as characterized by limited air pollution emission sources (few industrial facilities and residential emissions in the relatively small communities and isolated ranches) and good atmospheric dispersion conditions, resulting in relatively low air pollutant concentrations.

Existing air pollutant emission sources within the region include following:

- Exhaust emissions (primarily CO and nitrogen oxides [NOx]) from existing natural gas fired compressor engines used in production of natural gas and CBNG; and, gasoline and diesel vehicle tailpipe emissions of combustion pollutants;
- Dust (particulate matter) generated by vehicle travel on unpaved roads, windblown dust from neighboring areas and road sanding during the winter months;
- Transport of air pollutants from emission sources located outside the region;
- Dust (particulate matter) from coal mines;
- NOx, particulate matter, and other emissions from diesel trains and,
- SO2 and NOx from power plants.

For a complete description of the existing air quality conditions in the Powder River Basin, please refer to the PRB Final EIS Volume 1, Chapter 3, pages 3-291 through 3-299.

In the project area, air quality impacts would occur during construction (due to surface disturbance by earth-moving equipment, vehicle traffic fugitive dust, well testing, as well as drilling rig and vehicle engine exhaust) and production (including non-CBM well production equipment, booster and pipeline compression engine exhaust). The amount of air pollutant emissions during construction would be controlled by watering disturbed soils, and by air pollutant emission limitations imposed by applicable air quality regulatory agencies. Air quality impacts modeled in the PRB FEIS concluded that projected oil & gas development would not violate any local, state, tribal or federal air quality standards.

4. CONSULTATION/COORDINATION

Contact	Title	Organization	Present At Onsite
Mary Hopkins	Interim Wyoming State Historic Preservation Officer	Wyoming SHPO	No
Penny Bellah	Regulatory Team Lead	Williams Production RMT Company	NO

5. OTHER PERMITS REQUIRED

A number of other permits are required from Wyoming State and other Federal agencies. These permits are identified in Table A-1 in the PRB FEIS Record of Decision.

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7. LIST OF INTERDISCIPLINARY TEAM PREPARERS AND REVIEWERS

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Appendix A
Detailed Description of Alternatives B, C, D, and Alternatives Considered
But not Analyzed in Detail
Williams Production RMT Company
Carr Draw Federal POD V Addition II
ENVIRONMENTAL ASSESSMENT – WY-070-EA09-123

1. Alternative B - Proposed Action

Alternative B is the proposed action as originally submitted to the BLM by Williams Petroleum Corporation prior to any BLM review or modifications.

Proposed Action Title/Type: Williams’ Carr Draw Federal POD V Addition II Plan of Development (POD) for 14 coal bed natural gas well APD’s and associated infrastructure

Proposed Well Information: There are 14 wells proposed within this POD; the wells are vertical bores proposed on an 80 acre spacing pattern with 2 wells per location. Each well will have a single well completed to either the Big George coal seam or to the Lower Big George coal seam. Proposed well house color is Covert Green, selected to blend with the surrounding vegetation. Proposed wells are located as follows:

	Well Name	Well #	Qtr/Qtr	Sec.	TWP	RNG	Lease #
1	CARR DRAW V ADD 2 CARU	21-1BG*	NENW	1	50N	76W	WYW146290
2	CARR DRAW V ADD 2 CARU	21-1GW	NENW	1	50N	76W	WYW146290
3	CARR DRAW V ADD 2 CARU	34-1BG	SWSE	1	50N	76W	WYW146290
4	CARR DRAW V ADD 2 CARU	34-1GW	SWSE	1	50N	76W	WYW146290
5	CARR DRAW V ADD 2 CARU	32-1GW	SWNE	1	50N	76W	WYW146290
6	CARR DRAW V ADD 2 CARU	32-1BG	SWNE	1	50N	76W	WYW146290
7	CARR DRAW V ADD 2 CARU	12-12BG	SWNW	12	50N	76W	WYW147336
8	CARR DRAW V ADD 2 CARU	12-12GW	SWNW	12	50N	76W	WYW147336
9	CARR DRAW V ADD 2 CARU	21-3BG*	NENW	3	50N	76W	WYW135623
10	CARR DRAW V ADD 2 CARU	21-3GW	NENW	3	50N	76W	WYW135623
11	CARR DRAW V ADD 2 CARU	23-2BG	NESW	2	50N	76W	WYW135623
12	CARR DRAW V ADD 2 CARU	23-2GW	SWSE	2	50N	76W	WYW135623
13	CARR DRAW V ADD 2 CARU	41-3GW	NENE	3	50N	76W	WYW135623
14	CARR DRAW V ADD 2 CARU	41-3BG	NENE	3	50N	76W	WYW135623

County: Campbell

Applicant: Williams Production RMT Company

Surface Owners: Kerry and Stephanie Hayden

Project Description:

The proposed action involves the following:

- Project development involves the disturbance of surface features to accommodate the drilling of fourteen (14) federal CBNG wells and related infrastructure within the Carr Draw Federal POD V Addition II. The project area is inside the Carr Draw Unit, and immediately north of the approved Carr Draw Federal POD III West project area approved 9/4/2009. Each federal well site will have

a single well completed to the Big George coal seam at estimated depth 1,324 to 1,629 feet, and to the Wall coal seam at estimated depth 1,933 to 2,306 feet.

- Drilling and construction activities are anticipated to be completed within two years, the term of an APD. Drilling and construction occurs year-round in the PRB. Weather may cause delays lasting several days but rarely do delays last multiple weeks. Timing limitations in the form of 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.
- Williams plans to install electronic natural gas flow measurement equipment utilizing telecommunications data gathering or chart recorders. William's gas measurement will occur at the individual wellhead. Well metering shall be accomplished by telemetry. Well metering by telemetry will require multiple visits per month to each well.
- A Water Management Plan (WMP) that involves the following infrastructure and strategy: Water produced from the proposed Federal and Fee wells located within the Carr Draw V Addition II POD (CDVAII) will be managed within a common pipeline system and will also be incorporated into the approved Carr Draw Federal POD V (CDV) and Carr Draw V Addition I (CDVAI) projects' water management infrastructure, approved by BLM on October 7, 2005 and September 29, 2006. Additionally, portions of effluent produced from wells proposed in this plan will be discharged at one proposed reservoir facility located within the CDVAII project area.

In addition to the approved and proposed water management infrastructure outlined above, portions of produced effluent from the CDVAII project will be transported by a common waterline system to off-project facilities associated with the approved and pending PODs that are located to the southeast and south of the CDVAII project. The existing off-project infrastructure is associated with the Williams' BLM approved Carr Draw Federal POD II (CDII), Carr Draw Federal II Addition II (CDIIAII), Schoonover Road Unit 1&2, Schoonover Road Unit 3, Schoonover Road Unit 5, South Prong Unit 3 projects, and the Waterline Right of Way Sundry (Waterline Sundry). Proposed off-project infrastructure is located within the BLM pending South Prong Unit 1 and 2 Federal POD project. The information pertaining to the specific water management infrastructure for these projects can be reviewed in their perspective POD WMP's.

- An unimproved and improved road network.
- An above ground power line network to be constructed by the contractor. The proposed route has been reviewed by the contractor. If the proposed route is altered, then the new route will be proposed via sundry application and analyzed in a separate NEPA action. Power line construction has not been scheduled and will not be completed before the CBNG wells are producing. Temporary diesel generators shall be placed at the 4 power drops.
- A storage tank of 1000 gallon capacity shall be located with each diesel generator. Generators are projected to be in operation for 12 months. Fuel deliveries are anticipated to be 2 times per week. Please refer to the Carr Draw Federal POD V Addition II in the Master Surface Use Plan (MSUP) for further detail on noise level of the possible generators to be used, measured at 50 and 100 feet at the end of the MSUP.
- A buried gas, water and power line network.

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

WMP in the POD and individual APDs. Also see the subject POD and/or APDs for maps showing the proposed well locations and associated facilities described above. More information on CBNG well drilling, production and standard practices is also available in the PRB FEIS, Volume 1, pages 2-9 through 2-40 (January 2003).

Implementation of committed mitigation measures contained in the MSUP, Drilling Program and WMP, in addition to the Standard COA contained in the PRB FEIS Record of Decision Appendix A, are incorporated and analyzed in this alternative.

Additionally, the Operator, in their POD, has committed to:

1. Comply with all applicable Federal, State and Local laws and regulations.
2. Obtain the necessary permits for the drilling, completion and production of these wells including water rights appropriations, the installation of water management facilities, water discharge permits, and relevant air quality permits.
3. Offer water well agreements to the owners of record for permitted water wells within ½ mile of a federal CBNG producing well in the POD.
4. Provide water analysis from a designated reference well in each coal zone.

The Operator has certified that a Surface Use Agreement has been reached with the Landowners.

2. Alternative C – Proposed Action with BLM Specific Mitigation

The description of Alternative C is the same as Alternative B with the addition of the project modifications identified by BLM following the onsite. Alternative C integrates functioning environmental systems during and after construction. In addition, this alternative incorporates many of the protection measures historically utilized for sage-grouse, elk, and their habitats, and describes methods of avoiding cultural impacts prior to tribal consultations while assimilating drilling of wells on 80 acre spacing, where environmentally feasible.

Proposed Action Title/Type:

Williams Production RMT Company’s Carr Draw Federal V Addition II Plan of Development (POD) for 8 coal bed natural gas well APD’s and associated infrastructure.

Proposed Well Information:

There are 8 wells proposed within this POD; the wells are vertical bores proposed on an 80 acre spacing pattern with 2 wells per location. Each well will produce from one coal seam, the Big George or the Wall coal seam. Proposed well house dimensions are 6 ft wide x 8 ft length x 6 ft height with the exception of the 21-1BG*/GW wells. The well house color will be determined by the surrounding vegetation, the color will be Covert Green. The proposed wells are located as follows:

	Well Name	Well #	Qtr/Qtr	Sec.	TWP	RNG	Lease #
1	CARR DRAW V ADD 2 CARU	21-1BG*	NENW	1	50N	76W	WYW146290
2	CARR DRAW V ADD 2 CARU	21-1GW	NENW	1	50N	76W	WYW146290
3	CARR DRAW V ADD 2 CARU	34-1BG	SWSE	1	50N	76W	WYW146290
4	CARR DRAW V ADD 2 CARU	34-1GW	SWSE	1	50N	76W	WYW146290
5	CARR DRAW V ADD 2 CARU	32-1GW	SWNE	1	50N	76W	WYW146290
6	CARR DRAW V ADD 2 CARU	32-1BG	SWNE	1	50N	76W	WYW146290
7	CARR DRAW V ADD 2 CARU	12-12BG	SWNW	12	50N	76W	WYW147336
8	CARR DRAW V ADD 2 CARU	12-12GW	SWNW	12	50N	76W	WYW147336

Project History:

The 14 wells proposed in the Carr Draw V Addition II Federal POD and 1 reservoir were originally part of the Carr Draw Federal POD V Addition I approved on 9/29/2006. BLM reviewed the original Carr Draw Federal POD V Addition I submittal and conducted an OIM and onsite of the entire Carr Draw Federal POD V Addition I project area on June 5 and 14-16, 2006. This included the Carr Draw V Addition II Federal POD project area. The resulting Conditions of Approval for the Carr Draw Federal POD V Addition I did not approve the Carr Draw V Addition II Federal POD portion of the Carr Draw Federal POD V Addition I project because it was found to be located within the Fortification Creek elk yearlong range.

The cumulative effects analysis on the Fortification Creek elk herd was completed in September 2007 and is described in the BLM’s 2007 environmental report (BLM 2007). With the cumulative effects analysis completed, Williams requested that the BLM reconsider the 14 deferred wells and one reservoir and outfall. The environmental report (BLM 2007) discussed the importance of security patches to elk, (areas of greater than 250 acres), which provide hiding cover from disturbances such as CBNG development, and identified security habitat southwest of the Carr Draw V Addition II project area. During the Carr Draw V Addition II analysis, it was discovered that six of the proposed wells could impact elk security habitat. These six wells have been removed from the analysis of the Carr Draw V Addition II Federal POD and were analyzed in the Carr Draw III West Federal POD to the south.

These six wells were analyzed and approved with the Carr Draw III West Federal POD on 9/4/2009:

	Well Name	Well #	Qtr/Qtr	Sec.	TWP	RNG	Lease #
1	CARR DRAW V ADD 2 CARU	21-3BG*	NENW	3	50N	76W	WYW135623
2	CARR DRAW V ADD 2 CARU	21-3GW	NENW	3	50N	76W	WYW135623
3	CARR DRAW V ADD 2 CARU	23-2BG	NESW	2	50N	76W	WYW135623
4	CARR DRAW V ADD 2 CARU	23-2GW	SWSE	2	50N	76W	WYW135623
5	CARR DRAW V ADD 2 CARU	41-3GW	NENE	3	50N	76W	WYW135623
6	CARR DRAW V ADD 2 CARU	41-3BG	NENE	3	50N	76W	WYW135623

Project Description:

The proposed action involves the following:

- The operator plans to drill the wells into the Wall coal zone first and drill to the Big George coal zone if the thickness of the coal is such that it is economically feasible to produce the gas resource.
- A Water Management Plan (WMP) that involves the following infrastructure and strategy: Water produced from the proposed Federal and Fee wells located within the Carr Draw V Addition II POD (CDVAII) will be managed within a common pipeline system and will also be incorporated into the approved Carr Draw Federal POD V (CDV) and Carr Draw V Addition I (CDVAI) projects’ water management infrastructure, approved by BLM on October 7, 2005 and September 29, 2006.

2.1. Changes as a result of the on-sites

At the on-site, all areas of proposed surface disturbance were inspected to insure the project would meet BLM multiple use objectives to conserve natural resources while allowing for the extraction of Federal minerals. In some cases, access roads were re-routed, and well locations, pipelines, discharge points and other water management control structures were moved, modified, mitigated or dropped from further consideration to alleviate environmental impacts. Alternatives to different aspects of the proposed action are considered and applied as pre-approval changes, site specific mitigation and/or Conditions of

Approval (COAs), if they will alleviate environmental effects of the operator’s proposal. The specific changes identified for the Carr Draw V Addition II Federal POD are listed below.

2.2. Changes agreed to at the onsite

The specific changes identified for the Carr Draw V Addition II Federal POD are listed below:

Well #	Well Name	Changes agreed to at the onsite.
1	21-1BG*/GW	There is a steep drainage to the south side of the well location. A 20' foot buffer will be maintained. A pad built to fit the topography will be used to mitigate for the drainage to the south. The pad will have approximately 2'-3' foot of cut and approximately 8' foot of fill. Wells were shifted 30' to the NE to help maintain the 20' foot buffer. A short frost box will be used to further mitigate for view-shed. Moved the main corridor south off the existing two-track approximately 100 yards for a length of approximately 400 yards. The road move was based on safety concerns, due to the proximity to the existing power lines as well as slope. A reclamation plan will be submitted to reclaim the un-used portion of the existing road. Furthermore, the proposed portion of road east of the well that encompasses a stretch of approximately 500 yards will be shifted south of the proposed portion 50 yards and will be placed in the transition zone of the sage/ grass. This portion will need to be fully engineered due to slope, side hill, and length.
2	34-1BG/GW	The location will require a pad due to a cross slope of 10-11%, and there will be approximately 11' foot of cut. The pad will be built to best fit the topography. The south end of the pad will have the corners rounded and brought in. The pad is placed in sagebrush due to the proximity to an un-committed tract. The main corridor prior to the well access road will require engineering on the two knobs prior to the 34-1 turnoff. This is attributed to slopes of 14-14.5% and site visibility concerns. The remainder of the access will consist of improved template design.
3	32-1BG/GW	The location will need a pad due to the cross slope (10-12%). The pad will be made to fit the topography and the corners will be rounded in. The trees to the north and east will serve as the outside edge of disturbance for the well location. The access road off of the main corridor is a short spur. The main corridor going to the well will require an improved template design road.
4	12-12BG/GW	Moved the wells 50 yards to the east out of grass to the ridge top next to an existing two-track. The move eliminated the need for a pad and additional road. The location will require a slot for the pad and the frac tanks (20'x60' feet).The road to the well will need to be an improved template design with spot upgrade.
Impoundment	Hayden 12-1	The impoundment is dropped from the project do to sandstone geology located on both sides of the drainage where the embankment would key into. In addition, there is not a need for the impoundment due to all the existing infrastructure in the project area that can be utilized.

2.3. Description of Mitigation Measures (applied as Conditions of Approval):

The operator is responsible for the COAs attached to this EA and will be issued an Incident of Non-Compliance if found to be in violation of any COA.

3. Programmatic and Site specific mitigation measures, Alt. C

3.1. Programmatic mitigation measures identified in the PRB FEIS ROD

Programmatic mitigation measures are those, determined through analysis, which may be appropriate to apply at the time of APD approval if site specific conditions warrant. These mitigation measures can be applied by BLM, as determined necessary at the site-specific NEPA APD stage, as COAs and will be in addition to stipulations applied at the time of lease issuance and any standard COA.

3.1.1. Water Management

1. Channel Crossings:
 - a) Channel crossings by road and pipelines will be constructed perpendicular to flow. Culverts will be installed at appropriate locations for streams and channels crossed by roads as specified in the BLM Manual 9112-Bridges and Major Culverts and Manual 9113-Roads. Streams will be crossed perpendicular to flow, where possible, and all stream crossing structures will be designed to carry the 25-year discharge event or other capacities as directed by the BLM.
 - b) Channel crossings by pipelines will be constructed so that the pipe is buried at least four feet below the channel bottom.
2. Low water crossings will be constructed at original streambed elevation in a manner that will prevent any blockage or restriction of the existing channel. Material removed will be stockpiled for use in reclamation of the crossings.

3.1.2. Wildlife

1. For any surface-disturbing activities proposed in sagebrush shrublands, the Companies will conduct clearance surveys for sage grouse breeding activity during the sage grouse's breeding season before initiating the activities. The surveys must encompass all sagebrush shrublands within 0.5 mile of the proposed activities.
2. Power poles within 0.5 mile of any sage-grouse breeding ground will be raptor-proofed to prevent raptors from perching on the poles.

3.1.2.1 Threatened, Endangered, or Sensitive Species

3.1.2.1.1 Bald Eagle

1. Special habitats for raptors, including wintering bald eagles, will be identified and considered during the review of the Sundry Notices.

3.1.3. Air Quality

1. During construction, emissions of particulate matter from well pad and resource road construction will be minimized by application of water, or other dust suppressants, with at least 50 percent control efficiency. Roads and well locations constructed on soils susceptible to wind erosion could be appropriately surfaced or otherwise stabilized to reduce the amount of fugitive dust generated by traffic or other activities, and dust inhibitors (surfacing materials, non-saline dust suppressants, and water) could be used as necessary on unpaved collector, local and resource roads that present a fugitive dust problem. The use of chemical dust suppressants on BLM surface will require prior approval from the BLM authorized officer.

3.2. Site Specific Conditions of Approval, Alternative C

3.2.1. Surface Use

1. Approval of this project does not grant authority to use off lease Federal lands. No surface disturbing activity, or use of off-lease federal lands, is allowed on affected leases until right-of-way grants become effective, which is the date signed by the authorized officer.
2. All permanent above-ground structures (e.g., production equipment, tanks, etc.) not subject to safety requirements will be painted to blend with the natural color of the landscape. The paint used will be a color which simulates "Standard Environmental Colors." The color selected for the Carr Draw V Addition II Federal POD is Covert Green.
3. Due to erosive soils, and cut and fill amounts, a 30 day stabilization COA will apply to the well pad for the following locations: 21-1BG*/GW, 34-1BG/GW, and 32-1BG/G. Construction for these locations will be completed no later than 30 days prior to the start of sage-grouse timing limitations.
4. The 21-1BG*/GW location will utilize a short frost box to further mitigate the view-shed.
5. For the 21-1 BG*/GW well, the operator will be required to reclaim any un-used portion of the existing road that will not be used to access the well. A reclamation plan will be submitted and approved by the BLM authorized officer prior to construction.
6. For 32-1BG/GW location the operator will utilize the trees to the north and east as the outside edge of disturbance for the well location.
7. The operator will be required to monitor and record the frequency of site visits to individual wells and facilities for the first six months of production immediately following construction of the wells and facilities. These reports will be submitted by the operator at the end of each month to the BLM BFO. The monthly reports will include: The reason for the well visit, any problems identified, any repairs or actions made during the well visits, the date, time, and duration of the well visit. Actions that are covered under 43 CFR 3162.3-2 (a) Subsequent well operations, as they will be submitted through sundry. At the end of the six month reporting period the operator will submit a travel plan based on the well reports to be approved by the BLM BFO.
8. The operator will seed the Carr Draw V Addition II Federal POD with the seed mixes identified within the Carr Draw Federal POD III West Reclamation Management Plan. Seed Mix A, B, or C will be used depending on the site specific soil type, identified in attachment A and B within the Carr Draw V Addition II Federal POD Interim Reclamation Management Plan.

3.2.2. Wildlife

Blowout penstemon

1. *Prior to* commencement of surface disturbing activities within the project area, a blowout penstemon habitat assessment survey will be conducted. All survey results must be submitted in writing to the BFO and approved prior to initiation of surface disturbing activities.

Big Game

1. No surface disturbing activity shall occur within identified elk crucial winter range from November 15 to April 30. This timing limitation will affect the following:

Township/Range	Section	Wells and Infrastructure
T50N/R76W	2	All associated infrastructure within the SENW of this section.
T50N/R76W	3	All associated infrastructure within this ENTIRE section.

2. No surface disturbing activity shall occur within identified elk calving range from May 1 to June 30. This timing limitation will affect the following:

Township/Range	Section	Wells and Infrastructure
T50N/ R76W	2	All associated infrastructure in the SW, SENW, SWNW, and SWSE of this section.
T50N/R76W	3	All associated infrastructure within this ENTIRE section.
T50N/R76W	11	All associated infrastructure within this ENTIRE section.

3. The operator will provide BLM with a proposed work schedule at the pre-construction meeting and a work summary report, due by the 12th of each month. The report shall summarize the work activities from the previous month, what activities were conducted, where the work was conducted, when the work was conducted, and any elk observations shall be recorded. The report shall also include the proposed activity schedule for the next month. The summary report shall be compared with the elk monitoring data to evaluate cause and affect relationships.

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:

TOWNSHIP/RANGE	SECTION	WELLS AND INFRASTRUCTURE
T50N/R76W	1	Well locations: 21-1-5076 and 32-1-5076 All associated infrastructure in the NE and NWSE of this section.

- 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 Buffalo BLM 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 (e.g., well drilling or pipeline installation) across the entire POD for as long as the POD is under construction. Once construction of the POD has ceased, nest occupancy and productivity checks shall continue for the first five years on all nests that are within a 0.5 mile of locations where any surface-disturbing activities took place. Productivity checks shall be completed only on those nests that were verified to be occupied during the initial occupancy check of that year. The productivity checks shall be conducted no earlier than June 1 or later than June 30, and any evidence of nesting success or production shall be recorded. Survey results will be submitted to a Buffalo BLM biologist in writing no later than July 31 of each survey year. In 2009, this applies to the nest(s) listed in Table 3.2 of the EA and is subject to change each year after that, pending surveys.
2. If an undocumented raptor nest is located during project construction or operation, the Buffalo Field Office (307-684-1100) shall be notified within 24 hours.

3. Well metering, maintenance and other site visits within 0.5 miles of raptor nests should be minimized as much as possible during the breeding season (February 1 – July 31).

Sage Grouse

The following conditions will alleviate impacts to sage-grouse:

- a. No surface disturbing activities are permitted from March 1 to June 15. This condition will be implemented on an annual basis for the life of the project. This condition affects the ENTIRE project area.
- b. A sage-grouse survey will be conducted by a biologist following the most current WGFD protocol. All survey results shall be submitted in writing to a Buffalo BLM biologist and approved prior to surface disturbing activities.
- c. Maximum design speed on all operator-constructed and maintained roads (except county roads) will not exceed 25 miles per hour

Alternative D-Sage-Grouse Emphasis

The specific changes identified for the Carr Draw V Addition II Federal POD, Alternative D, are listed below:

1. Bury all existing and proposed power that will service the proposed action.
2. Limit production visits to once per month.
3. No surface disturbing or disruptive activity (to include disruptive maintenance activities such as a “work over rig”) from March 1 to June 15 for the life of the project.
4. Reclamation activities, including seeding will take place in the fall.
5. No surface use will be permitted within the 0.25 mile CSU for the Fortification lek.

Programmatic and Site specific mitigation measures

All programmatic and site specific measures from Alternative C apply.

Alternatives considered but not analyzed in detail

There were no additional alternatives considered but not analyzed in detail in this proposed action.

APPENDIX B
Bureau of Land Management Wyoming Buffalo Field Office
Guidance for general management actions during BFO
Resource Management Plan Revision
as of August 13, 2008

Lands shown on the attached map in white will be subject to the existing decisions from the 1985 RMP (as amended) and the 2003 Environmental Impact Statement/Plan Amendment Record of Decision for the Powder River Basin. Areas that are shown in blue will be managed according to these same planning documents as well as the management actions listed below.

The additional management actions were designed in accordance with the 2003 Record of Decision which states, in part, "Land use plan monitoring will be conducted by BLM...Information gathered from this monitoring will guide mid-course corrections in adapting to the inevitable changes that will occur because of new information."

Fluid Minerals

- Processing of new proposals will be considered on a case-by-case basis.
- Efforts will be made to assure that the impacts of surface disturbing projects will be consistent with a well pad density of 640 acres.
- Lease suspension requests will be processed in accordance with current regulations and policy.

Solid Minerals

- Processing of new proposals will be considered on a case-by-case basis.
- Vegetation Management**
- Current and proposed pesticide use proposals for weed control will be reviewed on a case-by-case basis.
 - Consideration of new proposals for vegetation treatments other than weed control may be considered on a case-by-case basis.

Fire Suppression

- The national strategy for fire suppression in sage-grouse habitat will be applied.
- Renewed emphasis on integration of resource advisors in fire suppression efforts.

Recreation

- Renewals for existing permitted actions will be allowed.
- New proposals for permitted activities will be considered on a case-by-case basis.
- New proposals for recreational facilities will be considered on a case-by-case basis.

Wildlife

- Approved habitat improvements and maintenance of existing improvements will be allowed.
- New proposals for habitat improvement projects will be considered on a case by case basis.

Rangeland Management

- Grazing use will continue in accordance with the grazing regulations.
- New proposals for range improvements or treatments will be considered on a case-by-case basis.

Realty

- Processing of new applications will be considered on a case-by-case basis. Changes to existing Terms & Conditions will be considered on a case-by-case basis.

When considering these general management actions on a case-by-case basis consideration will be given to maintaining a viable population of sage-grouse and associated habitat needs. The proponent will be asked to demonstrate that the proposal can be managed in a manner that effectively conserves sage-grouse habitats affected by the proposal.

BLM will work with industry to include measurable conservation objectives for use in project planning. Resources such as, but not limited to, the Local Sage-Grouse Working Group Plan may be used to develop these objectives. Each proposal will be evaluated by BLM in coordination with the Wyoming Game & Fish Department to ensure that BLM maintains habitat connectivity by addressing habitat loss, degradation and fragmentation.

Criteria that will be used when reviewing proposed activities include, but are not limited to the following:

- Consolidation of infrastructure to lessen habitat fragmentation, degradation and loss.
- Effective conservation of sage-grouse seasonal habitats and habitat connectivity.
- Measurable conservation objectives.
- Consideration of measures contained in the Local Working Group Conservation Plan.

