DECISION RECORD
Peak Powder River Resources, L.L.C. (Peak), Roush Federal 2 Plan of Development (POD)
Categorical Exclusion 3 (CX3), WY-070-390CX3-15-276 to -299
Bureau of Land Management, Buffalo Field Office, Wyoming

DECISION. The BLM approves Peak Powder River Resources, L.L.C. (Peak), Roush Federal 2 Plan of Development (POD) oil and gas well applications for permit to drill (APD), and construct their associated infrastructure as described in the CX3 analysis, WY-070-390CX3-15-276 to -299, all of which the BLM incorporates here by reference.

Compliance. This decision complies with or supports:

- Federal Land Policy and Management Act of 1976 (FLPMA) (43 USC 1701).
- National Environmental Policy Act of 1969 (NEPA) (42 USC 4321).
- National Historic Preservation Act of 1966 (16 USC 470).
- Endangered Species Act of 1974 (16 USC 1531).
- Powder River Basin Oil and Gas Project Final Environmental Impact Statement (FEIS), 2003.
- Buffalo Resource Management Plan (RMP) 1985, Amendments 2001, 2003, 2011.
- Greater Sage-Grouse Habitat Management Policy on Wyoming BLM Administered Public Lands (WY-IM-2012-019) and Greater Sage-Grouse Interim Management Policies and Procedures (WO-IM-2012-043).

A summary of the details of the approval follows. The CX3 analysis, WY-070-390CX3-15-276 to -299, includes the project description, including site-specific mitigation measures which are incorporated by reference into this CX3 from earlier analysis. The proposed wells are approximately 15 miles southwest of Wright, Campbell County, Wyoming. The Roush Federal 2 POD proposal has 24 APDs along with associated access road and infrastructure, to develop and produce oil and gas from the Mowery, Niobrara, Shannon, and Turner Formations.

Approvals. BLM approves the following 24 oil APDs and associated infrastructure:

Well Name	Twn	Rng	Sec	Qtr/Qtr	Surface Ownership	Surface Hole Lease	Lateral Lease	Bottom Hole Lease
Roush Fed 1-22MH*	43N	74W	22	SESW	Fee	Fee	Federal	Federal
Roush Fed 1-22NH*								
Roush Fed 1-22TH*								
Roush Fed 2-22MH	43N	74W	22	NENE	Fee	Federal	Federal/Fee	Fee
Roush Fed 2-22NH								
Roush Fed 2-22TH								
Roush Fed 1-23MH*	43N	74W	23	NWNW	Fee	Fee	Fee/Federal	Federal
Roush Fed 1-23NH*								
Roush Fed 1-23TH*								
Roush Fed 2-23MH*	43N	74W	23	NENE	Fee	Fee	Fee/Federal	Federal
Roush Fed 2-23NH*								
Roush Fed 2-23TH*								
Roush Fed 1-27H*	43N	74W	27	NWNW	Fee	Fee	Fee/Federal	Federal
Roush Fed 1-27MH*								
Roush Fed1-27TH*								
Roush Fed 2-27H*	43N	74W	27	NENE	Fee	Fee	Fee/Federal	Federal
Roush Fed 2-27MH*								
Roush Fed 2-27TH*								

Well Name	Twn	Rng	Sec	Qtr/Qtr	Surface Ownership	Surface Hole Lease	Lateral Lease	Bottom Hole Lease
Roush Fed 1-28H	43N	74W	28	SWSW	Fee	Federal	Federal	Federal
Roush Fed 1-28MH								
Roush Fed 1-28NH								
Roush Fed 1-28TH								
Atwood Laur Fed 2-35MH	43N	74W	35	SESE	Fee	Federal	Federal	Fee
Atwood Laur Fed 2-35TH								

Limitations. There are no denials or deferrals. Also see the conditions of approval (COAs).

THE FINDING OF NO SIGNIFICANT IMPACT (FONSI). Congress, the Department of Interior and BLM affirmed there was no significant impact of a like-structured project when they created this CX3 and its limiting parameters. Thus a FONSI and an EIS are not required.

COMMENT OR NEW INFORMATION SUMMARY. BLM posted the APDs for 30 days and received no public comments. There are no new policies or information received post analysis that affects this project.

DECISION RATIONALE. BLM bases the decision authorizing the selected project on:

1. BLM and Peak included design features and mitigation measures (conditions of approval (COAs)) to reduce environmental impacts while meeting the BLM's need. For a complete description of all site-specific COAs, see the COAs.
   a. The impact of this development cumulatively contributes to the potential for local extirpation of the Greater Sage Grouse (GSG) yet its effect is acceptable because it is outside priority habitats and is within the parameters of the PRB FEIS/ROD and current BLM (WO-IM-2012-043) and Wyoming (WY-IM-2012-019) GSG conservation strategies.
   b. With application of Standard Operating Procedures (SOPs), applied mitigation, Required Design Features, and COAs identified for Greater Sage-Grouse under the proposed action, impacts caused by surface-disturbing and disruptive activities would be minimized.
   c. There are no conflicts anticipated or demonstrated with current uses in the area.
2. The Resource Management Plan (RMP) for the Buffalo Field Office is currently undergoing revision. The Proposed RMP and Environmental Impact Statement were released in May 2015. The proposed action was screened against the Proposed RMP to ensure that the proposed action would not preclude BLM's ability to select any alternative in a ROD. The proposed action was also determined to not be inconsistent with the direction outlined in the RMP's Proposed Alternative.
3. Peak will conduct operations to minimize adverse effects to surface and subsurface resources, prevent unnecessary surface disturbance, and conform with currently available technology and practice.
4. The selected alternative will help meet the nation's energy needs, and help stimulate local economies by maintaining workforce stability.
5. The operator committed to:
   - Comply with the approved APDs, applicable laws, regulations, orders, and notices to lessees.
   - Obtain necessary permits from agencies.
   - Offer water well agreements to the owners of record for permitted wells.
   - Incorporate several measures to alleviate resource impacts into their submitted surface use plan and drilling plan.
6. The operator certified it has surface access agreements.
7. The project lacks wilderness characteristics. A wilderness characteristics inventory was completed in 2013; no lands with wilderness characteristics were identified outside the Big Horn Mountains. The inventory is available at: http://www.blm.gov/wy/st/en/programs/Planning/rmps/buffalo/docs.html.

8. This decision does not foreclose the lessee or operator to propose a new or supplementary plan for developing the federal oil and gas lease(s) in this project area, including submission of additional APDs to drain minerals in accord with lease rights and law. This decision does not foreclose the lessee or operator to propose using external pumping units via a sundry application process.
9. This approval is subject to adherence with all of the operating plans, design features, and mitigation measures contained in the master surface use plan of operations, drilling plan, water management plan, and information in individual APDs.

ADMINISTRATIVE REVIEW AND APPEAL. This decision is subject to administrative review according to 43 CFR 3165. Request for administrative review of this decision must include information required under 43 CFR 3165.3(b) (State Director Review), including all supporting documentation. 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. Parties 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: /s/ Duane W. Spencer Date: September 18, 2015

Categorical Exclusion 3 (CX3), WY-070-390CX3-15-276 to -299
Section 390, Energy Policy Act of 2005
Peak Powder River Resources, L.L.C. (Peak) Roush Federal 2 Plan of Development (POD)
Bureau of Land Management, Buffalo Field Office, Wyoming

Description of the Proposed Action.
Peak Powder River Resources (Peak) submitted the Roush Federal 2 POD with 24 applications for permit to drill (APDs). BLM incorporates the APDs here by reference; see the administrative record (AR). Peak proposes drilling the horizontal oil and gas wells and constructing supporting infrastructure at the locations in Table 1.1. The proposal is to explore for, and possibly develop oil and gas from the Mowry, Niobrara, Shannon, and Turner Formations, at depths found in the AR.

Table 1.1. Proposed Wells

Well Name	Twn	Rng	Sec	Qtr/Qtr	Surface Ownership	Surface Hole Lease	Lateral Lease	Bottom Hole Lease
Roush Fed 1-22MH*	43N	74W	22	SESW	Fee	Fee	Federal	Federal
Roush Fed 1-22NH*								
Roush Fed 1-22TH*								
Roush Fed 2-22MH	43N	74W	22	NENE	Fee	Federal	Federal/Fee	Fee
Roush Fed 2-22NH								
Roush Fed 2-22TH								
Roush Fed 1-23MH*	43N	74W	23	NWNW	Fee	Fee	Fee/Federal	Federal
Roush Fed 1-23NH*								
Roush Fed 1-23TH*								
Roush Fed 2-23MH*	43N	74W	23	NENE	Fee	Fee	Fee/Federal	Federal
Roush Fed 2-23NH*								
Roush Fed 2-23TH*								
Roush Fed 1-27H*	43N	74W	27	NWNW	Fee	Fee	Fee/Federal	Federal
Roush Fed 1-27MH*								
Roush Fed1-27TH*								
Roush Fed 2-27H*	43N	74W	27	NENE	Fee	Fee	Fee/Federal	Federal
Roush Fed 2-27MH*								
Roush Fed 2-27TH*								
Roush Fed 1-28H	43N	74W	28	SWSW	Fee	Federal	Federal	Federal
Roush Fed 1-28MH								
Roush Fed 1-28NH								
Roush Fed 1-28TH								
Atwood Laur Fed 2-35MH	43N	74W	35	SESE	Fee	Federal	Federal	Fee
Atwood Laur Fed 2-35TH								

*BLM's Instruction Memorandum No. 2009-078 entitled Processing Oil and Gas Applications for Permit to Drill for Directional Drilling into Federal Mineral Estate from Multiple-Well Pads on Non-Federal Surface and Mineral Estate Locations will apply to the proposal (COA's are only recommended)

The proposed horizontal oil and gas wells are in the Roush Federal 2 POD boundaries, which includes an area of 5,645 acres. The project area is approximately 15 miles southwest of Wright, Campbell County, Wyoming. Project elevations range from 5,151 to 5,288 feet. The topography has gently sloped draws rising to mixed sagebrush and grassland uplands. Ephemeral tributaries of All Night Creek and Mud Spring Creek in the Belle Fourche River drainage drain the project area. The climate in the area is semi-arid, averaging 10-14 inches of precipitation annually, about 60% of which occurs between April and September. The jurisdiction for the well is listed in Table 1.1. The AR is available for public review at the Buffalo Field Office (BFO).

Table 1.2. Associated CX3 Numbers for the Roush 2 POD.

Well Name	Twn	Rng	Sec	CX #
Roush Fed 1-22MH	43N	74W	22	WY-070-390CX3-15-276
Roush Fed 1-22NH				WY-070-390CX3-15-277
Roush Fed 1-22TH				WY-070-390CX3-15-278
Roush Fed 2-22MH	43N	74W	22	WY-070-390CX3-15-279
Roush Fed 2-22NH				WY-070-390CX3-15-280
Roush Fed 2-22TH				WY-070-390CX3-15-281
Roush Fed 1-23MH	43N	74W	23	WY-070-390CX3-15-282
Roush Fed 1-23NH				WY-070-390CX3-15-283
Roush Fed 1-23TH				WY-070-390CX3-15-284
Roush Fed 2-23MH	43N	74W	23	WY-070-390CX3-15-285
Roush Fed 2-23NH				WY-070-390CX3-15-286
Roush Fed 2-23TH				WY-070-390CX3-15-287
Roush Fed 1-27H	43N	74W	27	WY-070-390CX3-15-288
Roush Fed 1-27MH				WY-070-390CX3-15-289
Roush Fed1-27TH				WY-070-390CX3-15-290
Roush Fed 2-27H	43N	74W	27	WY-070-390CX3-15-291
Roush Fed 2-27MH				WY-070-390CX3-15-292
Roush Fed 2-27TH				WY-070-390CX3-15-293
Roush Fed 1-28H	43N	74W	28	WY-070-390CX3-15-294
Roush Fed 1-28MH				WY-070-390CX3-15-295
Roush Fed 1-28NH				WY-070-390CX3-15-296
Roush Fed 1-28TH				WY-070-390CX3-15-297
Atwood Laur Fed 2-35MH	43N	74W	35	WY-070-390CX3-15-298
Atwood Laur Fed 2-35TH				WY-070-390CX3-15-299

The BLM's need for this project is to determine whether, and if so, and under what conditions to support the Buffalo Resource Management Plan's (RMP) goals, objectives, and management actions with permitting the operator's exercising of conditional lease rights to develop federal fluid minerals. APD information, which BLM incorporates here by reference, is an integral part of this CX. Conditional fluid mineral development supports the RMP, the Mineral Leasing Act of 1920, the Federal Land Policy Management Act (FLPMA), and other laws and regulations.

Peak submitted a notice of staking (NOS) on October 30, 2014, to the BFO. Peak and BFO completed onsite inspections on February 4, 2015 and February 24, 2015. Peak filed applications for permit to drill (APD) which BLM received on May 21, 2015, incorporated here by reference. The onsite evaluated the proposal and modified it to mitigate environmental impacts. The BLM sent a post-onsite deficiency letter to Peak on June 15, 2015 and deficiency responses were received on July 28, 2015. After subsequent correspondence, the BLM considered the APDs complete on August 10, 2015.

Drilling, Construction & Production design features include:

Access Roads and Utilities

- A road network will consist of existing improved all-weather roads; existing primitive (2-track) roads to be upgraded to all-weather improved roads; and improved well access roads. Roads will be maintained in a condition the same as, or better than before operations began. Disturbances are listed in Table 1.3.
- Proposed roads will be built with a 20 foot running surface.
- A detailed description of turnouts, culverts, low water crossings, cattle guards, and engineered designs are listed in the surface use plan (SUP) and Map B (within the APD package, AR).
- Existing and proposed above ground power lines will be used if the wells become producers. Power will be provided by third party contactor. Lengths and disturbances are listed in Table 1.3.

- Average daily traffic (ADT) is outlined in Table 1.4.
- Drilling and completion water will be hauled onto the locations by trucks and placed in Poseidon tanks.

Well Locations

- Cut and fill slopes of the well pads will be constructed with slopes of 2:1 and 3:1, and reduced as much as possible during interim reclamation.
- Well pad disturbances are listed in Table 1.3.
- Multiple wells are proposed on 8 well pads, for a total of 24 wells. If the wells become producers, facilities to be placed on the well pads are outlined in the SUP.
- Poseidon tanks will be used for water storage during drilling and completion operations.
- The wells will be drilled using a semi-closed loop system. Cuttings will be contained in lined cuttings pits, constructed on the well locations.
- All well pads will be fenced around the extent of the disturbance and will be set back, to allow adequate space for equipment to operate, during construction and reclamation activities.
- No off-site ancillary facilities are planned for this project. No staging areas, man camps/housing facilities are anticipated to be used off-site. Working trailers and sleeping trailers will be placed on the well pad during the drilling and completion of the well.

Drilling and Completion Operations

- Drilling and construction is year-round in the region. Weather may cause delays, but delays rarely last multiple weeks. Timing limitations in the form of COAs and/or agreements with surface owners may impose longer temporal restrictions. The operator anticipates that estimated drilling duration per well will be 30 days.
- Hydraulic fracturing (HF) operations are planned as a 'plug and perf' operation done in stages. The process is anticipated to require approximately 20 days to complete. All water used for HF will come from water supplies listed in the SUP. All fresh water will be contained in Poseidon tanks and no surface pits will be used to hold this water. No additional well pad disturbance is anticipated for HF operations. Completion flowback water will be held in tanks on location and trucked offsite to a disposal facility permitted by Wyoming Department of Environmental Quality (WDEQ).
- Flowback equipment and tanks are spotted 2-3 days before pumping. Sand silos are spotted and filled 2-3 days prior to pumping.
- Next pump trucks and chemical mixing equipment arrives and, when ready, operations continue for 36-48 hours or 3-5 days depending on the type of stimulation stage isolation (i.e. packers/sleeves or plug/perf respectively).
- Sand is continuously brought on site in semi-truck loads during pumping. It is necessary to have a safe turning radius available for these trucks. Pumping water may require heating in the winter months.

All locations require extensive earthwork for creating sufficient area to complete the wells. Peak will then reduce the initial well site with interim reclamation. Individual well designs are in the individual APDs. While these 8 pads are larger than most to date they are more similar than different in that the 8 pads host multiple wells; their construction surface disturbance footprint is larger than their operational footprint; their construction footprint is followed with interim reclamation; and the totality of the pads contribution to surface disturbance in the Upper Powder River remains well within the surface disturbance envisioned and analyzed in the PRB FEIS. The proposed size is necessary to safely accommodate the equipment necessary for effective well completions. For a detailed description of design features and construction practices associated with the proposed project, refer to the surface use plan (SUP) and drilling plan included with the APDs. Also see the subject APD for maps showing the proposed well location and associated facilities described above. Total surface disturbance for the proposal is 72.45 acres.

Table 1.3. Disturbance Summary Roush Federal 2 POD:

Facility	Number or Miles	Factor	Disturbance	Interim Dist.
Proposed Improved Access (New Construction	7,117 ft x 70 ft	498,190 sq ft	11.43 acres	3.27 acres
Existing Unimproved Access to be Upgraded (pre-existing 12 ft width)	1,734 ft x 70 ft	121,380 sq ft	2.79 acres	0.80 acres
Turnouts (18)	200 ft x 10 ft	2,000 sq ft	0 .83 acres	0.83 acres
Proposed Overhead Power	20,095 ft x 30 ft	602,850 ft	13.84 acres	13.84 acres
Well Pads (8)	Varies	Varies	43.56 acres	17.60 acres
Total Surface Disturbance			**72.45acres**	**36.34 acres**

Table 1.4. Average Daily Traffic

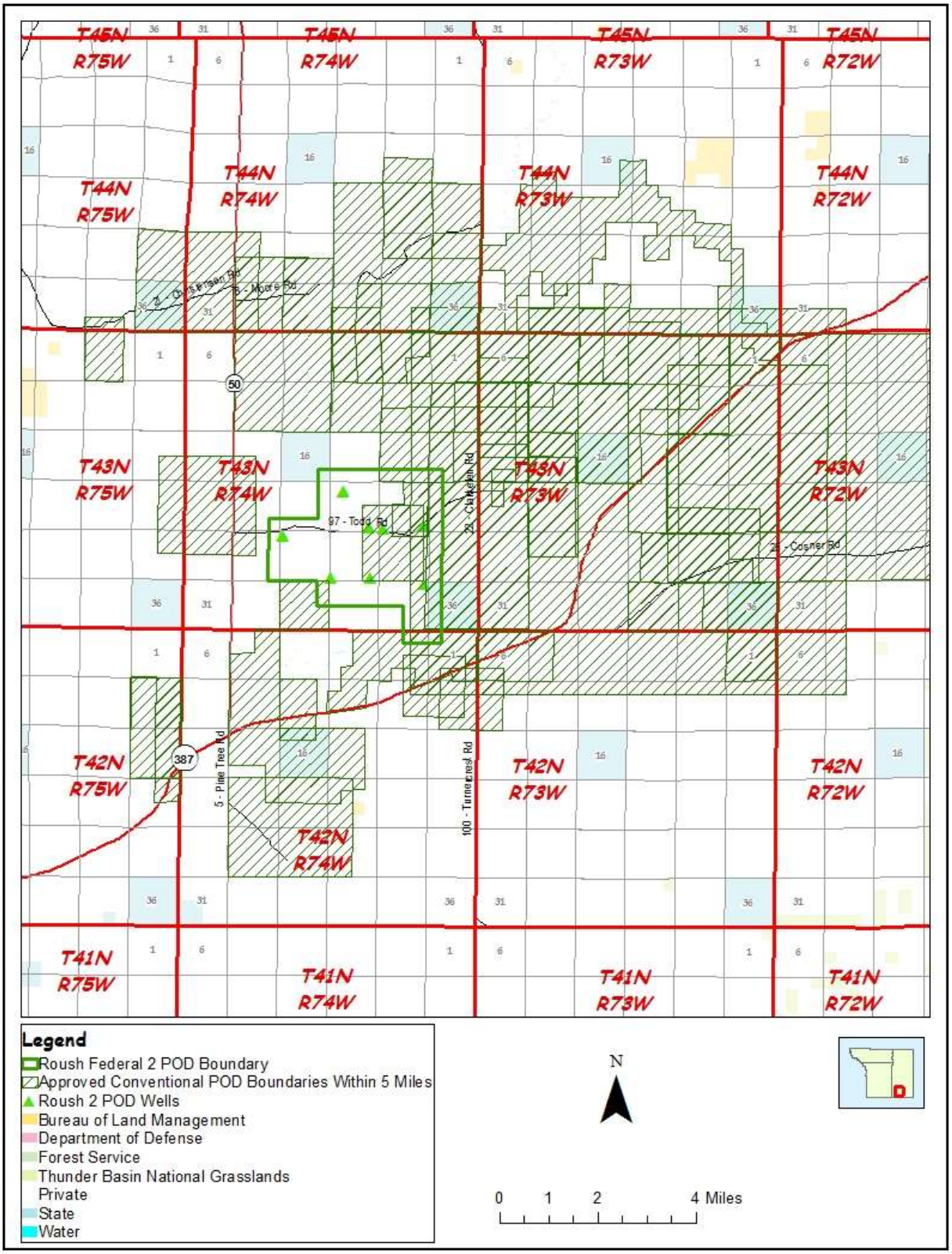
Activity	Duration	Large Trucks	Personal Pickups
Rig Move	5 Days (per well)	30	15
Drilling	2-4 weeks (per well)	15	10
Completion	1-3 weeks (per well)	6	6
Production	Life of wells	1-2	1

Off Well Pad

Peak will install a buried 3 to 6 inch high-density polyethylene (HDPE) gas gathering pipeline of at least 125 psi rating from each producing well to transport natural gas from the well to a gas gathering trunkline and on to a compressor facility. Gas gathering trunklines will typically consist of 6 to 24 inch HDPE buried lines of at least 125 psi rating. Peak will install a buried 2 to 6 inch corrosion resistant water gathering pipeline of at least 150 psi rating from the well to transport water to a water gathering trunkline and to an approved water disposal well in the area. Water gathering trunklines will typically consist of 6 to 12 inch corrosion resistant buried lines of at least 150 psi rating.

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

The Energy Policy Act of 2005, Section 390(a) subjects oil or gas exploration or development to a rebuttable presumption that the use of a categorical exclusion under the National Environmental Policy Act (NEPA) applies. Thus BLM must use an Energy Policy Act, Section 390(b), CX unless BLM rebuts the presumption. This CX analysis is NEPA compliance categorically excluded from an EA or EIS or their analysis; it is not an exclusion from all analysis. (40 CFR 1508.4 and BLM H-1790, p. 17.) The proposal conforms with the terms and conditions of the approved Resource Management Plan (RMP) for the public lands administered by the BLM, BFO, 1985; its amendments (2001, 2003, 2011) as required by 43 CFR 1610.5, 40 CFR 1508.4, and 43 CFR 46.215. BLM finds that the conditions and environmental effects found in the senior EA and PRB FEIS remain valid. 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.*


T45N R75W
T45N R74W
T45N R73W
T45N R72W
T44N R75W
T44N R74W
T44N R73W
T44N R72W
T43N R75W
T43N R74W
T43N R73W
T43N R72W
T42N R75W
T42N R74W
T42N R73W
T42N R72W
T41N R75W
T41N R74W
T41N R73W
T41N R72W
50
387
97 - Todd Rd
21 - Clarkelyn Rd
100 - Turner Crest Rd
5 - Pine Tree Rd
Legend
Roush Federal 2 POD Boundary
Approved Conventional POD Boundaries Within 5 Miles
Roush 2 POD Wells
Bureau of Land Management
Department of Defense
Forest Service
Thunder Basin National Grasslands
Private
State
Water
N
0 1 2 4 Miles

BLM has 3 requirements to use a Section 390 CX3, (BLM H-1790, Appendix 2, #3, p. 143):
1) The proposed APD is in a developed oil or gas field (any field with a completed confirmation well).

Table 1.5 is a list of NEPA analysis that are within or adjacent to the Roush Federal 2 POD project area. This information shows that BLM conducted analysis and BLM incorporates these here by reference.

Table 1.5. Overlapping NEPA Analyses by Decision Date

Operator	POD / Well Name	NEPA Analysis #	#/ Type Wells	Mo/Yr
Ballard	Leavitt Trust 1	WY-070-EA15-231	2/oil	06/2015
Yates	Justice 1H and Baker 9H	WY-070-EA15-7	2/oil	12/2014
Moncrief	Reno Fed 12-1TH/12-2TH	WY-070-EA14-295	2/oil	12/2014
Peak	Atwood Laur Fed 1	WY-070-EA14-278	6/oil	11/2014
Ballard	Roush 44-24TH	WY-070-EA14-188	1/oil	11/2014
Yates	Baker 8H et. al.	WY-070-EA14-224	5/oil	5/2014
Yates	Groves 53H	WY-070-EA14-194	4/oil	3/2014
Yates	Raging Bull 2H	WY-070-EA12-207	1/oil	9/2012

See also: SDR WY-2013-005, particularly noting pp. 2-3, incorporating the entirety here by reference.

2) Reasonably foreseeable activity (RFA) is found in the Atwood Laur POD Environmental Assessment (EA), WY-070-EA14-278, 2014. BLM also notes from Table 1.5, above, that of the 113 analyzed APDs, only 12 are drilled; thus 111 undrilled, analyzed APDs contribute to the available RFA for this CX3 analysis. The RFA for this analysis area includes oil/gas exploration on 640 acre, and possible 320 acre spacing for horizontal wells, and 40 acre spacing for vertical wells. The project analysis area is the area within 5 miles of the proposed wells and includes only those federal projects approved within 5 years, as of September 2015.

3) The tiered NEPA documents were finalized or supplemented within 5 years of spudding (drilling) the proposed wells. This Roush Federal 2 POD CX3 tiers to the NEPA analyses in the Baker 8H et.al. EA, WY-070-EA14-224 and the Atwood Laura EA, WY-070-EA14-278.

In summary, the analysis in Table 1.5, analyzed in detail the anticipated direct, indirect, residual, and cumulative effects that would result from the approval of these APDs and associated support structure in the Roush Federal 2 POD is similar to both the qualitative and quantitative analysis in the Table 1.5 tiered-to and incorporated NEPA analyses. The BLM reviewed the analyses and found that the analyses considered potential environmental effects associated with the proposal at a site specific level.

Plan of Operations.
The proposal conforms to all Bureau standards and incorporates appropriate best management practices, required and designed mitigation measures determined to reduce the effects on the environment. BLM reviewed and approved a surface use plan of operations describing all proposed surface-disturbing activities pursuant to Section 17 of the Mineral Leasing Act, as amended. This CX3 analysis also incorporates and analyzes the implementation of committed mitigation measures contained in the SUP, drilling plan, in addition to the Standard COAs found in the PRB FEIS ROD, Appendix A.

Soils/ Vegetation.
Impacts anticipated occurring and mitigation considered with the implementation of the proposals will be similar to those analyzed in the following EA which is adjacent or overlapping to these proposals, is substantially similar, and is incorporated here by reference: Yates Baker 8H et. al., WY-070-EA14-224, Section 3.2 and 4.2.

Table 1.6. Soils and Ecological Sites on the Roush Federal 2 POD Well Locations.

Pad	% of Pad	Map Unit	Ecological Site
1-22	59	Cushman-Cambria Loams, 6-15% slope	Loamy (10-14NP)
	41	Forkwood-Cambria Loams, 0-6% slope	
2-22	1	Cambria-Kishona-Zigweid Loams, 0-6% slope	Loamy (10-14NP)
	99	Forkwood-Cushman Loams, 0-6% slope	
1-23	53	Cambria-Kishona-Zigweid Loams, 0-6% slope	Loamy (10-14NP)
	47	Cushman-Theedle Loams, 0-6% slope	
2-23	100	Forkwood-Cushman Loams, 0-6% slope	Loamy (10-14NP)
1-27	76	Forkwood-Cushman Loams, 0-6% slope	Loamy (10-14NP)
	24	Cushman-Theedle Loams, 0-6% slope	
2-27	100	Forkwood-Cushman Loams, 0-6% slope	Loamy (10-14NP)
2-28	5	Cambria-Kishona-Zigweid Loams, 6-15% slope	Loamy (10-14NP)
	90	Savageton-Silhouette Clay Loams, 6-16% slope	Clayey (10-14NP)
	5	Ulm-Renohill Clay-loams, 6-15% slope	
2-35	59	Theedle-Kishona Loams, 0-6% slope	Loamy (10-14NP)
	41	Highland-Vonalee Fine sandy loams, 0-6% slope	Sandy (10-14NP)

Water Resources.

The historical use for groundwater in this area was for stock or domestic water. A search of the WSEO Ground Water Rights Database showed 15 registered stock and domestic water wells and 8 monitoring wells within 1 mile of the proposed wells in the project area with depths ranging from 80 to 2,042 feet. For additional information on groundwater, refer to the PRB FEIS, pp. 3-1 to 3-36. Adherence to the drilling COAs, the setting of casing at appropriate depths, following safe remedial procedures in the event of casing failure, and using proper cementing procedures should protect any fresh water aquifers above the target zone. This will ensure that ground water will not be adversely impacted by well drilling and completion operations. The depths to the Fox Hills Formation are listed in Table 1.7. The Fox Hills, the deepest penetrated fresh water zone in the PRB lies well above the target formation. The operator will verify that there is competent cement across the aquifer, from 100 feet above to 100 feet below the Fox Hills Formation. This will ensure that ground water will not be adversely impacted by well drilling and completion operations.

Table 1.7. Depth to Fox Hills Formation from the 8 Well Pads

Well Pad and #	Depth to Fox Hills Formation Total Vertical Distance (TVD)
Roush Federal 1-22 Pad	6,809 feet
Roush Federal 2-22 Pad	6,832 feet
Roush Federal 1-23 Pad	6,798 feet
Roush Federal 2-23 Pad	6,791 feet
Roush Federal 1-27 Pad	6,961 feet
Roush Federal 2-27 Pad	6,952 feet
Roush Federal 2-28 Pad	7,026 feet
Atwood Laur 2-35 Pad	6,867 feet

At the time of permitting, the volume of water that will be produced in association with these federal minerals is unknown. The operator will have to produce a well for a time to be able to estimate the water production. In order to comply with the requirements of Onshore Oil and Gas Order #7, Disposal of Produced Water, the operator will submit a Sundry to the BLM within 90 days of first production which includes a representative water analysis as well as the proposal for water management.

Historically, the quality of water produced in association with conventional oil and gas has been such that surface discharge would not be possible without treatment. Initial water production is quite low in most cases. There are three common alternatives for water management: Re-injection, deep disposal or disposal into pits. All alternatives would be protective of groundwater resources when performed in compliance with state and federal regulations.

Other Leasable and Locatable Minerals.
There are a total of 19 individual mining claims located in the same area as these 24 proposed oil wells. The Fort Union and the Wasatch Formations are the most important uranium-bearing formations in the PRB and are less than 800 feet deep. Uranium recovery involves surface disturbance for the construction of surface facilities, roads, well fields, utilities, and pipelines, and includes top soil removal, land grading, and interim reclamation. Presently there is no active uranium development in this immediate area. Direct and indirect effects, cumulative effects, mitigation measures, and residual effects are found in the Peak, Iberlin 1-9H and Iberlin 1-9TH EA, WY-070-EA13-224, pp. 28-29, incorporated here by reference – and BLM anticipates similar effects for this proposal.

Invasive Species.
Impacts anticipated occurring and mitigation considered with the implementation of the proposals will be similar to those analyzed in Baker 8H, WY-070-EA14-224, which is adjacent or overlapping to these proposals, has substantially similar characteristics, and is incorporated here by reference (Baker 8H, WY-070-EA14-224 Section 3.5 and 4.5).

Wildlife.
A BLM wildlife biologist reviewed the proposed APDs and determined that they, combined with the COAs and design features, are: (1) consistent with the PRB FEIS, the Buffalo RMP and the above tiered NEPA analysis; and (2) consistent with the programmatic biological opinion (ES-6-WY-07-F012), from the PRB FEIS. The BLM biologist performed an onsite inspection of the project area on February 5, 2015. The BLM wildlife biologist also consulted databases compiled and managed by BLM BFO wildlife staff, the PRB FEIS, WY Game and Fish Department (WGFD) datasets, and the Wyoming Natural Diversity Database (WYNDD) to evaluate the affected environment for wildlife species that may occur in the area. The proposed wells and infrastructure are a result of attempts by Peak and the BLM to reduce impacts to identified wildlife resources. The affected environment and environmental effects for wildlife are discussed in, and anticipated to be similar to the approved projects in Table 1.5. and are incorporated here by reference.A wildlife report was submitted by the operator which was performed by Grouse Mountain Environmental Consultants (GMEC 2015). Rationale for species not discussed in detail below can be referenced in the administrative record ((T & E and SS Tables (Summary of Threatened and Endangered Species Habitat and Project Effects and Summary of Sensitive Species Habitat and Project Effects)).

Greater Sage-Grouse
Nesting GSG habitat exists within the proposal area. The majority of the sagebrush stands have been fragmented by oil and gas development. The closest GSG lek is the Little Black Butte Lek which is 3.7 miles west of the project area. The affected environment for this proposal is similar to a recent approved project (Sahara POD) BLM analyzed. Therefore, the Lance, Sahara POD EA, WY-070-EA13-72 analysis is incorporated here by reference: Affected Environment (Section 3.7.4.1, p.18-19). Effects (Direct and indirect, Cumulative, Mitigation, and Residual, Section 4.6.4.1, pp. 34-37) to GSG from surface disturbing and disruptive activities associated with development of horizontal oil wells. The BLM IM WY-2012-019 establishes interim management policies for proposed activities on BLM-administered lands, including federal mineral estate, until RMP updates are complete. Because there are no known GSG leks within 2 miles of the Roush 2 project area, no mitigation measures for GSG are included or recommended.

Swift Fox

Fox tracks were observed throughout the project area during the onsite. The landowner verified that swift fox were common and that red fox were no longer observed in the area. Grouse Mountain Environmental Consultants did surveys within 0.25 mile of all proposed disturbances during the swift fox survey protocol window (April 15 and June 15). Several potential den sites were observed but no sign of breeding foxes were observed. To protect active dens a COA will be applied requiring surveys to be completed prior to surface disturbance during the swift fox breeding season.

Raptors

The affected environment for this proposal is similar to a recent approved project (Sahara POD) BLM analyzed. Therefore, the Sahara POD EA, WY-070-EA13-72 analysis is incorporated here by reference: Affected Environment (Section 3.7.2.1, p.15-17). Effects (Direct and indirect, Cumulative, Mitigation, and Residual, Section 4.6.2.1, pp. 28-31) to raptors from surface disturbing and disruptive activities associated with development of horizontal oil wells.

There are two raptor nests within 0.5 miles of the Roush 2 project area. Both were active with Swainson's hawks in the 2015 season. One is not with 0.5 miles of any proposed disturbances. The other is approximately 0.12 miles from where the proposed 1-22 location access takes off of the existing main road and approximately 0.2 miles from the proposed 1-22 well location. To reduce the risk of decreased productivity or nest failure during breeding and nesting season, BFO will typically implement a timing limitation around an active nest as a COA for surface disturbing activities (construction of well pad, associated buried pipelines, and for the associated access road). However, due to the BLM's minimal surface jurisdiction (per BLM IM No. 2009-078) this timing limitation COA will only be recommended by the BLM in order to reduce the possibility that a violation or "take" may occur as defined by and in contravention to the Migratory Bird Treaty Act (MBTA).

This timing restriction, however, will not apply to completion activities or maintenance actions (for example, work over operations). Traffic and construction activities that are not prohibited by the timing limitations may degrade habitat quality sufficiently to render the area unsuitable for some raptors. Timing limitations do nothing to mitigate habitat loss, therefore drilling and construction that takes place outside of nesting season will still result in habitat loss for this species.

Migratory Birds

Impacts to migratory birds will be similar to those described in the Sahara POD EA, WY-070-EA13-72, 2013, Section 4.6.2.2.1, pp. 31-32, incorporated here by reference. Suitable habitat for migratory birds is present throughout the proposal area. A timing limitation (May 1 – July 31) is applied as a condition of approval (COA) for surface disturbing activities (construction of well pad, associated buried pipelines, and for the associated access road). The 1-28 and 2-22 locations and their infrastructure, which are fee/fed locations, will have the timing COA applied to protect nesting migratory birds. Due to the BLM's minimal surface jurisdiction, this timing limitation is only recommended on the 1-22, 1-27, 2-27, 1-23 and 2-23 location by the BLM in order to reduce the possibility that a violation or "take" may occur as defined by and in contravention to the Migratory Bird Treaty Act (MBTA).

Cultural.

In accordance with section 106 of the National Historic Preservation Act, BLM must consider impacts to historic properties (sites that are eligible for or listed on the National Register of Historic Places (NRHP)). For an overview of cultural resources that are generally found within BFO the reader is referred to the *Draft Cultural Class I Regional Overview, Buffalo Field Office* (BLM, 2010). A Class III (intensive) cultural resource inventory (BFO project no. 70150067) was performed in order to locate specific historic properties which may be impacted by the proposed project. The following resources are located in or near the proposed project area.

Cultural Resources Located In or Near the Project Area

Site Number	Site Type	NRHP Eligibility
48CA7185	Historic	NE

BLM policy states that a decision maker's first choice should be avoidance of historic properties (BLM Manual 8140.06(C)). If historic properties cannot be avoided, mitigation measures must be applied to resolve the adverse effect. No historic properties will be impacted by the proposed project. Following the *State Protocol Between the Wyoming Bureau of Land Management State Director and The Wyoming State Historic Preservation Officer*, Section V(E)(iv), the Bureau of Land Management electronically notified the Wyoming State Historic Preservation Officer (SHPO) on 08/19/2015 that no historic properties exist within the area of potential effect (APE). If any cultural values (sites, features or artifacts) are observed during operation, they will be left intact and the Buffalo Field Manager notified. If human remains are noted, the procedures described in Appendix L of the PRB FEIS must be followed. Further discovery procedures are explained in Standard COA (General)(A)(1) and in Appendix K of the Wyoming Protocol.

List of Preparers: Persons and Agencies Consulted (BFO unless otherwise noted)

Position/Organization	Name	Position/Organization	Name
NRS/Team Lead	Dustin Hill	Archaeologist	Seth Lambert
Supr NRS	Casey Freise	Wildlife Biologist	Don Brewer
Petroleum Engineer	Jonathan Shepard	Geologist	Kerry Aggen
LIE	Connie Modzelewski	Assistant Field Manager	Chris Durham
Assistant Field Manager	Clark Bennett	NEPA Coordinator	Thomas Bills

Decision and Rationale on the Proposal.
The COAs provide mitigation and further the justification for this decision and may not be segregated from project implementation without further NEPA review. I reviewed the plan conformance statement and determined that the proposed Roush Federal 2 POD CX3 APDs and infrastructure conform to the applicable land use plan, 43 CFR 1610.5, 40 CFR 1508.4, and 43 CFR 46.215. I reviewed the proposal to ensure the appropriate exclusion category as described in Section 390 of the Energy Policy Act of 2005 is correct. I determined that there is no requirement for further environmental analysis.

Field Manager: /s/ Duane W. Spencer Date: September 18, 2015

Contact Person, Dustin Hill, Natural Resource Specialist, Buffalo Field Office, 1425 Fort Street, Buffalo WY 82834, 307-684-1100.