

**DECISION RECORD**

**Categorical Exclusion 3 (CX3), Pastry Federal 1H -WY-070-390CX3-13-247, Rocky Butte Federal 30H -WY-070-390CX3-13-248 and Thrush Com 21H -WY-070-390CX3-13-249  
Yates Petroleum Corporation  
Applications for Permit to Drill (APD), Section 390, Energy Policy Act of 2005  
Bureau of Land Management, Buffalo Field Office, Wyoming**

**DECISION.** The BLM approves the application for permit to drill (APDs) from Yates Petroleum Corporation (Yates) to drill 3 horizontal oil and gas wells and construct their associated infrastructure, as described in the CX3 worksheet, for the 390 CX3 numbers listed above, incorporated here by reference.

**Compliance.** This decision complies with:

- Federal Land Policy and Management Act of 1976 (FLPMA) (43 USC 1701); DOI Order 3310.
- 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).
- Buffalo and Powder River Basin (PRB) Final Environmental Impact Statement (FEIS), 1985, 2003.
- Buffalo Resource Management Plan (RMP) 1985, Amendments 2001, 2003, 2011.

**A summary of the details of the approval follows.** The consolidated CX analysis, WY-070-390CX3-13-247 to -249, for these oil and gas wells, includes the project descriptions, including site-specific mitigation measures which are incorporated by reference into that worksheet from earlier analysis. The proposed wells are between the towns of Gillette and Wright, in Campbell County, Wyoming. This Yates well proposal has 3 APDs, along with associated infrastructure, to develop and produce oil and gas from the Turner Formation of the PRB. These wells are a horizontal bore, proposed on an 80 acre spacing pattern, with 1 well per location.

**Approvals:** BLM approves the following APDs and associated infrastructure:

#	Well Name & #	Qtr	Sec	Twp	Rng	Lease	CX Number
1	Pastry Federal 1H	SESW	12	43N	74W	WYW139670	WY-070-390CX3-13-247
2	Rocky Butte Federal 30H	SWSE	32	44N	73W	WYW139662	WY-070-390CX3-13-248
3	Thrush Com. 21H	NWNE	13	43N	73W	WYW139659	WY-070-390CX3-13-249

**Limitations.** See 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 analysis process and its limiting parameters. Thus a FONSI and an EIS is not required.

**COMMENT OR NEW INFORMATION SUMMARY.** Since receipt of these APDS BLM clarified policies on APD processing, BLM Instruction Memorandum (IM)-2013-104; and migratory bird conservation, WY IM-2013-005.

**DECISION RATIONALE.** The approval of this project is because:

1. Mitigation measures and COAs, analyzed in the CX3 analysis, in environmental impact statements, or environmental analysis to which the CX3 worksheet tiers or incorporates by reference, will reduce environmental impacts while meeting the project’s need.
2. The approved project conditioned by its design features and COAs, will not result in any undue or unnecessary environmental degradation. The PRB FEIS analyzed and predicted that the PRB oil and

gas development would have significant impacts to the region's Greater Sage-Grouse (GSG) population. The impact of this development cumulatively contributes to the potential for local extirpation yet its effect is acceptable because it is outside priority habitats and is within the parameters of the PRB FEIS/ROD and current BLM and Wyoming GSG conservation strategies. There are no conflicts anticipated or demonstrated with current uses in the area. This decision approving these APDs complies with the Energy Policy Act of 2005, Section 390, 43 CFR 1610.5, 40 CFR 1508.4, and 43 CFR 46.215.

3. To reduce the likelihood of a "take" under the Migratory Bird Treaty Act, BLM sensitive species nesting habitat removal will occur outside of the breeding season or be cleared by survey.
4. Approval of this project conforms to the terms and the conditions of the 1985 Buffalo RMP (BLM 1985) and subsequent update (BLM 2001) and amendments (BLM 2003, 2011). This project complies with the breadth and constraints of CX3, Energy Policy Act of 2005, and subsequent policy.
5. The selected alternative will help meet the nation's energy need, revenues, and stimulate local economies by maintaining workforces.
6. The operator, in their APD/PODs, shall:
  - Comply with all applicable federal, state, and local laws and regulations.
  - Offer water well agreements to the owners of record for permitted water wells within 0.5 mile of a federal producing well in the POD (PRB FEIS ROD, p. 7).
  - Provide water analysis from a designated reference well in each coal zone.
7. The projects are clearly lacking in wilderness characteristics because there is no federal surface.
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. The operator certified there is a surface use access agreement with the landowners it posted a bond.
10. 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 APPEAL:** This decision is subject to administrative appeal in accord with 43 CFR 3165. Request for administrative appeal 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: \_\_\_\_\_



Date: \_\_\_\_\_

9/11/13

**Categorical Exclusion 3 (CX3), Pastry Federal 1H-WY-070-390CX3-13-247, Rocky Butte Federal 30H-WY-070-390CX3-13-248, and Thrush Com 21H-WY-070-390CX3-13-249  
Yates Petroleum Corporation, Applications for Permit to Drill (APDs)  
Section 390, Energy Policy Act of 2005  
Bureau of Land Management, Buffalo Field Office, Wyoming**

**Description of the Proposed Action.** Yates Petroleum Corporation (Yates) proposes to drill 3 horizontal oil and gas wells and construct associated infrastructure as follows:

**Table 1.1. Proposed Wells**

#	Well Name & #	Qtr	Sec	Twp	Rng	Lease	CX Number
1	Pastry Federal 1H	SESW	12	43N	74W	WYW139670	WY-070-390CX3-13-247
2	Rocky Butte Federal 30H	SWSE	32	44N	73W	WYW139662	WY-070-390CX3-13-248
3	Thrush Com. 21H	NWNE	13	43N	73W	WYW139659	WY-070-390CX3-13-249

The proposed horizontal wells are within historic and current oil and gas and coalbed natural gas (CBNG) development. These wells are on private surface, over federal minerals then horizontally draining federal minerals. The project area is between the towns of Gillette and Wright, in Campbell County, Wyoming. Elevation of these projects is close to 5,000 feet. The topography has gently sloped draws rising to mixed sagebrush and grassland uplands, with some areas of developed farming and ranching lands. Ephemeral tributaries are common in the area. Main drainages in the area are the Belle Fourche River, All Night, Hay, N. Porcupine, and Fourmile Creeks. The climate is semi-arid, averaging 10-14 inches of precipitation annually, about 60% of which occurs between April and September. The proposal is to explore by horizontal drilling for, and possibly develop oil and gas reserves in the Turner Formation at approximately 10,000 & 11,000 feet total vertical distance (TVD). The bottom hole locations are about 1 mile away from the vertical bores; (see well maps and APDs for exact locations and footages). The horizontal bores terminate at the bottom holes.

Reasonably foreseeable development in the Raging Bull Com. 2H APD/POD (plan of development) environmental assessment (EA), WY-070-EA12-207, 2012, is in the area of these proposals and addressed filling-in to 80-acre spacing. This supports the development anticipated in the Powder River Basin Final Environmental Impact Statement (PRB FEIS), (see narrative in Section 2, No Action Alternative). The surface owners are all private: Wright Ranch, Richard Leavit Trust, Robert & Dona Roush, Little Buffalo Ranch, and Bernice Groves Trust.

Yates submitted the APDs, to the BFO on January 28, 2013 for the Rocky Butte 30H, February 22, 2013 for the Pastry 1H and May 6, 2013 for the Thrush 21H wells. Yates and BFO completed onsite inspections on May 22, 2013 for these wells. The onsite evaluated the proposals and modified it to mitigate environmental impacts. The BLM sent a post-onsite deficiency letters to Yates on June 20, 2013.

Full effects of the action and recommended mitigation measures are in the proposed project APDs and surface use plans, as listed in Table 1.1 above and BLM Conditions of Approval (COAs) for Conventional Application for Permit to Drill, in Appendix A.

**Drilling, Construction & Production design features include:**

- The operator anticipates completing drilling and construction in 2 years. Drilling and construction is year-round in the region. Weather may cause delays, but delays rarely last multiple weeks. Timing limitations in the form of COAs and/or agreements with surface owners may impose longer temporal restrictions. The operator anticipates that estimated drilling duration will be 60 days and 90 day for completion, depending on circumstances.

- A road network that will consist of existing improved all-weather roads; existing primitive (2-track) roads to be upgraded to all-weather improved roads; and a proposed improved well access roads. The operator will use existing roads as much as possible, whether public or private.
- There will be a reserve pit at this oil well location during drilling and completion.
- Hydraulic fracturing (HF) operations are planned as a ‘plug & perf’ operation done in stages. The process is anticipated to require 14 days to complete. Drilling and completion water will come from either municipal water supplies from Wright or Gillette, Wyoming, permitted water wells, produced water directly from a CBNG well or treated water collected in lined pits or reservoirs. The water will be contained in either a lined pit or 400-500 bbl HF tanks. No additional well pad disturbance is anticipated for HF operations. Completion flowback water will be held in either the lined reserve pit or in tanks on location, until it can be either trucked or piped offsite to a disposal facility permitted by Wyoming Department of Environmental Quality (WDEQ).
- Temporary, surface water lines for drilling and completion may be used. The surface lines will be removed when all wells have been drilled and completed.
- 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.
- If the well becomes a producer, production facilities will be located at the well site and will include a pumping unit, storage tanks, buildings, oil-water separator (heater-treater). There will be no pits at this producing oil well location.
- Dikes will be constructed completely around production facilities, i.e. production tanks, water tanks, and heater treater. The dikes will be constructed of corrugated steel, approximately 3 feet high, and hold capacity of the largest tank plus 10%. The load-out line will be outside of the dike area. A drip barrel or “Getty-Box” will be installed under the end of all load-out lines.
- An existing and proposed above ground power line will be utilized if the well becomes a producer. Power will be provided by 3<sup>rd</sup> party contactor. Generators will be used for power until permanent power is obtained. It is anticipated that new construction of power will begin at existing 3-phase overhead lines or buried power lines closest to the well and continue adjacent to the well pad.
- Well pad disturbance during construction and drilling will be approximately 5 to 6 acres (this includes cut and fill and soil stock pile areas). Once the well is completed, any area of the well pad not needed for production will be reclaimed, reducing the pad area by approximately 0.4 to 0.86 acres, for interim reclamation.
- Typically 170 500-bbl HF tanks are spotted, taking 2 weeks to fill (approx.12 tanker loads/day), prior to pumping the stimulation. All HF water, including excess, is present before starting.
- 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.

The following narrative explains why the operator requests a 400 x 400 foot well pad, which is 3.67 acres for the bladed and level pad site. The well pad will be reduced to 2.81 acres, when interim reclamation is complete, in the production phase of the well. Total disturbance for pad cut and fill, road and utility disturbance will also be reduced with interim reclamation of the road ditches, pipelines and cut and fill areas. Multi-stage horizontal completions require all equipment and materials to be present before beginning operations. Necessary space must be available to work safely around all the equipment. This proposed well pad surface disturbances are within the PRB FEIS analysis parameters; see description and analysis in Crazy Cat East EA, WY-070-EA13-028, incorporated here by reference, along with its analysis of hydraulic fracturing, its effects on water, and traffic.

Additionally, these proposed wells will use existing infrastructure from existing disturbances as much as possible. For a detailed description of design features and construction practices associated with the proposed projects, refer to the surface use plans (SUP) and drilling plans included with the APDs. Also see the subject APDs for maps showing the proposed well locations and associated facilities described above. Total surface disturbance for the proposed action is 26 acres.

**Table 1.2. Disturbance Summary for the 3 well projects:**

Proposed Facility	Number or Miles	Factor	Disturbance
Engineered Pad	3	400 ft. x 400 ft. per Pad	3.7 acres
Engineered Pad Cut & Fill (additional to the Engineered Pad acres)		varies	1.3 to 2.3 acres
Improved Roads with Corridor	0.25 miles	75 ft. wide	2.24 acres
Improved Roads no Corridor	1.23 miles	75 ft. wide	11.19 acres
Water, Gas Pipeline and Buried Power	1.51 miles	25ft. to 35 ft. width	5.52 acres
Temporary Surface Waterline	8.73 miles	2" to 12" wide	1.05 acres
<b>Total Existing &amp; Proposed Surface Disturbance Before Interim Reclamation</b>			<b>26 acres</b>

**Off Well Pad**

Yates will install a buried 3 to 6 inch high-density polyethylene (HDPE) gas gathering pipeline of at least 125 psi rating from the producing well to transport natural gas from the well to a gas gathering trunk line and on to a compressor facility. Gas gathering trunk lines will typically consist of 6 to 24 inch HDPE buried lines of at least 125 psi rating. Yates will install an above ground and or buried 2 to 12 inch wide, corrosion resistant water gathering pipeline, of at least 150 psi rating from the well to transport water to a water gathering trunk line and/or to an approved water disposal well in the area. The surface water pipelines will be used for approximately 60 to 90 days, then removed.

The operator requires overhead power installation from existing utility lines for the proposed POD. The electric provider will run from overhead lines nearest to the pad and underground power will run to the pumping unit electric motor and other electrically powered devices on site to power the well.

**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 worksheet 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, the PRB FEIS, 2003, and the Record of Decision (ROD) and Resource Management Amendments for the Powder River Oil and Gas Project, Amendments of 2001, 2011 as required by 43 CFR 1610.5, 40 CFR 1508.4, 43 CFR 46.215, and the Federal Land Policy and Management Act (FLPMA). The projects areas are clearly lacking in wilderness characteristics as they are amidst extensive oil and gas development. 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.*

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 1.3 is a list of existing/approved APDs/PODs that are within, adjacent, and/or tier to the proposed well project area. This information shows the reader that BLM conducted analysis.

**Table 1.3.**

#	POD / Well Name	NEPA Document #	# / Type Wells	Decision Date
1	Yates: Sunrise Federal 32	WY-070-EA11-287	1/Oil	8/12/2011
2	Samson: Hornbuckle	WY-060-EA11-181	48 pads/Oil	8/26/2011
3	Yates: Verde	WY-070-08-177	11/CBNG	9/12/2008
4	Yates: Raging Bull Com. 2H	WY-070-EA12-207	1/Oil	9/27/12

- 2) There is an existing NEPA document (and the RMP) containing reasonably foreseeable development scenario for this action. There are several existing NEPA documents that reasonably foresaw development to spud additional wells to fill in 80 acre well-spacing. BLM reviewed these documents and determined they considered the potential environmental effects associated with the proposed activity at a site specific level. In addition, all approved EAs tier into the PRB FEIS. The PRB EIS analyzed foreseeable development in the PRB. The PRB foreseeable development included 3,200 oil wells and drilling CBNG wells on 80 acre-spacing resulting in about 51,000 CBNG wells and over 3,200 oil wells. The project wells are in the foreseeable development scenario of 80 acre well-spacing that was analyzed in EAs in Table 1.3 and in the PRB FEIS's Appendix A.
- 3) The tiered NEPA documents were finalized or supplemented within 5 years of spudding (drilling) the proposed well. This consolidated CX tiers to the APDs/PODs listed in Table 1.3.

In summary the EAs in Tables 1.3 analyzed in detail the anticipated direct, indirect, residual, and cumulative effects that would result from the approval of these APDs and associated support structure of the proposed wells projects. These oil well projects are similar to both the qualitative and quantitative analysis in the above mentioned EAs, in Table 1.3. The BFO reviewed the EA and found that the EA considered potential environmental effects associated with the proposal at a site specific level. The project wells will share existing infrastructure where possible. Confirmation wells for this project are those wells drilled and completed in the APDs/PODs in Table 1.3. The APDs' surface use and drilling plans are incorporated here by reference and show adequate protection of surface lands and ground water, including the Fox Hills Formation.

### **Plan of Operations.**

This 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 worksheet 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.

### **Wildlife**

ICF International (ICF) conducted a Greater Sage-Grouse (GSG) survey during 2013. Tony Wyllie did a habitat assessment and wildlife inventory for mountain plover, sharp-tailed grouse, raptor nests, and prairie dog colonies in 2013 (Wyllie 2013) near the proposed wells in Table 1.1. A BLM biologist performed onsite inspections to the project area on May 22, 2013. None of the proposed wells are in the GSG core population area as designated by the State of Wyoming (Executive Order No. 2011-5). A

detailed habitat description and wildlife survey results are in the project file (Wildlife Survey, Tab 7). The BLM used information from Tony Wyllie, the BLM wildlife database, and the onsite inspection to determine that the proposed APDs, combined with the COAs are: (1) consistent with the FEIS, WY-070-02-065, and its supplements, to include biological opinion (ES-6-WY-02-F006), the RMP and its Amendments, and the above tiered EAs. Effects to migratory birds (pp. 6-9) are anticipated to be similar to those discussed in the projects (all approved under one NEPA document) referenced in Table W1.1.

**Table W1.1 NEPA Analyses, Incorporated by Reference Here, for Wildlife Analysis**

#	Well Name & #	Qtr	Sec	Twp	Rng	CX Number
1	Bonita Federal Com 11H	NENE	10	43N	73W	WY-070-390CX3-13-41
2	Cousins Federal Com 22H	SWSE	2	43N	74W	WY-070-390CX3-13-74
3	Lone Moose Federal Com 13H	NWNW	26	44N	74W	WY-070-390CX3-13-73
4	Rocky Butte Federal Com 29H	NENW	4	43N	73W	WY-070-390CX3-13-75
5	Sahara POD EA,	many	many	42&43N	77W	WY-070-EA13-72

Site specific rationale for COA recommendation for proposed wells (pads) listed in Table 1.1.

### **Raptors**

Effects to raptors from surface disturbing and disruptive activities associated with development of horizontal oil wells were analyzed in the Sahara POD EA, WY-070-EA13-72, 2013, Section 4.6.2.1, pp. 28-31, incorporated here by reference. Activities associated with development of the 3 wells in Table 1.1 are anticipated to be similar in nature, with the following additional site-specific information.

The Buffalo BLM Field Office RMP (1985, 2001 Amendment) defines an active nest as “one that has been used at least once during the previous 3 years.”)

### Rocky Butte Federal 30H

- No active nest located within 0.5 mile of the well or access road.

### Thrush Com. 21H

- Nest # 1739 is 0.25 mile out of line of sight from the well and access road. The nest has had 4 non-consecutive years (2003, 2010, 2012, and 2013) of survey data. The nest was inactive during all 4 surveys. The U.S. Fish and Wildlife Service (FWS) recommends a 1-mile spatial buffer to protect ferruginous hawk nests. To reduce the risk of decreased productivity or nest failure, the BLM BFO applies a 0.5-mile radius timing limitation for surface disturbance during the breeding season around active raptor nests. The visual buffer between the nests and the well pad should mitigate impacts from daily activities at the well once it is in production; however, the disruptive activities associated with construction, drilling, and hydraulic fracturing are likely to impact hawks using the nests.

### Pastry Federal 1H

- No active nest located within 0.5 mile of the well or access road.

### **Greater Sage-Grouse (GSG)**

Effects to GSG from surface disturbing and disruptive activities associated with development of horizontal oil wells were analyzed in the Sahara POD EA, WY-070-EA13-72, 2013, Section 4.6.4.1, pp. 34-37, incorporated here by reference. Activities associated with development of Yates’ 3 wells listed in Table 1.1 are anticipated to be similar in nature, with the following additional site-specific information.

### Rocky Butte Federal 30H

- No lek within 2 miles of the well and access road.

### Thrush Com. 21H

- The Porcupine Creek Lek is 1.7 mile from the well and access road. To protect nesting and brood rearing GSG, BLM will implement a timing limitation (March 15 to June 30) on surface-disturbing activities for the well and associated infrastructure.

### Pastry Federal 1H

- No lek within 2 miles of the well and access road.

### **Migratory Birds**

#### Rocky Butte Federal 30H, Thrush Com. 21H, and Pastry Federal 1H

- Sagebrush grassland in the proposal areas provides suitable nesting habitat for Brewer's sparrows, and the species is suspected to occur. Brewer's sparrow is a BLM special status (sensitive) species (SSS). Nesting in Brewer's sparrows typically occurs mid-May to mid-July. Some young fledge in late July (see Birds of North America Online: <http://bna.birds.cornell.edu/bna> for habitat information). To reduce the likelihood of a "take" under the MBTA, the BLM biologist recommends that pad construction (vegetation removal) occur outside of the breeding season for the greatest quantity of BLM SSS passerines (May 1- July 31) where suitable nesting habitat for sagebrush obligates is present. This restriction would apply to habitat removal, unless a pre-construction nest search (within approximately 10 days of construction planned May 1-July 31) is completed. If surveys will be conducted, the operator will coordinate with BLM biologists to determine protocol. The nest search will consist of the areas where vegetation will be removed or destroyed. The well pad and associated infrastructure will have a timing limitation COA for habitat removal during the nesting season for BLM SSS sagebrush obligate passerines (May 1 to July 31). See Sahara POD EA (WY-070-EA13-72, p. 32) for complete analysis of impacts to migratory birds.

### **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 14 registered stock and domestic water wells within 1 mile of the proposed wells vertical bore shafts in the project areas with depths ranging from -4 to 401 feet. For additional information on groundwater, refer to the PRB FEIS, pp. 3-1 to 3-36.

Yates proposed several sources for their water needed to drill and develop the wells. The water will either be trucked or piped via temporary surface lines to the well pads and stored in tanks and/or a pit to be used as needed. They propose that 40,000 bbls /day per well will be used for the drilling and development of each well. For more detailed information refer to the MSUP for each proposed well to be drilled.

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. The anticipated depths of the Fox Hills Formation, which is a major fresh water aquifer in the Powder River Basin, are between 6,411 to 6,664 ft bgs. The operator will use centralizing stabilizers on each casing joint through the depths of the Fox Hills Formation to insure the cementing encapsulates the casing and seals the formation off from contamination. The cementing off of the formation will extend 50 feet above and below the formation. The operator committed in the MSUP to abide to the state and federal regulations for the drilling and production of the well. Therefore, no direct or indirect adverse effects are anticipated. This will ensure that ground water will not be adversely impacted by well drilling and completion operations.

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 the wells 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.

The WOGCC monitor and regulate the chemicals for drilling and completion as well as Class II underground injection disposal. “BLM may rely on the actions of state regulators. The IBLA and federal courts recognized it is appropriate for BLM to assume a proposed action complies with state permitting requirements, and rely on state analysis when evaluating the significance of effects. Wyo. Outdoor Council v. U.S. Army Corps of Eng’rs, 351 F. Supp. 2d 1232, 1244 (D. Wyo. 2005); PRBRC, 180 IBLA 32, 57 (2010); Bristlecone Alliance, 179 IBLA 51, 74-77 (2010).” In Wyoming Outdoor Council, the District Court held the Corps may rely on the WDEQ permitting process to “ameliorate any concerns that impacts to water quality will be significant.” Id.

During construction and subsequent production of these wells, Yates committed to stabilize the constructed area to reduce the risk of sediment transport due to erosion. This and complying with WDEQ Storm Water Pollution Prevention criteria will minimize impacts to surface water resources in the area.

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. Yates has proposed to dispose of the produced and flow back water to state permitted facilities by either deep re-injection (7,534-8,762 ft. below ground surface) or storage and evaporation in lined pits. Either alternative would be protective of groundwater resources when performed in compliance with state and federal regulations. The water will either be trucked or piped via underground water lines to the locations from the storage tanks and/or reserve pit located on the well pad. For more detailed information, refer to the MSUP for each proposed well.

**Cultural.**

Per section 106 of the National Historic Preservation Act, BLM must consider impacts to historic properties (sites eligible for or listed on the National Register of Historic Places (NRHP)). For an overview of cultural resources found in the area refer to the Draft Cultural Class I Regional Overview, Buffalo Field Office (BLM, 2010). Three class III (intensive) cultural resource inventories (BFO project nos. 70130035, 70130040, 70130088) were performed in order to locate specific historic properties which may be impacted by the proposal. The following resources are in or near the proposal.

**Cultural Resources Located In or Near the Project Area**

Site #	Site Type	NRHP Eligibility	Site #	Site Type	NRHP Eligibility
48CA1430	Prehistoric Site	Not Eligible	48CA4133	Prehistoric Site	Unevaluated
48CA3483	Prehistoric Site	Unevaluated	48CA4253	Historic School	Unevaluated
48CA4129	Prehistoric Site	Not Eligible			

Sites 48CA3483, 48CA4133, and 48CA4253 are unevaluated for the NRHP. All 3 sites are outside of the area of potential effect (APE) for the proposals. Some of the project area analyzed in this consolidated CX occurs on deep alluvial deposits. Alluvial deposits typically have a high potential for buried cultural resources, which are nearly impossible to locate during a Class III inventory (Ebert & Kohler 1988:123; Eckerle 2005:43). Buried archeological sites typically preserve artifacts, features and other materials in situ and are often evaluated as significant resources. When a project is constructed in an area with a high potential for buried cultural material, archaeological monitoring is often included as a condition of approval. Construction monitoring is performed by a qualified archeologist working in unison with construction crews. If buried cultural resources are located by the archeologist, construction is halted and the BLM consults with the State Historic Preservation Office (SHPO) about mitigation or avoidance. Due to the presence of deposits identified by the NRCS soil survey (NRCS n.d.), and the cultural resource use permittee, the operator will be required to have an archeologist monitor all earth moving activities associated with certain construction, as described in the site specific COA’s.

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. Non eligible sites 48CA1430 and 48CA4129 will be impacted by the proposed project. 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 VI(A)(1), the BLM notified the Wyoming SHPO on July 15, 2013, August 19, 2013, and September 4, 2013, that no historic properties exist in the 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 in Appendix L of the PRB FEIS and ROD must be followed. Further discovery procedures are explained in Standard COA (General)(A)(1).

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

<b>Position/Organization</b>	<b>Name</b>	<b>Position/Organization</b>	<b>Name</b>
NRS/Team Lead	Dan Sellers	Archaeologist	Ardeth Hahn
Supr NRS	Casey Freise	Wildlife Biologist	Scott Jawors
Petroleum Engineer	Will Robbie/Mark Thomason	Geologist	Warren Garrett
LIE	Kristine Phillips	Grazing Management	Dan Sellers
Soils	Dan Sellers	Supr NRS	Bill Ostheimer
Hydrologist	Keith A. Anderson	Assistant Field Manager	Chris Durham
Assistant Field Manager	Clark Bennett	NEPA Coordinator	John Kelley

**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 project, covered in this CX3 APD 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

9/11/13  
 \_\_\_\_\_  
 Signature Date

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