

**UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT  
CASPER FIELD OFFICE**

**FINDING OF NO SIGNIFICANT IMPACT**

**Scott Field Development Project  
WY-060-EA13-067**

The Bureau of Land Management (BLM), Casper Field Office has completed an Environmental Assessment (EA), WY-060-EA13-067, to analyze the effects of exploration drilling for oil and gas proposed by Samson Resources, Company (SRC). SRC plans to further develop hydrocarbon resources within an area encompassing the existing Scott Field, located approximately twenty (20) miles north of the town of Douglas in Townships 35 and 36 North, Range 71 and 72 West in Converse County, Wyoming.

The National Environmental Policy Act of 1969 requires the Bureau of Land Management (NEPA) to review the environmental impacts of this proposal through the preparation of an environmental analysis; in this case an Environmental Assessment (EA). The EA is available to the public at the Casper Field Office at 2987 Prospector Drive, Casper, Wyoming 82604.

**PROPOSED ACTION**

The proposed project would involve the construction of up to 40 additional well pads on lands with primarily private surface and federal minerals, with between two and six wells drilled from each pad, to a maximum of 150 wells. Well spacing and downhole density would be in accordance with Chapter 3, Section 2 of the rules of WOGCC. Within the SFD project area the proposed project would add approximately one well pad per 1,100 acres and approximately one new well bore per 300 acres. Of the 40 additional well pads, up to 10 of those could hold six wells; these pads would be located in areas with the most favorable production potential. The entire well drilling process (up to 150 wells) and the construction of associated infrastructure would be completed over a period of 5 to 10 years. All of the proposed wells would be drilled utilizing horizontal drilling technology to maximize the potential of deep formations, including but not limited to the Sussex, Shannon, Frontier, Muddy, Mowry, Niobrara, and Dakota, for commercial oil and gas production at vertical depths between 9,500 and 13,000 feet. A small portion of the wells may be drilled for exploration purposes utilizing vertical drilling techniques but the location and number are not known at this time. As such, the evaluation of impacts would assume all wells would be drilled using horizontal drilling technology.

Drilling operations would be initiated as soon as all of the necessary permits have been obtained. These operations could last from 5 to 10 years, depending on the combination of drilling success, rig availability, permit approvals, and market conditions. Based on an average 40-year life of a productive well, the anticipated project life would be between 45 and 50 years. Oil would be transported via trucks from storage facilities at each pad to bulk handling facilities in Casper or Douglas. Gas would be transported via subsurface pipelines to centralized compression

and treatment facilities. Produced water would be transported by truck or piped to approved water-disposal wells or evaporation ponds, or would be used for potential beneficial use (e.g., drilling operations). Existing arterial roads would provide the main access to and within the SFD project area.

Operations would be conducted in full compliance with all applicable laws, regulations (43 CFR, Part 3100 et al.; 43 CFR, Part 2800 et al.), Onshore Oil and Gas Orders (43 CFR, Part 3160; March 7, 2007), the approved plan of operations, and any applicable Notices to Lessees. Table 2-1 presents all proposed surface disturbance associated with the Proposed Action.

**Table 2-1. Total Surface Disturbance Associated with the Proposed Action (Acres)**

	<b>Associated with Well Pads<sup>1</sup></b>	<b>Roads</b>	<b>Pipelines</b>	<b>Total</b>	<b>Average Per Well Disturbance<sup>2</sup></b>	<b>Average Per Pad Disturbance<sup>1</sup></b>
Initial	237	96	353	686	4.6	17.2
Long-Term	175	67	0	242	1.6	6.05

<sup>1</sup> 40 pads. Includes pad construction, topsoil and spoil storage areas, and any required berms

<sup>2</sup> Assuming all 150 wells are drilled

### **Construction Activities**

General construction activities for each proposed well pad, access road, and ancillary facilities would follow practices and procedures outlined in the Scott Field Master Surface Use Plan (MSUP) and in each individual APD, including COAs appended to the APD by the BLM, or any accompanying mitigation measures included in the DR. Access road and well pad construction activities would follow guidelines and standards set forth in the BLM/U.S. Forest Service (USFS) publication, *The Gold Book: Surface Operating Standards for Oil and Gas Exploration and Development* (Fourth Edition) (BLM 2007a) and/or the contractual requirements of the state and any affected private (fee) surface owner(s).

### **Access Roads**

Access to the SFD project area would generally be from Wyoming Highway 59 and the Highland Loop Road (Converse County Road #32) and then, to the extent possible, via existing, upgraded oilfield roads (crowned and ditched with gravel running surfaces). Since the project would be an infill development in the existing Scott Field, existing roads would be utilized wherever possible and new road construction would not be extensive. Currently there are approximately 147 miles of roads of varying types within the SFD project area, not including 2-track roads. New road construction would primarily be short sections of road from the existing road network to individual new well pads. Some existing access roads may need to be improved (crowned and ditched with gravel running surfaces) to accommodate increased traffic. The actual locations of pads have not been determined at this time, but based on existing SRC development in the neighboring Hornbuckle Field, the average amount of per pad short-term road construction is estimated at approximately 2,600 feet, which would result in about 2.4 acres of disturbance (assuming a 40 foot wide disturbance footprint). The estimated total initial (short-term) surface disturbance associated with road construction for the 40 pads is 96 acres. The total long-term disturbance (following interim reclamation) associated with the access roads is estimated at 67 acres. The actual placement of pads would utilize existing roads to the extent possible so the disturbance acreages associated with access roads would be less than the estimates.

### ***Well Pads***

Major components of the proposed well pads would include:

- A leveled area suitable for placement/support of the drilling rig and related equipment including the space required for the permanent burial of the drill cuttings generated during the drilling of the wells;
- One earthen reserve pit, or the appropriate number of above ground tanks, designed to contain fresh water fluids to be used during the completion operation; and
- Storage tanks for produced water and oil.

Average disturbance per pad would be 5.93 acres (not including the access road). Construction of all 40 well pads would result in approximately 237 acres of additional initial surface disturbance within the SFD project area. Long-term disturbance associated with the pads (following 1.55 acres of interim reclamation at each pad) is estimated to be approximately 175 acres.

### **Drilling Operations**

Well-drilling and completion activities would be in compliance with BLM Onshore Oil and Gas Order No. 2. These guidelines specify the following:

*...proposed casing and cementing programs shall be conducted as approved to protect or isolate all usable water zones, potentially productive zones, lost-circulation zones, abnormally pressured zones, and any prospectively valuable deposits of minerals. Any isolating medium other than cement shall receive approval prior to use (BLM 1988).*

SRC would drill each well with a rotary drilling rig. Drilling operations, including mobilization, demobilization, and drilling to the target depth, would require approximately 30 days per well. SRC would drill year-round, subject to environmental considerations. Based on SRC's experience with the neighboring Hornbuckle Field, two to three rigs would typically be running continuously, within between 12 and 24 wells completed and put into production each year.

Drilling operations require an average of 20 personnel and seven vehicles on location at any given time each day during the course of the 30-day drilling period. The average values account for higher traffic during periods of mobilization and demobilization. An additional 10 to 15 personnel and six vehicles would be required on location during the installation of production casing, which takes approximately 7 days. Technicians and service personnel would commute to the project site daily.

On average, SRC would utilize approximately 2,500 barrels (bbls) of water to drill the initial 2,000 feet. Following installation of surface casing, a water based mud would be used to drill to the intermediate casing point, which would be through the Parkman Formation at approximately 8,500 feet below ground surface. Setting intermediate casing to this depth would ensure protection of all formations having the potential to contain fresh water (i.e., total dissolved solids less than 10,000 milligrams per liter [mg/L]). Water use for the drilling and installation of the intermediate casing would be approximately 2,500 bbls. Drilling water would be obtained from an approved source in the immediate SFD project area. The specific source of this fresh water used in drilling operations for each well would be identified at the time of APD submittal. If conditions allow, SRC may recycle any water remaining in the freshwater mud system for use during drilling of additional

wells on a pad. Upon completion of surface drilling operations on a pad, any water remaining in the mud tanks would be available for re-use on additional wells, transferred to a reserve pit for evaporation or trucked to an approved disposal facility, as appropriate. Cementing operations would be conducted in compliance with Onshore Oil and Gas Order Number 2. Upon installation of the intermediate casing, SRC would switch to an oil-based mud (OBM) system to complete the drilling process. Approximately 400 bbls of water would be used per well in the OBM system. Following the completion of drilling operations, any remaining oil-based fluids would be removed from the well location and either recycled into the OBM system for subsequent wells or disposed of in accordance with appropriate BLM and WOGCC rules and regulations. The average amount of water required for drilling each well would be approximately 5,400 bbls (0.7 ac-ft).

Reserve pits would be used to contain water-based drilling fluids, cuttings, and wastewater produced from the well-drilling operations. The reserve pits would be constructed with an impermeable liner to prevent seepage and possible contamination of surface and groundwater. Fresh water may be stored in lined pits or tanks in accordance with WOGCC regulations. Leakage of pit fluids would only occur if the liners were installed incorrectly or the liners were damaged during drilling operations. The reserve pits would be appropriately fenced to prevent access by persons, wildlife, or livestock and in some situations and locations, precautions, such as netting, may be required to prevent access and mortality of birds and other animals (BLM 2007a). As indicated above, surface casing would be set to an approximate depth of 2,000 feet and cemented back to the surface during the drilling operations. This would serve to isolate all near-surface fresh water zones or aquifers in the SFD project area. Intermediate casing would be set to a measured depth between 7,000 and 12,000 feet and would also be cemented in place, with the top of cement designed to be above the top of the Fox Hills Formation. This procedure would isolate potential hydrocarbon bearing zones below the Fox Hills Formation from near-surface freshwater aquifers.

Well completion operations would follow installation of production casing. In general, completion consists of perforating the production casing, pressure testing (hydrostatic testing), stimulation of the formation utilizing hydraulic fracturing (HF) technology, flow-back of HF fluids into tanks, flow testing to determine post-fracture productivity, and installation of production equipment to facilitate hydrocarbon recovery. Discussions regarding possible impacts from completion operations are included in Chapter 4.

These completion operations would generally require an average of 30 days per well. Following completion, the well would be allowed to flow under natural pressure for one to four months, after which a pumping system would be installed. A freshwater pit may be constructed at each well pad to hold the estimated 50,000 bbls (6.4 ac-ft) of water required for the HF operation on each horizontal well. Water would be acquired from an already appropriated source or from a new water well permit (issued by WSEO to appropriate groundwater).

Approximately 55,400 bbls (7.1 ac-ft) of water would be required for drilling and completion of each well. A total of approximately 8.3 million bbls (1,071 ac-ft) of water would be required for all 150 wells. According to the most recent information available from the USGS, in 2005 the total fresh water use in Converse County was approximately 936 ac-ft per day (USGS 2013). The total projected water use for the SFD project is comparable to 1.14 days of groundwater use at the current rate and would be distributed over the estimated 5 to 10 years of project life. The projected water use for the development of the SFD project (1,071 ac-ft) when averaged over the 5- to 10-

year development period equates to an average of 0.29 to 0.59 ac-ft per day or an increase of only about 0.03 to 0.06 percent over current use.

Use or discharge of hydrostatic test water would be accomplished in a manner that would not affect soils, stream channels, surface water, and groundwater quality. After testing operations are completed, the water would be pumped into water-hauling trucks and transported to drilling locations within the project area to be used in conjunction with drilling operations or reused for other aspects of the construction and/or production process. If such water is not reused it would be disposed of in such a manner that soil-scouring and water-quality impairment would not result. Hydrostatic test water would be evaluated for compliance with state water-quality standards and no test water would be discharged unless such water meets these standards. Test water not utilized for drilling operations that meets water-quality standards would be disposed of onto undisturbed land having vegetative cover or into an established drainage channel in a manner that would not cause accelerated erosion. Further, use and disposal of hydrostatic test water would comply with the mandatory right-of-way stipulation for hydrostatic testing as well as the plans of development (POD), the CWA, and the WYPDES permit that would be required for the proposed project.

### **Production Operations**

#### ***Oil Production***

Oil production facilities for multiple wells per pad are essentially a small central facility capable of processing the oil, gas, and water produced from each well. Typical oil production equipment required at the individual well locations would include the following:

- An artificial lift system (e.g., rod pump unit at the well head, typically powered by a gas engine, generator or commercial electric power);
- Combustion chambers; and
- Line heaters.

Each well pad would have:

- A tank battery for the storage of oil and produced water. Total oil storage capacity is anticipated to be 2,000 bbls per well. Total produced water storage capacity is anticipated to be 400 bbls per well. Therefore, for a six-well pad configuration, storage capacity would typically be 12,000 bbls of oil and 2,400 bbls of water in up to 36 400-bbl tanks.
- A heater/treater;
- A flare stack for situations where commercial quantities of natural gas are not encountered and the product must be flared;
- A connection point for loading tanker trucks used in hauling oil and water produced by each well;
- A portable lease automatic custody transfer (LACT) unit may be used if an electrical supply is available and other measuring options are not feasible; and
- Up to six metering houses for measuring the natural gas from each well.

Oil would be trucked to the purchaser's designation or to a pre-existing oil terminal for sales. The frequency of trucking activity would depend upon the amount of oil being produced from each

individual well. Water would also be required for dust suppression on access and county roads. These needs would increase as a result of the additional traffic generated as a consequence of well service activities for the 150 new wells. Annual fresh water use for dust suppression is estimated at 15,000 bbls. Based on an estimated 50 year project life, the total requirement for dust suppression would be 750,000 bbls (96.7 ac-ft).

There is potential for a future interstate oil pipeline to be constructed in the vicinity of the Scott Field. If that occurs, oil gathering lines may be installed in new or existing gas pipeline and road ROWs, if feasible. Approximately 83.2 miles (353 acres) of new gas and water pipelines ROW and 19.8 miles (96 acres) of 40-foot wide road ROW would be required for the new wells/pads associated with the Scott Field development. SRC anticipates that any oil gathering lines would be installed in existing ROW, where available, or in new ROW obtained for that purpose.

SRC is proposing to utilize a tiered approach for supplying power to well pad facilities. Until commercial electrical power is available, SRC would utilize temporary generators on well pads to power electric pumping units and portable LACT units (when used) and safety equipment for the production vessels. In instances where electrical power is not available and portable LACT units are not used, oil would be measured manually by measuring tank volumes and gas would be measured using meters not requiring electric power.

Once commercial electrical power becomes available, power lines would be installed to replace the temporary generators. Power lines would be installed either above ground or underground, depending on landowner preference. To minimize disturbance, power lines would be installed along road ROW to the extent possible. For the purposes of safety, power lines installed using road ROW would be placed on the opposite side of gas/oil/water corridors, if present.

The pumping units on the majority of the new wells would be powered by natural gas-engines utilizing gas produced by the wells. SRC anticipates the use of 115 horsepower (hp) Ajax® gas engines, using the best available control technology (BACT) for stack emissions and noise control. These gas pump engines would be permitted and approved by WDEQ/AQD under standard air permitting practices.

### ***Natural Gas Production***

Commercial quantities of natural gas may be expected from the target formations. Meter houses to facilitate gas sales from each individual well bore would be installed at a centralized pad location (see Appendix A). To the extent possible SRC would use the existing third-party operated natural gas gathering infrastructure that serves the current Scott Field area. SRC anticipates that the existing Scott Field gas gathering infrastructure would be expanded to accommodate production from the new SRC wells. Under the Proposed Action, new gas gathering pipelines would be installed to take custody of the metered natural gas at the well pad. It is estimated that approximately 49.9 miles of new 25 foot-wide gathering pipeline ROW and 33.3 miles of new 50 foot-wide pipeline ROW would be required, resulting in approximately 353 acres of initial disturbance (see Table 2-1). No long-term disturbance associated with pipeline installation is anticipated assuming all pipelines would be installed within road ROWs or assuming all of the out-of-ROW pipeline corridors would be successfully reclaimed.

Some of the produced natural gas may be used to power equipment on the well location including the heater-treater and pumping unit. In situations where commercial quantities of gas are not

encountered, small volumes of gas would be flared in accordance with USDI Notice to Lessees 4A (USDI 1980).

***Produced Water Disposal***

For the purposes of this discussion, produced water refers to water produced during oil/natural gas recovery and does not include water recovered during well development. Produced water would be separated from product at the pad and temporarily stored in tanks at the well site prior to being transported by trucks or by pipeline to a permitted collection/disposal facility. Under the Proposed Action, water pipeline would be installed in the same ROW as natural gas pipeline and as close to the existing road as possible. Anticipated average water production is estimated to be 30 bbls per day per well (annual production of 10,950 bbls per well). Produced water would be disposed of via subsurface injection, surface evaporative pits, or used for beneficial use (e.g., drilling operations). Depending on the method of disposal, permits for disposal of produced water are required from WDEQ/WQD (surface) or WOGCC (subsurface). SRC may rely on approved and permitted third-party vendors for produced water disposal. WDEQ records indicate that there were four permitted underground injection control (UIC) facilities and 11 permitted evaporation facilities in Converse County as of April 10, 2013 (WDEQ 2013).

***Projected Water Use***

Water would be utilized for the various phases of the proposed project. Table 2-2 indicates the projected water use by phase and for the anticipated project life.

**Table 2-2. Projected Water Use by Phase**

	<b>Phase Amount<sup>1</sup> (bbls)</b>	<b>Total<sup>2</sup> (bbls)</b>	<b>Total<sup>3</sup> (Ac-ft)</b>
Drilling Operation			
Drilling	5,400	810,000	104.4
Well Completion <sup>4</sup>	50,000	7,500,000	966.8
Maintenance			
Dust Suppression	15,000	750,000	96.7
<b>Total</b>	--	<b>9,060,000</b>	<b>1,167.9</b>

<sup>1</sup> Per well for drilling operations and per year for maintenance

<sup>2</sup> 150 wells total for drilling operations and a maximum 50-year project life for maintenance

<sup>3</sup> Based on 42 gallons per bbl

<sup>4</sup> Includes hydrostatic testing and hydraulic fracturing

***Interim Reclamation During Production***

Interim reclamation of each well location would be conducted in accordance with Onshore Order #1, IM WY-2012-007, Management of Oil and Gas Exploration and Production Pits and IM WY-2012-032, Wyoming BLM Reclamation Policy, and The Gold Book (BLM 2007a).

Solidification, back filling, and capping of the cuttings pits would be accomplished within 6 months following the completion of each individual well. The proposed co-location of multiple wells on each well pad has the potential to conduct drilling and production activities simultaneously. When more than one well for the same location are approved at the same time, interim reclamation would

be performed following completion of the last well on the pad or the expiration of the APD, whichever occurs first. Erosion control would be maintained through prompt revegetation and by constructing surface water drainage control structures such as berms, diversion ditches and waterbars as necessary on the proposed well location(s). Topsoil stored for a period greater than 90 days would not exceed piles of 3 feet in depth and would be seeded with a BLM approved seed mix to prevent wind and water erosion and to reduce the loss of microbial activity within the soil. Approximately 26 percent (62 acres) of the well pad disturbance, approximately 30 percent (29 acres) of the new road disturbance, and 100 percent (353 acres) of the new pipeline disturbance would be reclaimed in the manner indicated above, which equals a total of 444 acres of interim reclamation.

#### **Abandonment and Final Reclamation**

Final reclamation would be performed in accordance with Instructional Memorandum No. WY-2012-032, BLM Reclamation Policy, within 6 months of completion of plugging each well. Upon final abandonment of each well, all existing surface facilities specific to the well would be removed from the well location, the well bore would be physically plugged with cement as directed by the BLM, and a dry hole marker would be set in accordance with existing regulations and directions contained in the approved APD. Upon completion of all plugging operations at a well pad location, any remaining surface facilities would be removed and both the access road and remaining work areas would be scarified and recontoured, erosion control measures would be installed as necessary, and all disturbed areas would be reseeded as recommended by the BLM or private surface owner. There may be circumstances where the private surface owner may wish to retain specific access roads for future use at the time of final abandonment.

#### **Ancillary Facilities**

A central processing facility and a central power generating facility may be constructed at a later date. Neither of these facilities is planned at this time and neither is included in this EA so additional environmental analyses would be required prior to permitting and construction of those facilities. No man camps are planned within the SFD project area. SRC does not anticipate the need for any new gas compression facilities to facilitate handling of natural gas at this time.

### **FINDING OF NO SIGNIFICANT IMPACT**

On the basis of the information contained in WY-060-EA13-067, and all other information available to me, it is my determination that: (1) the implementation of the Proposed Action will not have significant environmental impacts beyond those already addressed in the *Record of Decision and Approved Casper Resource Management Plan (RMP)* approved in December of 2007; (2) the Proposed Action is in conformance with the Casper RMP; and (3) the Proposed Action does not constitute a major federal action having a significant effect on the human environment. Therefore, an environmental impact statement is not necessary and will not be prepared.

This finding is based on my consideration of the Council on Environmental Quality's (CEQ) criteria for significance (40 CFR 1508.27), both with regard to the context and to the intensity of the impacts described in the EA.

### **Rationale for Finding of No Significant Impact**

The primary purpose for conducting an environmental assessment (EA) is to determine whether or not a proposed action will have a significant impact on the human environment and therefore will require the preparation of an EIS. As defined in 40 CFR 1508.13, the Finding of No Significant Impact (FONSI) is a document that briefly presents the reasons why an action will not have a significant effect on the human environment. The regulations further define the term “significantly” in 40 CFR 1508.27 and require that the context and intensity of impacts be considered in analyzing significance.

“a) Context. This means that the significance of an action must be analyzed in several contexts such as society as a whole (human, national), the affected region, the affected interests, and the locality. Significance varies with the settling of the proposed action. For instance, in the case of a site-specific action, significance will usually depend upon the effects in the locale rather than in the world as a whole. Both short-term and long-term effects are relevant”. (40 CFR 1508.27(a))

“(b) Intensity. This refers to the severity of impact. Responsible officials must bear in mind that more than one agency may make decisions about partial aspects of a major action. The following should be considered in evaluation intensity.” (40 CFR 1508.27(b))

I have considered the potential intensity/severity of the impacts anticipated from the proposed action relative to each of the ten areas suggested for consideration by the CEQ.

#### ***1. Impacts that may be both beneficial and adverse.***

Chapter 4 of the Scott Field Development Project (WY060-EA13-067) identifies the impacts from the proposed action. Impacts associated with the development of this project are generally considered to be negligible. In addition to the impacts, the EA also demonstrates conformance with the Casper RMP, compliance with federal, state and local laws, mitigation measures, and conditions of approvals, as identified in the EA, while not causing impacts that rise to the level of significance as defined by the Council on Environmental Quality.

#### ***2. The degree to which the proposed action affects public health and safety.***

The Scott Field Development Project (WY060-EA13-067) analyzed impacts to public health and safety and concluded that due to the development and implementation of a comprehensive spill prevention, control and counter measure plan, and installation of casing to protect groundwater resources, public health and safety will not be affected by the proposed action. Specific detail of the impacts and mitigation measures analyzed for public health and safety can be found in Section 4.12 Public Health & Safety.

#### ***3. Unique characteristics of the geographic area such as proximity of historic or cultural resources, park lands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas.***

Historic and cultural resources are addressed specifically below in number 8. There are no known park lands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas located in proximity of the geographic area or within the Scott Field Development Project area.

Specifics regarding the affected resources and the general environment of the project area can be found in Chapter 3 of the EA (WY060-EA13-067).

**4. *The degree to which the effects on the quality of the human environment are likely to be highly controversial.***

The Proposed Action conforms to the plans and policies of the Casper RMP (BLM 2007). Specifically, the Proposed Action is in accordance with the objectives outlined in the RMP for managing leasable minerals:

- MR: 2.1 - Maintain oil and gas leasing, exploration, and development, while minimizing impacts to other resource values;
- MR: 2.4 - Facilitate the evaluation of public lands for oil and gas potential; and
- MR: 3.1 - Maintain opportunities to explore and develop federal oil and gas resources and other leasable minerals.

Comments were solicited, after the 30 day comment period, three comments were received, none of which were substantive or objected to the project, indicating that the Scott Field Development Project would not be considered controversial.

No anticipated effects have been identified that are considered “highly controversial”. The term “highly controversial” refers to instances in which “a substantial dispute exists as to the size, nature, or effect of the major federal action rather than the mere existence of opposition to a use” *Hells Canyon Preservation Council v. Jacoby*, 9F.Supp.2d 1216, 1242 (D.Or. 1998).

**5. *The degree to which the possible effects on the human environment are highly uncertain or involve unique or unknown risks.***

Oil and gas development has been ongoing in the Scott Development Project area since the early 1980s. SRC is applying state-of-the-art drilling and completion techniques to further develop previously exploited reservoirs. Plans presented in Chapter 2 and Chapter 4 of the Scott Field Development Project EA (WY060- EA13-067) will serve to eliminate or reduce direct and indirect impact to the maximum extent practicable.

The proposed activities in the Scott Field Development Project (WY060-EA13-067) are not highly uncertain and do not involve unknown or unique risks.

**6. *The degree to which the action may establish a precedent for future actions with significant effects or represents a decision in principle about a future consideration.***

The Scott Field project area has a 30+ year history of oil and gas development. The proposed activities in the Scott Field Development Project EA (WY060- EA13-067) do not establish a precedent or represent a decision in principal about future considerations.

**7. Whether the action is related to other actions with individually insignificant but cumulatively significant impacts.**

Cumulative impacts are described in Chapter 5 of the Scott Field Development EA (WY060-EA13-067). The affected resources analyzed are not approaching conditions where additional horizontal wells within the Scott Field Development area; when added to the past, present and reasonably foreseeable future action; have consequential cumulative effects that rise to the level of significance as defined by the Council on Environmental Quality.

**8. The degree to which the action may adversely affect districts, sites, highways, structures, or objects listed in or eligible for listing in the National Register of Historic Places or may cause loss or destruction of significant scientific, cultural, or historic resources.**

At the time of APD processing, and prior to authorizing future actions, the BLM will insure the requirements of the National Historic Preservation Act, as amended, are met. Any effects to historic properties (those eligible for or listed on the NRHP) would be avoided or minimized to the maximum extent. If adverse effects are unavoidable, a plan to mitigate those effects would be developed and implemented prior to the authorization. The specific procedures for these actions will follow the State Protocol Agreement between the Wyoming BLM and Wyoming SHPO dated March 8, 2006. In summary, the proposed action will have a minimum impact to historic properties.

**9. The degree to which the action may adversely affect an endangered or threatened species or its habitat that has been determined to be critical under the Endangered Species Act of 1973.**

The potential occurrence of threatened, endangered, and other special status species evaluated by the analysis presented in the Scott Field Development Project EA (WY060-EA13-067) is unlikely within the project area. Potential habitat for the Ute ladies-tresses orchid is believed to occur along selected stretches of several drainages within the HFDPA, although there has been no recent historical record of this species' occurrence in the project area. Inventories for the orchid will be conducted prior to disturbance and the areas would be avoided if the orchid is identified.

**10. Whether the action threatens a violation of Federal, State, or local law or requirements imposed for the protection of the environment.**

The proposed action is consistent with all federal, state, and local laws.

  
Assistant Field Manager, Lands and Minerals  
Casper Field Office

*JPM*

9-9-13  
Date