

**Questar Year-Round Drilling Proposal, Addendum
Environmental Assessment
WY -100-EA06-043**

Introduction. The Questar Year-Round Drilling Proposal Environmental Assessment (WY-100-EA05-034) (EA) and approved with the Finding of No Significant Impact (FONSI) and Decision Record (DR) in November 2004. The actions described in the EA and approved through the DR included “Over a nine year period beginning November 15, 2004 through the winter of 2013 – 2014, Questar Exploration & Production Company (QEP) will be allowed to utilize up to six rigs (two rigs per well pad) drilling on up to three well pads between November 15 and April 30 each year. This DR/FONSI is consistent with the Pinedale Anticline ROD which provided for BLM to grant exceptions to timing stipulations under certain conditions.

On October 11, 2005 the BLM received a proposal from QEP requesting a change in their 2005-2006 operations on the Pinedale Mesa, and approval for similar changes for future years. With the October 2005 proposal, QEP has requested approval to drill, complete and put into production additional wells as outlined below in the six components of the Proposed Action. In addition to drilling operations, they have requested authorization to ‘complete’ the drilled wells, which is a separate operation from drilling and was specifically prohibited under the November 2004 DR (Appendix A, page 11).

Well completion activities generally take around seven days to conclude and entail more vehicular traffic, on-site human activity, and noise than drilling activities. Completion activities include perforating the well and fracturing, through to final activities prior to putting the well into production. All of the vehicles and equipment associated with completions stay at the well pad or service that well pad until all wells are completed. The proponent estimates that there would be the following levels of traffic: approximately 140 truck trips per completion per well; and approximately 100 trips per well pad to move equipment.

Purpose and Need. The purpose of the proposed action is to continue natural gas drilling and allow for completions and subsequent production from wells on the Pinedale Mesa while minimizing impacts to wintering big game. This action is needed so that operators can increase production of natural gas that would be added to the national natural gas supply during a period of anticipated natural gas shortage as determined by the President. The shortage of natural gas is predicted as a result of loss of production, refinery, and distribution facilities due to Hurricanes Katrina and Rita in September and October 2005.

Proposed Action and Alternatives

1. The Proposed Action is described by “component” or geographic portion of the project area (see map at Figure 1). Each of these components contains various levels of drilling and completion activity as described below and summarized in Table 1, Comparison of Alternatives.

- Component 1 proposes to perform completion activities after November 15 on a well currently being drilled on the Mesa 15-20 pad (one of three currently approved winter drilling pads). Completion activities would conclude by the end of November. Additional

natural gas supply is estimated at 0.8 billion cubic feet (bcf) through May 2006 (when the well is currently scheduled to be brought on production).

- Component 2 proposes to drill and complete one additional well on the Mesa 15-20 pad in winter. This well is currently scheduled for drilling in spring 2006. If approved, activities would conclude by January 2006. Additional gas supply is estimated at 0.9 bcf through July 2006.
- Component 3 proposes to conclude drilling and complete four wells (Mesa 6-7D, Mesa 14B-6D, Mesa 9B-7D, and Mesa 10-7D), all located in Section 7, Township 32 North, Range 109 West, after the cutoff date of November 15. Activities would conclude by January 2006. Additional gas supply is estimated at 3.81 bcf through July 2006.
- Component 4 proposes to convert an existing drilling pad into a new winter pad (Mesa 3-21), bring in two additional drill rigs and drill and complete six new wells. Activities would continue throughout the winter. Additional gas supply would not be available until after April 15, 2006.
- Component 5 proposes to convert an existing drilling pad into a new winter pad (Mesa 11-20), bring in one additional drill rig and drill and complete four new wells. Activities would continue throughout the winter. Additional gas supply would not be available until after April 15, 2006.
- Component 6 proposes to bring one additional rig onto the existing Mesa 3-20 winter drilling well pad to drill and complete an additional six wells. Activities would continue throughout the winter. Additional gas supply would not be available until summer 2006.

2. Alternative A, the No Action alternative, is defined as the entire proposal as it was submitted in October 2005 being rejected. Operations would proceed consistent with those approved with the November 2004 DR with three winter drilling pads, each with two rigs drilling throughout the winter and no well completions. See map at Figure 2.

3. Under Alternative B, some components of the proposal as it was submitted would be approved; others would be rejected or denied as described below. Additionally, this alternative only approves activities for winter drilling during 2005-2006. This alternative would require mitigation activities including 250 acres of wildlife habitat enhancement and an additional 250 acres of habitat enhancement offered by the proponent. See map at Figure 3.

- Component 1 is not included. Subsequent information from QEP indicates activities on this well will be concluded prior to November 15, 2005.
- Component 2 would be approved with additional wildlife mitigation.
- Component 3 would be partially approved.
 - The Mesa 14B-6D is not approved.
 - Subsequent information from QEP indicates the Mesa 6-7D well completion would be concluded prior to November 15, but some equipment would be allowed to temporarily remain on-site and moved at a later date.
 - Winter drilling and completion of the Mesa 9B-7D and 10-7D wells from one pad would be authorized with additional off-site mitigation.
- Component 4 is not included.
- Component 5 is not included.

- Component 6 would be partially approved. A third rig would be allowed on the Mesa 3-20 winter drilling pad, but no winter completions would be authorized.

Environmental Consequences. The primary issue regarding the proposed action included additional activities, specifically well completion and drill rig “moves”, that would likely cause some additional impacts to wintering big game. To address these additional concerns that were not included in the November 2004 EA, the BLM and Game and Fish have evaluated the additional activities and potential impacts to wintering big game.

Proposed action:

Wildlife: Environmental Assessment WY-100-EA05-034 (Questar Year-round Drilling Proposal) and Environmental Assessment WY-100-EA05-283 (Questar Year-round Drilling Proposal – Condensate Pipeline Modification) address impacts related to operating 6 drilling rigs simultaneously during the crucial big game winter period on 3 separate well pads. The proposed action would add 2 additional winter pads (one with 2 rigs, and one with 1 rig), it would also add 1 additional rig to one of the three addressed and approved winter well pads, and would allow drilling to be completed on two additional pads (i.e., partially winter drilling. Once these 2 wells are drilled the rigs would move to the 2 additional pads previously discussed. Additionally, the proposed action would add approximately 22 well completion operations and 8 drill rig moves during the crucial winter period.

Big-game

Mule deer

Increased activity (vehicle, drill rig, equipment and human) within big-game winter range (mule deer and pronghorn) would potentially increase the amount of stress wintering animals would endure. Wintering big-game experience an energy balance that is negative and increased stress can accelerate and increase the negative balance. This increased stress level has the potential to decrease over-winter survival, decrease productivity, and lower fawn birth weights, a contributing factor to mortality. Studies have shown that mule deer prefer habitats further away from drilling locations and have been displaced into less suitable habitat (WEST, Inc 2005). Additionally, mule deer response is immediate and they do not seem to acclimate to drilling activities. This can lead to increased indirect impacts on winter ranges much larger than direct loss or fragmentation of habitats.

Additional drilling, rig moves and completion activities could result in areas of winter range not being used due to increased human activity levels and noise. In all, an additional reduction in habitats available, used, and preferred for mule deer could result from this action although cannot be quantified at this time. Therefore, an increase in the decline of mule deer abundance decline (use of Mesa winter range complex by mule deer) above the current 46% level of decline would be anticipated. The overall extent/magnitude of impact is not known nor is it accurately predictable, but it is very likely that the proposed action would, at a minimum, result in some wintering animals being displaced from habitat near the human activity. While there may be some effects to deer herd that winter on the Mesa, the impact to the overall Sublette herd is not expected to be significant.

No habitat enhancement for mule deer winter range was offered.

Pronghorn

Pronghorn experience the same types of impacts as those described for mule deer. Research has indicated that pronghorns also experience the negative energy balance on winter ranges, but have less reserves (fat), about 7 pounds on average, than mule deer. Snow depth is a primary factor in determining winter range use by pronghorn much more than mule deer. The deeper the snow the further pronghorn travel (in this case south) and subsequently increase use of winter ranges. Pronghorn will avoid areas of high human impact as long as sufficient movement areas exist (WCS, Joel Berger, personal communication). Associated with the proposed increase in vehicular traffic, there would be an increased chance of pronghorn winter mortality from animal/vehicle collision.

Pronghorn whose home range is on the Mesa currently occupy the southern third as winter range, with much of this acreage being privately owned agricultural land along Paradise Road. An increase in drilling and completion activities in the northern two-thirds of the Mesa would not be expected to greatly increase effects on pronghorn. However, increased vehicle traffic would likely increase the pronghorns' use of agricultural land near Paradise Road and possibly increase deaths due to vehicle collisions (recently 6 pronghorns were struck and killed along Paradise road, the first multiple animal kill record to date). Pronghorn movements throughout the Mesa, including traditional migration pathways would also be negatively affected as described previously. Noise from completions may impact fawning in the spring.

No additional mitigation is proposed to offset any impacts to pronghorn or their habitat.

Sage-grouse

Impacts to sage-grouse are anticipated to occur due to increased activity and noise in breeding and nesting habitats. A study by Matt Holloran (in press, 2005) concluded that sage grouse habitat use and lek attendance is negatively influenced by drilling activity. Specifically the distance to main haul roads, distance to drilling well locations, and distance to producing well from leks has a greater impact the closer the activity occurs. The same study also found that average number of males attending leks are negatively influenced from distance of main haul roads and number of cardinal directions (5 out of 8) that have a well within 5km. Sudden onset from noise impacts from completions could cause a panic response and therefore impact breeding and nesting grouse.

No additional mitigation is proposed to offset any impacts to sage-grouse or their habitat.

Alternative A (no action): The proponent would be authorized to conduct the activities that were approved as described in the QYD EA and DR, November 2004. The environmental consequences estimated for the selected alternative would not change either beneficially or adversely. The wildlife impacts as described for the proposed action would not occur. Additional natural gas would not be produced and there would be no additional natural gas that could be used to offset the impacts Hurricane Katrina and Rita caused oil and gas production losses in the east/southeast.

Alternative B: Environmental Assessment WY-100-EA05-034 (Questar Year-round Drilling Proposal) and Environmental Assessment WY-100-EA05-283 (Questar Year-round Drilling Proposal – Condensate Pipeline Modification) address impacts related to operating 6 drilling rigs simultaneously during the crucial big winter period on 3 separate well pads. This alternative would allow drilling to be completed on one additional pad (i.e., this in essence would be a fourth winter pad for a portion of the winter. Once the rig on the Mesa 7-7 pad finishes the well it’s currently drilling, the rig would move to one of the 3 winter-long drilling pads.) Alternative B would have a total of 7 winter drill rigs, 4 winter completion operations, and 2 winter rig moves.

Wildlife: The impacts to wildlife from this alternative would be essentially the same as that described for the proposed action; however the magnitude would be less since the human activity is less. As stated for the proposed action the actual extent/magnitude is not known, and without monitoring information, not easily estimated. Implementation of this alternative would likely result in greater stress than would occur through the Alternative A, and would potentially result in decreased productivity, lower birth weights, lower birth rates, and possibly some adult mortality but would be less than anticipated for the proposed action. Due to the limits on winter operations associated with Alternative B and components that would be approved, effects to big game in crucial winter range would be less than the Proposed Action but more than Alternative A.

Listing of Agencies and Persons Consulted.

Wyoming Governor’s Planning Office	Mary Flanderka
Wyoming Game and Fish	Vern Stelter

BLM-Pinedale Field Office:	Prill Mecham, Field Manager Roger Bankert, Associate Field Manager Bill Lanning, Natural Resources Specialist Steve Belinda, Wildlife Biologist Mike Stiewig, Acting Project Manager
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BLM-State Office, Wyoming	Don Simpson, Deputy State Director, RMP Alan Rabinoff, Deputy State Director, L&M Michael Madrid, Branch Chief, Fluid Minerals Walt George, Program Manager/Planner Janet Kurman N.E.P.A. Specialist Dave Roberts, Wildlife Biologist Brenda Vosika-Neuman, Physical Scientist Vickie Mistarka, Physical Scientist
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BLM- Washington Office, Washington, DC	Jim Perry, Fluid Minerals Specialist Jordon Pope, N.E.P.A. Specialist
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Figure 1. Map of Proposed Action

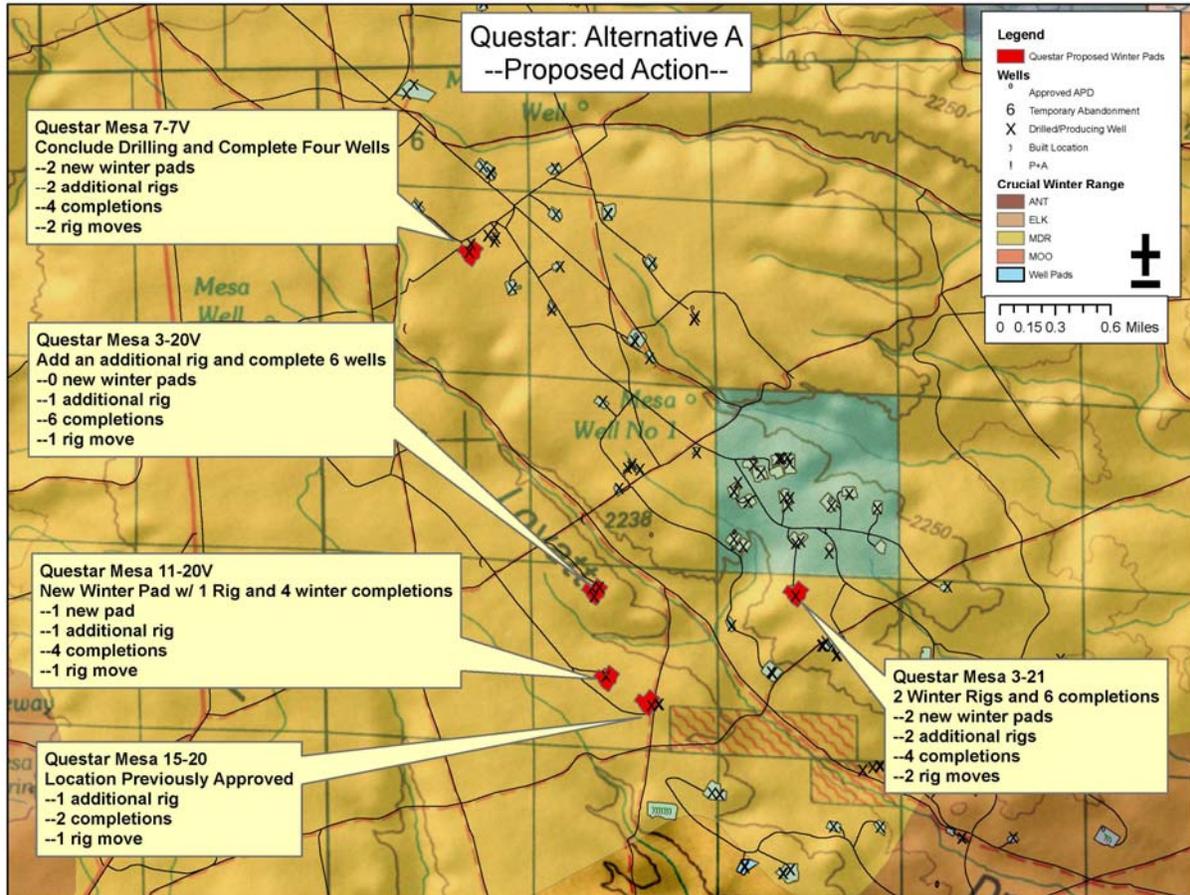


Figure 3. Map of Alternative B

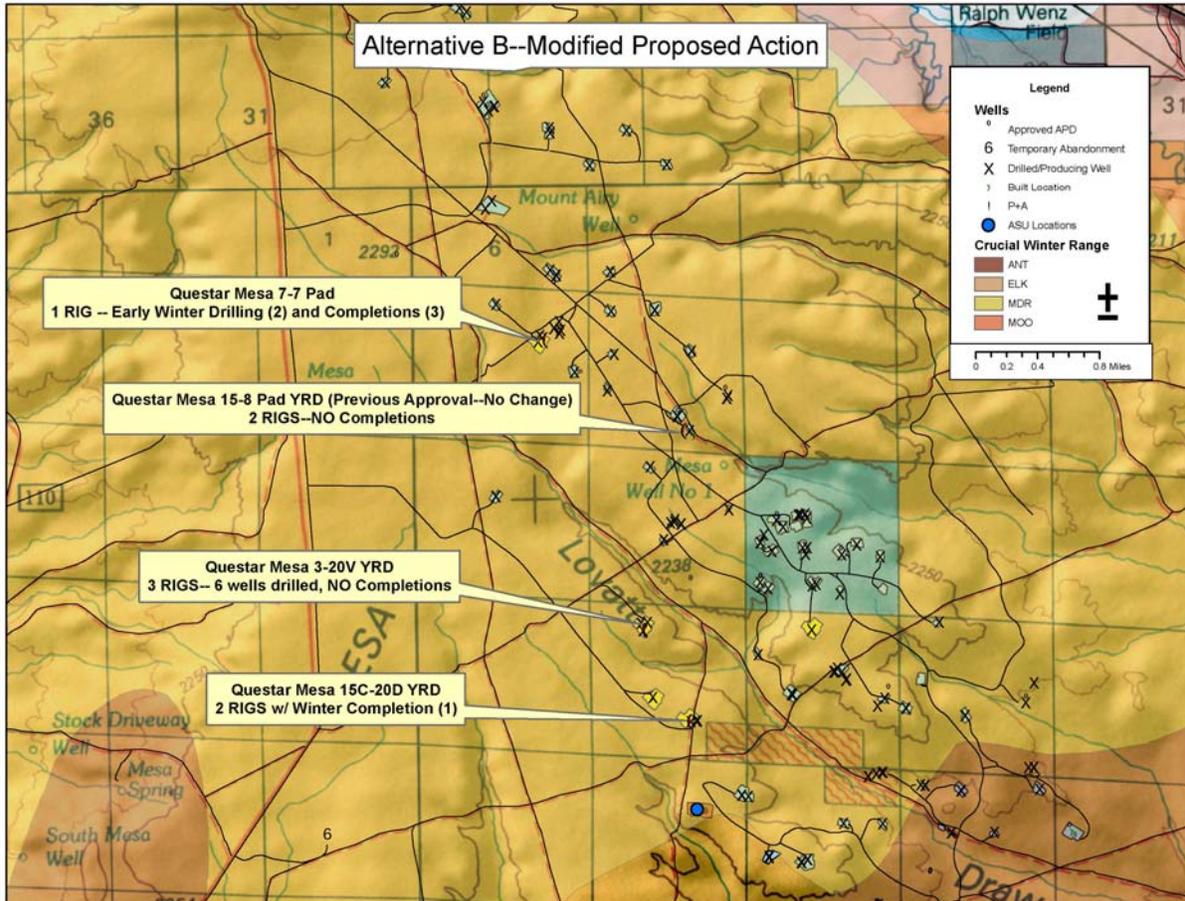


Table 1. Comparison of Alternatives

Component	Proposed Action	Alternative A (No Action)	Alternative B
1	<p>Conclude drilling and complete the Mesa 16C-20D after 11/15/05.</p> <p>0 new winter pads 1 additional rig 1 completion 1 rig move</p>		<p>Not Included - - Well completion will be concluded before 11/15/05</p>
2	<p>Drill and complete the Mesa 15C-20D after 11/15/05. This well, on an approved winter pad, will be drilled in the winter rather spring.</p> <p>0 new winter pads 0 additional rigs 1 completion 0 rig moves</p>	<p>Authorized Mesa 15-20 winter drilling pad</p> <p>2 rigs 6 wells drilled 0 completions 0 rig moves</p>	<p>Well drilling is acceptable under decisions in the Winter Drilling EA.</p> <p>Well completion approved with mitigation.</p> <p>0 new winter pads 0 additional rigs 1 completion 0 rig moves</p>
3	<p>Conclude drilling and complete four wells (Mesa 6-7D, 14B-6D, 9B-7D, and 10-7D) in Sec. 7, T. 32 N., R. 109 W. All completions done by early January 2006.</p> <p>2 new winter pads 2 additional rigs 4 completions 2 rig moves</p>	<p>Not Included</p>	<p>Mesa 6-7D completed before 11/15/05. Some equipment to remain on-site, then move after 11/15/05.</p> <p>Mesa 14B-6D is not included.</p> <p>Winter drilling and completion of Mesa 9B-7D and 10-7D from one pad allowed, with mitigation.</p> <p>1 new winter pad 1 additional rig 3 completions 1 rig move</p>
4	<p>Permit a new winter drilling pad (Mesa 3-21) with 2 rigs operating throughout the winter and completing 6 wells.</p> <p>1 new winter pad 2 additional rigs 6 completions 2 rig moves</p>	<p>Not Included</p>	<p>Not Included</p>

Component	Proposed Action	Alternative A (No Action)	Alternative B
5	Permit a new winter drilling pad (Mesa 11-20) with 1 rig operating throughout the winter and completing 4 wells. 1 new winter pad 1 additional rig 4 completions 1 rig move	Not Included	Not Included
6	Add an additional rig to the approved Mesa 3-20 winter drilling pad and complete the 6 wells drilled by this rig. 0 new winter pads 1 additional rig 6 completions 2 rig moves	Authorized Mesa 3-20 winter drilling pad 2 rigs 6 wells drilled 0 completions 0 rig moves	Addition on a third rig to drill on the approved Mesa 3-20 winter drilling pad. Well completions not included. 0 new winter pads 1 additional rig 0 completions 2 rig moves
N/A	Previously approved winter drilling	Authorized Mesa 15-8 winter drilling pad 2 rigs 6 wells drilled 0 completions 0 rig moves	Previously approved winter drilling

**Finding of No Significant Impact Decision Record/
For
Questar Year-Round Drilling Addendum
Environmental Assessment**

November 2005

Finding of No Significant Impact: Based on the analysis of potential environmental impacts contained in EA WY # 100-EA05-034 and additional analysis included in the addendum, I have determined that impacts are not significant. Increased natural gas production would have a positive affect to the human environment by offsetting 3.81 billion cubic feet (bcf) of the production losses between January and July 2006 that resulted from Hurricanes Katrina and Rita. Therefore, an environmental impact statement will not be prepared.

Decision: It is my decision to implement Alternative B.

Rationale for Decision: I base my decision on the following rationale.

- After reviewing the issues, alternatives and environmental analysis documented in EA WY# 100-EA05-034 and its Addendum, I am satisfied that the assessments and conclusions made in those documents are still applicable, and that they accurately portray the proposed actions, and environmental consequences.
- To address changes in activities that would be approved for operations between November 15 and April 15, the BLM reviewed the proposals and its alternatives, and assessed environmental consequences to big game winter range that might occur. I am satisfied that the effects associated with the activities as described for Alternative B meet the purpose and need and that the effects are not unacceptable.

Compliance and Monitoring: The accelerated winter development on the Mesa will be monitored for compliance and project effectiveness consistent with the mitigation measures and management requirements described in the Questar Year-Round Drilling Environmental Assessment and Decision Record, November 2004. In addition the attached required mitigation activities will be monitored for compliance during the winter season 2005-2006.

Appeal Procedures: Under the provisions of 43 Code of Federal Regulations (CFR) Part 4 any person who is adversely affected may file an appeal of this decision to the Interior Board of Land Appeals. Request for State Director's Review must be filed within 30 calendar days of receipt or notification of this decision, in accordance with 43 CFR 4.440.

Under the provisions of 43 CFR 3165.4 this decision shall be effective on the signature date of this decision. This project may be implemented any time after the signature date below.

/s/ Jesse J. Juen
Acting State Director,
Bureau of Land Management- Wyoming

November 9, 2005
Date

ATTACHMENT #1
Required Mitigation

A. In addition to the “Questar Year-Round Drilling Proposal Decision Record”, Performance – based Objectives (Decision Record, Appendix A) reduce human activity and noise levels after November 15, 2005 in your leasehold by:

- Moving equipment and material needed for winter drilling and completions onto the locations before November 15, 2005.
- Place suitable equipment around the perimeter of the locations to act as a noise barrier.
- Caravanning equipment and material moves to locations rather than many individual trips.
- Bus or car pool workers to the locations only at specified times, discourage individual vehicle trips.
- Using best available muffler technology

B. Expand the existing mule deer study to:

- Monitor traffic associated with increased drilling and well completion activity.
- Measure and document noise levels associated with increased drilling and well completion activity.
- Monitor and document mule deer movement and reactions associated with increased drilling and well completion activity.

C. To compensate for impacts from human activity and noise associated with additional drilling and winter completions, provide mule deer habitat enhancement on 250 acres in addition to the 1,500 acres of enhancement work currently required. Habitat enhancement includes, but is not limited to:

- Water developments
- Habitat improvement by mechanical, chemical or fire treatments
- Seeding to establish or restore desired plant species
- Setting vegetation stands back to earlier serial stages
- Improving mule deer access to habitats by removing barriers (i.e., fence modification)

D. Habitat enhancement work must begin as soon as practicable but no later than the spring of 2006, unless otherwise directed by BLM in consultation with Wyoming Game and Fish.