

Public Comments and BLM Responses on the Revised Draft SEIS Proponents

Comment Number **P-1-1-G-1**

Comment

Proponents define year-round access as assurance that BLM will not apply seasonal restrictions to permit approvals that would normally limit actions. The intent is to minimize impacts to wildlife, habitat and the environment by allowing continuous operations on pads without interruption, keeping movement and human activity to a minimum and providing safe, effective and efficient development of the resource. The Proponents have requested year-round access in specified areas which includes simultaneous operations such as drilling, completions, construction, pipelines, production, etc. Proponents respectfully request that BLM insert and use this definition of year-round access in the text, glossary, and appendices of the Final SEIS (FSEIS) and Record of Decision (ROD).

Response

The BLM analyzed year round access in conformance with the approved Pinedale RMP and in compliance with laws and regulations including FLPMA, MBTA, BGEPA, and ESA. Within the law, under Alternatives B, C and D, it is the intent that once operations begin on a pad, operations would continue on that pad until the pad is completely developed.

Comment Number **P-1-2-G-2**

Comment

Exceptions from seasonal stipulations for all species must be granted and Proponents have developed their monitoring and mitigation based on that premise.

Response

The BLM analyzed year round access in conformance with the approved Pinedale RMP and in compliance with laws and regulations including FLPMA, MBTA, BGEPA, and ESA.

Comment Number **P-1-3-G-3**

Comment

References to seasonal stipulation relief within the Core Area should be clarified in Alternative D descriptions by adding new language specifying that seasonal wildlife stipulation relief is only for the specific activity area during the year.

Response

Seasonal relief through the various development areas is subject to the Annual Planning Meeting as described in the Revised Draft SEIS.

Comment Number **P-1-4-G-4**

Comment

Proponents' inability to initiate any development in DA-3 in a reasonable or timely manner because of the significantly increased time needed to develop the area of the New Fork River and the delay in moving activity northward beyond the required two miles from the river. Unless resolved, this will seriously affect the ability to conduct year-round operations in all DAs, delaying for many years or potentially precluding altogether the benefits of year-round development and associated Proponent-offered mitigation to other wildlife, habitat and environment including rig engine emissions commitments, liquids gathering system (LGS), earlier and interim reclamation and other environmental commitments.

Response

The BLM will consider these impacts in issuing a decision. The text has been changed in Chapter 4.

Comment Number **P-1-5-G-5**

Comment

Proponents request that year-round access, which allows year-round development (construction, drilling, completions, pipeline and production), with exceptions for seasonal wildlife restrictions in big game, greater sage grouse seasonal habitats, raptors and stipulations for sensitive species and sensitive habitats, be allowed in the specified activity area within each Development Area to achieve the full benefit of Proponents' comprehensive mitigation package.

Response

Within the law, under Alternatives B, C and D, it is the intent that once operations begin on a pad, operations would continue on that pad until the pad is completely developed.

Comment Number **P-1-6-G-6**

Comment

Where exceptions must be granted on an annual basis, the goal of implementing mitigated year-round access will guide BLM approvals of exception requests. These exceptions would allow mitigated year-round access equal to the Proponents' proposed activity level benefiting air quality and wildlife as contemplated in the Proponents' original proposal. The BLM would approve exceptions which provide for the least rig movement and most efficient pad development.

Response

The BLM analyzed year round access in conformance with the approved Pinedale RMP and in compliance with laws and regulations including FLPMA, MBTA, BGEPA, and ESA. Within the law, under Alternatives B, C and D, it is the intent that once operations begin on a pad, operations would continue on that pad until the pad is completely developed.

Comment Number **P-1-7-G-7**

Comment

Language in the introduction to the FSEIS and ROD, especially in the Wildlife and Habitat Mitigation Plan, should indicate that seasonal stipulation exceptions are the norm rather than the exception for specific activity areas in the DAs. Additionally, the language should emphasize mitigation measures included in the proposed mitigation matrix process will address all current and future impacts to species that have seasonal stipulations.

Response

Thank you for your comment.

Comment Number **P-1-8-G-8**

Comment

The RDSEIS attempts to explain the year-round development concept to the reader through a listing of the species-specific seasonal restrictions for which exceptions will be granted. This listing, however, is incomplete and does not include all species and seasons.

Response

A complete listing of the restrictions typically applied is found in the PAPA ROD, the RMP, and Appendix 4 of the Revised Draft SEIS. Exceptions to one or more of these restrictions may be considered on a case-by-case basis.

Comment Number **P-1-9-G-9**

Comment

In addition, Proponents have agreed to the USFWS voluntary Best Management Practices (BMPs), included in Appendix 9C of the RDSEIS in the Alternative D – Wildlife and Habitat Mitigation Plan and specifically in Attachment D of this letter, which are applied over all ownership land patterns, not just private lands as erroneously described on p. 4-134 of the RDSEIS. The description of this voluntary agreement was truncated on p. 4-134 to the extent that it inaccurately portrays the agreement. Proponents request that the agreement be described fully in the FSEIS and ROD.

Response

The BLM will comply with all applicable federal laws and regulations, such as the Migratory Bird Treaty Act and the Bald and Golden Eagle Protection Act. Agreements that were made outside of the BLM will be taken into consideration when the BLM issues approvals, but will not be considered binding upon the BLM.

Comment Number **P-1-10-G-10**

Comment

Proponents strongly request that Appendix 4 be deleted in its entirety.

Response

The BLM respectfully disagrees.

Comment Number **P-1-10-G-11**

Comment

Instead, the Proponents strongly request that BLM continue to use the BLM's Surface Operating Standards and Guidelines for Oil and Gas Exploration and Development, "The Gold Book," as the standard for procedural operations.

Response

The Gold Book will remain a tool that the BLM can utilize.

Comment Number **P-1-11-G-12**

Comment

BLM describes in the RDSEIS the mitigation activities as impacts rather than benefits. BLM should recognize and highlight the benefits that certain components of the Proposed Action will have on the proposed project, including the innovative and costly Liquids Gathering System (LGS), directional drilling, Wildlife Matrix, mitigation and monitoring fund, etc.

Response

The BLM respectfully maintains that these measures are correctly analyzed.

Comment Number **P-1-11-G-13**

Comment

In addition to addressing and discussing the many innovative and costly on-site mitigation efforts, the BLM needs to state in the FSEIS and the ROD that the application of directional drilling from pads and the LGS techniques clearly constitute avoidance, minimization and mitigation of development impacts because they reduce habitat fragmentation and human disturbance.

Response

The BLM respectfully maintains that the analysis bring forward the effects of these measures.

Comment Number **P-1-12-G-14**

Comment

Proponents' commitment to off-site mitigation is not adequately presented in Chapter 2 or Chapter 4. Proponents proposed to implement off-site mitigation if on-site actions are not adequate or if off-site measures are considered to be of significantly greater value. Please refer to Attachment F in this letter and include language to accurately describe the mitigation package to the reader.

Response

The BLM's compensatory mitigation guidance supports the use of onsite mitigation to reduce impacts, then off site mitigation. This guidance is consistent with the Proponents' proposed off-site mitigation and is adequately presented in the SEIS.

Comment Number **P-1-13-G-15**

Comment

Proponents respectfully request that BLM include in the FSEIS and ROD all Proponent committed mitigation measures as submitted without editing the measures so that the language in the FSEIS and ROD will accurately reflect the offered mitigation commitments.

Response

The SEIS presents the mitigation measures offered by the proponents. The method of presenting these measures and the analysis of these measures remains the discretion of the BLM.

Comment Number **P-1-14-W-1**

Comment

On p. 4-161 of the RDSEIS, BLM says that it does not intend to adhere to the sequence outlined in the Proponent/State of Wyoming matrix agreement. Proponents did not offer this mitigation

tool for editing or alteration by the BLM because the matrix was developed in concert with the WGFD which is the agency charged with managing the wildlife resources of this state. Because WGFD has primary responsibility for managing wildlife within Wyoming, BLM should defer to WGFD's expertise and should accept the wildlife matrix as offered without modification.

Response

The text has been revised.

Comment Number **P-1-15-AQ-1****Comment**

Phase II mitigation under Alternative C in the RDSEIS requires that in addition to an 80% drill rig engine NOx emissions reduction, the Proponents will use "any and all available means" to ensure that visibility impacts will not exceed 1.0 deciview on any day. See Chapter 4, p. 4-82. Proponents have expressed many concerns with this requirement. The BLM added a similar requirement to the Proponents/WDEQ's proposal which is included in some part in Alternative D. The new BLM language has been included in Chapter 4, p. 4-85: "Accordingly, the Operators, BLM, EPA and WDEQ-AQD would jointly agree to a mitigation plan that complies with the goal (0 days of visibility impairment over 1.0 dv at the Bridger Wilderness Area), using any and all practicable means with full consideration of all resources." Under the sentence is the same list of components, although not in the same order, as those on p. 4-82. This is inconsistent with the approach the Proponents have discussed with the WDEQ-AQD.

Response

Thank you for your comment. The USQ correctly quotes "Accordingly, the Operators, BLM, EPA, and WDEQ-AQD would jointly agree to a mitigation plan that complies with the goal, using any and all practicable means with full consideration of all resources." Under Implementation in Point 1: "Operators would meet annually with the BLM and WDEQ-AQD and in consultation with EPA to review the annual forecast and monitoring data and evaluate alternate ways to achieve the visibility impact reduction goal specified..." The implication and intent is for a collaborative approach and agreement on mitigation measures.

Comment Number **P-1-16-AQ-2****Comment**

In addition to the above-mentioned sentence, BLM has appointed EPA as one of the decision-makers throughout the air quality portion for Alternative D. Again, because WDEQ-AQD has jurisdiction, all such references should be deleted.

Response

Thank you for your comment. The EPA is a cooperating agency on this project and would necessarily be consulted. The Wyoming DEQ has jurisdiction and regulatory authority for maintaining air quality in the state.

Comment Number **P-1-17-G-16****Comment**

Given the selection of specific wording by WGFD, WDEQ and the Proponents to describe the movement within and among the DAs, Proponents strongly request that the BLM include the changes to Alternative D found in Attachment B of this letter to assure mitigated year-round access.

Response

The BLM reviewed Attachment B and consistent with the approved RMP, and applicable laws and regulations, text revisions have been made.

Comment Number **P-1-18-AP-1****Comment**

In the RDSEIS, BLM did not capture the Proponents' intent from their DSEIS comment letter with the Annual Planning Meeting process included. Proponents strongly request that BLM include the following in the FSEIS and ROD.

Response

The concept of pre-planning is captured in the SEIS. The actual mechanics of the process need not be completely explained in order for the reader to understand the intent.

Comment Number **P-1-19-G-17****Comment**

Although within each description on the Development Areas the BLM notes that there is approximately a 24-month transition period, but there is no concise discussion in the RDSEIS. Proponents recommend that the BLM insert the language found in Attachment F, pp. 31-32 explaining the need for the transition period so that it is clear to the reader.

Response

The text changes have been made.

Comment Number **P-1-20-RC-1****Comment**

Throughout the document, the terms and definitions relative to "interim" and "final" reclamation are inconsistently applied in the various alternatives. There is a need to clarify definitions for interim and final reclamation for consistency purposes and future operational activities for reclamation throughout the document. Clear definition of "interim" versus "final" reclamation

needs to be added to the Glossary in Chapter 7, and any reference to interim and final reclamation must be consistent with that definition.

Response

The BLM recognizes that interim and final reclamation varies amongst the alternatives, however because of the variations amongst the alternatives, the variation is needed.

Comment Number **P-1-21-RC-2**

Comment

Additional discussions on reclamation need to be fortified, and in some cases, corrected. The Reclamation Plan in Appendix 8D cannot be applied to Alternative E as indicated in the RDSEIS because the Alternative E pads must be left open to allow the return of rigs year after year until all of the wells on the pad have been developed. The pads will be left unreclaimed much longer, even up to 12 years, than under Alternative D as it is not possible to implement interim reclamation. There is no provision for predictable development in Alternative E that would result in interim reclamation opportunities.

Response

The BLM respectfully disagrees. The reclamation objectives from D can be applied to E. The objectives remain valid, only the timing of implementation of the reclamation methods would vary between Alternative D and E.

Comment Number **P-1-22-RC-3**

Comment

Proponents request that Appendix 8D only be applied to Alternative D.

Response

The BLM respectfully disagrees.

Comment Number **P-1-23-AL-1**

Comment

Alternative E does not develop the resource with the benefits provided by Proponents' offered mitigations because the Proponents' offered mitigations do not transfer to Alternative E. The Proponents' offered mitigations require year-round access and Alternative E does not provide year-round access.

Response

Thank you for your comment.

Comment Number **P-1-24-G-18****Comment**

The RDSEIS is silent on which components and requirements of the July 2000 PAPA ROD and other PAPA DRs will migrate to the FSEIS and subsequent ROD. It is Proponents' understanding that the new ROD will be a stand-alone document superseding and supplanting the previous decision documents. This should be clarified, and those components from previous NEPA decision documents which migrate to the new ROD should be clearly articulated.

Response

This is one of the reasons Appendix 4 was included in the RDSEIS.

Comment Number **P-2-1-G-1****Comment**

APC incorporates its previous comments on the PAPA SDEIS herein by this reference.

Response

See Public Comments and BLM Responses on the Draft SEIS.

Comment Number **P-2-2-G-2****Comment**

The BLM must correct the Purpose and Need section in the Final EIS to include the above language.

Response

Thank you for your comment. The BLM respectfully disagrees.

Comment Number **P-2-3-AP-1****Comment**

The BLM has not explained or justified why the PAWG should continue.

Response

The comment points out some of the difficulties the PAWG has had in the past. However, the PAWG provides a forum for public input that otherwise is not available.

Comment Number **P-2-4-G-3****Comment**

The BLM should reference only the most recent version of the Gold Book.

Response

This has been updated in the Final SEIS.

Comment Number **P-2-5-G-4****Comment**

The BLM should consistently refer to the Management Areas by name and number to avoid potential confusion for the public.

Response

The text has been revised to refer to management areas by name and number.

Comment Number **P-2-6-AL-1****Comment**

APC is strongly opposed to the adoption of Alternative B because it would unfairly advantage other oil and gas operators owning leases in the Core Area by allowing year-round development, while precluding APC from similar benefits..... The BLM must not select Alternative B.

Response

Ultra, Shell and Questar have offered additional mitigation measures for access as described in Alternative B.

Comment Number **P-2-7-G-5****Comment**

APC is also opposed to BLM's proposal to only allow exploration activities outside of the Core Development Areas during the first five years after the issuance of the ROD in order to "delineate" the productive zones of the Project Area.....The BLM cannot unilaterally limit the time a lessee has to develop a lease and, thus, effectively modify the terms of the lease.

Response

Ultra, Shell and Questar offered to complete delineation within 5 years and as such would only pertain to Ultra, Shell and Questar.

Comment Number **P-2-7-G-6****Comment**

The BLM may not unilaterally abrogate specific provisions of APC's leases to further a few operators' abilities to develop leases within the Core Area.

Response

See response to Comment P-2-7-G-5.

Comment Number **P-2-8-G-7****Comment**

The proposal to limit delineation activities to only the first five years after the ROD is issued is also inconsistent with the term and conditions of the Two Buttes Unit Agreement, which was approved by the BLM on July 18, 2005.

Response

See response to Comment P-2-7-G-5.

Comment Number **P-2-9-G-8****Comment**

The BLM must avoid adopting alternatives that would result in the unconstitutional taking of APC's property and contract rights.

Response

The BLM will consider these factors when issuing a decision.

Comment Number **P-2-10-G-9****Comment**

To the extent they are applicable to Alternative C, APC hereby incorporates its comments regarding Alternative B. The BLM must not select Alternative C.

Response

Additional mitigation measures may be applied to all operators on the PAPA as a result of this analysis for the protection of resources. However, the alternatives that contemplate relief from seasonal restrictions contain mitigation measures to reduce the impact to wildlife species.

Comment Number **P-2-11-G-10****Comment**

The BLM must slightly correct its description of APC's development activities on page 2-45 of the PAPA RSDEIS. The BLM states on page 2-45 that "Anschutz agreed to limit development within the Alternative D Core Area to no more than three drilling rigs and three well pads at any given time."

Response

This correction has been made in the Final SEIS.

Comment Number **P-2-12-G-11****Comment**

The BLM may not unilaterally abrogate specific provisions of APC's leases.

Response

The two years applies only to Questar's proposed delineation.

Comment Number **P-2-13-G-12****Comment**

The BLM must avoid adopting alternatives that would result in the unconstitutional taking of APC's property and contract rights.

Response

Thank you for your comment.

Comment Number **P-2-14-LS-1****Comment**

This description is not consistent with APC's commitment or expectations. In its letter of July 27, 2007, and its numerous discussions with the BLM, APC made it entirely clear that its leases would, at APC's option, be released from the suspense after five years, and that development on the suspended leases could proceed subject to existing stipulations on the leases. If year-round development was later determined to be warranted on APC's suspended leases, APC would meet with the BLM to discuss the possibility and initiate the preparation of any required analysis and documentation. The BLM must correct the language on page 2-50 of the PAPA RSDEIS to accurately summarize APC's commitment. The current language is not accurate, with respect to APC, and must be removed.

Response

This has been corrected in the Final SEIS.

Comment Number **P-2-15-LS-2**

Comment

The BLM should also disclose the fact that suspension of APC federal leasehold and unit operations may require the consent of APC's partners owning an undivided interest in the acreage subject to suspension.

Response

For purposes of the analysis and based on APC's offer, the BLM analyzed suspension of the leases.

Comment Number **P-2-16-G-13**

Comment

APC is strongly opposed to Alternative E and urges the BLM not to select this unreasonable alternative. By allowing only a certain number of well pads within specific management areas at any given time, the BLM will provide certain operators with a significant operational advantage over the other operators in the Project Area.

Response

Thank you for your comment.

Comment Number **P-2-17-SE-1**

Comment

APC also opposes Alternative E because it will have significant adverse impacts to the local economy. Because the seasonal stipulations will continue, the region will continue to experience seasonal boom-bust cycles. See PAPA RSDEIS, pg. 4-16. The BLM should take efforts to reduce, not encourage these seasonal fluctuations.

Response

Thank you for your comment.

Comment Number P-2-18-V-1**Comment**

The BLM must be aware that cannot attempt to impose the new VRM objective on operations on existing leases.....The BLM cannot impose VRM objectives without considering existing leases and ongoing oil and gas operations.

Response

Thank you for your comment. This will be addressed under the new RMP.

Comment number P-2-19-V-2**Comment**

The BLM must revise and clarify the statement on page 3-50 in light of the limitations on the BLM's authority to modify VRM restrictions.

Response

Thank you for your comment. This will be addressed under the new RMP.

Comment Number P-2-20-AQ-1**Comment**

Given the fact visibility in the area is generally improving, the BLM should not attempt to impose unreasonable air quality mitigation requirements.

Response

Thank you for your comment. The BLM will continue to work with the WDEQ-AQD to ensure that impacts to Air Quality Related Values are mitigated.

Comment Number P-2-21-AQ-2**Comment**

The BLM should not reference unsubstantiated statements such as in this in the PAPA RSDEIS. APC is not aware, of a Forest Service proposal or rulemaking to modify or change the Level of Concern for deposition. Until such time as the Forest Service formally modifies the Level of Concern, the above statement is misleading and must be removed.

Response

Thank you for your comment. Please see response to P-1 (Attachment C) -82-AQ-9 and P-1 (Attachment E) -93-AQ-10.

Comment Number **P-2-22-AQ-3****Comment**

The BLM should clearly explain that the apparent discrepancy between the 2005 modeling results and the actual monitoring data is likely a result of the conservative nature of the BLM's modeling.

Response

Thank you for your comment. The BLM maintains that the analyses are reasonable but conservative.

Comment Number **P-2-22-AQ-4****Comment**

The BLM should more thoroughly disclose the conservative nature of its analysis in the PAPA SFEIS and its role in the NEPA process.

Response

Thank you for your comment. The BLM maintains that the analyses are reasonable but conservative.

Comment Number **P-2-23-SW-1****Comment**

The BLM should not attempt to impose unreasonable sediment control measures on oil and gas operations in the Project Area.

Response

The BLM realizes that the Operators will be implementing sediment control measures as required by the WDEQ-WQD. The BLM may use reasonable measures to mitigate impacts.

Comment Number **P-2-24-TE-1****Comment**

Because of the timing restrictions the BLM and the United States Fish and Wildlife Service (USFWS) will enforce around raptor nests and Bald eagle winter roosting habitat, see, e.g., PAPA RSDEIS, pgs. 4-134, the BLM must include maps of known raptor nest locations and proposed bald eagle roosting habitat in the Final EIS in order for the operators to assess what impacts such restrictions will have on their operations.

Response

The BLM considers raptor nest locations as sensitive information. Since the BLM described bald eagle nesting and roosting habitat as within 1 mile of the Green and New Fork rivers, particularly within forest-dominated riparian vegetation, the inquiry is directed to view Map 3.18-1, "Existing Wellfield Disturbance in Relation to Vegetation Types." Practices and Restrictions (Appendix 4 in the Revised Draft SEIS) are available for application to APDs and right-of-ways during the BLM's site-specific review process.

Comment Number **P-2-25-TE-2**

Comment

The BLM should ensure itself sufficient flexibility to comply with the USFWS's new regulations when they are finalized.

Response

The BLM has a mandate to comply with all applicable federal laws and regulations, such as the Migratory Bird Treaty Act, the Bald and Golden Eagle Protection Act, and Executive Order 13186. The BLM will not grant relief where such action is likely to result in violation of a federal law or regulation.

Comment number **P-2-26-TE-3**

Comment

Further, the BLM must recognize that existing regulations do allow an inactive golden eagle nest to be taken under limited circumstances, with the approval of a permit from the USFWS.

Response

Thank you for your comment. The BLM is aware of existing regulations.

Comment number **P-2-27-TE-4**

Comment

Finally, the BLM should recognize that the Migratory Bird Treaty Act (MBTA), does not, necessarily prohibit or preclude oil and gas operations the way the Bald and Golden Eagle Protection Act might.

Response

Thank you for your comment. The BLM is aware of existing regulations and the differences between the Migratory Bird Treaty Act and the Bald and Golden Eagle Protection Act. The BLM recommends the commenter review Executive Order 13186 as well as BLM Instruction Memorandum No. 2008-050.

Comment number **P-2-28-TE-5****Comment**

The BLM must amend the language in the PAPA RSDEIS to comply with these laws, regulations and past court decisions. The BLM should specifically allow itself sufficient flexibility to manage oil and gas development in accordance with the USFWS's regulations and procedures.

Response

The BLM recommends the commenter review examples of Best Management Practices to avoid or minimize the possibility of unintentional take of migratory birds within BLM Instruction Memorandum No. 2008-050 and note that those apply to all practices and projects, including oil and gas development.

Comment Number **P-2-29-TE-6****Comment**

To the extent possible, the BLM should include more detailed information regarding the distribution, threats, abundance, and habitat needs of BLM Wyoming Sensitive Species found within the Project Area.

Response

The BLM appreciates the issues presented in your comment as the BLM pursues its statutory mandate of ensuring multiple use of the public lands while balancing the associated impacts of those uses. Impacts to resources will occur under all alternatives proposed in the SEIS and due to mineral leasing laws the BLM is not in the position to conserve all potential habitats for sensitive species within the planning area.

Comment Number **P-2-30-TE-7****Comment**

The BLM should specifically include maps of known habitat for species such as white-tailed prairie dogs and pygmy rabbits, and known nesting locations for ferruginous hawks and burrowing owls..... The BLM should take extra effort to ensure its compliance with the BLM manual is properly documented.

Response

As noted in response to Comment P-2-24-TE-1, the BLM considers such information is sensitive. Practices and Restrictions (Appendix 4 in the Revised Draft SEIS) are available for application to APDs and right-of-ways during the BLM's site-specific review process.

Comment Number **P-2-32-TE-8****Comment**

Because the BLM, and other agencies such as the USFWS, may impose or enforce specific timing restrictions and other conditions of approval near raptor nests and white-tailed prairie dog habitat, the BLM must include maps of known raptor nest locations and occupied prairie dog complexes so that the operators can assess what impacts such restrictions may have on their operations.

Response

Operators are welcome to assess any such effects to their leaseholds on an individual basis. See response to Comment P-2-30-TE-7.

Comment Number **P-2-32-W-1****Comment**

The BLM should not reference the seemingly inaccurate conclusions in the 2006 report suggesting oil and gas activities are impacting pronghorn for several reasons.

Response

The BLM disagrees. The information presented in the 2006 report was the best available at the time of the Draft SEIS was prepared, as required by NEPA. The reported information was based on observation, not on assumption, and is no less valid because similar observations were not reported the following year. Information related to potential impacts to pronghorn in the Jonah Field and in the PAPA based on the 2007 report has been updated in Section 3.22.1.1 in the Revised Draft SEIS.

Comment Number **P-2-32-W-2****Comment**

This data strongly suggests the conclusions drawn by Berger in his report in 2006 - that pronghorn may be adversely impacted by oil and gas development - are suspect, if not completely erroneous.

Response

While the commenter correctly notes that the Sublette Herd Unit population has increased since 1999, the commenter should also note that the Northern Sublette Herd Unit subpopulation increased 4.8 percent from 2005 to 2006 (see Table 3.22-2 in the Revised Draft SEIS). The entire Sublette Herd Unit increased 25.3 percent in the same period (see Table 3.22-1). The northern subpopulation, which coincides with the Jonah Field and PAPA, did increase from 2005 to 2006 but at a substantially lower rate than the entire Sublette pronghorn population.

Comment Number P-2-33-W-3**Comment**

Second, BLM does not emphasize the more important conclusions from the Berger study that no significant differences were detected among pronghorn populations exposed to oil and gas development near PAPA and Jonah Field for such important viability factors as overall survivability, body mass, stress hormones (glucocorticosteroids), disease antibodies, and vitamins and minerals.

Response

Thank you for your comment. Those observations and others that indicated pronghorn use of the Jonah Field and PAPA during winter 2006-2007 were included in the Revised Draft SEIS.

Comment Number P-2-34-W-4**Comment**

Third, BLM fails to emphasize the fact that Berger's assumptions regarding pronghorn avoiding oil and gas development were not verified because tagged antelope extensively utilized habitat within Jonah Field during 2007.

Response

The Berger study did indicate that pronghorn used the Jonah Field and the fact that only a subset of the population is collared for the study.

Comment number P-2-34-W-5**Comment**

The assumptions in the 2006 Berger report appear to be inaccurate.

Response

Thank you for your comment. Dr. Berger and associates reported observations, not assumptions. If an earlier observation is not repeated during subsequent study, it is no less a valid observation.

Comment number P-2-35-W-6**Comment**

The BLM indicates that "casual observations" of sage-grouse has declined in recent years. See PAPA RSDEIS, pg 3-129. The BLM has not explained how the "casual observation" took place, or even if the "casual observation," are accurate.

Response

The BLM explained that those observations occurred while observers in the region conducted Breeding Bird Surveys (BBS). Since BBS do not target specific bird species nor is the research objective directed examining relationships of abundance to land use, the term "causal" was used to define the observations that were reported by the USGS Patuxent Wildlife Research Center. Procedures used in BBS are consistently applied from year to year and from location to location. Casual observations represent an unbiased record of occurrence.

Comment Number **P-2-35-W-7**

Comment

The BLM has not explained why harvest data is a more accurate representation of sage grouse populations in the vicinity of the PAPA Project area than the actual population counts prepared by the WGFD. The BLM must remove the misleading information regarding harvest success rates and replace it with the information and data contained in the original PAPA SDEIS.

Response

The WGFD and other observers count a portion of the sage-grouse population during lek surveys. Peak male attendance is the general metric used to track overall use of a lek. Females may also be observed and counted but they are less consistently observed and so lek counts do not accurately depict the amount of female grouse that attend the lek. Harvest includes males and females. When standardized as harvest per unit effort, as the BLM has done, the trend over time provides an indication of the population (called a population index) of males and females within a large geographic region, not on individual leks.

Comment Number **P-2-36-W-8**

Comment

The overall trend for sage-grouse attendance at leks in the Project Area appears to be increasing. See Taylor, Hayden-Wing, et al., Greater Sage-Grouse Populations and Energy Development in Wyoming, pgs. 30 - 31. In fact, the number of cumulative males has significantly increased since 2005, a period that also saw oil and gas development in the Project Area. See Taylor, Hayden-Wing, et al., Greater Sage-Grouse Populations and Energy Development in Wyoming, pg. 30. The BLM should include this analysis in the Final EIS.

Response

BLM assumes the commenter is referring to a report authored by Taylor, R.C., M.R. Dzialak, and L.D. Hayden-Wing, available on the Petroleum Association of Wyoming's web site at <http://www.pawyo.org/sagegrouse.htm>. The authors acknowledge the report is a qualitative characterization of sage-grouse population trends in Wyoming. The authors do use quantitative data but do not provide any formal tests of hypotheses based on those data; their conclusions are subjective. The use of WGFD data in the report appear to be inconsistent since total numbers of males counted each year (rather than average per lek) are reported for lek complexes sometimes but averages (average males/ lek) are used in other instances - labeled

ordinates of graphs are inconsistent or are missing. There appears to be no standardization of total counts and no control for variation in survey intensity of leks over time. There is no way to judge whether the increase in males from 2005 to 2006 cited in the comment is significant or not. Whether the increase cited is independent of development, directly related to or inversely related to development is untested in the report. The BLM's Handbook H-1790-1 (2008 - National Environmental Policy Act Handbook) indicates peer reviewed science and methodology should be given greater consideration over non-peer reviewed work and emphasis is always on the use of best available science. Therefore, the BLM will not include the commenter's recommendation in the Final SEIS although the BLM is aware of the report.

Comment Number **P-2-36-W-9**

Comment

Cooperative efforts between the BLM, State of Wyoming, and many others are working and should be allowed to continue. The BLM should revise and update the analysis regarding sage-grouse populations in the Final EIS.

Response

It is expected that cooperative efforts would continue and those cooperative efforts have been presented in the Revised Draft SEIS.

Comment Number **P-2-37-W-10**

Comment

The BLM also fails to note the significance of two new active leks in the vicinity of the PAPA, suggesting populations of sage-grouse are effectively utilizing habitat outside areas potentially disturbed by oil and gas operations. The BLM should revise section 3.22.1.2 of the PAPA SDEIS to more accurately reflect the current trends and protections available for sage-grouse in the Pinedale Field Office.

Response

Presence of those leks was reported in the Revised Draft SEIS. Note, too, that both were inactive during 2006 and 2007. The trends for sage-grouse in the PAPA and in the region were accurately reported.

Comment Number **P-2-38-W-11**

Comment

In discussing the Holloran study, and any potential conclusions derived therefrom, the BLM should specifically disclose the fact that BLM purposefully waived the seasonal and timing stipulations normally associated with sage-grouse leks and specifically allowed the Operators to drill near an active lek during the strutting season in order to assess the potential impacts.

Response

The results of Dr. Holloran's study would not be affected one way or another by such disclosure since his conclusions were based on a continuum of distance and intensity-dependent effects to leks, not just those related to one lek as the comment suggests.

Comment Number **P-2-38-W-12**

Comment

APC understands the BLM is currently in the process of revising this Instruction Memorandum. The BLM must consider this information when preparing the Final EIS and should not rely upon the Holloran study.

Response

This Instruction Memorandum has not been finalized. APC should be aware that Alternatives B, C, and D, each to varying extents, exempt restrictions on development specified in IM 2004-057. Those restrictions were included in the BLM's 2000 PAPA ROD (except for applications in winter habitat) and were not novel at the time IM 2004-057 was issued.

Comment number **P-2-39-SE-2**

Comment

The BLM must ensure that the significant, positive impacts of oil and gas development in the Southwest Wyoming are allowed to continue.

Response

Thank you for your comment.

Comment Number **P-2-40-V-3**

Comment

The BLM must revise the statement on page 4-56 suggesting that wellfield development may exceed BLM's VRM III management objectives. All of the BLM's management actions must conform to the Pinedale Resource Management Plan.

Response

Text has been revised.

Comment Number **P-2-41-C-1****Comment**

The BLM indicates on page 4-64 that "alternative methods of resource protection could be researched and implemented" for winter mitigation. See PAPA RSDEIS, pg. 4-64. The BLM should clearly define potential winter mitigation measures, and ensure that such measures are reasonable and consistent with existing lease rights.

Response

The BLM cannot define these mitigation measures because these mitigation measures currently do not exist. Thus, there is a need for the sentence in the Revised Draft SEIS.

Comment Number **P-2-42-C-2****Comment**

Notably, the BLM's analysis predicts for more negative impacts to cultural resources from development under Alternative E than Alternative D. See PAPA RSDEIS, pg 4-67. The BLM should adopt Alternative D.

Response

Thank you for your comment.

Comment Number **P-2-43-AQ-5****Comment**

The BLM must substantially revise the statement on page 4-71 that suggest the BLM's conservative air quality modeling can be used to demonstrate future compliance, or noncompliance with air quality laws and regulations.

Response

Thank you for your comment. The WDEQ has the regulatory responsibility and authority to enforce air quality regulations in Wyoming. The BLM has the land management authority and responsibility to adopt desired future conditions, such as significance criteria and levels of concern. The WDEQ and the EPA will implement and impose air emission regulations on stationary and mobile sources in accordance with each agency's authority. If an actual WAAQS or NAAQS standard has been exceeded, the WDEQ will take the appropriate action to ensure compliance based on monitored data, for example ozone exceedances and/or violations.

Comment Number **P-2-44-AQ-6****Comment**

Given the BLM's lack of authority over air emissions in Wyoming, and given the fact the BLM's admittedly conservative modeling demonstrates compliance with the WAAQS, NAAQS, and PSD Increments under the Proposed Action and the various alternatives, the BLM should not attempt to impose overly prescriptive or unnecessary air quality mitigation techniques or conditions of approval on operations in the PAPA Project Area.

Response

Thank you for your comment. Please see response to Comment P-2-43-AQ-5, but also note that potential (modeled) ozone impacts exceed the newly promulgated NAAQS for ozone. In addition, the Proponents, WDEQ, BLM and EPA agreed to a range of possible mitigation measures (bullet list, page 4-82 and 4-85; and modeling as part of Implementation).

Comment Number **P-2-45-AQ-7****Comment**

APC is concerned with the unnecessary air quality mitigation measures described in Section 4.9.3.5 of the PAPA RSDEIS. The language of the RSDEIS, coupled with the fact that the BLM's extensive air quality modeling in the PAPA RSDEIS demonstrates continued compliance with all NAAQS/WAAQS, suggest that the BLM intends to reduce potential visibility impacts through the proposed mitigation. Because actual visibility monitoring proves that visibility has remained relatively constant over the past several years and has recently improved despite increased oil and gas activity, the BLM is improperly allowing overly conservative models to influence its management decisions.

Response

Thank you for your comment. Please see response to Comment P-2-44-AQ-6.

Comment Number **P-2-46-AQ-8****Comment**

Therefore, the BLM has no authority over air quality, and cannot impose emissions restrictions, either directly or indirectly, on natural gas operations in southwest Wyoming, particularly if the overall goal is to reduce potential visibility impacts.

Response

Thank you for your comment. Please see response to Comment P-2-43-AQ-5.

Comment Number **P-2-47-AQ-9****Comment**

In light of these limitations, the BLM must significantly revise, if not delete entirely, the proposed mitigation strategy described in Section 4.9.3.5 of the PAPA DEIS. Wyoming's continued compliance with all NAAQS/WAAQS and its progressive and comprehensive air quality regulatory program demonstrates that WDEQ is fulfilling its responsibility to protect air quality in Wyoming. BLM should not attempt to illegally regulate air emissions in derogation of WDEQ's authority.

Response

Thank you for your comment. Please see response to Comment P-2-43-AQ-5 and Comment P-2-44-AQ-6.

Comment Number **P-2-48-AQ-10****Comment**

The BLM must eliminate this de facto emissions CAP in the PAPA ROD, in deference to the WDEQ's authority over air emissions in Wyoming.

Response

Thank you for your comment. The BLM must disagree; the mitigation plan (which was agreed to by proponents and agencies) is attempting to reduce visibility impairment in a step-wise process over a number of years, not impose an emissions cap. Modeling and monitoring are part of the plan. The BLM recognizes that certain aspects of air quality regulation are outside the bounds of its authority and fall within the purview of the WDEQ. However, some aspects of these air quality concerns are the responsibility of the BLM. The BLM does not have the authority to implement an emissions cap. The responsibility and authority for an emissions cap would rest with the WDEQ.

Comment Number **P-2-49-AQ-11****Comment**

In the PAPA RSDEIS, the BLM does not indicate whether the emission reductions described in Alternative D of the EIS are possible, much less technologically and economically feasible.

Response

Thank you for your comment. The mitigation plan and subsequent implementation is reasonable and was agreed to by proponents and agencies. The bullet lists included on pages 4-82 and 4-85 choices/suggestions for present day technology, not science fiction. The fact that all groups were (and are) part of this planning process would seem to indicate that these emissions reductions are possible.

Comment Number **P-2-50-AQ-12****Comment**

The BLM must delete the requirement to demonstrate compliance through annual modeling.

Response

Thank you for your comment. The BLM must disagree with APC. Modeling (in this case annually) is a valuable part (and tool) of the implementation plan to demonstrate reduction in visibility impairment. The BLM does agree with APC insofar as, yes, monitoring can be as valuable or more so in this area as even more funds become available to establish monitoring stations in the Upper Green River Basin.

Comment Number **P-2-51-M-1****Comment**

The BLM's proposed mitigation measures requiring offsite mitigation are inconsistent with BLM policy. The BLM cannot require offsite mitigation, it must be entirely voluntary. See BLM Instruction Memorandum 2005-069 (Feb. 1, 2005); Wyoming Instruction Memorandum WY-96-21 (Dec.14, 1995).

Response

The BLM interprets this comment as applying to Mitigation Measure No. 2. This mitigation measures does not specifically require the Operators to implement vegetation treatments. This mitigation measure could apply to various entities including the BLM.

Comment Number **P-2-52-M-2****Comment**

The BLM cannot impose mitigation measures inconsistent with APC's existing lease rights.

Response

This mitigation measure does not specifically require the Operators to implement stock water facilities. This mitigation measure could apply to various entities including the BLM. Standard lease conditions allow the Authorized Officer to move a well or other facility site up to 200 meters.

Comment Number **P-2-53-M-3****Comment**

The BLM cannot require offsite mitigation measures, they must be entirely voluntary. See BLM Instruction Memorandum 2005-069 (Feb. 1, 2005); Wyoming Instruction Memorandum WY-96-21(Dec. 14, 1995).

Response

See response to Comment P-2-52-M-2.

Comment Number **P-2-54-TE-9****Comment**

The BLM does not, however, include a specific statement or finding that the approval of the Pinedale Anticline Oil and Gas Exploration and Development Project will not contribute to the need to list a BLM Wyoming Species under the ESA. See BLM Manual 6840.06(E) (Rel. 6-121, 1/19/01). The BLM should clearly include this determination in the Final SEIS.

Response

The Revised Draft SEIS has evaluated and disclosed impacts to special status species for all alternatives.

Comment Number **P-1-55-W-13****Comment**

The 2004 version of the Recommendations for development of Oil and Gas Resources within Crucial and Important Wildlife Habitats is the only document that has been officially adopted by the Wyoming Game and Fish Commission. The BLM should delete the reference to the 2007 preliminary draft version.

Response

Thank you for your comment. The BLM anticipated the release of the 2007 version but the WGFD has not yet done so. Nevertheless, criteria advanced by the WGFD in 2004 (Recommendations for Development of Oil and Gas Resources within Crucial and Important Wildlife Habitats -December 6, 2004) would likewise categorize most of the current Pinedale Anticline Crest as an area of "Extreme Impact" with greater than 16 well locations per square mile and greater than 80 acres of wellfield disturbance per square mile - whether in areas of crucial winter range (for pronghorn and mule deer) or areas of sage grouse leks, nesting and early brood-rearing habitats. As an area of "Extreme Impact", the WGFD recognized in 2004 that "habitat function is substantially impaired and cannot generally be recovered through management or habitat treatments." The BLM will use the 2004 reference in the Final SEIS.

Comment Number **P-2-56-W-14****Comment**

The BLM should delete any references to the Naugle and Walker studies on pages 4-152 and 4-153 of the PAPA RSDEIS, or at least include information regarding the limitations and criticisms of those studies in other recently issued reports. A recently released study by Renee Taylor and Dr. Larry Hayden-Wing regarding the impacts of oil and gas development on sage-grouse in Wyoming call into question many of the assumptions and findings of the Naugle and Walker reports. See Taylor, Hayden-Wing, et al., Greater Sage-Grouse Populations and Energy Development in Wyoming. The BLM should review and incorporate the findings of the Taylor and Hayden-Wing report into the PAPA RSDEIS.

Response

The commenter should be aware that the studies they cite are part of the body of best available science used in the Revised Draft SEIS. The BLM has reviewed the suggested document and has declined to include it in the Revised Draft SEIS for reasons included in response to Comment P-2-36-W-8.

Comment Number **P-2-57-LS-3****Comment**

The BLM must correct the language on page 8D-5 of the PAPA RESEIS to accurately summarize APC's proposal to the BLM. The current language is not accurate, with respect to APC, and must be removed.

Response

The text has been clarified.

Comment Number **P-3-1-G-1****Comment**

Yates was not asked nor do they necessarily consent to all of the operator-proposed commitments found in the appendices.

Response

Thank you for your comment. The BLM understands that Yates position is different from that of other Proponents.

Comment Number **P-3-2-AM-1/MF-1**

Comment

Yates did not offer an adaptive management approach or a compensatory mitigation fund.

Response

The text has been revised.

Comment Number **P-3-3-M-1**

Comment

Yates did not offer to provide off-site compensatory mitigation.

Response

The text has been revised.

Comment number **P-3-4-MF-2**

Comment

Yates commends the BLM for recognizing that Yates did not voluntarily commit to the Pinedale Anticline Mitigation and Monitoring Fund.

Response

Thank you for your comment.

Comment Number **P-3-5-RC-1**

Comment

There is discussion about interim and final reclamation criteria, but the BLM does not clearly identify the criteria that must be met to qualify for rollover. The BLM should clarify the rollover criteria.

Response

There is no such thing as rollover criteria in the PAPA and therefore, it does not need to be identified.

Comment Number P-3-6-G-1**Comment**

Yates commends the BLM for clearly identifying the “Proponents” when discussing the wildlife and habitat mitigation plan and mitigation measures under Alternative D. This helps to identify which companies developed and agreed to the plan and mitigation measures.

Response

Thank you for your comment.

Comment Number P-4-1-V-1**Comment**

In order for a core development area to work, there needs to be relief from VRM classifications as well as wildlife seasonal stipulations. Much of DA-5 falls within a VRM Class III designation. Based on existing development in this area, Newfield requests the BLM to consider changing this area of DA-5 to a VRM Class IV designation.

Response

VRM classifications are outside of the scope of the analysis. Decisions on those classifications can only be made at the RMP level.

Comment Number P-4-2-G-1**Comment**

Newfield Production Company urges the BLM to approve the action proposed by the Operators, Alternative D.

Response

Thank you for your comment.

Comment Number P-5-1-AQ-1**Comment**

BP believes that BLM must address these technical concerns in order to present an accurate document for public review and ultimately for approval of the development plan.

Response

Thank you for your comment and information update. The BLM believes the air quality modeling efforts (performed as part of this project at that time), performed in cooperation with the WDEQ,

EPA, NPS, and USFS, have been appropriate and comply with NEPA. The modeling has provided both the decision makers and the public with adequate information.

Comment Number **P-5-1-AQ-2**

Comment

It is recommended that BLM provide a detailed summary of comments as well as supportable technical documentation for the necessary resolution of the issues raised.

Response

Thank you for your comment and information update. The BLM believes the air quality modeling efforts (performed as part of this project at that time), performed in cooperation with the WDEQ, EPA, NPS, and USFS, have been appropriate and comply with NEPA. The modeling has provided both the decision makers and the public with adequate information.

Comment Number **P-5-2-AQ-3**

Comment

If additional modeling is conducted, we recommend that BLM use CAMx rather than CALPUFF for secondary particulate analysis

Response

Thank you for your comment.

Comment Number **P-5-3-AQ-4**

Comment

While the application of CAMx is an improvement over CALGRID, there are a number of technical issues associated with the application of the CAMx model for estimating ozone formation, as a result of the proposed development, that BLM needs to address

Response

Thank you for your comment. See response to Comment P-5-4-AQ-5.

Comment Number **P-5-4-AQ-5**

Comment

It is important to review how BLM developed the CALMET wind fields

Response

Thank you for your comment. Please see AQTSD, Appendix A, Section 4.2 Meteorological Model Input and Options, pages A-24 to A-25 in the Revised Draft and Final SEIS.

Comment Number **P-5-4-AQ-6**

Comment

BLM, however, has not provided any documentation on how the MM5 modeling was conducted

Response

Thank you for your comment. Please see AQTSD, Appendix A, Section 4.2 METEOROLOGICAL MODEL INPUT AND OPTIONS, pages A-24 to A-25 in the Revised Draft and Final SEIS.

Comment Number **P-5-5-AQ-7**

Comment

The BLM document does not provide any evaluation of the accuracy of developed wind fields compared to independent data

Response

Thank you for your comment. Please see AQTSD, Appendix A, Section 4.2 Meteorological Model Input and Options, pages A-24 to A-25; especially paragraphs 2 and 3 within this section.

Comment Number **P-5-6-AQ-8**

Comment

The EIS modeling for Moxa Arch scenarios should incorporate additional station observations from sites in the likely direct trajectory paths from Moxa Arch to the Bridger Class I Area. Data is available from WDEQ. It is likely several other sites can be found between Rock Springs and Jonah

Response

Thank you for your comment. During the time since the Pinedale Draft SEIS was published to present, the Moxa Arch EIS project has been ongoing. For the Moxa Arch Project, a more refined ozone modeling study has been prepared using the CAMx model. The Moxa Arch analysis is based on WRAP 2002 regional emissions inventories and it includes other categories of source inventories that update the WRAP inventory to present such as; state permitted sources, reasonable foreseeable future action (RFFA) sources, and NEPA reasonable foreseeable development (RFD) projects. The Moxa Arch analysis includes the Pinedale

Anticline Project Area, and this area is included in the refined 4-km grid portion of the modeling domain.

Comment Number **P-5-7-AQ-9**

Comment

To support the need for more meteorological data for the large modeling domain, the following wind fields were excerpted from <http://deq.state.wy.us/aqd/Modeling%20Studies.asp>

Response

Thank you for your comment and reference; the cited surface windfields are CALMET modeled for 2001, 2002, and 2003 meteorology.

Comment Number **P-5-8-AQ-10**

Comment

The next several plots present vector flows that appear to be unrealistic of flow in the region. Each plot indicates confused flows in the Jonah plain and in the northeast quadrant that need to be resolved by using additional meteorological stations in the meteorological modeling. It is likely that an additional surface station is needed to resolve flows in the northeast quadrant.

Response

Thank you for your comment. And yes, given the scale of development in the Upper Green River Basin more than (just one) "...an additional surface station is needed to resolve flows in the northeast quadrant."

Comment Number **P-5-9-AQ-11**

Comment

This finding is in addition to the predicted wind direction is not correct. The fact that the wind speed is under predicted is important because it affects the dispersion of the plume and also the rate of chemical transformation.

Response

Thank you for your comment. The figures presented here attempt to compare monitored data from Jonah 2005 and CALMET modeled for the Jonah grid cell 2001 - 2003. Not an entirely valid comparison.

Comment Number **P-5-10-AQ-12****Comment**

In conclusion, there appears to be very large uncertainty in the wind fields used by BLM in the CALMET/CAMx modeling that needs to be resolved before additional modeling is conducted. In developing a more complete evaluation of the meteorological input to the CAMx model it is recommended that as a starting point, BLM should generate wind field plots for days with predicted elevated ozone concentrations

Response

Thank you for your comment. See response to Comment P-5-9-AQ-11.

Comment Number **P-5-11-AQ-13****Comment**

First, BLM needs to provide speciation information on VOC emissions and the profiles need to be compared to actual speciation data for the sources of concern. Second, information is needed regarding the emissions input to the model. It is recommended that BLM provide a matrix of emissions by pollutant for source types included in the modeling. This should be done for the 4, 12 and 36 kilometer grids, especially for oil and gas as well as biogenics emissions

Response

Thank you for your comment. Please note that the project emissions inventory is given in the AQTSD, Appendix F in the Revised Draft and Final SEIS.

Comment Number **P-5-12-AQ-14****Comment**

There is insufficient detail in the ozone modeling analysis to evaluate the emission inventory used for the future year development

Response

Thank you for your comment. Please see AQTSD, Appendix H, Regional Ozone Assessment in the Revised Draft and Final SEIS.

Comment Number **P-5-13-AQ-15****Comment**

It is recommended that additional analyses be presented in the document that clarifies model performance

Response

Thank you for your comment.

Comment Number **P-5-14-AQ-16**

Comment

It is also recommended that BLM consider the predicted spike in ozone near Yellowstone National Park as a modeling artifact. There is no information to suggest that the elevated concentration actually occurred.

Response

Thank you for your comment. The BLM believes that the data and analyses provided in the SEIS and AQTSD are adequate for this impact assessment.

Comment Number **P-5-15-AQ-17**

Comment

BLM needs to provide source apportionment modeling results for days when predicted ozone is elevated. The following source groups should be considered:

- 1) Proposed new sources;
- 2) Current baseline conditions within the 4 kilometer grid;
- 3) Ozone transported into the region (e.g. Denver, Salt Lake City and other urban emissions);
- 4) Biogenic emissions; and
- 5) Background ozone transported in from the 36 kilometer grid

By developing source apportionment information for critical days, it is possible to understand the actual predicted impact of the proposed development.

Response

Thank you for your comment. The BLM believes the air quality modeling efforts, performed in cooperation with the WDEQ, EPA, NPS, and USFS, have been appropriate and comply with NEPA. The modeling has provided both the decision makers and the public with adequate information.

Comment Number **P-5-16-AQ-18**

Comment

BLM should not consider the maximum 4/12 kilometer absolute maximum impacts in evaluation of ozone impacts (83.8 for Case 1 and Case 2).

Response

Thank you for your comment. The absolute 4th highest 8-hr maximum impact of potential ozone impacts (83.8 for Case 1 and Case 2) within the modeling domain does occur in Colorado; however, note that within the general location of the PAPA the maximum CAMx estimate fourth highest daily maximum 8-hour ozone concentrations are in the 80-85 ppb and 70-75 ppb range for the, respectively, PAPA Case 1 and Case 2 emission scenarios. This is very close to the 'old' NAAQS and almost above the 'new' NAAQS.

Comment Number **P-5-17-AQ-19**

Comment

The BLM supplemental draft presents mitigation options that were not identified in the original document.

Response

Thank you for your comment. Mitigation options and implementation plan(s) were agreed upon by Proponents, federal, and state agencies.

Comment Number **P-5-18-AQ-20**

Comment

There are many problems associated with the new mitigation options. First, from a visibility perspective, other than flawed CALPUFF modeling, there is no demonstrated need for the mitigation options.

Response

Thank you for your comment. The BLM believes the air quality modeling efforts, performed in cooperation with the WDEQ, EPA, NPS, and USFS, have been appropriate and comply with NEPA. The modeling has provided both the decision makers and the public with adequate information.

Comment Number **P-5-19-AQ-21**

Comment

The second mitigation option assumes that rigs are mitigated by 80 percent for Alternative C (Phase 1), a case that already assumes excessive controls. BP firmly believes that emissions from diesel engines used on drilling rigs will be much lower than was assumed in the modeling analysis. Additionally, in the WRAP Phase II Oil and Gas Inventory, it was reported that rig engines are subject to a current technology 5-10 year replacement cycle. This phased upgrade to the rig engine portfolio should be incorporated into the analysis

Response

Thank you for your comment. Mitigation implementation assumes a 20% per year reduction in NO_x emissions which had been agreed to by the Proponents, federal agencies, and state agencies.

Comment Number **P-5-20-AQ-22**

Comment

The American Petroleum Institute (API) has recently conducted an evaluation of the EPA CALPUFF model and based on that review it was concluded that there were errors in formulation of the chemistry modules of the model. A draft copy of the API report is attached to this document.

Response

Thank you for your comment and attachment.

Comment Number **P-5-21-AQ-23**

Comment

The changes to the chemistry algorithms in the CALPUFF model were revised to be more consistent with the formulation of CB4 chemical mechanisms in CAMx and CMAQ. Figure 2 presents a comparison of NO₃ predictions from the new and previous algorithms in CALPUFF. As indicated in this figure, when the model is run using current state of the art chemical formulations (consistent with CAMx and CMAQ), substantially lower NO₃ concentrations are predicted.

Response

Thank you for your comment and information update. The BLM believes the air quality modeling efforts, performed in cooperation with the WDEQ, EPA, NPS, and USFS, have been appropriate and comply with NEPA. The modeling has provided both the decision makers and the public with adequate information.

Comment Number **P-5-22-AQ-24**

Comment

API also found that through conducting low temperature sensitivity studies another important shortcoming of CALPUFF was identified, its lack of treatment of ammonia limitation for multiple or overlapping puffs. This finding leads to substantial overestimation of particulate nitrate formation at downwind receptors. This shortcoming can be addressed by a post-processing step to recalculate inorganic aerosol equilibrium at receptor locations. In addition, an upper limit for particulate nitrate formation that is based on the amount of ammonia available in the

background should be implemented in CALPUFF to prevent the output of particulate ammonium nitrate concentrations that are physically unrealistic (do not conserve mass of ammonia).

Response

Thank you for your comment and information update. The BLM believes the air quality modeling efforts (performed as part of this project at that time), performed in cooperation with the WDEQ, EPA, NPS, and USFS, have been appropriate and comply with NEPA. The modeling has provided both the decision makers and the public with adequate information.

Comment Number **P-5-23-AQ-25**

Comment

In conclusion, the API study further substantiates that visibility impacts predicted by CALPUFF overstate likely impacts from proposed development and do not support the excessive mitigation measures suggested in the BLM supplemental draft.

Response

Thank you for your comment and information update. The BLM believes the air quality modeling efforts (performed as part of this project at that time), performed in cooperation with the WDEQ, EPA, NPS, and USFS, have been appropriate and comply with NEPA. The modeling has provided both the decision makers and the public with adequate information.

Comment Number **P-1(Attachment C)-81-AQ-8**

Comment

Proponents respectfully object to BLM's revision of the Proponents/WDEQ agreed-upon drill rig engine NO_x emission plan.

Response

Thank you for your comment. The BLM believes that the intent of the language used under Implementation, Chap. 4, pages 4-85 to 4-87 has not changed.

Comment Number **P-1(Attachment C)-82-AQ-9**

Comment

SEE ATTACHMENT C FOR DETAILED COMMENTS.

Please see Attachment F of this letter for previously submitted comments on the "any and all available means" language. See text in this comment letter of comments to similar BLM language on Alternative D.

Response

Thank you for your comment. Please note language used under Implementation, Chap. 4, pages 4-85 to 4-87, Point 4 - "...the collaborative group, with input from WGFD, would select, and Operators would begin to implement, a technically and economically practicable plan to achieve the goal of zero days greater than 1.0 dv of predicted visibility impairment while avoiding adverse impacts to wildlife and other resources." The collaborative group in this case is: the Operators, WDEQ-AQD, and the BLM in consultation with the EPA.

Comment Number **P-1(Attachment A)-25-G-19**

Comment

This is inaccurate. Proponents requested exception from all wildlife stipulations. "To implement the components of this proposal, Proponents request that BLM not apply seasonal restrictions to permit approvals that would normally limit actions." (September 16, 2005, Proponents' letter to Priscilla Mecham, then the Pinedale Field Manager). The concept of year-round development requires comprehensive exception from all wildlife seasonal stipulations within the areas approved for year-round development. This wording could negate the concept of year-round access. Without total wildlife exceptions the mule deer, pronghorn and sage grouse exceptions could be neutralized and negated by another species' seasonal stipulation.

Response

Please refer to the scoping notice. The BLM will comply with all applicable Federal laws and regulations, such as the Migratory Bird Treaty Act and the Bald and Golden Eagle Protection Act. Agreements that were made outside of the BLM will be taken into consideration when the BLM issues approvals, but will not be considered binding upon the BLM.

Comment Number **P-1(Attachment A)-26-G-20**

Comment

Page 5 of July 2000 PAPA ROD: "This ROD does not specify a well pad limitation on federal lands and minerals. Rather, BLM will track development within the project area to ensure that development does not exceed the scope of the Pinedale Anticline EIS or create unanticipated impacts." Unable to locate a statement in 2000 PAPA ROD that if any of the authorized limits to development are reached, additional environmental analysis would be required except for the air threshold.

Response

Please refer to page 27 of the PAPA ROD. The BLM agrees that there is not a well limit, but rather an analysis threshold for NO_x and limitations on well pads within management areas.

Comment Number **P-1(Attachment A)-27-G-21****Comment**

The level of impact is dependent upon the Alternative and should be noted. Add a statement noting that the level of impact is dependent upon the Alternative under each category. Examples are noted below, but other subsections in the Executive Summary not listed below may also need this statement.

Response

The purpose of the Executive Summary is not to distinguish one alternative from another but to briefly describe the impacts that would occur.

Comment Number **P-1(Attachment A)-28-SE-1****Comment**

The paragraph implies that the impacts of the Alternatives are the same, but they are not. This should be clarified even in the Executive Summary. Such as “Differences in level and amount of impact on socioeconomics is inherent to the Alternative and dependent on the timing of development within a year and degree of concentrated development.” Similar to language under “Land Use and Residential Areas”.

Response

See response to Comment P-1(Attachment A)-27-G-21.

Comment Number **P-1(Attachment A)-29-T-1****Comment**

The amount of additional roads varies depending on the Alternative. This should be clarified even in the Executive Summary. Such as “Differences in the number of and miles of roads are inherent to the Alternative and on the degree of concentrated development.”

Response

See response to Comment P-1(Attachment A)-27-G-21.

Comment Number **P-1(Attachment A)-30-V-1****Comment**

While true, the degree to which visual resources are temporarily and permanently affected is different in each Alternative. This should be clarified even in the Executive Summary. Such as “Differences in the degree of visual impact are inherent to the Alternative, on the degree of concentrated development and the extent of implementation of the liquids gathering system.”

Response

See response to Comment P-1(Attachment A)-27-G-21.

Comment Number **P-1 (Attachment A)-31-AQ-3**

Comment

As with each of these subsections, the level of impact is dependent upon the Alternative and should be noted. This should be clarified even in the Executive Summary. Such as “Differences in the degree of air impacts to visibility is inherent to the Alternative, on the degree of concentrated development and the extent of implementation of the liquids gathering system.”

Response

The text has been revised in the Executive Summary.

Comment Number **P-1(Attachment A)-32-G-22**

Comment

Proponents committed to not more than 600 pads. Add to the end of the sentence “... not exceeding a total of 600 pads.”

Response

The text has been clarified.

Comment Number **P-1(Attachment A)-33-G-23**

Comment

Missing components are: earlier and interim reclamation, computer assisted operations, 10-year forecast and annual planning meeting, and components of Transportation, Reclamation, Wildlife and Habitat Mitigation plans in Appendices. Add to the description the missing components of the Proposed Action.

Response

A more complete listing of the Proposed Action is given in the Alternatives Section of the Revised Draft SEIS in Chapter 2.

Comment Number **P-1(Attachment A)-34-G-24****Comment**

Ultra, Shell and Questar have committed to no more than 600 pads being developed, and this should be added in the sentence. Add in the sentence "... on no more than 600 pads"

Response

The BLM respectfully disagrees.

Comment Number **P-1(Attachment A)-35-G-25****Comment**

The introductory section as currently written addresses BLM's "need" to act on the Proponents' proposal. The CEQ regulations (40 CFR § 1502.13) require the purpose and need statement to "briefly specify the underlying purpose and need to which the agency is responding in proposing the alternatives including the proposed action." For applicant-proposed projects, the purpose and need statement reflects what the applicant intends to accomplish by the proposed action. BLM NEPA Handbook, at V-4. (1988). The redrafted purpose and need statement fails to reflect the Operators' purpose and need. This is an incorrect formulation of purpose and need. The portions of the purpose and need deleted from the first draft SEIS should be included in the FSEIS.

Response

Thank you for your comment. The BLM respectfully disagrees.

Comment number **P-1(Attachment A)-36-G-26****Comment**

The purpose of this statement is unclear. Delete sentence.

Response

Thank you for your comment. The BLM respectfully disagrees.

Comment Number **P-1(Attachment A)-37-G-27****Comment**

BLM decision on how to use acreage for analysis purposes. USQ prior comment letter on the DSEIS requested consistent treatment on this issue and recommended that "Areas such as pipeline corridors that are reclaimed immediately should be considered temporary surface disturbance for the purposes of this analysis and mitigation." Change in FSEIS.

Response

The BLM respectfully disagrees.

Comment Number **P-1(Attachment A)-38-T-2**

Comment

Alternative E does not have a Transportation Plan for this analysis. Delete "X" from Alternative E - Transportation Plan column.

Response

Alternative E was developed by the BLM and the Transportation Plan from the PAPA ROD was incorporated into Alternative E.

Comment Number **P-1(Attachment A)-39-RC-4**

Comment

Explain how the reclamation plan for Alternative D can fit Alternative E or delete any analysis of the Alternative D reclamation plan that occurs for Alternative E.

Response

The criteria established for interim and final reclamation for Alternative D can be applied to Alternative E.

Comment Number **P-1(Attachment A)-40-W-2**

Comment

Delete Appendix 4.

Response

The BLM respectfully disagrees; Appendix 4 is retained.

Comment Number **P-1 (Attachment A)-41-AP-2**

Comment

Clearly state the difference in the alternatives. Alternative B and D provide for adaptive management through annual planning meetings and 10-year long-range planning.

Response

The BLM respectfully disagrees with the suggested change as this level of detail is not needed for the summary table.

Comment Number **P-1(Attachment A)-41-AQ-4**

Comment

Statement reads "Reduction to 2005 NO_x levels within 1 year and 80 percent additional within 42 months." This should be corrected according to Proponents' commitment: "Reduction to 2005 rig engine NO_x emission levels within 1 year and 80 percent additional within 42 months on rig engine NO_x emissions."

Response

Text has been changed.

Comment Number **P-1(Attachment A)-41-G-28**

Comment

There are numerous errors in this Table and it is redundant to information in the Chapter. Delete the Table or go through and make the following clarifications and correct specific issues.

Response

The table has not been deleted in the Final SEIS.

Comment Number **P-1(Attachment A)-41-G-29**

Comment

This description is misleading. It must be clear that Proponents' proposal includes a total of 535 new pads (not wells) will be constructed subsequent to the 2000 PAPA ROD. Correct to say "Proposed Total New well pads in PAPA."

Response

The text has been clarified.

Comment Number **P-1(Attachment A)-41-G-30**

Comment

Proponents' proposal is for no more than 600 total pads. Correct to indicate a total of 600 pads are proposed.

Response

Text has been revised.

Comment Number **P-1(Attachment A)-41-G-31**

Comment

Alternative E should reflect that there are only 8 MAs (MAs 1 through 8). Correct to show MAs 1 through 8.

Response

As the text describes, MA 8 was retained for consistency with the PAPA ROD.

Comment Number **P-1(Attachment A)-41-G-32**

Comment

Delineation is allowed anywhere in adherence to seasonal stipulations. Revise “Allowed by exception in other areas” to read “Allowed within seasonal stipulations by exception.”

Response

Text has been revised.

Comment Number **P-1(Attachment A)-41-G-33**

Comment

Need to quantify the difference between the alternatives according to the rest of the table. For Alt A & E, change wording to: “More rig moves to accommodate seasonal restrictions.” For Alt B, C, and D, change wording to: “Less rig moves as rigs stay on pad to the extent practical until pad is completed”

Response

Text has been revised.

Comment Number **P-1(Attachment A)-41-G-34**

Comment

The table states that Appendix 4 would be applied to all alternatives. Because Appendix 4 goes far beyond standard Practices for oil and gas operations, the restrictions are inefficient, costly and generally not compatible with oil and gas operations.

Response

The text has been revised to show that these measures can be applied on a case-by-case basis to resolve resource issues.

Comment Number **P-1(Attachment A)-41-LS-1**

Comment

Lease suspensions and term NSO restrictions are for 5-year term. Review of need to continue will be evaluated at end of 5 years. Clarify language.

Response

Not all Operators have agreed to the continuation after 5 years, if needed.

Comment Number **P-1(Attachment A)-41-MF-1**

Comment

Alternative D states “Expected \$36 Million Monitoring and Mitigation Fund.” The estimated \$36 million amount is based on a total estimate based on pace of development. Re: Alternative D, given the language in Chapter 4, p. 4-161 (not strictly following the matrix sequence) and the language on reaching lower air emission, p. 4-85, the total amount of the fund could be substantially lower. The amount should not be included here. Use as example of disclosure for exceptions for all wildlife stipulations. Delete “\$36 Million.”

Response

Text has been revised.

Comment Number **P-1(Attachment A)-41-T-3**

Comment

The Transportation Plan for Alternative E is not the same as Alternative D. Correct to show that Transportation Plan for Alternative E is the same as Alternative A, Appendix 8A.

Response

The Transportation Plan is not indicated to be the same as Alternative D. The commenter was likely referring to the Reclamation Plan. If this is the case, the goals and objectives of the Reclamation Plan from Alternative D can be applied to Alternative E, with recognition that the amount of time the pads stay open, due to the amount of time it would take to develop a pad, varies between the two alternatives.

Comment Number **P-1(Attachment A)-41-W-3****Comment**

Raptors and eagles should be in this comparative table as it was in the DSEIS, Appendix F comparative table. Are eagles and raptors assumed to be covered under Appendix 4, BLM's Standard Practices and Restrictions for the Pinedale Anticline Project Area?

Response

None of the alternatives treat raptors (including eagles) differently and therefore, they are not included in the table.

Comment Number **P-1(Attachment A)-42-AM-1****Comment**

The revised draft SEIS notes that adaptive management will apply to each Alternative, but Alternatives A-C and E do not have adaptive management plans. Without specific goals, triggers, and timelines, it is difficult for BLM to predict the effects of adaptive management. BLM should set forth adaptive management plans relating to each Alternative, and these plans should contain specific goals, timelines and triggers (or at least a working framework) of these elements.

Response

This is the ongoing work of the Pinedale Anticline Working Group.

Comment Number **P-1(Attachment A)-43-RC-5****Comment**

Is it during production phase or once the well is plugged and abandoned? Wording needs to be changed to interim reclamation or final defined. Both need to be defined in Appendix or Reclamation plan. Define "interim" and "final" reclamation for entire document, and check for consistent application therein. See Comment Letter for definition.

Response

Definitions of interim and final vary between alternatives and are defined in the applicable reclamation plan.

Comment Number **P-1(Attachment A)-44-W-2****Comment**

This statement needs to clarify that the 0.75 PDA buffer area outside of the 0.25-mile NSO for five designated occupied greater sage-grouse leks is for DA 5 only. Statement needs clarification that it is for only DA-5.

Response

The text has been clarified.

Comment Number **P-1(Attachment A)-45-AQ-5****Comment**

The operators' commitment is for "Reduction to 2005 rig engine NOx emission levels within 1 year and 80 percent additional within 42 months on drill rig engine NOx emissions."

Response

Text has been revised.

Comment Number **P-1(Attachment A)-46-M-1****Comment**

Incomplete list of mitigation measures. Add to the list: interim reclamation, reclamation, transportation and wildlife and habitat mitigation plans specifically for Alternative D.

Response

The BLM respectfully disagrees that these additional measures are necessary, the fact that these plans exist and the implications of those plans is discussed throughout the document.

Comment Number **P-1(Attachment A)-47-LS-2****Comment**

Add: "federal suspended and term NSO leases." See p. 2-50 for validation.

Response

Text has been changed.

Comment Number **P-1(Attachment A)-48-G-35****Comment**

Add language that WGD will be consulted and adjust paragraph.

Response

The BLM respectfully disagrees. Listing of who all will be consulted is not needed here.

Comment Number **P-1(Attachment A)-48-G-36****Comment**

This is an estimated size. Should say "approximately" 6 square mile area.

Response

Text has been changed.

Comment Number **P-1(Attachment A)-48-G-37****Comment**

In September 12, 2007, letter, Proponents submitted a sentence allowing for drainage issues to be resolved. Add the sentence: "If application of the principles for access to DA-1 preclude operators from fulfilling their legal obligations to develop leases or to prevent drainage, BLM will allow limited access if such access is minimal and is conducted within existing seasonal stipulations."

Response

Drainage issues, should any arise, would be handled on a case-by-case basis.

Comment Number **P-1(Attachment A)-48-W-1****Comment**

Add raptors.

Response

The BLM respectfully disagrees.

Comment Number **P-1(Attachment A)-49-G-38****Comment**

This may be confusing and misleading. Use language from April 2007 Comment Letter.

Response

Additional language on the 24-month transition period has been added to the document.

Comment Number **P-1(Attachment A)-49-G-29****Comment**

These were estimates only and also assumed a November 2007 ROD. Delete well and pad numbers.

Response

Text has been revised.

Comment Number **P-1(Attachment A)-49-G-40****Comment**

Does this mean no additional “new” pads?

Response

Text has been revised.

Comment Number **P-1(Attachment A)-50-LS-3****Comment**

This statement needs to reflect that this offer is voluntary and that it is additional on-site mitigation.

Response

Text has been revised.

Comment Number **P-1(Attachment A)-50-LS-4****Comment**

Wouldn't this decision be made in concert with operators and WGFD?

Response

Coordination with other entities would occur, but the actual decision rests with the AO.

Comment Number **P-1(Attachment A)-50-LS-5****Comment**

Under what conditions? What procedure does BLM have to follow? Can BLM force operators to forego lease rights without undergoing some rigorous process?

Response

In the interest of conservation, the BLM can direct lease suspensions. This is the authority under which the BLM can accept the lease suspensions. See Section 39 of the Mineral Leasing Act and BLM Manual 3160-10 .21(A)(1).

Comment Number **P-1(Attachment A)-51-RC-6****Comment**

Without a 10 year plan (not required in Alt E), operators will not be able to forecast which pads will be needed for the next two years. Economics and ability to gain wildlife stipulation relief will determine pad availability; therefore, more pads need to be left as potential options to conduct drilling and completion operations. Delete requirement for reclamation on pads forecasted to be developed within two years.

Response

The BLM acknowledges that pads will stay open for many years under Alternative E.

Comment Number **P-1(Attachment A)-52-RC-7****Comment**

Full site reclamation (final) would not look much different than interim reclamation and certainly would not be the final reclamation for bond release. Need to clarify definitions for interim and final reclamation and be consistent with terminology throughout the document.

Response

Final and interim reclamation definitions vary by alternative.

Comment Number **P-1(Attachment A)-53-V-2****Comment**

With most of the pads to be drilled currently built, would this really do anything but monitor the visual aspect? There is not a lot of flexibility in changing the current view aside from placement of new pads. This is another requirement that will take additional resources. Delete or reword to have assessments to have analysis on Sensitive View shed Areas and VRM II areas only.

Response

The text has been revised. It is correct that with many of the existing and potential new wellpads, roads and in some cases significant large facilities, there is little flexibility with where to place the features. This is especially true for the newer large pads. However, all reasonable means to mitigate visual impacts should be considered and implemented regardless of the VRM Class Objective. The viewshed monitoring plan is intended to document changes to the overall landscape (more cumulative than individual project) and among other reasons assist with determining the success of visual mitigation.

The complexity of visual resource mitigation plans required of all major pad or facility proposals would be based upon the potential degree of impact to sensitive viewsheds. It is also likely that visual resource protection plans developed for projects in sensitive viewsheds and VRM II areas would require a greater degree of impact analysis and visual mitigation.

Comment Number **P-1(Attachment A)-54-V-3****Comment**

This is not practical. Delete.

Response

Thank you for your comment. This will not be deleted.

Comment Number **P-1(Attachment A)-55-V-4****Comment**

What are criteria used to select these KOPs? What visual resource does BLM seek to protect? The Visual Resource Mitigation Measures should be deleted, and BLM should not impose additional visual protection requirements or KOPs.

Response

The BLM is responsible for implementing reasonable mitigation measures as directed by FLPMA, NEPA and BLM Policy. The success of existing and proposed mitigation for this project is largely unknown given the degree of potential change to the characteristic landscape. Therefore, to maximize the success of existing and future mitigation, a comprehensive monitoring program is necessary to analyze the effectiveness of mitigation efforts. The

selection of Key Observations Points are based upon numerous factors including the projects relative size, number of viewers, length of time the feature(s) are in view, season of use, light conditions, sensitivity of viewers etc. You may refer to BLM Manual Handbook 8410-1 for a detailed explanation. Given this project's complexity, size and potential for long term affects to important visual resources, the BLM believes this visual resource mitigation is reasonable and prudent.

Comment Number **P-1(Attachment A)-56-C-1**

Comment

Construction for pads, roads, and pipelines take place during non-frozen ground climatic conditions as operators proposed. Delete.

Response

BLM standard practices for identifying and evaluating cultural resources are established by law, regulation and policy. They are required for compliance with the National Historic Preservation Act, FLPMA and are used to meet long established historic preservation compliance, thus the reference will not be deleted. Past experience in the Anticline has shown that archaeological investigations cannot be effected when snow covers the project area, when frozen ground conditions prohibit subsurface evaluations, testing, excavations and other standard techniques for historic preservation compliance. The prohibition of construction with frozen materials in archaeologically sensitive soils will not be deleted. In extreme cases, temporary structures can be erected and heat applied to frozen soils allowing for standard archaeological investigations.

Comment Number **P-1(Attachment A)-56-C-2**

Comment

This is Appendix 4 p 4-15,16. Delete.

Response

Thank you for your comment. This will not be deleted.

Comment Number **P-1(Attachment A)-56-C-3**

Comment

Delete.

Response

Thank you for your comment. This will not be deleted.

Comment Number **P-1(Attachment A)-57-AQ-6****Comment**

The second and sixth paragraphs of Section 4.9.3.5 could be read to state that Alternative D Phase II has been modeled and the result shows less than the 1.0 dv threshold at all analyzed sensitive areas. No such modeling has been done, and the intent appears to be that future modeling will be employed to determine the results of Phase II Mitigation.

Response

Alternative D mitigation is the same as Alternative C mitigation; however, it would be complete within 42 months rather than 48 months. Phase II mitigation was modeled. The commenter is perhaps confusing Phase II mitigation with mitigation that would occur beyond the 80 percent reduction. That modeling has not been conducted.

Comment Number **P-1(Attachment A)-58-AQ-7****Comment**

This is not what Proponents offered as their mitigation. Change wording to: "Phase II mitigation would reduce projected visibility impairment from 2005 levels to a goal of 0 days of visibility impairment." Change table.

Response

The text has been revised with input from the WDEQ-AQD.

Comment Number **P-1(Attachment A)-59-RC-8****Comment**

Reclamation comparisons between Alternative A and E are not clear. Delete references to interim reclamation for Alt E.

Response

The BLM respectfully disagrees.

Comment Number **P-1(Attachment A)-60-S-2****Comment**

This is Appendix 4 p 4-4, 5, 6. Delete.

Response

Thank you for your comment. This will not be deleted.

Comment number **P-1(Attachment A)-61-RC-9**

Comment

This is Appendix 4 p 4-10, 11. Delete.

Response

Thank you for your comment. This will not be deleted.

Comment Number **P-1(Attachment A)-62-G-41**

Comment

Recognize Questar year-round approval. Revise to read “Year-round development would not be allowed in other seasonally restricted areas unless exceptions are granted by BLM.”

Response

The BLM recognizes the approved Questar Decision Record throughout the Revised Draft SEIS.

Comment Number **P-1(Attachment A)-62-RC-10**

Comment

Need to understand how Alternative E has interim reclamation. Delete references to interim reclamation for Alt. E.

Response

The BLM respectfully disagrees.

Comment Number **P-1(Attachment A)-63-GR-1**

Comment

This is Appendix 4, p. 14. Delete.

Response

Thank you for your comment. This will not be deleted.

Comment Number **P-1(Attachment A)-64-RC-11****Comment**

This is not accurate. Pads can stay open for up to 10 years without reclamation. Re-word this paragraph to accurately portray reclamation under Alternative E.

Response

The application of reclamation would remain consistent, but the timing would change. Therefore the reclamation plan is still applicable.

Comment Number **P-1(Attachment A)-65-TE-1****Comment**

The discussion on eagle and raptor BMPs is incomplete and misleading. The list of voluntary BMPs is incomplete, and the discussion would leave the reader to conclude that the USFWS imposed these BMPs on the operators when in fact the BMPs were developed the operators with approval from the USWS. It is also portrayed as only being for private lands.

Response

The BLM will comply with all applicable federal laws and regulations, such as the Migratory Bird Treaty Act and the Bald and Golden Eagle Protection Act. Agreements that were made outside of the BLM will be taken into consideration when the BLM issues approvals, but will not be considered binding upon the BLM for management of land and minerals under the BLM's jurisdiction.

Comment Number **P-1(Attachment A)--66-M-3****Comment**

“Rather than apply these mitigations in strict sequence” changes the operators’ offer of mitigation. The BLM cannot do this without the operators’ consent. In addition, by lifting the sequential nature of the mitigation matrix, the likelihood that some annual team members will propose operational mitigation (spatial and pace) is increased. Return to operators’ original matrix and implement sequentially. Delete the 3 paragraphs on the page discussing BLM changing the offered mitigation – Wildlife Matrix.

Response

Text has been clarified.

Comment Number **P-1(Attachment A)-66-M-4****Comment**

In addition this statement diminishes the role of habitat improvement in lieu of conservation easements.

Response

Text has been clarified.

Comment Number **P-1(Attachment A)-66-MF-2****Comment**

Wildlife Matrix contains thresholds that could trigger sequential mitigation efforts paid from the Mitigation and Monitoring Fund. The Fund may be used to avoid triggering thresholds. The sequence in the Wildlife Matrix is if the thresholds are triggered and do not control the sequence of funding of projects from the Mitigation and Monitoring Fund.

Response

The text on page 4-161 does not discuss the mitigation funding sequence, but rather the sequence of mitigation measures should the matrix be triggered.

Comment Number **P-1(Attachment A)-67-RC-12****Comment**

This is misleading. Pads can stay open for up to 10 years without reclamation. Use statements on p. 4-114, 4.15.3.6, Alternative E to accurately portray reclamation under Alternative E.

Response

The analysis recognizes that pads under Alternative E can stay open for several years. The requirement here is that those pads that would not have any planned activity in two years would have interim reclamation.

Comment Number **P-1(Attachment A)-68-AL-1****Comment**

This paragraph should describe surface disturbance associated with Alternative E. Correct in FSEIS.

Response

The text has been corrected.

Comment Number **P-1(Attachment A)-69-RC-13****Comment**

Add definitions of "interim reclamation" and "final reclamation." Add definitions as defined in comment letter.

Response

Please refer to the reclamation plans where interim and final reclamation are defined as this varies by alternative.

Comment Number **P-1(Attachment A)-70-RC-13****Comment**

This is not true and depends rather on the Alternative being analyzed. Less surface disturbance will occur under scenarios that allow coordination of development resources, planning and timing of activities, and efficiencies of scale and uniformity. Correct statement to read "Surface Disturbance will vary greatly depending on the Alternative chosen."

Response

The amount of surface disturbance varies with accessibility, not the pace of development.

Comment Number **P-1(Attachment A)-71-W-5****Comment**

Cite source or delete.

Response

Refer to reviews and citations presented in Chapter 3 (Section 3.22.1 and Section 3.22.2) and Chapter 4 (Section 4.20.3.1) in the Revised Draft SEIS.

Comment Number **P-1(Attachment A)-72-G-42****Comment**

Appendix 4 presents new practices and restrictions for the Pinedale Anticline project area that would be available for application to APDs and rights-of-way during the site-specific review, where appropriate. Appendix 4 goes far beyond standard practices for APDs and rights-of-way. In addition to imposing wildlife stipulations, which are incompatible with year-round access in an Appendix, Appendix 4 also presents other new restrictions relative to viewsheds and operating practices that would severely impact the ability of the Proponents to develop their leases. Delete Appendix 4 in its entirety and use the BLM's Surface Operating Standards and

Guidelines for Oil and Gas Exploration and Development, "The Gold Book," as the standard for procedural operations.

Response

Text has been revised.

Comment Number **P-1(Attachment A)-73-T-4****Comment**

This document should state that proponents have proposed this Transportation Plan in conjunction with their proposal for year-round development.

Response

The BLM finds the suggested change unwarranted.

Comment Number **P-1(Attachment A)-74-G-43****Comment**

Gathering system for Shell and Ultra will only be installed under Alternative B, C or D. Clarify language as such.

Response

Text has been revised.

Comment Number **P-1(Attachment A)-75-RC-14****Comment**

Identified as a concern in DSEIS. See Attachment F with reclamation plan.

Response

Thank you for your comment.

Comment Number **P-1(Attachment A)-76-G-44****Comment**

Graph is hard to interpret. Delete.

Response

Thank you for your comment, it is noted.

Comment Number **P-1(Attachment A)-77-RC-15**

Comment

This is an operator-committed measure, and it was not offered for Alternative E because the pads remain open substantially longer in Alternative E due to seasonal stipulations in place. Delete as the reclamation plan for Alternative E. This document should state that Proponents have proposed this Reclamation Plan in conjunction with their proposal for year-round development.

Response

Thank you for your comment. The BLM used this information in the formulation of alternatives for the RDSEIS.

Comment Number **P-1(Attachment A)-78-RC-16**

Comment

Not as Proponents submitted. Delete "Beginning in 2008." Use Proponents' Operator-Committed document in Attachment F.

Response

The text has been revised.

Comment Number **P-1(Attachment A)-79-G-45**

Comment

The objectives in Appendix 13 cannot be met due to the staggered development of Alternative E. Delete Appendix 13 including its Table.

Response

Thank you for your comment. Absent specific reasons why the objectives can not be met, the BLM can not specifically respond.

Comment Number **P-1(Attachment B)-80-AL-3****Comment****SEE ATTACHMENT B FOR DETAILED COMMENTS.**

The Proponents' changes to Alternative D clarify and restate the logical development and progression process through the DAs based on the Proponents' April 2007 comment letter while offering more benefits to wildlife than is afforded in Alternatives A, C and E. Proponents offer additional clarification on year-round access based on comments in the text of this comment letter.

Response

Alternative D as written in the Revised Draft SEIS was developed by the BLM.

Comment Number **P-1(Attachment D)-83-TE-2****Comment****SEE ATTACHMENT D FOR DETAILED COMMENTS.**

Proponents' Attachment D provides a listing of viable options available for raptor and bald eagle stipulation relief. These options are based on widely accepted and utilized practices within other oil and gas developments on other BLM-managed lands in Wyoming, and the Proponents' agreed-to voluntary Best Management Practices (BMPs) for raptor and bald eagle stipulation relief with the United States Fish and Wildlife Service (USFWS). These options contained in this attachment are in addition to the mitigation measures (as it applies to eagles and raptors) contained in RDSEIS Appendix 10 "Wildlife Monitoring Matrix" pp. 10-1 through 10-6.

Response

The BLM has a mandate to comply with all applicable federal laws and regulations, such as the Migratory Bird Treaty Act, the Bald and Golden Eagle Protection Act, and Executive Order 13186. The BLM will not grant relief where such action is likely to result in violation of a federal law or regulation.

Comment Number **P-1(Attachment D)-84-TE-3****Comment****SEE ATTACHMENT D FOR DETAILED COMMENTS.**

It is understood from BLM that waiving all raptor (Bald Eagle included) stipulations or addressing future stipulations is not possible. The following options were proposed to eliminate most of the issues and allow year-round access.

Response

See response to Comment P-1 (Attachment D)-83-TE-2.

Comment Number **P-1(Attachment E)-85-G-45****Comment**

Inaccurate language. Operators proposed “Concentrated Development Areas.”

Response

The text has been revised.

Comment Number **P-1(Attachment E)-86-G-46****Comment**

Inaccurate language. Operators proposed “concentrated” development.

Response

The text has been revised.

Comment Number **P-1(Attachment E)-87-G-47****Comment**

Inaccurate language. Operators proposed “concentrated” development.

Response

The text has been revised.

Comment Number **P-1(Attachment E)-88-G-48****Comment**

“Proponents” cannot be used in these sentences as defined on p. iii, second paragraph of the Executive Summary. Those offers are only from Ultra, Shell and Questar.
Make change in sentences.

Response

The text has been revised.

Comment Number **P-1(Attachment E)-89-G-49****Comment**

The reference should be to Alternative D. Change C to “D”.

Response

The text has been revised.

Comment Number **P-1(Attachment E)-90-T-5**

Comment

There are several statements throughout the RDSEIS referring to the decrease in truck traffic as a result of liquids gathering system (LGS). Each statement, however, specifically references the “production-only phase.” This could be misconstrued to mean that the benefit of decreased traffic is only realized at the production-only phase, when in reality, the benefits start accruing as soon as the LGS is put into service and increase throughout development and the production-only phase. It should be clearly stated that truck traffic will decrease by 90% as soon as the LGS is put into service, and the volume of traffic eliminated from the PAPA will increase each year throughout development. During the production-only phase the only heavy truck traffic will be that required for maintenance and repairs.

Response

The LGS does not reduce traffic related to drilling and completion activities. Therefore, stating that the reduction in traffic pertains to the production-phase is correct.

Comment Number **P-1(Attachment E)-91-G-50**

Comment

Change “they” to “the.”

Response

The change has been made.

Comment Number **P-1(Attachment E)-91-R-1**

Comment

This is speculative and pre-supposes an outcome currently under intensive research. This statement and the entire Recreation section (reduces hunting, lessens it as a place to recreate, not enough motel space) fails to take into consideration that under Alternatives B, C and D only 6.5% of the PAPA is initially disturbed over the 60-year life of the project (temporary disturbance included along with no reclaimed areas in the 12,885.6 acres of initial disturbance by natural gas development) and that reclamation is expedited and reduces that percentage to 2% of life-of-project disturbance. It also fails to recognize that under proponent’s proposal, 93% of the PAPA will be devoid of development at any one time, leaving that 93% available for wildlife and/or recreation.

Delete or re-word to include the research component in this statement thereby making it a more accurate portrayal of impacts.

Response

The BLM respectfully disagrees.

Comment Number **P-1(Attachment E)-92-C-5**

Comment

Doesn't the programmatic agreement for the Lander Trail address this issue? Delete this portion of the sentence.

Response

The Lander Trail PA is a document executed by Shell and Ultra, and not every Anticline operator. This, the reference to disturbance by linear facilities applies to any project proposed by an operator other than Shell or Ultra.

Comment Number **P-1(Attachment E)-93-AQ-10**

Comment

This statement is not accurate. Add "Air quality models predict air quality impacts to visibility at regional"

Response

Thank you for your comment.

Comment Number **P-1(Attachment E)-94-GE-1**

Comment

Not true, there are always some unrecoverable natural gas reserves. Alternatives B, C, D, and E natural gas reserve estimates are for "recoverable resource," which is about 40 – 45% of actual on 10-acre density, would be approximately 58% on 5-acre density. Delete sentence.

Response

The text has been revised.

Comment Number **P-1(Attachment E)-95-RC-17**

Comment

This is inaccurate on several fronts. The reclamation plans under Alternatives B and C are designed to promote interim reclamation so that there is minimal bare ground. It is not clear at

this point whether the reclamation plan under Alternative D will in fact return vegetation and functional habitat faster than the other alternatives. Reword stressing interim reclamation.

Response

The BLM respectfully disagrees.

Comment Number **P-1(Attachment E)-VG-1****Comment**

“Considerable” is an overstatement of the impact. 6.5% of the PAPA is the initial disturbance while only 2% is disturbed over the life-of-project in Alternatives B, C and D (4,012.5 acres) by natural gas development. That is minimal, not ‘considerable’. Delete “would be considerable” and use “would occur.” Add a statement that the degree of disturbance is dependent upon the Alternative.

Response

The text has been revised.

Comment Number **P-1(Attachment E)-97-TE-4****Comment**

“within 1 mile of New Fork River riparian zone” would occur only within exceptions. Highlight these comments as providing public notice that exceptions can be granted as disturbance is occurring ‘within’ 1 mile of the river.

Response

Waivers, exceptions, or modifications are an integral part of the adaptive management process (BLM Instruction Memorandum No. 2003-23). In Section 2.4.2.1 of the Revised Draft SEIS, the BLM has defined Adaptive Management that would be implemented by the BLM Authorized Officer. Any proposed waiver, exception, or modification would be subject to evaluation during Annual Planning Meetings. The BLM disagrees that the possibility of exceptions be highlighted.

Comment Number **P-1(Attachment E)-98-W-6****Comment**

This is speculative and pre-supposes an outcome currently under intensive research. Delete or re-word to include the research component in this statement.

Response

The statements are based on what already has occurred and reported by current research. Inference about future conditions is based on current knowledge and is not speculative. Any

belief that future research would produce conflicting results is speculative, however. Refer to the following:

Sawyer et al. 2006. Winter Habitat Selection of Mule Deer Before and During Development of a Natural Gas Field. *The Journal of Wildlife Management* 70(2): 396-403..

Braun, C. E., O. O. Oedekoven, and C. L. Aldridge. 2002. Oil and gas development in western North America: effects on sagebrush steppe avifauna with particular emphasis on sage grouse. *Transactions of the North American Wildlife and Natural Resources Conference* 67:337-349.

Doherty, K. E., D. E. Naugle, B. L. Walker, and J. M. Graham. In press. Greater sage-grouse winter habitat selection and energy development. *Journal of Wildlife Management*.

Kaiser, R. C. 2006. Recruitment by greater sage-grouse in association with natural gas development in western Wyoming. Thesis, University of Wyoming, Laramie, Wyoming.

Lyon, A. G., and S. H. Anderson. 2003. Potential gas development impacts on sage-grouse nest initiation and movement. *Wildlife Society Bulletin* 31:486-491.

Walker, B.L., D.E. Naugle, and K.E. Doherty. In Press. Greater sage-grouse population response to energy development and habitat loss. *Journal of Wildlife Management*.

Comment Number **P-1(Attachment E)-99-M-5**

Comment

“Proponents” cannot be used in this sentence as defined on p. iii, second paragraph of the Executive Summary. The offer is only from Ultra, Shell and Questar for off-site compensatory mitigation.

Amend sentence to say that Ultra, Shell and Questar offered the off-site compensatory mitigation. The additional mitigation opportunities in Chapter 4 have not been analyzed in the RDSEIS.

Delete sentence.

Response

Text (reference to Proponents) has been revised. However, the referenced sentence will not be deleted. See response to Comment P-1 (Attachment E)-189-W-15/M-17.

Comment Number **P-1(Attachment E)-100-AQ-8**

Comment

There was only one air-related threshold, for NO_x, not “thresholds.” Correct in the FSEIS by substituting “threshold” for “thresholds.”

Response

Please refer to page 27 of the PAPA ROD. The BLM agrees that there is not a well limit, but rather an analysis threshold for NO_x and limitations on well pads within management areas.

Comment Number **P-1(Attachment E)-101-LS-5**

Comment

It is important to note that many of the exception requests are not exceptions from lease stipulations. Many Pinedale leases date back beyond the imposition of wildlife stipulations. Exceptions requested in those cases are simply to grant relief from the PAPA ROD and/or APD restrictions. The FSEIS must differentiate between Lease stipulations and APD stipulations and acknowledge there are unstipulated leases.

Response

Text has been revised.

Comment Number **P-1(Attachment E)-102-W-7**

Comment

The exception was broader than only big game crucial winter ranges. Granted in the Decision Record: "Seasonal restrictions limiting actions within big game winter range, sage-grouse nesting and brood-rearing habitat, and sage-grouse winter concentration areas to not apply to this Demonstration Project." Correct sentence to include sage-grouse nesting and brood-rearing habitat, and sage-grouse winter concentration areas.

Response

Text has been revised.

Comment Number **P-1(Attachment E)-103-G-51**

Comment

Three are proposed, not two. Correct the sentence using "Three".

Response

The BLM is only aware of two pending natural gas pipelines which are included in the Final SEIS.

Comment Number **P-1(Attachment E)-104-G-52****Comment**

The RDSEIS does not mention the revisions to the Pinedale or Kemmerer RMP. FSEIS should note that the Pinedale and Kemmerer BLM Field Offices are in the process of revising the Pinedale and Kemmerer RMPs. This section should disclose the ongoing revision effort.

Response

The proposal and alternatives must be in conformance with the existing RMPs. Therefore it is not appropriate to interject here that these RMPs are currently under revision.

Comment Number **P-1(Attachment E)-105-G-53****Comment**

“Industrialization” has a negative connotation. If this is not a direct quote, it may provide a stronger bias than what the response was.

Since it is not a direct quote, suggest changing the word to “Development.” Is this BLM’s opinion that it has become a “single resource use of land” or was this what was submitted to BLM by the public?

If not, delete. Cite source.

Response

The text has been revised.

Comment Number **P-1(Attachment E)-106-G-54****Comment**

The US Department of Energy lists the field as the second largest (RDSEIS p. 3-10 (EIA)). Resolve contradiction between US Energy and WOGCC listings.

Response

Each is entitled to rate the field as it determines best.

Comment Number **P-1(Attachment E)-107-G-55****Comment**

Need to provide commentary as to why there is a difference in chart numbers. Add sentence clarifying difference.

Response

The table has been updated from 2005 in the Draft SEIS to 2006 in the Revised Draft SEIS - the text discusses this.

Comment Number **P-1(Attachment E)-108-G-56**

Comment

This term was changed to Central Gathering Facilities in the previous DSEIS. Correct to "Central Gathering Facilities."

Response

In the Questar Decision Record, these facilities were known as CDPs. This is discussed in the Revised Draft SEIS.

Comment Number **P-1(Attachment E)-109-G-57**

Comment

Adjust workers based on average wells per pad for each scenario (driving time and amount of facilities vary). Correct table.

Response

These are the workforce estimates provided by the Operators - no change was made to the text.

Comment Number **P-1(Attachment E)-109-T-6/AL-4**

Comment

The differences between the Alternatives are due to year-round access, consolidated development, liquids gathering system, and computer assisted operations. They also are different due to number of years of development traffic and number of years with and without LGS. The numbers in the columns of heavy/light have been may be switched. Given the substantial difference and causes in traffic loading among the Alternatives, this portion should not be considered as a common component and should be addressed separately under each Alternative especially as the text notes that there are differing transportation plans for the various Alternatives.
Need to verify and correct.

Response

The text in the SEIS does not contradict anything that the commenter brings up.

Comment Number **P-1(Attachment E)-110-G-58****Comment**

Table 2.4-6 does not include R7 pipeline. Check against 9/19/07 ancillary facilities from Proponents submitted responses to BLM. Make any needed changes, if any. Change "R6" to "R7."

Response

This Final SEIS includes the R7 pipeline.

Comment Number **P-1(Attachment E)-111-G-59****Comment**

Table 2.4-7 Change to "65,000 hp".

Response

This information was provided by the Operators and the air quality impact analysis is based on this amount. No change was made to the document.

Comment Number **P-1(Attachment E)-112-G-60****Comment**

Many of these numbers are different than the DSEIS. Provide clarifying sentence on difference from appearance in DSEIS.

Response

The differences in the numbers in the table are a result of updating information between the Draft SEIS and the Revised Draft SEIS. The BLM disagrees - no changes were made.

Comment Number **P-1(Attachment E)-112-G-61****Comment**

Need to show disturbance per gas recovered (acres/TCF) for all scenarios. Add another column or row in table.

Response

The BLM respectfully disagrees. Table 2.4-8 does not include information on recoverable resources; however, this information is included in Table 2.4-2.

Comment Number **P-1(Attachment E)-112-G-62/W-8****Comment**

Add that Questar has an exception for winter drilling in its 2004 EA. Add the following to the end of that sentence: "... except on Questar's leasehold where winter drilling is allowed with six rigs on three pads each year in mule deer and sage grouse seasonal habitats (BLM 2004a and BLM 2005a)."

Response

The Questar Decision Record is discussed throughout the Revised Draft SEIS.

Comment Number **P-1(Attachment E)-113-G-63****Comment**

This statement is misleading. Under Alternative A, No Action, once the MA limit for producing pads is reached, no additional well pads would be approved. However, development would most likely continue on that pad and on other pads in the MA through expansions. This statement should be corrected. It should be made clear that the limit on the number of pads does not limit the number of wells.

Response

For purposes of the analysis, the BLM assumed that development would halt once the pad limit in a management area is reached.

Comment Number **P-1(Attachment E)-114-G-64****Comment**

Additional compression should be 65,000 for a total of 85,000 as submitted by Proponents to BLM. Change to "65,000 hp."

Response

This information was provided by the Operators and the air quality impact analysis is based on this amount. No change was made to the document.

Comment Number **P-1(Attachment E)-115-G-65****Comment**

Need to provide commentary as to why there is a difference in chart numbers. Add sentence clarifying difference. This was an estimate not a proposal. Replace "proposing" with "estimating."

Response

The BLM respectfully disagrees fully recognizing that the number of wells is not a limit.

Comment Number **P-1(Attachment E)-116-G-66**

Comment

Alternative B is Proponents' proposal, and this statement might be construed that there would never be more than 305 wells drilled in any one year.

Correct statement to read that "The Proponents anticipate that under the September 2005 proposal the most wells drilled in any one year would be about 305."

Response

The BLM respectfully disagrees fully recognizing that the number of wells is not a limit.

Comment Number **P-1(Attachment E)-117-G-67**

Comment

This statement is inaccurate as year-round development occurs in only 4 of the 5 DAs (with DA5 and the flanks requiring the same development plan as the No Action) or on 36,638 acres (actually less than that [27,834 acres] since DA1 can only be developed approximately 3840 acres at one time). More pads (and subsequent impacts) would be required to be used in DA5 and the flanks in Alternative C than in Alternative B. Delete sentence or make accurate.

Response

The BLM respectfully disagrees. The BLM developed Alternative C and the constraints of the alternative.

Comment Number **P-1(Attachment E)-118-G-68**

Comment

Number of pads on non-BLM leases is not within BLM's jurisdiction.

Response

To compensate for impacts on private lands, the BLM would reduce the number of pads on federal lands (see page 26 of the PAPA ROD - #9 which states "the ROD analyzes and allows 700 producing wells for the project area as a whole."

Comment Number **P-1(Attachment E)-119-G-69****Comment**

Note that this would be after the life of the well; when the well is plugged and abandoned and full reclamation meets bond release requirements.
Bond release criteria needs to be identified as definition.

Response

Bond release criteria are defined in the oil and gas regulations and the BLM chooses to not include it in the Final SEIS.

Comment Number **P-1(Attachment E)-120-G-70****Comment**

These three statements are inconsistent. Correct inconsistencies.

Response

The BLM disagrees that these three statements are inconsistent. The second bullet is describing the difference between the Alternative D Core Area and the Alternative E Core Area.

Comment Number **P-1(Attachment E)-121-G-71****Comment**

No Action “predominant industrial landscape.” Delete.

Response

The text has been revised.

Comment Number **P-1(Attachment E)-121-R-2****Comment**

Alternatives B and D, state that disturbance is more due to increased acreage over No Action, with no comment to benefit of decreased fragmentation through consolidated development. Delete statement and add a revised statement that accurately represents the Alternatives.

Response

Thank you for your comment. It could be true that as consolidated development commences, detrimental impacts due to fragmentation may be diminished. However, until studies indicate otherwise, there is no basis to assume wildlife based recreational benefits would accrue.

Comment Number **P-1(Attachment E)-121-SE-1****Comment**

Workforce would be “steady” for 40 years under Alternative E, providing stabilization. Explain how erratic activity within stipulations provides stable or steady workforce.

Response

There will be a new table added to Chapter 4 depicting the direct, indirect, induced and total earnings and employment by year and by alternative. There will also be new table added to Chapter 4 illustrating the projected population by year and by alternative. A new narrative will then be added to Chapter 4 describing the impacts illustrated in the new tables. Finally, Table 2.4-17 will be adjusted, where necessary, to conform to the new tables and narrative added to Chapter 4.

Comment Number **P-1(Attachment E)-121-SE-2****Comment**

Demand “gradually decreasing” Need to show annual boom/bust with stipulations.

Response

There will be a new table added to Chapter 4 depicting the direct, indirect, induced and total earnings and employment by year and by alternative. There will also be new table added to Chapter 4 illustrating the projected population by year and by alternative. A new narrative will then be added to Chapter 4 describing the impacts illustrated in the new tables. Finally, Table 2.4-17 will be adjusted, where necessary, to conform to the new tables and narrative added to Chapter 4.

Comment Number **P-1(Attachment E)-121-T-7****Comment**

How does LGS traffic reduction not equal less accidents and road maintenance? Show differences between alternatives.

Response

The table clearly identifies that 3,820 vehicles per day in the production phase would be reduced with the installation of the liquids gathering system and computer assisted operations.

Comment Number **P-1(Attachment E)-122-AL-5/VG-2****Comment**

How can Alternative E have 165 more new pads than Alternatives B, C, D, and still retain 290.7 less miles of edge length? Alternative E should have the highest edge length due to additional number of individual pads verses existing pads with smaller expansions. BLM is assuming that the well pads developed under Alternative E would average 13.8 acres (compared to 17.7 for Alternative D), p. 4-147. In reality, most of the Alternative E well pads would probably be larger than Alternative D well pads because each year Proponents would expand and each year you would have to leave considerable distance from producing wells. Neither Alternative A nor Alternative E has any restriction on size of pad. Alternative A assumes a pad average of 8.3 acres. In reality, even if Proponents reached MA limit of pads, Proponents would likely expand existing pads and keep drilling. Thus, surface disturbance comparisons throughout the document are inaccurate. Add table of available undisturbed acres remaining in the PAPA under each alternative. In addition, there are three different scenarios which occur on the landscape: the area of no/little use, which is a pad; area of edge between pad and native landscape, which is used to some degree; and the native landscape, which is used to its full potential. These three items should be represented in some form to give a more realistic dictation or picture of the 5 alternatives. Pg 4-160 identifies "fragmentation and edge length" though it is not evaluated.

Response

The reader will note that the majority of the surface disturbance for Alternatives B, C, and D come from the installation of the liquids gathering system - see Table 2.4-16 in the Revised Draft SEIS.

Comment Number **P-1(Attachment E)-123-V-4/AL-6****Comment**

This is based solely on initial surface disturbance, not on LOP or reduction in tanks due to LGS for Alternatives B, C and D. Delete statement and add a revised statement that accurately represents the Alternatives.

Response

The table clearly states that approximately 90 percent of all condensate and storage tanks would be reduced as a result of installation of the liquids gathering system in Alternatives B, C, and D.

Comment Number **P-1(Attachment E)-124-C-6/AL-7****Comment**

This is based solely on initial surface disturbance, not on LOP or reduction in tanks due to LGS for Alternatives B, C and D. Delete statement and add a revised statement that accurately represents the Alternatives.

Response

See response to Comment P-1 (Attachment E)-123-V-4/AL-6.

Comment Number **P-1(Attachment E)-125-VG-3/AL-8**

Comment

This is based solely on initial surface disturbance and does not acknowledge benefit on Alternatives B and D of interim and earlier reclamation. Delete statement and add a revised statement that accurately represents the Alternatives.

Response

The BLM respectfully disagrees with the suggested change.

Comment Number **P-1(Attachment E)-126-W-9/AL-9**

Comment

If represented separately, calculate represented acres for each species, as opposed to lumping together.

Response

Acres affected within species' habitats have been reported separately. Loss of habitat function beyond direct loss of habitat has not been related to areas (acres) for either species. Such application would be based on a zone of effect that would extend some distance beyond individual well pads and roads. Such zones of effect would be expected to vary by species, by season, and by seasonal conditions (eg., snow cover) such as Sawyer et al., 2006 (in references) demonstrated for mule deer.

Comment Number **P-1(Attachment E)-127-G-72/AL-10**

Comment

It is unclear where this number comes from – seems high because Shell is proposing 3 additional pads at approx 27 acres + existing approx 25 areas = 52 acres. It is not clear where the other 434 acres comes from. Clarify.

Response

The text has been revised.

Comment Number **P-1(Attachment E)-128-G-73/AL-11****Comment**

Chapter 2 Table 2.4-17 Comparison of Impacts for All Alternatives p. 2-65 and 2-66
Based solely on initial surface disturbance and does not acknowledge benefit on Alternatives B and D of interim and earlier reclamation nor consolidated patches or lease suspensions and NSOs. Delete statements and add revised statements that accurately represent the Alternatives.

Response

The BLM respectfully disagrees with the suggested change. The liquids gathering system is a mitigation for certain resources but causes impacts to other resources such as soils and vegetation and must be analyzed as such.

Comment Number **P-1(Attachment E)-129-SE-4****Comment**

Chapter 3, p. 3-19
Subjective statement. Comparative to prices in the early 1990's in other parts of the country. Delete sentence, or add comment that there are other forces working in this market.

Response

First, there will be a new table added to Chapter 4 depicting the direct, indirect, induced and total earnings and employment by year and by alternative. Second, there will be a new table added to Chapter 4 illustrating the projected population by year and by alternative. Third, there will be a new table added that depicts the anticipated tax and royalty revenues by year and alternative. Fourth, a new narrative will be added to Chapter 4 describing the impacts illustrated in the new tables. Fifth, Table 2.4-17 will be adjusted, where necessary, to conform to the new tables and narrative added to Chapter 4. Finally, the Executive Summary will be changed to reflect the new data presented in the new tables.

Comment Number **P-1(Attachment E)-130-SE-5****Comment**

Chapter 3, 3.5.7.3 Law Enforcement p. 3-25
The writers did not mention that the center is funded by industry.
Add who is funding the center to the statement.

Table 3.5-18
Showing raw numbers rather than percentage of population is misleading in a rapidly increasing population.
Add percentage of population column.

Response

The FSEIS does not include information on funding sources for all public facilities in the cumulative impact area.

Comment Number **P-1(Attachment E)-131-SE-6**

Comment

Chapter 3, 3.5.8 County and Local Government Revenues p. 3-32
Substantial funding is available and has been provided to the 3 counties in the analysis. Provide information to give reader a true picture of financial resources to communities and counties.

Response

There will be a new table added to Chapter 4 of the FSEIS showing the tax and royalty revenues by year and by alternative in constant 2006\$. A totals row will be included in this new table. And there will also be a revised narrative added that discusses this new table.

Comment Number **P-1(Attachment E)-132-T-8/M-6**

Comment

Chapter 3, 3.6.1.1, Traffic Volume, p.3-35
The LGS should be considered, based on this tracking, as mitigation – not as a disturbance as it is in most of the document. The language should be used where appropriate to include LGS as mitigation for Alternatives B, C and D.

Response

The liquids gathering system is properly analyzed.

Comment Number **P-1(Attachment E)-133-G-74**

Comment

Chapter 3, 3.6.2, p. 3-38
BLM needs to add a R7 project instead of the R6 pipeline and Condensate Loop. Add R7 project and delete R6 to FSEIS.

Response

The R7 Pipeline is included in the Final SEIS.

Comment Number **P-1(Attachment E)-134-V-5**

Comment

Chapter 3, 3.9.2 Visual Resources, p. 3-50

What are criteria for designating each class? What visual values are being protected under each? The RDSEIS includes objectives of each visual class. BLM should include the criteria for designating an area under each class.

Response

Thank you for your comment. The BLM assigns VRM objectives through the land use planning process in accordance with planning guidance and BLM policy. The procedures used to determine the scenic quality and VRM Objectives for the Pinedale planning area may be found in BLM Manual handbook 8410-1. The visual values of the project area are broadly described in the DEIS for the PAPA, Chapter 3.9.1 Visual Resources, p. 3-26.

Comment Number **P-1(Attachment E)-135-V-6**

Comment

Page 3-51 Development in PAPA, Para 3. p. 3-7 stated that 96% of Sublette assessed value is from gas industry, so it is an exaggeration to say visual impacts could “impact overall economic conditions”.

Delete.

Response

The text has been revised.

Comment Number **P-1(Attachment E)-136-C-7**

Comment

Chapter 3 Map 3.10-1 p. 3-58

The buffer extends to Hwy 351 in the PAPA ROD.

The map should be corrected in the FSEIS by eliminating the shading south of highway 351.

Response

The 3-mile SRMZ and viewshed concern zone was estimated at 3 miles in the original PAPA EIS and this map derives from this work. In the original PAPA the 3 mile either side of the trail does extend south of Highway 351. The text indicates that normal development south of Highway 351 would be exempt from viewshed concerns; however, the BLM must recognize that if a non-typical development such as a water treatment facility, a large compressor site, or some other visually dominating project be proposed south of Highway 351, the Lander Trail Viewshed issues within the original SRMZ could result. Since 1999, the BLM has proposed no viewshed restrictions south of Highway 351.

Comment Number **P-1(Attachment E)-137-R-3****Comment**

Chapter 3, 3.8.1.1, Recreational Activities, p. 3-46

The decrease in hunting as shown by the USFWS 5-year surveys is a national trend based on aging population (no analysis of population age and trends in DSEIS or in the 3 county area considered) of hunters and non-recruitment of new hunters and is not peculiar to Wyoming or Sublette County.

Revise FSEIS to more accurately portray the possible reasons for the changes in these figures.

Response

Thank you for your comment. The table depicts the percent of change in hunting for Wyoming, not the percentage of change nationally. The data present is for Wyoming in general and does not imply cause for change either adverse or positive.

Comment Number **P-1(Attachment E)-138-AQ-9****Comment**

Chapter 3, p. 3-68 AQ Deposition

This is the personal opinion of someone in the USFS and not a regulatory, legal, or scientifically recognized screening threshold.

Delete statement.

Response

The text has been revised.

Comment Number **P-1(Attachment E)-139-N-1****Comment**

Chapter 3.2 Noise p. 3-75

While this may be true, no mention was made of flareless completions ongoing in the PAPA.

Add statement about flareless completions.

Response

At the time of the Revised Draft SEIS, the BLM did not have any data on noise from flareless completions in the PAPA.

Comment Number **P-1(Attachment E)-140-GW-1****Comment**

Chapter 3, Section 3.15.1.4, p. 3-83

These figures are inconsistent.
Confirm correct range of well depths and make consistent in FSEIS.

Response

The text has been clarified.

Comment Number **P-1(Attachment E)-141-GW-2**

Comment

Chapter 3, p. 3-84, Groundwater Monitoring, para 3.
WDEQ-WQD required operators to sample all wells that had been connected to a tank, tank truck or reserve pit.
Correct statement.

Response

The text has been clarified.

Comment Number **P-1(Attachment E)-142-GW-3**

Comment

Chapter 3, p. 3-85 Groundwater Monitoring, first para.
Operators initiated locking of well heads and installation of check valves/backflow prevention....WDEQ has not required these to date...just a good practice
Correct statement.

Response

Thank you for your comment.

Comment Number **P-1(Attachment E)-143-GW-4**

Comment

Chapter 3, p. 3-85 Groundwater Monitoring
No current status of the contaminated wells noted by BLM. Three wells have been remediated and are currently being monitored. The fourth well has initiated cleanup in accordance with the WDEQ Voluntary Remediation Program
Add paragraph stating status.

Response

Additional information on this subject has been added to the Final SEIS.

Comment Number **P-1(Attachment E)-144-TE-5****Comment**

Chapter 3, Section 3.21.1.1 Federally Listed, Proposed and Candidate Species, pp. 3-110-111 Section 3.21.1.1 and the balance of the document needs to reflect the USFWS's recent Federal Register publication of its determination that the pygmy rabbit "may be warranted" and the ongoing species review.

BLM should mention USFWS's determination that pygmy rabbit listing "may be warranted" and that species review is ongoing.

Response

That is correct. However, on May 20, 2005, the USFWS published a finding that the petition did not present substantial information indicating that listing the species was warranted. With that finding, the BLM did not make note that the petition had been filed as noted in the comment. But then in March 28, 2006, a complaint was filed alleging violations within the USFWS' 2005 finding. On September 26, 2007, a court ruled that the USFWS improperly imposed a higher than necessary standard on the 2005 petition. To comply with the September 26, 2007 ruling, the USFWS published a new finding on January 8, 2008 in which they acknowledge substantial scientific information was presented in the petition and listing for the pygmy rabbit may be warranted. The USFWS is now conducting a status review to determine if listing may be warranted. The status review is expected to be concluded in 12 months from initiation. This information is updated in the Final SEIS.

Comment Number **P-1(Attachment E)-145-TE-6****Comment**

Ch3, 3-111, 3.21 Bald Eagles

Add total Bald Eagle sighted for each year, put numbers in same terms – i.e. NFR corridor or PAPA.

Response

The data have not been reported in standardized format.

Comment Number **P-1(Attachment E)-146-W-10/MO-1****Comment**

Chapter 3, 3.22, Wildlife and Aquatic Resources, p. 3-118

There are several research and monitoring projects that are commissioned and funded by the operators that have been ongoing for several years:

- TRC Wildlife Monitoring. This monitoring has been ongoing since the PAPA ROD was implemented in 2000. TRC monitors all wildlife under the parameters set in the PAPA ROD. The monitoring is fully funded by the majority of the Pinedale Anticline operators.
- Mule Deer Study. This research and modeling, which began in 1999 by Ultra has been continued since 2001 by Questar.

- Pronghorn Research. This research project was commissioned by Shell/Ultra in 2005 and is in its third year.
- Sage Grouse Study. This study was implemented by Ultra/Shell/Questar in 2005 and is in its third year.

This research and data is submitted to the BLM, WGFD and operators each year by the contractor. It is an important resource as well and provides a valuable historical overview of wildlife on the Pinedale Anticline. It should be included here.

Include reference to this research and data that has been accumulated on behalf of the Proponents since the PAPA ROD was signed. Note that results have been provided annually to BLM and WGFD.

Response

The BLM will specifically mention research funded by the Operators in this section even though reference has been made to the data/reports itemized in this comment.

Comment Number **P-1(Attachment E)-147-W-11**

Comment

Chapter 3 3.22.1.1 Pronghorn p. 3-122

While this statement presents positive results in the second year of study for pronghorns, it still utilizes the 600 acre fragmentation figure. As Proponents pointed out in their previous comments and as determined in the second annual report, the figure was preliminary and had no scientific basis and had not received the concurrence of the WGFD.

There is no reason to perpetuate an unsubstantiated figure. This should be re-written deleting reference to the 600-acre fragmentation figure.

Response

Dr. Berger and associates reported their observations. Because the statement is based on observational data reported by the authors, it cannot be verified or rejected unless WGFD personnel or the commenter was present during the study at the time the observation was made. If not present, how would one judge that observation has no scientific basis? The information was the best available at the time of this analysis as required by NEPA. If an earlier observation is not repeated during subsequent study, it is no less a valid observation.

Comment Number **P-1(Attachment E)-148-W-12**

Comment

Chapter 3 3.22.1.1 Mule Deer p. 3-125

The mule deer population on the Mesa is not “consistently declining”. The last published study showed a slight increase in both population and usage.

The fact that mule deer carcasses have not been found by the WGFD strongly suggests that the decline may not be mortality but may indeed be emigration to other habitats. The fact that the control area was not consistent over the span of the study makes it very difficult to exclude emigration over mortality.

It should be noted that deer counts on the Pinedale Front Complex (Control) were suspended after 3 study years because the deer in that group were very mobile, and each year the area they utilized for wintering expanded. Thus the statement “[n]o such trend was observed on crucial winter ranges used as control in the study” is unverifiable and misleading.

This section should be re-written to add the most recent year of published data which shows the stabilization to slight increase in populations coinciding with the installation of the Liquid Gathering System and addition of 6 rigs in the winter. In addition it should be noted that unless and until mule deer carcasses have been found in proportional numbers to the reported decline emigration of mule deer is a real possibility.

Response

The declining trend reported by Sawyer et al., 2006 and shown in Figure 6-2 indicates some variance around the regression line (including a higher level of abundance in 2006 than observed in 2005) but the trend since 2001 is one of significant constant decline. Mule deer carcasses have been found by the WGFD and reported in Appendix 17. Emigration is a demographic effect potentially affected by wellfield development. Emigration by mule deer from the Mesa Winter Range Complex does not appear to be a major contribution to the decreased sub-population. With little emigration, decreased population as observed would be more likely caused by low recruitment/fecundity and/or decreased survivorship.

Comment Number **P-1(Attachment E)-149-W-13**

Comment

Chapter 3 3.22.1.2 Upland Game Birds p. 3-132 & 3-134

This statement does not reflect the results of the second annual report on sage grouse by WWC. The second annual report, which was not available at the time of the printing, notes that sage grouse are using habitats near development where there is a Liquids Gather System. This is significant and combined with the last two years results on the mule deer study. Request that BLM use the most recent data from the sage grouse report.

Response

The disclaimer made by WWC at the bottom of the title page follows: "This report presents the first 2 years of data from a 5-year research project. The data and results presented in this report are preliminary; Wyoming Wildlife Consultants, LLC considers it premature to draw any formal conclusions from the information presented in this report." Consequently, the BLM has not sought permission by the authors to cite their report and its contents and it will not be included in the Final SEIS.

Comment Number **P-1(Attachment E)-150-G-75**

Comment

Chapter 4 4.1.2 Spatial analysis of Future Surface Disturbance p. 4-5 and 4-6
Tables 4.1-2 and 4.1-3

Both tables have different numbers from the DSEIS.
Provide in text reason for different numbers from DSEIS.

Response

The differences in the numbers in the table are a result of updating information between the Draft SEIS and the Revised Draft SEIS. The BLM disagrees - no changes were made.

Comment Number **P-1(Attachment E)-151-SE-7**

Comment

Chapter 4 4.3.2.1 Natural Gas Development in the PAPA p. 4-10
Global statements that “residents” are concerned about anything should include a source.
Cite source or delete.

Response

There will be a citation added supporting this statement.

Comment Number **P-1(Attachment E)-152-SE-8**

Comment

p. 4-13 4.3.2.1, para 1. Workforce Estimates
Assuming year-round drilling when calculating the workforce results in an underestimation of the number of workers, hotels, services needed under seasonal stipulations.
Correct workforce numbers to show differences in personnel between alternatives with and without year-round drilling.

Response

There will be a new table added to Chapter 4 of the FSEIS showing the tax and royalty revenues by year and by alternative in constant 2006\$. A totals row will be included in this new table. And there will also be a revised narrative added that discusses this new table.

Comment Number **P-1(Attachment E)-153-SE-9**

Comment

Ch 4 Table 4.3-11 p. 4-20
Need to give summary of tax revenue to State by Alternatives (tables aren't totaled).
Add total tax column to WY for Tables 4.3-11, 4.3-16, 4.3-23.

Response

There will be a new table added to Chapter 4 of the FSEIS showing the tax and royalty revenues by year and by alternative in constant 2006\$. A totals row will be included in this new table. And there will also be a revised narrative added that discusses this new table.

Comment Number **P-1(Attachment E)-154-SE-10****Comment**

There is no discussion of the boom-bust situation occurring within a year that would continue under the No Action Alternative and Alternative E. Include discussion of this impact. Current data from communities and county should be used to project future continuation of seasonal boom-bust.

Response

A revised narrative describing the anticipated "boom and bust" scenario will be added to Chapter 4. Moreover, there will be a new table added to Chapter 4 depicting the direct, indirect, induced and total earnings and employment by year and by alternative. There will also be new table added to Chapter 4 illustrating the projected population by year and by alternative. A new narrative will be added to Chapter 4 describing the impacts illustrated in the new tables. Finally, Table 2.4-17 will be adjusted, where necessary, to conform with the new tables and narrative added to Chapter 4.

Comment Number **P-1(Attachment E)-155-SE-11****Comment**

This section offers two socioeconomic mitigation measures not previously considered by the Proponents. These mitigation opportunities were not analyzed in the RDSEIS. This should be deleted.

Response

The mitigation opportunities shown in Section 4.3.4 will be reviewed in the context of whether or not they can be included based on what was analyzed in the RDSEIS.

Comment Number **P-1(Attachment E)-156-T-10****Comment**

This is inaccurate. Production-related traffic would not be a constant under all alternatives as outlined on p. 4-34. The LGS under Alternatives B, C & D will reduce truck traffic by 90%. Production-related traffic under Alternatives A and E will be higher because there is no LGS in a majority of the field. This statement need to be corrected.

Response

This statement does not state that production related traffic would be the same under all alternatives but that production related traffic would be steady once drilling is complete.

Comment Number **P-1(Attachment E)-157-T-11**

Comment

Unclear why there would be only production-related traffic in winter if the only seasonal restrictions are sage grouse lek and nesting. Delete.

Response

The statement has been changed to read "Traffic in DA-5 in seasonally restricted periods would be related to production and maintenance."

Comment Number **P-1(Attachment E)-158-T-12**

Comment

Chapter 4, 4.4.3.5, Alternative D, p. 4-40, para. 1

It is unreasonable to restrict access to the northern DA-1 leasehold and require operators to access these areas using the Stewart Point Road, which is closed in the winter.

Clarify that northern DA-1 area can be accessed from the north.

Response

The BLM respectfully disagrees. The idea is to consolidate human presence and related activity to as small an area as possible. Therefore, it is inappropriate to have traffic running through the entire area of DA-1.

Comment Number **P-1(Attachment E)-158-T-13/N-2**

Comment

The implementation of an LGS will immediately eliminate an entire class of traffic, and the volume of traffic eliminated will increase with each well drilled. The benefit of the LGS is realized immediately, not just at production phase. Clarify the benefit of the LGS is realized immediately, not just at production phase. Clarify the benefits of LGS.

Response

The use of the liquids gathering system and computer assisted operations is discussed and it is stated that vehicle trips would be reduced especially in the production-only phase but it is also discussed in the development phase.

Comment Number **P-1(Attachment E)-159-T-14/M-7****Comment**

This section offers six additional transportation mitigation measures that the Proponents had not previously considered. These mitigation opportunities were not analyzed in the RDSEIS. This should be deleted.

Response

These mitigation measures are included as parts of the alternatives to varying degrees. Some of these mitigation measures are ongoing. Some of these mitigation measures were developed as response to public comment. Mitigation opportunities were also identified in the PAPA DEIS.

Comment Number **P-1(Attachment E)-160-G-76/LU-1****Comment**

Please confirm if “industrializing” was used or is that the author’s term. If it is the author’s term, it should be replaced with the accurate word.

Response

The text has been revised.

Comment Number **P-1(Attachment E)-161-V-7/LU-2****Comment**

This issue of the PAPA being an area of solitude was a subjective value by the authors of the original PAPA DEIS (BLM, 1999a). Cite source or delete.

Response

The source is the PAPA DEIS.

Comment Number **P-1(Attachment E)-162-V-8/LU-3****Comment**

This is a subjective statement indicating the author’s personal bias. Cite source or delete.

Response

The BLM respectfully disagrees. This is the determination of the BLM.

Comment Number **P-1(Attachment E)-163-G-77/LU-4**

Comment

This is a subjective statement indicating the author's personal bias. Cite source or delete.

Response

The BLM respectfully disagrees. This is the determination of the BLM.

Comment Number **P-1(Attachment E)-164-G-78**

Comment

Since the County has no jurisdiction over these lands, it is not necessary and is counter productive to quantify changes related to County's zoning districts. Delete.

Response

The BLM respectfully disagrees. This is important to various entities including the Sublette County. The BLM fully recognizes that Sublette County does not have jurisdiction over BLM-administered lands but the BLM takes county zoning into consideration in making land use/management decisions.

Comment Number **P-1(Attachment E)-165-G-79**

Comment

Unclear how Alternatives D and C have same Core when DA-1 was expanded for Anschutz and DA-5 is bigger than previous draft. Did C core change from previous draft?

Correct statement.

Response

The commenter is correct. The text has been revised.

Comment Number **P-1(Attachment E)-165-G-80**

Comment

The term "industrialization" is subjective and cannot be quantified except in the author's mind. Delete all 3 references.

Response

The text has been revised.

Comment Number **P-1(Attachment E)-166-G-81****Comment**

This seems like a subjective statement. Cite source or delete.

Response

This was anticipated in the PAPA DEIS (BLM, 1999a).

Comment Number **P-1(Attachment E)-167-R-4/M-8****Comment**

This section offers five additional recreational mitigation measures that the Proponents did not previously consider. These mitigation opportunities were not analyzed in the RDSEIS. Delete.

Response

Thank you for your comment.

Comment Number **P-1(Attachment E)-168-V-9****Comment**

This statement should be redrafted to reflect the factual positive results already demonstrated by the existing portion of the LGS. Redraft along the lines of: “Based on the success of existing revegetation and liquids gathering system efforts, the effects to VRM Class II and VRM Class III lands, particularly north of the New Fork River, will be substantially diminished.”

Response

Thank you for your comment. However, until viewshed monitoring determines mitigation efforts have been successful at the landscape level, the current analysis best depicts the impacts of the alternative actions.

Comment Number **P-1(Attachment E)-169-G-82****Comment**

This statement should be redrafted to reflect the factual positive results already demonstrated by the existing portion of the LGS. The words, “significantly, substantial and considerably” cannot be quantified or measured and should not be used. Delete these words.

Response

The text has been revised.

Comment Number **P-1(Attachment E)-170-G-83****Comment**

Chapter 4, 4.8.3.1, Summary of Impacts Common to All Alternatives, p. 4-64, para. 2
There are no areas that are known to be more than 50% disturbance.
Delete.

Response

These areas occur on state lands.

Comment Number **P-1(Attachment E)-171-AQ-10****Comment**

This is the personal opinion of someone in the USFS and not a regulatory, legal, or scientifically recognized screening threshold.
Delete statement.

Response

The text has been revised.

Comment Number **P-1(Attachment E)-172-AQ-11/M-9****Comment**

This section offers one additional air quality mitigation measures that the Proponents have not previously considered. These mitigation opportunities were not analyzed in the RDSEIS.
This should be deleted.

Response

Thank you for your comment.

Comment Number **P-1(Attachment E)-173-N-3/M-10****Comment**

See rationale above on other proposed mitigation opportunities.
This should be deleted.

Response

These mitigation measures are included as parts of the alternatives to varying degrees. Some of these mitigation measures are ongoing. Some of these mitigation measures were developed as response to public comment. Mitigation opportunities were also identified in the PAPA DEIS.

Comment Number **P-1(Attachment E)-174-C-8/M-11****Comment**

See rationale above on other proposed mitigation opportunities. This should be deleted.

Response

These mitigation measures are included as parts of the alternatives to varying degrees. Some of these mitigation measures are ongoing. Some of these mitigation measures were developed as response to public comment. Mitigation opportunities were also identified in the PAPA DEIS.

Comment Number **P-1(Attachment E)-175-GW-5****Comment**

This is not “inevitable” based on both the inexact nature of the model and the high amount of re-use of production water. Delete “inevitable”.

Response

The text has been revised.

Comment Number **P-1(Attachment E)-176-GW-6****Comment**

Proponents have already been monitoring groundwater required by the existing PAPA EIS; this will be a new plan. Proponents are not a part of the development of the plan and should be. Add: “Proponents will be involved in the development of any new plan from the beginning.” Existing groundwater data and activities should be incorporated and not lost.

Response

This has been clarified in the Revised Draft SEIS.

Comment Number **P-1(Attachment E)-177-GW-7/M-12****Comment**

See rationale above on other proposed mitigation opportunities. This should be deleted.

Response

These mitigation measures are included as parts of the alternatives to varying degrees. Some of these mitigation measures are ongoing. Some of these mitigation measures were developed as response to public comment. Mitigation opportunities were also identified in the PAPA DEIS.

Comment Number **P-1(Attachment E)-178-SW-1****Comment**

Provide citation to research verifying this conclusion or delete.

Response

The BLM disagrees regarding deletion of this statement. The potential for impacts from erosion are greater when disturbance is concentrated in one area rather than being dispersed.

Comment Number **P-1(Attachment E)-179-SW-2/M-13****Comment**

See rationale above on other proposed mitigation opportunities. This should be deleted.

Response

These mitigation measures are included as parts of the alternatives to varying degrees. Some of these mitigation measures are ongoing. Some of these mitigation measures were developed as response to public comment. Mitigation opportunities were also identified in the PAPA DEIS.

Comment Number **P-1(Attachment E)-180-M-14****Comment**

See rationale above on other proposed mitigation opportunities. Delete.

Response

These mitigation measures are included as parts of the alternatives to varying degrees. Some of these mitigation measures are ongoing. Some of these mitigation measures were developed as response to public comment. Mitigation opportunities were also identified in the PAPA DEIS.

Comment Number **P-1(Attachment E)-181-VG-4****Comment**

To answer the statement of BLM uncertainty on impacts to vegetation, the Proponents voluntarily commissioned and funded a Habitat/Vegetation inventory. This should be noted in this statement.

Response

After review of the habitat and vegetation inventory, the BLM is not able to determine with certainty whether or not a significant impact has occurred. Part of this uncertainty is because of the variation between reclaimed sites.

Comment Number **P-1(Attachment E)-182-VG-5/M-15****Comment**

See rationale above on other proposed mitigation opportunities. Delete.

Response

These mitigation measures are included as parts of the alternatives to varying degrees. Some of these mitigation measures are ongoing. Some of these mitigation measures were developed as response to public comment. Mitigation opportunities were also identified in the PAPA DEIS.

Comment Number **P-1(Attachment E)-183-GR-2/RC-18****Comment**

The number of wells per square mile on the Pinedale Anticline is not indicative of the amount of surface disturbance. Delete.

Response

Text has been revised based on this comment.

Comment Number **P-1(Attachment E)-184-GR-3/RC-19****Comment**

Not true. The Proponents volunteered interim reclamation – it was not a requirement. Need to correct that Alternative B allows year-round access in only 19 square miles. Change to reflect that interim reclamation was offered by Proponents.

Response

The BLM has the authority to require mitigation to minimize impacts. The text has been revised.

Comment Number **P-1(Attachment E)-185-GR-4/RC-20****Comment**

See rationale above on other proposed mitigation opportunities. Delete.

Response

These mitigation measures are included as parts of the alternatives to varying degrees. Some of these mitigation measures are ongoing. Some of these mitigation measures were developed as response to public comment. Mitigation opportunities were also identified in the PAPA DEIS.

Comment Number **P-1(Attachment E)-186-TE-7/CU-1****Comment**

Since available information is inadequate to predict cumulative impacts to federally listed species everything in this section is speculative and not supported by data.
Delete.

Response

The BLM disagrees. Possibilities for cumulative effects by any alternative are described and based on current understanding of such effects in the sources cited. Hence, such effects are reasonably foreseeable but there is no certainty that any single effect will occur.

Comment Number **P-1(Attachment E)-187-TE-8/M-16****Comment**

On all the additional mitigation opportunities for under this section, see rationale above on other proposed mitigation opportunities. Delete section.

Response

The effectiveness of the mitigation would vary by the alternative selected. Many of these measures have been included to some degree in portions of the alternatives.

Comment Number **P-1(Attachment E)-188-W-14****Comment**

BLM should quote source for this statement or delete it.

Response

The reference was cited at the beginning of the paragraph (WGFD. Recommendations for development of oil and gas resources within crucial and important wildlife habitats-version 2.0 revised April 20, 2007). The same conclusion would be reached citing the original WGFD, 2004 document.

Comment Number **P-1(Attachment E)-189-W-15/M-17****Comment**

Case law makes it clear that the effect of mitigation upon otherwise-anticipated impacts must be identified and discussed. BLM should discuss the effects of mitigation on wildlife.

Response

See response to Comment P-1(Attachment E)-187-TE-8/M-16.

Comment Number **P-1(Attachment E)-190-W-16**

Comment

While this statement presents positive results in the second year of study for pronghorns, it still utilizes the 600 acre fragmentation figure. As we pointed out in previous comments and as determined in the second annual report, the figure was preliminary and had no scientific basis and had not received the concurrence of the WGFD. This should be rewritten, and the reference to the 600 acre fragmentation figure should be deleted.

Response

See response to Comment P-1(Attachment E)-147-W-11.

Comment Number **P-1(Attachment E)-191-W-17**

Comment

The words," possible, would, likely, may, would probably" reinforce the concern that this entire statement is speculative. The issues raised by this statement are why the pronghorn study was initiated in the first place. Two years of the 5 year study have been completed, and it is premature to suggest population declines etc. due to habitat patchiness.
Delete.

Response

Criteria advanced by the WGFD (Recommendations for Development of Oil and Gas Resources within Crucial and Important Wildlife Habitats -December 6, 2004) would categorize most of the current Pinedale Anticline Crest as an area of "Extreme Impact" with greater than 16 well locations per square mile and greater than 80 acres of wellfield disturbance per square mile - whether in areas of crucial winter range (for pronghorn and mule deer) or areas of sage grouse leks, nesting and early brood-rearing habitats. As an area of "Extreme Impact", the WGFD recognized that "the function of an important wildlife habitat is essentially lost even though some animals may still be present within the project area." Linkage between loss of habitat function and declining populations is not speculation. The phrases quoted are customarily used in the interpretation of scientific studies because science does not provide absolute certainty. Lack of certainty does not equate to speculation.

Comment Number **P-1(Attachment E)-192-W-18****Comment**

The increase in mule deer abundance was more than “very slightly.” Reword this statement along the lines of: “Mule deer abundance during winter 2005-2006 increased from the previous winter (Sawyer et al., 2006).”

Response

The authors (Sawyer et al., 2006, page 6-8) observed "abundance estimates in the treatment area consistently declined 2001 - 2004, but appeared to stabilize in 2005." Also refer to the response to Comment P-1-148-W-12. The BLM has not changed the quoted text.

Comment Number **P-1(Attachment E)-193-W-19****Comment**

This statement discounts the possibility of habituation of mule deer to development activity. Pronghorn researchers and sage grouse researchers are noting the possibility of habituation in their studies, and mule deer should not be different. The possibility of habituation of mule deer to development activity should be noted.

Response

Since the next winter (2004-2005) was again mild (unlike the severe winter of 2003-2004) and mule deer distributions shifted away from wellfield developments as they had been during other mild winters, the observations made during the severe winter of 2003-2004 do not appear to support widespread habituation. The BLM has noted that wildlife can habituate to human presence under some circumstances but levels of habituation will differ by species, by season, and certainly by animals' local residency: migratory animals are less likely to habituate than sedentary animals.

Comment Number **P-1(Attachment E)-194-W-20****Comment**

This is speculative, and based on the mule deer proximity to well pads during the winter of 2003-2004, inaccurate as well. Delete.

Response

The comment ignores mule deer distributions reported by Sawyer et al. (2006) before and after the severe winter of 2003-2004. See response to Comment P-1(Attachment E)-193-W-19.

Comment Number **P-1(Attachment E)-195-W-21****Comment**

Calculating surface disturbance is the first step in impact analysis. The FSEIS should include some discussion of how surface disturbance affects the species.

Response

This has been discussed in the sections described. Surface disturbance removes/alters habitat. Such habitats are less or non-functional than undisturbed habitat. Non-functional habitat will not sustain wildlife.

Comment Number **P-1(Attachment E)-196-W-22****Comment**

This is correct in the sense that “Current understanding is insufficient to predict how such a demographic response would be manifested,” but everything that follows is speculative. Delete.

Response

Thank you for your comment. The observations reported in the cited section have generally occurred since the PAPA ROD was issued in 2000. There were 38 producing wells in the PAPA at the end of 2001 and approximately 642 producing wells at the end of 2006. Since the Proposed Action includes drilling 4,399 new wells, the scenarios seen as speculative by the commenter are quite possible given the intensity of proposed development. The BLM believes those scenarios are justified by the "hard look" criterion required in BLM's Handbook H-1790-1 (2008 - National Environmental Policy Act Handbook). A “hard look” is a reasoned analysis containing quantitative or detailed qualitative information.

Comment Number **P-1(Attachment E)-197-W-23****Comment**

This is inaccurate on at least two fronts. Male attendance at leks in and outside the PAPA increased in 2005 and 2006 due to heightened juvenile recruitment following 2004, a year of relatively high precipitation accompanied by beneficial sagebrush growth. Therefore it is not accurate to say that “Declining attendance at leks proximate to wellfield development is attributed to avoidance of the leks by yearling male greater sage-grouse (Kaiser, 2006).” In addition, because a lek has been abandoned does not mean the vital habitat is longer functional. Abandonment has nothing to do with functionality, as leks may be re-occupied at a later date. Correct this statement in the FSEIS.

Response

As indicated in Table 3.22-9, 11 leks in the PAPA had significant ($P < 0.1$) declining trends in male attendance during the past 10 years while 2 leks in the PAPA had significant ($P < 0.1$)

increasing trends during the same time period. There were significantly ($P < 0.05$) more producing wells within 2 miles of leks with declining attendance than within 2 miles of leks with increasing attendance. Attendance did not decline at any of leks on the three complexes off the PAPA while attendance at 9 of those 22 leks increase; only one of those 9 had 1 producing well within 2 miles. The observed trend of declining male attendance on leks in the PAPA occurred while attendance at leks with no producing wells within 2 miles increased. Kaiser's (2006) observations were peer-reviewed by his graduate committee and considered accurate. If wildlife avoid use of habitat within an area, whether due to alteration of that habitat or due to unsuitability because of human-related effects, that habitat has reduced or no function. If adequately restored by reclamation or if human-related effects are removed in the future, functionality may return if it is utilized by wildlife.

Comment Number **P-1(Attachment E)-198-W-24**

Comment

The second annual report investigating the greater sage-grouse use of winter habitat in the Upper Green River Basin indicates that the birds are not avoiding areas near well pads using off-site liquids collection. The new data which was not available to the authors of the RDSEIS suggests that collecting liquids off-site via a gathering system may reduce the impact to the sage-grouse as a result of developing natural gas reserves. Incorporate new findings into the FSEIS.

Response

See response to Comment P-1(Attachment E)-149-W-13.

Comment Number **P-1(Attachment E)-199-W-25**

Comment

At this time this statement is speculative since only two years of the five year research study have been completed. However, the first two years of sage grouse data would indicate that this statement is not accurate. Delete.

Response

This statement address effects to sage-grouse breeding, nesting, and brood-rearing habitats and is accurate according to other peer-reviewed research. The study referenced in the comment is investigating sage-grouse use of winter habitat which should not be confused with breeding, nesting, and brood-rearing habitats.

Comment Number **P-1(Attachment E)-200-W-26**

Comment

Section 4.20 introduces concept of delayed population response to habitat impacts, which undermines much of the discussion of current wildlife population impacts and trends. Delete.

Response

Time delays between the onset of impact and population response have already been reported in the scientific literature (for example see Walker et al., in press) and cited in Section 4.20. The BLM fails to understand why the comment refers to inclusion of such time delays as undermining discussion of current wildlife population impact and trends; varying impacts are expected to occur as a continuum over time. Discussing future impact is a requisite "hard look"; see response to Comment P-1(Attachment E)-196-W-22.

Comment Number **P-1(Attachment E)-201-W-27**

Comment

Reference the BMPs.

Response

It is unclear to what BMPs the comment is referring. The voluntary BMPs are referred to in the Revised Draft SEIS.

Comment Number **P-1(Attachment E)-202-SW-3**

Comment

Provide citation to data or research verifying this statement or delete.

Response

Citation was added to the text in the Revised Draft SEIS.

Comment Number **P-1(Attachment E)-203-W-28**

Comment

This section focuses solely on surface disturbance areas, reclamation, traffic, etc. The prior baseline should be referenced.

Response

The environmental baseline is described in Chapter 3. As the "No Action" Alternative, Alternative A would be implemented in the future, as would the other alternatives. Hence, analyses of effects have been consistent among the five alternatives. The commenter is directed to Section 4.20.3.1 "Summary of Impacts Common to All Alternatives", including Alternative A.

Comment Number **P-1(Attachment E)-204-W-29****Comment**

This implies that all wildlife habitat would be physically eliminated by implementation of the alternatives. Delete.

Response

The portion of text referenced does not imply what the comment states. The referenced text states: "In addition to the effects of fragmentation, wildlife habitats associated with native vegetation have been altered by land uses in the PAPA. These habitats would be physically eliminated through implementation of alternatives until surface disturbance is reclaimed."

Comment Number **P-1(Attachment E)-205-T-15****Comment**

The plan is left open for interpretation.
Proponents will need to be involved in the development of any Operator- Committed Measure.

Response

Thank you for your comment.

Comment Number **P-1(Attachment E)-206-G-84****Comment**

Allow flexibility where a variance to the 10-day period may be necessary and to the spacing of plugs and pipe set-backs.
Revise to read "To allow for both livestock and wildlife movement, no more trench than can be successfully backfilled and compacted in a 10-day period will be open at any one time.
Variance to the 10-day limit may be granted upon justification. Soft plugs will be placed approximately every 0.25 mile or at logical breaks in pipe installation (e.g., roads, other pipelines, etc.) at approximate 0.25 mile intervals, and when stringing pipe one joint of pipe will be set back approximately every 0.25 mile or at logical breaks in pipe installation at approximate 0.25 mile intervals."

Response

The text has been revised.

Comment Number **P-1(Attachment E)-207-G-85****Comment**

Appendix 7, Development Procedures for Wellhead Activities, Well Pads, p. 7-3, second bullet

Revise to read "...gases produced during drilling and permitted completion and testing operations."

Response

The text has been revised.

Comment Number **P-1(Attachment E)-208-G-86**

Comment

There is no "typical" well design across all operators and all parts of the PAPA. The described scenario is not typical for all operators.

Delete.

Response

The commenter did not provide information on what is incorrect with the description; however, to address the comment, the text has been revised.

Comment Number **P-1(Attachment E)-208-G-87**

Comment

This description is inaccurate. Production tubing is not run after perforating. Correct to say: "casing would be perforated in potentially productive zones downhole (e.g., Lance Pool sand lenses), FRACTURE STIMULATED, and ULTIMATELY production tubing run."

Response

The text has been revised.

Comment Number **P-1(Attachment E)-208-G-88**

Comment

How can the duration a pad remains open be determined in an APD (up front)? Delete as the reclamation plan for Alternative E.

Response

The BLM developed Alternative E. When the APD is submitted, if subsequent wells are not planned for the pad, interim reclamation may be required. If later subsequent APDs are filed, then the interim reclamation is modified as appropriate.

Comment Number **P-1(Attachment F)-210-G-89****Comment**

SEE ATTACHMENT F
Recap of Ultra's, Shell's and Questar's DEIS comments, Mitigation Letter and Agreements on DA-5, Reclamation and The Wildlife Matrix.

Response

Thank you for your recap.