

Public Comments and BLM Responses on the Revised Draft SEIS Business and Industry

Comment Number **BI-2-1-SE-1**

Comment

The BLM must select an alternative that fosters continued economic success to the region by promoting oil and gas development.

Response

Thank you for your comment.

Comment Number **BI-2-2-AQ-1**

Comment

The BLM must disclose that the apparent discrepancy between the 2005 modeled predictions and the actual monitoring data is likely a result of the conservative nature of the BLMs modeling.

Response

Thank you for your comment. Conservatively estimating impacts is in effect standard operating procedure. However, please note Figures 3.11-1, 2 and 3 (Chapter 3, pages 3-67-68) which show SVR data from the Bridger Wilderness IMPROVE site. Data in Figure 3.11-1 may suggest an improving trend in visibility - but this is only 5 years of data (1998-2003). Data in Figure 3.11-2 is quite variable while that in Figure 3.11-3 would seem to indicate no improvement for the 20th% Hazeiest Day's. Also note that the Bridger Wilderness IMPROVE site is located well above the valley floor - away from locations where drilling/production is occurring.

Comment Number **BI-2-2-AQ-2**

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. Conservatively estimating impacts is in effect standard operating procedure.

Comment Number **BI-2-3-AQ-3**

Comment

When describing atmospheric deposition on page 3-68 of the PAPA RSDEIS, the BLM states that the "USFS has indicated that the current green line values are set too high and do not protect ecosystems from nitrogen and sulfur deposition." The BLM credits this statement to a single Forest Service employee. See PAPA RSDEIS pg. 3-68. The BLM should not reference unsubstantiated, unverified statements such as in this in the PAPA RSDEIS.

Response

Thank you for your comment. As of 2007-2008 USFS (and other cooperators - EPA, NPS) strongly suggests Levels of Concern (LOC) which are maximum deposition rates for total nitrogen and sulphur, but these are guidance not national or state standards.

Comment Number **BI-2-4-AQ-4**

Comment

The BLM should not attempt to impose unnecessary or unduly restrictive emission standards or regulations in an attempt to control the potential emission of ozone forming compounds.

Response

Thank you for your comment.

Comment Number **BI-2-5-W-1**

Comment

The assertions proposed in the 2006 Berger reports do not appear to be well founded or justified. First, as the BLM admits on pages 3-122 and 4-4-149, pronghorn did not avoid habitat within Jonah Field during 2007.

Response

The BLM did not "admit" to anything. The BLM simply included the observations made by Dr. Berger and his associates in the 2006 and 2007 annual reports. Those observations were included in the Revised Draft SEIS.

Comment Number **BI-2-5-W-2**

Comment

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

The BLM respectfully disagrees. The information presented in the 2006 report was the best available at the time the Revised 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 **BI-2-6-W-3****Comment**

The BLM indicates that "casual observation" 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 observations" are remotely 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 at examining relationships of abundance to land use, the term "casual" 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 **BI-2-6-W-4****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 **BI-2-7-W-5****Comment**

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 further indicates that sage-grouse leks in the PAPA Project Area continue to be occupied even when impacted by the intensive natural gas development accruing in the area. The BLM should include this analysis in the Final EIS.

Response

The 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. Whether the continued occupation of leks or the increase in sage-grouse are 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 **BI-2-8-W-6****Comment**

The BLM must consider this information when preparing the Final EIS and should not rely upon the Holloran study.

Response

See response to Comment BI-2-7-W-5. Dr. Holloran's study design was such that it controlled for drought as well as protections applied under IM 2004-057.

Comment Number **BI-2-9-W-7****Comment**

Information released from the WGFD in March of 2007 also contradicts the BLM's description of sage-grouse populations in Wyoming. A report released in March of 2007 noted that while there have been historic declines in sage-grouse populations, there have been mid-term and short-

term increases in populations. The BLM should revise and update the analysis regarding sage-grouse populations in the Final EIS.

Response

There were several reports about sage-grouse released by the WGFD in 2007. The BLM cannot evaluate the commenter's statement without an appropriate citation.

Comment Number **BI-3-1-G-1**

Comment

We support the Proponents' year-round access definition as an assurance that BLM not apply seasonal wildlife restrictions when approving permits in the requested specified areas for simultaneous operations, including drilling, completions, construction, pipelines, etc. We support Proponents request for year-round access in specified areas which includes simultaneous operations (drilling, completions, construction, pipelines, etc.) We believe the BLM needs to clearly describe and insert this definition into the Final SEIS and Record of Decision

Response

Based upon the analysis contained in the SEIS, the BLM recognizes the benefits of systematic development that can be achieved with relief from all seasonal restrictions. However, the BLM is also mandated to comply with all applicable federal laws and regulations, such as the Migratory Bird Treaty Act and the Bald and Golden Eagle Protection Act. The BLM cannot grant relief where such action could result in violation of a federal law or regulation.

Comment Number **BI-3-2-W-1**

Comment

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

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 **BI-3-3-M-1**

Comment

The innovative and costly on-site mitigation components of the Proposed Action and as carried over to Alternative D—such as the Liquids Gathering System (LGS), directional drilling, Wildlife

Matrix, mitigation and monitoring fund, etc.—should be more clearly addressed in Chapter 2 even though they are contained in Appendices of the RDSEIS.

Response

The BLM respectfully disagrees. The BLM determined that these measures are adequately described in Chapter 2 to present the effects of those elements in Chapter 4.

Comment Number **BI-3-4-W-2**

Comment

It is the opinion of the WGFD in co-advancing this matrix that it is the best tool to mitigate impacts to wildlife. We request that the three paragraphs be deleted or that the BLM explicitly reject Proponents' offer of the WGFD-approved Wildlife Matrix as a method of setting thresholds to allow for performance-based wildlife management.

Response

The text has been revised.

Comment Number **BI-3-5-AQ-1**

Comment

On two issues, this is not what was committed to by the Proponents with WDEQ concurrence: 1. WDEQ-AQD has jurisdiction over air quality in the State of Wyoming and Proponents should not have to support WDEQ-AQD ceding that authority through a NEPA process to any other entity – BLM or EPA. 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 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 BLM will continue to support air quality monitoring and analysis.

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

Comment

Language on p. 4-85 RDSEIS puts in question year-round access and therefore destroys the Proponents' ability to make long-term commitments for emission reduction efforts. This language could result in the Proponents having to reduce activity levels or take other drastic measures if there are no technologically and economically feasible or other reasonable means to further reduce drill rig engine emissions, despite the very significant investment in drill rig

emissions reduction equipment and methods to achieve the 80% drill rig engine NOx reduction level.

Response

Thank you for your comment. Please note language of Points 1, 2 and especially 4 (under Implementation) in Chapter 4, p.4-85, which indicate that "...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 would also specify a schedule for completely implementing the plan." Please note that any decision would be collaborative in nature. This implies access for more than 1-2 seasons.

Comment Number **BI-3-6-G-2**

Comment

PAW thus recommends that Appendix 4 be deleted in its entirety and that it not be part of the FDSEIS or the ROD on the Pinedale Anticline.

Response

The BLM respectfully disagrees. Text in the Final SEIS and in Appendix 4 has been changed.

Comment Number **BI-3-7-G-3**

Comment

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 as well as existing procedures

Response

The BLM respectfully disagrees. The text in the Final SEIS and in Appendix 4 has been changed. Nothing in the SEIS makes "The Gold Book" unavailable to BLM. "The Gold Book" remains a tool available to reduce impacts.

Comment Number **BI-3-8-W-3**

Comment

Require inventories or special studies where necessary for areas to be disturbed. BLM does not provide criteria or guidelines identifying the circumstances where site-specific inventories or special studies would be required. Delete.

Response

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. Needs for site-specific inventories or special studies will be evaluated during Annual Planning Meetings and will, in part, be based on the knowledge accumulated from multiple sources.

Comment Number **BI-3-9-G-4**

Comment

Oil-based muds used for drilling operations should be environmentally acceptable. Environmentally acceptable is very nebulous wording. Delete.

Response

The text has been revised.

Comment Number **BI-3-10-G-5**

Comment

“The closed drilling system would be equipped with appropriate drip pans, liners...” Liners are not currently required on all OBM operations. Delete.

Response

The full COA states "as needed" therefore no change is required.

Comment Number **BI-3-11-G-6**

Comment

All spills in excess of one barrel outside the containment devices would be reported to the BLM within 8 hours. This requirement would be inconsistent with current requirements. Further, BLM fails to provide a rationale or identify the source of this requirement. It is not required by Onshore Order 1, NTL-3A, or WDEQ Regulations. Standard reporting volume for spills per BLM/WDEQ is 10 barrels of hydrocarbon. Revise to be consistent with these reporting levels.

Response

The WDEQ's reporting limiting is any amount if it could threaten the waters of the state. The BLM agrees that NTL3A reporting guidance is the appropriate regulations for reporting. However, the BLM has other resource concerns and encourages Operators to continue to notify the BLM of all undesirable events regardless of severity for tracking purposes.

Comment Number **BI-3-12-G-7****Comment**

Well control training of the rig crews would include coverage of the additional hazards associated with oil based muds. Appears to apply to all drilling operations. Should clarify that this only applies to rigs utilizing OBM.

Response

The text has been revised.

Comment Number **BI-3-13-WQ-1****Comment**

“operator is required to have WDEQ approved firm contracted to conduct water samples, send a copy... to the BLM PFO at the same time they are sent to the Operator.” Unclear if statement refers to drilling fluids, water source wells. Is BLM already receiving these? Confirm source or delete.

Response

This has been deleted.

Comment Number **BI-3-14-G-8****Comment**

“would be designed...not be damaged by moderate earthquakes” What is a moderate earthquake, and what are the standards? Delete or show specific requirements.

Response

This is already a requirement in the existing PAPA ROD.

Comment Number **BI-3-15-G-9****Comment**

Standard Practices and Restrictions of APDs. Appear to be conditions generally included in APDs.

Response

The commenter is correct. These conditions are generally included in APDs.

Comment Number **BI-3-16-G-10****Comment**

“Submit a Sundry Notice describing how the oil contaminated drill cuttings would be treated”
This is also generally part of the APD and is repetitive.

Response

The commenter is correct. These conditions are generally included in APDs.

Comment Number **BI-3-17-G-11****Comment**

“Prior to skidding or moving the drill rig to another well or well pad, the pumps, pump lines and tanks would be cleaned to insure that NO oil-based mud is in the system during surface drilling operations of the new well.” Operators may drill surface hole for all wells in a group before returning to drill all production holes. In this case, equipment would not require cleaning when skidding/moving from one production hole to next. Not needed if skidding. Other operators employ two separate systems which also eliminates the need for cleanup.

Response

The Operator will ensure that no oil based mud is in the system during surface drilling operations of a well.

Comment Number **BI-3-18-G-12****Comment**

“Any facilities defined as critical according to the Uniform Building Code would be constructed in accordance with applicable Uniform Building Code Standards for Seismic Risk Zone 2B.”
BLM should provide this information to Operators and all others whose facilities are defined as “critical.”

Response

This is already a requirement of the PAPA ROD (page A-16).

Comment Number **BI-3-19-G-13****Comment**

“The Operator would also submit to the BLM Authorized Officer within 30 days of drilling, a digital file of the surface location of the well head(s). Cannot be done until all wells are finished on a pad.

Response

The text has been revised.

Comment Number **BI-3-20-G-14**

Comment

30 days of drilling, a digital file of the surface location of the well head(s). "Contact the BLM Authorized Officer's field representative no earlier than 15 days and no later than 3 working days prior to commencement of construction activities." This requirement has been unfeasible for several years due to delays in BLM approval of APDs. Generally, when the APD is approved, the Operator must commence operations immediately due to rig availability or impending seasonal restrictions.

Response

The text has been revised.

Comment Number **BI-3-21-V-1**

Comment

"A controlled surface use stipulation would be applied for activities within 0.25 miles of the visual horizon (whichever is closer) of the Wilderness Study Area (WSA) boundary." The meaning of this statement and its effects on operations are unclear. BLM should define this restricted visual area. According the Pinedale Revised RMP, there are two WSAs in the RMP area, the Scab Creek WSA on east side of Wind River range and the Lake Mountain WSA just north of Lincoln County line.

Response

The text has been revised.

Comment Number **BI-3-22-S-1**

Comment

Management of the soil resource would continue to be based on 1) evaluation and interpretation of soils in relation to project design and development, 2) Identification and inventory of soils for baseline data, 3) Identification and implantation of methods to reduce accelerated erosion. Proponents have not, nor are they aware of having been asked to undertake items 1) and 2). Who is responsible for collecting? Not currently required - Delete.

Response

This is currently a requirement of the PAPA ROD (page A-13).

Comment Number **BI-3-23-S-2****Comment**

“before a surface disturbing activity is authorized, topsoil depth would be determined.” At present operators do not determine topsoil depths prior to project authorizations, nor do authorizations specify topsoil volumes; current authorizations simply call for stripping at minimum depths (e.g., 6 inches). Not Standard - Delete.

Response

This is currently a requirement of the PAPA ROD, page A-13.

Comment Number **BI-3-24-S-3****Comment**

Projects requiring soil interpretations include: construction of linear right-of-way facilities ... construction of water impoundments; rangeland manipulation ... construction of plant site facilities, pump stations, well pads and associated disturbances; and reclamation projects. Delete - These may be repetitive with NRCS who is coming out with soil analysis surveys for area.

Response

This is currently a requirement of the PAPA ROD, page A-13.

Comment Number **BI-3-25-S-4****Comment**

ERRP would be approved prior to disturbance. Delete – Operators submit this post disturbance now.

Response

This is currently a requirement of the PAPA ROD. The requirements have been strengthened in the Final SEIS to avoid submission confusion.

Comment Number **BI-3-26-RC-1****Comment**

“To control or reduce sediment from roads ... redesign or closure of old roads would be developed when necessary.” This is a concern since BLM has recently suggested reclaiming existing roads and building new ones to address visual anxiety. Clarify that requirement to redesign or close in-use roads would only be imposed where significant environmental impacts (such as sediment) cannot be alleviated through use of other mitigations and where the

detrimental impacts of the existing road outweighs the impacts associated with new surface disturbance to rebuild the road.

Response

The text has been revised.

Comment Number **BI-3-27-GW-1 SW-1****Comment**

Treaters, dehydrators and other production facilities installed on location, that have the potential to leak or spill oil, glycol, produced water...would be placed on or within appropriate containment and/or diversionary structure to prevent spilled or leaking fluid from reaching the ground, surface or navigable waters. EPA SPCC requirements do not require E&P facilities to meet this requirement. Processing equipment is not considered storage. Delete Paragraph.

Response

Water Quality is a key issue in the area and this is also a well site hygiene issue that is standard practice and well within the BLM's purview - the text will remain.

Comment Number **BI-3-28-RC-2****Comment**

"A sundry notice must be submitted and approved prior to any pit closures or reclamation work." A sundry notice is not necessary since pit closure work and reclamation guidelines are part of the APD. Delete requirement for sundry approval.

Response

A sundry notice is required and will be required for all reclamation or pit closure work to insure that reclamation goals, seed mixture, and timing are appropriate and to ensure that the pit is ready to be closed and complies with regulatory guidance.

Comment Number **BI-3-29-VG-1****Comment**

"Trees, shrubs and ground cover (not to be cleared from rights-of-way) would require protection from construction damage." This statement is unclear. Construction activity is confined to the approved ROW width. Why would vegetation outside require "protection"? What is meant by "protection"? Delete.

Response

What this statement says is if there is a plant species in a right-of-way that the BLM would like to protect, such as mountain mahogany and the BLM stipulates that the pipeline right-of-way will be narrowed down for a joint or two of pipe 40-80 feet to protect that species. Therefore if that species would need fenced, etc. to make sure it was not removed.

Comment Number **BI-3-30-SW-2**

Comment

“To protect watershed resources during wet periods, vehicle travel, particularly large or heavy truck traffic would not be allowed unless travel occurs on roads that are graveled for all-season use.”

What constitutes a “wet period”? Delete.

Response

The term, "wet period," was used to allow for flexibility in operations. The standard will be changed to a three inch rut.

Comment Number **BI-3-31-S-5**

Comment

1) Existing well pads that would not be fully developed by the first winter following construction, all bare ground would have at least 75% protective cover.... Erosion control measures shall be met as indicated by State of Wyoming Department of Environmental Quality’s Storm Water Discharge Plan. Techniques used but not limited to achieve erosion control are installation of barrier silt fencing, use of riprap, planting of topsoil spoils piles with annual native grasses/forbs, planting cut/fill areas of pads with soil stabilizing native plants. Delete this sentence.

Response

Text has been revised. This would not be required where active drilling and completion activities are occurring, but rather on those sites where the pad has been built and the concentrated development has not reached.

Comment Number **BI-3-32-RC-3**

Comment

“Protective cover may be excluded on active work sites ... if justified by the Operator and with concurrence of BLM.” Delete this sentence.

Response

The text has been revised.

Comment Number **BI-3-33-RC-4****Comment**

3) Access roads leading to the temporarily stabilized well pad would have protective cover to the same levels required on the well pad. Delete this sentence.

Response

The text has been revised.

Comment Number **BI-3-34-RC-5****Comment**

Site stabilization requirement #2. It is unreasonable to expect "no sediment discharge" from pads. Delete.

Response

This is a requirement of the PAPA ROD, page A-10 and page A-11. The text has been revised from "to achieve zero sediment discharge" to "to approach zero sediment discharge."

Comment Number **BI-3-35-RC-6****Comment**

Site stabilization requirement #3. This implies protective covers will be necessary for roads (see above). Delete.

Response

The text has been revised.

Comment Number **BI-3-36-RC-7****Comment**

SUP objectives. The inclusion of successful reclamation objectives is new for Surface Use Plans. Delete.

Response

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

Comment Number **BI-3-37-RC-8****Comment**

“All roads on federal lands not required for routine operation and maintenance of producing wells, ancillary facilities, livestock grazing administration, or necessary recreation access would be reclaimed as directed by the BLM. These roads would be permanently blocked, recontoured, reclaimed, and revegetated by the Operators” Does this include roads outside the PAPA? Does it include roads outside the Operators’ leaseholds? Does it include two-track roads? Need to Clarify.

Response

It is currently a requirement of the PAPA ROD, page A-9.

Comment Number **BI-3-38-RC-9****Comment**

“On producing locations, Operators would be required to reduce slopes to original contours (not to exceed 3:1 slopes).” Is this possible on all producing locations? Delete.

Response

This is a requirement of the PAPA ROD, page A-11.

Comment Number **BI-3-39-VG-1****Comment**

“A pre-disturbance species composition list must be developed...” The requirement of a pre-disturbance plant species list is new. Delete.

Response

This is currently a requirement of the PAPA ROD, page A-14.

Comment Number **BI-3-40-RC-11****Comment**

Sterile Gravel Issue. Insert the word “reasonably” before the word “free” at the start of the line. Without sterilization it would be impossible to have mold/fungi free anything. Delete.

Response

The text has been revised.

Comment Number **BI-3-41-RC-12****Comment**

“All reclamation is expected to be accomplished as soon as possible after the disturbance occurs with effort continuing until a satisfactory revegetation cover is established...”
What is defined as satisfactory? Delete.

Response

Successful reclamation is described in the various reclamation plans for each alternative.

Comment Number **BI-3-42-SW-3****Comment**

Floodplains will have no permanent facilities located on them. Floodplain not defined (10-yr, 100-yr?). If implemented, BLM should note that private land with private minerals is exempt. Counter to normal operations. Delete.

Response

The definition will be changed to clarify that it is the federally managed 100-year floodplains.

Comment Number **BI-3-43-G-12****Comment**

4 mile restriction to dwelling or residence from compressor unit would require additional NEPA analysis.

Response

This is already a requirement in the existing PAPA ROD based upon the analysis contained in the EIS (page A-23).

Comment Number **BI-3-45-GR-1****Comment**

“Operators would restrict ORV activity by employees and contract workers...” This ORV restriction would prevent ORV use in APD staking, ROW survey, and wildlife work. Delete.

Response

There is no permit required for staking. This restriction is intended to apply to permitted and maintenance actions. ORV restrictions will follow those outlined in the RMP.

Comment Number **BI-3-45-GR-1****Comment**

Grazing: all improvements should be avoided by 500'. The general requirement to avoid all range improvements by 500 ft. seems unreasonable and all applicable range improvements need listing. (Does this apply to fences, cattle guards?) Delete.

Response

The BLM sets this as a goal to avoid all improvements (fences, cattle guards, stock tanks) by 500'. The BLM respectfully disagrees that a complete listing of all improvements is needed.

Comment Number **BI-3-46-SW-4****Comment**

"All water used in association with this project would be permitted through the Wyoming State Engineer's Office." Not all water used in this project would be under jurisdiction of SEO (e.g., recycled produced water). Delete this sentence.

Response

The sentence will be changed to "All water put to beneficial use, including produced water, associated with this project would be under the jurisdiction of the SEO." As a side note, water that is discharged and not put to a beneficial use is not under the jurisdiction of the SEO but if the water has a beneficial use, then it is under the SEO's jurisdiction.

Comment Number **BI-3-47-C-1****Comment**

"Areas underlain by either the Wasatch or Green River formations ... must be surveyed by a qualified paleontologist before surface disturbing activities would be authorized." All areas on PAPA underlain by Wasatch formation? Insert "if appropriate" after "must be surveyed by qualified paleontologist." Otherwise delete.

Response

The text has been revised.

Comment Number **BI-3-48-C-2****Comment**

"All major pipelines (12" and larger) proposed within would have paleontological open trench inspections and geologic research to resolve mapping issues discovered during the

paleontological overview in the Jonah Field.” The “mapping issues” identified for Jonah require identification. Delete.

Response

The text has been revised.

Comment Number **BI-3-49-C-3****Comment**

“All personnel should be informed that collecting artifacts (including arrowheads) is a violation of federal law and that employees engaged in this activity may be subject to disciplinary action, which could include dismissal.”

Response

This is correct.

Comment Number **BI-3-50-HW-1****Comment**

“Owners or operators of onshore facilities ... could reasonably be expected to discharge oil in harmful quantities ... into or upon navigable waters of the United States” This is a subjective statement. Hydrocarbons are exempted from HM. Delete this sentence.

Response

The text has been revised. The word "that" was missing from the statement and now has been inserted. This is a requirement of the PAPA ROD, page A-17.

Comment Number **BI-3-51-HW-2****Comment**

“An orientation should be conducted by the Operators to ensure that project personnel are aware of the potential impacts that can result from accidental spills and that they know the appropriate recourse if a spill occurs. Delete this sentence.

Response

Spills have the potential to effect cultural resources and as such are an undertaking needing evaluation.

Comment Number **BI-3-51-HW-3****Comment**

“If reserve pit leakage is detected, operations at the site would be curtailed, as directed by the BLM, until the leakage is corrected.” Delete this sentence.

Response

This is a requirement of the PAPA ROD, page A-17.

Comment Number **BI-3-52-TE-1****Comment**

Surveys of T&E and candidate wildlife species would be implemented in areas of potential habitat by a qualified biologist prior to disturbance. Findings would be reviewed by the BLM prior to or as components of ROW applications and APD review process. This differs from today’s practices in which the survey needs to be conducted prior to construction but does not hold up actually receiving the APD or ROW. Based on the findings, operators are not allowed to construct or to move forward. The newly described process will hold APD’s, which need have seasonally stipulated surveys up for longer periods of time waiting for approvals. Approve APD’s with the COA’s that specified studies must be conducted and reviewed prior to construction.

Response

Such circumstances would completely depend on site-specific conditions. The BLM always retains the right to review information as components of ROW applications and the APD review process. The BLM has a mandate to comply with all applicable federal laws and regulations, and will not grant relief where such action is likely to result in violation of a federal law or regulation.

Comment Number **BI-3-53-TE-2****Comment**

“Proposed construction sites in the development area would be examined prior to surface-disturbing activities to confirm the presence or absence of prairie dog colonies.” Prairie dog and black-footed ferret surveys should not be required for all construction. Delete this sentence.

Response

As noted in the Revised Draft SEIS, surveys would be required within prairie dog colonies that were not included in the USFWS' block-clearance as described in Section 4.19.3.1 of the Revised Draft SEIS.

Comment Number **BI-3-54-TE-3****Comment**

“A survey for black-footed ferret is required prior to approval of construction activities.” Delete this sentence or add “should be site specific.” Should be subject to the parameters listed above. (US Fish & Wildlife guidelines.)

Response

See response to Comment BI-3-53-TE-2.

Comment Number **BI-3-55-TE-4****Comment**

There is no relief provided for eagles, hawks, or Burrowing owls. BLM should provide relief. At a minimum, this should be on a case by case basis.

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 **BI-3-56-TE-5****Comment**

What are these? Need Definition or remedy.

Response

50 CFR § 402 (June 3, 1986) will be added to the referenced text.

Comment Number **BI-3-57-TE-6****Comment**

“Surveys for T&E and candidate wildlife species would be implemented in areas of potential habitat by a qualified biologist prior to disturbances.” Does this reflect current expectations regarding T&E consultations with USWFS?

Response

This does reflect consultations with the USFWS. It is anticipated that this would be required in the Biological Opinion for listed species.

Comment Number **BI-3-58-TE-7****Comment**

“...no surface disturbing or human activities would be authorized between November 1 and April 1 within 1 mile of known bald eagle winter use areas. All surface-disturbing or human activity ... would be seasonally restricted from February 1 through August 15 within 1.0 mile of all active eagle nests.” Not in conformity with the intent of year-round development. These restrictive statements should all be prefaced by “Except in areas approved for continuous operations under year-round development in this FSEIS,”

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 recommends the commenter review BLM Instruction Memorandum No. 2008-050 as well. The BLM will not grant relief where such action is likely to result in violation of a federal law or regulation.

Comment Number **BI-3-59-TE-8****Comment**

“All surface-disturbing activity ... would be seasonally restricted from February 1 through July 31 within a 0.5 mile radius of all active raptor nests, except ferruginous hawk nests, for which the seasonal buffer would be 1.0 mile.” These restrictive statements should all be prefaced by “Except in areas approved for continuous operations under year-round development in this FSEIS,”

Response

See response to Comment BI-3-58-TE-7

Comment Number **BI-3-60-TE-9****Comment**

“Surface disturbing and disruptive activity will be prohibited within 0.5 mile of burrowing owl nesting habitat from April 1 through August 15.” Unless the word “occupied” is included here, any area within 0.5 mile of burrows (pygmy rabbit burrows, prairie dog burrows) could be considered burrowing owl nesting habitat. These restrictive statements should all be prefaced by “Except in areas approved for continuous operations under year-round development in this FSEIS,”

Response

See response to Comment BI-3-58-TE-7

Comment Number **BI-3-61-TE-10****Comment**

“If surface disturbing activity is requested to take place min mountain plover habitat between April 10 and July 10, presence/absence surveys are required. Survey results would determine when activities are proposed.” These restrictive statements should all be prefaced by “Except in areas approved for continuous operations under year-round development in this FSEIS,”

Response

See response to Comment BI-3-58-TE-7.

Comment Number **BI-3-62-TE-11****Comment**

“Surveys to determine presence/absence of the plover would be conduct between May 1 and June 15 through out the breeding range.” These restrictive statements should all be prefaced by “Except in areas approved for continuous operations under year-round development in this FSEIS,”

Response

See response to Comment BI-3-58-TE-7.

Comment Number **BI-3-63-W-4****Comment**

Field evaluations for sage grouse leks and/or nests – using proper survey methods. What are these methods – state protocol accepted by BLM. State methods or make reference to protocols

Response

Survey protocols are known by qualified wildlife biologists, as specified in the BLM's Instruction Memorandum No. WY-2004-057 and attachment updated December 2006.

Comment Number **BI-3-64-W-5****Comment**

Wildlife proof fencing on reclamation sites. This is a new requirement. Delete this sentence.

Response

The comment does not fully disclose the context of the requirement since wildlife-proof fencing would be utilized "if it is determined that wildlife species are impeding successful vegetation establishment."

Comment Number **BI-3-65-W-6**

Comment

For all breeding birds observed, additional surveys would be conducted immediately prior to construction activities to search for active nest sites. This is a new requirement. Delete this sentence.

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 **BI-3-66-W-7**

Comment

"Well locations and associated road and pipeline routes would be selected and designed to avoid disturbances to areas of high wildlife value" "High wildlife value" is subjective. Delete this sentence.

Response

Such value had been defined by WGFD in 2004 (Recommendations for Development of Oil and Gas Resources within Crucial and Important Wildlife Habitats -December 6, 2004).

Comment Number **BI-3-67-W-8**

Comment

"Avoid activities and facilities that create barriers to the seasonal movements of big game and livestock." This statement is unclear. Define what "barriers" would qualify for restriction of activities and facilities.

Response

WGFD (Recommendations for Development of Oil and Gas Resources within Crucial and Important Wildlife Habitats -December 6, 2004) defined barriers as physical or psychological (i.e., disturbance-related) and which can "further reduce the availability of effective habitat." The BLM recognizes that the term "barrier" will differ among species, habitats, seasons, and a wide

variety of additional site-specific circumstances such as the specific nature a disturbance-related action.

Comment Number **BI-3-68-V-2**

Comment

Approval of well pad locations, new roads, buried pipelines, or other facilities would be conditioned upon the operator developing a visual resource protection plan, acceptable to BLM, for the mitigation of anticipated impacts in all areas of the PAPA. This is a new requirement and would be both costly and untimely to conduct. Delete this sentence.

Response

Thank you for the comment. The BLM would work with industry to develop reasonable procedures for the preparation of a visual resource protection plan. These plans need not be costly nor create delays; however, the VRPP would facilitate a decrease in direct and cumulative visual impacts accrued from fluid mineral production and related activities. Text has been revised.

Comment Number **BI-3-69-V-3**

Comment

“... require the Operator to demonstrate to the Authorized Officer’s satisfaction that the location and/or facilities have reasonably incorporated visual design considerations that would mitigate unnecessary visual impacts.” Not all areas of the PAPA require visual mitigation. Requirement for mitigation should be based on the standards for the visual class. Class IV areas would not require mitigation because it allows for major modification of existing character of the landscape. Likewise, a location/facility in a Class III area should not be required to have mitigation unless the location/facility will “dominate” the landscape. Delete this requirement.

Response

Thank you for the comment. Mitigation is required regardless of the affected areas VRM Class Objective. The level of visual mitigation will be commensurate with the relative visual values assigned the area through the Land Use Plan. Please refer to BLM Manual 8431, Visual Resource Management Objectives for definitions and standards for each VRM Class Objective.

Comment Number **BI-3-70-RC-13**

Comment

“New roads would be designed ...; every opportunity would be taken to reclaim existing road ROWs that are not used when new roads are designed over them.” Alludes to BLM’s intention to require Operators to close and reclaim existing in-use roads in favor of constructing a new road. Delete this reference.

Response

The text has been revised.

Comment Number **BI-3-71-V-4**

Comment

“Topographic screening, vegetation manipulation, project scheduling, and traffic control procedures would all be employed as deemed appropriate by the BLM to further reduce visual impacts.” Project scheduling should not be a mitigation for visual impacts. Delete this sentence.

Response

The BLM respectfully disagrees and also notes that project scheduling is not exclusive to rigs or rig moves.

Comment Number **BI-3-72-V-5**

Comment

“Within Visual Resource Management (VRM) Class IV areas, the BLM and Operators would utilize existing topography to screen roads, pipeline corridors, drill rigs, wells and production facilities from view, where practical.” Not required under Class IV standards. Delete this sentence.

Response

Operators are expected to have reasonably incorporate visual design considerations that would mitigate unnecessary visual impacts in all areas of the PAPA. Please refer to BLM Manual 8431, Visual Resource Management Objectives for definitions and standards for each VRM Class Objective.

Comment Number **BI-3-73-S-6**

Comment

“Well pads, roads and buried pipelines would avoid the sensitive soils shown on Map 3.17-1 in the Revised Draft SEIS.” Delete this reference

Response

The BLM respectfully disagrees.

Comment Number **BI-3-74-V-6****Comment**

“If BLM allows a well pad to be developed in any area managed for visual resources, roads and well pads may need to be surfaced” This implies that BLM has discretion to disallow a well pad in any area managed for visual resources, which is the entire PAPA. Delete this reference.

Response

This is currently a requirement of the PAPA ROD. However, the BLM recognizes the concern expressed in this comment. Therefore the text has been revised.

Comment Number **BI-3-75-V-7/S-7****Comment**

“One way to avoid visual impacts associated with construction of well pads, roads and pipelines in visually sensitive areas is to avoid any surface disturbing activities on the sensitive soils shown on Map 3.17-1 in RDSEIS.” Numerous areas of sensitive soils (steep slopes) occur on our leasehold. Insert the words “where practical” or delete this sentence.

Response

The text has been revised.

Comment Number **BI-4-1-PA-1****Comment**

EOG is concerned with the potential precedent established by BLM’s use of staged or phased development as proposed in the PAPA RSDEIS under Alternatives B, C, and D.

Response

The staged development is an outgrowth of thousands of public comments and as such is a reasonable alternative and will not be removed. Further the BLM recognizes the unique characteristics of the PAPA that make this a viable option for development.

Comment Number **BI-4-2-W-1****Comment**

The PAPA SDEIS exaggerates the potential impacts from oil and gas development to pronghorn in the project area. The BLM does not emphasize the more significant conclusion from the Berger study that no material differences were detected among pronghorn populations exposed to oil and gas development near PAPA and Jonah Field for viability factors such as overall survivability, body mass, stress hormones (glucocorticosteroids), disease antibodies, and

vitamins and minerals. Additionally, the BLM overlooks that although the pronghorn populations studied by Berger did not utilize habitat near oil and gas, the Berger study does not demonstrate that pronghorn will generally avoid such development. Additionally, the Berger study observes that some pronghorn antelope spend extensive time within developed fields and “adjust their patterns of activity to capitalize on areas adjacent to pads when traffic volume and other human disturbances were diminished, such as occurs at night,” a phenomenon which can readily be observed in Jonah Field.

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 **BI-4-3-W-2**

Comment

The BLM also overlooks that Berger’s assumptions regarding pronghorn avoiding oil and gas development in the Jonah Field were not verified because tagged antelope extensively utilized habitat within Jonah Field during 2007.

Response

The BLM respectfully disagrees. The information presented in the 2006 report was the best available at the time the Revised 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 **BI-4-4-W-3**

Comment

The PAPA SDEIS also fails to recognize the significant increase in antelope populations in the Pinedale Field Office. The BLM should revise its description of the existing antelope population and the impacts of oil and gas development on said populations.

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 **BI-4-5-W-4****Comment**

The BLM must remove the misleading information regarding harvest success rates 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 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 **BI-4-6-W-6****Comment**

A recent study by Renee Taylor and Dr. Larry Hayden-Wing regarding the impacts of oil and gas development on sage-grouse in Wyoming suggests that sage-grouse leks in the PAPA Project area continue to be occupied even when impacted by intensive natural gas development occurring in the area. The BLM must include this analysis in the Final EIS.

Response

The 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. Whether the continued occupation of impacted leks cited in the comment 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 **BI-4-7-W-7****Comment**

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 Resource Area.

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 two 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. Those are the current (2007) trends.

Comment Number **BI-4-8-W-8****Comment**

Information the WGFD released in March of 2007 indicates that although sage-grouse populations have experienced historic declines, mid-term and short-term increases in populations have occurred. Cooperative efforts between the BLM, State of Wyoming, and many others are working and should be allowed to continue. The BLM must revise and update the analysis regarding sage-grouse populations in the Final EIS.

Response

There were several reports about sage-grouse released by WGFD in 2007. The BLM cannot evaluate the commenter's statement without an appropriate citation.

Comment Number **BI-4-9-W-9****Comment**

In discussing the Holloran study, and any potential conclusions derived therefrom, the BLM must disclose that BLM purposefully waived the seasonal and timing stipulations normally associated with sage-grouse leks and allowed operators to drill near active leks 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 **BI-4-10-W-10****Comment**

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

Response

See response to Comment BI-4-9-W-9.

Comment Number **BI-4-11-W-11****Comment**

The WGFD has adopted the 2004 version of the Recommendations for Development of Oil and Gas Resources within Crucial and Important Wildlife Habitats. 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 **BI-4-12-W-12****Comment**

The BLM must delete references to the Naugle and Walker studies on pages 4-152 and 4-153 of the PAPA RSDEIS or, at a minimum, explain the limitations and criticisms of those studies identified in other recently issued reports.

Response

The commenter should be aware that the study they cite is 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 BI-4-6-W-6.

Comment Number **BI-4-12-W-13****Comment**

The BLM must review and incorporate the findings of the Taylor and Hayden-Wing report into the PAPA RSDEIS.

Response

See response to Comment BI-4-6-W-6.

Comment Number **BI-4-13-SE-1****Comment**

When selecting an alternative for future operations in the PAPA Project Area, the BLM should ensure that its actions do not adversely impact the vitality of oil and gas development in the region.

Response

Thank you for your comment. The BLM will consider your input in making a decision.

Comment Number **BI-4-14-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 **BI-4-15-V-1****Comment**

The BLM cannot impose VRM objectives without considering existing leases and ongoing oil and gas operations.

Response

This comment raises an RMP issue and is outside of the scope of the SEIS analysis. Lease rights will be honored.

Comment Number **BI-4-16-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

This comment raises an RMP issue and is outside of the scope of the SEIS analysis. Lease rights will be honored.

Comment Number **BI-4-17-AQ-1****Comment**

Accordingly, the BLM should insert additional language discussing the monitoring data in the PAPA RSFEIS to fully inform the public of improvements in air quality.

Response

Thank you for your comment. Conservatively estimating impacts is in effect standard operating procedure. However, please note Figures 3.11-1, 2 and 3 (Chapter 3, pages 3-67-68) which show SVR data from the Bridger Wilderness IMPROVE site. Data in Figure 3.11-1 may suggest an improving trend in visibility - but this is only 5 years of data (1998-2003). Data in Figure 3.11-2 is quite variable while that in Figure 3.11-3 would seem to indicate no improvement for the 20th % Hazeiest Day's. Also note that the Bridger Wilderness IMPROVE site is located well above the valley floor - away from locations where drilling/production is occurring.

Comment Number **BI-4-18-AQ-2****Comment**

Similarly, the BLM should include additional information regarding Figures 3.11-4, 3.11-5, and Table 3.11-3, which demonstrate annual deposition levels near Pinedale are well below the Forest Service's administrative levels of concern.

Response

Thank you for your comment. At the time this document was prepared the Forest Service's administrative levels of concern (LOC) for N and S deposition were as described. Also note that these LOC's are not national or state standards.

Comment Number **BI-4-18-AQ-3****Comment**

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

Response

Thank you for your comment. At the time this document was prepared the Forest Service's administrative levels of concern (LOC) for N and S deposition were as described. Also note that these LOC's are not national or state standards. However the USFS has lowered/toughened their N LOC to 1.5 kg/ha/yr.

Comment Number **BI-4-19-AQ-4****Comment**

The BLM should clearly explain that the apparent inconsistency between the 2005 modeling results and the actual monitoring data appears to be a result of the BLM's overly conservative model.

Response

Thank you for your comment. Conservatively estimating impacts is in effect standard operating procedure. However, please note Figures 3.11-1, 2 and 3 (Chapter 3, pages 3-67-68) which show SVR data from the Bridger Wilderness IMPROVE site. Data in Figure 3.11-1 may suggest an improving trend in visibility - but this is only 5 years of data (1998-2003). Data in Figure 3.11-2 is quite variable while that in Figure 3.11-3 would seem to indicate no improvement for the 20th% Hazeiest Day's. Also note that the Bridger Wilderness IMPROVE site is located well above the valley floor - away from locations where drilling/production is occurring.

Comment Number **BI-4-19-AQ-5****Comment**

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

Response

Thank you for your comment. See response to P-5-1-AQ-1.

Comment Number **BI-4-20-AQ-6****Comment**

The BLM should emphasize that even its overly conservative modeling determined that air quality in southwestern Wyoming will be adequately protected.

Response

Thank you for your comment. Please note that discussion(s) in Chapter 4, pages 4-79 to 4-83 address this point although visibility in some areas would be very slightly impacted (see Tables 18-16 to 18-19, Appendix 18, Air Quality Impact Tables Project Alternative).

Comment Number **BI-4-21-AQ-7****Comment**

The BLM must substantially revise the statement on page 4-71 that imply that the BLM's conservative air quality modeling can be used to demonstrate future compliance, or noncompliance with air quality laws and regulations. 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 actual WAAQS or NAAQS standard has been exceeded, emissions data – not the BLM's conservative modeling – ever demonstrate that the WDEQ will take the appropriate action to ensure compliance.

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.

Comment Number **BI-4-22-AQ-8****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. Any mitigation measures have been agreed upon by a collaborative group - Proponents, state agencies, and federal agencies.

Comment Number **BI-4-23-AQ-9****Comment**

The language of the RSDEIS, together with the results of the BLM's extensive air quality modeling in the PAPA RSDEIS that demonstrate continued compliance with all NAAQS/WAAQS, suggest that the BLM intends to reduce potential visibility impacts through the proposed mitigation.

Response

Thank you for your comment.

Comment Number **BI-4-24-AQ-10****Comment**

The BLM lacks the authority to impose an emissions cap.

Response

Thank you for your comment. The BLM disagrees. See response to Comment BI-4-22-AQ-8. Any mitigation measures have been agreed upon by a collaborative group - Proponents, state agencies, and federal agencies.

Comment Number **BI-4-25-AQ-11****Comment**

The BLM must eliminate the de facto emissions cap in the PAPA SFEIS and ROD because the WDEQ and not the BLM has the authority to regulate air emissions in Wyoming.

Response

Thank you for your comment. See response to Comment BI-4-21-AQ-7 and Comment BI-4-22-AQ-8.

Comment Number **BI-4-26-AQ-12****Comment**

Further, the BLM lacks authority to impose mitigation measures on oil and gas leases that are not technically or economically feasible. The SDEIS lacks any analysis indicating that the 80% emission reduction—from the 2005 actual emission levels—is possible, much less technologically and economically feasible.

Response

Thank you for your comment. The BLM disagrees. See response to Comment BI-4-22-AQ-8. Any mitigation measures have been agreed upon by a collaborative group - Proponents, state agencies, and federal agencies.

Comment Number **BI-4-27-AQ-13**

Comment

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

Response

Thank you for your comment. The BLM disagrees. See response to Comment BI-4-22-AQ-8. Any mitigation measures have been agreed upon by a collaborative group - proponents, state, and federal agencies.

Comment Number **BI-5-1-GR-1**

Comment

Our earlier comments regarding the need for careful coordination with grazing permittees, mitigation of impacts on livestock grazing, timely and effective reclamation and compensation for lost grazing opportunity remain applicable to this alternative.

Response

The BLM agrees.

Comment Number **BI-6-1-G-1**

Comment

If year-round access and drilling is granted to the operators then it is important that year-round access be granted for the installation of new pipelines, as well.

Response

Relief from seasonal restrictions will be granted on a case-by-case basis in conformance with the RMP. To the extent that the pipeline construction would conform to the development sequence outlined in the alternative, exceptions may be granted.

Comment Number **BI-6-2-G-2****Comment**

JGG would also like to state impacts for pipelines should not count toward total surface disturbance. Pipeline reclamation is completed as soon as construction is completed and therefore reclamation is virtually immediate. JGG believes it should not be considered as part of the total surface disturbance.

Response

The BLM respectfully contends that the disturbance has been properly disclosed in the SEIS.

Comment Number **BI-7-1-G-1****Comment**

The innovative and costly on-site mitigation components of the Proposed Action and as described in Alternative D—such as the Liquids Gathering System (LGS), directional drilling, Wildlife Matrix, mitigation and monitoring fund, etc.—should be more clearly addressed in Chapter 2 of the body of the RDSEIS even though they are contained in the document's Appendices.

Response

The BLM respectfully disagrees. The BLM determined that these measures are adequately described in Chapter 2 to present the effects of those elements in Chapter 4.

Comment Number **BI-7-1-G-2****Comment**

Many other major on-site mitigation measures such as interim and real-time reclamation, leaving lateral and linear migration corridors available, Bald Eagle and Raptor Best Management Practices (accurately described), computer assisted operations, etc. presented in Appendices should be more clearly presented to highlight the key elements of the Proponents' proposal for purposes of impact analysis and for the benefit of the reader.

Response

Thank you for your comment. The BLM respectfully disagrees that it has misrepresented the "major on-site mitigation measures".

Comment Number **BI-7-2-AQ-1****Comment**

We specifically oppose the adoption of Alternative C that would require that in addition to an 80% drill rig engine NO_x emissions reduction, the proponents would 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). Similar language has been included in Chapter 4, p. 4-85. WDEQ-AQD has jurisdiction over air quality in the State of Wyoming and Proponents should not have to support WDEQ-AQD ceding that authority through a NEPA process to any other entity - BLM or EPA.

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. Also, please note in Chapter 4, pages 4-85 in the Revised Draft SEIS, under 'Implementation', paragraph 4, second to last sentence: "...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."

Comment Number **BI-7-2-AQ-2****Comment**

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 BLM disagrees. 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.

Comment Number **BI-7-2-AQ-3****Comment**

Language on p. 4-85 RDSEIS puts in question year-round access and therefore destroys the Proponents' ability to make long-term commitments for emission reduction efforts.

Response

Thank you for your comment. Please note language of Points 1, 2 and especially 4 (under Implementation) in Chapter 4, p.4-85 in the Revised Draft SEIS, which indicate that "...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 would also specify a schedule for completely implementing the plan." Please note that any decision would be collaborative in nature. This implies access for more than one to two seasons.

Comment Number **BI-8-1-G-1**

Comment

IPAMS incorporates and adopts by reference the comments of member companies Questar Exploration & Production, Shell Exploration & Production, Ultra Petroleum, and Newfield Exploration.

Response

The comments are addressed in the respective letters.

Comment Number **BI-8-2-G-2**

Comment

The final EIS must clearly articulate an alternative that provides for year-round access in specifically defined areas with the mitigation package offered by the Proponents.

Response

Thank you for your comment. Consideration of applicable federal laws and regulations was used to formulate alternatives to the Proposed Action.

Comment Number **BI-8-3-G-3**

Comment

The liquids gathering system should be treated as a benefit rather than a negative impact.

Response

The BLM disclosed the impacts. Impacts can be perceived to be either beneficial or adverse, depending upon the reader's point of view. The BLM disclosed that the liquids gathering system would result in increased surface disturbance and would reduce truck traffic and human presence.

Comment Number **BI-8-4-G-4****Comment**

In addition to addressing and discussing the many innovative and costly on-site mitigation efforts, the BLM needs to state in the final SEIS 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 disagrees. The BLM determined that these measures are adequately described in Chapter 2 to present the effects of those elements in Chapter 4.

Comment Number **BI-8-5-W-1****Comment**

On page 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 and then proceeds to discuss the reasons in the next three paragraphs. This matrix tool was developed in concert with the WGFD which is the agency charged with managing the wildlife resources of the state. The WGFD holds not only the primacy over wildlife but is the expert in managing wildlife in this state. It is the opinion of the WGFD in co-advancing this matrix that it is the best tool to mitigate impacts to wildlife. We request that the three paragraphs be deleted or that the BLM explicitly reject Proponents' offer of the WGFD-approved Wildlife Matrix as a method of setting thresholds to allow for performance based wildlife management.

Response

The text has been revised.

Comment Number **BI-8-6-AQ-1****Comment**

The Proponents' broad resource protection mitigation commitments were not offered to BLM in support of only specific species, specific situations, or partial access in the Development Areas (DA). These mitigations were purposefully developed to address air quality and protection for all species with seasonal stipulations and for year-round access within the specifically defined activity area in the DA.

Response

Thank you for your comment.

Comment Number **BI-8-7-AQ-2****Comment**

WDEQ has jurisdiction over air quality in the State of Wyoming and Proponents should not have to support ceding that authority through a NEPA process to any other entity – BLM or EPA. In addition, BLM has appointed EPA as one of the decision-makers throughout the air quality portion for Alternative D. Since WDEQ has jurisdiction, all such references should be deleted.

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.

Comment Number **BI-8-8-AQ-3****Comment**

Language on page 4-85 of the RDSEIS questions year-round access and would damage the Proponents' ability to make long-term commitments for emission reduction efforts. This language could result in the Proponents having to reduce activity levels or take other drastic measures if there are no technologically and economically feasible or other reasonable means to further reduce drill rig engine emissions, despite the very significant investment in drill rig emissions reduction equipment and methods to achieve the 80% drill rig engine NO_x reduction level.

Response

Thank you for your comment. Please note language of Points 1, 2 and especially 4 (under Implementation) in Chapter 4, p.4-85, which indicate that "...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 would also specify a schedule for completely implementing the plan." Please note that any decision would be collaborative in nature. This implies access for more than 1-2 seasons.

Comment Number **BI-9-1-G-1****Comment**

It is important to note that the RDSEIS does not clearly articulate an alternative that provides for year-round access in specifically defined areas together with the mitigation package offered by the operators.

Response

Thank you for your comment. Consideration of applicable federal laws and regulations was used to formulate alternatives to the Proposed Action.

Comment Number **BI-9-2-G-2****Comment**

The BLM should clarify what is included in Alternative D so that year-round access is clearly provided.

Response

Thank you for your comment. Consideration of applicable federal laws and regulations was used to formulate alternatives to the Proposed Action.

Comment Number **BI-10-1-G-1****Comment**

In the future, we recommend the Pinedale FO post NEPA and other documents by individual chapter, as other BLM offices have done, to facilitate online public access and review.

Response

The Revised Draft SEIS is available by chapter and entire volumes at <http://www.blm.gov/wy/st/en/info/NEPA/pfodocs/anticline/seis.html>

Comment Number **BI-10-2-G-2**

It is critical that the innovative and costly on-site mitigation components of the Proposed Action and as carried over to Alternative D—such as the Liquids Gathering System (LGS), directional drilling, Wildlife Matrix, mitigation and monitoring fund, etc., be more clearly addressed in Chapter 2 even though they are contained in Appendices of the RDSEIS.

Response

The reader is provided with enough detail to understand the components of the alternative and the impacts that those components would have.

Comment Number **BI-10-2-G-3**

The other major on-site mitigation measures, such as interim and real-time reclamation, leaving lateral and linear migration corridors available, Bald Eagle and Raptor Best Management Practices (accurately described), computer-assisted operations, etc., presented in Appendices must also more clearly presented in order to highlight the key elements of the project proposal for purposes of impact analysis and for the benefit of the reader. BLM's failure to incorporate this information into the effects analysis makes it impossible to understand both the negative and positive aspects of the proposed action.

Response

The reader is provided with enough detail to understand the components of the alternative and the impacts that those components would have.

Comment Number **BI-10-3-G-4**

To maximize the benefits of development to all of the competing resources—wildlife, environment, air and community—the BLM must not allow for the interests of a single entity to override the many long-term benefits to many that can be realized with the balanced project management plan provided.

Response

Thank you for your comment.

Comment Number **BI-10-4-W-1**

Therefore it is unclear why BLM intends to reject the project proponents' offer of the WGFD approved Wildlife Matrix as a method of setting thresholds to allow for performance-based wildlife management. We recommend that BLM accept the matrix tool as finalized by industry and WGFD.

Response

Please see the Final SEIS.

Comment Number **BI-10-5-AP-1**

We recommend that the annual meeting be recognized in Chapter 2 as a decisional meeting rather than merely another planning step in the decision-making process. It would be inefficient for BLM to unnecessarily draw out the process; these meetings are the appropriate vehicle to make timely project decisions.

Response

Information and data sharing will need to occur over a period of time to ensure good decisions.

Comment Number **BI-10-6-G-5**

We reject claims that oil and gas activity throughout the year does will result in the PAPA will becoming an industrialized area. It must be acknowledged that year-round access allows for temporary development of the natural gas resource in an efficient manner so that operators can begin to remove equipment from the field sooner than current operations allow. While we acknowledge there will be temporary disturbances and construction from year-round access, it must also be recognized that the overall timeframe in which the PAPA is subjected to heavy equipment and construction will be reduced.

Response

Thank you for your comment.

Comment Number **BI-10-7-G-6**

Comment

We support project proponents' request for year-round access in specified areas which includes simultaneous operations (drilling, completions, construction, pipelines, etc.). We urge BLM to clearly describe and insert this definition into the Final SEIS and Record of Decision (ROD) and revise its selection of a preferred alternative from the current preferred alternative to the Proposed Action.

Response

Thank you for your comment.

Comment Number **BI-11-1-SE-1**

Comment

Attached find a previously submitted report titled *Socioeconomic Impact Study – Phase I* completed on behalf of Sublette County. Please consider this formal comment to the RDSEIS and respond accordingly.

Response

This report has been referenced in the Final SEIS.