

Board of Commissioners Converse County, Wyoming

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Richard G. Grant, Jr., Chairman, Robert G. Short, Vice-Chairman, Thornton V. Lehner, Michael F. Colling, James H. Willox, Members

March 9, 2018

Mike Robinson
Planning and Environmental Coordinator/Project Manager
Casper Field Office
Bureau of Land Management
2987 Prospector Drive
Casper, Wyoming 82604

RE: Converse County Draft Environmental Impact Statement Project

Dear Mr. Robinson,

Thank you for the opportunity to review and comment on the *Draft Environmental Impact Statement (EIS) for the Converse County Oil and Gas Project Preliminary Draft* dated January 2018. The Converse County Board of Commissioners reviewed the document and submits the enclosed comments for your consideration. As we stated during the scoping and in our review of the *Preliminary Draft EIS*, we support this project and continue to do so. We also recognize our responsibility as Commissioners to identify:

- 1) Flaws in the Draft EIS;
- 2) Areas where we have concerns or reservations about the project; and
- 3) Impacts we believe must be mitigated.

We understand that this is a Programmatic EIS, evaluating the effects of a broad proposal and subsequent site-specific National Environmental Policy Act (NEPA) evaluations (i.e., Environmental Assessments, or Categorical Exclusion Checklist) will be tiered to this document. While the spatial and temporal boundaries for the proposed oil and gas development is surrounded by uncertainty, a Programmatic EIS is a vehicle to design and develop broad mitigation strategies to minimize the potential impacts. The Board of Converse County Commissioners is very interested in participating in the development of socioeconomic mitigation strategies that would minimize the uncertainty as it relates to the resources and services that we are charged with providing and protecting on behalf of our constituents. Along with our comments on the Draft EIS, we have developed Mitigation Opportunities (Attachment 1) that we would like the Operators Group (OG) and the Bureau of Land Management (BLM) to commit to developing in conjunction with the Board of Commissioners. We recognize there are details regarding this mitigation proposal that need to be worked out, but with the level of uncertainty and the great potential for the proposed level of development to significantly impact and substantially change our community, we feel strongly that the proposed Mitigation Opportunity be seriously considered and incorporated into the Final EIS.

We have several concerns regarding the socioeconomic analysis. Due to the importance of these concerns and the magnitude of potential impacts we have developed a list that highlights the major concerns (Attachment 2) along with a detailed comment response form (Attachment 3). In general, the socioeconomic impact analysis touches on many concerns, but the actual impacts deserve more delineation and attention, given their magnitude. There also appear to be some impact calculation errors and the need for more substantiated assumptions, including the experience Converse County has already had with petroleum industry boom and bust over the past decade. However, a robust approach to the proposed mitigation program will somewhat allay these concerns, since the foundation of all of the analyses is highly uncertain, anyway.

Additionally, we believe year round development would reduce the potential impacts on our socioeconomic resources as well as other resources such as transportation, air quality, and vegetation. We recognize this is an element of Alternative B, the Preferred Alternative, however the analysis in the DEIS is not consistent on this point under each resource. We request that the analysis, both negative and positive, of year round development be discussed for every resource. Furthermore, the criteria to grant an exception to allow year round development in an area that would otherwise be subjected to raptor or grouse timing stipulations is unclear.

As the Board of Commissioners, we also have a responsibility to consider impacts to resources that affect private landowners in the County. BLM should revise the cultural resource management measures proposed in the DEIS. Any cultural resource management measures must respect the rights of private surface owners in the Project Area. The United States owns only 10 percent of surface lands within the Project Area, and the Project involves a proposal to develop horizontal wells on these lands. Therefore, many of the wells developed by the Project will be located on off-lease, nonfederal surface estate (the “fee-fee-fed” scenario).

When the pad will be on private surface, the BLM should analyze only the impacts of drilling a well, rather than also analyzing the impacts of building the well pad under NEPA, National Historic Preservation Act (NHPA) and Endangered Species Act. Accordingly, the scope of BLM’s analysis under these statutes will be narrow and should rarely consider the impacts of constructing well pads when the location is on private surface.

Again, when on private surface, the BLM should eliminate the extensive surveying and monitoring requirements proposed in the DEIS including DEIS at 6-23 (CR-1), DEIS at 6-23 (CR-4), DEIS at 6-23 (PALEO-1). Neither the NHPA nor any other statute or regulation requires these surveying and monitoring measures before BLM may authorize development. Furthermore, the imposition of these extensive surveying and monitoring requirements throughout nearly all of the Project Area encroaches on the rights of private surface owners. Consistent with the surface ownership patterns in the Project Area, BLM must eliminate these requirements to minimize federal intrusion in privately owned surface.

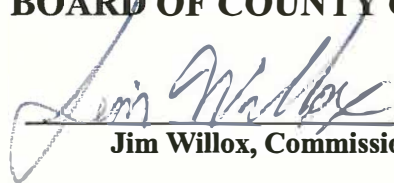
Additionally, BLM must ensure it manages historic trails in accordance with the Casper Resource Management Plan (RMP). However, the RMP was developed before this large development was contemplated. It would seem wise to explore an amendment to the RMP to deal with the new technology. The view shed requirements in the RMP are detrimental to full development of the natural resources contain underneath.

Consistent with our concerns for private landowners, we are concerned with the amount of water that would be extracted from aquifers and the potential impacts on private domestic and livestock wells. While there will be evaluations during the site-specific NEPA evaluations we are concerned that these evaluations may not capture a cumulative or long-term impact on these private wells. We would like a commitment that if the water supply for a domestic or livestock well is significantly reduced that the OG will mitigate the impact by providing replacement water supply (e.g., a pipeline, maintaining a storage tank, or providing an alternative water source).

Thank you for considering our concerns expressed in this letter and in the enclosed comment matrixes (Attachment 3 and 4).

Sincerely,

BOARD OF COUNTY COMMISSIONERS


A handwritten signature in blue ink, appearing to read "Jim Willox", is written over a horizontal line. The signature is stylized and cursive.

Jim Willox, Commissioner

MITIGATION OPPORTUNITIES—SOCIOECONOMICS

- I. PROSPECTIVE PETROLEUM INDUSTRY DEVELOPMENT AND RESPONSE REPORTING PROGRAM—semiannually, information collected and aggregated by 3rd Party Contractor**
 - A. OG prepares report and submits to and meets with local government group**
 - 1. Current and Rolling five-year projection for number of wells to be drilled
 - 2. Current and projected number of new pads developed and average number of wells/pad
 - 3. Rolling five-year projection for all off-pad facilities—i.e. pipelines, processing plants, etc.
 - 4. Present and projected total employment on site in Converse County
 - 5. Current residence patterns of all employees
 - 6. Dwelling unit choice of all current employees
 - 7. Demographics of current employees—single, with partner, with children
 - B. Housing industry report**
 - 1. Current number and vacancy rate by type of dwelling unit by location
 - 2. Average daily (transient units) and monthly rent (houses, apartments, MH pads, RV pads)
 - 3. Rolling five-year average of new units projected for development
 - 4. Comparison of projected new supply vs. employment on site.
 - C. Infrastructure and public service report**
 - 1. Identification of infrastructure constraints—malfunctions, capacity issues
 - 2. Identification of infrastructure development plans by jurisdiction
 - 3. Identification of public service constraints
 - 4. Identification of improvement plans for public services
- II. COORDINATION OF HOUSING INDUSTRY RESPONSE**
 - A. OG and Local Government work together on a pro-active, coordinated response to future housing needs generated by petroleum development**
 - B. OG to consult with Converse County prior to development of Man-camps**
 - C. OG and Converse County to work together to promote private housing industry response**
- III. COORDINATION OF ROAD USE JOINT AGREEMENTS**
 - A. OG to seek Converse County concurrence on all joint road use agreements**
- IV. SECTION 106 CONSULTATIONS**
 - A. See text attached**

SUMMARY OF SOCIOECONOMIC CONCERNS/ ISSUES FOR THE CONVERSE COUNTY OIL AND GAS DEIS

I Mitigation

- A. Converse County respectfully requests that the BLM and the OG consider the mitigation plan we have submitted. We believe these mitigation steps should be made part of the EIS and the BLM approval process. We have participated in this NEPA process from its inception, providing input and suggestions along the way. After carefully reviewing the DEIS, Converse County has concluded that the level, nature and uncertainty associated with the Preferred Alternative creates an urgent need for these mitigation measures. Whereas we support the Preferred Alternative with year around drilling where reasonable, we need these mitigations to provide the opportunity to manage these impacts for the best interest of our constituents.
- B. The outline of these mitigations are provided in summary form. How these mitigation steps will be implemented can be worked out with the County and the OG.

II Socioeconomics

- A. The level of uncertainty, in terms of the scale of actual employment, population, and housing demands in any individual year, is extremely high. The DEIS assumes an average of 500 wells drilled per year for 10 years. However, depending on economic and other conditions, actual development (and employment, population and housing demands) could be very different, resulting in either higher than average or lower than average impacts in any one year. High/ low scenarios should be developed for employment, population and housing demands, as well as for estimated revenue produced from various sources. The highest risk rests with local government.
- B. We are unable to confirm the employment estimates in the DEIS with the provided information on employment for specific facilities. The assumed breakdown of wells per pad is needed in Appendix C. i.e. x% of pads with 10 wells, y% of pads with 15 wells, etc. Also missing is a detailed schedule of timing assumptions behind facility construction estimates, i.e. what are the assumptions of when specific ancillary facilities would be built?
- C. The text and tables discussing direct and total employment numbers in Chapter 4.11 are inconsistent with the data presented in Appendix C. There is no way to reconcile those differences – it appears that there are several errors throughout those pieces of the DEIS. There appear to be inconsistencies between the text and tables throughout the employment portion of Chapter 4.11 and there appears to be several errors in the data presented.

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- D. There appears to be an error in the calculation of the total incremental employment. Direct ancillary facility employment was added in to Figure 4.11-16 in the DEIS; however, the presentation of total employment in Figure 4.11-17, as well as the text discussion of employment, remains the same as in the PDEIS. Estimated population changes and housing demands are also the same in DEIS as in the PDEIS, even with the additional ancillary facility employment, which looks to be about as much as 500 people in Year 1. If this is a true error, then population and housing demand estimates are understated in the DEIS.
- E. The discussion of housing impacts is incomplete. Although an estimate of the demand for new units is provided, there is no comparison back to current availability of units (as presented in Chapter 3), which would give the reader a picture of the difference between existing supply and future demands and the housing market situation that would face Converse County. A more comprehensive discussion would also more fully address changes in housing prices, changes in the future burden of cost of housing as a portion of income and the social effects of housing shortages.
- F. Changes in the overall total cost of living are not sufficiently addressed in the DEIS. A brief qualitative discussion of that issue is included, but this does not capture what is likely to happen at peak development. A more detailed look at the cost of living in the counties (Wyoming Cost of Living Index), by component parts would be informative.
- G. The discussion and evaluation of impacts to public services and facilities is inadequate for the purposes of the EIS and local planning efforts. Other than for additional law enforcement needs, there is no quantification of impacts or costs to these services and no indication of magnitude of effects. Details of how roads, health services, education, fire protection, water, sewer, library, etc will be impacted are missing. How much greater will demand be and how quickly can it come on? Will there be warning? Will the money be there to pay for facility expansion and services? These are only examples of the analyses that are missing for all the public facilities and services. Impacts to public services (water, roads, etc.) are issues that Converse County and other jurisdictions must deal with on a daily basis.
- H. The DEIS provides information about various revenue streams associated with the development, but for the most part does not indicate what jurisdictions would receive how much of each revenue source and when. As we have pointed out in previous comments on the PDEIS, Converse County needs a much better indication of costs to them from development impacts as well as the revenues that would come to them. The big revenue numbers are meaningless to local government unless we know who gets what, when.
- I. Oftentimes the counties are lumped together in terms of baseline data and impacts. A more detailed focus on the impacts to individual jurisdictions,

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including larger communities, is warranted and necessary. Since each local government jurisdiction is responsible for its own services and facilities, the impact analyses ought to be at that level.

- J. The impacts of the loss of more than 6,000 employees over a 2-year period at the end of the 10-year development period requires much more examination and discussion than is evident in the DEIS.
- K. The discussion of impacts for Alternative C inadequately addresses the socioeconomic implications of the variability of activities over the year, i.e. pressures on public services, housing, etc.
- L. The DEIS presents the impacts of Alternatives A, B and C separately. However, if Alternative B or C was chosen, then the total and complete impacts to Converse County and others would be those stemming from Alternative A PLUS the other alternative. The DEIS does not present a quantifiable data set of total impacts to population, housing, traffic, public services, etc. should Alternative B or C be chosen. This point should also be emphasized.
- M. The supposition that hiring out the local workforce will not create socioeconomic impact is probably false. In low unemployment circumstances and in less populated areas, local hires will be more scarce and more importantly, they will need to be replaced anyway. For instance, the convenience store clerk who goes to work on a rig will need to be replaced by someone. The minimal benefit of local hires was borne out in the last boom.
- N. Appendix C provides information on the assumptions behind the calculations of direct and total employment, population and residency patterns, but there is no support or basis provided for each. For example, what is the basis for assuming that 2100 people can be hired from the existing labor force? Where do the residency assumptions for new residents come from? Do they assume no additional housing in Converse County? There are no citations or derivation of these critical assumptions.
- O. Appendix C or in fact the DEIS did not explicitly state whether it was based at least in part on the historical experience Converse County has already had with a petroleum industry boom and bust, Given that this has occurred over the last six years, the experience should be noteworthy as an empirical test. It is noted that socioeconomic impact might reach a peak approximately four times greater, however.
- P. The DEIS presents a Cumulative Impacts analysis for Socioeconomics that is a qualitative discussion of potential impacts. There is no quantification of impacts to any resource. Additionally, Converse County is concerned that the Cumulative Impacts analysis may be too conservative, in that it may be missing other

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developments that could occur in the future, given the economic conditions that would support Alternative B or C.

- Q. There are no Socioeconomic mitigation measures included in the DEIS, other than at least annual meetings between the OG, BLM and local jurisdictions to discuss future development plans. A much more robust set of mitigation measures is warranted for socioeconomic resources, perhaps including more frequent meetings, a long-term monitoring program or other strategies for addressing impacts.

R. **POINT OF DELIVERY CONVERSE COUNTY**

III Recreation

- A. The DEIS presents a qualitative discussion of recreational impacts. However, that discussion does not include any indication of the degree or magnitude of effects, which is necessary in evaluating impacts.

IV Land Use

- A. Converse County is concerned about property values, especially decreases in property values from changes in adjacent land uses, i.e. properties adjacent to newly installed oil and gas infrastructure. The DEIS only briefly touches on this issue in several places.

V Transportation

- A. Chapter 4.13 of the DEIS presents a lot of traffic data for different types of actions, i.e. separate traffic data tables are presented for well development; construction of facilities; production and operation activities for Alternatives B and C. However, nowhere in the DEIS is the traffic data presented as combined total traffic volume for any particular point in time, i.e. individual or specific years. It is unclear how to use the data as presented to estimate how much traffic would actually occur in each year. Total annual average traffic volume and peak traffic volumes are necessary to estimate road maintenance costs, congestion, traffic delays and the potential for other vehicle related impacts. These are critical responsibilities for Converse County, and more complete information is needed.
- B. No traffic data is offered in the DEIS for Alternative A. Increases in traffic volumes associated with that alternative would also be applicable under Alternatives B or C. It would be the total traffic associated with Alternative A plus Alternative B or C that Converse County and local jurisdictions would have to respond to and that local drivers would be subject to.
- C. The traffic data included in the DEIS does not include commuting workers. That additional traffic volume will place additional pressures on roadways and results

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in additional traffic related impacts. This traffic volume should also be considered.

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Attachment #3
Converse County EIS Project
Reviewer Comments on Draft EIS

Reviewers: Edward Harvey, Susan Walker, Ben Norman____ Affiliation: Harvey Economics_____ Review Date: February 26, 2018

Chapter/Section/ Appendix	Page	Line No(s).	Existing Text in Draft	Reviewer Comment/Suggested Replacement Text
Chapter 2, Section 2.3.2	2-18	15	Based on this analysis, an estimated 1,663 wells remain to be drilled on 361 new well pads.....	As described in this section of the DEIS, the 361 new well pads described as new development under the No Action alternative account for the following: 1. Well pads included in six recent BLM EAs (ranging in date from 2012 through 2014); 2. wells and pads from the Powder River Basin EIS (BLM 2003); and 3. additional well development estimates for non-Federal properties (based on a percentage of the proposed development in the identified EAs and EIS). Therefore, it appears that the estimates of new development under Alternative A are limited only to these historical proposals and that there is no accounting for any other potential future development that may occur in addition to those proposals. What about private lands? Is this truly an accurate representation of the development activity that would occur under the No Action scenario? Converse County realizes that the EIS must be based on the information available at the time of writing; however, the limited assumption of future development will minimize the potential effects of both Alternative A AND the evaluation of cumulative impacts.
Chapter 2, Section 2.3	2-15		Omission	The description of Alternative A does not include any estimates of traffic volumes or potentially affected roadways for any phase of well development or for construction/ operation of support facilities. Information on average daily vehicle trips is provided for Alternatives B and C. Traffic information for Alternatives A and C is necessary for evaluation of cumulative impacts.

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Chapter/Section/ Appendix	Page	Line No(s).	Existing Text in Draft	Reviewer Comment/Suggested Replacement Text
Chapter 2 Section 2.3.2.4	2-23		Summary of water use for Alternative A	The numbers do not appear to properly compute. Suggest the calculations be re-visited
Chapter 2 Section 2.4.7	2-31	Table 2.4-2	Alternative B Employment by activity and duration	While helpful, this information is insufficient to show how total employment for a given year or at peak can be calculated. Additional employment information is provided in Chapter 4 and in Appendix C, but the socioeconomic impacts are driven in part off employment, so full disclosure of exactly how employment is calculated is warranted.
Chapter 2, Section 2.5.2.1	2-36		Timing Stipulations	One of the outcomes of the timing stipulations would be that employment, housing demands, public service demands and other socioeconomic impacts would become "bunched up" at certain times of the year, placing additional pressures on those resources during periods of peak activity. Year-round drilling activity would spread out those impacts to a certain degree.
Chapter 2, Section 2.5.2	2-36			Would Alternative C require the same amount of freshwater as described for Alternative B in Section 2.4.3.4 for drilling operations?
Chapter 3 Omission			Not included	The phenomenon of the mini-drilling boom in 2014 compared with the bust of 2015 and 2016 deserves more discussion. The change in the number of drilling rigs and supporting activity cause a substantial change in the socioeconomic conditions of Converse County. On a small scale, this is instructive of what uncertain fluctuations and the major drop in exploration activity might be like under Alternatives B and C.

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Chapter 3 Throughout			Definition of the socioeconomic study area	The definition and treatment of the socioeconomic study area is problematic and of critical importance to the later socioeconomic impact analyses. A large area, including three counties and numerous communities are included without fully explaining or substantiating that study area. For instance, historical information would be helpful in supporting that definition.
Chapter 3 Throughout			Lumping the county and community conditions together	The structure of the socioeconomic section of Chapter 3 generally lumps the total three county area together which is not helpful in understanding the particular socioeconomic conditions of each jurisdiction. Since each jurisdiction is responsible for its own conditions and experiences its own eventual impacts, the information should be presented by jurisdiction where applicable.
Chapter 3 Section 3.11.5.2	3.11- 12	19-21	This data may not fully capture employment associated with contractors working in the area.....	How large is the under-reporting problem? Should the reader worry about it or not?
Chapter 3, Section 3.11.5.2	3.11- 16	5-6	The average weekly wages for the.....	The Natrona County differential should be 293%, not 1,293%.
Chapter 3, Section 3.11			Omission	Table 3.11-20 shows the cost of housing in each of the 3 counties, as compared to the statewide average, which is an indication of the local cost of living (a portion of the Wyoming Cost of Living Index). However, there are other components of the cost of living that should be presented somewhere in this section as well, in order to provide a complete picture of expenses in the area, as compared to the state. That provides a richer set of information on the local cost of living.

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Chapter 3 Section 3.11.10.1	3.11- 59 and 60		Table 3.11-33 and Table 3.11-34	The revenue generation discussion does not make clear the disposition of each revenue source in terms of specific jurisdictions. For instance, it is unclear which jurisdictions ultimately benefit from the severance taxes and the FMR. What is needed is an identification of each revenue source flowing to each jurisdiction.
Chapter 3, Section 3.11.10.1	3.11- 55	15-21		The text of this paragraph appears to be somewhat incomplete as compared to Table 3.11-30 and is awkwardly worded at the end.
Chapter 3 Section 3.11.10.2	3.11- 61 and 62		Table 3.11-36 and Table 3.11-37 and accompanying text.	More information is needed on specific expenditure items and revenue sources for Converse County and the other jurisdictions for eventual consideration in the impact analysis. For example, Road and Bridge, Public Safety and Public Works expenditures would be of use.
Chapter 4 Throughout			Breakdown of impacts by county and city	It is not meaningful to present socioeconomic impacts aggregated for counties or communities. Whereas total employment, population and housing needs can be estimated as totals, they are only relevant when broken down and discussed by jurisdiction. Each jurisdiction must deal with its own impacts.

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Chapter 4 Omission			Impacts of precipitous decline in petroleum exploration and uncertain variability	The text notes a decline of more than 6,000 employees that will occur over a two years period at the end of the 10 year development period. The impact analyses for Alternatives B and C only state that there will be effects but do not address those effects in detail. These impacts deserve much more examination. Similarly, the up and down variability and associated uncertainty in planning public services, facilities and housing is one of the larger impacts, but it is not given much attention as to how or why that uncertainty itself produces major impacts. A discussion of that would help support the mitigation proposed.
Chapter 4, Section 4.11			Omission	Qualitative impacts to livestock and agricultural operations are noted, but there is no quantification of potential economic impacts to ranchers or other agricultural producers.
Chapter 4, Section 4.11.2	4.11- 16	Table 4.11-4		It is unclear as to how the "Estimated Total Person-days On-Site to Complete Well" were calculated for several of the development phases and how the total number of 5,962 was calculated. The table presents the "typical number of persons on site" and the "typical activity duration", but then the footnote states that the actual maximum number of people on site may sometimes exceed the typical number. The DEIS does not provide the specific assumptions of workers and activity days behind the 5,962 person days total for a 4 bore multi pad well.

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Chapter 4, Section 4.11.2	4.11- 17	24 - 27	Over a typical 1-year period, on-site employment within the CCPA would average approximately 2,300 workers in conjunction with new well development and completions, with an estimated range of approximately 1,600 to 3,000 daily on-site workers.	<p>(1) How can a reader use the data in 4.11 and Appendix C to verify those numbers? The DEIS provides a lot of different employment data, but not in a way that can be followed in order to confirm these numbers.</p> <p>(2) While, perhaps accurate in terms of “on-site” well development and completions specifically, this sentence could be misleading because the total direct employment in the CCPA (and that which the impacts are based on) is much higher, as seen in Figure 4.11-6. The on-site employment is described as employment occurring at the individual well site (a portion of the total). The total direct employment includes other activities occurring in the 3 county area.</p>

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Chapter 4, Section 4.11.2	4.11- 18	Figure 4.11-6 and lines 25 -26		<p>We could not find a way to recreate the employment estimates shown in Figure 4.11-6. Additional information on project scheduling or other assumptions used to make those estimates is needed to evaluate the validity of those calculations.</p> <p>The information and assumptions given in the section (and in Appendix C) do not provide enough detail to be able to re-create and confirm the employment estimates. For example, the DEIS does not provide detailed information for how many well pads will be 1,2,3, ...16 wells per pad. All the data for person days of employment is based on well pads. The number of person days per well pad varies with the number of wells per pad. The aggregate employment relies on summing the person days across all the various well pads (plus the ancillary construction and other stuff). Without this information the direct employment numbers cannot be reproduced.</p> <p>The DEIS does not provide any assumptions for the timing of ancillary facilities construction. Knowing when these facilities will be constructed (and how many people will be employed each year) is crucial for reproducing the employment numbers.</p>

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Chapter 4 Section 4.11.2	4.11- 18	25-30		The direct and total employment numbers in this section do not match the employment numbers in Table 2-7 of Appendix C. Chapter 4 indicates 3,504 direct jobs (and 6,650 total jobs) in 2018, while Appendix C states 3,039 direct jobs and 6,185 total jobs. And in both places a total of 3,146 indirect and induced jobs are stated – that cannot be the case given two different estimates of direct jobs.
Chapter 4 Section 4.11.2	4.11- 18	Figure 4.11-6 and lines 17- 26		The text does not appear to match the data in the figure. (1) The text states a total of 3,504 direct jobs in 2018, but the figure shows over 4,000 total direct jobs in that year. (2) The peak year now looks to be about 2021, not year 10 as stated in the text, and looks to have more than the 4,643 workers indicated in the text.
Chapter 4 Section 4.11.2	4.11- 18 and 19	Figure 4.11-7		The text does not appear to match the data in the figure. The text states a total of 6,650 total jobs in 2018, but the figure number looks closer to 7,000.
Chapter 4 Section 4.11.2	4.11- 19	Figure 4.11-7		The figure shows almost 7,000 new jobs in 2018, while Table 2-7 in Appendix C indicates only 6,185 new jobs.

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Chapter 4, Section 4.11.2	4.11- 19	Figure 4.11-7		It appears that although the direct ancillary facility employment has been added into Figure 4.11-6 in the DEIS, that additional direct employment has NOT been included in Figure 4.11-7, which is the same as in the PDEIS. Figure 4.11-7 only includes 3,500 direct workers in Year 1, while the previous figure shows over 4,000 direct workers. The text discussing direct employment is the same in the DEIS as it was in the PDEIS, leading us to believe that the ancillary facility works have NOT been incorporated into the estimates of total incremental employment, population or housing demands. In fact, the estimates of population and housing unit demands are also the same in the DEIS as in the PDEIS, even with the additional ancillary workers. This must be checked and corrected throughout.
Chapter 4, Section 4.11.2	4.11- 19	22-32	Discussion of businesses that serve tourism and recreation visitors.	The treatment of impacts to those types of business appears relatively superficial, especially for businesses located in Converse County. It would be reasonable to believe that many or most people would avoid visiting Converse County for tourism or recreational purposes altogether during the development period, given the number of other locations available for those activities that would not also have drilling activity occurring. However, some of the drilling workforce might also frequent those businesses in their free time.

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Chapter/Section/ Appendix	Page	Line No(s).	Existing Text in Draft	Reviewer Comment/Suggested Replacement Text
Chapter 4, Section 4.11.2	4.11- 21 - 22	Figure 4.11-8 and Table 4.11-5		<p>(1) These population estimates may be incorrect considering that the ancillary workers may not be included in the total employment estimates in Figure 4.11-7.</p> <p>(2) The figure footnote indicates that between 250 and 500 workers living in man camps or other workforce housing are excluded from the population estimates. We believe that they should be included since they will be using at least some local services and amenities and will be a part of the total population in the area.</p>
Chapter 4, Section 4.11.2	4.11- 24	Figure 4.11-9 and Table 4.11-6		These housing demand estimates may be incorrect considering that the ancillary workers may not be included in the total employment estimates in Figure 4.11-7.

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Chapter/Section/ Appendix	Page	Line No(s).	Existing Text in Draft	Reviewer Comment/Suggested Replacement Text
Chapter 4, Section 4.11.2	4.11- 16 to 4.11- 25			Under Alternative B, the employment estimates (Figure 4.11-7), incremental population estimates (Figure 4.11-8) and estimated housing demands (Figure 4.11-9) are based on an assumption of an average of 500 wells drilled per year for 10 years. However, depending on economic and other conditions, those impacts (population and employment changes and housing demand) could be very different than what is presented for the average situation, resulting in either higher than average or lower than average population increases and/ or housing demands in any one year. Have high/ low scenarios been developed for population and housing estimates? Data on the high end of development will be necessary to evaluate the peak year socioeconomic impacts if energy prices increase substantially and/or rapidly. The possibility of dramatically different population, employment and housing impacts needs to be addressed. This comment applies to all alternatives.
Chapter 4, Section 4.11.2	4.11- 20	27-46		We request that the discussion of impacts to personal income be expanded to include the range of wages for the different types of workers required for Project development. Additionally, more analysis needs to be included somewhere in the DEIS regarding anticipated changes in the overall cost of living in the 3-county area and the impacts that those changes may have on non-oil and gas workers based on their income levels. This is touched on briefly on p 4.11-42, but it is an important effect of proposed development.

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Chapter 4, Section 4.11.2	4.11- 25	28-29	The major communities in the three-county analysis area collectively have adequate hotels, motels and RV parks to accommodate the temporary housing demand from Alternative B during the peak year of development....	The DEIS addresses the adequacy of the temporary accommodations to meet Project demands (although the lack of space for other visitors is noted). However, the temporary housing demands are only one portion of total housing demand, as shown in Figure 4.11-10. The DEIS only discusses the impacts to housing resources as a whole qualitatively and there is no discussion of the adequacy of other types of housing. There is no quantitative comparison of the existing housing stock, as provided in Chapter 3, and the estimated demands. That comparison would provide a clearer picture of the situation. For example, data in Chapter 3 shows about 300 rental units available for rent in mid-2014 in the 3 county area. That compares to an incremental demand of several thousand units under Alt B. The discussion of housing needs, the related impacts on housing costs and social impacts of potential housing shortages needs to be more fully developed.
Chapter 4, Section 4.11.2	4.11- 26	7-9	Housing shortages in the Douglas market likely would "push" more population to Casper and Gillette given.....	Converse County is concerned that instead of workers being pushed into the Casper or Gillette areas to find housing, that they might instead turn to undesirable living situations in the Douglas area, i.e. illegal camping, other situations. Those activities might have an impact on adjacent property values.

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Chapter 4, Section 4.11.2	4.11- 25	1-10	"It was assumed that as many as 500 single-status workers would be housed in temporary workforce housing....."	How certain is the development of a man-camp and how certain is the number of workers that could be housed in that facility? The DEIS suggests that the facility could be removed when no longer needed or potentially converted into other housing. However, there is no discussion of who would be responsible for managing this facility. The location of this facility is very important to Converse County and we assume there will be close coordination.
Chapter 4, Section 4.11.2	4.11- 23		Omission	Tables 3.11-20 and 3.11-21 discuss the costs of housing to residents, as compared to the statewide average and as a percent of total household spending. That information is not used in the analysis of housing impacts in Chapter 4. The DEIS includes no quantitative discussion of impacts to housing prices or what effect that might have on local workers and residents, both in the mining industry and in other industries. How will housing costs change and how will the portion of income used to pay housing costs change for locals?
Chapter 4, Section 4.11.2			Omission	Anticipated changes in the local cost of living should be addressed, not only for housing, but for all components of the Wyoming Cost of Living Index. How would that compare to increases in wages and income?

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Chapter 4 Section 4.11.2			Public facilities and services	<p>(1) A quantified estimate of the number of law enforcement officers has been included in the DEIS; otherwise, the impacts to public services and facilities are largely qualitative and inadequate for planning purposes. More attention to hospitals, fire, water and sewer, library and schools, for instance, needs to be provided. There is no discussion of the magnitude of impacts to these services.</p> <p>(2) Some estimates of the costs of expanding services must be included in the DEIS in order to evaluate fiscal impacts to local jurisdictions.</p>
Chapter 4, Section 4.11.2	4.11- 30	6-8demands under Alternative B could exceed the effective delivery capacity of some municipal and regional systems during periods of peak demand."	<p>This is a real concern. What would these municipal water providers really be able to do to meet demands, especially in peak periods? What would the impacts to customers be from those actions? For example, the text notes some planned system expansions and improvements, but those types of activities take a long time to implement and are expensive. What would the impacts be to water rates, quality, other factors? How would demand be met prior to expansion coming on-line? Would water restrictions be implemented? The social and economic effects of changes in water service to local customers needs to be addressed.</p>

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Chapter 4, Section 4.11.2	4.11- 31	32-44		The text states that "the Converse County Road and Bridge Department would.....incur substantial costs associated with road reconstruction and maintenance." Have any quantitative estimates been made of the anticipated costs to the Road and Bridge Department? How much of that could be made up by road use agreements and how much would the County have to make up? Converse County is concerned about those costs and about the staff and workers required to meet road maintenance demands.
Chapter 4, Section 4.11.2	4.11- 33	5-31		The DEIS estimates the potential increases in student enrollment and discusses the potential need for additional school facilities and staff under the alternatives. Although the text notes the potential difficulties in recruiting/ retaining teachers and other staff, this challenge/ concern cannot be understated. The enticement of higher wages in other industries and pressures on housing and costs of living in combination with the financial challenges faced by school districts in WY will certainly make it difficult to hire and retain staff in Converse County.

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Chapter 4, Section 4.11.2	4.11- 34 through 4.11- 38			It appears that the Fiscal Conditions analysis applies high and low energy price assumptions to one common assumption of annual production (that associated with the development of 500 wells per year), so that the same amount of production is assumed in a specific year, regardless of the price. However, in truth, when commodity prices rise, so will production levels and vice versa. Therefore, the tables included in this section do not represent any potential actual outcome. We suggest evaluating a low price/ low production level scenario along with a high price/ high production scenario. The current analysis does not provide the state, counties or schools with an accurate picture of the flow of revenues under Alternative B. That low/ high production scenario would also play into developing a range annual population increases and housing demands.
Chapter 4, Section 4.11.2	4.11- 29	Table 4.11-9		Revenue flows by all sources by all jurisdictions needed. For example, the table show total severance taxes and FMR generated by production, but what jurisdictions get what portion of those monies?
Chapter 4, Section 4.11.2	4.11- 31	28-30	The taxable value is determined by the state, but the tax is levied and collected by local taxing jurisdictions based on the applicable tax levy.....	Please provide additional information about the assumptions behind the calculation of taxable value of Project oil and gas production. We would like more detailed information about how the Converse County revenues were calculated in Table 4.11-10.

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Chapter 4, Section 4.11.2	4.11- 36	Table 4.11-9	Footnote 2: "Allocations assume locally generated taxes are retained by the school districts and not subject to transfer to the state under the "recapture" provisions of the Wyoming School Finance Act."	Is this an accurate assumption given the estimated increase in enrollment in each of the school districts (Table 4.11-8) as compared to the estimated property tax revenues generated by assumed oil and gas production? Increases in the number of students will increase each District's Foundation Guarantee; but given the assumed production levels and estimated taxes generated by that production, will the Districts' Local Resource funds remain less than the Guarantee? It seems likely that at least some portion would be recaptured over the indicated time periods.
Chapter 4, Section 4.11.2	4.11- 32	12-22		This section of the text seems to imply that overall property values will increase given additional oil and gas activity in Converse County. Is that true for all types of existing properties, including residential properties? The demand for conventional home ownership is only a small part of the housing demand shown in Figure 4.11-10.

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Chapter 4, Section 4.11.2	4.11- 39	Table 4.11-12		<p>(1) The calculations of sales and use tax revenues for Wyoming and for Local counties and municipalities are unclear and may be incorrect in this table. Given the assumptions stated in Footnote 2 of this table and knowledge of the distribution of state sales tax revenues, the total tax revenue generated under the low end of capital investment appears to be high, while the total tax revenue generated under the high scenario appears to be low.</p> <p>(2) Please provide additional detail on the revenues distributed to each of the three counties (Campbell, Converse, Natrona) – a breakdown of the “Local counties and municipalities” row by individual county and perhaps even the portions going to the larger communities within each county. The revenue to each county may vary substantially depending on the point of sale for deliveries.</p>
Chapter 4, Section 4.11.2	4.11- 43	17-23		Traffic is discussed in Section 4.11.2 as it would affect the Converse County Road and Bridge Department, but the increased traffic volumes would also have additional impacts to local residents and businesses, in terms of increased vehicle maintenance costs, delays in drive times and the potential for accidents and injury. Those impacts are addressed briefly and qualitatively and could be acknowledged in more detail.

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Chapter 4 Omission in Section 4.11.3			Seasonal variability and year round drilling	Under Alternatives C there is mention of seasonal variation in drilling activity. The significance of this variation should be identified, since this could cause important socioeconomic effects. Similarly, the difference between year round drilling and periodic stoppage should be discussed in greater detail, since that will cause a myriad of additional impacts.
Chapter 4, Section 4.11.3	4.11- 44 to 4.11- 51			The description of socioeconomic impacts under Alternative C discusses greater variability in employment and population changes over the course of any particular year, as compared to Alternative B. The text also states that under Alternative C, there would be relatively more short-term jobs and single-status workers. The DEIS addresses the potential impacts related to that variability, in terms of pressures on temporary housing, employment in other industries, wages, crime rates, public services. Converse County is concerned about both the economic and social effects of those factors (annual employment variability and single status workers) on county residents and public services.
Chapter 4. Section 4.11.3	4.11- 47-48	35-45 and 1 - 37	Community Infrastructure and Services	As described in Section 4.11.2, demands for water service could exceed provider capacity during peak periods under Alternative B. It appears that those impacts would be exacerbated under Alternative C, which includes more annual variability in employment and housing demands and an additional workforce needed for construction of water management facilities. Peak period demands could be higher under Alternative C as compared to Alternative B, placing even more pressure on municipal providers. Those potential impacts must be addressed.

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Chapter 4, Section 4.11.3	4.11- 49	31-47		The text notes potentially different local sales tax receipts under Alternative C (as compared to Alternative B) due to differences in the percentage share of single status workers and the residency distribution of those workers. However, it would seem that sales tax revenues would also be different due to differences in capital investments for well pads, roads and other linear features between Alternatives B and C, although perhaps the additional costs of produced water management in Alternative C offsets some of the other reduced costs?
Chapter 4, Section 4.11.3			Fiscal Impacts	Revenues and expenditure effects upon each jurisdiction should be provided.

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Chapter/Section/ Appendix	Page	Line No(s).	Existing Text in Draft	Reviewer Comment/Suggested Replacement Text
Chapter 5, Section 5.2	5-4			We are concerned that the assumptions of future development used for the Cumulative Impacts Analysis may be conservative given the long-term temporal scope for analyzing effects (55 to 60 years). The assumptions of new development under Alternative A account only for historically proposed development and no other future development. The only Reasonably Foreseeable Future Project included in the Cumulative Impacts Analysis in the CCPA is the Greater CrossBow Project, which would add only a small amount of additional development in the CCPA. It seems likely that the economic conditions that would encourage those developments (as well as those of the Proposed Action) would also result in other additional oil and gas development in the CCPA in the future. Given the assumptions stated in the DEIS, Converse County is concerned that the Cumulative Impacts Analysis may not account for the full scope of future effects on various resources in the CCPA, in combination with the Proposed Project. The County is concerned that the Cumulative Impacts described in this section may be at the lower end of actual potential effects.

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Chapter 5, Section 5.3.11	5-39			The discussion of Cumulative Impacts to Socioeconomic resources (population, employment, housing, public services, fiscal conditions, etc.) provides a general picture of the types of impacts that could occur in the CCPA, but because it is largely qualitative in nature, it does not provide the specific detail necessary to comprehensively evaluate cumulative effects in this case. Given the scale of employment, population, housing and other impacts described for Alternatives A, B and C in Section 4.11, as well as the potential effects of other current and future activities noted in Section 5.2 (i.e. uranium mining, wind power projects, other developments), Converse County requests that additional quantitative detail be added to this section of the EIS in order to fully comprehend the cumulative impacts.
Chapter 5, Section 5.3.11	5-39			There is no place in the DEIS, either in Chapter 4 or in Chapter 5 that provides a complete picture of total impacts either to the area as a whole, or to individual jurisdictions. For example, if either Alt. B or Alt. C are chosen, the true impacts to communities are the effects of Alt A plus the chosen alternative, plus any other projects included in cumulative effects. The scope of the total impacts is necessary for any county or city to truly comprehend the full set of impacts to housing resources, public services, etc. and to plan for future development.

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Chapter 6, Section 6.5.11	6-24			Only one mitigation measure is included for Socioeconomics – at least meetings with the OG, BLM and local representatives to discuss upcoming development plans or specific issues. Additional mitigation strategies must be developed to address impacts to socioeconomic resources. A long-term monitoring program might be one.
RECREATION COMMENTS				
Chapter 4, Section 4.10	4.10-1			The text provides a good general description of the types of recreational impacts that could occur under each alternative; however, there is no indication of the degree, or magnitude, of effect. We suggest adding some additional discussion of degree of effect and the basis for that designation. For example, would Alternative B be a big deterrent for campers, hunters, etc. when it comes to recreating in or visiting Converse County, a mild nuisance or something else? Maybe more of an issue for certain types of recreation and less of an issue for others?
Chapter 5, Section 5.3.10	5-38			The Cumulative Impacts analysis for recreation appears to focus mainly on surface disturbance – number of acres and % of CCPA, which admittedly is quite small. However, it is not only the absolute number of acres physically disturbed that may impact recreational activities – impacts may also be due to effects on adjacent properties, noise, etc. Additionally, there is no discussion of the degree or magnitude of effects given cumulative activities. For example, how much more impact occurs under the cumulative scenario as compared to Alternative B?

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LAND USE COMMENTS				
Chapter 4, Section 4.5				Converse County is concerned about changes in property values, especially from changes in adjacent land uses. The DEIS touches on this issue in a qualitative manner in Sections 4.5 and 4.11, but overall, provides only a cursory look at the issue of changing property values.
TRANSPORTATI ON COMMENTS				

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Chapter 4, Section 4.13.2.1	4.13-2	Tables		<p>(1) Is there a way to estimate how many vehicle trips might occur on an "average" day or on peak day during well development/ construction phase? For example, the Alternative B section includes Table 4.13-1 showing vehicle trips for well development, Table 4.13-2 showing vehicle activity for construction of other facilities and Table 4.13-3 showing vehicle activity for production and operations. How does all of that data combine together in individual years? It would be helpful for readers in understanding the complete traffic picture to provide a table or graphic showing total increases in traffic volume (for all activities) by year. Perhaps something similar to the total incremental population changes in Table 4.11-8?</p> <p>(2) Commuting workers are not included in the tables notes above, but they may add a considerable number of additional vehicle trips to the area. Is there a basis for not including those trips? Can they be calculated and included somewhere?</p> <p>(3) Table 4.13-1 is confusing. For example, what does the 161,891 number reflect? Is that really average DAILY roundtrips, or is it total daily trips over the 10 year construction period, or maybe average annual daily trips? Again, this goes back to part 1 of this comment, as to the difficulty of determining actual daily traffic increases or even average annual traffic increases in any one year. This will be important in evaluating potential road maintenance costs and congestion.</p>

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APPENDIX C COMMENTS				
Appendix C		Table 2- 7		The 2018 numbers in this table do not add up. The first six rows sum to the number of direct jobs. The number of direct jobs, indirect and induced jobs and the adjustment for multiple job holders sum to the total workers. However, the additional new residential and commercial construction number of 400 is not reflected in the total, or anywhere else – what is that number and how does it fit into this table?
Appendix C		Section 4.0 Housing		The estimates of housing demands are unclear and possibly flawed. For example, assuming that 50% of the 2,100 jobs assumed to go to residents will be direct jobs and 50% will be indirect and induced, and following the assumptions about what proportion of direct and indirect job holders will be single or bring families generates about 3,600 single workers and about 2,700 accompanied workers moving into the area. After the 500 temporary beds are accounted for, and following the assumptions of 1 dwelling per accompanied worker and 1.2 single people per room, about 2,700 dwellings will be needed for accompanied workers and about 2,500 rooms for single workers. However, once the 2,700 dwellings are subtracted from the reported 5,640 total housing units demanded in 2025 (Table 4.11-6), this leaves about 2,900 dwellings left to supply the 2,500 rooms that house the single workers. That would indicate a housing demand estimate that is too high for the number of workers indicated.

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Appendix C Section 3	C-10	11 - 18		<p>The assumption that 2,100 jobs (1,500 under Alternative A and 600 under Alternative B) could be filled by existing residents may be overstated.</p> <p>(1) In 2014, during the last oil boom, there were 2,883 unemployed people in the three-county area. If these people could not find employment then, why assume that they could find employment this time?</p> <p>(2) In 2017, there were only 289 more people unemployed in the area than in 2014. Even if the labor force participation rate returned to the 2014 level, there are still only 324 people available to be hired.</p> <p>(3) If those assumptions include existing residents currently employed in other occupations that are lured into the oil and gas industry by higher wages, etc., then those jobs left behind in other sectors will also need to be filled.</p>

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Introduction and Background				
1.4.1	1-5	13-14	At that time, the BLM/USFS would conduct a site-specific NEPA review and attach appropriate measures to the permit to protect natural and human resources.	Please provide more details on what the NEPA review would entail and the tiering approach. The Chokecherry Sierra Madre Energy Project Programmatic EIS provided a NEPA Teiring Review Procedure. We suggest this Programmatic EIS provide a similar document to clarify the level of NEPA documentation that may be required and to understand the efficiencies in the NEPA process that are gained through the development of this Programmatic EIS.
Development Overview				
2.4.1	2-25	8-11	As part of the Proposed Action, the operators would request exceptions to timing limitations for raptor nests and greater sage-grouse leks in non-core areas for several wells over extended periods of time to increase efficiencies and reduce the number of times drill rigs would be moved on and off pads.	If this would result in efficiencies for development that should be reflected in the resource analysis somewhere. It appears to be missing or is not clearly stated in chapter 4 analyses.
2.4.1	2-25	13-24		This paragraph discusses the requirements if an exception would be granted including the development of an EA, a monitoring plan, the timing and duration of the activity. However, this discussion lacks the explanation of what would qualify for an exception to be granted. Without a clear understanding of what conditions need to be present to be considered for an exception it is difficult to evaluate the potential impacts or that the inclusion of year round development under this alternative is even likely to occur.
Transportation				

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3.13 and 4.13				The Transportation sections do not include any discussion about current or future use of US Highway 26 between Douglas and Glenrock. Currently, this road is used by vehicles supporting oil and gas development. Please update the analysis to include a discussion about the potential impacts to US Highway 26.
4.13.2.1				There is no discussion about year round development and if that would change the traffic counts in any manner. It is our understanding that the year round development would reduce the rig movements and potentially maintain a more stable rate of development. How would that change the traffic pattern?
4.13.2.1	4.13-4	27-29	Percent increases from 2016 traffic levels would range from 5 percent to 679 percent. Both light and heavy truck traffic on WY93 at the junction of Route 504 and WY 94 was estimated to increase approximately 1,863 percent; this is considered to be an outlier.	The proposed Mitigation Opportunities proposed by the Board of Converse County Commissioners would facilitate discussions to address and prepare for the increased pressure on existing resources including road maintenance and public services. This increased level of traffic is substantial.
Vegetation				
4.14.2.2	4.14-8	18-20	Therefore, there would be a greater likelihood of spreading and aiding the establishment of noxious weeds and invasive plant species under Alternative B because there would be more surface disturbance than under Alternative A.	There is no discussion about year round development and the possible benefit of initiating reclamation activities in a timely manner rather than potentially leaving partially developed sites unreclaimed until the timing stipulations have been lifted. If the year round development would expedite the reclamation activities that would reduce the potential for noxious weeds and invasive plants to establish.
4.14.3.2	4.14-13	13-14	...under Alternative C would be the same when compared to Alternative B because timing stipulations would not stop disturbance completely, but rather the disturbance would occur in other areas of the CCPA	Please consider the preceding comment and re-evaluate this statement.

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Visual Resources				
4.15.2.1				There is no mention of year round development. Assuming exceptions are granted, the reduced movement of rigs and the continued activity would be a change to the view shed compared to Alternative A and C. This is not discussed.
Wildlife				
4.18.1.1	4.18-10	27-28	Exceptions may be granted to these restrictions.	Are these exceptions something other than those described under section 2.4.1 for Alternative B? If these are currently granted, the potential impact of granting those should be discussed under Alternative A and included in the Alternative B analysis as well. How are these exceptions granted (i.e., under what conditions)? How often are these granted? How do those reduce impacts to other resources etc.
4.18.1.2	4.18-11	4-12	A wildlife review of federal APDs for 2012 to 2017 conducted by the BLM determined that approximately 55 percent of the APDs were subject to given timing limitation stipulations....	Please check the 55%, as it seems low to us. This paragraph appears to be minimizing the amount of area that may be affected by timing limitations with further reduction by stating not all nests or leks are active each year. This discussion is not incorporated into the actual impact evaluation for big game, small mammals, or game birds. Those analyses focus on direct impacts. The potential for year round development would reduce disturbance from rig movements, result in more stable traffic and potentially earlier efforts for reclamation. The analyses do not discuss the actual impact of allowing year round development.
4.18.1.4	4.18-15	11-13	This alternative includes the potential for year-round development with regard to timing stipulations for active raptor nests and greater sage-grouse breeding habitat that otherwise provide protection to other seasonal wildlife habitats.	An discussion as to what would qualify for an exception is lacking in this document. One could assume that exceptions would only be granted in areas where the potential impact to raptors or sage grouse would be relatively low, thus a minor impact. If granting an exception is more restrictive and only a few will likely be granted than the difference between B and C could be negligible. Please provide insight as to how and when an exception might be granted.

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4.18.1.5	4.18-16	2-4	This would mean that exceptions to timing limit stipulations would not be granted on approximately 15 to 20% of the CCPA which would eliminate some of the adverse impacts described under Alternative B	Without clearly understanding the likelihood or probability of the BLM granting exceptions under Alternative B, this statement is not very meaningful. It could be that the BLM would not likely grant any exceptions, then the difference between Alternative B and C could be negligible. Please provide more insight as to how and when exceptions might be granted.
4.18.2.2	4.18-27	13-28		There is not a clear understanding of how exceptions might be granted. So it is not possible to understand the nature or magnitude of the potential impact. If the conditions have to be such, that the year round development would likely not impact a nesting raptor or grouse activity at a lek, than the potential impact would be similar to Alternative A and C. There is not enough analysis to understand what the potential impact may be relative to granting exceptions under Alternative B.
4.18.2.4	4.18-34 and 4.18-35	19 and 1	However, MBTA protections for birds, nests, and eggs are applicable regardless of land ownership.	Reconsider this statement in light of the recent opinion by the Solicitor General relating to MBTA.
4.18.3.2	4.18-60	30-39	A wildlife review of federal APDs for 2012 to 2017 conducted by the BLM determined that approximately 55 percent of the APDs were subject to given timing limitation stipulations....	See previous comment about this language. This discussion lacks analysis without knowing what conditions would allow an exception.
4.18.3.1	4.18-46	37-44		This section states that the Core Area Version 3 maps were used in the analysis. Please make sure that the Version 4 maps are used in the analysis of sage grouse under all alternatives.
Technical Edits				
4.0		26	Section 2.3, Management Common to All Alternatives	The correct reference is 2.2 Common to All Alternatives
Tables 4-18 11,14 and 18				The calculations are slightly off
Tables 4.18 17,13 and 10				The grassland percents are slightly off
Tables 4.18-24 and 28				Please check numbers as the numbers are off on several tables.

Board of Converse County Commissioners
ATTACHMENT #4

Chapter/Section / Appendix	Page	Line No(s).	Existing Text in Draft	Reviewer Comment/Suggested Replacement Text
				Likely rounding errors
4.18.1.2	4.18-10	42-43	..."sage grouse leks outside of PHMAs"	Section 2.4.1 says "limitations for raptor nests and greater sage-grouse leks in non-core areas....check for consistency in terminology throughout document
4.18.1.2	4.18-11	5	55 percent of APDs	Other sections that utilize this language state 50%. Please check and correct accordingly
6.1		14	their management goals and objections	Correct to "objectives"
6.2.1	6-5	5	Other Raptors - 0125-mile buffer from February 1 to July 31	We assume 0125 was meant to be 0.125. Please correct.