

Appendix B

Responses to Comments and Compilation of Comments Received for the Lost Creek Uranium *In-Situ* Recovery Project FEIS

**PUBLIC COMMENTS AND BLM RESPONSES
ON THE
FINAL ENVIRONMENTAL IMPACT STATEMENT
FOR THE
LOST CREEK Uranium *In-Situ* Recovery PROJECT**

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Introduction

This appendix includes public comments and Bureau of Land Management (BLM) responses on the Final Environmental Impact Statement (FEIS) for the Lost Creek Uranium *In-Situ* Recovery Project (Project). The Notice of Availability (NOA) for the Project FEIS was published in the *Federal Register* on August 17, 2012. The BLM accepted public comment on the FEIS within the 30-day waiting period between publication of the NOA and issuance of the Record of Decision. A total of 7 letters were received by the BLM during this 30-day period.

According to the National Environmental Policy Act (NEPA), BLM is required to identify and formally respond to all substantive public comments. On the basis of the Council on Environmental Quality's (CEQ) regulations, a substantive comment does one or more of the following:

- Questions, with a reasonable basis, the accuracy of the information in the environmental impact statement;
- Questions, with a reasonable basis, the adequacy of environmental analysis as presented;
- Presents reasonable alternatives other than those presented in the DEIS that meet the purpose and need of the proposed action and address significant issues; and/or
- Causes changes or revisions in the proposal.

Nonsubstantive comments simply state a position in favor of, or against, an alternative; merely agree or disagree with BLM policy; or otherwise express an unsupported personal preference or opinion.

The BLM is required to respond only to substantive comments to fully inform the public of concerns raised. For this ROD comment - response appendix, the BLM has provided responses to all substantive public concerns identified during comment analysis. Responses to concerns considered nonsubstantive thank the commenter for participation in the NEPA process, and response to comments considered outside the scope of the plan simply state that the comment is outside the scope of the NEPA process and contain no further explanation. Responses to substantive comments are more extensive, complete, and often offer an explanation of why a comment may or may not have resulted in a change to the Project FEIS.

Comment Review Methods

The BLM read all public response letters in their entirety and identified comments that related to a particular concern or resource consideration or that proposed management actions. The BLM looked not only for each action or change

requested by the public, but also for any supporting information to capture the comment in its entirety. In doing so, paragraphs within a response letter may have been divided into several comments because of multiple comments being presented, or alternatively, sections of a letter may have been combined to form one coherent statement. Once a comment was identified, the BLM assigned each to a category associated with the overall premise of the comment. A coding structure served as a tool to sort comments into logical groups by topics. In this case, the coding structure was organized to mirror the sections of the FEIS; some additional categories were added that included additional classification of comments. If a comment on the FEIS was a repetition or clarification of a comment submitted on the DEIS, the comment was addressed under the same section in this document as it was in Appendix F of the FEIS.

This appendix contains the names of the commenters, their substantive comments, and responses to those comments. A list of the commenters, by date the comment was received, and the comment letters, in their entirety, are also included in the second part of this appendix.

It is important to note that during the process of identifying concerns, all comments were treated equally. The comments were not weighted by organizational affiliation or status of respondents, and the number of duplicate comments did not add more bias to one comment than another. The process was not one of counting votes, and no effort was made to tabulate the exact number of people for, or against, any given aspect of the FEIS. Rather, emphasis was placed on the content of a comment.

Response to Comments

In the case of identical or similar comments or comments from opposite points of view, a summary of the comments is provided rather than each individual comment. In the case of unique comments, each response is preceded by the submitted comment. As previously stated, the comments are organized according to the outline of the Project FEIS and in no way indicate the significance of any statement. The BLM's response to the public concern follows each public concern.

The abbreviation for the name of an agency, company, or organization used more than once in the responses are abbreviated as shown in the first response to that group and on the list of the commenters in this appendix. The one exception to this scheme is the set of comments received from the Biodiversity Conservation Alliance (BCA), which were a compilation of comments from several organizations, including: the BCA, Californians for Western Wilderness, and Western Watersheds Project. Comments from these organizations were referenced as BCA et al.

No Comment

Comment: Wyoming Game and Fish Department (WGFD)
WGFD referred to their letter of May 30, 2012, submitted in reference to the DEIS, which notes that their comments were addressed through the WDEQ permitting processes.

Response: The BLM thanks WGFD for their continued attention to this Project.

General

General Support

Comment: Office of the Governor of the State of Wyoming; Rock Springs Chamber of Commerce; Sweetwater County Board of County Commissioners (SWCBCC)

These commenters expressed their support of the Project.

Response: The BLM thanks you for your comment, your interest, and participation in the NEPA process for this Project.

Comments on the BLM DEIS and NRC Draft SEIS

Comment: BCA et al. (Page 1); WOC (Page 13):

BCA et al. requested that BLM respond to the BCA et al. comments on the BLM DEIS and on the NRC Draft SEIS, "to the extent that the agency has not already done so." The WOC also indicated that their wildlife comments on the BLM DEIS "still stand".

Response: The BLM responded to comments on the BLM's April 2012 Draft Environmental Impact Statement (DEIS) for the Project in Appendix F of the BLM's July 2012 FEIS. As noted in the responses to more specific comments on the FEIS that were repeated from the DEIS comments, the BLM appreciates the reviewer's additional discussion; however, based on review of the DEIS, the original comment and response, and the FEIS, the BLM still considers the previous responses applicable.

The Nuclear Regulatory Commission (NRC) responded to the BCA et al. and other organizations' comments on the December 2009 Draft Supplemental Environmental Impact Statement (SEIS) for the Project in Appendix B of the June 2011 Final SEIS. Given the differences in the scoping comments, agency concerns, and updates in technical and regulatory information, the BLM refers the commenter to the relevant NRC SEIS documents for responses.

Regulatory Conformance

Comment: Office of the Governor of the State of Wyoming

The Office of the Governor requested that the Record of Decision (ROD) conform with the Wyoming Department of Environmental Quality-Land Quality Division (WDEQ-LQD) Permit to Mine and the application conditions and timing stipulation provided by Lost Creek ISR, LLC (LCI). The Office of the Governor also reiterated that the WDEQ-LQD Permit to Mine has been found to be in compliance with the Governor's Executive Order 2011-5 (EO 2011-5).

Response: The BLM has worked with WDEQ and other State agencies throughout the NEPA process, and the approved WDEQ-LQD Permit to Mine is incorporated by reference in the FEIS. The BLM also appreciates the confirmation that the WDEQ-LQD Permit to Mine is in compliance with EO 2011-5.

Editorial

Regulatory

Comment: SWCBCC

SWBCC requested changes and additions to Table 1.4-1, List of Regulatory Requirements, to help ensure compliance with the County regulations.

Response: The requested changes and additions to Table 1.4-1, with one exception, are included in Table 1 of the ROD. The exception is the addition of a table entry for a Work Camp Conditional Use Permit, which is omitted because the Plan of Operations does not include a proposal to develop any work camps.

Comment: SWCBCC

SWCBCC reiterated their encouragement of cooperative interaction between local, state and federal agencies, and emphasized soliciting comments from the communities of Wamsutter, Baroil, Rawlins, and neighboring Carbon County.

Response: As noted in the response to the comment on the DEIS, the BLM added the communities to the Project mailing list to help ensure their continued participation in the NEPA process. Community representatives have previously participated in public meetings and submitted comments during the NEPA process. Carbon County has been on the mailing list and participated in the NEPA process as a cooperating agency.

Comment: SWCBCC

SWCBCC reiterated their request that the BLM encourage LCI to deliver Project materials "free on board" to help ensure sales tax are properly allocated and paid.

Response: As noted in the response to the comment on the DEIS, the BLM added a request in Section 4.15.1 of the FEIS, that materials be delivered "free on

board."

Comment: SWCBCC

SWCBCC reiterated their appreciation of BLM's efforts to protect historic and cultural sites and their encouragement of BLM's efforts to balance of site protection with resource development.

Response: Comment noted.

Comment: SWCBCC

SWCBCC reiterated their support for the State of Wyoming Sage Grouse Core Area Program and their appreciation of BLM's and LCI's efforts to comply with this program.

Response: Comment noted.

Comment: LCI

LCI again requested that the reference to Carbon County land use regulations be removed. LCI also requested removal of the reference to accrual of maintenance costs to Carbon County. The requests are based on the Project location (Sweetwater County) and current maintenance responsibilities.

Response: The BLM appreciates the reviewer's additional discussion of this comment. Based on additional review and the assertion that LCI will not be using any Carbon County maintained roads, the requirement for LCI to obtain a Road Use and Maintenance Agreement with Carbon County was removed. However, the additional review resulted in the requirement that LCI pursue a Road Use and Maintenance agreement with BLM for use of BLM-controlled roads outside of the permit area boundaries.

Typographical

Comment: LCI

LCI noted three corrections:

- The liner thickness is still in error;
- The discussion of solid waste containment does not list all the acceptable containers; and
- The reference to Table 3.8-3 on Page F-39 of the FEIS should be to Table 3.8-4.

Response: The corrections have been noted in Appendix A (Updates and Errata to the Final Environmental Impact Statement) of this document.

Groundwater and Surface Water

Comment: Lost Creek ISR, LLC (LCI)

LCI has again requested that the additional stability water quality sampling requirement, detailed in Section 4.7.1 of the FEIS, be removed.

Response: The BLM appreciates the reviewer's additional discussion of this comment. Based on review of the DEIS, the original comment and response, and the FEIS, the BLM still considers this requirement appropriate for this Project to ensure the Reclamation Plan and associated monitoring are effective (43 CFR 3809.401(b)(3)&(4)). Additionally, the BLM reviewed literature and professional speakers and found that stability monitoring may be necessary for the protection of BLM resources including rangeland health, wild horse herd management areas and wildlife habitat. This included:

Hall, Susan, 2009, Groundwater restoration at uranium in-situ recovery mines, south Texas coastal plain: U.S. Geological Survey Open-File Report 2009-1143, 32 p.

Davis, J.A. and Curtis, G.P, 2007, Consideration of geochemical issues in groundwater restoration at uranium in-situ leach mining facilities: NUREG/CR-6870.

Nuclear Regulatory Commission, 2009: Generic Environmental Impact Statement for in-situ leach uranium milling facilities: NUREG 1910.

Susan Hall, USGS, statement in ISL workshop – September 2010.

Bill von Till, NRC, statement in ISL workshop– September 2010.

Comment: BCA et al. (Pages 5 through 7)

BCA et al. has again expressed concern about the completeness of the analysis and evaluation of:

- Surface Water and Groundwater Monitoring;
- Lixiviant Toxicity;
- Excursion Control;
- Historic Boreholes;
- Well Construction; and
- Drawdown Impacts.

Response: Analysis and evaluation of the above topics has been provided in the NRC License, Safety Evaluation Report, and SEIS for the Project, the NRC Generic Environmental Impact Statement for *In-Situ* Leach Uranium Milling Facilities, the WDEQ-LQD Permit to Mine, and the BLM DEIS and FEIS. The references for these topics are:

- Surface Water and Groundwater Monitoring
The concerns about surface water monitoring include the reference to the NRC SEIS and the evaluation of spills from wells in ephemeral channels. As discussed in Section 4.1 of the DEIS and FEIS, the findings from the NRC SEIS are included in the respective sections for each resource to provide for easier comparison of the BLM and NRC documents. The NRC cross-reference cited on Page 4.6-6 is for that purpose. The BLM

finding is discussed at the beginning of Section 4.6.4 (Page 4.6-5) based on the impact significance criteria in Section 4.6.3. The protection and monitoring measures related to spills and leaks apply regardless of the type of source, e.g., a truck accident could occur in an ephemeral drainage channel. Therefore, a separate assessment of spills from wells versus spills from another source is not considered necessary.

The concerns about groundwater monitoring relate to surface water and groundwater interactions (which would include hyporheic flows) several miles from the Project, excursion detection and control, and the quality of water in the Battle Spring Formation. The presumption of a direct connection between the production zone (the HJ Sand) and the surface is counter to the interlayered nature of the formation [Sections 3.3.1.1 and 3.3.2.5 of the DEIS and FEIS]. In addition, the assessments of groundwater movement in the Battle Spring Formation and the ability to detect and control excursions indicate flow rates that would preclude contaminant movement over the distances to the features noted in the comment. These assessments are discussed in more detail below. The comment notes that the water quality in the “target formations” is low; however, the water quality elsewhere in the Battle Springs Formation is affected by the presence of uranium minerals (Section 3.6.4.1).

- Lixiviant Toxicity

The potential environmental impacts for the individual chemicals used in lixiviant, as well as the lixiviant, are evaluated throughout the BLM DEIS and FEIS in the assessments of the Project impacts on specific resources (e.g., Soils [Section 4.5.1.4] and Public and Occupational Health and Safety [Section 4.17.4.2]) and cross-reference the detailed requirements in WDEQ-LQD and NRC documents (e.g., Section OP 2.9 of the WDEQ-LQD Permit to Mine).

- Excursion Control

BCA states that it will not be possible "to determine the geographic extent of the excursion once it gets past the ring of monitoring wells because there will be no system to track such groundwater excursion beyond the monitoring well ring." However, several additional requirements are available for excursion detection and control, including installation of additional wells (WDEQ-LQD, NonCoal Rules and Regulations, Chapter 11, Section 12(d)(ii)). In addition, evaluation of the effectiveness of measures to control excursions is required for the mine units (e.g., Attachment MU1 5-1 to the WDEQ-LQD Mine Unit One Permit). Section 4.7.1.1 of the BLM DEIS and FEIS discuss the primary excursion control methods, and cross-references Section OP 3.6.4 of the WDEQ-LQD Permit to Mine, which provides more detail on excursion detection and control.

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- **Well Construction**

The comment does not differentiate between the mine unit wells and the UIC Class I wells; however, different construction requirements apply: *Mine Unit Wells*. Details on well construction, including figures, are provided in Section OP 3.3 of the WDEQ-LQD Permit to Mine, which is referenced in Section OP 2.1.3.2. As discussed in Section OP 3.3 of the WDEQ-LQD Permit to Mine, the wells are not “open hole” completions; rather, casing is set through all overlying formations to isolate those formations from the ore zone and then the hole for the well is drilled into the ore zone. The interval in the ore zone may be left open or screened, depending on the hole stability.

UIC Class I Wells. Details on well construction for these wells are included in Attachment ADJ-2 (Attachment G to the UIC Class I Underground Injection Control Permit) of the WDEQ-LQD Permit to Mine. These wells are also not “open hole” completions; rather a series of protective casings are set in overlying formations and injection tubing is used in the injection zone.

The reference to “mud filter cake” is in the discussion of the drilling of the UIC Class I wells not in the discussion of the final construction of the wells. During drilling for each of the protective casings, the “mud filter cake” reduces the potential for introduction of drilling mud and fluids as the drill hole is advanced through the interval to be cased. Once the well is cased, the casing and annular seal provide protection from introduction of fluids into unauthorized zones. Periodic testing of the well integrity is required.
 - **Historic Boreholes**

Historic boreholes, that were either not plugged properly or plugged in accordance with requirements that are no longer considered sufficient, are a chronic problem in western states. They present not only environmental and health and safety concerns (e.g., the WDEQ had an Abandoned Drill Hole Program at one time, similar to the Abandoned Mine Lands Program), but an operational concern for companies conducting subsurface activities. Therefore, it is in the best interest of companies, such as LCI, to be diligent in finding and properly abandoning historic boreholes. In addition to LCI’s work to date to locate and abandon all historic boreholes in the Permit Area (e.g., Appendix D-5, Section D5.2.4 of the WDEQ-LQD Permit to Mine, referenced in Sections 4.4.1 and 4.4.4.1 of the BLM DEIS and FEIS), LCI is required to attempt to locate and abandon all historic boreholes within the perimeter of the monitoring well ring as part of the NRC License (License Condition 10.10) and WDEQ-LQD Permit to Mine (Section OP 3.2).
 - **Drawdown Impacts**

The groundwater consumption (the volume of water removed from the aquifer) is discussed in Section 4.7.4.1 of the DEIS and FEIS, and the

drawdown recovery (how quickly the water levels recover after cessation of pumping) is discussed in Section 4.7.7.1. The groundwater consumption of the waters of the State of Wyoming is regulated by the Wyoming State Engineer's Office, and LCI has obtained (and will continue to obtain) the appropriate WSEO permits. As noted by the commenter, the Battle Springs Formation is laterally extensive, covering many square miles, and as discussed in Section 3.3.3.1 of the DEIS and FEIS, the formation thickness is on the order of several thousand feet. The production zone is a very small portion of the formation, and the quantity of water that will be removed from the formation during the Project is a very small percentage of the volume of water in the aquifer. The ability to detect any influence from the Project on spring flows, even presuming the HJ Sand is directly connected to the sands supply the springs (which is highly unlikely given the interlayered nature of the formation [Sections 3.3.1.1 and 3.3.2.5 of the DEIS and FEIS]), would be outside the accuracy of spring flow measurements. Water level recoveries after pumping are projected to recover within ten to 15 years, with most of the recovery occurring within the first few years (Section 4.7.6.1 of the DEIS and FEIS).

Wildlife

Analysis of Sage Grouse Impacts

Comment: BCA et al. (Pages 2 through 4)

BCA et al. expressed several concerns regarding the analysis of impacts on Greater Sage-Grouse, including:

- Lack of consideration for alternative access road routes presented in BCA et al. comments to the DEIS,
- Lack of compliance with noise restrictions in EO 2011-5,
- Lack of compliance with development density restrictions presented in WY IM 2012-019, and
- Lack of clarity regarding specifications of the mine unit development.

Response:

The BLM not only considered alternative access route presented prior to the BLM EIS process (FEIS, Section 2.3.3.8), but also considered the additional alternative routes presented by BCA et al. in their comments on the DEIS (FEIS, Appendix F, F-32 and F-33).

Regarding the lack of compliance with restrictions in EO 2011-5, the potential impacts have been appropriately analyzed and documented. Additionally, Wyoming Governor Matthew Meade, wrote a letter to the BLM dated July 18, 2012, reaffirming that the project proposal has been found to be in compliance with Greater Sage-Grouse Core Area Protection (Executive Order 2011-5). Additionally, annual wildlife monitoring will occur and be reviewed by a

Technical Advisory Committee (TAC) to implement the adaptive management process.

Pertaining to the comment regarding the lack of compliance with development density restrictions presented in WY IM 2012-019, impacts from density disturbance on Greater Sage-Grouse are assessed through the DDCT tool, as designated by EO 2011-5. As noted in the letter received from Wyoming Governor Matthew Meade, dated July 18, 2012, “the project proposal has been found to be in compliance with Greater Sage-Grouse Core Area Protection (Executive Order 2011-5). The proponent completed the project impact analysis area (PIAA) process and determined that the maximum disturbance resulting from the proposed project will equate to 0.92 percent of the defined PIAA, which is less than the Sage Grouse Implementation Team (SGIT) maximum disturbance stipulation of five percent.” BCA et al.’s commentary that the DDCT (formerly referred to as the PIAA) is not an adequate tool or is not being applied correctly is beyond the scope of this EIS.

Specifications of the mine unit development are summarized in Section 2.1.2.3 of the FEIS; more detailed information is available in WDEQ-LQD Permit to Mine (LCI, 2011b) Operations Plan, Section 3.2. The logistical reasons for the exact layout of mine units being unable to be supplied at this stage in the Project consideration is explained in the Adjudication Files (Permit Development) of the WDEQ-LQD Permit to Mine (LCI, 2011b).

Impact of Roads

Comment: WOC (Pages 3-5)

The WOC has again expressed concern about the BLM’s acceptance of the WGFD’s analysis of the impact of the proposed access roads on Greater Sage-Grouse, with particular emphasis on the conclusions obtained from the viewshed analysis regarding impacts from noise.

Response: The BLM appreciates the reviewer’s additional discussion of this comment. Based on review of the DEIS, the original comment and response, and the FEIS, the BLM still considers the analyses of the road impacts, including visibility, noise, and other factors, on Greater Sage-Grouse appropriate for this Project.

One-Access-Road Alternative

Comment: WOC (Page 6)

The WOC has again expressed concern about the BLM’s acceptance of the current plan for the Project access roads. The current plan includes upgrade of an East and West access road, rather than upgrade of one or the other, but not both. The WOC requests that the one-access-road alternative be considered.

Response: The BLM appreciates the reviewer's additional discussion of this comment. Based on review of the DEIS, the original comment and response, and the FEIS, the BLM still considers the proposed use of two access roads for this Project appropriate, considering factors such as surface disturbance and traffic volumes (and associated concerns such as noise, dust, wildlife collisions, and accident rates).

Analysis of Traffic Impacts

Comment: BCA et al. (Pages 1 and 2):

BCA et al. stated that the analysis of "traffic impacts" in the FEIS is invalid because, in a comment response on Page F-34, the number of tractor-trailers changed from the DEIS to the FEIS. In addition, BCA et al. stated that BLM cannot rely on the WGFD analysis because the alternate roads proposed by BCA were not considered.

Response: Clarification of the original response is needed; however, the analysis of traffic impacts is valid and the mitigation and monitoring measures remain the same:

- The change referenced by BCA et al. was in Table 4.3-1, under *Initial Construction*, on Page 1 of 2, in the last column (Heavier Equipment To/From Site). As noted in the original response, the change was from 2 to 5 tractor/trailers per week to 2 to 5 tractor/trailers per day during the 7 months of Initial Construction. The estimated number of tractor-trailers during the years of Operation (Production) and Reclamation, which is 1 to 2 tractor/trailers per week, did not change.
- The change was implemented for consistency with the NRC SEIS, which is incorporated by reference into the FEIS. When regulatory discussion and review of this Project started in the mid-2000s, the evaluations were generally over the life of the Project. Over time, the evaluations have been refined by phase of the Project, but the average over the life of the Project has not changed substantially.
- Because of uncertainties in the volume of traffic on the public, unpaved roads, LCI is installing traffic counters to determine actual traffic volumes. This will include assessment of both LCI's traffic and public traffic, over which LCI does not have control.
- The BLM has worked with WGFD throughout the NEPA process and WGFD reviewed both the DEIS and FEIS; therefore, WGFD has had the opportunity to consider the BCA's proposed alternate routes, as well as BLM concerns about those routes.

Habitat Equivalency Analysis (HEA)

Comment: WOC (Pages 6-7)

The WOC requested an additional type of analysis (a habitat equivalency analysis) of the Project impacts on Greater Sage-Grouse.

Response: The analyses in the FEIS are considered sufficient to determine if impacts can be avoided or reduced and to compare the relative merits of the measures for losses and benefits.

Exploration Activities

Comment: WOC (Pages 7-9)

The WOC presents several comments about the monitoring and presentation of results from monitoring of Greater Sage-Grouse Leks. They also comment on the potential impacts of exploration activities on Greater Sage-Grouse.

Response:

Note: For clarification, the table number for the lek count data is Table 3.8-4 and the 2010 data in the table starts on Page 3.8-40.

Stinking Springs North and Stratton Camp Leks were newly discovered leks as of 2010. They were incorporated into the ongoing monitoring scheme as reference leks. Table 3.8-4, primarily shows “affected” leks (versus reference leks); however, the two newly discovered leks were noted in the table as of 2010. More information on these two leks and the rest of the reference leks can be found in Appendix C of the FEIS.

Lek count surveys for the reference leks are coordinated by WGFD and are a shared responsibility between the wildlife biologist hired by the proponent, the BLM and WGFD. In 2011, WGFD was responsible for counting the Stratton Camp lek, and there may be several reasons for the completion of only one count at this lek in 2011. For instance, WGFD may have determined that they had representatively counted peak males on the lek during the single count in 2011, or site conditions did not allow for further visits. In addition, weather and road conditions may have precluded access. However, the number captured is similar to the number counted in 2010, during which the site was visited three times (FEIS, Appendix C). This lek will be surveyed ongoing as well.

The WOC questions why the Osborne Draw, Little Osborne, Eagle’s Nest Reservoir, Eagle Nest Draw, and Sand Gully leks are not mentioned though they may be impacted by the proposed project. The Eagle Nest Draw and Sand Gully; however, are shown on Figure 3.8-8, Table 3.8-4, and discussed on Page 3.8-29 in the FEIS. The remaining leks in question are outside of the scale of Figure 3.8-8, which shows the leks nearest to the Project area in relation to proposed Project infrastructure; however, lek counts from these, slightly further away, leks are presented in Table 3.8-4. Furthermore, additional information on all “affected” leks near the Project area as well as information on all “reference” leks is available in Appendix C of the FEIS.

Pertaining to the comment that LCI’s exploratory activities may have already had an impact on sage-grouse lek numbers in the Project area, sage-grouse lek count results have been collected prior to and throughout the duration of exploration

(2006-2010). These results are clearly documented in the FEIS (Table 3.8-4) and in Appendix C. These results will be considered in the adaptive management process in which trends will be determined across 3-yr running averages, comparing impacted leks to control area (reference) leks. If a decline is observed at impacted leks as compared to control leks (using a 3-yr running average during any 5 year period), the trends will be analyzed to determine if they are statistically significant and if likely attributable to Lost Creek Mine Activity. If so, this will indicate that a mitigation threshold has been reached. The TAC will discuss an appropriate mitigation (or mitigations) response to apply in an attempt to reverse or minimize the impact(s). In the event that an impact has been determined but the cause of the impact cannot be determined the TAC will discuss and implement mitigations in the assumption that the in situ mining project has some relation to the determined impact. All additional mitigation will be monitored and its effectiveness analyzed during the annual meeting. If after a two year period the additional mitigation shows no positive effect on the impacted leks additional mitigation will be applied. This cycle will occur until all possible mitigation has been applied or the impacted leks show a positive effect from the applied mitigation (FEIS 4.9-8 thru 4.9-9).

The Density Disturbance Calculation Tool (DDCT) and the 0.6 Mile Buffer for Sage Grouse Leks

Comment: BCA et al. (Pages 2 thorough 4)

BCA et al. reiterated their opinion that the BLM should proceed independently of EO 2011-5 because, in their opinion, several aspects of the EO and its associated policies are flawed or unsupported, including: the method for calculation of the surface disturbance (the DDCT); the 'allowable' disturbance percentage; the provisions for exceptions; and the 0.6 mile buffer requirement.

Response: The BLM appreciates the reviewer's additional discussion of this comment. As noted in the Response to Comments on the DEIS, revising the contents of the Sage Grouse Executive Order and associated policies are outside the scope of this FEIS. In addition, numerous agencies and organizations have worked cooperatively to develop (and improve) a viable approach to addressing issues related to the protection of Greater Sage-Grouse in Wyoming. Therefore, the BLM does not consider it effective or appropriate to ignore this cooperative effort.

Compliance with EO-2011-5

Comment: Office of the Governor of the State of Wyoming

The Office of the Governor reiterated that the WDEQ-LQD Permit to Mine has been found to be in compliance with the Governor's Executive Order 2011-5 (EO 2011-5).

Response: The BLM appreciates the confirmation that the WDEQ-LQD Permit to Mine is in compliance with EO 2011-5.

Comment: WOC (Pages 9-10):

The WOC reiterated their contention that the Project is not in compliance with EO 2011-5.

Response: As noted above in the above comment and response, Wyoming Governor Matthew Meade, wrote a letter to the BLM dated July 18, 2012, reaffirming that the Project proposal has been found to be in compliance with Greater Sage-Grouse Core Area Protection (Executive Order 2011-5). The proponent completed the project impact analysis area (PIAA) process and determined that the maximum disturbance resulting from the proposed Project will equate to 0.92 percent of the defined PIAA, which is less than the Sage Grouse Implementation Team (SGIT) maximum disturbance stipulation of five percent. Additionally, annual wildlife monitoring will occur and be reviewed by a Technical Advisory Committee (TAC) to implement the adaptive management process.

Effectiveness of Mitigation Measures

Comment: BCA et al. (Pages 2 and 3)

BCA et al. again expressed concerns about the effectiveness of the required mitigation measures.

Response: The BLM appreciates the reviewer's additional discussion of this comment. As noted in the response to this comment on the DEIS, the mitigation measures presented in Section 4.0 for all the resources, including wildlife (e.g., Sections 4.5.1 and 4.8.1 for Soils and Vegetation, respectively) are based on a variety of information and requirements, including mature regulatory programs and interdisciplinary and interagency efforts to update and improve those programs. Measures from other agencies were also reviewed in light of the BLM's concerns and knowledge of the on-the-ground conditions. Monitoring measures are also discussed for each resource to ensure the effectiveness of the mitigation measures is as anticipated. The information analyzed and presented in the EIS is sufficient to determine if impacts can be avoided or reduced and to compare the relative merits of the measures for different resources in evaluation of an alternative, such as a road location.

With respect to Greater Sage-Grouse, the approach used by federal and state agencies to regulate activities potentially affecting the birds in the State of Wyoming has evolved considerably over the last five years. This evolution is due in part to the delineation of Greater Sage-Grouse Core Areas and project review procedures and stipulations, per EO 2011-5 and the preceding EO 2010-4. The BLM has been part of these efforts to develop consistent, effective mitigation and monitoring measures, including participation in work groups responsible for developing the measures. These work groups are comprised of representatives from a variety of backgrounds and experiences, in recognition of the need for a comprehensive, rather than piecemeal approach, to addressing the variety of

factors affecting Greater Sage-Grouse.

The mitigation and monitoring measures implemented for the protection of the Greater Sage-Grouse include techniques proven for other species, as well as new or adaptable techniques. Because some of these measures are relatively new to Greater Sage-Grouse monitoring, the adaptive management approach has been specifically agreed to and the Proponent has provided data and evaluation that would not have been available otherwise.

Wyoming Pocket Gopher

Comment: WOC (Pages 10-12): The WOC again expressed concern about the projected impacts to the Wyoming Pocket Gopher.

Response: The BLM appreciates the reviewer's additional discussion of this comment. Based on review of the DEIS, the original comment and response, and the FEIS, the BLM still considers the mitigation measures for this locatable mineral project appropriate.

Surveys and trapping efforts for Wyoming Pocket Gopher were conducted within the Project area during the summer of 2010. The surveys and trapping efforts showed that Wyoming pocket gophers do occupy open and grassy areas within the sagebrush shrub land habitats within the proposed Permit area. The BLM discloses in the EIS that the proposed Project would have direct impacts to Wyoming pocket gopher. Wyoming pocket gophers are expected to be impacted in areas that are disturbed. At most, 8 percent of the Permit area will be disturbed. It is anticipated that this would not result in a population level impact to Wyoming pocket gophers. It is also expected that Wyoming pocket gophers that are not disturbed both from within the Permit area and outside the Permit area would be capable of recolonizing disturbed areas once reclaimed (FEIS 4.9-38).

Furthermore, this action is a non-discretionary action under CFR 3809 that limits Bureau of Land Management's authority to mitigate impacts to wildlife including our sensitive species. Impacts associated with the plan of development described within the mining permit have been analyzed appropriately.

BLM Sensitive Species

Comment: BCA et al. (Pages 4 and 5)

BCA et al. again asserted that impacts analysis for BLM sensitive species, such as the Pygmy rabbit and Wyoming pocket gopher are not adequate.

Response:

Based on review of the DEIS, the original comment and response, and the FEIS, the BLM concludes that baseline monitoring and impact analysis associated with the plan of development described within the mining permit for these species have been appropriate (see also the response to comment for "Wyoming Pocket

Gopher”). Furthermore, it should be noted that this action is a non-discretionary action under CFR 3809 that limits the BLM's authority to mitigate impacts to wildlife including our sensitive species.

Cumulative Impacts

Whirlwind I Project

Comment: WOC (Pages 12-13): The WOC again requested inclusion of the Whirlwind I Project into the Cumulative Impacts Analysis, based on meetings of that project's proponent with the BLM and the WOC.

Response: The BLM appreciates the reviewer’s additional discussion of this comment. Based on review of the DEIS, the original comment and response, and the FEIS, the BLM still does not consider it appropriate to include the Whirlwind I Project in the Cumulative Impacts Analysis given that the project timeline has not progressed as planned and the project information is still in development.

Lost Creek North and South

Comment: WOC (Page 12):

The WOC expressed concern that LCI’s intentions to develop Lost Creek North and South provide a disincentive to maintain Greater Sage-Grouse populations in the area.

Response: There are incentives in place to protect and maintain the Greater Sage-Grouse populations in the impact area leks. The Adaptive Management Plan will monitor population levels and apply additional protection measures if a decrease in population is observed at impact area leks. If, after a two-year period, the additional protection measures show no positive effect, additional impact measures will be applied (Section 4.9.1.10 of the FEIS). Finally, if additional measures continue to show no positive effects, then the EO 2011-05 states in Appendix B, General Stipulation No. 9:

“If the operator cannot demonstrate a restoration of bird numbers to baseline levels (established by pre-disturbance surveys, reference surveys and taking into account regional and statewide trends) within three years, operations will cease until such numbers are achieved.”

Therefore, the cost of additional protective measures and the potential financial loss associated with a cease in operations provide the incentive to maintain population levels.