Appendix F
Public Comments and Agency Response

#	Comment	Response
1	**<u>Coalition of Local Governments:</u> 1. Deferred Parcels for Greater Sage Grouse RMP Revision** The Coalition questions the merit of deferring an estimated 70% of the nominated lands based on the pending sage grouse RMP revision. EA at 2-3. As recognized in the EA, all of the parcels nominated are considered available for leasing in the RMPs. Id. at 1. The BLM sage grouse RMP revision is now almost six years past the original completion date of Sept. 2009. The draft environmental impact statement (DEIS) was released in 2013 and received significant complex comments. While the FEIS is supposed to be released in one month's time, the local government cooperators have not seen even a preliminary final. The State of Wyoming has been implementing a robust program of sage grouse protection, while continuing to develop data regarding lek locations and related habitat. This process began more than ten years ago with regional working groups. The state remains committed to its core area identification, which attempted to balance energy development and access with sage grouse conservation. This process resulted in the identification of core areas and detailed management guidelines. While CLG members have not agreed with every detail of the State's plan, BLM cannot ignore the fact that there is already a robust conservation program in place that contradicts the assumed need to defer the leases for an RMP revision that is unlikely to be final and will certainly be the subject of a legal challenge. The BLM DEIS, moreover, adopted the State's plan for the most part. The EA justifies deferral based on BLM WY IM 2012-019, which expired on Sept. 30, 2013. The EA did not document any risk of drainage, only that none has been determined. EA at 75. The IM also provided for a sage grouse stipulation rather than deferral. Based on this background, BLM should reconsider the deferral of these other parcels. Leasing subject to Wyoming BLM Instruction Memorandum, which incorporates the Wyoming executive order is not an irreversible and irretrievable commitment of resources. Deferral only interferes with completion of land positions necessary to drill. It also permits drainage when the deferred parcels are located near or adjacent to state and private lands. As indicated in earlier comments, the local governments depend on sales tax revenues from the energy industry.	Comments acknowledged. All parcels have been analyzed consistent with WY-IM-2012-019 'Greater Sage-Grouse Habitat Management Policy on Wyoming BLM Administered Public Lands Including the Federal Mineral Estate' which is internal guidance to staff for management of sage grouse under the BLM Wyoming Sensitive Species Policy while the RMP amendments/revisions are ongoing. Parcels are reviewed by BLM's Reservoir Management Group for potential drainage issues prior to deferral for sage grouse. See Appendix C. Deferred parcels will remain deferred from leasing until conservation and management for sage grouse can be evaluated under the land use planning process, which is expected to be completed in the near future. Once this planning process is completed, this parcel could be re- nominated for future competitive leasing and leased with appropriate stipulations. Wyoming IM 2012-019 policy remains valid until it is superseded, or rescinded. Neither has happened. BLM must consider changes to an RMP when there is a change in management allocation (i.e. from an open with standard stipulations designation to controlled surface use or no surface occupancy designations) such as those required by IM2012-019.

Appendix F
Public Comments and Agency Response

#	Comment	Response
	The high percent of federally-owned land within each affected county makes property taxes a relatively small source of revenues and federal in lieu of taxes payments (PILT) are an insufficient substitute. The energy industry is an equally important source of jobs and stability within the counties. Accordingly the deferral of these lease parcels for an indefinite period on these facts is unwarranted.	
2	**<u>Coalition of Local Governments:</u> 2. Reclamation Discussion Should Be Improved** The EA assumes that BLM's current reclamation policy is sufficient. EA at 64-65. CLG members' observations is that this assumption is often at odds with reality. Especially in the high desert areas, reclamation does not succeed and BLM has done little to enforce effective long-term reclamation. Halogeton has fully infested disturbed areas in the field offices. In some cases, BLM is proposing livestock grazing reductions due to these infestations. This situation cannot be allowed to continue. CLG helped to lead the effort for a better reclamation policy for the Continent Divide Creston EIS. That direction should be adopted for all surface disturbing projects and BLM needs to commit to ensuring that reclamation succeeds. The premise that grading and seeding will lead to effective reclamation has proven false. The loss of habitat values and forage is significant. At a minimum, operators should be required to aggressively control non-native invasive species and further required to achieve reclamation fully. The EA discussion of reclamation (EA at 65) is insufficient. There is no direction to control halogeton and no direction to coordinate with livestock operations, especially when the surface disturbance facilitates halogeton and other non-native or noxious weeds.	Thank you for your comments. Discussion of the CDC EIS is outside the scope of this document. Consistent with IM 2004-110, Change 1 more extensive/ expansive/ restrictive mitigation, including adaptive management, could be developed during the site-specific NEPA analysis that would be required to address any specific post-lease exploration or development actions that are proposed. Further, all surface disturbing proposals must comply with WY BLM Instruction Memorandum 2012-032, WY BLM Reclamation Policy. We agree that reclamation and weed control are important issues. Onshore Order #1 requires a thorough site inspection by interdisciplinary team prior to a decision, to determine the specific characteristics of the site including soil and vegetation, and potential resource conflicts. These will be described in the site specific NEPA document should the parcel be sold and development proposed.
3	**<u>WildEarth Guardians</u>:** The following are the comments of WildEarth Guardians and Rocky Mountain Wild on the Wyoming BLM's May 2015 Lease Sale EA for the High Desert District. For many years, the BLM has prioritized oil and gas leasing and development over other multiple uses such as wildlife, watersheds, and public recreation. It is time for the BLM to restore some balance among resource uses in Wyoming, and render extractive industries more compatible with maintaining healthy ecosystems and public enjoyment of the land. Generally speaking, we would support a modified version of the BLM Preferred Alternative adjusted to address our concerns, but in this case the problems with this proposed lease sale and its NEPA analysis are so pervasive that we recommend scrapping the entire effort and adopting	Thank you for your comment. No response needed.

Appendix F
Public Comments and Agency Response

#	Comment	Response
	Alternative A, the No Action alternative. BLM attaches a number of stipulations, most notably timing stipulations, and relies upon them to reduce impacts to sensitive wildlife resources without ever analyzing the effectiveness of these stipulations. Many of these stipulations are known to be ineffective as outlined below. We concur with the intention to defer parcels entirely or in part based on the sage grouse Priority Habitat screen and, at the discretion of the State Director, to defer parcels within core areas that contain less than 640 acres as well, totaling 84,474.5 acres. EA at 3.	
4	**<u>WildEarth Guardians:</u> Sage Grouse** Parcels 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 19, 20, 21, 22, 23, 24, 25, 26, 28, 30, 31, 37, 38, 39, 40, 41, 42, 43, 44, 45, 52, 53, 54, 59, 60, 61, 62, 69, and 70 are completely or partially within sage grouse Core Areas. See Table 1. Under Instruction Memorandum No. WY- 2012-19, lands falling within sage grouse Core Areas that are primarily under BLM ownership and are not extensively leased are recommended for deferral from oil and gas leasing. Given the pendency of the Sage Grouse Plan Amendment EIS, and the perilous status of the sage grouse with regard to Endangered Species listing, these lands should all be deferred from leasing pending an outcome of the RMP amendments. 'No leasing in Core Areas' is one reasonable alternative which BLM has been asked to consider in its Sage Grouse Plan Amendments process, and also in its RMP revisions by BLM Instruction Memorandum requiring that National Technical Team recommendations be analyzed in detail, and leasing Core Area lands regardless of what screening mechanisms they have been subjected to will violate CEQ guidance. Please note that the National Technical Team did not recommend screening parcels inside Core Areas for at least 11 square miles of unleased federal mineral estate before closing federal lands to future leasing. We agree with BLM's recommendations to defer in whole or in part the offering of Parcels 4, 5, 6, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 19, 20, 21, 22, 23, 24, 25, 26, 37, 38, 39, 40, 41, 43, 44, 45, 52, 53, 54, 60, 61, 62, 69, and 70, which fall entirely or partially within Core Areas (see Table 1). It is a wise decision to defer the long-term commitment of mineral leases at least until the sage grouse RMP amendment process is completed, in order to avoid foreclosing conservation options that may be selected for implementation under the RMP amendments.	BLM and US Forest Service are currently engaged preparing an amendment to the nine land use plans to evaluate the status of sage grouse and to incorporate results and recommendations from recent studies. We continue to assert that the impacts from an alternative that would consider not leasing in core is imbedded within the No Action alternative and its impacts are within the scope of the analysis. This comment provides no information which would change this determination. The May 2014 Sale does not provide an opportunity to challenge or protest BLM's on-going land use planning efforts All parcels have been analyzed consistent with WY-IM-2012-019 'Greater Sage-Grouse Habitat Management Policy on Wyoming BLM Administered Public Lands Including the Federal Mineral Estate' which is internal guidance to staff for management of sage grouse under the BLM Wyoming Sensitive Species Policy while the RMP amendments/revisions are ongoing. The adverse of this alternative is the Full Leasing alternative. The impacts of leasing all parcels without the screen has been appropriately considered. All parcels are screened against the management actions proposed (preferred) in the draft RMP EIS' to ensure that offering parcels for sale does not preclude our ability to select any alternative in a ROD. This comment does not identify any specific conflict. All parcels for the November 2014 proposed sale are in compliance with the existing land use plans as required by 43 CFR 1610.5. Additionally, site specific NEPA analysis will occur at the development stage that will analyze resource conflicts and identify mitigation for specific impacts. In accordance with IM 20040-110, Change 1 and

Appendix F
Public Comments and Agency Response

#	Comment	Response
	Parcels 3, 7, 28, 30, 31, 42, and 59 fall entirely or partially within a Core Area (see Table 1), yet are not earmarked for even partial deferral. Regardless of whether these parcels are within 11 square miles of contiguous unleased federal estate or not, BLM must retain the option to preclude future leasing in these areas under the RMP revisions/amendments currently underway. For this reason, these parcels should be deferred as well. BLM chose not to consider deferring all parcels that fall within sage grouse Core Areas: An alternative was considered that would defer all remaining parcels that are located within sage-grouse core areas. This alternative was not carried forward into detailed analysis because it is not supported by IM WY-2012-019, Greater Sage-Grouse Habitat Management Policy on Wyoming Bureau of Land Management (BLM) Administered Public Lands Including the Federal Mineral Estate and IM WO-2012-043, Greater Sage- Grouse Interim Management Policies and Procedures, and the impacts are embedded within the No Action. EA at 7. This alternative is a fully reasonable and well-reasoned option, and BLM's explanation for why it was not considered in detail is inconsistent with the precepts of NEPA. Neither IM referenced precludes BLM from adopting stronger protection measures for sage grouse than are explicitly prescribed under the guidance they contain. Under NEPA, BLM must consider a range of reasonable alternatives, including those that are outside the agency's authority to implement. In this case, such an alternative would be fully within BLM's authority to implement; state office or national Instruction Memoranda are readily replaced without NEPA process. A decision not to defer parcels which are part of an area less than 11 square miles of BLM- controlled, unleased land would be derived from a Wyoming State Instruction Memorandum which was not part of any RMP, was not subject to NEPA review, and possibly as a result yields outcomes that will likely be deleterious to sage grouse. One such outcome is that BLM adopts recommendations in the National Technical Team Report through the Sage Grouse RMP Amendments or through RMP amendments, yet the existence of the leases in question create valid existing rights that cannot be undone. Once BLM leases such lands, they are very difficult to "unlease." The result could be development in accordance with lease terms that harms the welfare of sage grouse and/or degrades their habitats, undermining population recovery or maintenance, while eliminating the option to keep these lands free of lease encumbrances under the Sage Grouse Plan	Lease Notice No. 3 any new standards/mitigation/ stipulations coming forth from that process can be applied to post-lease actions (i.e., APDs, Sundry Notices, Rights-of-Way, etc.). Additional stipulations are beyond the scope of this document. Oil and gas stipulations are developed at the RMP level. They cannot be changed unless done at that level.

#	Comment	Response
	Amendments and/or pending RMP revisions. These parcels should be deferred from sale even if they are not part of 11 square miles of unleased mineral estate held by BLM. We request that all parcels listed above be deferred from the lease sale pending analysis of whether large-block unleased parcels inside Core Areas are being leased, pursuant to the 2012 Wyoming leasing IM. BLM should do its best to keep largely unleased areas of public land in Core Areas unleased, regardless of mineral ownership patterns. Wyoming sage grouse populations are some of the largest left in the nation and were relatively stable until the last decade, when sage grouse populations experienced major declines range-wide. The Wyoming Game and Fish Department reported that since 1952, there has been a 20% decline in the overall Wyoming sage grouse population, with some fragmented populations declining more than 80%;one of WGFD's biologists reported a 40% statewide decline over the last 20 years. As of 2014, WGFD data reports a 60% population decline statewide since 2007. Since these figures were published, grouse populations have continued to decline. These declines are attributable at least in part to habitat loss due to mining and energy development and associated roads, and to habitat fragmentation due to roads and well fields. Oil and gas development poses perhaps the greatest threat to sage grouse viability in the region. The area within 2 to 3 miles of a sage grouse lek is crucial to both the breeding activities and nesting success of local sage grouse populations. In a study near Pinedale, sage grouse from disturbed leks where gas development occurred within 3 km of the lek site showed lower nesting rates (and hence lower reproduction), traveled farther to nest, and selected greater shrub cover than grouse from undisturbed leks. According to this study, impacts of oil and gas development to sage grouse include (1) direct habitat loss from new construction, (2) increased human activity and pumping noise causing displacement, (3) increased legal and illegal harvest, (4) direct mortality associated with reserve pits, and (5) lowered water tables resulting in herbaceous vegetation loss. These impacts have not been thoroughly evaluated with full NEPA analysis. Lease parcels should also be screened against Sage Grouse ACECs proposed in the context of the statewide Sage Grouse Plan Amendments EIS process. Many of the proposed ACECs have for proposed management withdrawal from future oil and gas leasing. Parcels in each of these areas should be deferred pending the outcome of the Sage Grouse Plan Amendments process, so that a proper decision can be made regarding whether or not to lease them and/or appropriate stipulations can be attached,	

#	Comment	Response
	per IM 2004-110 Change 1. BLM should also consider whether any parcels fall within proposed Sage Grouse ACECs. In the forthcoming RMP revisions, it is our expectation that the BLM will be considering the designation of several Core Areas as Sage Grouse ACECs, to be managed for no future leasing for oil and gas development. In addition, many parcels are within designated Preliminary General Habitat (PGH) under the Wyoming Sage-grouse RMP Amendment DEIS preferred alternative including Parcels 1, 2, 18, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 42, 46, 47, 48, 49, 50, 51, 55, 56, 57, 58, 59, 63, 67, 68, 71, 72, 73, 74, and 75 according to our lease screens. All portions of these parcels falling within PGH should be deferred as well, in order to retain the decision space for "no leasing" or No Surface Occupancy for Preliminary General Habitats under the sage grouse-related RMP revisions and amendments currently underway, which provide the only legally sufficient EIS underpinning to allow leasing in the habitat of a Candidate Species. Every single parcel in this lease sale except Parcels 2, 35, 36, 46, 47, 55, 57, 58, 63, 71, and 72 is located within 4 miles of one or more active sage grouse leks. The lands within 4 miles of active leks are typically used for nesting, a sensitive life history period when sage grouse are sensitive to disturbance from oil and gas drilling and production activities. The current standard sage grouse stipulations that apply outside Core Areas are biologically inadequate, and their effectiveness has not been established by BLM. Indeed, scientific studies demonstrate that these mitigation measures fail to maintain sage grouse populations in the face of full-field development, and significant impacts in terms of displacement of sage grouse from otherwise suitable habitat as well as significant population declines have been documented. BLM should not issue these sage grouse parcels unless a rigorous set of stipulations, far stronger than those provided in the EA (such as NSO stipulations), are applied to the parcels. This should include 4- mile No Surface Occupancy stipulations around active leks. If these stipulations are implemented together with even stronger measures for Core and Connectivity Areas, the BLM could make a credible case that impacts from leasing would not result in significant impacts. Outside Core Areas, current sage grouse lease stipulations provide an NSO stipulation of ¼ mile around active sage grouse leks. This is a ridiculously inadequate amount of protection for the lekking grouse during the breeding period, nevermind for hens nesting on lands surrounding	

#	Comment	Response
	the lek. Studies have shown that the majority of hens nest within 3 miles of a lek, and that a 5.3-mile buffer would encompass almost all nesting birds in some cases. For Core Areas, the most scientifically supportable metric for NSO buffers would be 2 miles from the lek to protect breeding birds (after Holloran 2005, finding impacts from post-drilling production extend 1.9 miles from the wellsite) and 5.3 miles to protect nesting birds, with the understanding that the impacts of drilling and production activity would extend into the NSO buffer area from wells arrayed along its edge. Because leks sites are used traditionally year after year and represent selection for optimal breeding and nesting habitat, it is crucially important to protect the area surrounding lek sites from impacts. In his University of Wyoming dissertation on the impacts of oil and gas development on sage grouse, Matthew Holloran stated, "current development stipulations are inadequate to maintain greater sage grouse breeding populations in natural gas fields." (Notably, these exact stipulations are being applied by BLM in this lease sale for non-Core Area sage grouse habitat parcels). The area within 2 or 3 miles of a sage grouse lek is crucial to both the breeding activities and nesting success of local sage grouse populations. Dr. Clait Braun, the world's most eminent expert on sage grouse, has recommended NSO buffers of 3 miles from lek sites, based on the uncertainty of protecting sage grouse nesting habitat with smaller buffers. Thus, the prohibition of surface disturbance within 3 miles of a sage grouse lek is the absolute minimum starting point for sage grouse conservation. Other important findings on the negative impacts of oil and gas operations on sage grouse and their implications for the species are contained in three studies recently accepted for publication. Sage grouse mitigation measures have been demonstrated to be ineffective at maintaining this species at pre-development levels in the face of oil and gas development by Holloran (2005) and Naugle et al. (2006). This study found an 85% decline of sage grouse populations in the Powder River Basin of northeastern Wyoming since the onset of coalbed methane development there. BLM has repeatedly failed to provide any analysis, through field experiments or literature reviews, examining the effectiveness of the standard quarter-mile buffers where disturbance would be "avoided." There is substantial new information in recent studies to warrant supplemental NEPA analysis of the impacts of oil and gas development to sage grouse. It is incumbent upon BLM to consider the most recent scientific evidence regarding the status of this species and to develop mitigation measures which will	

Appendix F
Public Comments and Agency Response

#	Comment	Response
	ensure the species is not moved toward listing under the Endangered Species Act. It is clear from the scientific evidence that the current protections are inadequate and are contributing to the further decline of the bird's populations. This information constitutes significant new information that requires amendment of the Resource Management Plans before additional oil and gas leasing can move forward. Wyoming Game and Fish Department biologists have reached a consensus that the Timing Limitation Stipulations proposed for sage grouse in this lease sale are ineffective in the face of standard oil and gas development practices. These stipulations have likewise been condemned as inadequate by the U.S. Fish and Wildlife Service and renowned sage grouse expert Dr. Clait Braun. The BLM itself has been forced to admit that "New information from monitoring and studies indicate that current RMP decisions/actions may move the species toward listing…conflicts with current BLM decision to implement BLM's sensitive species policy" and "New information and science indicate 1985 RMP Decisions, as amended, may not be adequate for sage grouse." Continued application of stipulations known to be ineffective in the face of strong evidence that they do not work, and continuing to drive the sage grouse toward ESA listing in violation of BLM Sensitive Species policy, is arbitrary and capricious and an abuse of discretion under the Administrative Procedures Act. The restrictions contained in IM No. WY-2012-019 come nowhere close to offering sufficient on-the-ground protection to sage grouse leks. Within Core Areas, the IM allows surface disturbing activity and surface occupancy just six tenths (0.6) of a mile from "the radius of the perimeter of occupied sage-grouse leks," a far cry from the science-based 4-mile buffer recommended by the BLM's own National Technical Team. By acreage, a 0.6-mile buffer encompasses less than 4% of the nesting habitat contained within the 4-mile buffer recommended by agency experts, and therefore does essentially nothing to protect sensitive nesting habitats. Even less protective, restrictions outside Core or Connectivity Areas allow surface disturbing activities and surface occupancy as close as one quarter (0.25) of a mile from leks. BLM has too great an abundance of data to the contrary to continue with scientifically unsound stipulations as used in IM WY-2012-019 and the current Notice of Competitive Oil and Gas Lease Sale. This is especially clear in light of the U.S. Fish and Wildlife Service's recent finding that listing the greater sage grouse as endangered or threatened under the Endangered Species Act is warranted, but precluded by	

#	Comment	Response
	other priorities. BLM should apply the recommendations of the National Technical Team instead, and in the meantime defer leasing until these recommendations can be formally adopted through the plan amendment/revision process. If the BLM and other federal agencies intend to keep the sage grouse from accelerating beyond other listing priorities, more protective measures, in adherence with the scientific recommendations of Holloran, Braun, and others, must be undertaken now. The vague stipulations included in BLM's Notice of Competitive Oil and Gas Lease Sale for particular parcels do little to clarify to the interested public or potential lessees what restrictions might actually apply to protect sage grouse populations. For example, for some parcels, BLM imposes a Timing Limitation Stipulation and a Controlled Surface Use Stipulation. Such acceptable plans for mitigation of anticipated impacts must be prepared prior to issuing the lease in order to give the public full opportunity to comment, and to abide by the Department of Interior's stated new policy to complete site-specific environmental review at the leasing stage, not the APD stage. Without site-specific review and opportunity for comment, neither the public nor potential lessees can clearly gauge how restrictive or lax "acceptable plans for mitigation" might be, and whether they comply with federal laws, regulations, and agency guidelines and policies. Thus, absent such review, the leases should not issue at all. BLM has the scientific information needed to recognize that any use of these parcels will result in further population declines, propelling the sage grouse ahead of other "priorities" on the ESA "candidate list." Again, it is in all interested parties favor (conservation groups, potential lessees, BLM and other federal agencies) for BLM to determine specific "modifications" prior to issuing leases, such as NSO restrictions. If the BLM fails to do so through site-specific environmental review before the APD stage, the agency will violate the "jeopardy" prohibition in the Endangered Species Act and will not adhere to the directive of Secretary Salazar and the Department of Interior's announced leasing reforms. We recommend against the sale of any lease parcels which contain sage grouse leks, nesting habitat, breeding habitat, wintering habitat and brood-rearing habitat. We request that these parcels be withdrawn from the lease sale. Failing withdrawal of the parcels, parcel-by-parcel NEPA analysis should occur (we have seen no evidence of this in the May 2015 Leasing EA), and NSO stipulations must be placed on all lease parcels with sage grouse leks. In addition,	

#	Comment	Response
	three-mile buffers must be placed around all leks. It is critical that these stipulations be attached at the leasing stage, when BLM has the maximum authority to restrict activities on these crucial habitats for the protection of the species, and that no exceptions to the stipulations be granted. BLM's failure to do so will permit oil and gas development activities which will contribute to declining sage grouse populations and ultimately listing by the U.S. Fish and Wildlife Service as a threatened or endangered species, in violation of BLM's duty to take all actions necessary to prevent listing under its Sensitive Species Manual. In 2010, the greater sage grouse became a Candidate Species under the Endangered Species Act, and a final listing determination is due by court order in September of 2016. These facts constitute significant new information that has not been addressed in programmatic NEPA analysis for any of the Resource Management Plans that support the Wyoming May 2015 oil and gas lease sale. In addition, numerous scientific studies have been published indicating that BLM mitigation measures in these plans are insufficient and will not prevent significant impacts to sage grouse, and these studies also constitute significant new information not addressed in RMP decision making. Finally, in 2013 the U.S. Fish and Wildlife Service identified Priority Areas for Conservation, and BLM subsequently identified Preliminary Priority Habitats and Preliminary General Habitats in its RMP Amendment Draft EIS, which also constitute significant new information, potentially significant impacts to which have yet to be addressed through an EIS. We remain concerned that development activities on the sage grouse parcels noted above will result in significant impacts to sage grouse occupying these parcels and/or the habitats nearby, and the BLM's programmatic NEPA underlying this lease sale does not adequately address these significant impacts in light of new information. Therefore, the requisite NEPA analysis to support the leasing of the sage grouse parcels listed above in the absence of an Environmental Impact Statement does not exist.	
5	**<u>WildEarth Guardians</u>: Ungulate Crucial Habitats** Parcels 2, 18, 55, 73, and 74 fall within mule deer crucial winter ranges and/or migration corridors. Parcels 5, 12, 14, 15, 17, 18, 19, 23, 25, 28, 30, 31, 33, 35, 36, 38, 44, 47, 49, 50, 51, 55, 56, 57, 71, 73, and 74 fall partially or entirely within antelope crucial winter ranges, migration corridors,	Absent a definitive development proposal it is not possible to conduct a more specific impact and/or cumulative effects analysis and as stated in Section 1.3 of the EA, BLM cannot determine at the leasing stage whether or not a nominated parcel will actually be leased, or if leased, whether or not the lease would be explored or developed or at what

Appendix F
Public Comments and Agency Response

#	Comment	Response
	and/or parturition areas. Parcels 1, 2, and 55 fall within elk crucial winter ranges, migration corridors, and/or parturition areas. All portions of these parcels falling within big game crucial ranges should be deferred or at least placed under No Surface Occupancy stipulations to protect these sensitive lands and prevent impacts to these species. BLM has authority to apply a greater level of protection than is called for under the RMP to subsequent oil and gas development decisions, and we call upon the agency to employ this authority to protect these sensitive wildlife habitats. The crucial big game range portions of these parcels falling within the Rock Springs Field Office need to be deferred due to pending completion of the Rock Springs RMP revision to avoid foreclosing on reasonable alternatives including no leasing and NSO-only leasing on big game winter ranges, which need to be considered by BLM. It would be prudent for BLM not to commit these lands for a 10-year period during which the leaseholders would possess some right to explore and produce oil and gas on their leaseholds. A comprehensive analysis of the level of crucial winter range conservation necessary to maintain herd populations at or above targets needs to be undertaken; we urge BLM to defer such parcels until this analysis is complete, in order to avoid foreclosing on options for conservation. In its April 2008 Decision on a challenge of the June 6, 2006 lease sale,10 the Interior Board of Land Appeals inquired into whether BLM had complied with the Memorandum of Understanding between BLM and the Wyoming Game and Fish Department in regarding lease parcels in big game crucial winter range and parturition areas. The BLM is required to have a rational basis for its decision to issue leases in crucial wildlife habitat, and that basis must be supported by the agency's compliance with applicable laws. While the Board held that failure of BLM to follow the directives contained in Instruction Memorandum No 2004-110 Change 1 was not, standing alone, proof of the violation of law or discretionary policy, it was probative of whether BLM had a rational basis for its decision. The Board found that the appeal record presented no evidence of compliance with the Memorandum of Understanding. We recommend against selling the lease parcels listed above because BLM has in cases where parcels are not deferred again failed to comply with the Memorandum of Understanding and therefore has not provided a rational basis for its decision to offer lease parcels in areas with big game crucial winter range and parturition areas. Until such	intensity development may occur. As further stated in Section 1.3 of the EA, "additional NEPA documentation would be prepared at the time an APD(s) or field development proposal is submitted. Consistent with IM 2004-110, Change 1 more extensive/ expansive/ restrictive mitigation, including adaptive management, could be developed during the site-specific NEPA analysis that would be required to address any specific post-lease exploration or development actions that are proposed and could include additional measures to mitigate impacts to wintering big game from production related activities. With appropriate site-specific analysis, restrictions on production related activities could be imposed. G&F is encouraged to participate in the review of all APDs in big game crucial winter range, and to submit "best practices" they feel are necessary to mitigate any potential negative impacts, at that time in accordance with our MOU. WEG as well, is encouraged to participate in this process. The BLM's responsibility under the FLPMA is to ensure that public lands are managed "under principals of multiple use and sustained yield." 43 USC§1732(s). "Multiple use management' is a deceptively simple term that describes the enormously complicated task of striking a balance among the many competing uses to which lands be put, 'including, but not limited to, recreation, range, timber, minerals, watershed, wildlife and fish, and [uses serving] natural scenic, scientific and historical values.'" Norton v. S. Utah Wilderness Alliance, 542 US 55, 58 (2004) (quoting 43 USC §1702(c). BLM's second goal, sustainable yield, "requires BLM to control depleting uses over time, so as to ensure a high level of valuable uses in the future." Id.)(citing 43 USC 1702§ (h)). Accordingly, BLM is not required, under FLPMA, to adopt the practices best suited to protecting wildlife, but instead to balance the protection of wildlife with the nation's immediate and long-term need for energy resources. (See TRCP vs. Salazar, No. 08 Civ. 1047 (RJL) (C.A. D.C., Sept. 29, 2010)). BLM will add the following lease notice to parcels 1, 2, 5, 12, 14, 15, 17, 18, 19, 23, 25, 28, 30, 31, 33, 35, 36, 38, 44, 47, 49, 50, 51, 55, 56, 57, 71, 73, 74: This parcel is located within areas of delineated crucial winter range and/or identified migration corridors. BLM will consider recommendations received by the Wyoming Game and Fish Department, generally contained within a document entitled "Recommendations for Development of Oil and Gas Resources within Important Wildlife Habitats" (http://wgfd.wyo.gov/web2011/ Departments/Wildlife/pdfs/HABITAT_OILGASRECOMM

#	Comment	Response
	time as BLM complies with the Memorandum of Understanding it has no rational basis for its decision and the decision is arbitrary and capricious. We request that the parcels be withdrawn from the upcoming lease sale. While WildEarth Guardians strongly recommends against the offering of any of these lease parcels for sale, at the minimum, all such parcels in big game crucial winter range and parturition areas should have No Surface Occupancy (NSO) stipulations applied to them. NSOs provide the only real protection for big game. Recent studies on the impacts of oil and gas development and production on big game in Wyoming show that the impacts have been huge. Not only have impacts to big game been significant, but they have occurred in spite of the application of winter timing limitations, demonstrating that these stipulations alone do not provide adequate protections for big game. The effectiveness of Timing Limitation Stipulations has been neither tested nor established by any other method by BLM, and the overall 30% decline of the Pinedale Mesa mule deer population while TLS stipulations were applied demonstrates their ineffectiveness. A further noteworthy factor is that timing limitations apply only during oil and gas development, not during the production phase. Once production begins, there are no stipulations in place for the protection of big game. It is therefore imperative that stipulations adequate to protect big game be applied at the leasing stage, not the APD stage. See Center for Native Ecosystems, IBLA 2003-352, November 22, 2006. Timing stipulations are not total prohibitions on drilling during the stressful winter period. Exceptions to the stipulations are regularly—almost automatically—granted anytime a lessee requests it. See, for example, http://www.wy.blm.gov/pfo/wildlife/exceptions.php (Pinedale Field Office winter range stipulation exceptions) which shows that 123 exceptions were granted for the winter of 2006-2007. Similar statistics are available for other Wyoming Field Offices. The enthusiasm with which the BLM has granted winter-long exceptions to the stipulation for drilling on crucial winter range further illustrates the totally discretionary nature and consequent ineffectiveness of this stipulation. Under the Lander RMP EIS, BLM proposes a Timing Limitation on surface disturbing and disruptive activities during the winter season of use in the agency's Preferred Alternative. Disruptive activities would include vehicle traffic and human presence at the well pad, which disturb wintering big game. These are the type of TLS stipulations that need to be applied to winter range, parturition areas, and	ENDA TIONS0000333.pdf) if and when development of this lease is proposed. BLM will encourage the use of Master Development Plans in accordance with Onshore Order #1, on this lease parcel to the extent possible.

#	Comment	Response
	migration corridors for the upcoming lease sale. Just as important, traditional stipulations do not limit operational and production aspects of oil and gas development. See, for example, Jack Morrow Hills CAP EIS at A5-3. Obviously, if the stipulation does not reserve authority to BLM at the leasing stage, BLM must allow development despite severe impacts to winter ranges and big game, except for being able to require very limited "reasonable measures." These reasonable measures cannot be nearly broad enough to ensure crucial winter ranges and parturition areas are protected at the operation and production stage. See 43 CFR 3101.1-2. The Wyoming Game and Fish Commission (WG&F) has a formal policy relative to disturbance of crucial habitats, including crucial winter ranges. Crucial habitat is habitat "which is the determining factor in a population's ability to maintain and reproduce itself . . . over the long term." Id. at 7. WG&F further describes big game crucial winter ranges as vital habitats. Vital habitats are those which directly limit a community, population, or subpopulation (of species), and restoration or replacement of these habitats may not be possible. The WG&F has stated that there should be "no loss of habitat function" in these vital/crucial habitats, and although some modification may be allowed, habitat function, such as the location, essential features, and species supported must remain unchanged. Mitigation Policy at 5. Furthermore, Wyoming Game and Fish released the recommended minimum standards to sustain wildlife in areas affected by oil and gas development. Their policy recognized the ineffectiveness of winter range stipulations standing alone as currently applied. Mitigation Policy at 6. In all cases, Wyoming's new mitigation policy recommends going beyond just the winter drilling timing limitations, which BLM currently applies to lease parcels on crucial winter range. In addition to the winter timing limitations, the Mitigation Policy includes a suite of additional standard management practices. Mitigation Policy at 9-11, 52-58. These additional management practices include planning to regulate the pattern and rate of development, phased development, and cluster development, among many other provisions. Mitigation Policy at 52. Clearly, the timing limitation stipulation applicable to the Crucial Winter Range Parcels is not in compliance with the State of Wyoming's policies and plans regarding the protection of wildlife. The timing stipulation, standing alone, does not ensure protection of habitat function. There	

#	Comment	Response
	is absolutely no guarantee, or even the remote likelihood that the location, essential features, and species supported on the crucial winter range will remain "unchanged." Scientific literature makes it clear that there will be loss of function if significant exploration and development occurs on the leaseholds. In prior Protests the parties have submitted substantial evidence showing that big game species are negatively affected by oil and gas drilling on winter ranges. See the studies referenced above. These studies document the negative effects of oil and gas drilling on big game winter ranges and winter range use, as well as on big game migration routes, even when winter timing stipulations are in effect. For parcels intersecting migration corridors to be offered at auction, special timing limitation stipulations should be attached that prevent construction, drilling, or production-related activity and vehicle traffic on the lease during the migration periods. To these parcels, BLM should attach stipulations that prohibit not just construction activity but also project-related vehicle traffic and human presence at the wellsite within 0.5 mile of the migration corridor during its season(s) of use. The findings in the scientific and popular literature have been confirmed in recent BLM NEPA documents. The Green River EIS/RMP/ROD is replete with documentation of the importance of crucial winter ranges, and their ongoing loss, despite the stipulation required by BLM. Green River EIS/RMP at 347-349. ("Probably the single most important factor affecting antelope populations are weather," at 438-441.) (" . . . oil and gas development in Nitchie Draw causing forage loss and habitat displacement;" "Displaced wildlife move to less desirable habitat where animals may be more adversely stressed . . .;" "Long-term maintenance and operations activities in crucial wildlife habitats would continue to cause displacement of wildlife from crucial habitats, including . . . crucial big game winter habitats;" "Surface disturbing activities would continue to cause long-term loss of wildlife habitat," etc.) The Jack Morrow Hills EIS also documents the importance of crucial winter ranges, particularly to elk, and the sensitivity of wildlife on winter ranges not only to drilling during the winter period, but also due to ongoing displacement and disturbance of wildlife from oil and gas development. Jack Morrow Hills EIS at 4-61 to 4-64, 4-80 to 4-88. The Rawlins RMP Draft EIS further documents the negative effects of oil and gas drilling on big game when on winter ranges. Rawlins RMP Draft EIS at 3- 131 to 3-136. Given this evidence and the simple fact that each well pad	

#	Comment	Response
	converts 3-5 acres of crucial winter range to bare ground for extended periods of time, there is no rational basis for BLM to claim that it meets Wyoming's mitigation policy. It is impossible for crucial winter ranges to remain "unchanged" in terms of the location, essential features, and species supported, even if drilling does not take place during the timing stipulations. What is worse, however, is the fact that drilling does take place during the timing stipulations when they are waived, as they frequently are. Crucial winter ranges will clearly not remain "unchanged" because BLM has not retained the authority to condition well operations (lasting for decades) at the leasing stage. The Federal Land Policy and Management Act (FLPMA) requires BLM to "coordinate the land use inventory, planning, and management activities of [public lands] with the land use planning and management programs of . . . the States and local governments . . . by, among other things, considering the policies of approved State and tribal resource management programs." 43 USC 1712I(9) (emphasis added). BLM must give special attention to "officially approved and adopted resource related plans." 43 CFR 1601.0-5(g). BLM must remain apprised of State land use plans, assure they are considered, and resolve to the extent practical, inconsistencies between state and federal plans. 43 USC 1712I(9). There is no indication that BLM's winter timing stipulation is based on consideration of Wyoming's 1998 Mitigation Policy, or its new programmatic standards policy. It is apparent there has been no attempt to resolve inconsistencies between what BLM's stipulation provides and what Wyoming's mitigation policy requires. There are certainly inconsistencies. BLM's timing stipulation attempts to prohibit drilling during limited periods, yet this prohibition is frequently waived.14 Indeed, quite recently the WG&F asked BLM in Wyoming not to grant any waivers of stipulations last winter due to the lack of quality forage for big game in their winter range and the anticipated impacts that year-round drilling will have on big game under those conditions. BLM has refused to accede to this request and has proceeded to grant waivers and exceptions. Wyoming's mitigation policy specifically seeks to fill gaps left by the timing stipulation, by requiring a number of standard management practices on crucial winter ranges in all cases. These recommendations are standing policy which WG&F expects to be applied in every instance of leasing in crucial winter range. These inconsistencies are even more glaring when one considers the fact that BLM's timing stipulation does not regulate the production phase. Until BLM considers and attempts to resolve these inconsistencies, it cannot allow	

#	Comment	Response
	the sale of the Crucial Winter Range Parcels to go forward. To do so would be a violation of NEPA. Furthermore, timing stipulations attached to the Crucial Winter Range Parcels are inconsistent with the policy of the BLM Wyoming State Office, as enunciated in the Revised Umbrella Memorandum of Understanding (MOU) between BLM and Wyoming Game and Fish Department. The various requirements in the WG&F minimum programmatic standards for oil and gas development establish "sideboards" as to what actions need to be taken to prevent unnecessary or undue degradation. BLM has not considered these standards from the perspective of its FLPMA-imposed requirement to prevent unnecessary or undue degradation. BLM is not meeting its duty to take "any" action that is necessary to prevent unnecessary or undue degradation. 43 USC 1732(b). Once again, this failure is most apparent where application of the winter timing stipulation does not even regulate ongoing operations such as production. BLM has an independent duty under FLPMA to take any action necessary to prevent unnecessary or undue degradation, in addition to its NEPA duty to coordinate its activities with the State of Wyoming and comply with the MOU. Since BLM has given up its ability to require restrictions in the future by not imposing sufficient stipulations at the leasing stage, the effect of this failure to require adequate restrictions at the leasing stage violates FLPMA by permitting unnecessary or undue degradation when oil and gas development commences. The parties also recommend against the sale of the Crucial Winter Range Parcels on the basis that their sale would cause unnecessary or undue degradation of public lands. "In managing the public lands the [Secretary of Interior] shall, by regulation or otherwise, take any action necessary to prevent unnecessary or undue degradation of the lands." 43 U.S.C. § 1732(b) (emphasis added). BLM's obligation to prevent unnecessary or undue degradation is not discretionary; it is mandatory. "The court finds that in enacting FLPMA, Congress's intent was clear: Interior is to prevent, not only unnecessary degradation, but also degradation that, while necessary . . . is undue or excessive." Mineral Policy Center v. Norton, 292 F.Supp.2d 30, 43 (D.D.C. 2003) (emphasis added). The BLM has a statutory obligation to demonstrate that leasing will not result in unnecessary or undue degradation.	

Appendix F
Public Comments and Agency Response

#	Comment	Response
6	**<u>WildEarth Guardians:</u> Wilderness** Parcel 71 falls within the Kinney Rim South citizens' proposed wilderness unit, an area that possesses wilderness qualities for which BLM has not adequately conducted a NEPA analysis regarding the significant impacts that will inevitably occur when the rights and priveleges accorded to mineral leaseholders are exercised as a direct result of leasing the parcels. We have attached the comments of WildEarth Guardians and of The Wilderness Society regarding deficiencies in BLM's wilderness inventories that involve the parcels listed below as Attachments 1 and 2 to these comments, rather than repeating them in the body of these comments. We incorporate these attachments by reference into our comments; please address the issues raised therein as a part of this NEPA process.	It is beyond the scope of this EA to address the perceived validity and/or perceived deficiencies of the Rawlins Field Office's Lands with Wilderness Characteristics Inventory. Lands with wilderness characteristics are adequately addressed in Sections 3.2.3 and 4.2.3 of the EA. The EA and the maintenance of LWC inventories are in compliance with BLM Manuals 6310, "Conducting Wilderness Characteristics Inventory on BLM Lands" and Manual 6320, "Considering Lands with Wilderness Characteristics in the BLM Land Use Planning Process."
7	**<u>WildEarth Guardians</u>: Other Special Areas** Parcels 7 and 27 fall within the Chain Lakes Wildlife Habitat Management Area/Special Management Area. The area, under the Rawlins RMP, is open to oil and gas leasing under "intensive management" and its management goals include protecting pronghorn habitat and fragile wetlands. Special stipulations need to be attached to this parcel requiring that any oil and gas development minimize impacts to these habitat attributes.	That portion of Parcel 7 that falls within the Chain Lakes Wildlife Habitat Management Area/Special Management Area has been deferred due to sage grouse. The remaining Chain Lakes parcel contains the following lease stipulation: "CSU (1) Surface occupancy or use will be restricted or prohibited unless the operator and surface managing agency arrive at an acceptable plan for mitigation of anticipated impacts; (2) as mapped on the Rawlins Field Office GIS database; (3) protecting the Chain Lakes WHMA unique alkaline desert wetland communities." BLM will add the following lease notice to Parcel 27: This parcel is located within the Chain Lakes Special Management Area. Development within the Chain Lakes Special Management Area will be intensively managed per the Rawlins RMP and any proposed development will be reviewed in consideration of the "Recommendations for Development of Oil and Gas Resources within Important Wildlife Habitats" document authored by the WGFD prior to approving surface disturbance (http://wgfd.wyo.gov/web2011/Departments/Wildlife/pdfs/HABITAT_OILGASRECOMMENDATIONS0000333.pdf). BLM will encourage the use of Master Development Plans in accordance with Onshore Order #1, on this lease parcel to the extent possible. Absent a definitive development proposal it is not possible to conduct a more specific impact and/or cumulative effects analysis and as stated in Section 1.3 of the EA, BLM cannot determine at the leasing stage whether or not a nominated parcel will actually be leased, or if leased, whether or not the lease would be explored or developed or at what intensity (spacing) development may occur. As further

Appendix F
Public Comments and Agency Response

#	Comment	Response
		stated in Section 1.3 of the EA, "additional NEPA documentation would be prepared at the time an APD(s) or field development proposal is submitted. Consistent with IM 2004-110, Change 1 more extensive/ expansive/ restrictive mitigation, including adaptive management, could be developed during the site-specific NEPA analysis that would be required to address any specific post-lease exploration or development actions that are proposed.
8	**<u>WildEarth Guardians:</u> The Social Cost of Carbon** The high costs to society from the leasing and possible subsequent burning of public lands fossil fuels must be properly analyzed and presented to the public and agency decision makers. When BLM proposes the mining of coal or the drilling for oil and gas on public lands, it generally touts the proposed project's economic benefits. Historically, however, BLM has ignored the costs of fossil fuel leasing on public lands, especially the costs to society that result from global warming. Proper consideration of these social costs of carbon is simply good governance and good stewardship of public resources, and such consideration is legally required. Global warming is responsible for extreme costs to society already, and it will only get worse in the future. A recent consensus report, joined by more 190 countries, makes the basic science on global warming crystal clear. Global warming is unequivocal: since the 1950s the atmosphere and oceans have warmed, snow and ice have diminished, and seas have risen. Climate Change 2013 – The Physical Science Basis - Summary for Policymakers, United Nation Intergovernmental Panel on Climate change (2013) ("AR5 summary") at 4. There is little doubt that pollution from human activities is the cause of this warming. Id. at 17. The U.S. government's own more recent report concludes that global warming is now affecting our country in far-reaching ways. National Climate Assessment 2014 – Overview, at http://nca2014.globalchange.gov/highlights/overview/overview (last checked September 17, 2014) ("National Climate Assessment"). Climate pollution has warmed the U.S. almost 2°F, mostly since 1970, with another 2°F to 4°F expected in the next few decades. Id. Much greater warming in future decades is also possible, possibly up to an increase of 10°F above current temperatures by the end of the century. Id. These are not the estimates of "environmentalists." This is the scientific consensus accepted both in the U.S. and	Executive Order 13514 required Federal agencies to submit a 2020 greenhouse gas pollution reduction target within 90 days, and to increase energy efficiency, reduce fleet petroleum consumption, conserve water, reduce waste, support sustainable communities, and leverage Federal purchasing power to promote environmentally-responsible products and technologies. This EO does not apply to land management decisions. For a full copy of the EO, see http://www.whitehouse.gov/administration/eop/ceq/sustainability The Executive Order requires agencies to meet a number of energy, water, and waste reduction targets, including: •30% reduction in vehicle fleet petroleum use by 2020; •26% improvement in water efficiency by 2020; •50% recycling and waste diversion by 2015; •95% of all applicable contracts will meet sustainability requirements; •Implementation of the 2030 net-zero-energy building requirement; •Implementation of the stormwater provisions of the Energy Independence and Security Act of 2007, section 438, and; •Development of guidance for sustainable Federal building locations in alignment with the Livability Principles put forward by the Department of Housing and Urban Development, the Department of Transportation, and the Environmental Protection Agency. The Council on Environmental Quality (CEQ) regulations at 40 CFR 1502.23, state (in part), "…for the purposes of complying with the Act, the weighing of the merits and drawbacks of various alternatives need not be displayed in a monetary cost-benefit analysis and should not be when there are important qualitative considerations." The Social Cost of Carbon (SCC) protocol was developed by the Office of Management and Budget using an interagency working group in response to Executive Order 12866, which requires federal agencies, to the extent

#	Comment	Response
	around the world. The burning of coal, oil, and gas are the principle sources of the largest contributor to global warming, carbon dioxide. Id.; see also AR5 summary at 13. At this time, approximately 25% of the carbon dioxide from fossil fuels produced in the U.S. comes from public lands leases. Greenhouse Gas Emissions from Fossil Energy Extracted from Federal Lands and Waters, Stratus Consulting (February 1, 2012) at 15; see also, Sales of Fossil Fuels Produced from Federal and Indian Lands – FY 2003 through FY 2013, U.S. Energy Information Administration (June 2014) at 2. Fossil fuels extracted from public lands release more than one and one-half billion metric tons of carbon dioxide equivalent per year. Id. at 12. That is the equivalent of more than 31 million passenger cars' annual climate pollution, just from producing and burning fossil fuels from our public lands alone. Greenhouse Gas Equivalencies Calculator, U.S. Environmental Protection Agency at http://www.epa.gov/cleanenergy/energy-resources/calculator.html - results (last checked September 17, 2014). BLM manages federal mineral rights, including the leasing and approval of extraction of public lands fossil fuels, on all federal lands. Therefore, BLM decision makers play a critical role in determining how much more climate pollution the U.S. will emit to the atmosphere, the extent that that pollution will exacerbate global warming, and the extent that society will have to bear the myriad related social costs of those decisions. Global warming is exacting costs on society in numerous ways. Agricultural productivity, including crops, livestock, and fisheries have been negatively impacted by global warming. National Climate Assessment – Overview. This has resulted from extreme weather events, changes in temperature and precipitation, and increasing pressure from pests and pathogens. Id. Both water quality and water quantity are being affected by global warming. Id. The degradation has resulted from changes in snowpack, extreme weather events, coastal flooding affecting aquifers, and from changes in temperature and precipitation. Id. Heat-related deaths and illnesses have grown and are growing. Id. Impacts to forest resources from increased forest fires and the resulting impacts to air quality put additional costs on society. Id. A wide variety of ecosystem services are degraded by global warming, including habitat for fish and wildlife, drinking water storage, soils, and coastal barriers. Id. Carbon dioxide pollution is also responsible for increasing ocean acidification. This list represents only a subset of the social	permitted by law, "to assess both the costs and the benefits of the intended regulation and, recognizing that some costs and benefits are difficult to quantify, propose or adopt a regulation only upon a reasoned determination that the benefits of the intended regulation justify its costs." SCC estimates the monetary cost incurred by the emission of one additional metric ton of carbon dioxide (CO2), and is not applicable to non-CO2 GHG emissions, such as methane. Estimating SCC is challenging because it is intended to model effects on the welfare of future generations at a global scale caused by additional carbon emissions occurring in the present and does not account for the complexity of multiple stressors and indicators. The SCC was developed to support agencies in responding to EO 13514, not for use in making land management decisions. The May 2015 Oil and Gas Lease Sale is not a regulatory action but rather a leasing action. The act of leasing land for oil and gas development in itself does not emit any carbon or greenhouse gasses. It is BLM's determination that in this particular instance, calculating the SCC from CO2 emissions from the combustion of an unknown quantity of produced oil and gas would be highly speculative but likely would be negligible in relation to the impacts from oil and gas burned on a nationwide or global basis. NEPA does not require a benefit-cost analysis, although CEQ NEPA regulations allow agencies to use it in NEPA analyses in certain circumstances (40 CFR § 1502.23). BLM's socioeconomic impact analysis acknowledges the monies received from leasing the parcels but because of the speculative nature of development does not attempt to quantify costs and benefits associated with drilling, possible production or eventual combustion of fluid minerals from the lease parcel. In contrast, SCC provides one element of a benefit-cost analysis: the monetization of all meaningful economic benefits and costs. Monetizing only certain effects on social welfare can lead to an unbalanced assessment. Reporting the SCC in isolation could be misleading. As a federal District Court in Oregon recently held in *League of Wilderness Defenders/Blue Mts. Biodiversity Project v. Connaughton*, 2014 U.S. Dist. LEXIS 170072 (D. Or. Dec. 9, 2014), , a SCC analyses is not required to comply with NEPA where there is no clear way to quantify costs and benefits. Because anticipated production from a particular lease parcel is speculative, and the resulting CO2 emissions from eventual combustion of that production is even more speculative, a qualitative evaluation of climate change is appropriate. The BLM also has acknowledged that climate science does not allow a precise connection between project-specific

Appendix F
Public Comments and Agency Response

#	Comment	Response
	costs of carbon pollution from burning fossil fuels extracted from our public lands. Nonetheless, "[l]ower emissions of heat- trapping gases and particles mean less future warming and less-severe impacts; higher emissions mean more warming and more severe impacts." Id. BLM decision makers must consider the social cost of carbon from all proposed land management projects. The requirement to analyze the social cost of carbon is supported by the general requirements of the National Environmental Policy Act ("NEPA"), specifically supported in federal case law, and by a 2009 Executive Order. NEPA requires agencies to take a "hard look" at the consequences of proposed agency actions. 42 U.S.C. § 4321 et seq.; Morris v. U.S. Nuclear Regulatory Commission, 598 F.3d 677, 681 (10th Cir. 2010). Consequences that must be considered include direct, indirect, and cumulative consequences. 40 C.F.R. §§ 1502.16, 1508.7, 1508.8. A cumulative impact is the "impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non- Federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time." 40 C.F.R. § 1508.7. Analysis of site-specific impacts must take place at the lease stage and cannot merely be deferred until after receiving applications to drill. See New Mexico ex rel. Richardson v. Bureau of Land Management, 565 F.3d 683, 717-18 (10th Cir. 2009); Conner v. Burford, 848 F.2d 1441 (9th Cir.1988); Bob Marshall Alliance v. Hodel, 852 F.2d 1223, 1227 (9th Cir.1988). Any NEPA analysis of a fossil fuel development project that fails to use the government-wide protocol for assessing the costs to society of carbon emissions from the proposed action has failed to take the legally required "hard look." Courts have ordered agencies to assess the social cost of carbon pollution, even before a federal protocol for such analysis was adopted. In 2008, the Ninth Circuit Court of Appeals ordered the National Highway Traffic Safety Administration ("NHTSA") to include a monetized benefit for carbon emissions reductions in an EA prepared under NEPA. Center for Biological Diversity v. National Highway Traffic Safety Administration, 538 F.3d 1172, 1203 (9th Cir. 2008). NHSTA had proposed a rule setting corporate average fuel economy standards for light trucks. A number of states and public interest groups challenged	GHG emissions and specific environmental effects of climate change. This approach is consistent with the approach that federal courts have upheld when considering NEPA challenges to BLM federal coal leasing decisions. *WildEarth Guardians v. Jewell*, 738 F.3d 298, 309 n.5 (D.C. Cir. 2013) *WildEarth Guardians v. BLM,* , 8 F. Supp. 3d 17; 34 (D.D.C. 2014)

#	Comment	Response
	the rule for, among other things, failing to monetize the benefits that would accrue from a decision that led to lower carbon dioxide emissions. NHTSA's EA had monetized the employment and sales impacts of the proposed action. Id. at 1199. The agency argued, however, that valuing the costs of carbon emissions was too uncertain. Id. at 1200. The court found this argument to be arbitrary and capricious. Id. The court noted that while estimates of the value of carbon emissions reductions occupied a wide range of values, the correct value was certainly not zero. Id. It further noted that other benefits were monetized by the agency although also uncertain. Id. at 1202. More recently, a federal court has done likewise for a proposed coal lease modification. That court began its analysis by recognizing that a monetary cost-benefit analysis is not universally required by NEPA. High Country Conservation Advocates v. U.S. Forest Service, 2014 WL 2922751 (D. Colo 2014), Slip Op. at 3, citing 40 C.F.R. § 1502.23. However, when an agency prepares a cost-benefit analysis, "it cannot be misleading." Id. at 3 (citations omitted). In this case, the NEPA analysis prepared by federal agencies, like the case above, included a quantification of benefits of the project. The quantification of the social cost of carbon, although included in earlier analyses, was omitted in the final NEPA analysis. Id. at 19. Those federal agencies then relied on the stated benefits of the project to justify project approval. This, the court explained, was arbitrary and capricious. Id. Such approval was based on a NEPA analysis with misleading economic assumptions, an approach long disallowed by courts throughout the country. Id. at 19-20. It should be noted that a general acknowledgement in the EA that the proposed action would release carbon pollution, which adds to the impacts of global warming was not enough; nor did an accurate accounting of the likely emission of those greenhouse gases suffice. The social cost of carbon had to be included. In addition to case law, Executive Order 13514 makes the "reduction of greenhouse gas emissions a priority for federal agencies." E.O. 13514, Preamble. The reduction of emissions includes emissions from both direct and indirect activities. Section 1. This Executive Order requires that, "[i]n order to create a clean energy economy that will increase our Nation's prosperity, promote energy security, protect the interests of taxpayers, and safeguard the health of our environment," it is the "policy of the United States" that agencies "shall prioritize actions based on a full accounting of both economic and social benefits and costs." Section 1. When quantifying greenhouse gas emissions, the Department of the Interior is specifically	

Appendix F
Public Comments and Agency Response

#	Comment	Response
	instructed to "accurately and consistently quantify and account for greenhouse gas emissions" from sources controlled by the Department, including "emissions of greenhouse gases resulting from Federal land management practices." Section 9(a). The results of quantifying emissions from proposed federal land management actions, of fully accounting for all economic and social costs and benefits of those proposed actions, and the resulting prioritization of actions based on this quantification and accounting must be fully disclosed on publically available websites. Section 1. NEPA's hard-look doctrine and related court cases make clear that the social cost of carbon must be analyzed whenever an agency is analyzing other economic costs and benefits of a proposed public lands fossil fuel project. E.O. 13514 goes further however and requires the Department of the Interior to analyze the social cost of carbon for all federal land management decisions. The social cost of carbon will be significant whenever fossil fuel leasing, or mining, or drilling is proposed. According to the U.S. Environmental Protection Agency ("EPA"), the social cost of carbon is "an estimate of the economic damages associated with a small increase" in emissions. The Social Cost of Carbon, U.S. Environmental Protection Agency at http://www.epa.gov/climatechange/EPAactivities/economics/scc.html, last checked 9/12/2014. "This dollar figure also represents the value of damages avoided for a small emission reduction." Id. Thus, it would be incorrect to assert that the social cost of carbon cannot be calculated for a project that represents a tiny fraction of global or even a tiny fraction of U.S. emissions. Estimates of the social cost of carbon are designed to do exactly that. In fact, the social cost of carbon is generally expressed in terms of the costs tolled by emitting or the benefits realized by avoiding a single ton of carbon dioxide emissions. However, it is very likely that the social cost of carbon protocol underestimates the true damages exacted on society by carbon pollution. Id. citing the IPCC Fourth Assessment Report. In particular, damages related to social and political conflicts, weather variability, extreme weather, and declining growth rates are either ignored or underestimated. Omitted Damages: What's Missing from the Social Cost of Carbon, Peter Howard, the cost of Carbon Project (March 13, 2014). Thus, any application of the current social cost of carbon protocol is very likely a	

Appendix F
Public Comments and Agency Response

#	Comment	Response
	significant underestimate of the true cost of carbon pollution. Acknowledging the known tendency to underestimate costs, the federal government has been using this cost-benefit assessment tool since February 2010. See Technical Support Document: Social Cost of Carbon for Regulatory Impact Analysis Under Executive Order 12866, Interagency Working Group on Social Cost of Carbon, United States Government (February 2010). In the last year alone, the Departments of Agriculture, Energy, Transportation, and Housing and urban Development and the Environmental Protection Agency and National Highway Traffic Safety Administration have all utilized the Social Cost of Carbon Protocol in public decision making documents. There is nothing special about the Department of the Interior or the Bureau of Land Management that makes this tool less useful, or exempts the Department or its agencies from requirements to utilize it where applicable. In fact, the U.S. Government Accountability Office recently reviewed the process employed to develop the federal government's assessment of the social cost of carbon. The GAO found that the process employed to develop the 2013 social cost of carbon estimates "used consensus-based decision making," "relied on existing academic literature and models," and "took steps to disclose limitations and incorporate new information." Id. In short, while the social cost of carbon protocol, like other economic models, provides only estimates and is subject to further updates as new information becomes available, the federal government's social cost of carbon protocol is a legitimate tool for performing a thorough and honest assessment of both costs and benefits of proposed actions as required under NEPA and E.O. 13514. EPA lists the current social costs of carbon in the following format. As the table above makes clear, the social costs of carbon pollution are anything but trivial. For example, a project that released a mere 10,000 tons of carbon dioxide in 2025 would be responsible for costs to society, through global warming, of $150,000 to more than $1.5 million for that year's emission alone. And again, this is very likely an underestimate of true costs. If the economy returns to fast paced growth and global warming impacts are currently foreseen and properly estimated, the higher discount rates, 5%, and the lower social cost of carbon estimates will be most appropriate. If	

#	Comment	Response
	the economy grows long-term at slower rates and global warming impacts are currently foreseen and properly estimated, the higher social cost of carbon figures, the 2.5 % column, will be better estimates. A middle discount rate value, 3%, for mid- range growth estimates is also available. If, on the other hand, global warming impacts are greater or more costly than current mid-range estimates, the social cost of carbon would be better estimated by the 95th percentile figures. That means that the lowest social cost of carbon numbers are best-case scenarios for both the economy and global warming impacts. The highest numbers are for mid-range economic projections and close to worst-case estimates for global warming impacts.	
9	**<u>Wild Earth Guardians:</u> BLM's proposed EA for the May 2015 Oil and Gas Lease Parcel Sale violates NEPA and E.O. 13514** While BLM acknowledges some impacts of climate change, it fails to draw the necessary connection between this project and increased climate impacts and costs. BLM improperly declines to assess the impacts of climate change, promising to assess them at some unknown time in the future. This violates NEPA's hard look doctrine. Court's have made clear that the leasing stage is an appropriate time to assess impacts that will not be mitigated by lease stipulations, as carbon emissions surely will not. In addition, the project fails to take a hard look through a misleading economic analysis. On the one hand, BLM claims that the project will lead to economic benefits. But the costs to society of releasing hundreds of thousands of metric tons of carbon-dioxide equivalent is completely ignored or presumed to be zero. In fact, application of the Social Cost of Carbon Protocol could arrive at project costs to society of tens of millions of dollars. The economic benefits of this project may well pale in comparison to its costs. This is exactly the type of misleading NEPA economic analysis that courts have rejected previously and recently. The EA must be modified to analyze the social cost of carbon. As discussed above, fossil fuels development on public lands results in more than one and on- half billion tons of carbon dioxide emissions per year. Using 2015 social cost of carbon values, the costs to society of the federal fossil fuel leasing program is between $18 and $177 billion per year. This same level of emissions in 20 years would incur costs from $20 to more than a quarter of a trillion dollars	See Response to Comment #8. Climate change is adequately addressed in Sections 3.2.1.3 and 4.2.1.3 of the EA.

#	Comment	Response
	per year, depending on the growth of the economy and the intensity of global warming impacts at that time. These costs, of course, do not include costs from air quality issues like smog and mercury emissions, do not include lost opportunity costs from recreation, or costs from direct degradation of ecosystem services. Recall also, that it is very likely that these numbers even represent an underestimate of the true costs to society from global warming. Of course numbers of such an alarming magnitude do not result from the approval of any single project. Instead, they represent the incessant accumulation of costs that result from BLM approving project after project while refusing to acknowledge that those projects have unspoken costs to society, both individually and in the aggregate, that will continue to plague our country for generations. BLM must address the social costs of carbon that are likely to result from this project.	
	<u>WildEarth Guardians</u>: Hydraulic Fracturing The EA fails to consider the impacts of hydraulically fracturing these oil and gas wells. There is no discussion of water usage, wildlife impacts, seismic activity, health impacts, or any of the other known impacts of hydraulic fracturing. Around 90 percent have used hydraulic fracking to get more gas flowing, according to the drilling industry.15 It is arbitrary and capricious of BLM to neglect this highly controversial and impactful practice in its environmental analysis. At a minimum, "the agency's [Environmental Assessment] must give a realistic evaluation of the total impacts and cannot isolate a proposed project, viewing it in a vacuum." Grand Canyon Trust v. F.A.A., 290 F.3d 339, 342 (D.C. Cir. 2002). More specifically, "an environmental impact statement must analyze not only the direct impacts of a proposed action, but also the indirect and cumulative impacts." Utahns for Better Transp. v. U.S. Dep't of Transp., 305 F.3d 1152, 1172 (10th Cir. 2002) (citing Custer County Action Assoc. v. Garvey, 256 F.3d 1024, 1035 (10th Cir. 2001)) (internal quotation omitted); see also 40 C.F.R. § 1509.25(a)(2) (2009) (scope of EIS is influenced by cumulative actions and impact); Greenpeace v. Nat'l Marine Fisheries Serv., 80 F. Supp. 2d 1137, 1149 (W.D. Wash. 2000) (management plans were unlawful for failing to consider cumulative impacts on species). Conner v. Burford holds that the inability at the lease sale stage to fully ascertain effects of development "is not a justification for failing to estimate what those effects might be." Conner v. Burford, 848 F.2d 1441 (9th Cir. 1988); see also	Hydraulic Fracturing is a specific development scenario that will be analyzed at their appropriate APD or project stage with the necessary NEPA document. The impacts to resources affected will also be analyzed under that site specific NEPA document. See page 9, Section 1.6 of the lease sale EA, for a general discussion of development in relations to leasing. Also see Sections 3.2.9 and 4.2.9 for a discussion of water resources. As well, incorporated by reference in to the lease sale EA is Appendix E which contains a white paper on Hydraulic Fracturing. Since development cannot be reasonably determined at the leasing stage, any site specific impacts cannot realistically be analyzed at this time. At the time of APD proposal, should the parcels be sold and development proposed, an analysis of these resources will be completed.

Appendix F
Public Comments and Agency Response

#	Comment	Response
	Methow Valley Citizens Council, 490 U.S. 332 (1989). Cumulative impact is defined as "the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time." 40 C.F.R. § 1508.7 (2009). The Tenth Circuit recently noted that the BLM's own Handbook for Fluid Mineral Resources recognizes that "BLM has a statutory responsibility under NEPA to analyze and document the direct, indirect and cumulative impacts of past, present and reasonably foreseeable future actions resulting from Federally authorized fluid minerals activities." Pennaco Energy Inc., v. U.S. Dep't of Interior, 377 F.3d 1147, 1160 (10th Cir. 2004). BLM must conduct a thorough analysis of hydraulic fracturing to comply with its NEPA responsibilities. The reference to this practice does not fulfill the agency's duties to take a hard look at the impacts of its action. The analysis of hydraulic fracturing should require an Environmental Impact Statement due to its significant environmental impacts that have heretofore never been analyzed in the programmatic EISs underlying oil and gas leasing in these Field Offices.	
10	**David M. Slaughter:** Currently, I have a cattle/hay operation while I do not reside at my ranch year around, I plan to have full residency when I retire from my current engineering position in two years. I am not sure if my property was physically inspected for residential development. The property has a concrete foundation for my future permanent dwelling, a house trailer, septic sewer system, water well/pump house, and power (wind turbine, diesel) building. This upcoming year utility power will be added. In all, there are three water wells (two stock and one human use). Of the three, one stock and culinary well are within section 23 that has been identified. They were drilled and encased over 10 years ago. I am following up why the state of Wyoming does not have record of them. The driller at the time indicated he submitted the paperwork. The wells are currently in use and I assume that activity protocols/restrictions will be followed to ensure the viability of these wells to provide uncontaminated water. While confusing, it appears that the excluded 31 acres corresponds to the location of the Graham reservoir in section 27. Is this correct? (The	Site visits were conducted on all parcels nominated for the lease sale and landowners were contacted. Lease Notice No. 1 restricts or prohibits surface disturbance within ¼ mile of occupied dwellings and is applied to all parcels to mitigate impacts to private residences. The State of WY also imposes a minimum 350' offset from all sources of drinking water including private water wells. Per 43 CFR 3160 and Onshore Order #1, prior to granting an Application for Permit to Drill, the Operator must negotiate a Surface Access Agreement with you. As well, during the APD review process, the BLM will consult with you to determine what your needs and wishes are for the project and will incorporate them to the extent required to comply with law. Title 43 Code of Federal Regulations, Section 3100.0-3 states that "Oil and gas in public domain lands...are subject to lease under the Mineral Leasing Act of 1920..." These parcels are located in areas identified as open to oil and gas

Appendix F
Public Comments and Agency Response

#	Comment	Response
	majority of the water from that reservoir supports my operation.) The same lands in section 23 are mostly irrigated from both creek and reservoir water rights. Also I believe I own some mineral rights approximately 20 acres that was passed to me when I purchased the place 15 years ago. Are you aware of that right and why have I not been contacted to ensure this right is protected? What is the status of that right if the exploratory stage shows promise and the leasee opts for oil/gas extraction? While the document states that if the oil/gas right is leased than the leasee is subject to extensive regulation to minimize my negative exposure. This promise of strict compliance of the leasee is overshadowed by limited field inspection and enforcement resources that most likely plague the agency. My property borders BLM land. Is it likely that the licensee will prefer to keep their operation on public land compared to privately owned lands? I request that the T.0150N, R1140W section 23 as described be excluded from the list to be potentially leased in May.	leasing in the existing land use plans. Stipulations have been added to these parcels to mitigate for resource impacts, as appropriate. The stipulations are based on the current RMPs. In addition, the portions of the parcel in Section 23 have been leased three times previously, from 1975 through 2003. The individual acreage around Graham reservoir is privately owned minerals. Only federal minerals are included in the offering of this lease parcel. Absent a definitive development proposal it is not possible to conduct a more specific impact and/or cumulative effects analysis and as stated in Section 1.3 of the EA, BLM cannot determine at the leasing stage whether or not a nominated parcel will actually be leased, or if leased, whether or not the lease would be explored or developed or at what intensity (spacing) development may occur. As further stated in Section 1.3 of the EA, "additional NEPA documentation would be prepared at the time an APD(s) or field development proposal is submitted. Consistent with IM 2004-110, Change 1 more extensive/ expansive/ restrictive mitigation, including adaptive management, could be developed during the site-specific NEPA analysis that would be required to address any specific post-lease exploration or development actions that are proposed.
11	**Western Energy Alliance:** Western Energy Alliance wishes to express its support for Alternative B, the Proposed Action in the High Desert District leasing Environmental Assessment (EA) for the May 2015 oil and natural gas lease sale. We urge the Bureau of Land Management (BLM) to move forward in the process without any further deferrals of nominated parcels. Western Energy Alliance represents over 480 companies engaged in all aspects of environmentally responsible exploration and production of oil and natural gas in Wyoming and across the West. The Alliance represents independent producers, the majority of which are small businesses with an average of fifteen employees. Our industry plays an important role in the economic well-being of Wyoming, and the state's production is a strong contributor toward American energy security. In Wyoming, oil and natural gas exploration and production	Thank you for your comment. No response needed.

#	Comment	Response
	supports nearly 25,000 high paying jobs with wages totaling nearly $2 billion, an economic impact of over $11 billion, and nearly $3.5 billion in federal and state taxes. These revenues are used to fund infrastructure, education, and other vital services for communities.	
12	**Western Energy Alliance:** **Parcel Deferrals** BLM originally received Expressions of Interest (EOI) for 75 parcels totaling 121,325.56 federal mineral acres, of which all or part of 51 were deferred due to BLM's determination of conflicts with the Greater Sage-Grouse. 34 parcels totaling 36,851.06 federal mineral acres, or only 30% of the original amount remain available for lease. We object to these continued large deferrals, and urge BLM to move forward with RMP amendments that are based on the state of Wyoming's sage grouse plan. BLM states in the EA that "[a]ll of the nominated parcels are available for offering at the May 2015 Competitive Lease Sale under the applicable Field Office Resource Management Plans," but that parcels were deferred "pending completion of the ongoing Greater Sage- Grouse RMP amendment process in the Rock Springs, Kemmerer, Pinedale, and Rawlins field offices." However, in accordance with BLM Handbook H-1601-1, which establishes that existing land use plan decisions are authoritative until such time as an amendment or revision is finalized, these parcels should not be deferred for the purpose of waiting for the RMP amendments to be complete.	See Response to Comment #1
13	**Western Energy Alliance:** **Air Quality** As affirmed in the EA, the act of leasing in and of itself will result in no impacts. There can be no assumption that a leased parcel will actually be developed, and therefore any attempts to quantify emissions are conjecture. If and when development of a lease is proposed, the Air Quality Division (AQD) of the Wyoming Department of Environmental Quality (WDEQ) stringently regulates air emissions per the Clean Air Act (CAA) with strict permitting requirements before development may actually take place. The Environmental Protection Agency (EPA) has further imposed additional requirements for reducing emissions resulting from oil and natural gas development. Industry has made great technological strides in reducing air impacts, and we hold that the requirements mandated	Thank you for your comment. No response needed.

Appendix F
Public Comments and Agency Response

#	Comment	Response
	through the WDEQ AQD and EPA more than adequately address potential air impacts.	
14	**<u>Western Energy Alliance:</u> Water Resources** As with air quality, the EA indicates that the act of leasing will result in no direct impacts to water quality, though subsequent development might result in long and short term impacts. Water is a vital resource in the arid West, and states, which have jurisdiction over water use, have a long history of and expertise in managing their water resources. Industry is required by the Clean Water Act (CWA), the Safe Drinking Water Act (SDWA), and state laws to undertake extensive measures to protect water quality. During the development phase, plans of operations incorporate comprehensive protections to prevent or immediately address the potential spill of contaminants that may impact surface water, and EPA rules require companies to develop Spill Prevention, Control, and Countermeasure (SPCC) plans. Roads and well pads are designed to minimize runoff and sediment buildup in waterways, and wellbore engineering includes multiple layers of steel and concrete to prevent any potential contaminants from escaping the borehole and communicating with groundwater resources. If the use of hydraulic fracturing is employed, companies take precautionary actions to ensure fluids remain in the borehole during fracturing operations and to safely contain and transport fluids from the well site. These precautions and best practices have proved their effectiveness as not one instance of groundwater contamination has been linked to hydraulic fracturing though it has been conducted in over 1.2 million wells in the U.S.	Thank you for your comment. No response needed.
15	**<u>Western Energy Alliance:</u> Wildlife** The EA discusses several wildlife and special status species that are present within a number of the proposed lease sale parcels, including raptors, big game, and Greater Sage- Grouse. Each of the field offices' Resource Management Plans (RMPs) imposes stipulations for the protection of wildlife, including Timing Limitations (TL), Controlled Surface Use (CSU), and No Surface Occupancy (NSO). Appropriate Conditions of Approval (COA) may also be applied at the permitting stage for the further protection of wildlife resources. Due to these protective measures, we believe that potential impacts to wildlife can and will be effectively mitigated.	Thank you for your comment. No response needed.

Appendix F
Public Comments and Agency Response

#	Comment	Response
16	**Western Energy Alliance: Socioeconomics** As previously stated, the oil and natural gas industry creates a significant number of jobs in the State of Wyoming, and generates billions of dollars in revenue for local, state, and federal coffers. Energy produced domestically reduces the need to import energy from other nations, many of which are antagonistic to American interests, and often do not have the same level of environmental protections in place. Alternative B, which would allow the remaining parcels to be leased, would have the greatest positive socioeconomic impact. Oil and natural gas production has played a historically significant role in the culture and economic livelihood of the State of Wyoming, and it has been one of the few bright spots in an otherwise moribund economy. Domestic production, predominantly on state and private lands, has allowed the United States to claim the mantle as the world's top producer of oil and natural gas. Production from public lands has historically been an important part of the equation, and to meet the nation's energy needs and to continue to reduce our reliance on foreign sources it must continue to be so into the future. We urge BLM to move forward with Alternative B and refrain from deferring any further acreage.	Thank you for your comment. No response needed.
17	**Wyoming Outdoor Council:** Please accept these comments from the Wyoming Outdoor Council on the above-referenced environmental assessment (EA) being prepared by the Bureau of Land Management (BLM). The Wyoming Outdoor Council is the state's oldest independent conservation organization. We've worked for more than four decades to protect Wyoming's environment and quality of life for future generations. The EA indicates that 75 parcels, containing approximately 121,326 acres, were nominated and reviewed for the May 2015 lease sale. Application of sage-grouse screening criteria and discretionary action by BLM eliminated 41 whole and 10 partial parcels, totaling roughly 84,475 acres, from the May 2015 lease offering. We support the decisions deferring those parcels. Of the remaining 34 parcels, encompassing approximately 36,851 acres in the Kemmerer, Rock Springs, and Rawlins Field Offices, we have specific concerns with four parcels: WY-1505-055, -071, -067, and -068. In these comments, we ask for greater site-specific analysis of these four parcels and request that the BLM defer leasing them in this sale. Additionally, we advocate for more in-depth, site-specific analysis for all parcels offered in this and other oil and gas lease sales. We also ask the	Thank you for your comment. No response needed.

Appendix F
Public Comments and Agency Response

#	Comment	Response
	BLM to address two outdated resources and to incorporate current research and information on the health impacts of emissions from oil and gas development.	
18	**<u>Wyoming Outdoor Council:</u> WY-1505-055** We are concerned about the detrimental impacts oil and gas leasing and subsequent development of this parcel will have on the Cherokee Trail. The Powder Rim country around the Cherokee Trail remains wild, undeveloped, and natural such that it continues to contribute to the Cherokee Trail's historical context and setting. Travelers today see much the same type of country as those 19th century travelers that followed the trail to new beginnings in the West. We, and our partners in historical preservation organizations, are concerned that continued leasing in this landscape will erode the values that, as of today, contribute to the potential addition of the Cherokee Trail into the National Historic Trails system. At this time, the National Park Service is assessing the Cherokee's suitability and inclusion in that system. Yet, continued leasing and the possibility of future development could influence that decision prematurely and before the proper procedural analysis can be completed. Beyond the major emigrant trails system of the Oregon, California, Mormon and Pony Express routes, our nation is continually at risk of losing the important pathways of the 19th and early 20th centuries—and that loss portends the loss of our heritage, of histories, and of our ability to understand westward migration and settlement. As such, we ask the BLM to forego leasing parcels that will negatively impact the Cherokee Trail and its historical setting until the suitability analysis is complete. We disagree that, "offering lease parcels for sale would not, in and of itself, impact historic or prehistoric resources," (Section 4.2.4 at 63). Leasing a parcel transfers rights to development. And the BLM correctly notes, "development within the viewshed of contributing segments of National Historic Trails could impact trail setting." As the analysis of the Cherokee Trail as a National Historic Trail is in progress, the BLM should not preclude that decision by offering lease parcels such as WY-1505-055.	Absent a definitive development proposal it is not possible to conduct a more specific impact and/or cumulative effects analysis and as stated in Section 1.3 of the EA, BLM cannot determine at the leasing stage whether or not a nominated parcel will actually be leased, or if leased, whether or not the lease would be explored or developed or at what intensity (spacing) development may occur. As further stated in Section 1.3 of the EA, "additional NEPA documentation would be prepared at the time an APD(s) or field development proposal is submitted. Consistent with IM 2004-110, Change 1 more extensive/ expansive/ restrictive mitigation, including adaptive management, could be developed during the site-specific NEPA analysis that would be required to address any specific post-lease exploration or development actions that are proposed.

#	Comment	Response
	Site-specific analysis during this leasing process, as mandated by the leasing reforms, is needed and could help obviate these concerns. We understand that WY-1505-055 has a controlled surface use stipulation and, during decisions regarding potential development after leasing, would have a cultural resource inventory completed. During that process, it is possible that sites eligible for listing under the National Register of Historic Places would be avoided, or impacts minimized and mitigated. We find, however, that this delay in the site-specific analysis only complicates the possibility of proactively protecting our important heritage and cultural resources such as the Cherokee Trail. The controlled surface use stipulation is also inadequate, as it is attached to the cultural inventory not yet completed and it requires mitigation only for National Register of Historic Places—of which the Cherokee Trail is not yet designated. The CSU provision to "protect historic and visual values of the Cherokee Trail" means site-specific analysis is required, but not provided, as to how development would be camouflaged or removed from the Trail's viewshed. Additionally, the management goals and objectives for historic trails in the Rawlins Resource Management Plan Record of Decision (at 2-12) set forth a clear expectation that the integrity of trails and trail setting will be preserved. Leasing and allowing oil and gas development in the historical setting of the Cherokee Trail does not preserve; it denigrates. Leasing this parcel is at odds with resource management plan guidance, possibly precludes the suitability of the trail as a National Historic Trail, and does not include appropriate site-specific analysis. Please defer WY-1505-055 from the May lease sale.	
19	**Wyoming Outdoor Council: WY-1505-071** This 640-acre parcel is located within the Rawlins Field Office's Adobe Town Dispersed Recreation Use Area (DRUA). EA at 41. Under the DRUA, this parcel is classified as "middle country." The DRUA's management objectives are "for dispersed recreation uses that do not require recreational developments or facilities. Future emphasis will be placed on maintaining an undeveloped recreation setting." Appendix 37 at A37-3. This emphasis on not developing recreation sites or facilities and maintaining the wild character of the land should also be reflected in decisions for oil and gas leasing. Importantly, management objectives include maintaining a setting that is "characterized by a predominately unmodified natural environment" and the experience has "some opportunity for isolation from the sights and sounds of man" which	Lands with wilderness characteristics are adequately addressed in Sections 3.2.3 and 4.2.3 of the EA. The EA and the maintenance of LWC inventories are in compliance with BLM Manuals 6310, "Conducting Wilderness Characteristics Inventory on BLM Lands" and Manual 6320, "Considering Lands with Wilderness Characteristics in the BLM Land Use Planning Process." Offering parcels without waiting for the Rawlins RMP VRM amendment to be completed is in compliance with the BLM Land Use Planning Handbook H-1601-1, Section VII.E. which states, "Existing land use plans decisions remain in effect during an amendment or revision until the amendment or revision is completed and approved. The decisions of existing land use plans do not change. For example, if current land use plans have designated lands open for a particular use, they remain open for that use.

Appendix F
Public Comments and Agency Response

#	Comment	Response
	allows for an "opportunity to have a high degree of interaction with the natural environment." The decision to lease this parcel is not in accordance with these management objectives. Much of the Kinney Rim country is leased, including the acreage surrounding WY-1505-071, and if developed, would not provide an unmodified natural setting nor would it provide isolation from the impacts of human developments. Importantly, this parcel is also located inside the Kinney Rim South Citizen's Proposed Wilderness Area. Though the BLM has determined this area lacks wilderness characteristics, citizens' inventories submitted by several organizations disagree. Importantly, the Rawlins RMP is currently under revision and lands with wilderness character inventory status and management implicated by the possibility of revised management. Until that amendment is complete, we advocate the BLM not lease parcels subject to differing inventory reports. The Rawlins RMP (2008) determined that for lands "unmanageable for wilderness character because of preexisting oil and gas leases, the BLM elected to manage lands with wilderness character for multiple use and not for protection of wilderness character." However, BLM Manual 6310, released in 2012, is clear that potential lands with wilderness character cannot be precluded from the inventory (or, from management under 6320) as long as the leases are undeveloped. In order to meet the procedural requirements of NEPA and BLM Manual 6310, the RMP amendment must ensure that the BLM has evaluated the new citizen inventory information submitted by Wyoming Wilderness Association, documented their findings, made the findings available to the public, and retained a record of the evaluation and the findings as evidence of the BLM's consideration. While the BLM does have recent inventories on record for these areas, their inventory findings diverge significantly from inventories submitted by Wyoming Wilderness Association. Upon review of the BLM inventory documents, it is clear that the difference in inventory findings is likely a result of a difference in procedure, particularly as related to adhering to BLM Manual 6310. It is critical that the BLM, through its RMP amendment, brings lands with wilderness character inventories and management into alignment with the current guidance in Manuals 6310 and 6320. Until this process is complete, a lease parcel implicated in this conflict should not be leased. Additionally for WY-1505-071, we find the CSU stipulation that provides: "(1) Surface occupancy or use	Land use plan decisions may be changed only through the amendment or revision process." It is beyond the scope of this EA to address the perceived validity and/or perceived deficiencies of the Rawlins Field Office's Lands with Wilderness Characteristics Inventory. Absent a definitive development proposal it is not possible to conduct a more specific impact and/or cumulative effects analysis and as stated in Section 1.3 of the EA, BLM cannot determine at the leasing stage whether or not a nominated parcel will actually be leased, or if leased, whether or not the lease would be explored or developed or at what intensity (spacing) development may occur. As further stated in Section 1.3 of the EA, "additional NEPA documentation would be prepared at the time an APD(s) or field development proposal is submitted.

Appendix F
Public Comments and Agency Response

#	Comment	Response
	will be restricted or prohibited unless the operator and surface managing agency arrive at an acceptable plan for mitigation of anticipated impacts; (2) as mapped on the Rawlins Field Office GIS database; (3) protecting recreational opportunity class setting within the Adobe Town Dispersed Recreation Use Area" incomplete. This stipulation is not adequate to protect the recreational values of backcountry hunting and primitive recreation that many citizens enjoy in the area. BLM enjoys far greater environmental protection authorities than just those described in a stipulation. To ensure a more complete and accurate disclosure of impacts, we recommend that more detailed analysis of site-specific impacts are conducted and disclosed. The EA discloses that oil and gas activities could have a negative impact on hunting and other recreation uses in the area. Visual resources could also suffer impacts if development were to take place on the lease, but the EA declines to delve into an assessment of those impacts, claiming that "[s]ince well locations cannot be accurately determined at the leasing stage, it is not possible to accurately predict the visual impacts." EA at 72. However, we believe that although BLM may not know at the leasing stage precisely where on the parcel a well will be located, certainly enough information is known to allow a determination about whether the parcel may be in "proximity to a visual receptor" and whether a well on the parcel can "be screened by terrain" so as to reduce effects. This is the level of investigation required by the leasing reforms but unfortunately is absent from this EA. Because of the lack of appropriate site-specific analysis, inadequate conformance with the management objectives in the DRUA, and inadequate conformance to Manuals 6310 and 6320 as relative to how this parcel and its landscape were inventoried for lands with wilderness character, WY-1505-071 should be deferred from this lease sale.	
20	**<u>Wyoming Outdoor Council:</u> WY-1505-67 and WY-1505-067** These two parcels are within the Red Desert Watershed Management Area, as identified in the Green River RMP. As such, these parcels have CSU stipulations that, importantly, restrict surface occupancy or use pending an agreement in which, "the operator and surface managing agency arrive at an acceptable plan for mitigation of anticipated impacts to steep slopes, visual resources, recreational, watershed, cultural, and wildlife values." We believe it will be difficult to arrive at an acceptable	Offering the parcels is in compliance with the BLM Land Use Planning Handbook H-1601-1, Section VII.E., which states, "Existing land use plans decisions remain in effect during an amendment or revision until the amendment or revision is completed and approved. The decisions of existing land use plans do not change. For example, if current land use plans have designated lands open for a particular use, they remain open for that use. These parcels are located in areas open for oil and gas leasing in accordance with the land use plan and are appropriately offered with a CSU.

Appendix F
Public Comments and Agency Response

#	Comment	Response
	mitigation plan as this landscape has numerous wild values—both for ecological systems and viewsheds desired by primitive recreationists. These parcels are located in the interior of the Red Desert and are, importantly, near substantially unleased areas. We find leasing and subsequent oil and gas development irrevocably damaging to the values of this landscape. Importantly, the guidance for the Red Desert Watershed Management Area is severely outdated. This management comes from a 1997 Record of Decision for an RMP that is now being revised. Though the BLM is under no legal obligation to defer leasing pending RMP revision, we ask that for these parcels— because of the significant values and community attachment, as well as potential for conflict—the BLM defer leasing. These leases are part of an encroachment on the Jack Morrow Hills Coordinated Activity Plan boundary, where updated oil and gas leasing and development decisions have tended towards resource protection rather than development.	
21	**Wyoming Outdoor Council: THE BLM SHOULD ENHANCE ITS SITE SPECIFIC ANALYSIS** Throughout the EA, the discussion of impacts regarding each resource value (air, water, wildlife, recreation, etc.) begins with or contains this sentence: "The act of offering, selling, and issuing federal oil and gas leases does not produce impacts to the recreational use of public land." The EA repeatedly defers detailed site-specific environmental analysis to the application for permit to drill (APD) stage. The EA (at 4) attempts to justify the lack of site-specific analysis by arguing that: According to the Tenth Circuit Court of Appeals, site-specific NEPA analysis at the leasing stage may not be possible absent concrete development proposals. Whether such site-specific analysis is required depends upon a fact-specific inquiry. Often, where environmental impacts remain unidentifiable until exploration narrows the range of likely well locations, filing of an Application for Permit to Drill (APD) may be the first useful point at which a site-specific environmental appraisal can be undertaken (Park County Resource Council, Inc. v. U.S. Department of Agriculture, 10th Cir., April 17, 1987). In addition, the Interior Board of Land Appeals (IBLA) has decided that, "BLM is not required to undertake a site- specific environmental review before issuing an oil and gas lease when it previously analyzed the environmental consequences of leasing the land..." (Colorado Environmental Coalition, et al., IBLA 96- 243, decided	Absent a definitive development proposal it is not possible to conduct a more specific impact and/or cumulative effects analysis and as stated in Section 1.3 of the EA, BLM cannot determine at the leasing stage whether or not a nominated parcel will actually be leased, or if leased, whether or not the lease would be explored or developed or at what intensity (spacing) development may occur. As further stated in Section 1.3 of the EA, "additional NEPA documentation would be prepared at the time an APD(s) or field development proposal is submitted. All parcels for the proposed sale have been analyzed consistent with WO-IM-2010-017 ' Oil and Gas Leasing Reform – Land Use Planning and Lease Parcel Reviews' and are in compliance with the existing land use plans as required by 43 CFR 1610.5. Additionally, site specific NEPA analysis will occur at the development stage that will analyze resource conflicts and identify mitigation for specific impacts. In accordance with IM 2004-110, Change 1 and Lease Notice No. 3 any new standards/ mitigation/ stipulations coming forth from that process can be applied to post-lease actions (i.e., APDs, Sundry Notices, Rights-of-Way, etc.).

#	Comment	Response
	June 10, 1999). However, when site-specific impacts are reasonably foreseeable at the leasing stage, NEPA requires the analysis and disclosure of such reasonably foreseeable site specific impacts. (N.M. ex rel. Richardson v. BLM, 565 F.3d 683, 718-19 (10th Cir. 2009). The BLM has not received any specific development proposals concerning the proposed lease parcels addressed in this EA. This site-specific environmental documentation would provide specific analysis for the well pad location or locations. What the above discussion does not acknowledge is that national leasing reforms instituted by the Department of Interior in May 2010 with full knowledge and understanding of those and other cases in the 9th Circuit and D.C. Circuit, established a new process for leasing, and public involvement, which is set forth in Instruction Memorandum No. 2010-117. "The purpose of lease parcel review . . . is to determine the conditions under which leasing and eventual development would occur if allowed to proceed." IM 2010-117 at 7 (emphasis added). And, "[m]ost parcels that the field office determines should be available for lease will require site-specific NEPA analysis." Id. at 12 (emphasis added). Section III.C of the Instruction Memorandum (IM) describes the lease parcel review and lease issuance process. Among other things, the process requires the formation of an Interdisciplinary Parcel Review (IDPR) Team of resource specialists "to review lease sale parcels and ensure compliance with NEPA." As expressly stated in the IM, compliance with NEPA includes "a site-specific NEPA compliance documentation for all BLM surface and split estate parcels." Id. (emphasis added.) According to the IM, the "[s]ite-specific NEPA compliance documentation must incorporate appropriate information gained through the lease parcel review process...." IM 2010-117. Thus, by requiring a "hard look" at the site-specific environmental impacts before leasing, these reforms have fundamentally changed the way BLM conducts the business of leasing, and have also settled the decades-long debate about the level of NEPA analysis required at the leasing stage, despite cases like Park County, which no longer correctly reflect existing law or BLM's own internal direction. The correct understanding is that the issuance of a lease represents an irreversible and irretrievable commitment of resources. As such, site-specific environmental impacts that may result from development on the lease must be	

Appendix F
Public Comments and Agency Response

#	Comment	Response
	disclosed prior to the decision to issue the lease. Accordingly, we respectfully request levels of site-specific analysis in this, and future lease sale EA are based on an accurate discussion of the leasing reforms.	
22	**Wyoming Outdoor Council: Climate Change** The EA section on Climate and Climate Change quotes extensively from the Intergovernmental Panel on Climate Change (IPCC 2007). We recommend that future lease sale Environmental Assessments update this section using the most current data, analyses and information. The IPCC produces comprehensive assessment reports on climate change approximately every six years; the Fifth Assessment Report was released in November 2014. See http://www.ipcc.ch/report/ar5/	Thank you for your comment. The EA has been updated to reflect this information.
23	**Wyoming Outdoor Council: Recreation** We suggest that information sources be updated. The EA (at 44) references the USFWS 2006 National Survey of Fishing, Hunting, and Wildlife Associated Recreation. This report is prepared every five years; the 2011 report is available on the agency's website at: http://wsfrprograms.fws.gov/Subpages/NationalSurvey/National_Survey.htm. In addition, the EA also cites economic information from the 2008 WGFD annual report. We suggest that the information should be updated using the 2013 Annual Report, which is available on the WGFD website: http://wgfd.wyo.gov/web2011/Departments/WGFD/pdfs/WGFDANNUALREPORT_201300052 37.pdf. The EA cites recreation statistics from a 2011 DOI report. The DOI's 2012 Economic Contributions Report is available online at: http://www.doi.gov/ppa/economic_analysis/economic-report.cfm	Thank you for your comment. The EA has been updated to reflect this information.
24	**Wyoming Outdoor Council: Air Quality Emissions** The EA's disclosure of impacts to public health and safety, section 4.2.13, acknowledges that "[s]ubsequent development of a lease may generate impacts." EA at 73. It goes on to state that "releases of gas from the well bore, production facilities and spills could potentially adversely affect members of the public in the vicinity as well as members of the workforce." Id. We are submitting for BLM's consideration a recent peer-reviewed study that revealed air concentrations of dangerous volatile chemicals, such as benzene, hydrogen sulfide and formaldehyde, near oil and gas production sites often	Thank you for your comment. The referenced Attachment A, measured a wide range of concentrations of volatile chemicals at oil and gas production sites, none of which are located in the High Desert District. Air quality emissions are adequately addressed in the Air Resources and Public Health and Safety sections of the EA.

Appendix F
Public Comments and Agency Response

#	Comment	Response
	exceeded federal guidelines. See Attachment A. As this report demonstrates, existing regulatory mechanisms are not completely effective at controlling emissions of harmful pollutants into the air. We recommend that the EA be revised to address and disclose the findings in this report, and discuss steps to mitigate the effects on both workers and members of the public who may be exposed to these harmful pollutants.	
25	**Kennecott Uranium Company:** Kennecott Uranium Company is in receipt of the notice dated October 20, 2014 signed by Mark A. Storzer, District Manager of the Bureau of Land Management's Wyoming High Desert District, regarding an Expression of Interest (EOI) to lease the Federal oil and gas mineral estate in an area in which Kennecott Uranium Company is the owner of Patented lode mining claims and Patented mill site mining claims overlying these federal minerals. Kennecott Uranium Company has reviewed this notice and the associated Environmental Assessment (EA) and requests that: • any leasing of Federal minerals underlying the surface and mineral estates held by Kennecott Uranium Company be indefinitely deferred and that • leasing of Federal minerals be indefinitely deferred on Federal lands held by Kennecott Uranium Company's unpatented lode mining claims and/or mill sites in areas where Kennecott Uranium Company is currently performing various activities related to the Sweetwater Uranium Project, specifically Sections 2, 3, 9, 10, 11, 12, 14 and 15 of Township 24 North, Range 93 West. Kennecott Uranium Company has the following comments regarding such proposed leasing and the associated Environmental Assessment (EA) and also wishes to provide the following information regarding Kennecott Uranium Company's interest in the area to support Kennecott Uranium Company's request that any leasing of Federal minerals under the October 20, 2014 notice should be indefinitely deferred.	The BLM acknowledges the potential conflicts which have been raised by the commentor and is considered potentially significant new information. In response to the comments submitted by Kennecott, portions of parcels underlying the subject patents, located within parcels 42, 32, 28, 30, and 31 will be deferred from offering at the May 2015 Competitive Lease Sale. Further, within parcel 31, those nominated lands within section 14 and 15 will be deferred in whole. These parcels will be deferred until such time as BLM can undertake additional analysis to determine whether these parcels should be made available for lease, and under what conditions. We further understand that the Sweetwater Mill site, while not brought up by Kennecott, is currently being evaluated in the Sheep Mountain Uranium Project EIS in the alternative analysis as a potential processing facility. This will certainly need to be considered by the BLM prior to offering these parcels for lease.
26	**Kennecott Uranium Company: Patented Lands and Unpatented Mining Claims Held by Kennecott Uranium Company** Kennecott Uranium Company holds two (2) blocks of fee ground upon which the Mill Building, Solvent Extraction (SX) Building, tailings impoundment and other structures and infrastructure reside which consists of the following two (2) tracts of patented (fee) ground: 1) Land Patent No. 49-83-0009 consisting of 1,333.7	See our response to comments #25. Per 43 CFR 3160 and Onshore Order #1, prior to granting an Application for Permit to Drill, the Operator must negotiate a Surface Access Agreement across fee surface. As well, during the APD review process, the BLM will consult with you to determine what your needs and wishes are for the project and will incorporate them to the extent required to comply with law. Absent a definitive development proposal it is not possible

Appendix F
Public Comments and Agency Response

#	Comment	Response
	acres (patented lode mining claims) 2) Land Patent No. 49-83-0023 consisting of 641.2 acres (patented millsites) These patented lands are depicted in the map entitled Sweetwater Uranium Project - Land Ownership dated October 2013 included in Appendix 1 and are shaded in green and yellow respectively. In addition, Kennecott Uranium Company holds substantial land holdings in the Great Divide Basin (two (2) State Leases and 1,581 unpatented mining claims (mill sites and lode mining claims) adjoining the patented lands primarily to the West. These unpatented mining claims retain all rights and access under the 1872 Mining Law. Kennecott Uranium Company also holds four (4) State leases and 1,423 unpatented lode mining claims on and around Green Mountain (twenty two (22) miles to the north) containing resources that are expected to be processed by the mill when economic conditions warrant. Kennecott Uranium Company is wholly owned by Rio Tinto. Another entity owned by Rio Tinto holds additional unpatented lode mining claims and State Leases South of the Kennecott Uranium Company's holdings.	to conduct a more specific impact and/or cumulative effects analysis and as stated in Section 1.3 of the EA, BLM cannot determine at the leasing stage whether or not a nominated parcel will actually be leased, or if leased, whether or not the lease would be explored or developed or at what intensity development may occur. As further stated in Section 1.3 of the EA, "additional NEPA documentation would be prepared at the time an APD(s) or field development proposal is submitted.
27	**<u>Kennecott Uranium Company:</u> Sweetwater Mill: Site of One of the Remaining Three (3) Licensed Source Material Processing Facilities in the United States and the only such Facility Remaining in Wyoming** The patented lands within Section 15, Township 24 North, Range 93 West contain the Sweetwater Mill and associated infrastructure (Main Shop Building, Tire and Lube Building, Administration Building and other structures) and the Sweetwater Tailings impoundment which is located in the section's east half. Nuclear Regulatory Commission (NRC) licensing requirements compel Kennecott Uranium Company to maintain personnel on site twenty-four (24) hours per day 365 days per year. Oil and gas activities are known sources of carcinogens including benzene (Please see article titled "Researchers Assess Emissions from Colorado Oil and Gas Fields" from the Denver Post dated November 16, 2014). In addition, oil and gas activities (particularly roads) often generate dust that would likely interfere with required airborne particulate monitoring downwind of the Sweetwater Mill site. Kennecott Uranium Company wants assurance that site and/or contract employees will not be exposed to hazardous effluents from oil and gas operations.	See Response to Comments # 24, 25, and #26 Lease Notice No. 1 restricts or prohibits surface disturbance within ¼ mile of occupied dwellings and is applied to all parcels to mitigate impacts to private residences. The State of WY also imposes a minimum 350' offset from all sources of drinking water including private water wells. Kennecott Uranium Company currently does not have any proposed or approved Plan of Operations with BLM to conduct additional uranium mining or construction activities on their unpatented lode mining or millsite claims. Air quality emissions are addressed in the Air Resources and Public Health and Safety sections of the EA.

Appendix F
Public Comments and Agency Response

#	Comment	Response
	The Eastern eight (8) miles of the paved road extending from U.S. 287 to the site is a shared right of way held by Kennecott Uranium Company and the Bureau of Land Management (BLM). The cost of maintenance of this road is borne in its entirety (including snow removal) by Kennecott Uranium Company. And as the Rawlins Field Office of the Bureau of Land Management (BLM) knows, Kennecott Uranium Company makes every effort to ensure that this road is not used by heavy traffic, since heavy traffic can, and has done substantial and costly damage to this road. Commercial use by non-right of way holders on this road requires a permit. Kennecott Uranium Company works with the Rawlins Field Office of the Bureau of Land Management (BLM) to ensure that unauthorized use is prohibited by reporting to the BLM all of the non-permitted commercial use of this road that it observes. These images show the facility including mobile homes used as residences for security personnel who are required to remain on site. These mobile homes are sited on patented lands. The Sweetwater Mill possesses an operating Nuclear Regulatory Commission (NRC) license allowing it to resume operations upon ninety (90) days notice to the Nuclear Regulatory Commission (NRC) as per License Condition 9.4 that states in part: The NRC shall be notified at least ninety (90) days prior to any planned resumption of uranium milling operations. In addition, Kennecott Uranium Company is also authorized to construct one (1) new tailings impoundment and up to eight (8) evaporation ponds (a total of (one hundred and twenty (120) acres) at any time by License 10.3 which states in part: The licensee is currently authorized to construct up to eight evaporation ponds and one new impoundment. An additional two evaporation ponds and an additional five impoundments, as described in the above documents, may be constructed after: 1) notification of NRC; 2) submittal of data confirming the proposed design; and 3) an increase in the surety amount, based on the NRC approved cost estimate for reclaiming the additional structures. In addition, Kennecott Uranium Company may construct additional five (5) tailings impoundments and two (2) additional evaporation ponds (a total of (two hundred twenty (220) acres) upon further approval of the Nuclear Regulatory Commission (NRC).	

Appendix F
Public Comments and Agency Response

#	Comment	Response
	The proposed evaporation ponds would be constructed on unpatented mill sites in the south half of Sections 14 and 15, Township 24 North, Range 93 West. The additional proposed tailings impoundments would be constructed on unpatented mill sites in the Southeast 'X of Section 10, South 1/2 of Section 11, and North % of Section 14 of Township 24 North, Range 93 West. An approved diversion channel is also planned for construction on unpatented mill sites in Section 11, West % of Section 12 and the East % of Section 14 of Township 24 North, Range 93 West. While these items are not planned for construction on the fee ground discussed in the notice any oil and gas activities in these areas would substantially interfere with these already permitted but as yet unconstructed features. The proposed locations of these Nuclear Regulatory Commission (NRC) approved features (additional tailings impoundments, evaporation ponds and diversion channels) are shown on the Sweetwater Uranium Project Land Ownership map dated October 2013 in Appendix 1. The continued existence of Sweetwater Mill has been declared by the Nuclear Regulatory Commission (NRC) to be in the public interest in a June 18, 2001 letter that stated: " The continued existence of the mill is in the public interest, as it is one of only six uranium mills remaining in the United States and the only one remaining in Wyoming." At this time, three (3) of the six (6) mills mentioned in the quotation above have been decommissioned. The Sweetwater Mill is now one of only three (3) remaining conventional uranium mills in the United States making it that much more vital. In its October 4, 2011 letter granting a fourth five (5) year postponement of the implementation of Timeliness in Decommissioning, the Nuclear Regulatory Commission (NRC) reiterated the fact that the continued existence of the facility is in the public interest stating: "In its review, the staff determined that this postponement is not detrimental to public health and the environment and is in the public interest... " Source: FIVE-YEAR POSTPONEMENT OF IMPLEMENTATION OF DECOMMISSIONING, KENNECOTT URANIUM COMPANY, SWEETWATER URANIUM PROJECT, MATERIALS LICENSE SUA-1350 (TAC J00648) ADAMS Accession Number: ML 112270574	

Appendix F
Public Comments and Agency Response

#	Comment	Response
	The entire facility is shown in a Google Earth image dated June 8, 2014 in Appendix 2. The Sweetwater Mill is shown in a Google Earth image dated June 8, 2014 in Appendix 3. The Tailings impoundment on Land Patent No. 49-83-0023 in Sections 14 and 15 of Township 24 North, Range 93 West contain in excess of 2 1/2 million tons of 11(e).2 byproduct material regulated by the Nuclear Regulatory Commission and is a restricted area in that personnel leaving it are required to monitor for contamination by alpha emitters and equipment leaving it must be tested and decontaminated as necessary to be released for unrestricted use. As such, no oil and gas activities could be conducted within the restricted area. The Tailings impoundment is shown in a Google Earth image dated June 8, 2014 in Appendix 4. This facility is required to maintain substantial reclamation sureties including: • A surety held by the Nuclear Regulatory Commission (NRC) of $11,018,000 as required by License Condition 9.7 that states in part: o The licensee's currently NRC-approved surety (performance bond) shall be continuously maintained in an amount no less than $11,018,000 for the purpose of complying with 10 CFR 40, Appendix A, Criteria 9 and 10, for decommissioning costs related to the existing facility, until a replacement amount is authorized by the NRC. • A surety held by the Department of Environmental Quality (DEQ) of $1,054,000 as required by Permit to Mine #481PT Kennecott Uranium Company is responsible for the reclamation of these areas and additional oil and disturbance may ultimately increase the company's reclamation liabilities. Oil and gas operations in and around the Sweetwater Mill and Tailings impoundment would substantially interfere with site licenses, permits and activities.	
28	**Kennecott Uranium Company:** Corrective Action Program (CAP) The facility is under a Nuclear Regulatory Commission (NRC) mandated Corrective Action Program (CAP) that is required by License Condition 11.3 that states:	See Response to Comment #25 and 26 Per Onshore Order #2, III. B. Casing and Cementing Requirements. The proposed casing and cementing programs shall be conducted as approved to protect and/or isolate all usable water zones, lost circulation zones, abnormally pressured zones, and any prospectively valuable

Appendix F
Public Comments and Agency Response

#	Comment	Response
	11.3 The licensee shall conduct a corrective action program (CAP) with the objective of returning the ground-water concentrations of chromium, natural uranium, and combined radium-2261228 to the levels referenced in Addendum to the Revised Environmental Report, Background Ground Water Quality and Detection Standards, January 1996, as revised by page changes January 8, 1998 (approved by the NRC letter of May 28, 1998), and the catchment basin ground-water corrective action plan dated May 12, 2004, as revised July 22, 2004, December 15, 2004, and January 18, 2005. The ground-water protection standards at point of compliance (POC) wells TMW-15, 16, 17, and 18, with background being defined in the above Addendum are: arsenic = 0.05 mg/L, beryllium = 0.01 mg/L, cadmium = 0.01 mg/L, chromium = 0.05 mg/L, lead-210 = 8.9 pCi/L, nickel = 0.01 mg/L, combined radium-2261228 = 5.8 pCi/L, selenium = 0.01 mg/L, thorium-230 = 7.0 pCi/L, natural uranium = 36.0 pCi/L, and gross alpha = 15.0 pCi/L, manganese = 0.2 mg/L, and iron = 0.6 mg/L. Compliance with this requirement requires the completion, sampling and in nine (9) cases, continued pumping of wells around the tailings impoundment. These wells are shown in the maps included in Appendix 5 entitled Revised Site Contour Map July 2014 and Revised Site map November 2014. These wells are located in Sections 14 and 15 of Township 24 North, Range 93 West, some on the fee ground (those west of the existing tailings impoundment) and others on unpatented mill sites (those north, east and south of the existing tailings impoundment). Drilling activities in the vicinity of these wells could interfere with their proper operation (if pumping) and with sampling operations. In addition, oil and gas operations could interfere with the installation of new wells, if required by the Nuclear Regulatory Commission (NRC). Oil and gas Operations in the vicinity of the tailings impoundment could cause additional shallow groundwater contamination.	deposits of minerals. Any isolating medium other than cement shall receive approval prior to use. The casing setting depth shall be calculated to position the casing seat opposite a competent formation which will contain the maximum pressure to which it will be exposed during normal drilling operations. Determination of casing setting depth shall be based on all relevant factors, including: presence/absence of hydrocarbons; fracture gradients; usable water zones; formation pressures; lost circulation zones; other minerals; or other unusual characteristics. All indications of usable water shall be reported.
29	**Kennecott Uranium Company: Sweetwater Pit** The Sweetwater Pit, a reclaimed open pit mine including a pit lake, resides in Sections 9 and 10 of Township 24 North, Range 93 West, is on Land Patent Number: 49-83-0009 and is shown in the Google Earth image included in Appendix 6. The following areas in and around the pit lake area were listed in the Notice: The original pit was excavated to a depth of approximately 6425 above mean sea level beginning in September 1979.	See Response to Comments #25, #26 and #28

Appendix F
Public Comments and Agency Response

#	Comment	Response
	When mining operations ceased on April 15, 1983, followed by cessation of dewatering on April 25, 1983, the pit flooded with groundwater to a level approximately 100 feet below ground surface. A graph of pit water levels as it flooded is included with other pertinent information regarding the pit in Appendix 7. The pit lake attained its final/present elevation on or around May 1998. In October 1999 reclamation of the pit began. The 1.2 billion gallons of water in the pit lake was bioremediated via the addition of 1,000,000 million pounds of nutrients (sugars, alcohols, proteins, oils and other additives) to nourish metal respiring microorganisms in the lake, which precipitated uranium and selenium in the water to levels deemed acceptable by the State of Wyoming. Half of the sides of the lake were left as highwalls while the other half was sloped, topsoiled and seeded. Following completion of the remediation of the lake water in April 2000, the lake underwent a five (5) year stability monitoring period involving quarterly stratified sampling, after which the surety for the pit and associated ground was released by the State of Wyoming. The bioremediation of the Sweetwater Pit Lake won the 2001 Excellence in Surface Mining award from the State of Wyoming. Included in Appendix 7 is tabular water quality data for the pit lake as well as graphs showing pit lake water elevations, and selenium and uranium concentrations over time. This data shows that following remediation (for the last fourteen (14) years the pit lake has been a source of high quality/low total dissolved solids (TDS) water in the Great Divide Basin as opposed to the poor quality water present in the various playa lakes (Circle Bar Lake, Hansen Lake, Still Lake and West Still Lake) on Battle Spring Flat. Water quality data for these lakes for comparison purposes is included in Appendix 9. Following reclamation the pit lake has become a substantial ecological enhancement to the Red Desert, a significant wildlife habitat site including a drinking water source for wildlife that is frequently seen in the area around the lake as shown in the images below: In addition, in the fall of 2001 hydrophytic vegetation was planted along the lake shore to further improve wildlife habitat. The images below show the hydrophytic vegetation in successive years: This pit lake is a unique feature in that to the best of Kennecott Uranium Company's knowledge it is one of only four such pit lakes successfully treated to completion via bioremediation. It has become an important source of high quality water for wildlife in an area of high total dissolved	

Appendix F
Public Comments and Agency Response

#	Comment	Response
	solids (TDS) playa lakes. It also has esthetic value. Three (3) panoramas of the lake taken over four (4) years are included below: Kennecott Uranium Company does not want this unique feature endangered by oil and gas development.	
30	**Kennecott Uranium Company: Mine Permit Area/Nuclear Regulatory Commission (NRC) Bonded Area** The areas described within the Notice lie within the Department of Environmental Quality (DEQ) mine permit area for Permit to Mine #481 and within the Nuclear Regulatory Commission (NRC) Bonded Area for Source Material License SUA-1350. The Department of Environmental Quality (DEQ) mine permit area for Permit to Mine #481 and the Nuclear Regulatory Commission (NRC) Bonded Area for Source Material License SUA-1350, are shown on the map in Appendix 8. Kennecott Uranium Company is responsible for uranium mining and processing related activities and associated disturbances in these two (2) areas. Kennecott Uranium Company has substantial land holdings in the Great Divide Basin including (two (2) State Leases and 1,581 unpatented mining claims (mill sites and lode mining claims) and land holdings on and around Green Mountain including (four (4) State leases and 1,423 unpatented lode mining claims) that contain potential resources to be used to feed the mill when market conditions warrant. The uranium market has recently been improving with the price climbing to $41.75 per pound (Uranium Exchange - Monday, November 10, 2014), up $5.00 per pound since Monday, November 3, 2014. In addition to the lands held directly by Kennecott Uranium Company, Rio Tinto's exploration subsidiary (Rio Tinto is also the parent of Kennecott Uranium Company) holds additional unpatented lode mining claims and State Leases south of lands held directly by Kennecott Uranium Company. Given the large land holdings associated with the project, rising uranium prices, and the possession of current permits and licenses, overlapping oil and gas activities could significantly hinder Kennecott Uranium Company's substantial, already permitted and constructed Sweetwater Uranium Project.	See Response to Comment #25 and 26 Kennecott Uranium Company currently does not have any proposed or approved Plan of Operations with BLM to conduct additional uranium mining or construction activities on their unpatented lode mining or millsite claims.

Appendix F
Public Comments and Agency Response

#	Comment	Response
31	**Kennecott Uranium Company: Conclusions** Kennecott Uranium Company has reviewed this notice and requests that: • any leasing of Federal minerals underlying the surface and mineral estate held by Kennecott Uranium Company be indefinitely deferred and that; • leasing of Federal minerals be indefinitely deferred on Federal lands held by Kennecott Uranium Company's unpatented lode mining claims and/or mill sites in the areas where Kennecott Uranium Company is currently performing various activities related to the Sweetwater Uranium Project, specifically Sections 2, 3, 9, 10, 11, 12, 14 and 15 of Township 24 North, Range 93 West. Oil and gas development on and around these lands will be detrimental because: • The lands contain one of the three (3) remaining conventional uranium mills in the United States with a performance based operating license granted by the Nuclear Regulatory Commission (NRC) the continued standby status of which has been declared to be in the public interest by that agency. Oil and gas activities would substantially interfere with activities at this location. • The lands contain an operating (40 CFR Part 61 Subpart W) tailings impoundment containing 2 % million tons of 11e.2 byproduct material which is a restricted area. • The lands contain the reclaimed Sweetwater Pit that contains a lake containing 1.2 billion gallons of bioremediated water that to the best of the company's knowledge is one of only four (4) such lakes so reclaimed, This lake contains water that is of substantially better quality that that found in nearby playa lakes and is a source of unique high quality wildlife habitat. Oil and gas activities have the potential to degrade this feature. • These lands contain areas hosting wells and a groundwater pumpback system related to a Nuclear Regulatory Commission (NRC) mandated corrective action program. Oil and gas activities would interfere with these activities. • These lands contain planned sites for additional, already approved (Nuclear Regulatory Commission (NRC)) facilities including additional tailings impoundments, evaporation ponds and diversion channels. Oil and gas activities could interfere with the construction of these already permitted facilities. • Kennecott Uranium Company possesses a performance based operating Nuclear Regulatory Commission (NRC) license (Source Material License	See Response to Comment #25 and 26

Appendix F
Public Comments and Agency Response

#	Comment	Response
	SUA-1350), a Department of Environmental Quality (DEQ) Permit to Mine (Permit to Mine #481PT), other associated permits and substantial land holdings related to the Sweetwater Uranium Project all of which are being maintained at a high level in anticipation of resuming operations when market conditions warrant. The uranium market has recently been improving with the price climbing to $41.75 per pound (Uranium Exchange - Monday, November 10, 2014), up $5.00 per pound since Monday, November 3, 2014.	