APPENDIX E

RESPONSE TO COMMENTS

ID/ Issue	Comment	Response
T. Wright Dickinson Vermillion Ranch, Limited Partnership 609 5th Ave W., Rock Springs WY 82901		
1. Groundwater	Vermillion holds numerous State appropriated water rights for agricultural and domestic purposes within and near the project area. Vermillion's Property Rights and Permitted actions may be adversely affected if the water resources are not appropriately protected during the seismic project.	Applicant-Committed Environmental Protection Measures have been developed in the EA and included in the Decision Record to ensure that no adverse effects occur to appropriated water rights. Additional protection measures include a pre-project peak-particle motion study and post-project analysis of source seeps and springs. Project activities requiring shot hole drilling and detonation will not occur on private lands and within 500 feet of riparian areas or 100 feet of all ephemeral channels.
2. Surface Water	Vermillion believes the water pipelines are correctly identified but requests restoration requirements if they are damaged.	Applicant-Committed Environmental Protection Measures include avoidance of shot drilling and detonation activities within 250 feet of water pipelines.
3. Groundwater	Main concern is the geologic and hydrologic formations that create the springs and seeps in the area may be adversely disturbed by the seismic energy source used in the survey. Vermillion believes that the identified Buffers 1320 ft and 500 ft respectively for springs and riparian vegetation are arbitrary and not scientifically tailored to the site specific geology of the area.	Please refer to response to Comment No. 1.
4. Groundwater	The individual springs on BLM lands are at different (higher) elevations then those on private land and may be more susceptible to adverse impact from seismic energy sources (explosive). Vermillion had a spring damaged on its BLM permitted lands with no restoration requirements by the BLM and has since developed seismic agreement to prevent such a similar occurrence. Vermillion acknowledges technology has changed but encourages safeguards unless the mineral developer (BLM or Devon) agrees to accept full restoration responsibility for any lost springs.	Please refer to response to Comment No. 1.

ID/ Issue	Comment	Response
5. Groundwater	Vermillion's private lands contain several large springs which irrigate and create riparian areas which livestock and wildlife use. These large springs from the McKnight spring west to the Scrivner springs appear to be in a line. 20 years of personal observation demonstrate a flow rate that is directly determined each year by the amount of snow pack and precipitation. This would appear to indicate a hydrologic connectivity that is very unique and should be well understood so as not to inadvertently damage it.	Comment noted.
6. Groundwater	While there may be some historical rational for the current BLM buffers Vermillion believes there should be a more scientific approach. To Vermillion it is not the distance from the spring as much as it is the potential for the energy source used to disrupt the water flow to the surface. Encourages the BLM to develop a better understanding of the area's water resources including tributary aquifers and to identify the appropriate site specific standard that will protect those resources. At the very least riparian buffers should not be any different than springs since they are a result of impervious layers bringing water to the surface just like springs.	Please refer to response to Comment No. 1.
7. Groundwater	Vermillion is more comfortable with Vibroseis seismic methods and would prefer their use where possible.	Heli-portable seismic methods would result in significantly less soil and vegetation disturbance than the four to five heavy (62,500 lbs.) vibroseis trucks that would be required. Use of vibroseis would also not be feasible on approximately 30-40 percent of the Project Area due to steepness of terrain.

ID/ Issue	Comment	Response
8. Groundwater	Vermillion encourages BLM to adopt appropriate scientific methods to detect seismic energy source impacts on water resources and develop appropriate standards that will protect those resources. Vermillion has consulted with BLM and Devon and they have agreed to conduct three seismic energy source tests away from any known springs but in different geologic and soil types to determine how different shots sizes would affect particle motion sensors, not to accede the .02 standard as a bench mark.	Comment noted.
9. Groundwater	Encourages BLM and Devon to conduct before and after hydrologic flow tests on the springs and 1 year later on the anniversary date. Request to include private springs as well as the BLM springs. Further encourages that an independent third party monitor all of the springs recording and assuring that the standard is not acceded.	Please refer to response to Comment No. 1.
10. Groundwater	Encourages the BLM and Devon to adopt a not to accede seismic energy standard. Offer .02 particle motion standard in the attached document as an example unless there is a more appropriate standard for the site specific geology and energy source used in the project area.	Comment noted.
11. Groundwater	Encourages BLM to include a not to accede diminution of flow standard and a responsibility for restoration if damage is done to the springs by BLM authorizations including our private water resources.	Comment noted.
12. Groundwater	Requests that a copy of all hydrologic and seismic monitoring data be made available to Vermillion.	Results of the survey methods and report will be available in the BLM Rock Springs Field Office for review during regular business hours.

Cathy Purves, Technical Advisor **Trout Unlimited** **315 Main Street, Suite 11, Lander, WY 82520**		
13. Cumulative Effects	Expressed concern about the expansion of oil and gas development in southwestern Wyoming, and that the expansion rate is not being considered from a cumulative analysis perspective or landscape scale analysis by the BLM.	A cumulative affects analysis was carried out as part of this EA. The analysis looked at impact on the environment resulting from incremental impact of the proposed action when added to other past, present, and reasonably foreseeable future actions, regardless of what agency or person undertakes such other actions in and near the project area. While the cumulative effects analysis did not look at the oil and gas development across southwestern WY, it did examine oil and gas development in and near the Project Area.
14. Groundwater, Surface Water, Wetlands, Wildlife, Vegetation & Soils	Notes that the highly erosive soils, the natural springs and groundwater recharge area, the limited vegetation cover, the unique qualities of the high desert ecosystem with its associated riparian and wetland complexes, and the considerable big game crucial winter range all contribute to this area's vulnerability to impacts and that TU remains concerned about how energy development will harm this area.	Applicant-Committed Environmental Protection Measures are being implemented to ensure that the resource values in the project area will be protected. The project would temporarily disturb approximately 78 acres, which will be reclaimed as the seismic testing progresses. No project activities will occur on private land where riparian and wetland complexes occur. A 100-foot buffer on ephemeral channels and a 500-foot buffer on riparian areas would also provide additional protections. Timing stipulations require that project activities in designated big game crucial winter range be suspended by November 15. The EA provides further detailed analysis of the project area resources and found that there was not expected to be any significant impacts as a result of this project; therefore, resulting in a finding of no significant impact (FONSI).
15. Wildlife, Recreation	Horseshoe Basin is considered a high value wildlife and recreation area by the Wyoming Game and Fish Department and the public citizens of this state. Provides list of resource attributes that require protection.	BLM acknowledges and agrees that the Project Area contains high value wildlife and wildlife-related recreation opportunities. The BLM is coordinating with the WGFD to ensure that the project does not result in any lasting wildlife impacts. Applicant-Committed Environmental Protection Measures to protect wildlife are included in section 2.2.3.8 of the EA. These include the conclusion of operations by November 15th during the crucial winter range period. There may be some short term temporary impacts during hunting season resulting from increased traffic and helicopter activity during the hunting season (see section 4.9.1.2, Hunting, for further details).

16. Groundwater, Surface Water, Wildlife	The BLM stated that specific surveys will be completed prior to any approval or start of any seismic activities. TU requested the hydrologic and biological survey (among others) information but while it was supposed to have been collected, it was not available. TU requests that this information be made available in order that a thorough Environmental Analysis (EA) is conducted.	The hydrologic and biologic surveys were carried out during the third and fourth weeks of August 2008. Reports were completed on area springs, seeps, and riparian areas; project area vegetation; and sensitive animal species such as the pygmy rabbit. The reports were completed and the results have been incorporated in to this EA. Copies of the reports may be obtained from the BLM RSFO.
17. Wildlife, Fisheries	The BLM has an obligation to the public to ensure that any extractive development activities that occur in this area contacting critical wildlife and fishery resources are approached with a high level of respect to the natural renewable resource values.	The EA was carried out with in accordance with the National Environmental Policy Act (NEPA) under 40 CFR Parts 1500-1508, Mineral Leasing Act, Onshore Oil and Gas Order (43 C.F.R. § 3161 and Order 1), and BLM Handbook H-1790-1, which outline the requirements that the BLM and project proponent must follow in order to protect the resources found in the Project Area. BLM guidance is also provided by BLM Handbooks 3150-1 (Onshore Oil and Gas Geophysical Exploration Surface Management Requirements), 4180-1 (Rangeland Health), and 8120 (General Procedural Guidance for Native American Consultation); and BLM Manuals MS-3150 (Onshore Oil and Gas Geophysical Exploration Surface Management Requirements), MS-4180 (Rangeland Health Standards), MS-6840 (Special Species Management), and MS-8140 (Cultural Resources). In addition, BLM was guided by the Federal Land Policy and Management Act of 1976 (FLPMA) and the Endangered Species Act of 1973, as revised (ESA) in consideration of the natural resources in the proposed Project Area. Please note that the Project Area boundaries were reduced from the one included in the NOI. Canyon Creek and the associated Four J Basin are no longer in the project area, and there are not any creeks in the Project Area that contain Colorado River Cutthroat Trout, though potential downstream effects were addressed in the A.

18. Special Status Species (Fish)	The area waters directly impact the survivability of Vermillion Creek's CRCT populations. Sedimentation in streams that flow into Vermillion Creek could negatively impact the status of the CRCT. Requests that no activity occur within one-quarter of a mile of any noted creeks given the highly erodible nature of these soils and streambank areas.	Measures to protect that area streams from erosion and sedimentation will be undertaken. These include establishing a no seismic activity buffer of 100 feet around streams/ephemeral channels, a 500-foot buffer around riparian areas, and a ¼-mile buffer around springs. In addition when roads are wet, travel will be restricted if 4 plus inch ruts are possible. Total short-term surface disturbance would be approximately 88.8 acres, with no long-term disturbance. Other than the shot holes, no vegetation or soils is expected to be removed.
19. Special Management Areas	Requests that areas identified as closed to surface disturbance activities be managed as such, including the Pine Springs ACEC and the Pine Mountain Management Area.	All RMP and lease stipulation closure requirements will be followed. Waivers from some timing limitations can be requested by the project proponent. BLM would review any such waivers, and if appropriate, approve requested waivers the BLM. The Pine Mountain Management Area is not closed to surface disturbance, as stated in the Green River RMP.
20. Special Management Areas	Manage the Pine Mtn. Management Area as the avoidance area as defined in the GRRMP. This includes prohibiting rights-of-way and surface disturbing activities.	While the Pine Mountain area will be managed as an avoidance area for rights-of-way and surface disturbing activities, it is open to mineral leasing and related exploration and development activities with appropriate mitigation requirements (controlled surface use) applied to protect all other resource values. The Pine Mountain area has been withdrawn from the proposed seismic survey; therefore, there would be new roads or surface disturbances as a result of the Proposed Action.
21. Special Management Areas	Manage the aquifer recharge zones in the area as defined in the GRRMP, including limiting road density, surface disturbing activities, and surface occupancy.	According to the RMP "Aquifer recharge zones in the area will be managed to protect groundwater quality and aquifer function. Protection includes limiting road density, surface disturbing activities, and surface occupancy in identified recharge zones to maintain them in a healthy and functioning condition". No new roads are planned, surface disturbance is limited to 88.8 acres in the short term and none in the long term, and beyond the staging areas, no surface occupancy is planned. The Proposed Action will not require any blading or grading.

22. Air Quality	Protect the air quality conditions necessary to maintain a healthy and balanced ecosystem. Consideration of future development scenarios and their impacts must be considered in the landscape evaluation of this project.	Helicopters and vehicles used to transport crews and equipment are likely to result in some short-term increases in particulate matter and dust. The short-term duration and limited scope of this project will not result in any meaningful increase in emissions. The reasonably foreseeable development was included in the cumulative effects analysis section, including the approved but not yet constructed wells.
23. Water Quality	As indicated in the recent federal climate change directive the BLM should manage for any impacts, short-term and long- term, that might affect water quality issues within an ecosystem from a climate change perspective.	This memorandum authorizes senior staff from the Environmental Protection Agency and the Departments of Agricultural, Commerce, Defense, and Interior to cooperate to address the water-related consequences of climate change. This directive primarily deals with sharing information between agencies. This document does not require the BLM to manage impacts that might affect water quality issues within an ecosystem from a climate change perspective. A reference to this can be found at: http://www.epa.gov/water/climatechange/
24. Wildlife & Wildlife Habitat	The proposed activities conflict with the habitat protection measures in the GRRMP. There are inconsistencies between the premise that lands leased for minerals and the GRRMP's statements about improving and protecting watersheds, riparian areas and CRCT habitat. TU suggests that BLM consider the importance of this area and the long term impacts that would most likely occur with the approval of this seismic activity. Strict NSO stipulations should be included as part of the approval conditions.	According to the RMP the Pine Mountain management area is not recommended as part of the Greater Red Creek ACEC because Pine Mountain does not contain the same sensitivity of resources found in Greater Red Creek, even though the watershed resources in this area are interconnected with those of Greater Red Creek. The area does not contain populations of the Colorado River cutthroat trout that the Greater Red Creek area has and thus will not need to receive the same management emphasis. Still there are established seismic activity setbacks for all manmade and natural water resources features help to ensure that the watershed and riparian improvement goals are met.
25. Special Status Species	Within the project area are more than 37 species identified as species of greatest conservation need, and several are being considered for ESA. Development further threatens the stability of these species. TU strongly urges the BLM to consider the long-term ramifications of what oil and gas development in this area might do to these sensitive wildlife species.	The Wyoming Natural Diversity Database and the WGFD Comprehensive Wildlife Conservation Strategy (2005) were queried for sensitive species. Those species that occur on these lists and BLM's Sensitive Species List received particular attention. A detailed field survey was carried out to identify habitat for the black-footed ferret, white-tailed prairie dog, greater sage-grouse, pygmy rabbit, sensitive plants and others. No white-tailed prairie dog complexes meeting the minimal 200-acre size requirement for black-footed ferrets. Sage-grouse habitat has established timing and setback restrictions in place. Pygmy rabbit burrows have a 100 feet seismic activity setback.

26. Recreation (Hunting)	Hunters will experience some level of disturbance from the proposed activities, since all three big game seasons will be open during the proposed seismic activity time period. TU respectfully requests that all seismic activity scheduled for the 2008 fall dates be halted until the summer of 2009 in order to avoid conflicts with hunters.	BLM acknowledges that seismic survey activities would temporarily conflict with hunters who hold permits to hunt mule deer and elk in the Project Area in 2008. BLM considered many factors in its decision to allow seismic activities during established hunting seasons in hunt areas encompassing the Project Area. These factors included how delaying the project to 2009 would conflict with area sage-grouse nesting and brood-rearing periods in spring and summer, and young raptors fledged from area nest sites. Pine Mountain was also originally considered part of the proposal; however, the BLM and the project proponent agreed to avoid seismic activities in this environmentally sensitive and important recreational area. By reducing the seismic survey to a relatively small area (24.95 square miles), conflicts with wildlife and recreation were further reduced in the short term and long term. BLM also weighed the value of having the seismic survey conducted in about a 45-day window in 2008 in an area where recoverable natural gas reserves are, as yet, unproven. A seismic survey will provide the necessary data to determine if recovery is technically and economically feasible. If not, the project proponent may not propose to continue conducting any additional exploratory activities in the area.
27. Mitigation	TU requests that all reclamation efforts and plans be analyzed prior to any activity, and full monitoring and enforcement be implemented in order to prevent any sedimentation, erosion, weed infestation and invasive species occupation or air quality degradation.	The NEPA process allows for the BLM to review all the reclamation efforts and plans for operation prior to the commencement of any activity. The NEPA process also allows for modification and additions to proposed mitigation efforts as a result of the impact analysis. Applicant-Committed Environmental Protection Measures are the result of the BLM review of proposed project activities and the measures necessary to protect soil, vegetation, and air quality. In addition, the BLM carries out monitoring as time and resources allow on ongoing projects. The BLM has the legal authority to take enforcement action should that become necessary, including stopping work and requiring additional reclamation.

28. Water	Water management plans, including surface impoundments, well drilling and testing, and dust abatement need to be strictly observed.	There is very limited water management activities related to this project. There are no surface impoundments, well drilling or testing activities. Dust control activities will be coordinated with the BLM as described in the Applicant-Committed Environmental Protection Measures in the EA and Decision Record.
29. Regulatory Responsibility	TU urges the BLM to act responsibly in their analysis for this environmental assessment and to place restrictions and specifications which place the burden of responsibility directly on the proponent's shoulders.	The BLM acknowledges its responsibility in carrying out this NEPA process and that the project proponent has a high level of burden in ensuring that resource impacts are kept to a minimum and that regulations are being met.
Mary Thoman, Chairman **Sweetwater County Conservation District**		
30. Water, Soil	The District it is one of the few governmental entities with express authority to address resource issues, in cooperation with private landowners or state or federal land management agencies on private, state, and federal lands.	The BLM appreciates the input and technical knowledge that the SWCCD can provide in this and other projects in the County. The mission of the conservation districts to direct programs protecting local renewable natural resources parallels the BLM mission.
31. Regulatory Responsibility	SWCCD wishes to provide comments on the draft EA to ensure that BLM takes a look at all relevant matter of environmental concern. Asks that it be treated as an interested party and receive notice of the EA and any decision.	Due to the limited scope of the proposed project the BLM did not circulate the EA to the cooperating agencies or the public. The SWCCD scoping comments were very thorough and did help to guide the development of the EA.
32. Mitigation	The District agrees with the issues identified in the Scoping Notice and recommends two more: (1) incorporation of a mitigation plan which responds to each of the identified issues and a monitoring plan to ensure implementation of the identified mitigation measures and (2) the need for the travel plan to reflect coordination with local government, particularly the county, permittees, and landowners to resolve potential travel and rights-of-way issues.	(1) While the EA does not have mitigation and monitoring plans, mitigation measures are included in a number of sections including the Applicant-Committed Environmental Protection Measures (section 2.2.3), the mitigations sections in Section 4, and the Conditions of Approval (Appendix D). Monitoring is carried out as part of routine BLM monitoring efforts. Monitoring plans are generally not needed for a short duration project such as the Proposed Project. (2) While there is not a travel plan *per se*, as part of the EA and the initial surveying of the Project Area, a transportation map was developed showing all the existing roads and two tracks that are allowed to be used during project implementation. No travel outside of these mapped roads and two tracks will be allowed.

33. Regulatory Responsibility	Because BLM proposes an environmental assessment (EA) rather than an environmental impact statement (EIS), it must adopt additional mitigation measures so that the total environmental effects of the project remain below the level of significance and support the finding of no significant impact (FONSI) (cases cited).	Part of this EA was a finding of no significant impact (FONSI) and Decision Record). Applicant-Committed Environmental Protection Measures and additional mitigation measures have been developed as part of this EA process to reduce project-related impacts to a level that does not result in significant effects. Because of the nature of the project and the required mitigation measures, the BLM was able to issue a FONSI determination.
34. Mitigation	The EA needs to include a mitigation and monitoring plan to address the identified impacts and implementation of the prescribed mitigation. The FONSI needs to be supported by clearly stated and enforceable mitigation measures.	Please see response to Comment No. 32.
35. Groundwater	Explosive exploration activities may interrupt the hydrologic systems that determine flows, seeps, and ephemeral drainages. The project area provides rangeland to ranches that depend on these local important water supplies for their livestock. Springs also provide year-round flows important to fish habitat.	The springs in and near the Project Area are of critical importance in this arid landscape. All prudent measures to protect the spring's area are included in the mitigation measures for the Proposed Project. These include carrying out a spring and seep survey and establishing a ¼ mile-setback for the drilling and detonation of shot holes occurring near springs. In addition spring monitoring by a qualified hydrologist will be carried out before and after any seismic work in the area.
36. Mitigation	The scoping notice indicates that BLM would apply a 100' instead of a 500' riparian width buffer on ephemeral drainages. The District questions this decision, because ephemeral drainages are managed as riparian areas for purposes of rangeland health and are ephemeral due largely to the lack of precipitation in the region, rather than the lack of a hydrologic connection.	There were not any riparian areas mapped on BLM–administered lands within the Project Area. There were wetland areas and limited woody vegetation associated with many of the springs. BLM disagrees that the lack of riparian areas are more a climate issue than a lack of hydrologic connection. The 100 feet (ephemeral) and 500 feet (riparian) mitigation measures would provide adequate protection in the event of erosion and sedimentation resulting from seismic activities. The risk of erosion and sedimentation from the drilling and detonation of shot hole 40 feet below ground surface is considered low.
37. Mitigation	The mitigation plan needs to include a control program for noxious weeds as classified by the State of Wyoming as part of reclamation. The project area is not heavily vegetated and native vegetation continues to reflect the impacts of an extended drought and even minor surface disturbance will create opportunities for expansion noxious weeds.	A noxious weed control management program will be implemented to prevent or control the spread of noxious weeds at the proposal site. All applicable equipment, including on-road and off-road equipment, will be cleaned to remove weed seed and soil (which may contain weed seeds), prior to commencing operations on public lands within the Project Area. Weed infestations resulting from the seismic operations will be treated, as necessary, by an herbicide approved by the BLM AO to prevent additional weed spread.

38. Mitigation	Reclamation should provide first for site stabilization as soon as possible. The District recommends modifying the reclamation plan to allow for a sterile mix of non-native and native seeds to facilitate plant establishment, and then require monitoring and reseeding if needed. Soils in the project area are alkaline and reclamation can be very difficult. Native plants found in alkaline soils grow very slowly and there is no assurance that seeding one time will be sufficient for successful reclamation.	Very limited vegetation removal will occur as a result of this project, and will be confined mainly to the shot hole itself, otherwise most of the disturbance will result from vegetation trampling due to foot traffic, which may not require any revegetation efforts. Disturbed areas from shot hole drilling and helicopter staging areas will be reclaimed and restored with a BLM-approved native seed/shrub mix. Restoration will be to pre-project topographic contours and conditions and be implemented within one month of project completion. However, BLM may approve the use of sterile, nonnative species if the degree of disturbance (e.g., at staging areas), warrants rapid stabilization. Interim progress of reclamation will be monitored as appropriate by the BLM and Devon after the initial growing season. Where it has been determined that revegetation success has not been met, the BLM and Devon will meet to decide on the best course of action necessary to meet the reclamation goal.
39. Mitigation	The District recommends that the mitigation measures include: Coordinate seismic work with affected grazing permittees; Repair or replace all damaged structures, including loss of water resources; Pay for the loss of livestock caused by the seismic operations; Coordinate reclamation and other post-seismic work with grazing permittees.	The measures recommended by the SWCCD will be implemented as part of the proposed project.

40. Noise	The District questions the availability of scientific data to support specific noise levels or even the feasibility of monitoring noise levels over the long term, the EA must deal with the issue of noise impacts on sage grouse.	Overall, potential disturbance to sage-grouse from project activities associated with Proposed Action is expected to be short term and minimal in extent. The greatest potential for disturbance would occur in those sagebrush swales located throughout the proposed Project Area where potential fair to excellent cover occurs in association with riparian areas and moist drainages. The Proposed Action would not occur during sage-grouse strutting season (March – May), early brood rearing period (May – late June/early July), or during sage grouse late brood rearing (late June/early July – August). In addition, no project activities will occur within 400 feet of known lek sites and habitat. The disturbance would be short term and limited to about a 45-day period in 2008. Human presence and shot hole detonation would likely cause birds to disperse to adjacent suitable cover. No activities would occur to the three leks identified in the Project Area because the Proposed Action would avoid seismic activities within 400 feet of a lek. Noise from helicopter activity and human presence could temporarily cause birds to flush.
41. Groundwater, Fisheries, Mitigation	The blasting has some potential to affect hydrological resources within the project area, which in turn may affect the fisheries. The EA must address and mitigate these potential impacts.	Please see response to Comment No. 35.
Joy Owen, Field Director **Wyoming Wildlife Federation** **P.O. Box 106, Cheyenne, WY 82003**		
42. Wildlife (Big Game)	Horseshoe Basin and Four J Basin are winter-yearlong ranges for mule deer and antelope, yearlong range for elk, and spring-summer-fall ranges for mule deer and antelope. The area also includes migration routes for antelope and elk. Sensitive species (Species of Greatest Conservation Need) are also important here.	Please see response to Comment No. 25. Big game range information is included in the EA. There is a critical winter range closure stipulation for the entire Project Area. Sensitive species studies were carried out as part of this project, and mitigation measures put into place.

43. Wildlife (Sage-grouse)	Adequate and suitable sage grouse habitat should be protected to prevent a further species decline. Reducing habitat and increasing the level of noise during breeding and brood rearing times will reduce the chances sage grouse populations' viability. This seismic survey will be out of compliance with the BLM's management responsibilities, as described in the Green River RMP.	Please refer to response to Comment No. 40.
44. Wildlife (Big Game, Recreation Hunting)	Seismic activities in September and through November will take place through antelope, elk and mule deer hunting season. Antelope hunters will experience the largest disturbance to their activities. The impact includes hunt areas 112 for antelope, 32 for elk, and 102 for deer – all of which are managed as limited quota areas and produce high quality animals.	Please refer to response to Comment No. 26.
45. Recreation (Hunting)	A 2006 in the Rocky Mountain states found that 55% of the public valued their hunting and fishing activities away from motorized vehicles and roads. A 2007 survey showed that 86% of the public favored limiting or banning energy development on certain public lands that are unique and have special fish and wildlife management resources that offer different or unique hunting and fishing opportunities.	BLM acknowledges the value of dispersed recreation, particularly as it pertains to residents of Sweetwater County, and non-residents that visit the County. This EA focuses on the short-term effects of a seismic survey. Any decisions regarding energy development in the Project Area will require additional NEPA analysis should such development be proposed in the future. BLM acknowledges that under a development scenario additional public input will be necessary before approving any development activities that would result in a longer term effect on recreation resources.
46. Noise, Wildlife	This proposed development potentially leads to animal displacement due to staging area placement, noise via helicopter, trucks and humans, construction of the infrastructure, increased traffic from trucks, and the presence of machinery and workers. Increased human activity is also a concern due to the potential for animals to be harmed through harassment, poaching, or negligent driving.	Please refer to response to Comment No. 15. The two 10-acre helicopter staging areas would occur in pronghorn crucial winter range and mule deer winter range. Project activities associated with the use of the staging areas would trample vegetation; however, the loss would be short-term and negligible because no blading or grading would occur. Any disturbance would be reclaimed immediately following completion of the seismic survey; direct impacts to forage from project activities would be minimal. Removal of vegetation, especially those preferred shrubs (e.g., mountain mahogany, antelope bitterbrush, and Wyoming big sagebrush) and herbaceous material with a high nutritional value, would be avoided by equipment and crews.

47. Wildlife	Establish thresholds for wildlife impacts that will include indicators, a policy to mitigate or curb the impacts, and prevention methods to maintain population numbers.	BLM acknowledges that thresholds and indicators would be useful for development activities requiring more extensive NEPA analysis; however, the establishment of thresholds and indicators for a proposed action that will be short-term and temporary is unnecessary. For example, noise would temporarily displace most animals, but has a low risk of causing direct mortality. Some less mobile species may potentially become more vulnerable to predators if displaced from cover. Habitat fragmentation would not occur because surface disturbance would be isolated and small (e.g., 3-foot radius around shot holes) and be reclaimed. No new roads and no blading or grading will occur. For this project, additional requirements were also established for protection of BLM sensitive species including field surveys buffers for pygmy rabbit habitat. There are timing limitations for critical winter range for big game. There are ¼ to ½ mile timing limitations for active raptor nests. There are 500-foot setbacks from riparian areas and 100-foot buffers around streams and channels. Given the relative short duration of field portion of this project, the buffers and timing limitations are considered sufficient to protect important wildlife resource values.
48. Wildlife, Surface Water	Provide current inventory studies and a full analysis (which should be conducted before the proposed project can be approved) of wildlife habitat, wildlife species, and current riparian and stream habitat conditions.	Please refer to response to Comment No. 16.
49. Mitigation	Develop action plans for monitoring, addressing thresholds, and mitigation.	Please refer to responses to Comment Nos. 16, 25, 27, 32, 37, 40, 42, and 43.
50. Noise, Wildlife	Provide the most current impact data to wildlife from 3D seismic survey development utilizing helicopters.	An examination of the available information on potential impacts to wildlife from helicopters is included in sections 4.5.1, and 4.6.1.

51. Wildlife, Mitigation	Identify migration corridors for all wildlife species within the project area and on a landscape scale that considers migration corridor changes due to the development. Also, provide an action plan for when migration corridors are fragmented or lost.	Information on migration routes was obtained during discussion held with the WGFD in July 2008. The impact on migration routes from the Proposed Action would be short-term and minimal. However, increased traffic throughout the proposed Project Area may disturb migrating animals where migration routes cross roads or two-tracks. The use of light vehicles on existing roads and two-tracks would also increase the risk of human-wildlife collisions. The risk of human-wildlife collisions would remain low where vehicles obey the appropriate speed limits and minimize travel during pre-dawn and post-sunset periods when animals are more active. Because no new roads would be constructed and surface disturbance would be short-term and temporary, no habitat fragmentation would occur.
52. Mitigation	Provide an environmental compliance plan that looks at the BLM and how enforcement will occur for monitoring, environmental compliance and remediation on wildlife that will be affected by the project.	This EA and associated decision documents provide much of the information about requirements for monitoring, environmental compliance and remediation that the BLM is requiring of Devon. Given the Applicant-Committed Environmental Protection Measures, Additional Mitigation Measures, and Conditions of Approval, and due to the short duration of the project, an environmental compliance plan is not considered necessary.
53. Wildlife, Mitigation	Supply a comprehensive analysis of the seasonal timing restrictions and the development plan as applied to all wildlife species.	This information is contained in sections 4.5.1, and 4.6.1 of the EA.
54. Wildlife, Mitigation	Establish a mitigation plan with a threshold matrix that addresses wildlife, wildlife habitat, invertebrates, aquatic habitat and stream changes.	Please refer to responses to Comment Nos. 16, 25, 27, 32, 37, 40, 42, and 43. Mitigation measures beyond those proposed in the Applicant-Committed Measures, Additional Mitigation Measures, and Conditions of Approval would also reduce any potential downstream impacts to aquatic systems. Primary aquatic habitats occur on private land that would be avoided, except for the placement of receiver lines. Placement of receiver lines would avoid aquatic areas; those placed on the surface would not require any surface disturbance.

55. Wildlife, Cumulative Effects	Develop a landscape scale cumulative impacts analysis that addresses the development within and outside of the proposed project area. Include how the project will impact crucial habitat and crucial ranges (such as winter, summer and transitional) for wildlife species, including ungulate populations, as a whole. This will entail the issue of species being pushed onto less suitable habitat. In creating this analysis, the BLM must use the most up-to-date big game seasonal range designation maps that the WGFD will provide.	A cumulative effects section (5.0) is included in the EA that deals with the proposed action when added to past, present, and reasonably foreseeable future actions. There is also an analysis of big game impacts in section 4.6.1. The most recent WGFD data was obtained and used in developing this EA.
56. Special Status Species, Cumulative Effects	Develop a cumulative effects scenario that illustrates what may occur to sensitive, threatened or endangered species that are within this project area and will see habitat changes occur.	The proposed 3D geophysical seismic exploration was found to not significantly contribute incrementally to long-term changes or conditions of the major critical elements identified. Any potential adverse long-term cumulative effects of the Proposed Action have been adequately mitigated through project design, Applicant-Committed Environmental Protection Measures, Conditions of Approval, and additional mitigation measures recommended.
57. Invasive Nonnative Plants, Mitigation	Evaluate, mitigate, and develop a plan for invasive plant species.	Please see response to Comment No. 37.
58. Groundwater, Surface Water	Horseshoe Basin and Four J Basin are within a recharge area. Part of the proposal will involve thumper trucks (weighing 62,500 pounds each) and increased traffic on the eastern half of the project. Riparian and watershed conditions in that will be impaired through sediment and nutrient loading within streams as the soils are extremely sensitive and erode easily.	The use of vibroseis truck methods is no longer part of the Proposed Project. All the seismic sources will be from buried explosive charges. The drill rig and associated equipment will be carried to each source point using helicopters (see section 2.2). The use of helicopter portable drill rigs will reduce the area of disturbance and consequently the risk of water quality impacts. In addition, there are setbacks from streams/channels (100 feet) and riparian areas (500 feet) to reduce impacts to those critical resources.

59. Groundwater, Surface Water, Hazardous Waste	The proposed seismic survey project may have an impact on the local and regional groundwater and surface water resources through contamination from storing hundreds of gallons of gas and/or diesel and motor oil at the staging areas. Spills occur and cause harm to groundwater, soils, wildlife, vegetation, fisheries and amphibians.	BLM requires that Devon have an Emergency Response Plan (ERP). If spills of diesel fuel or other hazardous fluids occur during the seismic operations, Devon or their contractors would immediately begin cleanup operations and contact the BLM and other regulatory agencies (e.g., EPA National Response Center, State of Wyoming), as required. Devon would maintain on site Material Safety Data Sheets (MSDS) for all chemicals used during seismic operations, in accordance with 29 CFR 1910.1200(g).
60. Hazardous Waste, Mitigation	Recommend to keep all equipment contained, do not cross streams, and move the staging areas away from any stream or headwaters.	Two staging areas, approved by BLM, will be used for the proposed project, instead of the originally proposed four. The equipment will be stored at the staging area, which is located well away from any surface water bodies. Equipment will be carried by primarily by helicopter. It may also be moved by vehicles on established roads or two tracks which generally have only limited stream crossings or have developed crossings.
61. Surface Water, Groundwater	Provide a complete description of the subsurface hydrology of the project area with information on how the aquifers will be affected by the proposed activities.	Please refer to response to Comment Nos. 21 and 35 and the water resource sections of the EA (Sections 3.2 and 4.2).
62. General	Proper baseline studies need to be conducted prior to the authorization of the proposed development.	This is not a development project, so there would not be any drilling of oil or gas wells.
63. Hazardous Waste, Mitigation	Implement a monitoring system for detecting spills around the proposed project area.	As part of routine operations, Devon would inspect the fuel storage systems and vehicles on a regular basis. Devon will prepare and submit an Emergency Response Plan to BLM before proceeding with project activities.
64. Transportation, Surface Water	Conduct a comprehensive analysis on all waterways and drainages near or crossing roads and staging areas.	Vehicle water crossing would only occur at existing roads and two tracks. In addition, Devon has committed to avoiding ephemeral crossing when water is flowing. As a result there is not expected to be any measurable impact to the area waterways, and a comprehensive analysis would not be warranted.
65. Groundwater, Surface Water	A complete and accurate assessment of the impacts (such as contamination and demands on water), including reasonably foreseeable impacts and baseline sampling, should be conducted for ground and surface water related to the proposal prior to approval of this proposed development.	Please refer to the water resource (Sections 3.2 and 4.2) and cumulative impact (Chapter 5) sections of the EA.

66. Mitigation	We recommend that all equipment be contained, do not cross streams, and move the staging areas away from any stream or headwater. Preferably move west of the proposed seismic survey area.	Please refer to responses to Comment Nos. 54 and 60.
67. Air Quality, Cumulative Effects	The BLM, under the EPA, needs to conduct a comprehensive air quality model and analysis. Comprehensive and current baseline data for air quality is necessary to fully understand the cumulative effects especially with the massive growth of development within the last five years.	Emissions from helicopters, drill rigs and passenger vehicles are considered *de minimus* and air quality monitoring is not considered appropriate for a relatively short duration project such as this seismic EA.
68. Air Quality	Ambient air monitoring programs should be utilized and documented with the goal of exceeding the stated mitigation goals. An analysis should be provided with particular focus on visibility and regional haze.	Ambient air monitoring programs are generally not included with EAs, which are based on existing information.
69. Air Quality	If the BLM finds that this comprehensive and current air quality data is lacking while the next stage of this proposed plan is being established, the plans should be placed on hold until such data is complete.	Since air impacts are considered *de minimus*, the air quality data is not needed for this Project. BLM may require a more comprehensive air quality analysis in a more comprehensive NEPA document should Devon decide that results of the seismic survey warrants further exploration and development.
70. Air Quality	The BLM should identify all air quality impacts and mitigation criteria on the onset for the project area. All preventions and remedies that the BLM can implement should be identified. Performance goals and objectives can be established to improve the quality of air and to reduce cumulative impacts that exist.	As part of the EA, air quality mitigation measures are included in the BLM Conditions of Approval and in Devon's Applicant-Committed Environmental Protection Measures.
71. Recreation, Wildlife & Wildlife Habitat	The Wyoming Wildlife Federation recommends that the Horseshoe Basin 3D Seismic Survey be denied so that the existing resource values can be maintained or enhanced. The project, if allowed, would endanger recreation opportunities; reduce the health of the wildlife and wildlife habitat, damage recreation, wildlife, wildlife and aquatic habitat, fisheries, soils, groundwater and surface water, and air quality.	The BLM found that the implementation of the Proposed Action in conjunction with the required mitigation actions is in agreement with the RMP and that no significant impacts are expected. Impacts to resources listed by the commenter would be limited in scope, short duration in nature and would result in any significant impacts.

72. Regulatory Requirements, Hazardous Waste, Water Quality, Nonnative Invasive Species, Recreation (Hunting), Wildlife (Sage-grouse)	Requests an EIS be completed for the following reasons: 1) Impacts to streams and drainages from sediment and nutrient loading, from contamination of the streams and drainages through gas and/or diesel spills; 2) Impacts to aquatic species and water quality; 3) Impacts to wildlife habitat from invasive species; 4) Impacts to hunting and recreation that will be seen as unacceptable to the public; and 5) Impacts to sage grouse.	Potential impacts considered critical resources were analyzed in the EA. Based on public comment and BLM analysis, it was determined that the Proposed Action warrants a FONSI, and therefore the Decision Record reflects the RSFO Field Manager's decision that no EIS would be needed. There are also multiple mitigation measures, including Applicant-Committed Environmental Protection Measures and BLM Conditions of Approval that will be put into place to protect the listed critical resources. Please refer to responses to Comment Nos. 16, 25, 27, 32, 37, 40, 42, and 43.
James Montuoro, P.E., WYDOT District Maintenance Engineer **Wyoming Department of Transportation** **Box 1260 Rock Springs, WY 82902**		
73. Transportation	Any work done within the WY 430 highway right of way, such as seismic cable crossings, highway approaches, utility work, etc., will require written permission from WYDOT. They have obtained permission for one highway approach.	Comment noted. No project work, other than project area access, is expected as a result of the Proposed Project.
John Emmerich, Deputy Director WGFD **Wyoming Game and Fish Department** **5400 Bishop Blvd, Cheyenne, WY 82006**		
74. Wildlife (Big Game, Sage-grouse)	Portions of the project area are classified as elk and mule deer crucial winter range. The northern portion of the project area is within a Core Sage Grouse Population Area. The area overlaps antelope, mule deer, elk, and moose hunting areas.	Comment noted. The BLM has incorporated into the EA information obtained from the WGFD for big game ranges.

75. Cumulative Effects	With increased energy development, it is important that this project contribute as little as possible to cumulative wildlife disturbance and displacement. Cumulative impacts should be disclosed.	There is not expected to be impacts to area wildlife populations as a result of this project. Specific steps will be taken to minimize impacts to sensitive species such as buffers around pygmy rabbit dens, and buffers around streams. The impacts to big game are expected to last for a relatively short duration (approximately 45 days). Critical Winter Range closures are in place starting November 15 and running through April 30. Other timing restriction may apply for sage-grouse and raptors if project implementation continues into next spring and summer. Please also refer to responses to Comment Nos. 16, 25, 27, 32, 37, 40, 42, and 43.
76. Wildlife (Big Game, Sage-grouse)	Activities should not extend into big game winter stipulations (November 15 to April 30), grouse protection periods (March 1 to July 15).	These timing and location restrictions are included as Applicant-Committed Environmental Protection Measures and Conditions of Approval.
77. Noise, Recreation (Hunting)	Recommend seismic activity associated with helicopters and explosives terminate five days prior to opening of big game seasons and remain closed for the duration due to the potential to cause significant conflicts for sportsman and displace big game.	Please refer response to Comment No. 26.
78. Recreation (Hunting)	If seismic activities occur during hunting season, field personnel should wear blaze orange for their personal protection.	Comment noted. The project proponent will include this recommendation in their safety plan.
79. Wildlife (Raptors), Mitigation	Recommend that wildlife stipulations in the RMP governing raptor nest sites be implemented, and that all the raptor nests should be recorded.	The EA includes stipulations for active raptor nests. See Table 2-2 for a list of setbacks and limitation dates. If any work is planned for Feb. 1 through July 31, a raptor survey will be conducted prior to any project activities and consultation will occur with BLM and WGFD.
80. Mitigation	Recommend using existing roads, helicopters or personnel on foot, and avoid off road travel during wet or muddy conditions.	The project proponent is required to stay on the established roads and two tracks (see EA Transportation map, Figure 3-6). The Proposed Action has been modified to no longer use vibroseis trucks, but to conduct the survey using heli-portable methods only. Applicant-Committed Environmental Protection Measures requires that vehicles stay off the roads if ruts deeper than 4 inches occur.

81. Surface Water, Mitigation	Recommend maintaining a 100 foot buffer from riparian areas	The buffer for riparian areas is 500 feet, the buffer for streams is 100 feet, and the buffer for springs is ¼ mile.
82. Mitigation	Drill holes should be reclaimed promptly and all cutting removed from the surface.	Drill cuttings would be spread over a radius of approximately three feet around the shot hole. The shot hole would not exceed a diameter of two inches and would be backfilled with soil and cuttings, and contoured to the approximate topography of the area. The shot holes are expected to recover without additional reclamation, with the goal of returning to pre-disturbance conditions within one or two growing seasons.
83. Mitigation	Firearms should be prohibited on all job sites during exploration activities.	No firearms will be allowed in the proposed Project Area.
84. Mitigation	Dogs should be strictly prohibited on all job sites during exploration.	No dogs (Guide dogs excluded) / pets will be allowed in the proposed Project Area.
85. Wildlife	The following species of greatest conservation concern need overlap the project area; tiger salamander, north leopard frog, Great Basin spadefoot, Great basin gopher snake, northern sagebrush lizard, mountain sucker.	Comment noted. Please refer to response to Comment No. 25.
86. Wildlife	Wildlife, especially snakes are at increased risk of being killed by increases in project traffic and road density as they sun or cross the area roads. Also intentional mortalities may occur. If increased development occurs reptile habitats may be fragmented and migration impeded.	The risk of increased traffic related wildlife mortality will increase during project implementation. Applicant-Committed Environmental Protection Measures require that crews drive below the speed limit and at safe speeds to reduce the risk of traffic mortalities. There is no additional road building as a result of this project and the project related traffic increases will be limited to approximately 45 days. Development activities will be addressed in a separate NEPA document, if such a proposal occurs.
87. Groundwater, Mitigation	Request peer reviewed information from the BLM or Devon documenting the 1,320–foot spring buffer provides adequate protection. An independent geologist and hydrologist should confirm this figure and provide assurances that project activities will not damage these critical resources.	Please refer to the response to Comment No. 1.

88. Surface Water, Mitigation	Request peer-reviewed information from the BLM or Devon documenting the buffers around ephemeral and perennial streams. These resources cannot be mitigated if they are altered or destroyed by project activities.	Please refer to the response to Comment No. 1. Peer-reviewed data are not available for the buffers around the streams. The setback distances were selected to be protective of the streams based on BLM and Wyoming Oil and Gas Conservation Commission requirements.
89. Transportation, Mitigation	Recommend that any road ruts as the result of this project will be repaired or reclaimed. Devon should be responsible for road damage caused by increased traffic. Project related traffic on and off road will lead to more "established roads" being developed.	Devon will be responsible for road repair and/or improvements as needed on the existing BLM access roads in accordance with BLM road standards if the damages are a result of the seismic operation. Vehicle use would be suspended if there is rutting greater than four inches in depth occurring.
90. Mitigation	Three staging areas are proposed. The main staging area and the staging area on sec. 3 R102W, T13N will have the least impact on aquatic resources. The third site on private land is immediately adjacent to a drainage/riparian area. Recommend that staging areas where storage or chemical and fuel occur should be kept 500 feet from streams, springs, and riparian areas.	Field operations would be conducted from one of two proposed staging areas located in the SW ¼ of Section 5, T. 12 N., R. 102 W. or the SE ¼ of Section 4, T. 12 N., R. 102 W. One of the two staging areas would be designated as a back-up staging area. Applicant-Committed Environmental Protection Measures and Conditions of Approval require Devon to develop a Spill Prevention, Containment, and Control Plan (SPCC) and an Emergency Response Plan. Devon will also be required to restrict project activities within 500 feet of riparian areas and 100 feet of ephemeral channels.
Bruce Pendery, Staff Attorney and Director of Public Lands **Wyoming Outdoor Council** **444 East 800 North, Logan UT 84321**		
91. Special Status Species	Notes that special status species habitat is to be maintained, habitat is to be expanded, and the BLM is to seek to prevent these species from being listed under the Endangered Species Act (ESA). Sensitive plant species receive like protection under the RMP	Please refer to responses to Comment Nos. 24 and 25.
92. Visual, Wildlife	Asks the BLM to ensure relevant provision in the RMP be fully complied with. Examples include visual resource management, requirements and maintain and improve wildlife habitat.	The BLM has determined that this seismic project would be in compliance with respect to all relevant portions of the RMP. The only NSO areas within the vicinity of the Project Area occur in the Owl Canyon and Canyon Creek areas to protect the visual and sensitive topographic values of the area escarpments. No surface-disturbing project activities will occur in these areas.

93. Transportation, Wildlife (Big Game and Raptors), Recreation, Visual, Special Management Areas	Notes that the RMP maps highlight important resources that must be considered by the BLM, right-of-way avoidance areas (Map 8), big game crucial ranges (Map 15), sage-grouse restriction areas (Map 16), raptor seasonal restriction areas (Map 17), important recreation use areas (Map 21), visual resource management designations (Map 24), and areas of hydrologic concern (Map 26)	Please refer to responses to Comment Nos. 1 - 12, 20, 21, 24, 25, 76, 79, and 80.
94. Regulatory Responsibility	States that the BLM has substantial retained rights and that pursuant to these retained rights it can fully protect the natural environment in leased areas. That not only does the BLM have the right to do this, it in fact has an obligation to ensure full protection of wildlife and other resources as a condition of development of existing leases. In particular the BLM should interpret, and implement, its obligations in light of the policies established by NEPA.	Comment noted. Please also refer to response to Comment No. 17.
95. Regulatory Responsibility	States that Federal Land Policy and Management Act (FLPMA), establishes a requirement to fully protect the natural environment in areas that that have been leased.	Please refer to response to Comment No. 17 .
96. Regulatory Responsibility	Notes that that FLPMA's mandate is to prevent unnecessary or undue degradation imposes dual action requirements on the BLM; and that it must take action to prevent both unnecessary degradation as well as undue degradation of the public lands.	Please refer to response to Comment No. 17.
97. Regulatory Responsibility	FLPMA through its unnecessary or undue degradation clause and other provisions provides the BLM with authority, and indeed an obligation, to protect the natural environment even in areas that have already been leased.	Please refer to response to Comment No. 17.

98. Regulatory Responsibility	Notes that the BLM has policies, regulations, and contractual provisions related to protection of the natural environment, relative to oil and gas development. It goes that the BLM has retained very substantial rights under the standard lease contract, provides a list of lease authority's	Please refer to response to Comment No. 17.
99. Regulatory Responsibility	States that the standard lease and the 3101.1-2 regulation must be considered together to determine the BLM's retained rights to protection of the natural environment.	Please refer to response to Comment No. 17.
100. Regulatory Responsibility	Provides a list of the three rights that the BLM conveys when it issues a lease, and provides a summary of the rights that the BLM has retained. Discusses details about the lessee and BLM lease rights.	Please refer to response to Comment No. 17.
101. Regulatory Responsibility	Makes the point that under the Mineral Leasing Act, the BLM has sufficient authority to regulate development of an oil and gas lease in order to meet its legal obligations under numerous applicable environmental laws and policies enacted to protect the natural environment.	Please refer to response to Comment No. 17.
102. Regulatory Responsibility	Reference regulations for onshore oil and gas leasing related to 43 C.F.R. § 3161, and the BLM retained right to protect the natural environment.	Please refer to response to Comment No. 17.
103. Regulatory Responsibility	Discusses the issue of "takings" related to the issuance of an oil and gas lease, and that the takings issue is not significant in relation to a lease.	Please refer to response to Comment No. 17.
104. Regulatory Responsibility	Requests that the BLM fully consider not allowing the Horseshoe Basin Project to be done "all at once," that it should consider pacing or phasing the project over a period of time so as to fully protect other resources.	Please refer to response to Comment No. 17.

105. Regulatory Responsibility	Notes that the BLM in Wyoming has shown increasing granted exceptions and waivers to them to timing stipulations, and that this trend not be perpetuated, if protection of other resources is desired.	Please refer to response to Comment No. 17.
106. Regulatory Responsibility	Make the case that given the because the project is in special management areas, with their associated resources values, that the project is increasingly likely to have a significant impact, and an EIS should be carried out.	Please refer to response to Comment No. 17.
107. Regulatory Responsibility	Notes that in determining the scope of this project, BLM must consider "connected actions," "cumulative actions," and "similar actions." Provides information of what the three actions are and lists projects that should be considered as part of the cumulative impacts.	Please refer to response to Comment No. 17.
108. Regulatory Responsibility	Makes the point that "primary purpose" of an environmental review is to "insure that the policies and goals defined in [NEPA] are infused into the ongoing programs and actions of the Federal Government. Proceeds to discuss the policies and goals of NEPA	Please refer to response to Comment No. 17.
109. Regulatory Responsibility	Discusses specific NEPA requirement that the BLM considerations that it is important that they do not get overlooked. For example, to insure that presently un-quantified environmental amenities and values are given consideration.	Please refer to response to Comment No. 17.
110. Regulatory Responsibility	Provides information about how the purpose and need statements are determined. Notes that the BLM cannot claim the purpose and need for the Horseshoe Basin Project is essentially solely defined by, and constrained by, whatever rights and desires the lessees may have to explore for oil and gas.	Please refer to response to Comment No. 17.
111. Regulatory Responsibility	Discusses the standards for information requirements necessary for environmentally informed decision-making by BLM.	Please refer to response to Comment No. 17.

112. Regulatory Responsibility	Discusses the need for a scoping process that identifies a range of alternatives. The WOC specifically requests that the BLM consider alternatives that would phase or pace the seismic analysis over time and not allow it to be done "all at once" as one reasonable means to help ensure environmental protection.	Please refer to response to Comment No. 17.
113. Regulatory Responsibility	States that it is crucial to recognize that unnecessary or undue degradation must be prevented as a result of the seismic project. Notes that unnecessary or undue degradation are two separate standards, and that the EA and decision record must provide that both unnecessary and undue degradation standards are met.	Please refer to response to Comment No. 17.
114. Regulatory Responsibility	Discusses that under FLPMA, specific management actions like the seismic project must be done pursuant to multiple use and sustained yield principles.	Please refer to response to Comment No. 17.
115. Regulatory Responsibility	Notes that under FLPMA the seismic project environmental analysis and resulting decision document must consider and be based on the relative value of the resources involved.	Please refer to response to Comment No. 17.
116. Regulatory Responsibility	Provides information about BLM sensitive species and candidate species and the requirements to conserve the species in a manner which contributes to their removal from BLM's sensitive species list, or avoids listing on the ESA.	Please refer to response to Comment No. 17.
117. Wildlife (Raptors), Mitigation, Regulatory Responsibility	Requests that the environmental analysis determine whether raptors including the ferruginous hawk, and eagles are or could be using the Horseshoe Basin Project area and ensure that BLM meets its duties to provide management protections for these species	Please refer to response to Comment No. 79.

118. Wildlife, Mitigation, Regulatory Guidance	Notes that the sage-grouse receives special protective measures, particularly in the context of oil and gas development and exploration activities, and BLM must ensure full compliance with its Sensitive Species Manual relative to this species, as well as other BLM guidance and guidance from the Wyoming Game and Fish Department. Also notes potential impacts to other obligate sage species.	The Proposed Action would not occur during sage-grouse strutting season (March – May), early brood rearing period (May – late June/early July), or during sage-grouse late brood-rearing (late June/early July – August). Potential disturbance to the grouse may not be completely avoided during the fall where birds utilize sagebrush cover; however, the disturbance would be short-term and limited to about a 45-day period in 2008.
119. Wildlife (Big Game), Noise, Mitigation, Regulatory Responsibility	Provides suggestions of available information on big game that should be used in carrying out the EA. Requests that all the RMP requirements, not just critical winter range closures, for big game are followed, and that noise impacts be fully analyzed	Please refer to responses to Comment Nos. 14 and 74.
120. Surface Water, Regulatory Responsibility	Provides information and regulatory requirements about the Clean Water Act, and what the BLM is required to do to meet the Clean Water Act requirements. That the BLM must meet not only numeric standards but other standard as the anti-degradation standards as well.	Please refer to response to Comment No. 17.
121. Vegetation, Regulatory Responsibility	Notes that the project area contains remarkable riparian areas that are vitally important to the ecological health of the region, and that proper management of riparian areas is a critical component of managing for biological diversity and for meeting many other needs. Notes regulatory requirements for riparian area protection.	No wetland and riparian areas would be directly impacted by the Proposed Action because those areas will be off limits to drilling and seismic shots. While riparian and wetland areas will be open to foot traffic and the placement of seismic geophone lines and associated equipment, this impact is limited to very minor vegetation trampling. BLM requires that all seismic exploration activities (including vehicle use, helicopter use, and drilling) avoid wetland and riparian area by 500 feet from either side of the streambank.

122. Invasive Nonnative Species, Regulatory Responsibility	Requests that the BLM ensure the decision document provides for compliance with established requirements and procedures to adhere to invasive species prevention and control.	Please refer to response to Comment No. 36.
123. Vegetation, Special Status Species (Plants), Mitigation	Requests that the BLM and this project should protect native plant species and communities, especially rare and special status species. The BLM should conduct surveys to determine the location of native plant communities and rare or special status species. The survey results should be presented in the environmental analysis, and the decision document should established protection standards	As part of the EA, the BLM RSFO staff botanist indicated that no BLM sensitive or federally listed plant species are known to occur in the project area. A general field survey was conducted to identify BLM potential sensitive plant areas. The results of this survey are included as part of the EA.
124. Noise, Recreation	Notes that the environmental analysis and the decision document should fully address issues related to noise. These impacts must be evaluated in terms of the remoteness and quietness that so many seek on the public lands.	An analysis of the short-term noise impacts was carried out for this EA. Overall, project noise elevation would be expected to be of moderate level, localized to portions of the proposed Project Area at any one time, and transient in nature. Shot hole drilling and explosive noise would be expected to impact only wildlife and people near the operations drill. Helicopter noise would be expected to be the biggest generator of noise across a larger area, but would not be expected to have a long-term, detrimental impact to wildlife or recreationists.
125. Cultural Resources, Mitigation	Notes that relevant cultural resource regulations and requirements and the project environmental analysis must ensure inventory of cultural resources and their values prior to authorizing ground-disturbing activities.	A cultural survey of the project disturbance areas has been conducted. The required cultural resource regulations and requirements were followed in the survey and are documented in this EA. If any additional cultural resources are discovered during the field portion of the project, work will stop in that area and the BLM will be notified.

John Wagner, Water Quality Administrator **Wyoming Department of Environmental Quality** **122 West 25th Street, Cheyenne, WY 82002**		
126. Soils	Due to the highly erodible soils and risk of increase sediment laden runoff in the project area, the EA should include detailed BLM's for use in minimizing soil compaction, soil disturbance, and mitigation measures should the BMP's fail.	While there is a potential 87.8 acres of surface disturbance, the vast majority of this would be vegetation trampling due to foot-traffic resulting from the drilling of seismic sources and placement of receiver lines (66.7 acres). Limited soil and vegetation compaction will occur in the staging area and at the shot holes (21.1 acres); however, no blading or grading will occur. Mitigation measures are in place to revegetate areas and control invasive nonnative plant species, and, if necessary, control erosion that results from the project activities.
127. Cumulative Effects	The decision in this EA should be data based, and consider all effects and cumulative impacts from those decisions.	The EA is based on the best available information. In some instances this includes collection of additional information, but is generally based on what information and data already exist about the area, the potentially impacted resources, and the project processes.
128. Water Quality, Mitigation	The EA should include detailed discussion of the BLM's monitoring strategies in order to be protective of water quality. The data collection and analysis should be ongoing through the life of the project.	Water quality monitoring is not normally part of an EA. Because of the limited surface disturbance and the water resource setback, no water quality impacts are expected. Some water quantity data will be collected on the flow associated with the project area springs and seeps.
129. Mitigation	Encourage the BLM to use the Rawlins Field Office/Reclamation Reporting Database along with photo points of all streams and draw crossings.	Because of the short duration of this project and the limited disturbance, there is limited reclamation needed. Crossings of streams and draws will occur on existing roads and two-tracks, but would primarily be due to human foot-traffic from seismic crews.
130. Regulatory Responsibility	Notes some Water Quality Division requirements that may apply to the project, including stormwater permit, spill reporting, and section 404 permitting.	Comment noted. BLM acknowledges that any necessary permits and reporting will occur, as deemed necessary.
131. Water Quality, Cumulative Effects	Request that the BLM conduct a detailed analysis of the direct, indirect and cumulative effects if this proposed development on water quality.	The EA includes a detailed analysis of the potential impacts from the proposed project. Please refer to sections 3.2 and 4.2 for the analysis.

Shawn Syme		
132. Regulatory Responsibility	Is writing to stop seismic survey and future O&G development in Horseshoe Basin. At minimum there should be strict regulations as to where and when they can drill/ explore. BLM should provide science based analysis on the environmental impact of wildlife, air, and water quality. Once finished there should be stronger and larger bonds for reclamation.	The BLM acknowledges the high recreation value of the area. Its importance for recreation is addressed in Section 4, Environmental Consequences, of this EA. Although the game species will be disturbed by noise from helicopter activities and explosives use, the impacts will be short term and are not expected to constitute a significant impact to the area big game populations over the long term.
Dwayne Rowland **300 Taylor Rowland Road** **Dexter, GA 31019**		
133. Mitigation, Regulatory Responsibility	I support the Horseshoe Basin 3D Seismic Survey. We need the energy for our country to be energy independent. I'm sure "best management" practice will be in place. Oil companies use the best methods and have little impact if any.	Comment noted. Applicant-Committed Environmental Protection Measures and Conditions of Approval incorporate Best Management Practices that will be used throughout the project to protect critical water resources. Impact will be minimized to the extent practical.
Mike Hunzie **Diamondville, WY**		
134. Recreation (Hunting)	I recently found out of Devon's request for seismic work in the Horseshoe Basin. This follows Devon's seismic and application for 2 exploratory wells on Little Mountain. Pine Mountain and Little Mountain has become prime elk and deer hunting areas and used by other outdoor recreation. My wife recently drew Little Mt. elk permit and a recent trip brought us concern of seeing elk. I hear that the seismic in the Horseshoe basin will take place during the hunt. I hope the BLM denies Devon's request, although this will be dashed due to current American politics. So I ask the BLM to permit activity only during specific times, when wildlife, hunting and outdoor recreational activities are not interfered with.	Please refer to response to Comment Nos. 26 and 132.

Jocelyn Moore **809 Rose Crown Circle** **Rock Springs, WY 82901**		
135. General Comment	The purpose of this letter is to protest the Devon Energy, Horseshoe Basin 3D Seismic activity. This arid high desert bears scars of previous seismic probes as read in the BLM Green River RMP page 809 "Aerial monitoring reveals hundreds of old seismic lines that are still visible and have caused an adverse impact."	The proposed seismic operations will not result in visible seismic lines, which occur when vibroseis methods using heavy vehicles (62,500 lbs. each) are used. BLM acknowledges that previous seismic line scars occurring in the RSFO, as stated in the RMP, are the result of activity that occurred when older seismic survey techniques utilized a bulldozer to blade a pathway for geophysical ("thumper") vehicles. BLM no longer allows such surface disturbing activity for seismic operations, nor does the project proponent propose to conduct such practices. The Applicant-Committed Environmental Protection Measures and the BLM Conditions of Approval were developed, in part, to further minimize any surface disturbance. Because BLM wants to limit surface disturbance in the area, this proposed project will utilize helicopter portable drill rigs. Vehicles will only access the Project Area using existing roads and two-tracks approved by BLM following completion of the cultural survey. There will be very limited vegetation removal due to shot hole drilling (about a three-foot radius around a two to three inch radius shot hole), and no road construction, blading, or grading. By limiting surface disturbance to drill holes and to the minor amount of vegetation trampling resulting from foot-traffic, the project will not otherwise result in long-term impacts to vegetation and soils. Please see Section 2.2.2 Project Overview for further details of the seismic operations.

136. General Comment	Within the last two years Kodiak O&G, Inc. installed two wells in the same area and a call to WOGCC informed me that no production can be verified!	The Kodiak wells (Sections 3 and 4, T. 12 N., R. 102 W.) were previously permitted by BLM. Both wells were exploratory and drilled in a joint agreement between Devon and Kodiak. An exploratory well is a well drilled for the purpose of discovering new reserves in unproven areas. They are used to extract geological or geophysical information about an area. The use of 3D seismic survey techniques is another geological and geophysical method to collect data that a single exploratory well cannot. The data collected from the seismic survey will be reviewed along with the well logs of the exploratory wells, which will allow Devon to better determine whether recoverable reserves exist in the project area.
137. General Comment	Recently a proposed gravel pit on Pine Mountain was protested by the community and the county commissioner. The applicant withdrew his proposal, which would have increased traffic and degraded air, and wildlife quality.	Comment noted.
138. Soils, Water Quality	The proposed land disturbance of Horseshoe Basin will free up alkaline soil. These soils will be carried to low spot and stream drainages via wind, snowmelt and rain. Examples where these soils will go are Vermillion Creek, Coyote Creek, and Canyon Creek.	The highly erodible nature of the area soils and the related watershed degradation are acknowledged as a potential issue, but one that would have minimal impact in the project area. Establishment of appropriate buffers (100 feet for ephemeral channels; 500 feet for riparian areas) is an effort to minimize soil erosion risks. In addition, no new or improved roads will be constructed for this project. Also the project has a relatively small surface disturbance area, which is primarily limited to drilling shot holes.
139. Soils, Fisheries, Water Quality	Fishery habitat degradation will occur from soil settling into streams and pools. This will affect the macro-invertebrates living in the waters, negatively impact the fish habitat, spawning areas, and food sources that the native fish relies on.	Please refer to response to Comment Nos.14, 18, 21, 64, and 138.
140. Range Resources	These streams provide water for permitted grazers, running cattle and sheep. Higher salt content in the water impact livestock health and growth. Wind driven alkaline soils will attach to forage impacting range production and livestock uptake.	Please refer to response to Comment Nos.14, 18, 21, 64, and 138.

141. Wildlife (Big Game) & Wildlife habitat, Mitigation	Pronghorn, mule deer, and elk that inhabit this area will also be negatively impacted by the soil contaminated water and forage. This will then affect the trophy game hunting, especially if seismic activity occurs during the hunting season. BLM's Green River RMP says, "Wildlife does not benefit from reclamation or the short-term disturbance assumptions. Estimate it will take 20 years to return vegetation to pre-disturbance conditions. Therefore, it will take that long for the reclaimed area to be usable by wildlife.	The BLM acknowledges the high recreation value of the area. Its importance for recreation is addressed in the environmental consequences section of this EA. Overall, the impacts are not expected to constitute a significant impact to the area big game populations either in the short term or long term.
142. Soils, Hazardous Waste, Groundwater	In addition to the surface water contamination by alkaline soils and residue spills form heavy equipment, groundwater sources will be contaminated with explosive material.	Please refer to response to Comment No. 1.
Mike Smart Green River, WY		
143. Recreation (Hunting)	Is it necessary that this survey be done during one of the most enjoyable times of the year for outdoor recreation in Wyoming? The pronghorn, deer, and elk hunting areas south of Rock Springs are prime choices for resident & non-resident hunters alike. Those who are fortunate to draw these coveted licenses may only due so once in their life. Don't let this survey happen this fall! There is no monetary reason that it can't wait till next summer.	Please refer to responses to Comment Nos. 26 and 141.
Craig Thompson		

144. Groundwater	I own land on Pine Mountain west of the proposed area. This area has scars from previous surveys, and proper reclamation never took place. I request that the project not be allowed until these conditions are met: Devon should contact an independent groundwater consulting company to conduct a comprehensive groundwater study identifying the aquifers and characterize those aquifers as to quality and yield. This study should be part of a larger EA.	Please refer to responses to Comments Nos. 1 – 12. A ¼-mile buffer will surround each spring and seep. An 800-foot buffer will surround each stock pond. Please also refer to sections 3.2.2 and 4.2.2 of the EA where the topic of groundwater is addressed.
145. Groundwater, Mitigation	Devon should post a bond which should cover the local water users in the event their activities impact the aquifers. Wyoming Environmental Quality Council should hold such bond for a ten year period to insure the water users are protected against impacts that might be delayed by remote aquifer disruption. In 1970's Union 76 conducted a seismic survey less than a mile from our property, which blow a shot hole penetrating an aquifer. I was concerned that a drinking water source would go dry. Vermillion Creek no longer flows year-round through the segment north of our cabin.	Devon is required by the BLM to post a bond in the event something should arise. The goals set in the RMP improve watershed condition and enhance watershed values. Please also refer to responses to Comments Nos. 1 - 12.
146. Surface Water, Groundwater, Wildlife, Vegetation, Paleontology	BLM should make public the hydrologic, biologic, geologic, and paleontological surveys and the public should comment on the adequacy of such surveys in the EA.	Please refer to responses to Comment No. 1 – 12, and 16.
147. Mitigation	BLM should require the staging area be close to highway 430 near mile marker 49, which is used by highway construction. Another appropriate site would be near the existing road to the Nabors drilling rig where Horseshoe Basin intersects highway 430. This is to minimize disruption to wildlife.	Please refer to response to Comment No. 90.

148. Recreation (Hunting)	BLM should require no activity associated with the project during hunting season September 20- November 15.	Please refer to responses to Comment Nos. 26 and 141.
149. Mitigation	Devon should hire a compliance officer to monitor contractor's off-road activity and report to the BLM natural resource protection officer daily. The compliance officer should also insure "water withdrawals" mentioned on page 9 not take place.	BLM expects to make regular site visits during project activities to ensure compliance with the Applicant-Committed Environmental Protection Measures and Conditions of Approval. Water withdrawals will not occur on BLM-administered public lands. Any water withdrawals necessary will be made in agreements prior to commencing project activities and between Devon and private landowners. BLM has no regulatory authority over these private agreements.
150. Mitigation	BLM should change wording in segment five on page 7 about reclamation, "Reclamation will, to the extent possible, repair the damaged area as close to the original condition as possible." This sentence does not identify the responsible party. Please change the sentence to read; Devon should post a bond of such a magnitude to reclaim any disturbance to the pre-project net primary productivity as measured by a BLM range manager and a WG&F habitat specialist. Further, that such bond is held by the Wyoming Environmental Quality Council for a period of five years to insure that the range is restored to its pre-project condition. I request members of the public be allowed on the final inspection.	Devon is required by the BLM to post a bond in the event that reclamation does not meet or exceed BLM standards. BLM will make the final determination of reclamation success within two years of project completion. BLM may also require any areas with unsatisfactory reclamation continue to be restored to BLM requirements. With surface disturbance limited largely to drill holes (1.1 total acres), helicopter staging areas (two staging areas 10 acres each, or 20 total acres), and foot-traffic, BLM anticipates that impacts will be minimal and short-term.
151. Special Status Species	BLM should require a comprehensive survey for T & E Species to take place prior to any project activity and the public to comment on the accuracy of that survey.	A comprehensive wildlife and plant habitat survey was conducted from August 18-29, 2008. This was part of the scope of what Devon had to complete before the project could be approved.

152. Cumulative Effects	BLM should evaluate the cumulative impact of this proposed activity particularly considering the pace of regional natural gas development and BLM should allow the public to comment on the adequacy of the evaluation. This evaluation should consider the O & G impacts at the hydrologic, biologic, geologic, and paleontological levels. Further, it should consider the historical impact of all the development that occurred.	Cumulative impacts from the project were evaluated in Section 5 of the EA and the cumulative effects analysis area was considered to be the area encompassed by the hunt unit areas affected. A region-wide cumulative effects analysis is beyond the scope of this EA, and may be considered in a more comprehensive NEPA analysis, if future development of the possible oil and gas reserves were to occur. Evaluations have been completed for hydrology, biology, geography, archeology, and paleontology and incorporated in the EA. These reports may be requested from the BLM RSFO.
153. Climate Change	BLM should consider the impact that this proposal could have on the global climate change and BLM should allow the public a chance to comment on the adequacy of your consideration.	BLM has determined that the Proposed Action would have a *de minimus* effect on global climate change, and was not considered a significant issue for this EA.
Anonymous		
154. General	I strongly oppose the Horseshoe Basin 3D Seismic EA. We have compromised Little Mountain, why do the same to Pine Mountain area where diverse recreation takes place? It seems that energy companies are putting holds on the most controversial land while the time is right. Public input on public land has little merit.	Comment noted.
Dave Welch **Oregon-California Trails Association**		
155. Cultural Resources	The southern route of the Cherokee Trail traverses this area. If an assessment of the trail's location and condition has not been performed, then a survey should be conducted prior to initiating activities. The EA should seek to avoid adverse impacts to both the trail and its setting. The trail should not be used for access to the project area and survey lines should not introduce an artificial grid to the area.	Although close to the area, the Cherokee Trail lies north of the proposed Project Area and will not be affected by the 3D Seismic survey.

Brian Kelly, Project Leader **U.S. Fish and Wildlife Service - Wyoming Field Office** **5353 Yellowstone Road, Suite 308A, Cheyenne, WY 82003**		
156. Regulatory Responsibility	It will be important to ensure that issued identified through the NEPA scoping process be adequately addressed.	Please refer to response to Comment No. 17.
157. Special Status Species	Black-footed ferrets may be affected if prairie dog towns are impacted. However, we encourage the Bureau to protect all prairie dog towns for their value to the prairie ecosystem and the many species that rely on them. We further encourage you to analyze potentially disturbed prairie dog towns for their value to future black-footed ferret reintroduction.	Wildlife field surveys conducted in August 2008 noted that while some small, active prairie dog complexes are within the Project Area, these complexes do not exceed 3-5 acres. Most complexes were not active and burrows were largely abandoned, and in many cases, decadent.
158. Special Status Species	The Service has reevaluated the potential for occurrence of the blowout penstemon (*Penstemon haydenii*) in this area and believes this species could potentially be affected by the project if the specific habitat required by the species is present: Blowout penstemon is known only from sand dunes or blowouts (i.e., sparsely vegetated, sandy habitats). We recommend you avoid these habitats when conducting seismic work.	BLM RSFO staff botanist and the WYNDD were consulted. Both sources indicate that this *P. haydenii is* not present in the Project Area.
159. Special Status Species	Depending on location and climatic conditions, *Sprianthes diluvialis* may bloom in early July or still be in flower as late as early October. It is also endemic to moist soils near wetland meadows, springs, lakes, and perennial streams where it colonizes early successional point bars or sandy edges. The elevation range of known occurrences is 4,200 to 7,000 feet (although no know populations in Wyoming occur above 5,500 feet) in alluvial substrates along riparian edges, gravel bars, old oxbows, and moist to wet meadows. Soils where *S. diluvialis* have been found typically range from fine silt/sand, to gravels and cobbles, as well as to highly organic and peaty soil types. *S. diluvialis* is not found in heavy or tight clay soils or in extremely	Please see response to Comment No. 158. Project activities would not occur within 500 feet of riparian areas and within ¼ mile of springs and seeps. As stated by USFWS, no known populations occur in Wyoming above 5,500 feet elevation. The project area is between 7,020 and 8,420 feet elevation, and as also stated by USFWS, 7,000 feet elevation is the upper limit of the known range of *S. diluvialis.*

	saline or alkaline soils. *S. diluvialis* seems intolerant of shade and small scattered groups are found primarily in areas where vegetation is relatively open. Surveys should be conducted by knowledgeable botanists trained in conducting rare plant surveys.	
160. Special Status Species	In Wyoming, the yellow-billed cuckoo is dependent on large areas of woody, riparian vegetation that combine a dense shrubby understory for nesting and cottonwood overstory for foraging. Destruction, degradation and fragmentation of wooded, riparian habitats are continuing threats to yellow-billed cuckoos in Wyoming. Additionally, project actions to control outbreaks of caterpillars, cicadas or grasshoppers, and the general use of insecticides, in or adjacent to riparian areas may negatively affect yellow-billed cuckoos. Therefore, we recommend as a conservation practice that projects avoid impacting large, woody riparian areas from late may to September, during the period when yellow-billed cuckoos seasonally occur in Wyoming. To help us better understand the distribution and status of the species in Wyoming, we request that all sighting of yellow-billed cuckoos west of the Continental Divide be reported to our office.	Project activities would not occur within 500 feet of riparian areas. In addition, project activities would occur for 45 days from October to mid-November, outside the migratory bird nesting season.
161. Special Status Species	Any activities that result in loss or degradation of sagebrush habitats that are important to greater sage-grouse should be closely evaluated for their impacts to sage-grouse. If important breeding habitat (leks, nesting, or brood rearing habitat) is present in the project area, the Service recommends no project-related disturbance March 1 through June 30, annually. Minimization of disturbance during lek activity, nesting, and brood rearing is critical to sage grouse persistence within these areas. Likewise, if important winter habitats are present (Doherty *et al.* 2008), we recommend no project-related disturbance November 15 through March 14, annually. We recommend you contact the Wyoming Game and Fish Department to identify important greater sage-grouse habitats	Please see response to Comment No. 40.

	within the project area, and appropriate mitigative measures to minimize potential impacts from the proposed project. The Service recommends surveys and mapping of important greater sage-grouse habitats where local information is not available. The results of these surveys should be used in project planning, to minimize potential impacts to this species. No project activities that may exacerbate habitat loss or degradation should be permitted in important habitats. This project should be carefully evaluated for long-term and cumulative effects on the greater sage-grouse, since reclamation may not restore populations to pre-activity levels. The Bureau should ensure this activity does not exacerbate greater sage-grouse declines on either a local or range-wide level.	
162. Special Status Species	Historically, the Wyoming pocket gopher's (*Thomomys clusius*) known distribution is restricted to Sweetwater and Carbon counties in Wyoming, but the species may also occur in very northern Colorado (Beauvais and Keinath 2008). The range of the Wyoming pocket gopher occurs within the range of the northern pocket gopher (*T. talpoides*), but the Wyoming pocket gopher is believed to occupy relatively moist sections of gravelly ridges instead of the valley bottoms and riparian areas with deeper soils used by most other pocket gopher species (Keinath et al. 2008). The Service recommends avoiding activities that compact soils in gravelly ridges where the Wyoming Pocket gopher is believed to occur.	Impacts from project activities on Wyoming pocket gopher are discussed in section 4.5.1.2 of the EA. Project activities will result in minimal surface disturbance, and soil compaction will be limited to foot-traffic from seismic field crews. No typically heavy (62,500 lbs.) vibroseis trucks will be used to conduct the seismic survey; rather, heli-portable equipment will be used to avoid surface disturbance and potential impacts resulting from soil compaction.
163. Special Status Species	The Service encourages the Bureau to analyze the project area for potential effects to pygmy rabbits and their habitats. Conversion of sagebrush grasslands, habitat fragmentation, and overgrazing are considered potential threats to pygmy rabbits. Project planning measures that retain large tracts of suitable habitat and corridors to adjacent habitat will aid in the conservation of this species.	Please see responses to Comment Nos. 16 and 25.

164. Special Status Species	Project planning measures that protect and retain white-tailed prairie dog towns for their value to the prairie ecosystem will aid in the conservation this species and the myriad of species that rely on them.	Please see responses to Comment Nos. 16, 25, and 157.
165. Special Status Species	There are other sensitive species within the project area that could be impacted, such as the midget faded rattlesnake (*Crotalus viridis concolor*). We recommend contacting the Wyoming Game and Fish Department for additional information on their species of greatest conservation need.	Current range maps and a data base query of the Wyoming Natural Diversity Database did not indicate that the midget faded rattlesnake occurs in the Project Area. Please also see responses to Comment Nos. 16 and 25.
166. Special Status Species	In addition to requirements to consult on projects affecting threatened and endangered species, agencies also have obligations to protect migratory bird species, including eagles and other raptors, protected under the MBTA and BGEPA. Work that could lead to the take of a migratory bird or eagle, their young, eggs, or nest (for example, if you are going to erect ne roads, or power lines in the vicinity of a nest), should be coordinated with our office before any actions are taken.	BLM acknowledges our responsibility to protect migratory birds under the MBTA and BGEPA. Project activities would be completed in 45 days, beginning in October and concluding in mid-November 2008. Any project activities that may be left for 2009 would be required to comply with both acts, including conducting the necessary nesting surveys and implementation of timing restrictions where active nests occur. BLM would ensure that the project proponent would be responsible for the "take" of raptors, including eagles, as defined by the USFWS.

167. Special Status Species	To ensure the Service has sufficient information to assess project impacts on wetlands, assessments should include: 1. An enumeration of the acreage of wetlands, by type, impacted by the proposed action. 2. A discussion of why wetlands cannot be avoided. 3. A description of the functions and values of the wetlands, including sediment transport, water storage, habitat for aquatic and terrestrial organisms, and contaminant sinks, as well as the potential risks of water removal for these functions and values. 4. Measures that will reduce or eliminate the adverse impacts to wetlands such as a mitigation plan to offset unavoidable impacts, protective buffers, seasonal and physical restrictions, maintenance of the natural hydrograph, and development and implementation of a monitoring program to track the effectiveness of mitigation measures. 5. Results of wetland monitoring or management activities in, or adjacent to, the proposed project site. The anticipated short and long term effects to wetland and riparian areas during and after project completion. We recommend addressing each of the above concerns where applicable to the project.	Wetlands occurring in the Project Area occur on private lands, and field surveys conducted in August 2008 indicated that such areas are isolated, inconspicuous, and small (less than 0.1 acre in area). These wetlands are associated with the similarly small and isolated riparian areas occurring on private lands. Because project activities would avoid private land, no impacts to wetlands would be expected to occur. Project activities would not be conducted within 100 feet of ephemeral channels, and within 500 feet of riparian areas to prevent any downstream effects. Project activities would be avoided within ¼ mile of all know springs and seeps. Vehicle travel will be restricted to existing approved roads and two-tracks. BLM believes these measures will adequately buffer any potential risk of direct or indirect effects on area wetlands.