ENVIRONMENTAL ASSESSMENT

Project Name:	Seismic Permit #1564 - Dupuyer Creek East 3D
Proposed Implementation Date:	August 1, 2011
Proponent:	St. Croix Seismic LLC, C/O Mark Kinghorn, on behalf of LXL Consulting, Ltd., 4335 Johnny Creek Road, Pocatello, Idaho 83304 (permit agent) CGG Veritas Land, 10300 Town Park Drive, Houston, TX 77072 (seismic company) Primary Petroleum, Suite 800, 744 4th Ave SW, Calgary, AB T2P 3T4 Zone Exploration, Inc., P.O. Box 1362, Billings, MT 59103 Tommy C. Craighead, P.O. Box 576, Ardmore, OK 73402 (oil and gas companies)
Location:	Township 28 North, Range 7 West Section 16: S½ - 320 acres (Common Schools) Section 17: S½SE¼, SE¼SW¼ - 120 acres (Common Schools) Section 20: E½W½, E½ - 480 acres (Common Schools) Section 31: Lots 1, 2, 3, E½NW¼, N½NE¼, SW¼NE¼ - 320 acres (Common Schools) Section 32: SW¼SE¼ - 40 acres (Common Schools) State Land – 1,280 acres
County:	Pondera and Teton
Trust:	Common Schools

I. TYPE AND PURPOSE OF ACTION

St Croix Seismic LLC and CGG Veritas Land Company on behalf of Primary Petroleum have applied for a 3D seismic permit on 1,280 acres of state lands listed above. The total project area consists of 15,180 acres (1,280 acres of state land and 13,900 acres of private land). This Environmental Assessment is intended exclusively for the previously listed state owned lands. The proposed seismic project will proceed on private land regardless of state involvement. However, DNRC has no control over activities on private land. The seismic contractor anticipates the entire exploration activity will take approximately one month regardless of whether state lands are included. The proposed 3D seismic operation over the entire 15,180 acres is scheduled to occur in 4 stages described below:

1. Staking and Surveying – Ground crews and/or crews on ATV's survey and stake land in order to precisely orient receiver lines and geophones as well as locate and avoid sensitive areas. (1 Week)
2. Placement of Receiver Lines and Equipment – A helicopter, ATVs, and ground crews will transport receiver cables, data collectors, batteries and geophones along receiver lines. (<7 Days Concurrent with Seismic Shoot)
3. Conduct Seismic Shoot – 5 servo-hydraulic vibroseis trucks will be used to create the vibratory energy source at each source point. Receiver lines will be removed as needed via ATV crews. (<7 Days)

4. Finish removal of receiver lines and site cleanup – Project cleanup will proceed concurrently with the recording phase in which all pins, flags, and lath will be collected and site restored. (<7 Days)

II. PROJECT DEVELOPMENT

1. PUBLIC INVOLVEMENT, AGENCIES, GROUPS OR INDIVIDUALS CONTACTED:

Provide a brief chronology of the scoping and ongoing involvement for this project.

St. Croix Seismic – Landman / Permit agent
DNRC TLMD-Surface and Mineral Owners
Double K Land and Cattle Co – Surface Lessee
Susan Anderson– Surface Lessee
Apex Angus– Surface Lessee
Bills Ranch– Surface Lessee
Montana Environmental Information Center – Interested Party
Montana Wildlife Federation– Interested Party
The Wilderness Society– Interested Party
Friends of the Rocky Mountain Front– Interested Party
The Blackfeet Nation– Interested Party
Montana Petroleum Association– Interested Party
Northern Montana Oil & Gas Association– Interested Party
Mountain View Energy Inc– Interested Party
The Nature Conservancy– Interested Party
Pondera County Commissioners– Interested Party
Teton County Commissioners– Interested Party
Montana FWP, Gary Olson, Wildlife Biologist– Interested Party
Montana FWP, Gary Bertellotti, Region 4 Manager– Interested Party
Marie and Elena G. Hovland – Area Land Owner
The New and Improved Hager Ranch LLC– Area Land Owner
Virgil R. Pedersen, Etal– Area Land Owner
Wayne & Ila Denise Agee– Area Land Owner
Dellwo Duard S as Custodian– Area Land Owner
Colin S Phipps– Area Land Owner
Margaret Eileen Manix– Area Land Owner
Margaret e. Manix Dernovich– Area Land Owner
Holden Herefords– Area Land Owner
James & Angela Munroe– Area Land Owner
E.C. & Edna Parocai– Area Land Owner
Ronald & Joyce Jones– Area Land Owner
Edward & Calvin Parocai– Area Land Owner
Delbert & Arcelia Breding– Area Land Owner
Broken O Ranch LLC– Area Land Owner
Double K Land & Cattle Co– Area Land Owner
Susan Anderson– Area Land Owner
Bills Ranch Co– Area Land Owner
Apex Angus Inc. – Area Land Owner
Rappold Ranch– Area Land Owner
Springhill Ranch Corp– Area Land Owner

Public Scoping notice published in the Choteau Acantha June 15, 2011 and June 22, 2011.
Public Scoping notice published in the Independent Observer June 16, 2011 and June 23, 2011.

2. OTHER GOVERNMENTAL AGENCIES WITH JURISDICTION, LIST OF PERMITS NEEDED:

The DNRC Trust Land Management Division and Minerals Management Bureau has jurisdiction over this proposed project. State seismic exploration permit, County permit, and proof of qualification to conduct business in the State of Montana is also required.

DNRC is not aware of any other agencies with jurisdiction or other permits needed to complete this project

3. ALTERNATIVES CONSIDERED:

Alternative A (No Action) – Deny St Croix Seismic LLC / CGG Veritas Land Company permission to conduct 3D seismic survey on state land. Seismic exploration will proceed on private land

Alternative B (the Proposed action) – Grant permission to conduct the 3D seismic survey on state land using the DNRC-TLMD mitigation measures to minimize adverse environmental impacts.

III. IMPACTS ON THE PHYSICAL ENVIRONMENT

- *RESOURCES potentially impacted are listed on the form, followed by common issues that would be considered.*
- *Explain POTENTIAL IMPACTS AND MITIGATIONS following each resource heading.*
- *Enter "NONE" If no impacts are identified or the resource is not present.*

4. GEOLOGY AND SOIL QUALITY, STABILITY AND MOISTURE:

Consider the presence of fragile, compactable or unstable soils. Identify unusual geologic features. Specify any special reclamation considerations. Identify any cumulative impacts to soils.

Geology to the north and east is conducive to oil and gas testing and development. Two existing oil and gas fields are located nearby to the north and to the east of the proposed seismic activity. Soberup Coulee Field is a stratigraphic trap on the west flank of the Sweetgrass Arch located 4.2 miles to the north of the proposed seismic area. Gypsy Basin Field is a faulted anticlinal fold also on the west flank of the Sweetgrass Arch that is located 1.3 miles to the east of the proposed seismic shoot. Various formations in the area have been shown to contain oil and gas. All previous well exploration within and in proximity to the proposed seismic project have dry holes. This includes a number of dry holes drilled within, to the south, and some to the southwest of the project area.

The soils and range sites within the proposed project area vary. They include silty, dense clays, saline lowlands, shallow, sub-irrigated, and overland flow areas. The terrain is also varied from flat to rolling hills with intermittent brush filled coulees with some steeper slopes and ridges. Soils throughout the project area are well vegetated (native range land) and very stable. Wet areas, wet coulee bottoms, and riparian areas on or adjacent to state lands will be avoided. The proposed action may cause minimal localized areas of soil erosion and compaction from the manipulation of vehicles and equipment on the surface. Soil types throughout the area have a high potential to recover functional and structural integrity after disturbance. The proposed seismic project work may only be done when the topsoil is dry to minimize soil erosion and compaction. The proposed action will temporarily disturb a small portion of the landscape. Any impacts to the soil are expected to be minor, and temporary. Standard Special Stipulations including no vehicle operation during wet or muddy conditions, no seismic testing on slopes greater than 25%, and no seismic testing in wet zones, which will minimize any impacts. No cumulative effects to the soils are anticipated.

5. WATER QUALITY, QUANTITY AND DISTRIBUTION:

Identify important surface or groundwater resources. Consider the potential for violation of ambient water quality standards, drinking water maximum contaminant levels, or degradation of water quality. Identify cumulative effects to water resources.

There are several documented and/or recorded water rights associated with the proposed project areas. There are also several undeveloped springs, one irrigation ditch, one water well, water lines, tanks, and 4 reservoirs in the proposed project areas. Dupuyer Creek is also present in the project area. The proponent will be required by the Standard Special Stipulations to stay 300 feet from springs, water wells, streams, lakes, or water storage

reservoir facilities while conducting vibratory operations on state land. No drilling or blasting operations are planned or authorized for this project. Wet coulee bottoms and brushy coulees are also present in the proposed project area. Special stipulations in attachment A require no seismic activity within 100 feet of woody draws on state lands. This requirement will mitigate damage to these areas.

No important surface or groundwater resources will be impacted by the proposed project by utilizing the above special stipulations.

Other water quality and/or quantity issues will not be impacted by the proposed action.

6. AIR QUALITY:

What pollutants or particulate would be produced? Identify air quality regulations or zones (e.g. Class I air shed) the project would influence. Identify cumulative effects to air quality.

The proposed seismic project will not consist of any disturbance to soils, so no cumulative effects to air quality are anticipated.

7. VEGETATION COVER, QUANTITY AND QUALITY:

What changes would the action cause to vegetative communities? Consider rare plants or cover types that would be affected. Identify cumulative effects to vegetation.

The vegetation within the proposed project area consists primarily of native rangeland grasses, forbs, and shrubs. Native rangeland vegetation is dominated by silty range sites with rough fescue, Idaho fescue, blue bunch wheatgrass, green needle grass, western wheatgrass, prairie june grass, sedges, and shrubby cinquefoil being the major species. The project area is relatively free of noxious weeds. Small patches and individual plants of Canada thistle and hounds tongue are the only identified noxious weeds present on state lands. Introduction of new noxious weeds and the spread of existing noxious weeds is a concern. This will be mitigated by initially power washing all equipment prior to entering the project area, briefing crews for identification of noxious weeds, and avoidance of known infestations. The proponent is currently working with the appropriate County Weed Coordinator and the Rocky Mountain Front Weed Round Table on best management practices for this project. The oil and gas lessee is responsible for mitigating noxious weed issues that may arise as a result of this project.

ATV, foot traffic and vibroseis trucks will temporarily flatten native vegetation along source and receiver lines. No ground disturbing actions are planned or authorized. Trampled vegetation is expected to recover quickly and naturally. The woodland thicket areas adjacent to Dupuyer Creek, woody draws, and other wet coulees and/or riparian areas adjacent to or on state land will be avoided. As a practical matter, mechanized equipment generally avoids wetland and riparian areas, regardless of land ownership. The vegetation along the proposed seismic routes will be minimally impacted. Restricting the vibroseis and vehicle activity to only dry conditions will minimize any impacts to the existing vegetation. No long term or cumulative impacts to the existing vegetation are expected.

A review of Natural Heritage data through the NRIS was conducted and there were no plant species of concern noted or potential species of concern noted on the NRIS survey.

8. TERRESTRIAL, AVIAN AND AQUATIC LIFE AND HABITATS:

Consider substantial habitat values and use of the area by wildlife, birds or fish. Identify cumulative effects to fish and wildlife.

Wildlife analysis was completed by DNRC staff Wildlife Biologist Ross Baty. This analysis is found in attachment B.

9. UNIQUE, ENDANGERED, FRAGILE OR LIMITED ENVIRONMENTAL RESOURCES:

Consider any federally listed threatened or endangered species or habitat identified in the project area. Determine effects to wetlands. Consider Sensitive Species or Species of special concern. Identify cumulative effects to these species and their habitat.

Endangered species analysis was completed by DNRC staff Wildlife Biologist Ross Baty. This analysis is found in attachment B.

10. HISTORICAL AND ARCHAEOLOGICAL SITES:

Identify and determine effects to historical, archaeological or paleontological resources.

A review of previous field evaluations and TLMS indicates no cultural resources have been identified within the state land project area. This type of seismic activity has very low impacts to historical, archaeological, and paleontological resources. The DNRC archaeologist, Patrick Rennie, has been contacted concerning the proposed state-land area and does not have any cultural resource concerns with this type of seismic exploration as long as the operations are restricted to dry soil conditions.

The proponent will be required by the special stipulations to avoid and report any historical, archeological, and paleontological resources encountered in the project area as well to conduct seismic activities only during dry conditions.

11. AESTHETICS:

Determine if the project is located on a prominent topographic feature, or may be visible from populated or scenic areas. What level of noise, light or visual change would be produced? Identify cumulative effects to aesthetics.

During seismic operations, a variety of vehicles, including ATVS, pickups, buggies, large vibroseis trucks, and a helicopter will be seen and possibly heard by people in the vicinity of the operations. The survey vehicles and equipment will only be visible during the seismic operation of approximately one month and therefore no long term effects to the aesthetics of this area will occur.

The state land is located near Dupuyer approximately 10 to 15 miles east of Rocky Mountain Front topography and therefore provides some scenic opportunities from a considerable distance. This scenic opportunity is abundantly available to the north or south of the seismic project area from the existing highway. The proposed activity will be temporary and no long term changes to the aesthetics values of the area will occur.

No direct or cumulative effects to aesthetics are anticipated.

12. DEMANDS ON ENVIRONMENTAL RESOURCES OF LAND, WATER, AIR OR ENERGY:

Determine the amount of limited resources the project would require. Identify other activities nearby that the project would affect. Identify cumulative effects to environmental resources.

The demand on environmental resources such as land, water, air, or energy will not be affected by the proposed action. The proposed action will not consume resources that are limited in the area. There are no other projects in the area that will affect the proposed project.

13. OTHER ENVIRONMENTAL DOCUMENTS PERTINENT TO THE AREA:

List other studies, plans or projects on this tract. Determine cumulative impacts likely to occur as a result of current private, state or federal actions in the analysis area, and from future proposed state actions in the analysis area that are under MEPA review (scoped) or permitting review by any state agency.

There are no other projects or plans being considered on the tracts listed on this EA or in the immediate area around the state lands involved.

IV. IMPACTS ON THE HUMAN POPULATION

- *RESOURCES potentially impacted are listed on the form, followed by common issues that would be considered.*
- *Explain POTENTIAL IMPACTS AND MITIGATIONS following each resource heading.*
- *Enter "NONE" If no impacts are identified or the resource is not present.*

14. HUMAN HEALTH AND SAFETY:

Identify any health and safety risks posed by the project.

The project area is in the occupied grizzly bear zone. Several grizzly bears are likely present in the area. The proponent is coordinating with Montana FWP on briefing crews at safety meetings on bear awareness. A 1/5 mile stretch of Dupuyer Creek is located on adjacent state land outside the seismic project area. A minimum of 1/8 mile buffers around woody thickets, particularly around that portion of Dupuyer Creek, will be closed to all seismic activities. There will be some health and safety concerns associated with the operation of seismic equipment in more remote areas of Dupuyer Creek on non-state land. The proponent and their employees will be briefed through safety meetings and therefore will be aware of safe operating practices for the area. Employees are also trained and familiar with safe operating practices for the equipment they are operating and accept any health and safety risks as normal occupational hazards.

Once the survey has been completed, there will be no health and safety concerns associated with this project.

15. INDUSTRIAL, COMMERCIAL AND AGRICULTURE ACTIVITIES AND PRODUCTION:

Identify how the project would add to or alter these activities.

The local economy (motels, restaurants, ect.) will benefit from this project. The applicant will pay surface lessee's $1.00 per acre plus any additional required for actual damage to grazing land. This proposed seismic exploration project may increase or decrease the possibility of oil and gas drilling and development in the area. Any new activities that may be proposed on state land will be subject to MEPA review.

16. QUANTITY AND DISTRIBUTION OF EMPLOYMENT:

Estimate the number of jobs the project would create, move or eliminate. Identify cumulative effects to the employment market.

The proposed activity will create a limited number of jobs. These positions are already held by employees of the proponent.

17. LOCAL AND STATE TAX BASE AND TAX REVENUES:

Estimate tax revenue the project would create or eliminate. Identify cumulative effects to taxes and revenue.

The seismic project will temporarily increase the tax base or tax revenues through payroll taxes and vehicle registrations. No other long term impacts to tax base or tax revenues are expected.

18. DEMAND FOR GOVERNMENT SERVICES:

Estimate increases in traffic and changes to traffic patterns. What changes would be needed to fire protection, police, schools, etc.? Identify cumulative effects of this and other projects on government services

There will be a temporary increase in local traffic if this project is approved, but the traffic levels will return to normal, "pre-action", levels once the project is completed. Wildfire is a potential concern with equipment operating in grasslands during summer months. The applicant will have fire extinguishers on equipment and have other fire fighting equipment onsite in case of a fire. Local fire departments will be notified of this project. The applicant will be responsible for all suppression costs and resource damage associated with a wildfire started by seismic operations.

There will be no other direct or cumulative effects on government services.

19. LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS:

List State, County, City, USFS, BLM, Tribal, and other zoning or management plans, and identify how they would affect this project.

The 1987 "Interagency Rocky Mountain Front Wildlife Monitoring / Evaluation Program" document concludes that "activities related to one phase (seismic exploration) of oil and gas development have great potential for detrimental effects to habitat and species in the identified area." However, DFWP's July 12, 2011 comment letter advises that "if this company can minimize impacts to a level that habitat and species recovery from the disturbance can occur in a short time frame, both the industry, public, wildlife and habitat will benefit. With new techniques, equipment and knowledge both the industry side and the natural resources side there should be ways to accomplish this." This statement is consistent with the Bureau of Land Management's 2006 Analysis Report and determination that the impacts from geophysical exploration were usually short term and do not contribute to significant cumulative impacts, and as a result, were eligible for a categorical exclusion status under NEPA. This document's description of seismic exploration is particularly instructive:

> "Today's energy development is dependent upon geophysical exploration to maximize recovery potential while minimizing the number of necessary platforms and wells. Seismic operations that occurred on public lands twenty plus years ago often involved road building and heavy truck mounted drill rigs. This type of exploration had much greater environmental impacts on the landscape than the exploration occurring today. Most modern geophysical exploration involves low impact and state-of-the-art techniques that minimize surface disturbance. The seismic operations BLM authorizes today are typically conducted by vibroseis trucks or small portable drill rigs transported by either off-road vehicles with low pressure tires, or helicopter. Thus, the traditional work camps and bulldozers that accompany heavy equipment have been abandoned and the seismic crews greatly reduced in size. Using best management practices such as seasonal restrictions, equipment restrictions and other mitigation measures are employed, operators are able to minimize the impacts associated with modern seismic operations."

As discussed in the proposed action, this seismic project proposal would utilize vibroseis technology. No road or pad construction, no dynamite shot-holes, and no work-camps would be required. The entire operation could be completed in about one month.

The proponent must obtain a seismic permit from Pondera County. The proposed action is in compliance with State and County laws. No other management plans are in effect for the area.

20. ACCESS TO AND QUALITY OF RECREATIONAL AND WILDERNESS ACTIVITIES:

Identify any wilderness or recreational areas nearby or access routes through this tract. Determine the effects of the project on recreational potential within the tract. Identify cumulative effects to recreational and wilderness activities.

All state lands considered under this permit are located outside the Baucus withdrawal area. The Baucus withdrawal area oil and gas lease stipulation was specifically developed for state school trust lands in the withdrawal area. It recognizes the resource values associated with lands east of the Rocky Mountain Front. The stipulation focused on the potential long-term impacts that may be possible from well drilling and development. The stipulation was developed with substantial input from wildlife interest groups. The result was a stipulation that allowed for the responsible leasing of state school trust lands in the withdrawal area. However, the 7/20/11 reduced project area does not include any state lands located within the Baucus withdrawal area.

Substantial recreation values mentioned in the DFWP letter are present on the Rocky Mountain Front. However, the area of the proposed seismic project lies south and west of Dupuyer and is located 10 to 15 miles east of Rocky Mountain Front topography and recreational resource values. The state tracts have minimal opportunities or qualities for recreation. Traditional ranching operations would continue with minimal and only short-term impacts.

The tracts of state land are rural and generally have low recreational value in late summer. The project will be completed prior to the general hunting season. The majority of the state tracts are legally accessible. The proposed action is not expected to impact general recreational activities on the state tracts.

21. DENSITY AND DISTRIBUTION OF POPULATION AND HOUSING:

Estimate population changes and additional housing the project would require. Identify cumulative effects to population and housing

The proposal does not include any changes to housing or developments. No direct or cumulative effects to population or housing are anticipated.

22. SOCIAL STRUCTURES AND MORES:

Identify potential disruption of native or traditional lifestyles or communities.

There are no native, unique or traditional lifestyles or communities in the vicinity that would be impacted by the proposal.

23. CULTURAL UNIQUENESS AND DIVERSITY:

How would the action affect any unique quality of the area?

The proposed action will not impact the cultural uniqueness or diversity of the area.

24. OTHER APPROPRIATE SOCIAL AND ECONOMIC CIRCUMSTANCES:

Estimate the return to the trust. Include appropriate economic analysis. Identify potential future uses for the analysis area other than existing management. Identify cumulative economic and social effects likely to occur as a result of the proposed action.

The Settlement of Damages returns approximately $4/ac or $5,120.00 to the Common Schools Trust for seismic exploration on these tracts.

Proposed permit special stipulations are listed in attachment A.

DNRC received 19 written comments in response to the public scoping notice sent in the mail and published in two local newspapers. Attachment C contains the comments letters and emails and DNRC response.

EA Prepared By:	**Name:**	Erik Eneboe	**Date:**	July 22, 2011
	Title:	Conrad Unit Manager, CLO, DNRC		

V. FINDING

25. ALTERNATIVE SELECTED:

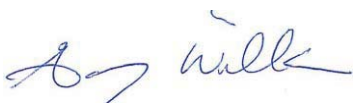
I have selected Alternative B which would grant the proponent authority to conduct a 3-D seismic survey on state lands located within the project area.

26. SIGNIFICANCE OF POTENTIAL IMPACTS:

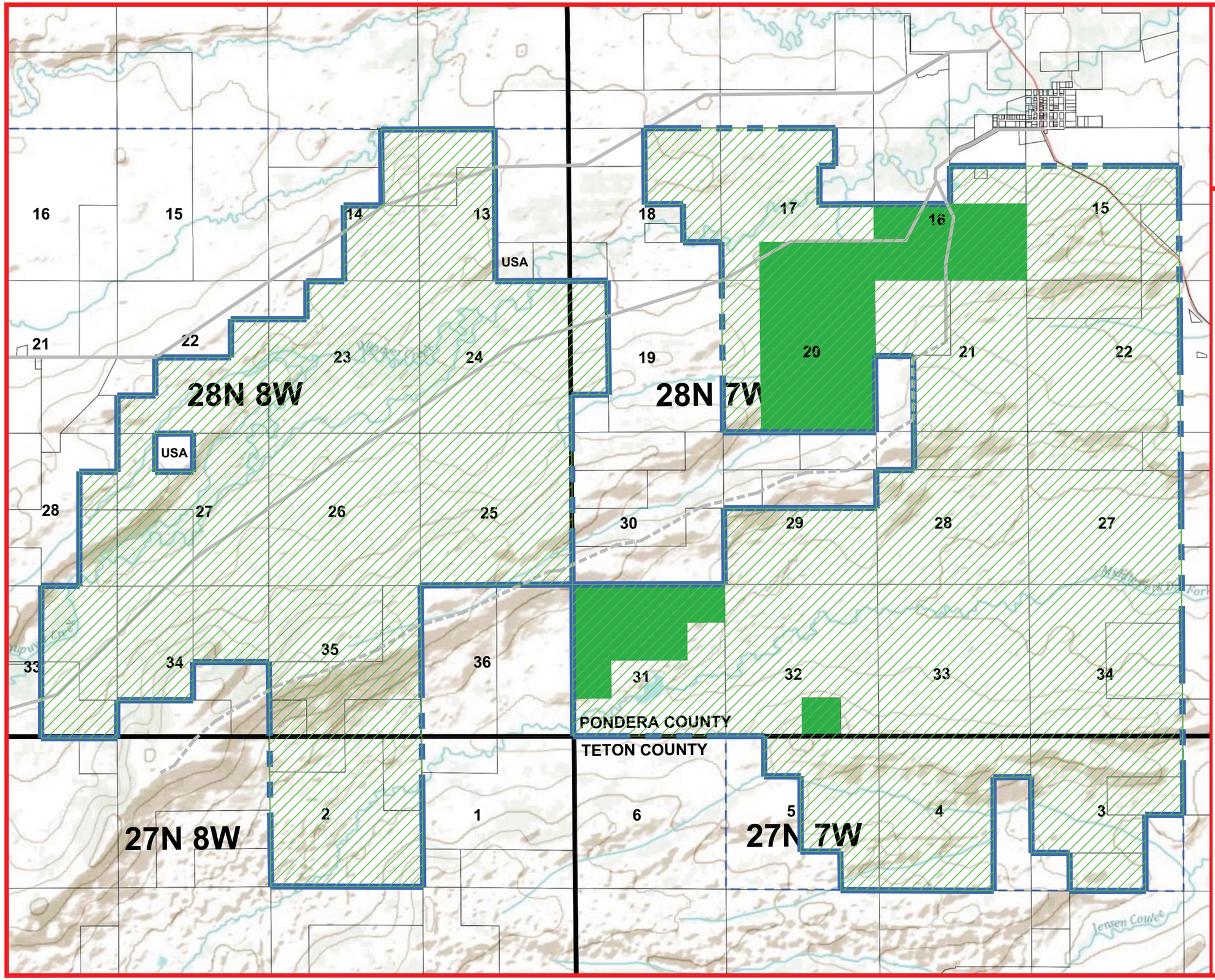
Significant impacts are not expected to occur as a result of the proposed activity on state lands. The intent of the proposed activity is to collect geophysical data in the project area. 3-D seismic operations are a very common method to collect sub-surface data in a manner which results in very little surface disturbance. The state lands represent less than 10% of the over project area and conducting activities on the state land will result little additional impacts which would likely occur with or without participation by the state. The project area is not necessarily remote; approximately 70% of the state land involved is located within a few miles of the town of Dupuyer. Normal farming and ranching activities are conducted in the project area on a regular basis throughout the seasons. Seismic surveys necessarily results in a substantially greater amount of human activity than would normally occur which may temporarily displace some wildlife species. However the activity is proposed during a period of year where there are few critical habitat requirements and species would most likely be expected to adapt to the activity levels. Mitigation measures which are common and effective have been incorporated in the proposal to minimize the potential for environment impact and any impacts associated with this proposal on state lands are expected to be minor and short term.

27. NEED FOR FURTHER ENVIRONMENTAL ANALYSIS:

The environmental analysis for this project is appropriate and additional analysis is not needed.

EA Approved By:	**Name:**	Garry Williams
	Title:	Area Manager, CLO, DNRC
Signature: 		**Date**: 7/22/2011

Dupuyer Creek Overall Map



LEGEND

- Project Boundary
- Permitted Lands
- State Lands

7/20/11

N
W
E
S

Not to Scale

ATTACHMENT A

1. The permittee shall contact and meet with the Conrad Unit Staff prior to commencing any surface activity on state lands.

   Erik Eneboe, Conrad Unit Manager,
   P O Box 961 Conrad, MT 59425 PH (406)278-7869 or (406)788-7074.

2. The permittee shall be responsible for controlling any noxious weeds introduced by permittee's activity on state owned land and shall prevent or eradicate the spread of those noxious weeds onto land adjoining the leased premises by implementing the below measures:

   a. Obtain information on noxious weed issues and management in the area from the appropriate County and the Rocky Mountain Front Weed Round Table.
   b. Implement best management practices that prevent the spread of noxious weeds.
   c. Power wash all equipment (vehicles, ATVs, command center, etc.) prior to entering the project area.
   d. Provide crew training and briefings on noxious weed identification.
   e. Avoid areas infested with noxious weeds.

3. The seismic permit is valid from August 1 through August 31. The permit will allow for 24 hour seismic operations. All stages of the project including removal of all receiver lines, staking, equipment and reclamation, if needed, shall be completed by August 31.

4. To minimize the extent of displacement associated with project-related disturbances, conduct ground activities to the extent possible in a sequential vs. a concurrent manner.

5. To minimize risk of disturbance and displacement of grizzly bears and surprise bear encounters, all ground activities are prohibited within 1/8 mile of brushy areas situated adjacent to state land along Dupuyer Creek. No activities including ATV and foot travel into dense, brushy portions of the state land survey area are authorized.

6. To minimize risk of disturbance and displacement of grizzly bears, aerial helicopter flights within 1/4 mile of brushy areas situated adjacent to state land along Dupuyer Creek are prohibited.

7. For human safety, brief staff conducting ground activities on working safely in bear habitat and train in the effective use of bear spray.

8. For human safety while working in occupied grizzly bear habitat, ground crews are required to carry bear spray.

9. To minimize risk of bear habituation and human/bear encounters, any bear attractants, including food and garbage are to be stored in a bear resistant manner at all times when unattended.

10. To minimize risk of bear habituation and human/bear encounters, on-site camping within the project area is not permitted.

11. To minimize risk of surprise bear encounters, cross country foot travel on state land by ground crews in nighttime hours between 9:30 pm and 7:30 am is prohibited. Crew members should remain in or near trucks during night time shifts.

12. To minimize potential for disturbance and adverse impacts to important bear foods and feeding areas, all use of vehicles, ATVs and ground crews are not authorized in a 100 feet of wetlands and riparian areas on or adjacent to state lands.

13. The seismic project area contains several springs, wells, reservoirs, creeks and other surface / subsurface water features. The permittee shall pay particular attention to and follow the standard set backs outlined in condition #7 on the seismic permit.

14. No seismic activity will occur within 100 feet of woody draws on or adjacent to state lands. Permittee shall minimize impacts to woody vegetation.

15. This tract may contain significant archaeological, historic, or paleontologic resources. If any of these resources are located within the direct route of the proposed seismic lines, the permittee shall cease all activity and contact the field Unit Office and the Department Archaeologist in Helena immediately.

16. It is the responsibility of the permittee to make sure that the seismic company that has been contracted to do the seismic work under this permit has a valid permit with the appropriate counties and has registered their bond with the Secretary of State's office.

17. Permittee shall contact surface lessee 48 hours prior to any seismic activity on state-owned lands.

18. Seismic activity may occur on dry ground only. No activity will be allowed during muddy conditions or conditions where rutting will occur.

19. No vehicle oil changes or petroleum disposal shall occur on the state land. All seismic vehicles will contain suitable fire extinguishers. No open burning will be allowed on state land.

20. There will be no off road traffic other than that necessary to accomplish the seismographic goals. Vehicles will not be allowed to traverse steep slopes greater than 25%, areas with very thin soils that may be rutted and left open to erosion. All receiver lines that will be placed on steep slopes (>25%) shall be completed by hand crews.

21. All gates will be closed and all fences that are taken down will be repaired as soon as possible.

22. All flagging will be removed from the roads and fences leading into the site, along designated routes, and fence lines indicating where gates are located, once the project is completed.

23. Permittee shall settle all damages with the surface lessee within a reasonable time period following the completion of the seismic project.

Attachment B

Montana DNRC Dupuyer Creek East Seismic Permit Proposal

Wildlife Analysis

Ross Baty

July 19, 2011

Introduction

The project area lies immediately southwest of Dupuyer, Montana and is comprised of 1,280 acres of state trust lands. Seismic exploration activities would also occur concurrently on neighboring private lands totaling approximately 15,180 acres. Activities would occur on nearby private lands regardless of DNRC's decision to authorize similar activities on state trust lands. The project area is situated just east of the Rocky Mountain Front, which provides habitat for many terrestrial species with high social value (USFWS 1987). Lands within the project area generally have high to very high value with regard to terrestrial species richness, particularly along portions of Dupuyer Creek (DFWP 2010). These lands also maintain moderate habitat value for prairie grouse species such as sharp-tailed grouse (DFWP 2010). Other notable species that may use the project area annually include: grizzly bears, black bears, gray wolf, mule deer, white-tailed deer, elk, moose, bald eagles, northern harrier, ferruginous hawks, sharp-tailed grouse, long-billed curlew, and numerous other grassland and riparian-associated terrestrial species. McCown's longspur and Sprague's pipit are ground-nesting species of concern that may occur on lands within or near the project area (MNHP 2011).

Within the project area and cumulative effects analysis area primary existing land uses include agricultural crop production, livestock grazing and recreational activities such as hunting, fishing, hiking, and bird watching. Foot and mechanized activities associated with the proposed seismic exploration project would occur in addition to these existing activities.

Analysis Areas

For this project, environmental effects were analyzed at two different scales. Direct and indirect effects were analyzed for all DNRC parcels that comprise 1,280 acres. Cumulative effects were considered at an expanded scale within an 85,891-acre analysis area that encompassed state and private lands around the project area. DNRC is not aware of any additional concurrent state or federal activities planned within the area identified as the cumulative effects analysis area.

Description of Activities that Could Result in Impacts

Under the proposed action seismic exploration operations would be carried out using vibroseis trucks that use vibrations to map different layers of the ground. Activities would be conducted using existing road systems and overland routes. No new excavation or road construction would be required. Project activities would take place in four stages: 1) staking and surveying with ground crews, 2) placing receiver lines and equipment using ground and aerial crews, 3) conducting the seismic shoot using vibroseis trucks, and 4) removal of receiver lines and clean-up using ground and aerial crews. Disturbance and temporary trampling of vegetation along survey and receiver routes would likely occur as a result of motorized activities during the proposed month-long exploration period. These impacts could occur as a result of ground crews on ATVs surveying, staking and orienting receiver lines and geophones, and as a result of activities associated with operation of 5 servo-hydraulic vibroseis trucks and ground crews on ATVs during the pickup/cleanup phase of the project. While operating, vibroseis trucks could emit

continuous motorized noise day and night. Noise and disturbance would also occur that would be associated with one helicopter used for multiple flights during daylight hours throughout the layout and cleanup phases of the project. Helicopter flight routes would be designed to avoid Dupuyer Creek and adjacent brushy zones along or adjacent to state lands at all times. However, activities would occur at a distance, frequency and intensity that could still displace some species from nearby areas along Dupuyer Creek -- particularly those species most sensitive to motorized disturbance. Overall, the expected disturbance associated with the proposed activities would be expected to occur at a level and duration that would be foreign to many species inhabiting the area prior to startup actions. Depending upon the specific disturbance type, some species may flee a sizable distance (one or more miles) when disturbed (eg. mule deer), whereas others (such as ground-nesting songbirds) may relocate a short distance away from the immediate disturbance source. Other less mobile species such as small mammals and larger burrowing species that can find refuge in the project area, may alter daily activities in response to the new disturbances, but they would not likely be displaced any appreciable distance (less than 1 mile).

No Action Alternative

Under the no action alternative proposed project activities would occur on other neighboring private lands that total approximately 13,900 acres. To a large degree, these private lands surround the 1,280 acres of state lands being proposed for exploration, thus, many of the disturbance impacts (particularly those that could affect large free-ranging mammal species such as deer, elk and grizzly bears) would likely occur regardless of the state's decision to conduct survey work on state trust lands. Activities on private lands would likely occur during the same approximate time period, but DNRC would have no control over agreements between the contractors and private surface and mineral owners or lessors. DNRC anticipates the seismic contractor would follow the state land mitigation measures on the private lands, but DNRC has no control over these activities. Activities are anticipated to take approximately one month, regardless of whether state lands are included.

Issues

Grizzly Bears -- There are concerns that: 1) grizzly bear habitat could be adversely affected by proposed activities resulting in lower suitability and quality, 2) grizzly bears could be disturbed and displaced from preferred feeding areas during critical nutritional periods, 3) proposed activities could result in bear/human encounters, and 4) bears could be attracted to unnatural food sources associated with crews resulting in removal of a problem bear.

The project area occurs within occupied grizzly habitat along the Rocky Mountain Front (Wittinger 2002) and portions are situated within approximately 1 mile of the NCDE Recovery Zone boundary along Dupuyer Creek. Riparian vegetation and brushy sites along Dupuyer Creek provide foraging and resting sites for grizzly bears. Under the proposed action, no preferred feeding or resting sites would be physically altered by seismic activities. Areas along Dupuyer Creek adjacent to state lands would be avoided. Some vegetation trampling associated with equipment placement would occur on upland sites, but would result in negligible direct, indirect or cumulative effects to habitats or foods preferred by bears.

Disturbance associated with mechanized seismic activities and the increased presence of humans (particularly in areas along Dupuyer Creek could cause several individual bears to flee and be displaced from the immediate area, should they be present. Should displacement occur, it would not be expected for extended periods (> 1 month) beyond the end date of proposed activities, particularly as desirable berries and other foods are available in early fall in preferred feeding areas. Mitigations designed to prohibit all ground and aerial activities within 1/8 mile of the edge of the brush zone along Dupuyer Creek adjacent to state lands would lessen the potential for displacement of grizzly bears from preferred sites and minimize risk of human/bear encounters. Nonetheless, given that motorized activities would

occur at a distance, frequency and intensity that could displace grizzly bears from some portions of the area along Dupuyer Creek some potential for minor adverse impacts to grizzly bears would be present. To further minimize this potential, state land activities would be restricted to occur only during the month of August, which is outside of the most critical feeding times for grizzly bears (eg. April 1 to June 30 and September 1 to November 30). Given the types of activities that would occur, the limited duration that the activities would occur, and the less critical season when activities would take place, minor direct, indirect and cumulative effects to several individual grizzly bears would be possible.

As ground crews would be required to set up and take down equipment in the project area, some potential for grizzly bear encounters would be present. To minimize this potential, ground crews would be required to carry bear spray and go through a brief training session with MT FWP on working safely in occupied grizzly bear habitat. Crews would also be prohibited from straying from closed vehicles during nighttime hours, and would be prohibited from entering or going near brushy sites along Dupuyer Creek. Given the required mitigations and short duration of project activities, minor adverse direct and cumulative effects to grizzly bears would be expected.

Grizzly bears are attracted to many unnatural foods and substances, which can result in their habituation and subsequent removal from the population. To minimize risk associated with grizzly bear attractants, workers would be required to store any bear attractants such as foods and garbage in a bear resistant manner at all times when unattended. Crews would also be prohibited from camping on work sites within the state project area to minimize the potential of attracting and rewarding grizzly bears with unnatural foods. Given the required mitigations and short duration of project activities, minor adverse direct, indirect and cumulative effects to grizzly bears would be expected.

Big Game Habitat and Disturbance (elk, mule deer, white-tailed deer, moose) -- As a result of proposed activities, there are concerns that: 1) these big game species could be disturbed and displaced from important wintering areas during the critical winter period, 2) there are concerns that these species could be disturbed and displaced in spring during calving, 3) there are concerns that these species may be permanently displaced, and 4) there are concerns that proposed activities could disrupt recreational activities -- particularly during hunting season.

Under the proposed action, activities would take place only during the month of August, eliminating concerns regarding disturbance of wintering animals and calving animals in spring during those two critical periods. Recreational activities could be disrupted to some degree during the month of August, however, no additional work would occur during hunting seasons beginning in early September. As activities would occur for only one month and would take place in a successional manner across the survey area vs. concurrently, the potential to displace any big game species or individuals permanently would be expected to be minimal. However, some short-term displacement would be likely, should individuals be present in the area at the time of the survey work. Given the types of activities that would occur, the limited duration of the proposed activities, and the less critical season when activities would take place, minimal direct, indirect and cumulative effects to any of the four big game species listed above would be anticipated.

Wetlands and Aquatic Species -- There are concerns that activities associated with the proposed action could adversely affect sensitive wetland communities and riparian habitats and associated aquatic species that may occur in the project area.

Under the proposed action, no road construction would be required and no activities would take place in streams or sensitive wetland communities. Vehicles would be prohibited from entering wet sites and crossing sensitive wetlands and riparian areas on state lands. As a practical matter, vehicles would not cross or occupy wetland and riparian areas on private land either. Thus, minimal risk of direct, indirect or

cumulative effects to sensitive wetland plant and animal communities and aquatic species would be expected.

Threatened, Endangered and Sensitive Species -- The following is a list of federally listed threatened or endangered species, and state-listed sensitive species that are likely to occur in some portion of lands administered by the DNRC Central Land Office. The information and sources used to evaluate impacts related to the following species included: MNHP species occurrence record search (7/19/11), species specific assessments of distribution and habitat suitability, field reviews by local managers, assessment of anecdotal information obtained from local biologists on species occurrence, professional judgment, assessment of risk factors for each species, timing and duration of proposed activity, type of proposed activity, location of proposed activities, and scale of activity.

CHECKLIST FOR ENDANGERED, THREATENED AND SENSITIVE SPECIES

CENTRAL LAND OFFICE

Threatened and Endangered Species	[Y/N] Potential Impacts and Mitigation Measures N = Not Present or No Impact is Likely to Occur Y = Impacts May Occur (Explain Below)
Grizzly Bear (*Ursus arctos*) Habitat: recovery areas, security from human activity	[Y] -- See detailed analysis above in this report.
Lynx (*Felis lynx*) Habitat: mosaics--dense sapling and old forest >5,000 ft. elev.	[N] -- Habitat suitable for use by Canada lynx does not occur within the project area or cumulative effects analysis area. Thus, no direct, indirect, or cumulative effects to lynx would be anticipated.

DNRC Sensitive Species	[Y/N] Potential Impacts and Mitigation Measures N = Not Present or No Impact is Likely to Occur Y = Impacts May Occur (Explain Below)
Bald Eagle (*Haliaeetus leucocephalus*) Habitat: late-successional forest <1 mile from open water	[N] Bald eagles are present along the Rocky Mountain Front. However, habitat suitable for nesting eagles does not occur in the project area or cumulative effects analysis area. Any appreciable use of the area would likely be confined to the winter period when eagles would likely be foraging in the area on carrion. Thus, no direct, indirect or cumulative effects to bald eagles would be anticipated.

Gray Wolf (*Canis lupus*) Habitat: ample big game pops., security from human activity	[N] No active wolf packs or dens are known to occur within the project area or cumulative effects analysis area, and project activities would occur outside of the sensitive spring denning season (April 1 to June 30). Thus, no direct, indirect or cumulative effects to gray wolves would be anticipated.
Black-Backed Woodpecker (*Picoides arcticus*) Habitat: mature to old burned or beetle-infested forest	[N] Habitat suitable for use by black-backed woodpeckers does not occur within the project area or cumulative effects analysis area. Thus, no direct, indirect, or cumulative effects to black-backed woodpeckers would be anticipated.
Black-tailed Prairie Dog (*Cynomys ludoviscianus*) Habitat: Prairie, shortgrass prairie, badlands	[N] No known prairie dog colonies occur within the project area or cumulative effects analysis area. Thus, no direct, indirect, or cumulative effects to prairie dogs would be anticipated.
Flammulated Owl (*Otus flammeolus*) Habitat: late-successional ponderosa pine and Doug.-fir forest	[N] Habitat suitable for use by flammulated owls does not occur within the project area or cumulative effects analysis area. Thus, no direct, indirect, or cumulative effects to flammulated owls would be anticipated.
Greater Sage-grouse (*Centrocercus urophasianus*) Habitat: sagebrush semi-desert	[N] Developed sagebrush communities do not occur on the project area of within the cumulative effects analysis area, and no sage-grouse flocks or leks are known to occur in these areas. Thus, no direct, indirect or cumulative effects to greater sage grouse would be anticipated.
Ferruginous Hawk (*Buteo regalis*) Habitat: prairies and badlands	[Y] Ferruginous hawks have been observed in the vicinity of the project area and potential nesting habitat may be present. Project activities would occur outside of the critical nesting season (April 1-July 30) (USFWS 1987). However, there is some potential for displacement of several individuals due to ground and aerial helicopter activities should hawks be present near active work zones. By conducting activities late in the summer (month of August only), the potential for displacement and adverse effects to ferruginous hawks would be lessened. Given the season activities would occur, the types of activities that would occur, and the short 1-month duration of planned activities, minor adverse direct, indirect, and cumulative effects to ferruginous hawks would be anticipated.
Long-billed Curlew (*Numenius americanus*) Habitat: moist meadows and dry upland prairies	[Y] Long-billed curlews have been observed in the vicinity of the project area and potential nesting habitat may be present. Project activities would occur outside of the critical spring nesting season. However, there is some potential for displacement of individuals due to ground and aerial helicopter activities should curlews be present near active work zones. By conducting activities late in the

	summer (month of August only), the potential for adverse effects associated with displacement would be lessened. Given the season activities would occur, the types of activities that would occur, and the short 1-month duration of planned activities, minor adverse direct, indirect, and cumulative effects to long-billed curlews would be anticipated.
McCown's Longspur (*Rhynchophanes mccownii*) Habitat: dry short-grass plains	[Y] The project area occurs within the known distribution of McCown's longspurs. Grassland habitat found on the project area is generally comprised of mid to taller grass species such as rough fescue (*Festuca scrabrella*) and may not be highly preferred by this species. However, inclusions of potential nesting habitat may be present in the project area and cumulative effects analysis area. Project activities would occur outside of the critical spring nesting season. However, there is some potential for displacement of some individuals due to ground and aerial helicopter activities should longspurs be present near active work zones. By conducting activities late in the summer (month of August only), the potential for adverse effects associated with displacement would be lessened. Given the season activities would occur, the types of activities that would occur, and the short 1-month duration of planned activities, minor adverse direct, indirect, and cumulative effects to McCown's longspurs would be anticipated.
Sprague's Pipit (*Anthus spragueii*) Habitat: native medium to intermediate height prairie	[Y] The project area occurs within the known distribution of Sprague's pipit, and grassland habitat found on the project area is potentially suitable for this species. Project activities would occur outside of the critical spring nesting season. However, there is some potential for displacement of some individuals due to ground and aerial helicopter activities should longspurs be present near active work zones. By conducting activities late in the summer (month of August only), the potential for adverse effects associated with displacement and nest abandonment would be lessened. Given the season activities would occur, the types of activities that would occur, and the short 1-month duration of planned activities, minor adverse direct, indirect, and cumulative effects to Sprague's pipits would be anticipated.
Harlequin Duck (*Histrionicus histrionicus*) Habitat: white-water streams, boulder and cobble substrates	[Y] Harlequin ducks have been documented in years past west of the project area. Suitable habitat is potentially present in portions of Dupuyer Creek. Project activities would occur outside of the critical nesting season. However, there is some potential for displacement of several individuals due to aerial helicopter activities should they be present near active work zones. By conducting activities late in

	the summer (month of August only) and by prohibiting activities near Dupuyer Creek, the potential for displacement and adverse effects to harlequin ducks would be lessened. Given the season activities would occur, the types of activities that would occur, and the planned restriction of activities in areas along Dupuyer Creek, minimal adverse direct, indirect, or cumulative effects to harlequin ducks would be anticipated.
Mountain Plover (*Charadrius montanus*) Habitat: short-grass prairie, alkaline flats, prairie dog towns	[N] Short-grass prairie types and prairie dog towns are not present in the project area and no observations of mountain plovers have been reported in the local geographic area. Thus, no direct, indirect or cumulative effects to mountain plovers would be anticipated.
Northern Bog Lemming (*Synaptomys borealis*) Habitat: sphagnum meadows, bogs, fens with thick moss mats	[N] The project area is outside of the known distribution of bog lemmings, thus no impacts to bog lemmings would be anticipated. Further, motor vehicle use would be prohibited within any wet meadows, bogs or fens that could occur within the project area, which would protect potential habitat or suitable features should they be present. Thus, no direct, indirect, or cumulative effects to northern bog lemmings would be anticipated.
Peregrine Falcon (*Falco peregrinus*) Habitat: cliff features near open foraging areas and/or wetlands	[N] Peregrine falcons have been documented in the vicinity of the project area and suitable foraging areas occur all along the Rocky Mountain Front. However, cliff features suitable for nesting sites do not exist within the project area or cumulative effects analysis area. Thus, the potential for adverse direct, indirect, or cumulative effects to peregrine falcons would be minimal.
Pileated Woodpecker (*Dryocopus pileatus*) Habitat: late-successional ponderosa pine and larch-fir forest	[N] Forested habitat suitable for use by pileated woodpeckers does not occur within the project area or cumulative effects analysis area. Thus, no direct, indirect, or cumulative effects to pileated woodpeckers would be anticipated.
Townsend's Big-Eared Bat (*Plecotus townsendii*) Habitat: caves, caverns, old mines	[N] Caves suitable for use by Townsend's big-eared bats do not occur within the project area or cumulative effects analysis area. Thus, no direct, indirect, or cumulative effects to bats would be anticipated.

Mitigations

The primary mitigation incorporated into the proposed project considered to lessen many issues of concern for wildlife, is to restrict the period of operation on affected state trust lands to occur from August 1 through August 30. By requiring all associated field activities to occur during this brief

operational window, the vast majority of potential adverse impacts associated with project-related disturbance and/or trampling can be minimized or avoided. These include lessened effects for ground-nesting birds, other nesting upland and riparian song birds, raptors, calving and denning mammals during the spring season, and sensitive spring and fall seasons for grizzly bears during periods of their greatest nutritional stress and need. Similarly, by requiring activities to occur during this brief period in late summer, any potential for disturbance and displacement to wintering elk and deer herds can be avoided during their period of greatest stress from December to April. Work would also be conducted in a sequential manner (i.e., one portion surveyed before moving to the next portion), which would lessen the scope of impact zones at the time survey work would be conducted. In order for activities to occur within the narrowest window possible, an allowance for workers in closed vehicles to operate 24 hours per day would be required and authorized. As a precautionary measure to protect human safety and grizzly bears, ground crews would not be permitted to travel away from closed vehicles during nighttime hours.

Mitigations that would be required before permitting would be authorized would include:

The mitigations that are detailed below apply directly to the state lands proposed for inclusion in the seismic exploration project area. The seismic contractor anticipates completing the entire seismic activities within an approximate one month time frame. However, the DNRC has no control over seismic activities on private lands.

Human Safety and Grizzly Bear Protection

- To minimize risk of disturbance and displacement of grizzly bears and surprise bear encounters, prohibit ground activities within 1/8 mile of brushy areas situated along Dupuyer Creek and prohibit ATV and foot travel into dense, brushy portions of the survey area.

-To minimize risk of disturbance and displacement of grizzly bears, prohibit aerial helicopter flights within 1/4 mile of brushy areas situated along Dupuyer Creek.

-For human safety, brief staff conducting ground activities on working safely in bear habitat and train in the effective use of bear spray.

-For human safety while working in occupied grizzly bear habitat, require ground crews to carry bear spray.

-To minimize risk of bear habituation and human/bear encounters, require that any bear attractants, including food and garbage be stored in a bear resistant manner at all times when unattended.

-To minimize risk of bear habituation and human/bear encounters, prohibit on site camping within the project area.

- To minimize risk of surprise bear encounters, prohibit cross country foot travel by ground crews in nighttime hours between 9:30 pm and 7:30 am. Crew members should remain in or near trucks.

-To reduce disturbance for grizzly bears during the most critical feeding periods in spring and fall, restrict the allowable period of ground and aerial activities to occur from August 1 to August 30.

-To minimize potential for disturbance and adverse impacts to important bear foods and feeding areas, prohibit use of vehicles in wetlands and riparian areas.

Other Terrestrial Species

-To minimize potential for disturbance and displacement during the most important periods during the year for ground-nesting birds, other song birds, raptors, carnivores, and big game species, restrict the allowable period of ground and aerial activities to occur from August 1 to August 30. To ensure activities can be completed during this condensed time period, allow 24 hour operations to occur as needed.

-To minimize the extent of displacement associated with project-related disturbances, conduct ground activities to the extent possible in a sequential vs. a concurrent manner.

-To minimize risk of weed introduction and spread, require power washing of all vehicles, vibroseis trucks, ATVs and other equipment before entering the survey area. Oil and gas lessees shall be responsible for any noxious weed issues that may arise.

-To minimize potential for disturbance and adverse impacts to sensitive wetland plant and animal species, prohibit use of vehicles in wetlands and riparian areas.

References

DFWP 2010. Montana Fish, Wildlife and Parks crucial areas planning system. Version 1.0. Helena, Montana. April 2010.

USFWS 1987. Interagency Rocky Mountain Front wildlife monitoring/evaluation program. Management guidelines for selected species. September 1987. 71 pp.

MNHP 2011. Montana Natural Heritage Program species of concern query -- Natural Heritage Tracker. July 19, 2011.

Wittinger, W.T. 2002. Grizzly bear distribution outside of recovery zones. Unpublished memorandum on file at U.S. Forest Service, Region 1, Missoula, MT. 2pp.

Attachment C

Comments Received

and

DNRC Responses to Comments

Eneboe, Erik

From: dblank1@cyberport.net
Sent: Sunday, July 03, 2011 8:38 PM
To: Eneboe, Erik
Subject: comments on Pondera 3-D Seismic

Dear DNRC staff,
I am very concerned about the effects of the seismic survey proposed for the sensitive shortgrass prairie near Dupuyer Creek. This area has some of the highest quality native plant communities that I have seen in the prairies of the Front. And, as you know, the natural resources of the Front are outstanding nationally.

Any seismic operations should follow these precautions to avoid doing damage to the area:
Prevent weed infestations by thoroughly cleaning all machines and equipment before bringing it into an area, and before moving it if it as been in an area with weeds.
Do long-term, multi-year monitoring after operations, and treat any weeds found.
Stay off soils when wet.
Stay out of areas with riparian vegetation and seasonal wetlands to protect vegetation and water quality.
Stay out of grizzly bear habitat. In this region, grizzlies use the creek bottoms and riparian areas.

With that said, the larger issue is that this area is inappropriate for oil and gas extraction, which makes it inappropriate for survey work. The federal government has already recognized this. DNRC could be part of the movement to maintain Montana's legacy for our childrens' children, and not consume the minerals while damaging the surface values.

Sincerely,
D. L. Blank
PO Box 953
Whitefish, MT 59937

Eneboe, Erik

From: Laura Miller [vland6491@yahoo.com]
Sent: Wednesday, July 06, 2011 3:19 PM
To: Eneboe, Erik
Subject: Pondera 3-D Seismic

TO: Erick Eneboe
DNRC, Trust Lands Mngmnt Div.

Mr. Eneboe,

We are writing to you in order to express our deepest concern for the seismic operations in the Swift Dam area. We are homeowners in the proposed area and greatly object to this operation. We are proponents in saving the Rocky Mtn Front from as much destruction of habitat as possible. We do not think we have gotten to a point where drilling in one of the last undisturbed areas left is necessary.

Montana was the first state to really hold conservation and wildlife management as a foremost concern. It has a heritage regarding it's natural history, in holding it's lands and wildlife at the top of the priority list.. The Rocky Mtn Front is the top wildlife habitat in the nation. There is an extreme need for the future generations to keep this intact. There is plenty of drilling going on now that hasn't been exhausted so we have the opportunity to keep this area free of disturbance. This region is known not only as the area with the largest number of grizzlies, but also the largest grizzlies. The habitat here is crucial considering the proximity to Dupuyer Creek. The proximity to the TMR Ranch is also crucial due the area being much needed winter range for not only our hurting Elk populations but also great numbers of deer, coyotes, wolves, wolverines, mountain lions, and the possible re-establishing of an Antelope population, just to name a few. The area is also a natural native short grass prairie which is also down to only about 2% left in the nation. It is valuable nesting and breeding ground for the Long-billed Curlew and many more ground nesting birds.

It is not only a concern for the seismic trucks to come through but also for the drilling itself. An environmental assessment for the drilling should already be in place before and seismic information is necessary. This area is the headwaters for a lot of livelihoods down stream. Fracking is a danger to water sources and also water supplies. With our well being in the area as well as two creek systems, fracking could possibly harm many irrigation sources in which ranchers, livestock, and wildlife depend.

Just the driving on the lands themselves could cause harm that would take many many years to repair. This is very slow growing vegetation and a extremely harsh growing climate. The transportation and spreading of noxious weeds is a definite not a possibility. This area in particular has a reputation for spending a lot of time and effort controlling these weeds and that should be respected. The surrounding private land holders have decided to keep their land intact and undisturbed and we should help them in these efforts. They have been offered incredible amounts of money to be part of this effort and have refused. The value to the land here is in it's natural state. Let's please honor their rights and their effort. Our representatives in government have been pushing hard an agenda to conserve the front and the federal leases in this area are off limits. That effort only woks if the state also follows suit. There needs to be a united governing rule here. Please take the time to really examine the environmental impact of not only the seism graphing but also the drilling and fracking. They won't even say what the frack with- that alone needs to be known and examined for impact BEFORE anything goes any further. Thanks for listening to our comments.

Sincerely,

Laura Miller and Virgil Pedersen
6491 Swift Dam Rd.
472-3234

Eneboe, Erik

From: Dave Hanna [dhanna@TNC.ORG]
Sent: Wednesday, July 06, 2011 3:59 PM
To: Eneboe, Erik
Subject: Pondera 3-D Seismic
Attachments: Pondera_3-D-Seismic_birds.pdf

July 6, 2011

Pondera 3-D Seismic

Erik Eneboe
DNRC, Trust Lands Management Division
600 South Main, Suite 10
P.O. Box 961
Conrad, MT 59425

Dear Mr. Eneboe,

I am writing to provide comments on the Pondera 3-D Seismic EA. The proposed seismic operation area boundary includes private land on which The Nature Conservancy (TNC) holds conservation easements. Some of the DNRC parcels are adjacent to these private lands where we hold a conservation interest. As such, we are concerned about the impact of the proposed activity on both the state parcels as well as the surrounding area.

The maps I have seen of the proposed seismic survey show a very intensive pattern of source and receiver lines, which will require a significant amount of off-road vehicular traffic, including heavy vibroseis trucks, to implement. This vehicular traffic may displace wildlife and reduce habitat availability, destroy grassland bird nests, disturb cultural features, compact soils and damage vegetation, create rutting and trails, create erosion on steep slopes, introduce or spread noxious weeds, and reduce agricultural productivity. Some of these impacts can be avoided or mitigated, although given the diversity of values and the intensity of the proposed activity some impacts are inevitable.

Basic precautions to reduce impacts of vehicular traffic include limiting off-road travel to only essential travel, avoiding time periods when soils are wet and can be easily damaged or rutted, avoidance of steep slopes, and avoidance of cultural features. In addition, procedures to eliminate the introduction and spread of noxious weeds are essential to protect agricultural and ranching enterprises.

Currently, the area within the proposed seismic survey boundary is mostly free of noxious weeds. Avoiding any areas with noxious weeds will prevent spread from these existing sources. Thoroughly washing all vehicles prior to arriving in the project area will help prevent new introductions of noxious weeds. Vehicles which are subsequently exposed to noxious weed sources, either within or outside the project area, could be again washed after exposure to prevent transport of noxious weeds. Additional precautions include minimizing off-road vehicle travel and ensuring that any staging areas are weed-free.

The Rocky Mountain Front Weed Roundtable could provide data on known noxious weed locations in the proposed project area. However, this data is undoubtedly incomplete and should not be solely relied upon for avoidance of noxious weeds. It would be beneficial if project personnel could identify noxious weeds and were able to map and avoid weeds they encounter. Given the level of GPS and survey activity associated with the project, it seems like this could be easily accomplished.

However, even with appropriate precautions, some introduction of noxious weeds could occur given the intensity of the proposed seismic survey, some inevitable ground disturbance, and the presence of noxious weed sources near the

project area. Post-activity surveys in subsequent years could be conducted to locate and eradicate any new introductions.

The intensity of the proposed seismic survey is far greater than originally contemplated by the 1987 Interagency Rocky Mountain Front Wildlife Monitoring/Evaluation Program, Management Guidelines for Selected Species. These guidelines recommend that concurrently active seismic lines be spaced at least 9 air miles apart, and that activities avoid seasonally important wildlife habitats. Dupuyer Creek and other riparian zones in the proposed project area provide important seasonal grizzly bear habitat. Avoidance of these features and seasonal restrictions on activity in adjacent areas could reduce impacts to grizzly bears. Similarly, seasonal avoidance of important habitat features for other wildlife species such as deer or elk could reduce impacts to those species. Montana Fish Wildlife and Parks biologists could provide the most up-to-date information on habitat use and timing restriction recommendations.

The proposed project area includes extensive areas of native grasslands which support numerous grassland bird species, including several species of concern as listed by the Montana Natural Heritage Program. These include long-billed curlew, McCown's longspur, and Sprague's pipit. Sprague's pipit is also a candidate species for listing under the Endangered Species Act (ESA). In September 2010 the US Fish and Wildlife Service determined that Sprague's pipit warranted protection under the ESA , but that listing was precluded by higher priorities.

Based on 2005 point count data from private lands within the proposed project area, DNRC lands likely support all the above listed species. Predictive modeling for these species based on survey data from 2006 suggests that DNRC lands in the project area provide extensive habitat for long-billed curlew and Sprague's pipit, along with a smaller habitat area for McCown's longspur. I have included maps that show this modeled expected distribution for DNRC lands and can provide further data if it would be useful. Avoidance of grassland habitat during the breeding season would reduce impacts to these species.

Wetlands and riparian zones, while only occupying a small proportion of the landscape, are critical features in this arid landscape. Soils and vegetation in these areas can often be easily damaged by heavy vehicles. Avoidance is the best strategy to reduce impacts to these features.

Salix serissima, listed as a plant species of concern by the Montana Natural Heritage Program, occurs in small fen wetlands along and above the North Fork of Sheep Creek just north of the project boundary. Based on aerial photos, the wetland on DNRC land in the NW¼ S16 T28N R8W and adjacent private land appears to be a similar fen wetland feature. While I have not visited this site, I believe there is a reasonable probability that it also supports *Salix serissima*. This species occurs in fen wetlands which could be easily damaged by vehicular traffic. Aerial photos also show that pothole wetlands occur in T28N R8W S16. All these wetland features are small, and should be able to be easily avoided.

There appear to be numerous other small wetlands and riparian areas on other DNRC lands in the proposed project area. These features are small in size, and best protected by avoidance. Some of these are mapped by the National Wetlands Inventory data; others could be identified and mapped as encountered in the field by project survey crews.

It is my understanding that snow removal may be necessary if 3-D seismic operations are conducted in winter. Given the intensity of the source and receiver lines, this could create a significant network of ground disturbance that would damage soils and vegetation and serve as a vector for noxious weeds. If a winter time frame is considered for the proposed seismic operation, snow removal impacts could be avoided by restricting seismic activity to periods when the ground is snow-free and mechanized snow removal is not necessary. Due to the frequent high winds in the proposed survey area, snow-free periods are common in winter.

Thank you for the opportunity to comment. If you have any questions regarding my comments or need additional information please contact me.

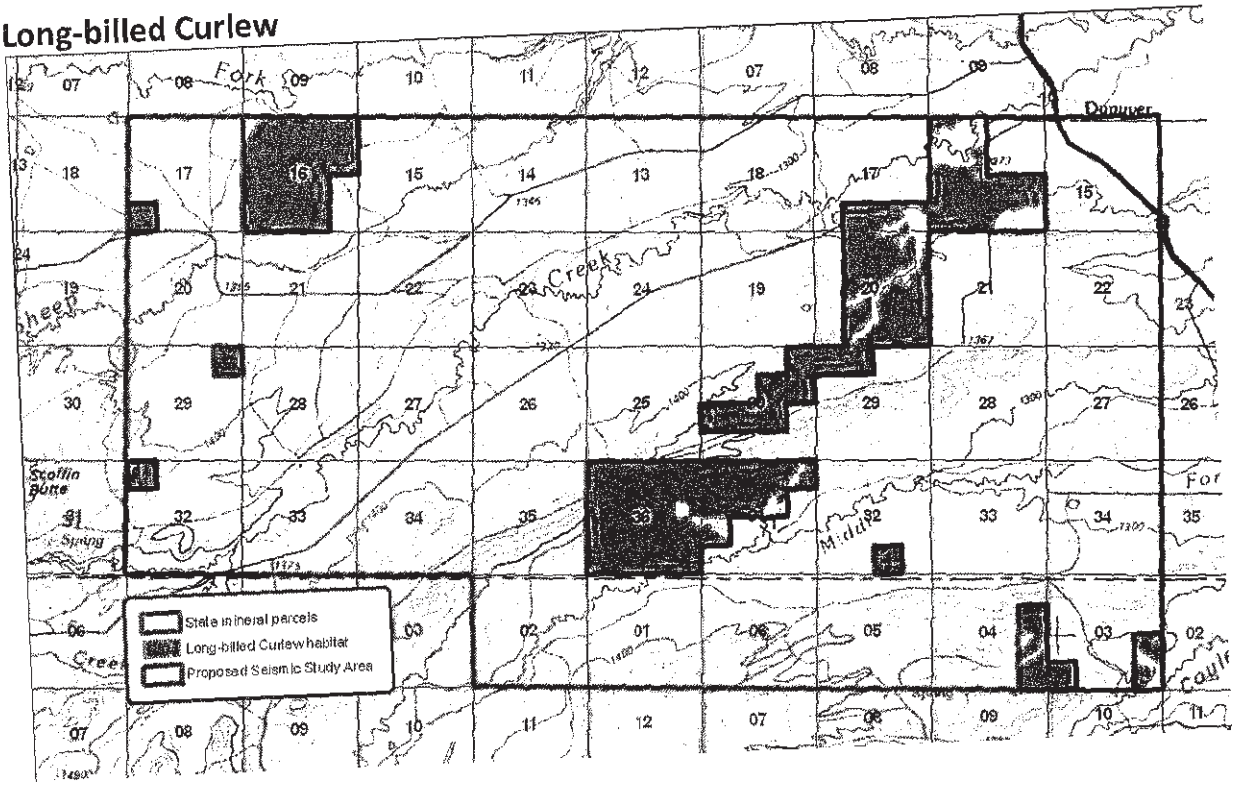
Sincerely,

David Hanna
Rocky Mountain Front Science and Stewardship Director
The Nature Conservancy
PO Box 825
Choteau, MT 59422
406-466-5299

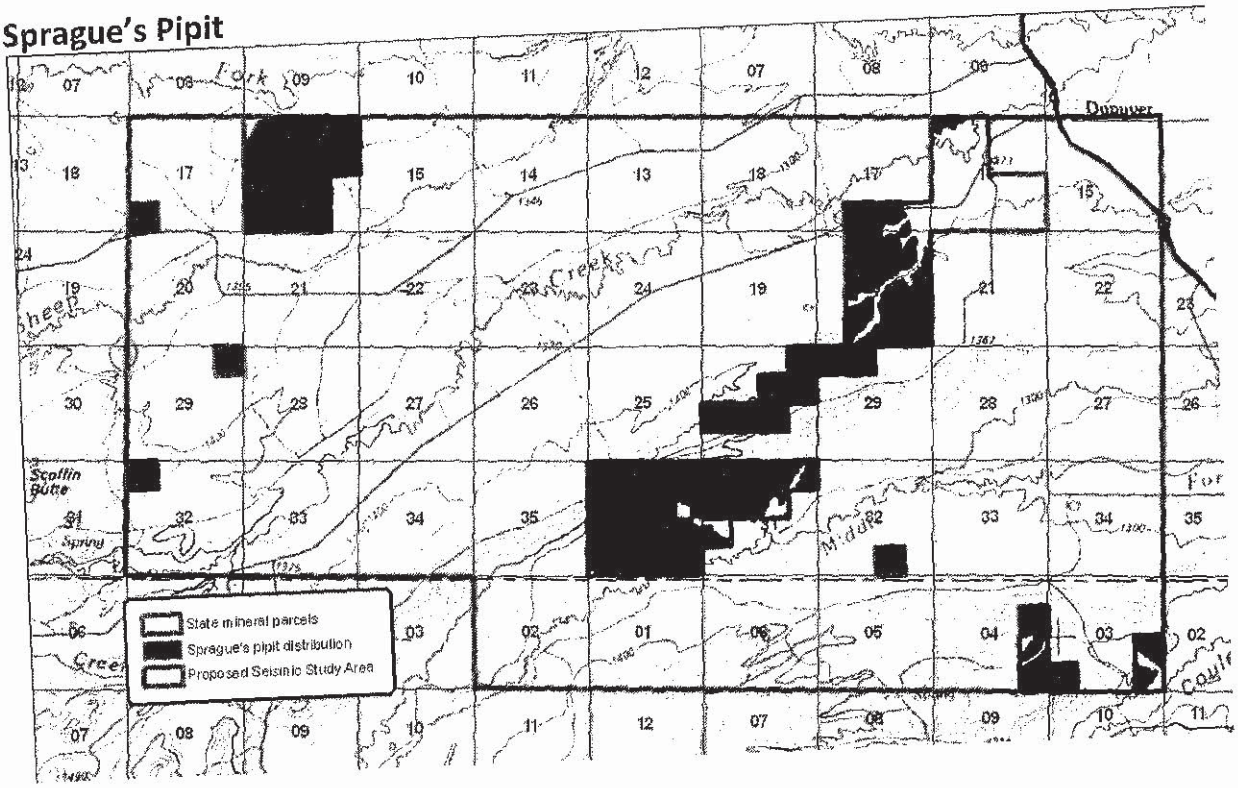
Expected distribution of Long-billed Curlew, Sprague's Pipit, and McCown's Longspur on DNRC lands in the Pondera 3-D Seismic EA Area based on data from:

Martin, B. and B. Long. 2007. Developing a Predictive Model for the Distribution of Priority Grassland Bird Species on the Rocky Mountain Front. Report to The Nature Conservancy, Helena, MT.

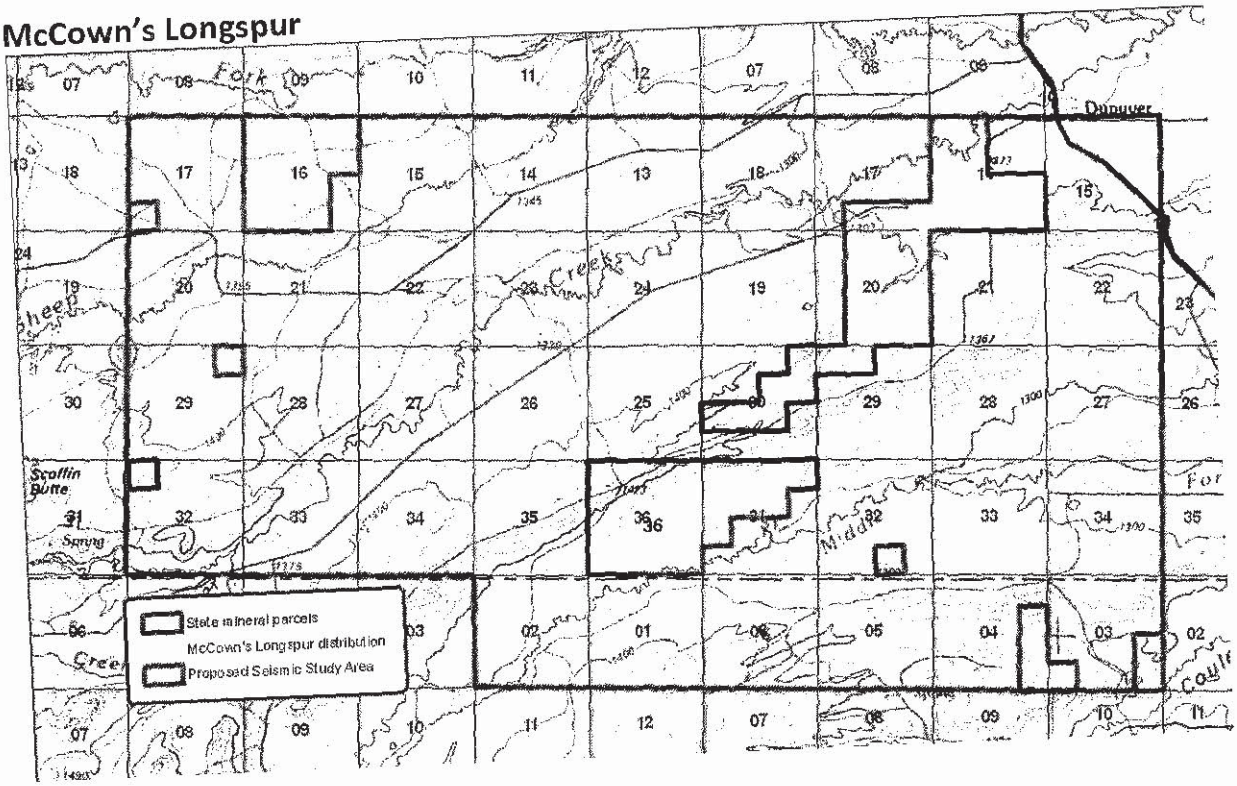
Long-billed Curlew



Sprague's Pipit



McCown's Longspur



MONTANA WILDLIFE FEDERATION
www.montanawildlife.org

Protecting Montana's wildlife, land, waters, hunting and fishing heritage since 1936

Erik Eneboe, Conrad Unit Manager
DNRC, Trust Lands Management Division
600 South Main, Suite 10
P.O. Box 961
Conrad, MT 59425
eeneboe@mt.gov

Mr. Eneboe,

Thank you for the opportunity to submit comments regarding the scoping document for the Site-Specific Environmental Assessment for CGG Veritas Land Company to Conduct Seismic Operations near the Eastern Rocky Mountain Front. The Montana Wildlife Federation (MWF) is Montana's oldest and largest Hunter/Angler Conservation organization, with over 7,000 members, many of whom hunt, fish, recreate and live within the project area, and along the Rocky Mountain Front in General. In fact, Montana Wildlife Federation's conservation history is intricately linked to the conservation history of the Rocky Mountain Front.

1947, MWF member Tom Messalt worked with Choteau Area rancher Karl Malone to come up with the down payment for the Sun River Game Range. Since then, MWF has been a staunch advocate for the wildlife and wildlife habitats along the Front. That tradition continues today with our role in the Coalition to Protect the Rocky Mountain Front, as well as other advocacies in the area. MWF believes that the conservation of the Rocky Mountain Front is of paramount importance to the local economy, as well as the critical wildlife habitat found in the project area.

Recognizing the Constitutional and Statutory authority of the Department of Natural Resources Conservation, MWF submits the following comments in regards to the scoping document:

Currently, the Rocky Mountain Front Stipulations that the DNRC and Board of Oil and Gas operate under are the strongest in the state, and possibly the nation. These stipulations were carefully crafted, and designed in such a manner as to allow for the exploration and development of oil and gas resources on DNRC state trust lands. MWF fully recognizes the bold effort by the DNRC to act as good neighbors in areas where conservation values are high, and many surrounding private lands are under conservation easements to protect and enhance natural, native plant communities and wildlife.

Unfortunately, the Rocky Mountain Front Guidelines referenced in the stipulations and the Scoping document is woefully outdated. Adopted in 1988, the RMF Guidelines do not take in to account expanding populations and wintering grounds for elk and pronghorn, as well as expanding occupied habitat for Grizzly Bears. There are several species of concern, as well, that rely on the proposed area for some or all of their habitat needs. These include the Long-Billed Curlew, and several other sensitive migratory bird species.

We respectfully request that the DNRC work collaboratively with the Montana Fish, Wildlife and Parks Department, the US Fish and Wildlife Service and the University of Montana, as well as Non-Governmental Organizations such as the Boone and Crockett Club and the Nature Conservancy, to compile the latest research and findings in the project area, and surrounding environs. This collaboration will help assimilate the latest, best science in determining impacts, mitigation and avoidance of the project sponsors during critical times, and in critical habitats.

We also request that the DNRC follow not only the guidelines, but the spirit of the stipulation which goes far beyond a checklist Environmental Assessment, and encompasses a much more detailed look at the proposed activity.

The Rocky Mountain Front's wildlife resource is an $11 million per year renewable economy and resource. Our members are major economic drivers in the project area, and believe that if all the current and proper information is reviewed, that the DNRC can craft a proposal that respects all rights and privileges of different interests.

Thank you for the opportunity to comment,

Ben Lamb
Conservation Director for State and National Issues
Montana Wildlife Federation
P.O. Box 1175
Helena, MT 59624
blamb@mtwf.org
(406) 437-3558 (xtn 108)

July 6, 2011

Erik Eneboe, Conrad Unit Manager
DNRC, Trust Lands Management Division
600 South Main, Suite 10
P.O. Box 961
Conrad, MT 59425
eeneboe@mt.gov

Mr. Eneboe,

These are my comments regarding the proposed Site-Specific Environmental Assessment for the for CGG Veritas Land Company to Conduct Seismic Operations along the Rocky Mountain Front.

This area is of national significance. The procedures and activates for seismic testing must comply with the existing laws, regulations and specific stipulations for protection of both people and the environment. Included in this supervisory duty is the responsibility of the State to assure the proper care of these special resources, especially State Trust Lands. No amount of money is worth destruction of or damage to the water, the wildlife and the overall values recognized by thousands and thousands of citizens of both this State and of our nation.

The DNRC and Board of Oil and Gas need to very carefully perform their duties to assure careful and complete compliance with the existing stipulations specifically designed to allow certain activities of this type while assuring the protection of the State's Trust lands, its wildlife and water.

DNRC needs to collaborative with the Department of Montana Fish, Wildlife and Parks, the US Fish and Wildlife Service and other public and private organizations to assure these special resources are adequately protected.

Please be very careful to assure that the wildlife resources, water and aesthetic values are not sacrificed in any manner to support a potentially risky commercial activity, be it seismic testing or actual drilling. History of oil and gas activities in this state is replete with environmental damage that often has to be addressed and cleaned up by our citizens after activities of this nature.

Please pay special attention to the duty to assure a clean and healthy environment as guaranteed by our Montana Constitution.

Thank you for the opportunity to comment,

Stoney Burk
P.O. Box 1019
Choteau, MT 59422
stoneman@3rivers.net

JOHN A. "Chip" MILLER, JR.
CERTIFIED PROFESSIONAL LANDMAN
PO Box 502 ~ Shelby, Montana 59474
Phone (406) 434-2911 ~ Email: pega@3rivers.net

July 10, 2011

Mr. Erik Eneboe
DNRC – Conrad Field Office
PO Box 961
Conrad, MT 59425

Re: Primary Petroleum's Ponderosa 3-D Seismic Survey
Pondera and Teton Counties, Montana

Dear Erik,

I understand that there is opposition to this project by the environmental community, and I am having a hard time understanding this. Here are a few reasons why I fully support the project:

1. Jobs
2. Jobs
3. Jobs

Not to mention that, in the event of a successful oil and gas exploration and development program, further benefits would include more domestic production, desperately needed tax relief, more money for schools, royalties for land and mineral owners, decent paying jobs – need I say more.

The adverse impact on wildlife and the landscape will be non-existent and I'm surprised that the state is wasting the taxpayer's time and money by even considering and giving credence to these obstructive, socialistic and well-funded environmental groups whose only goal is $10+ per gallon gasoline.

I am certain that I speak for the vast majority of north central Montana citizens when I request that you expedite the permitting process and allow Primary to move forward with its survey ASAP. Thank you.

Sincerely,

John (Chip) Miller, CPL

Eneboe, Erik

From: Carolyn Salansky [cansalmy@3riversdbs.net]
Sent: Monday, July 11, 2011 8:51 AM
To: Eneboe, Erik
Cc: Mason, Monte
Subject: Pondera 3-D Seismic Plan

Erik Eneboe
DNRC
600 South Main, Suite 10
P.O. Box 961
Conrad, MT 59425
eeneboe@mt.gov

Mr. Eneboe:

We are writing in support of the Pondera 3-D Seismic plan as we strongly believe the stipulations as set forth by the State Mineral Lease program are among the most highly stringent and tightly regulated rules in the nation. There will be no room or opportunity for irresponsible activity with the present oversight and supervisory authority of the DNRC.

We are landowners in adjacent Teton County and are acutely aware of the qualities and nature of the land upon which we live. We don't just talk about stewardship; we reside here and take care of the range and grasslands everyday. Care of the environment is our top priority. That being said, we are also cognizant of the attempts to gradually remove all private enterprise and productivity from the area designated in the long range Wildlands Project. The most efficient and responsible manner of exploration and extraction will be actively contested by the preservationist community in order to deter any oil/gas activity.

Many landowners, mineral/surface owners, lease holders are supportive of local oil/gas exploration. The media and vocal environmental groups would have you believe the majority of the local population oppose any such activity. A straw poll taken in Teton County a number of years ago expressed 75% of the county in support of responsible oil and gas exploration. Also, many of the mineral rights held by previous owners on lands purchased by environmental groups or public agencies are subject to potential activity, and the current owners were aware of that possibility when they acquired easements or title to the land. Viewing the reclamation areas along the Front where drilling took place in the past will prove that these areas can be reclaimed to the point where the land actually looks better than it did originally.

Again, we believe in the integrity of the DNRC as the watchdog of our state lands. The concerns of the opposed have been addressed in the rigid stipulations in the Montana State Mineral Lease program.

Sincerely,

Tom and Carolyn Salansky
Arrow S Ranch
P.O. Box 112
Dupuyer, MT 59432

July 9, 2011

To: Mr. Eric Eneboe , Conrad Unit Manger-DNRC

Subject: Seismic Permit, Pondera/Teton Counties

Ref: Public Notice for Township 27-28 North, Range 7-8 West

Thank you for the opportunity to comment on the process for issuance of the subject permit.

We at Montana Overthrust Management, llc support responsible development of the oil/gas resources which include seismic operations. As you know, significant State Mineral Lease activity and sales have been made in Pondera and Teton counties in the last year, and this type of activity will be on going. Also, the many acres of private minerals that are under lease in this area indicates significant private citizen support for these activities.

Recent 3D Seismic activity in this general area (2007-2008) covered approximately 30,000 acres and was conducted with no known environmental disturbance. We believe the DNRC's stipulations associated with the State Mineral Lease process will address potential environmental concerns.

Again, we support the issuance of this permit, knowing that the DNRC will interact with other surrounding surface owners to mitigate concerns. Please feel free to contact us regarding surface/mineral ownership in this area, our mission is, and has been, to facilitate responsible Oil/Gas development through personal contact with these owners.

Regards,

Harold Yeager and Dan Lindseth

Owner/Agents of M.O.M.,llc

1501 Airport Road, Choteau, MT 59422 406-466-2955 or 406-590-5447

JAMIE CANFIELD HARWELL
461 S.PARK AVENUE
HELENA, Montana 59601
(406) 439-5097

July 9, 2011

Mr. Erik Eneboe
DNRC Trust Lands Management Division
P.O. Box 961
Conrad, Montana 59425

Re: Ponderosa 3-D Seismic Survey
Primary Petroleum Company
Teton and Pondera Counties, Montana

Dear Mr. Eneboe:

I wish to express MY FULL SUPPORT of the Ponderosa 3-D seismic survey proposed by Primary Petroleum Company in "Ponderosa" area.

Concerns that we have heard expressed by opponents of the survey are unfounded and overblown. The survey will not destroy the environment, cause weed infestations, disrupt grizzly bear habitat, cause cow elk to abort, or bother coyotes, curlews, wolves, wolverines and mountain lions. Although trucks and 4-wheelers may cross the land off-road, the impact should be minimal the natural grasses will hardly be disturbed at all. They will survive and continue to thrive.

I live in Helena, Montana, the capital of the state with a urban deer populationthat requires they be "sniped" at night to cull the herds. We ALSO have, fox, bobcats, wild turkeys, pheasants, skunk, raccoons, bear, moose, porcupines, rabbits . . . you name it. The point being, as John and Bess Fredlund suggested: we all need to calm down and have a little perspective on these issues.

I too, love nature and the environment every bit as much as the next person and often spend time in the backcountry and in wilderness areas. I have listened to exaggerated concerns of some people and some organizations and chalk it up to hyped-up hysteria, out-right ignorance or making a living off of dooms-day predictions. We do need some balance with regard to these distortions!

Thank you for the opportunity to comment,

Jamie Canfield Harwell

Glenn W. Harwell

P. O. Box 675
Helena, Montana 59624
(406) 439-5778

July 8, 2011

Mr. Erik Eneboe
DNRC Trust Lands Management Division
P.O. Box 961
Conrad, Montana 59425

Re: Ponderosa 3-D Seismic Survey
Primary Petroleum Company
Teton and Pondera Counties, Montana

Dear Mr. Eneboe:

I am sending this letter in support of the Ponderosa 3-D seismic survey proposed by Primary Petroleum Company in "Ponderosa" area.

It seems that any time an energy development company wants to explore, there are always those groups with unsubstantiated reasons for preventing the exploration. These opponents are ever present, but rarely offer any realistic solutions to energy production in our country. The doomsday scenarios that are usually portrayed are often without merit or scientific basis, and seem to contain an element of hysteria.

I live three miles from Helena on a secondary Montana highway. This traffic, along with the off-road mountain bikers in the area around my small community, has not interfered with the seasonal visits from bear and moose, nor with the populations of deer, grouse, coyotes, foxes and many other forms of wildlife.

I am sure that the ranchers in the "Ponderosa" area are well aware of the tenaciousness of the grizzly, the elk, the coyote, the lion and other wildlife. It seems ironic that a rancher can dispose of these animals if they are a threat to their livestock operation, but the concern by these "others" is that a seismic survey might create a problem for this wildlife population.

With this in mind, I would like to reiterate my support for allowing the seismic survey to proceed as planned.

Respectfully,

Glenn W. Harwell

Eneboe, Erik

From: Jerry Black [Blacks@3rivers.net]
Sent: Friday, July 08, 2011 3:50 PM
To: Eneboe, Erik
Subject: Dupuyer Seismic Proposal

I am very much in support of this seismic proposal. I'm confident the seismic company would follow all requirements to protect the most sensitive areas as required. It's important for Montana, and the nation, to get as much technical information as possible on the potential for oil and gas development between Interstate 15 and the Rocky Mtn. Front. Without it we are really just speculating on what might or might not be there. More knowledge is not a bad thing and like other projects can be done responsibly taking in the concerns of all parties involved .We must cooperate and work together for the best interests of our state and country. Thank you.
Jerry Black
Former State Senator, Dist. 14
Shelby, Mt.

LEE LAW OFFICE PC
158 Main Street
P.O. Box 790
Shelby, Montana 59474

TELEPHONE (406) 434-5244
FAX (406) 434-5246

DON R. LEE, Attorney
don.leelaw@gmail.com

BRIAN D. LEE, Attorney
brian.leelaw@gmail.com

LUKE CASEY, Attorney
luke.leelaw@gmail.com

July 8, 2011

Erik Eneboe
DNRC Trust Lands Management Division
P.O. Box 961
Conrad, Montana 59425

Re: Pondera/Dupuyer Seismic Survey

Dear Mr. Eneboe;

This letter is submitted as a comment regarding seismic activity near Dupuyer, Montana proposed by Primary Petroleum Company LLC ("Primary") to be conducted by Primary's contractors (the "Surveys") and environmental assessment (the "EA") thereof. The attorneys and support staff in this office strongly support approval of Primary's proposal.

The proposed Surveys would be completed in under one month and the servo-hydraulic vibroseis trucks which would be used to perform the Surveys will have little to no impact upon the surface or wildlife occupying it. In other words, Veritas' presence will be brief and will be scarcely felt by the plants, wildlife and people in the area. Concerns regarding a perceived dire impact upon the various wildlife and plant life calling the Dupuyer area home are overbroad and lack a firm basis in fact. The means proposed for conducting the survey are minimally intrusive. In fact, it is the hope of the oil and gas industry that improved 3-D seismic surveying in the area will permit more efficient and selective drilling operations in the future to further minimize surface disturbance. In addition, the geographic area subject to the EA is immediately adjacent to the Gypsy Basin which is a producing oil and gas field that has already been in operation for years.

In addition, consideration must be given to the economic impact which hangs in the balance of the eventual findings of the EA. Approval of the proposed surveys will have significant positive economic impact which will be felt throughout the Montana oil and gas industry, encompassing a geographical area far broader in scope than the Dupuyer area. The attorneys in this office assist oil and gas clients with offices across Montana, southern Alberta and beyond. Development of potential oil and gas reserves in north central Montana, in turn allows this office and our oil and gas clients to engage a vast array of other individuals including landmen, accountants, IT personnel and manual laborers throughout Montana. It cannot be ignored that the employment opportunities created by projects such as this are some of the best north central Montana has to offer. In short, approval of the Surveys creates a positive ripple effect

throughout north central Montana and beyond creating employment opportunities and increased business for tens of thousands of Montanan's which extends far beyond the oil and gas industry.

Lee Law Office P.C. supports the proposed Surveys and urges a finding of no significant impact in response to the EA.

LEE LAW OFFICE P.C.

By: _____
Don R. Lee

G. B. COOLIDGE INC.
P. O. BOX 857
SHELBY, MT. 59474
(406) 434-7185

July 8, 2011

Montana Department Of Natural Resources & Conservation
P. O. Box 201601
Helena, MT 59620-1601

Attention: Monte G. Mason, Minerals Management Bureau Chief

Dear Sirs:

Re: Dupuyer Seismic Proposal

This letter is written in support of the above captioned seismic project. While companies such as ours, who are in engaged in the U.S. Oil & Gas Industry, realize the importance of protecting the environment, we must all understand that in order to develop future supplies of oil and gas to meet our country's energy needs, it will be necessary to look for these supplies in untested areas such as Dupuyer.

The simple facts are that the obvious and easy sources of oil and gas have all been found and developed, so if our industry is to provide energy for the future, we must explore in areas that have not been previously tested. The simple fact is that our nation uses 20 MMBO per day, and we as a nation produce only 6 MMBO per day. The balance must be imported from foreign sources, some of which are not friendly to the United States. For this one reason alone, it does not make sense to impair our industry's ability to find new sources of energy.

We have the knowledge and technology to develop a balance between environmental issues and pursuit of future energy supplies that will serve the best interests of all concerned. Hopefully, we possess the wisdom as well.

Yours very truly,
G. B. Coolidge Inc.,

Gus B. Coolidge Jr., P. Eng.
President

Eneboe, Erik

From: Brian D. Lee [brian.leelaw@gmail.com]
Sent: Friday, July 08, 2011 2:22 PM
To: Eneboe, Erik
Subject: Dupuyer Seismic Shoot - Primary Petroleum Company, LLC

Erik;

I am writing in regards to the the proposed seismic shoot that my law firm's client, Primary Petroleum Company, LLC ("Primary"), will be conducting in the very near future near Dupuyer, Montana. This letter is being submitted both in my individual capacity and as an attorney with the Lee Law Office PC which has provided legal services to Primary and its sister companies in Montana since approximately 2005.

I would first like to point out that our small firm in Shelby, Montana would be negatively impacted if the DNRC were to disallow Primary to proceed with its seismic shoot on State of Montana lands. Because of clients like Primary who are engaged in oil and gas exploration in Montana, our small firm is able to support 3 full time attorneys, 3 full time staff as well as no less than 4 part time staff. Our firm is able to provide some of the best paying jobs in Toole County, Montana and it is a direct result of clients like Primary. In addition to the employees and staff of our firm that benefit from having clients like Primary, there a multitude of other third parties such as landman, seismic permitting crews, seismic companies, etc. and the local motels and restaurants that house and feed these folks while working in Montana that directly benefit from Primary's oil and gas exploration activities in Montana. Last but not least are the actual landowners (including the State of Montana) on whose lands Primary intends to conduct the seismic shoot on. Primary will voluntarily pay tens of thousands of dollars in monies to these landowners simply for having to deal with Primary conducting the seismic shoot. Because our firm also represents a large number of farm and ranch clients in north central Montana I am personally familiar with the struggles these ag producers face today's and it is a rare occasion when any of my farm and ranch clients will reject the opportunity to allow oil and gas exploration on their lands. They usually jump at the chance to sign and oil and gas lease and welcome the additional monies they are paid when seismic or drilling activities occur on their lands.

I would like to close by saying that I have reviewed the public comments submitted on this matter through July 7, 2011, and it is my opinion that the majority of these comments are the same regurgitated nonsense that the environmental community uses ad nauseum to try and delay, stifle and prevent any carbon based natural resource development in Montana and the rest of the country. I truly believe that the majority of these people and organizations have no concept of how critical carbon based fuels are to our economy and in maintaining our high standard of living. Without low cost energy sources our standard of living in this country would be drastically reduced. Primary and its contractors are more than capable of conducting the proposed seismic shoot without causing wide spread and cataclysmic destruction of the environment or wildlife as alleged. In short, comments of this nature should be disregarded as radical and unsubstantiated allegations. The State of Montana and its citizens benefit far more from responsible oil and gas development than they ever will from locking up huge swaths of land in the name of "saving the land" for future generations.

It goes without saying that I am strongly in favor of Primary's scheduled seismic shoot.

--
Brian D. Lee
Lee Law Office PC
158 Main St.
PO Box 790
Shelby, Montana 59474
(406) 434-5244

July 8th, 2011

Montana Department of Natural
Resources & Conservation
Mr. Erik Eneboe & Staff
P.O. Box 201601
Helena, MT 59620-1601

Re: Dupuyer Seismic Proposal

Dear Mr. Eneboe and Staff,

Thank you for the opportunity to comment on the Dupuyer seismic program.

MCR, LLC is a family owned oil and gas company based in Shelby, Montana. We currently have operations in Toole, Liberty, Pondera and Teton Counties.

We are in support of the CGG Veritas Land Company seismic program. The east end of the proposed seismic program is within one mile of the Gypsy Basin Field which has been in existence since 1966. That field had nearly 65 wells drilled in it over the last 45 years most of which have been plugged and abandon. It is our hope that improved 3D seismic will allow companies better drilling locations so fewer dry holes will be drilled and thus less surface disturbance will occur.

We understand that a substantial amount of money has been spent on State of Montana Oil and Gas leases as well as fee leases. These leases were acquired in accordance with all existing rules, regulations and laws. The individuals or entities that granted the leases did so knowing that development was a possibility. The lessee is now in the process of development . This seismic program will last less than a month from start to finish and will have a very little if any impact on wildlife or environment.

MCR, LLC urges a finding of no significant impact and approves the proposal.

Sincerely,

Mac McDermott
MCR, LLC

P.O. Box 716 • Shelby, MT 59474-0716 • phone 406.424.8216

MONTANA PETROLEUM ASSOCIATION, INC.

25 Neill Avenue, Suite 202
Post Office Box 1186
Helena, Montana 59624-1186
www. montanapetroleum.org
Telephone (406) 442-7582
Fax (406) 443-7291

July 8, 2011

Erik Eneboe, Conrad Unit Manager
DNRC, Trust Lands Management Division
600 South Main, Suite 10
P.O. Box 961
Conrad, MT 59425

Dear Mr. Eneboe:

On behalf of the Montana Petroleum Association (MPA) we submit the following comments regarding the environmental analysis for proposed seismic activity near Dupuyer, Montana.

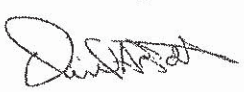
MPA is a voluntary, nonprofit trade association whose 143 members include oil and natural gas producers, gathering and pipeline companies, petroleum refineries, service providers and consultants. A majority of the oil and gas produced in Montana is produced by MPA members. Recent economic studies show that the petroleum industry provides, and supports over 12,000 jobs in Montana, and has a total economic impact of over $9 billion.

We support the request by CGG Veritas Land Company to perform seismic operations near Dupuyer, Montana. A considerable amount of money has been invested to acquire an acreage position in the area that includes State Trust Lands. The acreage position has been acquired in accordance with established processes and procedures. The next logical step in the exploratory process and develop seismic data for the area.

The proposed plan will use five servo-hydraulic vibroseis trucks to perform the analysis in an operation that will be conducted in less than one month. This operation will have minimal impact the surface, the environment and to wildlife. The area under review in your scoping notice is adjacent to developed oil and gas fields that have been producing for years. The seismic proposal that you have under review is a temporary action that has little if any impact on wildlife or the environment. MPA is not aware of any peer reviewed and published studies that indicate any negative impacts.

MPA urges a finding of no significant impact and approves the proposal.

Best Regards:



David A. Galt
Executive Director

cc: Monte Mason

John and Bess Fredlund

2611 Longfellow Place
Billings, Montana 59102
(406) 855-1457

July 8, 2011

Mr. Erik Eneboe
DNRC Trust Lands Management Division
P.O. Box 961
Conrad, Montana 59425

Re: Ponderosa 3-D Seismic Survey
Primary Petroleum Company
Teton and Pondera Counties, Montana

Dear Mr. Eneboe:

We wish to express our FULL SUPPORT of the Ponderosa 3-D seismic survey proposed by Primary Petroleum Company in "Ponderosa" area.

Concerns that we have heard expressed by opponents of the survey are unfounded and overblown. The survey will not destroy the environment, cause weed infestations, disrupt grizzly bear habitat, cause cow elk to abort, or bother coyotes, curlews, wolves, wolverines and mountain lions. Although trucks and 4-wheelers may cross the land off-road, the impact should be minimal the natural grasses will hardly be disturbed at all. They will survive and continue to thrive.

We live in Billings, Montana, the largest city between Minneapolis and Spokane, Denver and Calgary. In the midst of traffic, trucks, motorcycles, subdivisions, paved streets, back-yard barbeques and the general havoc of city-life, we have thriving populations of mule deer, fox, bobcats, wild turkeys, pheasants, rabbits, ducks, geese . . . you name it. The point being: we all need to calm down and have a little perspective on these issues.

We both love nature and the environment every bit as much as the next person. We often spend time in the backcountry and in wilderness areas. We listen to exaggerated concerns of some people and some organizations and chalk it up to hyped-up hysteria, out-right ignorance or making a living off of dooms-day predictions.

Thank you for the opportunity to comment,

John Fredlund
Bess Fredlund

Mason, Monte

From: Eneboe, Erik
Sent: Friday, July 08, 2011 11:00 AM
To: Williams, Garry; Schultz, Tom (DNR); Mason, Monte; Taylor, Trevor
Cc: Sexton, Mary
Subject: FW: seismic leasing

FYI

ERIK

From: Larry Bonderud [mailto:larry@shelbymt.com]
Sent: Friday, July 08, 2011 8:46 AM
To: Eneboe, Erik
Subject: seismic leasing

Erik:

On behalf of the City of Shelby I wish to express our strong support for the seismic survey proposed in Pondera County. I have just observed a 3 D seismic survey that has just taken place in Toole County and I was very impressed by the care and consideration given to the land and property owners during the survey process. I am sure this will also be the case in Pondera County. This seismic survey will benefit state land trust funding and will hopefully be followed by oil and gas development activity that will benefit the state land trust even more. This land is owned by all Montana's, not just a few from the west side of the divide. Seismic activity on state land has very similar impacts as grazing and this type of development should be aggressively pursued by DNRC.

Sincerely,

Larry J. Bonderud, Mayor
City of Shelby
larry@shelbymt.com
phone 406-434-5222
cell 406-450-5196

Montana Fish, Wildlife & Parks

PO Box 200701
Helena MT 59620-0701
(406) 444-3186
FAX:406-444-4952
Ref:DO154-11
July 12, 2011

Monte Mason, Minerals Management Bureau Chief
MT Department of Natural Resources and Conservation
Trust Lands Management Division
1625 11th Avenue
Helena, MT 59620

Erik Eneboe, Conrad Unit Manager
Trust Lands Management Division
600 South Main, Suite 10
P.O. Box 961
Conrad, MT 59425

RE: Notice of intent for CGG Veritas Land Company to Conduct Seismic Operations near the Eastern Rocky Mountain Front

Dear Mr. Eneboe and Mr. Mason:

Based on the information provided regarding CGG Veritas Land Company's proposal, Montana Fish, Wildlife & Parks (FWP) has an obligation to make comments related to potential impact to diverse wildlife and fisheries resources, Rocky Mountain Front (RMF) ecosystem habitats, and represent concerns of our constituent groups (sportsmen and women). Historic oil and gas exploration and development has occurred along the RMF both on public and private lands. Those efforts west of Highway 287 / 89 from Dupuyer to Augusta have been extremely controversial, as you are aware, due to their impacts to the fish and wildlife resources found in the area and to the resulting recreational activities those resources support.

Due to the outstanding natural resource values of the RMF, and public agencies and private citizen efforts to preserve and protect the entire RMF eco-system, all federal oil and gas mineral reserves were permanently removed from potential development. This effort was supported by the preponderance of public, federal and state resource agencies and garnered widespread support at the state and federal level. This is truly a testament to the dedication, broad support and agreement that the RMF's values are unsurpassed in scale. Recreation values (including hunting, fishing, hiking, wildlife viewing, horse packing and others), traditional farming and ranching operations, and extremely valuable and unique wildlife and fisheries resources found only along the RMF are more sustainable from an environmental, social and economic standpoint over the long-term than energy resource exploration and development.

FWP is charged through its employees and citizen commission to provide for the stewardship of the fish, wildlife, parks and recreational resources of Montana, while contributing to the quality of life for present and future generations. Based on the proposal by CGG Veritas Land Co. to Conduct Seismic Operations, FWP's comments will reflect our knowledge of potential conflicts and impacts we feel will occur to those valued resources.

GENERAL:
The area identified for seismic operations is critical habitat for grizzly bears, a threatened species under the Endangered Species Act. In the Northern Continental Divide Ecosystem, the location for seismic activity lies in some of the most critical habitat outside the Glacier National Park ecosystem.

Extensive human presence on the ground, helicopter activity, and motorized equipment create opportunities for wildlife disturbance on a scale previously unseen in the area. Numbers and type of travel corridors utilized for seismic censoring equipment and associated activities during the seismic testing in sensitive habitats will also contribute to displacement or permanent relocation of species. The entire area identified for activities is critical habitat for grizzly and black bear, wolf, mule and white-tailed deer, moose, elk, raptors and other bird species. Areas where work will be performed are used by fish and wildlife species dependant on both aquatic and riparian habitats as well as associated grassland and shrub habitat types.

The 1987 "Interagency Rocky Mountain Front Wildlife Monitoring / Evaluation Program" document was developed over a 7 year period, in cooperation with U.S. Forest Service, U.S. Bureau of Land Management, U.S. Fish and Wildlife Service, and Montana Fish Wildlife & Parks. The document was developed as a "best management practices to maintain or enhance select wildlife species and their habitats". This document is predicated on management concerns involving the effects of existing and proposed land uses and human activities upon various wildlife species and their habitats. Management guidelines were developed to avoid or minimize effects of human related activities including energy exploration and development.

Activities related to one phase (seismic exploration) of oil and gas development have great potential for detrimental effects to habitat and species in the identified area. The next step in oil and gas exploration and development will compound effects and become cumulative in nature. If this company can minimize impacts to a level that habitat and species recovery from the disturbance can occur in a short time frame, both the industry, public, wildlife and habitat will benefit. With new techniques, equipment and knowledge both on the industry side and the natural resource side there should be ways to accomplish this. However, previous activities related to oil and gas exploration and development have not demonstrated a willingness by the industry to do work in an ecologically sound/safe way.

POTENTIAL / PROBABLE AFFECTS TO AVOID

- Activities will disrupt normal wildlife movements and expose them to stresses that may cause impacts at the individual and population level. Most sensitive are ground-nesting grassland birds, birds of prey, shorebirds (e.g. long-billed curlews, sharptailed grouse, and grizzly bears). Grizzly bear movement to and from preferred habitat types may be disrupted due to disturbance related to seismic activities. Avoidance of key foraging habitats during the critical period for weight gain may result in bears going into hibernation underweight and reduce bear survival. Human use of bear security cover may result in bear/human conflicts resulting in human injuries and potential lose of life both for human and bears.

- Due to a lack of detail in the proposal, the social impacts (e.g. recreational opportunity, such as hunting, fishing and wildlife watching) are difficult to quantify.

- Winter (December-April) seismic activities have the potential to disrupt, displace, and place additional stress on elk, white-tailed deer and mule deer herds that depend upon area winter ranges for survival.

- It is recommended that the Dupuyer Creek drainage (with ¼ mile buffers on each side) be avoided because of grizzly bear use during spring-fall months.

- It would be best from a wildlife perspective not to run seismic lines concurrently, but try to accomplish the task in stages – keep human disturbance confined to a few lines at a time, rather than blanket the entire area with disturbance.

FWP understands the need for responsible energy development in Montana. The agency has staff and planning resources that are dedicated to providing private sector companies such as CGG Veritas Land Company with wildlife focused planning information to minimize the impacts of their exploration on these resources.

Sincerely,

Dave Risley
Fish and Wildlife Administrator

c: Art Noonan
Gary Bertellotti
T.O. Smith
Rob Brooks

Responses to Comments:

1. Vegetation Concerns – Operations are to be conducted during dry periods, which will aid in mitigating disturbance (See Section 7 of the EA). Most soils throughout the seismic shoot area are classified as having a high potential to fully recover after being disturbed (Section 4). To minimize risk of weed introduction and spread, power washing of all vehicles, vibroseis trucks, ATVs and other equipment will be required before entering the survey area (Section 7). A search conducted with the Natural Heritage Program found no vegetative species of concern located within the seismic shoot area. Wet, marshy areas are to be avoided (Section 7).

2. Wildlife and Habitat Concerns – See Section 8 and 9 of the EA for concerns relating to wildlife, habitat, and sensitive species.

   A search for species of concern on The Natural Heritage Program produced grizzly bears as a Species of Concern on State land just outside the seismic shoot area in the Dupuyer Creek drainage. Seismic crews will be instructed by local wildlife biologists on working in and around bear habitat as stated in Section 14.

   Aquatic species will be protected from seismic operations by a 300 foot buffer from springs, streams, lakes, or water storage reservoir facilities. See Section 5.

   DNRC sensitive species' that have been documented in the vicinity of the project but weren't listed by The Natural Heritage Program as being observed within the seismic area include the Ferruginous Hawk, Long-billed Curlew, McCown's Longspur, Sprague's Pipit, and the Harlequin Duck. Since suitable habitat for the above species does exist within the project area, mitigations will be incorporated. Minimal adverse direct or indirect impacts are anticipated. No cumulative impacts are anticipated (See Section 9).

   Big game species including elk, mule deer, white-tailed deer, and moose residing in the seismic area will likely experience short-term displacement. The limited duration and timing of proposed seismic activities result in minimal direct and indirect impacts. No cumulative effects are anticipated. (See Section 8).

3. General Oil and Gas Concerns – This EA focuses on the portion of the proposed activity which occurs on State mineral ownership, which constitutes approximately 8% of the total seismic shoot area. The DNRC TLMD has no authority over the proposed activity occurring on the other 92% of the lands that overlay private mineral ownership. Seismic exploration will occur on the private mineral ownership regardless of whether State lands are involved. (See Part I.)

   Future Oil and Gas Concerns – This EA addresses the proposed activity. Wells may or may not be proposed in the future, and may or may not involve State lands. See Part I of the EA.