Scoping Report

OTTER CREEK MINE
Powder River County, Montana

April 2013

Montana Department of Environmental Quality

MONTANA DNRC

PROPOSED OTTER CREEK COAL MINE ENVIRONMENTAL IMPACT STATEMENT

SCOPING REPORT

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INTRODUCTION

The Montana Department of Environmental Quality (DEQ) and Montana Department of Natural Resources and Conservation (DNRC) held public scoping meetings on January 16-17, 2013, and accepted public comments between January 4th 2013 through March 6, 2013, on the proposed Otter Creek Coal, LLC - Otter Creek Coal Mine project (Proposed Project) located approximately five miles southeast of Ashland, Montana.

This report describes the public scoping process including informational materials distributed to the public during the scoping period. This report also summarizes substantive public comments received during the public scoping period. A separate volume includes eight appendices of supplemental information as follows:

Appendix A Press Release and Notifications

Appendix B Mailing List for Scoping Period

Appendix C Scoping Newsletter

Appendix D Transcripts of Verbal Comments from Public Meetings

Appendix E Sign in Sheets for Public Meetings

Appendix F Written Agency Comments

Appendix G Written Public Comments

Appendix H List of Commenters

PROJECT DESCRIPTION

PROJECT SUMMARY

The Proposed Project is located in Powder River County approximately 5 miles southeast of Ashland and 30 miles west of Broadus (**Figure 1**). The site is accessed by U.S. Highway 212 and Montana Route 484, also known as Otter Creek Road. The life-of-mine area includes Tracts I, II, and III. The proposed mine area (Tract II) is owned or controlled by the applicant (Otter Creek Coal, LLC) and encompasses approximately 7,640 acres, of which about 4,100 acres would be disturbed under the proposed mine plan. Tracts I and III total 10,580 acres.

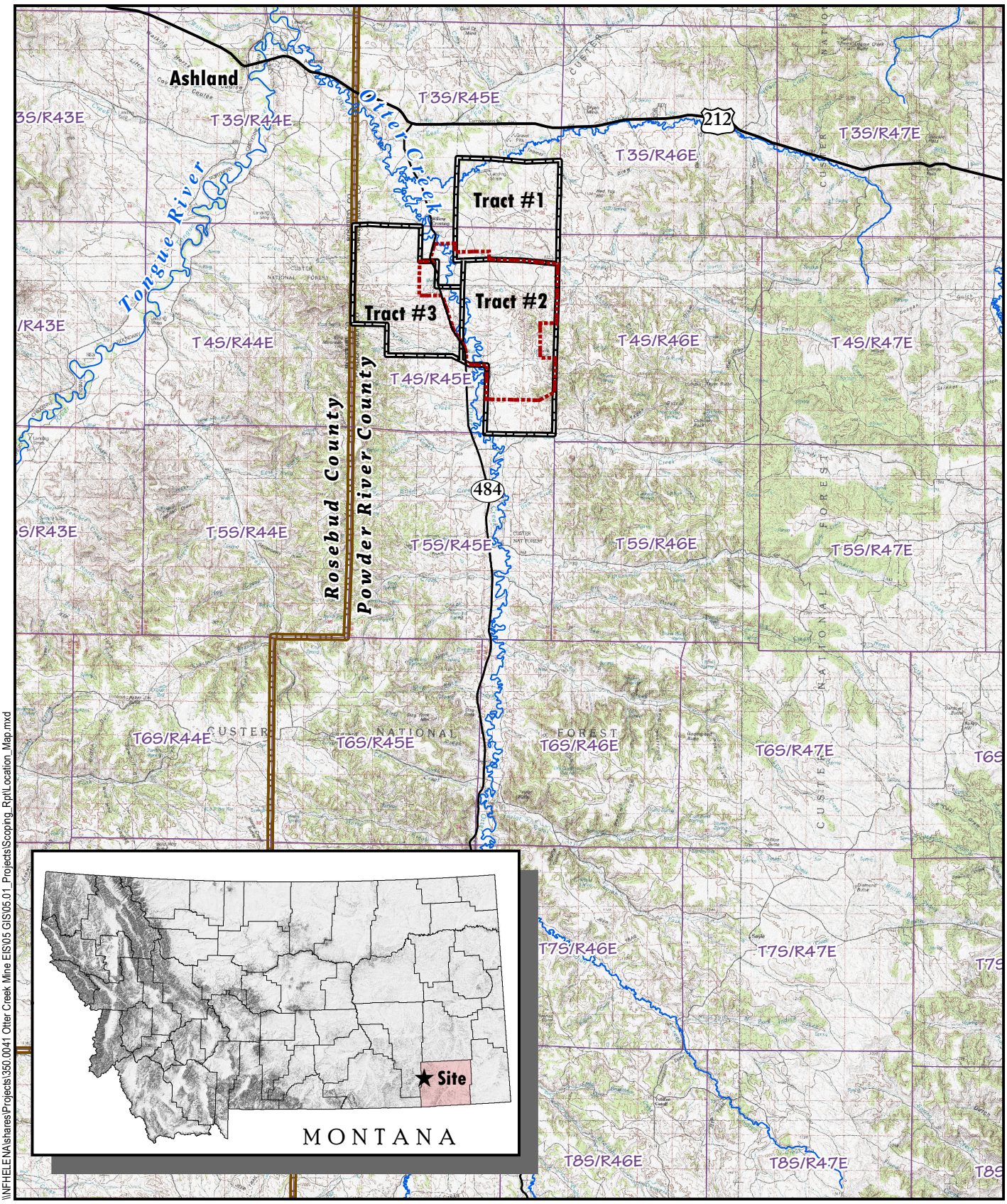
The primary drainage in the area is Otter Creek, a northward flowing tributary of the Tongue River. From Otter Creek, topography trends gently upward through areas of rolling hills to steep breaks including badlands and cliff features. Hay land is prevalent on the Otter Creek valley bottom, while uplands are dominated by grassland and shrub-grassland and ponderosa pine in the higher elevations.

The Proposed Project, Tract II, would produce approximately 20 million tons (Mt) of coal per year over a 20-year period. The Proposed Project would include an open-pit mine, roads, rail loop, truck dump station, conveyor, crusher, transfer station, sediment-control ponds, soil storage areas, office, shop, and other ancillary facilities. In advance of each mining pass, the topsoil and subsoil would be removed and stockpiled for use later during reclamation. Next, the overburden rock (spoil) would be drilled and blasted and moved by dragline into the mine-out pit created by the preceding mining pass. After the dragline exposes the coal seam in each pass, the coal would be drilled and blasted. The coal is then transported to a truck dump station where it is moved by conveyor to silos and rail loadout facility. Reclamation would include spoil grading, soil replacement, and seeding and planting. Reclamation would be concurrent with and following mining, and would facilitate the following post-mine land uses: cropland, pastureland, grazing land, and fish/wildlife habitat.

PUBLIC INVOLVEMENT PROCESS

The DEQ deemed OCC LLC's surface mine permit application complete in December 2012 and is engaged in reviewing the application for compliance with the Montana Strip and Underground Mine Reclamation Act (MSUMRA)(the Proposed Action). DEQ's decision regarding the permit application must also comply with requirements of the Montana Environmental Policy Act (MEPA). In addition, under direction of the State Land Board, the DNRC has charge of the leasing, management or other disposition of state lands. All rights granted to OCC LCC under these leases are contingent upon State Land Board review and approval of the Lessee's mine operation and reclamation plan, and are further subject to DNRC responsibilities and authority under provisions of MEPA.

An Environmental Impact Statement (EIS) is being prepared by DEQ and DNRC to ensure agency decisions regarding the Proposed Project are in compliance with MEPA. Pursuant to MEPA (MCA 75-1-101, et seq.) and associated administrative rules (ARM 17.4.615), the State has solicited input from the public and governmental entities to provide agencies and the public with a general understanding of the Proposed Project and to identify the range of issues and concerns associated with the Proposed Project. Results of the scoping phase, described in this Report, will be ultimately combined with review of the Proposed Project by an interdisciplinary team of technical experts to establish the scope of analysis to be conducted in the EIS.



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100,000 USGS Quadrangle

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Mine Permit Boundary

Tract Boundary

Location Map
Otter Creek Mine
Powder River County, Montana
FIGURE 1

IMPLEMENTATION OF SCOPING PROCESS

NOTIFICATION PROCESS

In December 2012, DEQ posted on its website notice that it was preparing an EIS and a Meeting Notice of three public scoping meetings in Broadus, Ashland, and Lame Deer, Montana. Notification of the meetings was also provided as a December 28, 2012 DEQ press release distributed to media throughout the region and Montana. A copy of the press release and notice are included in **Appendix A.** The press release was sent to Billings media, Bozeman Chronicle, Great Falls Tribune, Miles City Star, Powder River Examiner, A Cheyenne Voice, Newslinks, the Helena Independent Record, Yellowstone Public Radio, High Plains News Service, Northern News, the Associated Press, and numerous others on the DEQ Public Affairs Office list, including the Governor's Office, members of the Congressional Delegation, Lee Newspapers, the Montana Environmental Information Center, Clark Fork Coalition, Montana Petroleum Association, Treasure State Resource Industry Association, Bloomberg, and News Smart Energy Universe. **Appendix A** also includes copies of articles from the Billings Gazette and the Cheyenne Voice responding to DEQ's public notifications outlining the scoping process and public meeting information. In early January 2013, the Meeting Notice was mailed to 72 organizations, agencies and individuals included within a project-specific mailing list as presented in **Appendix B**.

DEQ originally proposed a 30-day public scoping period (beginning January 4, 2013, and ending on February 4, 2013) to identify potential issues and concerns associated with the Proposed Action. In response to public requests, DEQ extended the scoping period to March 6, 2013, to allow for additional time for public review and comment on the permit application and Proposed Action. A post card notification of this time extension was sent in late-January 2013 to both the DEQ mailing list and those individuals and organizations who recorded their attendance at one of the three public meetings (see Section 3.3). Comments obtained by DEQ though this process will be combined with issues identified by the agency to develop the list of substantive issues forming the scope of the EIS.

NEWSLETTER/SCOPING MATERIALS

DEQ developed the materials included in **Appendix C** to disseminate information concerning the Proposed Action, the MEPA process, and methods by which the public could be involved in commenting on the Proposed Project. Specifically, a two-page project newsletter was developed to provide a description of the Proposed Project including Project location, future agency decisions, and the environmental review process under MEPA. The newsletter discussed methods by which the public could provide input including attendance at public meetings or through submission of written comments via mail, fax, or email. In addition, a DEQ website was established with a link to information about the Proposed Project including a copy of the coal mine permit application.

OPEN HOUSE / PUBLIC MEETINGS

Central to the scoping process, DEQ arranged and facilitated three public scoping meetings to obtain public comment on issues or concerns associated with the Proposed Project. The meetings were held in the following communities:

- Broadus, Montana – Community Center; January 16, 6:00 PM to 8:00 PM
- Ashland, Montana – St. Labre School; January 17, 2:00 PM to 4:00 PM

• Lame Deer, Montana – Tribal Office; January 17, 6:00 PM to 8:00 PM

The purpose of the public scoping meetings was to provide the public information regarding the Proposed Project as well as answer questions, identify concerns regarding the potential environmental impacts that may result from development and operation of the Proposed Project, and receive comments to assist in determining the scope of issues to be addressed in the EIS.

Visual aids (e.g., posters/maps) were made available at each meeting to provide information regarding the Proposed Project and the associated state permitting processes (including MSUMRA, MEPA and State Land Board). Copies of the project newsletter were made available for distribution to inform attendees of other methods of providing comment/input outside of the public meetings.

Each meeting began with introductory remarks regarding the EIS process provided by DEQ followed by a brief presentation of the Proposed Project by a representative of OCC. DEQ specialists and the agency's EIS contractors were available throughout the meetings to provide information on the Proposed Project. Both written and oral comments were accepted during the meetings. Transcripts of verbal comments recorded during each meeting were produced and are provided in **Appendix D**.

A total of 205 individuals recorded their attendance at the three public meetings (**Appendix E**). Based on sign-in sheets, approximately 77 people attended the meeting in Broadus, 76 attended the meeting in Ashland, and 52 attended the meeting in Lame Deer. A few individuals declined to sign in formally at each meeting; therefore, actual attendance at each meeting was slightly higher than recorded. Some members of the public attended more than one meeting. Verbal and written comments generated at the meetings were compiled with other written comments submitted to DEQ during the scoping period.

RESULTS OF THE SCOPING PROCESS

LOCAL, TRIBAL, STATE AND FEDERAL AGENCY COMMENTS

DEQ received written comments from various governmental entities including State, Tribal and Federal agencies regarding issues, concerns, and recommendations related to the Proposed Project. See **Appendix F** for copies of all government/agency comments received.

The Custer National Forest (CNF) provided comments on the Proposed Project, particularly focused on public land administered by the CNF that lies immediately adjacent to the OCC tracts. Main topic areas outlined in the comment letter included the following:

- *Water Quality and Quantity Implications* – CNF requested further analysis of mining impacts on the Otter Creek hydrograph. The water resources effects analysis should be provided relative to existing water resources on the CNF which lie adjacent to the Tract 2. Additionally, in the event that adverse effects to wetland resources develop within the permit area, the CNF would like to be considered with respect to any wetlands offset mitigation opportunities. In 2013, the USFS will apply for an in-stream flow water right under the compact agreed to with the State of Montana Reserved Water Rights Compact Commission (see, MCA 85-20-1401). This water right will protect in-stream flow values and aquatic habitat within the Otter Creek drainage by guaranteeing base flow appropriate for the stream system.
- *Total Maximum Daily Load (TMDL)* – TMDL establishment will likely need to consider potential hydrologic impacts to beneficial water uses associated with developing the Proposed Project. The DEIS should disclose cumulative effects of the project's development and the subsequent potential Otter Creek TMDL water quality mitigations and associated implications to CNF multiple use management activities.
- *Water Resource Monitoring* – Additional monitoring and assessment work should be considered to better determine and monitor long-term potential effects to CNF surface and groundwater resources, including Otter Creek tributary watersheds.
- *Water Rights and Alternative Water Sources* – If water quality and quantity of springs and streams are affected, management activities would be affected in kind (water available for stock, wildlife etc.). These water systems should be protected, including existing forest service surface and groundwater rights. Also contingencies for alternate sources are necessary if protection of quantity cannot be ensured.
- *Recreational Use of Adjacent National Forest System (NFS) Land* – Influx of new residents to the area may lead to potential increase in recreational demand. The EIS should disclose potential restrictions or constraints surrounding the OCC activities within the permit area (e.g., no firearms discharge zones to protect employees) that could affect existing recreational activities in the Ashland Ranger District.
- *Residential Occupation of NFS Land* –The EIS should include a discussion of potential effects from rapid influx of new employees and the potential that illegal occupancy of NFS land may occur due to lack of local infrastructure available to handle such an influx.
- *Mass Wasting/Erosion Potential of Adjacent NFS Land* –The proximity of the Proposed Project buffer area with NFS lands (100 feet) and the potential that removal of in-situ materials within this boundary may result in mass wasting when lateral support is removed within the active mine footprint. The EIS should disclose means available to ensure such surface effects on NFS land do not occur and what mitigations are available if they do.

- *Existing Cultural Resources and Uses on NFS Land* – Although no cultural sites on NFS lands will be directly affected by the Proposed Project, the EIS should address the proximity (100 feet from the CNF boundary) of the Proposed Project and potential indirect impacts to cultural resource sites on CNF land from vibration, dust, increased visitation, noise, visual, exhaust/fumes. The EIS effects analysis should also evaluate the Proposed Project in relation to the entire ethnogeographic landscape to measure and mitigate adverse effects. The EIS process should also focus on tribal consultation and including a range of tribes (Lakota, Shoshone, Crow) with aboriginal ties to the landscape in and around the Proposed Project area.
- *Implications to National Forest System Existing Visual Quality* – The EIS should evaluate visual effects of the Proposed Project relative to the adjacent CNF visual quality objectives (Retention, Partial Retention and Modification).
- *Light Pollution Implications to Adjacent NFS Lands* – The EIS should evaluate and disclose effects of light pollution from the Proposed Project and potential mitigation measures.
- *Wildlife, Including Threatened, Endangered, and Sensitive Species* – The EIS should evaluate direct and indirect effects to area wildlife populations including those listed as Forest management indicator species or sensitive species. The cumulative effects discussion and analysis within the EIS should also go beyond the footprint of the mine, including 'connected actions' such as the proposed Tongue River Railroad, highway upgrades, power lines / upgrade and residences.
- *Effects to the NFS Transportation System* – The EIS should examine increased use of NFS roads due to the Proposed Project and clearly identify project-related access routes to determine if NFS roads would be used.
- *Air Quality Implications to Adjacent NFS Lands* – The EIS should examine potential impacts to the Class II air shed surrounding the Ashland Ranger District and also disclose effects to air quality as well as potential effects to vegetative communities adjacent to the permit area which may be adversely affected by particulate accumulation.
- *Noxious Weeds* –Project-related activities could establish or spread existing weed infestations on both NFS and adjacent private land and this should be addressed within the EIS.
- *Increased Potential for Human Caused Fire on Adjacent NFS Land* – The EIS should examine the potential for an increase in human-caused fires due to residential development and recreational use of the area associated with the Proposed Project's development. The EIS should address these issues, the demand for emergency response both inside and outside the NFS land, and potential difficulties due to expanded development with maintaining appropriate ingress/egress for fire suppression.
- *Boundary Line Survey and Monument* – Boundary lines surveys, in full compliance with applicable state laws and USFS specifications, may be needed around the CNF boundary adjacent to the Proposed Project.

The U.S. Fish & Wildlife Service (USFWS) provided comments and recommendations regarding the Proposed Project. Major comments focused on outlining USFWS's authority and requirements of the Endangered Species Act of 1973 (ESA), as amended (16 U.S.C. 1531 et. seq.), Migratory Bird Treaty Act (MBTA)(16 U.S.C. 703 et seq.), as amended, Executive Order 13186 Responsibilities of Federal Agencies to Protect Migratory Birds, Bald and Golden Eagle Protection Act (BGEPA) (16 U.S.C. 668-668d, 54 Stat. 250), as amended, and the Fish and Wildlife Coordination Act (16 U.S.C. 661 et seq.).

The USFWS listed the Black-footed Ferret, Sprague's Pipit, and Greater Sage-Grouse as listed and/or candidate species which may occur in the Proposed Project area. The EIS should analyze how the project would affect fish, wildlife, vegetation, and important habitat features in the Proposed Project

area, including thorough analyses of direct, indirect, interrelated, interdependent, and cumulative actions and effects. Major considerations and recommendations for the EIS process focused on species identification and survey, biological assessments, and required analyses or measures to ensure compliance with laws administered by USFWS and Executive Orders. USFWS suggested developing a conservation plan for migratory birds and implementing other wildlife conservation measures. Additionally, the USFWS recommended close coordination with the Northern Cheyenne Tribe, Montana Fish Wildlife and Parks (MFWP), and Montana Natural Heritage Program throughout the EIS process.

The Montana Department of Transportation (MDT) discussed a range of design and permit requirements related to highways in and around the Proposed Project area. For instance, a Traffic Impact Study would be necessary for the mine site to determine the type of mitigation required for necessary MDT Road approaches (State Secondary [S] 484, as well as intersection of S-484 and U.S. Highway 212). MDT would prefer an underground conveyor be used to transport coal under S-484; however in all cases the design must be coordinated with MDT. An above-ground conveyor crossing will require Airspace Lease Agreement. Any state road realignment work would require MDT review and approval prior to construction.

The Northern Cheyenne Tribe, recognized as a formal governmental entity near the Proposed Project, provided scoping comments on the application submitted by Otter Creek Mine, LLC. Appendices to the letter were provided to DEQ on a DVD. The Northern Cheyenne Tribe indicated that the EIS should evaluate the impacts that the Proposed Project will have on the Tribe and Reservation. The DEQ should understand and account for the conditions on the Reservation. The Tribe intends to seek funding to allow it to assist DEQ in completing a baseline assessment that includes (but is not limited to) an evaluation of the detailed list of baseline conditions as stated in their letter of March 5, 2013. See **Appendix F** to review the letter in detail.

Several other comment letters were received from the Oglala Sioux, Kalispell Tribe and two tribal non-profit organizations (EcoCheyenne, Yellow Bird). These comments were reviewed and are included as part of the public comments summary in **Table 1** below. **Appendix G** contains each letter.

METHODOLOGY FOR SUMMARY OF COMMENTS RECEIVED

In addition to the government and agency letters, a total of 4,522 written comments were received directly by DEQ or were collected at the public scoping meetings. A majority of the comments received directly by DEQ (approximately 4,142) were attributed to several organized form-letter campaigns. The remaining comments (380) represent unique responses, generated individually by private citizens, organized groups, tribal interests, and/or non-profit organizations with an interest in the Proposed Project. **Appendix H** for a listing of all commenters.

For example, members of the Blue Skies Coalition established internal comment campaigns with their collective memberships. Of the total comments identified above (4,142), these campaigns resulted in 2,102 comments; all but 4 of which were based on form letters. All of these hard-copy comments were collectively submitted to DEQ as a single package. All individual comments obtained as part of these internal campaigns were reviewed and main themes incorporated as part of this scoping report. Contents of these campaigns will also be retained as part of the EIS Administrative Record for the Proposed Project. However, individual names collected as part of these internal campaigns were not directly included in the mailing list for subsequent EIS-related communication, given the comments were not made directly to DEQ for tracking purposes. DEQ assumes the Blue Skies Coalition and associated

organizational members will continue to inform their respective membership bases of ongoing communications with regards to future opportunities for public comment associated with this Project under MEPA.

SUMMARY OF ISSUES RAISED DURING THE SCOPING PROCESS

Numerous common themes and issue areas were identified and categorized based upon review and analysis of comments received during the scoping process; including transcripts of verbal comments from the three public meetings; written comments submitted at each public meeting; and written comments sent to DEQ as part of the extended 60-day public comment period.

Table 1 provides a summary of main topic areas and subthemes within those topic areas as expressed in the public comments received. Individual responses were condensed and collated into larger topic areas to allow for reasonable interpretation of the range, depth, and breadth of the issues raised during the scoping process. Individual responses in their entirety, including copies of form letters received and signed by numerous individuals, are available for review in **Appendix G**.

TABLE 1. Summary of Scoping Issues and Concerns by Topic Area	
Topic Area	**Summary of Issues**
Impacts to Air Quality / Air Pollution	• Proposed Project would release (from the coal generated from mine development) CO_2 into airsheds both over Montana as well as outside of state boundaries. • The EIS should evaluate the types and sources of potential pollution from construction and operation of the Proposed Project, as well as the range of potentially affected areas that may see impacts. The EIS should also evaluate impacts from air pollution to worker and neighboring community health, impacts from nitrogen oxide clouds from blasting as well as potential toxins in coal dust, especially during the transport of coal. • In addition to the above, other specific EIS-study requests included: o An analysis of how Otter Creek mine may impact Class I airsheds (Northern Cheyenne Reservation) and what measures OCC will take to mitigate impacts. o An analysis of what effect increased carbon emissions would have on agriculture in Montana.
Climate Change / Global Warming	• Greenhouse gas (GHG) emissions from burning coal mined by the Proposed Project would exacerbate climate change, affecting precipitation and temperatures. Climate change should be included in the EIS impact analysis. Requested EIS analyses included the following: o Study short and long-term impacts of climate change in Montana and elsewhere due to increased burning of coal from the Proposed Project in addition to emission sources already in production. Calculate the amount of coal to be produced and burned over the life of the Proposed Project (current estimates of 1.3 billion tons) and from this amount, project how much additional CO_2 would be released to the atmosphere. Consider climate change impacts to agriculture, recreation, hunting, fishing, aquatic life, in-stream flows, forestry, water supply and quality, increased fire impacts, flooding, and tourism. o Examine whether "carbon sequestration" of this coal is currently a viable, economically feasible, and effective method eliminating the release of all CO_2 from any coal-fired power plant in any location where coal from the Proposed Project would be burned. o Produce a scientifically based analysis of: 1) the number of degrees' rise in global temperature caused by the CO_2 released by burning the coal; 2) the likely impact upon global weather should the temperature rise as predicted. o Commenters stated that state (MEPA) requirements for addressing global warming/climate change should follow national (National Environmental Policy Act) requirements.

TABLE 1. Summary of Scoping Issues and Concerns by Topic Area	
Topic Area	**Summary of Issues**
Impacts to Water Quality and Quantity	• Construction and operation of the Proposed Project will impact water quality and quantity in the mining area and downstream and it will have a significant impact on agriculture in the area. Major issues include: impacts to springs (flow and quality); impacts to private wells (water level decline and quality); impacts to water rights; characterizing how far from the mine site impacts to water resources will extend; difficulty in adequately replacing impacted springs and wells; impacts to the "deeper" aquifer (i.e., below coal seams); impacts to underground "rivers" located above coal seams; assurance that surface water and groundwater will be adequately monitored during and after mining; questioning the length of time it will take agencies to identify and mitigate any impacts that may occur to water resources; impacts to water quality and fisheries in Tongue River; the need to consider the Proposed Project in light of certain water quality standards yet to be approved by EPA; impacts of injecting sediment-laden water into the groundwater; and, impacts from increased demand for water use and septic systems resulting from more workers in the area. • The EIS should provide a detailed analysis and discussion of the physical and chemical impacts on all water resources (inclusive of issues/considerations above) and address the potential failure of reclamation efforts with regards to protecting water quality/quantity. This includes determining whether the application adequately analyzes the probable hydrologic consequences (PHC) of the mining for the projected life of the mine and disclosing and evaluating those effects in the EIS. • The EIS should consider Project-related sedimentation in the Otter Creek watershed from construction activity necessary to build the mine and the proposed rail spur to the mine property. In addition, soil surrounding coal seams and the underground aquifers in coal seams are laden with sodium salts and the EIS should address if/how discharge of sediment and water (from project activities) would impact surface water quality. Concern was also expressed that a Total Maximum Daily Load (TMDL) has not yet been completed for the Tongue River.
Change in Land Use / Loss of Agricultural Land	• Proposed Project and Tongue River Railroad (TRR) would take existing farm and ranch land out of production, which in turn would adversely affect the livelihoods of farms and ranches throughout the area. The EIS should consider these issues as well as the Project's negative effects on quantity and quality of water available for agriculture and ranching; including specific concerns over potential impacts to sub-irrigation practices in the Tongue River basin. • The EIS should evaluate proposed fire-safety and fire-response plans so that nearby residents and various fire-fighting response entities can review and comment on the plans.

TABLE 1. Summary of Scoping Issues and Concerns by Topic Area	
Topic Area	**Summary of Issues**
Impacts to Soil / AVF	• The Proposed Project would have negative, permanent effects on the area's aquifer and soil resources. Particular concern was expressed that the applicant's existing information regarding alluvial valley floors (AVF) was inadequate. The State must require the necessary (additional) information to determine the presence/absence of AVFs before proceeding further with the application. Several commenters stated that a new AVF determination should be completed before analyses of impacts on agricultural production can be performed. • The EIS should address the difficulty (or impossibility) of reclaiming the land within an alluvial valley. Commenters noted that much of the Otter Creek coal sits in an alluvial valley, an area that is likely impossible to reclaim which would in turn result in long term, persistent impacts to productive agricultural soil and the aquifer. • Provide estimates of erosional soil loss related to construction and operation of the Proposed Project, as well as document earthquake potential.
Impacts to Wildlife / Terrestrial and Aquatic Habitat	• The Tongue River Valley provides diverse habitat which could be impacted by development of the Proposed Project and associated ancillary facilities (including roads, pipelines, train spur and power lines, etc.). The EIS should consider the important biological and ecological importance of the area in and around the Proposed Project and include a comprehensive analysis of area land and ecosystems. • Include comprehensive baseline and detailed analysis of potential for environmental and social impacts of the Proposed Project and associated train and transportation development, would impact a range of game and non-game wildlife, birds (prairie bird species, raptors, neo-tropical migratory species, sagebrush steppe habitat, greater sage grouse), amphibians and reptiles, wildlife habitat, terrestrial and aquatic connectivity, migration corridors, and water resources in the region. The EIS should consider both direct impacts due to mine development as well as indirect impacts on wildlife due to impacted water quality/quantity, increased road use/development, impacted air quality (dust and dust control measures), noise, fencing, train traffic, and social impacts related to an influx of population. • Potential impacts to water quality and fisheries within the Tongue River, particularly in light of recent improvements (fish bypass) made to aquatic habitat at the Tongue & Yellowstone (T&Y) diversion which opened up many miles of spawning habitat upstream of the diversion dam. Include a comprehensive baseline and analysis for terrestrial aquatic species and identify critical aquatic habitat for each species; including the importance of small creeks, intermittent steams and ephemeral channels. • Examine potential impacts to species due to climate change driven by burning coal produced in Montana (i.e., Western Glacier Stonefly, wolverine, grizzly bears, Greater sage grouse, Canada lynx)

TABLE 1. Summary of Scoping Issues and Concerns by Topic Area	
Topic Area	**Summary of Issues**
Impacts to Vegetation	• Introduction and spread of noxious weeds. Examine potential spread of noxious weeds due to ground disturbance associated with the Proposed Project as well as potential spread of noxious weeds via development/use of the TRR rail on agricultural land near this corridor. • Include baseline vegetative surveys and habitat maps to identify any threatened and endangered species, species of special concern (regionally, nationally, or globally), and endemic species in the Proposed Project area, as well as wetland and riparian areas. Describe how native vegetation will be protected or, if disturbed, restored/reclaimed and describe whether the mine plan would avoid wetlands and if not what process will be used for "replacement" of disturbed wetlands.
Loss of Historical/Cultural Resources in Tongue River Valley	• Concern was expressed that the Proposed Project and TRR would irreparably damage the Tongue River Valley's historical and cultural resources. The State must comply, and ensure that OCC complies, with all of state and federal statutory directives to protect cultural and historic resources, including an independent inventory of cultural and historic resources in the Proposed Project area, the Otter Creek valley, and adjacent land before any development activity occurs. • Include a legally compliant mitigation and protection plan for historic and cultural resources regarding treatment of such resources and which demonstrates an understanding and respect for indigenous communities, the sovereign status of tribal governments, the principles of environmental justice, and "the inadequate preservation previously accorded Plains Indian history and culture." • Include consultation with the Montana State Historic Preservation Officer ("SHPO") and the Tribal Historic Preservation Officers ("THPO") or tribal representatives of potentially impacted tribes regarding the impacts of the proposed Project. • Include a thorough archaeological and cultural survey on all cultural impacts of mining and rail transportation of coal from the Otter Creek mine on the Amish community and their customary way of life and on other historic family- based farming and ranching in the areas that may be impacted. • Before historic and cultural resources on DNRC-administered state owned land can be disturbed or collected, an Antiquities Permit must be obtained from the SHPO and a Cultural/Paleontological Resources Collection Permit must be obtained from the DNRC. • Additional Tribal Concerns (See Separate discussion below)

TABLE 1. Summary of Scoping Issues and Concerns by Topic Area

Topic Area	Summary of Issues
Impacts to Tribal Land and Heritage	• The Otter Creek area has historically been used by several Native American tribes including the Northern Cheyenne and Crow and the Proposed Project area and Tongue River Valley is land was historically promised to leaders of many of their ancestral families. The State should honor Northern Cheyenne families with valid claims to the Otter Creek Valley. • Include a thorough archaeological and cultural survey and provide a report on all cultural impacts of mining and rail transportation of coal from the Proposed Project on several Native American Tribes' (including Northern Cheyenne, Crow, Arapahoe, and numerous bands of the Sioux Nation) cultural and sacred sites and artifacts. The Traditional and Cultural Property Inventory in the Otter Creek and Tongue River Valleys should include interviews with knowledgeable users of the area or through other forms of ethnographic research. • Include a thorough assessment of the potential direct, secondary and cumulative impacts of this proposal on the Northern Cheyenne tribe, tribal members, and the reservation and address environmental justice-related concerns that the Northern Cheyenne in particular will receive the bulk of negative social and environmental impacts, and potentially sacrifice traditional ways of life due to the degraded landscape (e.g., subsistence) but receive only a small fraction of any economic benefits. • The Northern Cheyenne Tribe indicated they intend to seek funding to assist DEQ in completing a baseline assessment of the reservation. ~~The Northern Cheyenne Tribe stated its commitment to fund and fully cooperate in assisting DEQ in conducting a baseline conditions study on~~Topics may include: air quality, surface and ground water quality, water availability, human health conditions, wildlife resources, social and economic, transportation infrastructure, tribal and cultural resources, and other impacts to the tribe. • Ensure all tribal members have a voice. Agreements made by the Tribal Council do not reflect the will or needs of all tribal members (even off the reservation) and that any agreements made would not adequately compensate for impacts. • Concerns were raised about the EIS permitting process as key native authorities have not been consulted to date. The Oglala Sioux Tribe Historical Preservation Office and their legal counsel asked to be formally included as a consulting party in the development of the EIS for both the Proposed Project and TRR. • The State must honor the 2012 Settlement Agreement with the State Land Board 2012, Appendix B (employment assurance and contracting, regulatory environment monitoring, protection of cultural resources). Commenters expressed concern that there have already been broken promises (at the time of the lease) and questioned whether future agreements would be honored.

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Topic Area	**Summary of Issues**
Impacts to Recreation and Recreational Land	• Analyze potential impacts the Proposed Project would have on area hunting, fishing and wildlife recreation opportunities, which would in turn negatively affect the recreation-based economy of the region. In addition to broad concerns, impacts to land within MFWP's block management program, as well as on recreational opportunities within the Ashland Ranger District of the CNF were noted specifically. Address potential impacts due to the influx of new population and what direct and in direct effects that influx would have on public recreational land, recreational areas, use and maintenance of forest service roads, etc.
Infrastructure Concerns	• Address potential impacts (in Rosebud County for example) to infrastructure, particularly roads, bridges and crossings which may be affected by development of the Proposed Project in Powder River County. Of particular note, questions arose as to whether any signed agreements would be established concerning sharing costs associated with construction and maintenance of such infrastructure given the tax revenues associated with OCC's mine development go directly to Powder River County but a significant portion of impacts would likely be in Rosebud County given its proximity to Ashland. • The Proposed Project would require substantial quantities of electricity to operate. The EIS should evaluate where OCC will get its electrical power for operations and whether all existing and anticipated electrical needs of the region could be met in addition to the needs of the Proposed Project. • Evaluate railroad spur and turn-around loop, including its ownership and classification.
Socioeconomic / Community Impacts	• Potential adverse socio-economic impacts of the Proposed Project, particularly as it relates to 'boom-and-bust' development citing impacts of past, similar projects in Montana and the Western U.S. as examples. • Examine a range of potential adverse socioeconomic impacts, including: o Disruption of community character and traditional rural way of life in the Otter Creek area; o Destruction of livelihoods of those who ranch in the area; o Devaluation of viable farm and ranch property; o Noise related concerns (the expected increase in decibel levels should be quantified and analyzed to determine the difference between pre-mining levels and levels during active mining); o Questions regarding whether jobs from the Proposed Project would be slated for Montanans; o Decreased tourism and recreational opportunities due to detrimental effects on the landscape; o Social costs associated with loss of productive soil resources, reductions in water quality, air quality; o Disparity of impacts versus benefits. For example, the mine, thus the tax revenues, will be located in Powder River County, but many of the social impacts will be located in Rosebud County (Ashland in particular), including the expected influx of workers and the need for provision of additional emergency services and other public infrastructure services. A concern was noted that Rosebud County may not be equipped to handle such an influx and the potential socio-economic problems associated with mine development;

TABLE 1. Summary of Scoping Issues and Concerns by Topic Area	
Topic Area	**Summary of Issues**
	○ Anticipated employment projections and associated impacts (so preparations/mitigations can be established); ○ Tax revenues from mining operations in coal mining areas typically lag behind demand for government services and, therefore, tax revenues are insufficient for the counties and communities to cover the increased costs of law enforcement, emergency services, schools, infrastructure maintenance, social services, and other government services; ○ Visual/Aesthetic impacts, including that the Proposed Project will industrialize a rural agricultural area; and ○ Issues associated with rail traffic including air pollution, noise, congestion, public service interruption, and public health. • Economic analysis should extend to address the potential impacts of the TRR throughout Montana and the western U.S. as well as the potential impacts of port development along the pacific coast and international export of coal. • Analyze the socioeconomic impact on the Amish community that would be affected by the Proposed Project and proposed TRR (or another proposed rail system).
Socioeconomic Impacts - Positive	• Lack of employment opportunities in the area and the positive economic effects (direct and indirect employment, business development, influx of population) due to the Proposed Project should be described. The area currently lacks opportunities to grow its economy and the Proposed Project would offer a means by which to residents can make a living and choose to stay in the area. In addition, commenters noted the positive tax revenues to the county and state. • Include description of means already available to mitigate many of the 'perceived' environmental and social impacts on area communities and institutions are in place to address impacts.
Economics of Project	• Economic benefits of the Proposed Project should be questioned and the EIS economic analysis (of the Proposed Project and associated rail transportation) should weigh costs as well as benefits more clearly, and include those costs to society due to adverse social and environmental impacts. Numerous commenters questioned the economic impacts considered in the Bureau of Business and Economic Research's (BBER's) analysis of the Proposed Project believing it focused solely on projected benefits (projected jobs) associated with the proposal, ignoring potential direct and indirect costs of the proposal to Montana communities, businesses and residents. • Use of the school trust fund monies and whether that directly translated into more funding of public schools.

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	• Analyze the economic viability of coal mining (particularly given the quality of the coal associated with the Proposed Project) compared to other energy sources (e.g., natural gas, solar, wind, etc.). How much infrastructure would go unused, and in turn, the development costs that would go unrecovered if coal continues to become less profitable over time. • Analyze the economic viability of the Proposed Project using the most up-to-date information available; extending the analysis from the source of the coal (Proposed Project) to the final delivery of coal (e.g., Asia, international markets, etc.). Consider the Energy Return on Investment (EROI) for all fossil fuels and calculate the EROI of any energy development as part of this EIS.
Concerns over Reclamation Practices/Success	• Reclamation of strip-mined areas to standards defined by the state and federal government is usually considered as appropriate mitigation for harm to ecosystems, surface, ground and drinking water quantity and quality; landscapes and fish and wildlife habitat. Include complete and detailed data about whether and how the applicant will meet all requirements governing reclamation and restore or replace all ground and surface waters and other natural resources to pre-mining conditions. • Address concerns related to the documented effectiveness of reclamation at past strip-mining areas. Some commenters were of the opinion that restoration or replacement of water bodies and reparation of soil and ecosystems to pre-mining conditions in western U.S. states, including Montana, has proven to be largely ineffective. Of particular note, concern was expressed that land, even though "reclaimed", is never the same and could never be reclaimed to a productive agricultural site. • Evaluations of reclamation success in the past have focused only on grassland restoration versus surface and groundwater reclamation and restoration of coal-seam aquifers. Concern was raised over the on-the-ground effectiveness of performance bonds stating they do not provide adequate incentives to reclaim, and that timely reclamation "as contemporaneous as possible" by government agencies in cases of mining company bond forfeiture has been largely unsuccessful. Agency inspection and regulatory enforcement of the government standards has been underfunded, ineffective or non-existent. • Address how the direct mining impacts to the landscape, water quality and human health could be mitigated successfully.
Unequal Distribution of Costs and Benefits	• Unequal distribution of costs versus benefits associated with the Proposed Project; large companies will profit with the expense of the local taxpayer. In particular, citizens of Montana would bear the environmental and social costs associated with coal development and transport, that OCC and out of state interests would reap the economic benefits, and that other countries would receive cheap coal. he Proposed Project would negatively affect local communities, just to fuel competing economies. Parallels were made with a range of other projects in Montana where large scale resource extraction projects resulted in long-term environmental issues due to inadequate reclamation.

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Extent of Connected Action and/or Cumulative Effects Analysis	• Analyze the direct, indirect and cumulative impacts of coal mining, CBM development, oil and gas developments, and any other industrial development in the Otter Creek area. • Analyze the cumulative impacts of the Proposed Project along with other mine-related transportation proposals, not just the TRR but plans to upgrade Secondary Highway 332 to accommodate mine-related truck traffic. • Evaluate impacts of growth inducing impacts of developing the mine, including the development of the TRR and future coal resources in vicinity of the Proposed Project. • A cumulative EIS or "Programmatic" EIS that would cover or collectively consider mining, railroad transport, port activity and ship transport and final burning of coal from North America in Asia should be compiled. None of these activities could exist without the others, so therefore they are not separate projects and shouldn't be permitted as such. Namely: o The Otter Creek Mine EIS should be jointly-conducted with permitting of the TRR as part of a Programmatic EIS with co-leads for the TRR expansion, particularly the Surface Transportation Board and the U.S. Army Corps of Engineers. A thorough analysis of the State's fiduciary responsibility to trust beneficiaries requires a comprehensive cumulative analysis of impacts of both proposals. o Impacts would extend through the entire northwestern U.S. and as such the EIS to analyze the cumulative effects on the health of humans, fisheries and farmland, ranchlands, and healthy rural communities throughout the Northwest. Impacts of diesel particulates, coal and coal dust, noise and vibration. o The EIS should extend further; analyzing potential cumulative impacts of pollutants from emissions associated with transportation of coal from Montana to Asia and combustion of coal in Asia, including potential effects of long range transport. Coal burned in Asia will increase atmospheric deposition (wet and dry) of mercury, particulate matter, and nitrous and sulfurous oxides in coastal waters. Cumulative emissions would in turn contribute to exacerbation of global warming and climate change impacts, including extreme weather and ocean acidification. • Consider the long-term (temporal) scale of the impacts due to burning coal for 50+ years.
Environmental and Social Impacts Related to Burning of Coal	• Burning of OCC coal and the global atmospheric pollution that could occur due to the Proposed Project, including concerns about the acceleration of climate change. Address the close association of coal burning with climate change that has affected the long-term future of coal, including access to investment capital, and that carbon sequestration is still not a proven technology, and greenhouse gases will eventually face more restrictions.

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	• Other concerns include:
	  ○ Air pollution is already a health factor in developing nations like China and that burning Otter Creek coal will add to this situation, and will ultimately negatively affect the U.S;
	  ○ The Proposed Project and the transport and burning of this coal would degrade water within Montana as well as in foreign countries where the coal is burned; and,
	  ○ Burning coal is an outdated means of fueling industrial profits.

Environmental and Social Impacts Related to Transport of Coal via Rail	• A range of impacts associated with the transport of coal via rail including potential social and environmental impacts due to transport of OCC coal through Montana to site specific concerns about creating a bottleneck of BNSF rail traffic on an already congested system due to proposed coal mining operations.
	• Consider expansion of the TRR in the OCC Mine EIS. Specifically, analyze all of the impacts associated with increased rail traffic through the state of Montana, and have all of the details of the Proposed Project and related transportation before beginning the OCC environmental review process.
	• Potential impacts (from rail expansion/use) on landowners/land use and agricultural land, wildlife and habitat, ecological health (deposition), introduction/spread of noxious weeds, fires, spills, air quality (both coal train dust and emissions from idling vehicles waiting for trains to pass), and a host of socio-economic impacts on Montana communities due to increased coal train traffic, including noise, public safety, particulate-related impacts to human health, especially to at-risk groups (e.g., those with asthma and existing respiratory problems).
	• Include whether locomotives will be required to use the latest technologies to reduce diesel emissions and whether loads will be covered to reduce coal dust.
	• The State should hold scoping hearings in Montana communities that will be impacted by the increased rail traffic (as part of this EIS process).
	• Include a broad economic impact analysis inclusive of rail-related concerns given the cumulative direct and indirect impacts of the mine on the environment, human health, and the state's economy will be significant. Specific EIS topics included:
	  ○ An analysis of past, present, and reasonably foreseeable future rail impacts on communities including need for subsidization for expansion (e.g., addition of sidings or tracks) or upgrades of existing rail infrastructure, need for new tracks, traffic impacts at at-grade crossings and need for grade changes and/or quiet zones;
	  ○ Condemnation of private land;
	  ○ Costs of reclamation to be borne by the state;
	  ○ Costs associated with any necessary upgrades to filtration systems for drinking water supplies and environmental cleanup;

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	○ Health care costs; ○ Potential displacement of railroad workers in Forsyth and Sheridan; ○ Whether cost of building the railroad would significantly reduce any lease payments the state is able to capture for the coal; ○ Whether the expense related to mitigating a range of social issues (if feasible to do) would fall on local communities; most of which do not receive any economic benefit (e.g., taxes, etc.) from the Proposed Project; and ○ Impacts of additional coal trains on the cost of grain shipments by train. ○ Funding source for reclamation (removal) of the rail line after serving its useful life.
Environmental and Social Impacts Related to Transport of Coal – Port/Shipping	• The Proposed Project, in conjunction with the TRR, would create down-the-line impacts on communities all the way to the Pacific coast. Include a range of environmental and socioeconomic effects associated with the port, waterfront, and shipping (oceanic impacts). • Environmental and social impacts associated with the proposed Gateway Pacific Terminal should be considered within the OCC EIS.
Overseas Markets for Coal – Export	• Exports of coal and other natural resources owned by the citizens of the U.S. should not be allowed, and that money spent on infrastructure for the coal mines would divert funds from locales where other investments (e.g., roads) could have far greater long-term public benefit. Address the potential that foreign countries will eventually receive energy from more renewable sources, meaning the long-term market for coal would contract. If this occurs, the coal-related infrastructure (e.g., rail, port) will have been of limited value in the future.
Lack of Reasonable Alternatives	• A lack of other reasonable alternatives considered for the Otter Creek Tracts (DNRC State Trust Lands). The existing BBER economic study only considers two alternatives: the economic contribution of granting the permit and the lack of contribution that result from not granting the permit. • Investigate assertions contained in the BBER study (a second, economic analysis produced by Power Consulting was cited as an alternative study) to fully analyze the economic costs associated with significant adverse impacts of coal mining and rail transport of the mined coal. All public and private costs of these impacts should be studied in detail and weighed against purported economic benefits to Montana from granting the permits. Consider other reasonable land use alternatives other than mining coal. • Several other comments included: ○ Specify what contract(s) is in place with Arch Coal Inc. or its subsidiary Otter Creek Coal, LLC for sale of the coal. If none exists, the EIS must explain why mining coal from the leased school trust land and minerals would be a reasonable alternative.

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	○ Alternatives that are reasonable must be consistent with Montana's duties as trustee to protect the leased school trust land and its minerals in light of all public and private economic costs to Montana citizens from mining and transporting the coal. ○ An alternatives analysis within the EIS must include review of projects that would safeguard state trust lands and Montana's natural, economic and cultural resources (including the atmosphere) for present and future generations. • Coal-based energy is fast becoming an out-of-date energy technology, and that the State of Montana should be investing in (examining) cleaner, more efficient alternatives.
Concern over the Potential that State of MT has a Conflict of Interest in Reviewing/Approving Application	• The State of Montana has a conflict of interest in reviewing the application given it owns over half the land on which coal will be mined. Questions arose regarding the impartiality of state leaders/regulators when the state is financially vested in the Proposed Project and how the State could effectively judge and regulate the overall effects of a proposed mine in which it has a financial stake. As such, the validity of the state regulatory processes was called into question.
Procedural Issues with MSUMRA Application, MEPA, or State Decisions	• Procedural issues with the pending state decisions, including potential non-compliance with MSUMRA (AVFs, wildlife studies, groundwater modeling, etc.) as well as questions regarding the lack of federal agency coordination, and violation of the Montana Constitution are a concern. Until DEQ has an application containing all of the details of the Proposed Project it is premature to start the environmental review process. It is impossible to know what issues the agency should study without a full application. • The main MSUMRA application issues included: ○ The application lacks many of the required details for the DEQ to make the fundamental determination as to whether this coal can even be legally mined (i.e., alluvial valley floor data gaps), and that all information is necessary before DEQ can decide if it is even legal to proceed further under MSUMRA. ○ Deficiencies and miscalculations were noted in the application related to analysis of water resources impacts (dissolved solids loads, etc.) and wildlife studies. ○ Coal mine applicants are (or should be) required to disclose any prior history of violations at other mines they own across the country. ○ The application and the identified BBER economic appraisal was based on outdated information, simple calculation errors, and many flawed assumptions about the workings of the marketplace in coal. • The adequacy of the Purpose and Need for the Proposed Action and that the EIS must fully consider, analyze, and evaluate the "no-action" alternative; stating that Project approval should not be automatic.

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	• The Land Board's activities to date, including the decision process that sidestepped needed environmental analysis that would allow the state to address this issue with a thorough understanding of its ramifications. The EIS should have been completed before the lease was offered. • The Proposed Project would violate the Montana Constitution which recognizes as inalienable —the right to a clean and healthful environment, and, as a correlative responsibility, requires that —the State and each person shall maintain and improve a clean and healthful environment in Montana for present and future generations. This project would impose damage to the land and aquifers that is long-lasting, even after reclamation. • The legality and completeness of State activity to date in informing potentially affected parties/individuals who many not have received information through typical means of public notifications (e.g. neighboring Amish farmers) is questioned. • Clearly discuss the plan for addressing the surface acres within the permit boundary managed by the Bureau of Land Management (BLM) and the public opportunities for participation in this federal land issue. • Aspects of this project may also be under federal jurisdiction (BLM, U.S. Army Corps of Engineers, Surface Transportation Board) and stated that MEPA should be postponed until appropriate federal officials determine whether NEPA requires a federal EIS for the project.