

**U.S. DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
SPOKANE DISTRICT, WASHINGTON STATE**

ENVIRONMENTAL ASSESSMENT TITLE PAGE

ENVIRONMENTAL ASSESSMENT NUMBER OR-135-08-EA-028	SERIAL NUMBER WAOR 64096-02	DATE OF REPORT December 10, 2008
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BLM RESOURCE AREA Border	COUNTY Stevens
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TYPE OF ACTION

Reactivation, Development and Mining of the Flagstaff Mountain Barite open pit mine situated on Federal Fee Estate

APPLICANT'S NAME

Graeme O'Neill, President & CEO
Kent Exploration, Inc.

ADDRESS (Include zip code)

Kent Exploration, Inc.
619-744 West Hastings Street
Vancouver, BC Canada V6C 1A5

DATE(S) OF FIELD EXAMINATION – Numerous examinations over a five year period (continuing)

LANDS INVOLVED

Township	Range	Meridian	Section	Subdivision	Acres
T. 39 N.	R. 39 E.	Willamette	09	N1/2	~ 18

PURPOSE OF REPORT:

To disclose the environmental effects of approval of a mining and reclamation plan for reactivating a previously disturbed and un-reclaimed, open pit barite mine and issuing approval for initial mining of about 30,000 tons of previously stockpiled material within that pit. Subsequently, an additional 880,000 tons of barite ore would be mined at a rate of about 100,000 tons per year for an estimated mine life of about nine years.

I. Introduction

A. Background:

The Brokers Best project is situated on Flagstaff Mountain about three miles southwest of the town of Northport, WA in Stevens County (see Brokers Best - Plan of Operations). The entire operation as proposed will be situated within the disturbance affected area of a previously un-reclaimed barite mining operation which removed 85,000 tons of barite from the mine. Kent Exploration, Inc. has acquired a bulk sample of approximately 30,000 to 50,000 tons of barite (barium sulfate) ore from previously blasted and stockpiled ore within the open pit as feed for an offsite pilot plant. Barite is not considered to be a toxic chemical due to its extreme insolubility. Metallurgical and processing tests have determined that the material is suitable for commercial marketing. The company intends to mine an additional 880,000 tons of material and gangue at a rate of about 100,000 tons per year. Initial product concentration will be done onsite using comminution and gravity separation of the barite material. Further processing will be done in an established mill at an offsite location, probably near Colville, WA. The entire operation on the subject site should not exceed 20 acres.

This environmental assessment (EA) describes the proposed action and no action alternative, analyzes the environmental and social impacts of those actions, evaluates mitigating measures which might be needed, describes the mining and reclamation procedures, and examines the ultimate land use alternatives for this parcel.

B. Type of Action:

This action includes assessment, development, mining and reclamation planning of a moderate sized locatable mineral (barite) deposit pit three miles southwest of Northport, WA.

C. Purpose and Need for Proposed Action:

The purpose of the proposed action is to comply with federal laws and regulations, and the Spokane District Resource Management Plan Record of Decision (RMP/ROD - 1987). This action is needed to comply with the 1872 mining law as amended, which allows and encourages mining claimants to identify and appropriately develop mineral resources located on federal mineral estate. 43 CFR 3809.11 requires submission of a plan of operations for BLM approval.

Section 302 of the Federal Land Policy and Management Act of 1976 directs the Secretary of the Interior to manage public lands under the principles of multiple uses. Minerals are specifically identified as one of these multiple uses in the Act.

As referenced in the Code of Federal Regulations (43 CFR 3802.0-6, Exploration and Mining Wilderness Review Program Subpart) “Under the 1872 Mining Law (30 U.S.C. 22 et seq.), a person has a statutory right consistent with other laws and Departmental regulations, to go upon the open (unappropriated and unreserved) public lands for the purpose of mineral prospecting, exploration, development, and extraction.” This applies to all public lands available for mineral entry. It is BLM’s policy “to make minerals available unless it is detrimental to the public interest to do so;” and “to protect public land resources and the environment and to minimize damage to public health and safety during the exploration for and the removal of such minerals.” The Spokane RMP/ROD (1987, page 48) states that “All locatable mineral operations on BLM administered lands are covered by 43 Code of Federal Regulations (CFR) 3809 and 3802 regulations.”

With the increasing U.S. and world population, there is an ever increasing need for mineral products and energy sources. Barite serves a dual role as a mineral material in building and as a high specific-gravity drilling fluid designed to keep deep drill holes from collapsing. This site has been identified, explored, and mined for barite in the past. Recent exploration completed by Kent Exploration, Inc. appears to indicate that an economic resource is present at this site.

D. Location of Proposed Action:

This project is located about 3 miles southwest of the town of Northport, Stevens County, WA. The legal description of this tract is Township 39 North, Range 39 East, Section 9, N 1/2, Willamette Meridian (See attached Plan of Operations/Reclamation Plan). The project area is wholly within the Border Resource Area of the Spokane BLM District.

E. Compliance with Applicable Land Use Plan:

The proposed action conforms to the Spokane Resource Management Plan Record of Decision (1987) as described in the Purpose and Needs Section.

F. Relationship to Statutes, Regulations, or Other Plans:

The proposed action is in conformance with federal law and regulations as described in the Purpose and Needs section above.

II. Proposed Action and Alternatives

Two alternatives are analyzed in this document: 1) Approve the plan of operations; 2) No Action.

A. Description of Proposed Action

BLM would approve the proposed plan of operations for locatable mineral development at this site, pursuant to all applicable regulations and law. The proponent has provided a detailed mining and reclamation plan for BLM evaluation and approval (see attached). The proponent will submit, prior to initiation of mining operations, an appropriate monetary bond which is acceptable to BLM and sufficient to provide reclamation funds in the event that the proponent fails to complete their proposed obligations. The mining proponent has provided detailed operational data which is sufficient for BLM staff to fully analyze this proposal under the National Environmental Policy Act (NEPA) process. When approving the mining and reclamation plan, BLM may require mitigation measures or specific stipulations as conditions of approval. For purposes of analysis, it is assumed that the following generalized scenario will occur and the described actions will be part of the mining and reclamation plan.

A locatable mineral open pit would be sequentially developed over an area of about 5 acres of the Federal parcel. Ancillary facilities such as access roads, ore pads, powder magazines, power generating facilities, concentrators, etc. will be developed on the remaining approximate 15 acres. Initially the company would mine about 30,000 tons of ore from existing stockpiles within the pit area at the south-central portion of the parcel. Additional ore for future production would require blasting.

The company proposes to mine the material at a rate of about 100,000 tons per year for approximately nine years until the resource is exhausted. This property would be developed using open pit mining methods with concurrent reclamation of the mined out areas by backfilling

mined-out portions of the pit with waste rock. Temporary haul roads would be constructed and removed within the previously disturbed mine area as necessary. Resulting pit high walls will, upon reclamation of the site, be constructed not to exceed 2 horizontal to 1 vertical (2:1) slope, in order to enhance safety and final reclamation efforts. Mining will be done using conventional blasting, rubber tired front-end loaders, track hoes, dump trucks, pit conveyers, horizontal and vertical impact crushers and mechanical screening. Barite would be separated using visual analysis and through gravity separation. Support equipment in the pit would consist of 4x4 pickup trucks, water trucks for dust suppression, maintenance vehicles and power supply lines. All mining, processing and high traffic areas associated with this operation would utilize water sprays to reduce potential generation of fugitive dust. The ultimate pit dimensions are proposed to be about 100 feet wide, 1,000 feet long and 150 feet deep during the mining phase. The pit floor is not expected to encounter any groundwater conditions during or subsequent to mining. Pit backfilling and reclamation efforts will result in about a 50 depression along most of the ore body length. This will create a centripetal drainage and reduce storm-event water runoff from the site.

On-site concentrating will consist of standard dry crushing and separation methods similar to those used at a sand and gravel operation. Wet crushing and separation tests would be evaluated for processing effectiveness. Dust would be controlled using water trucks and sprays incorporated into the processing systems. The remaining 880,000 tons of ore will be mined using similar methods at a rate of about 100,000 tons per year (500 to 2,000 tons/day) for about nine years.

Diesel generators would be used to supply power for mining and on-site processing.

The following mitigation measures would be required for this proposed operation:

- Haul roads on and accessing the site would be continuously watered to minimize fugitive dust from leaving the site.
- Dust generating activities within the pit will be suppressed by water trucks and dust control spray systems so as to minimize offsite dust migration.
- The highwall areas exceeding 15 feet in height will be effectively fenced to protect the public and wildlife from entering into a potentially dangerous pit or equipment operation area. Stable, final reclamation slopes of about 2 horizontal to 1 vertical will be planned and incorporated into the mining operation sequence to prevent over-steepened final pit walls during mining.
- If an archaeological resource (historic or prehistoric site or object) is discovered by the operator or any person working on the operator's behalf, the operator shall immediately stop all operations in the area, immediately notify the Authorized Officer (AO), in this case the Border Resource Area Field Manager, verbally, and shall follow up such verbal notification with a written confirmation (certified mail recommended). In accordance with 43 CFR §10.4 (c)(d) and (g), if the discovery includes human remains, funerary items, sacred objects, or objects of cultural patrimony, operations shall remain suspended and the discovery protected for thirty (30) days or until a written notice to proceed is issued by the AO. An evaluation of the resource or remains will be made by a representative of the AO and appropriate mitigation actions will be identified in

consultation with the SHPO, consulting tribes, and claim holder. The BLM shall be responsible for evaluation and mitigation costs. All archaeological materials shall remain the property of the United States.

B. No Action Alternative

BLM would not approve the plan of operations. No additional materials in excess of those previously mined from this location would be removed from this parcel.

III. Affected Environment

A. General Setting

This deposit is situated on the southeastern shoulder of Flagstaff Mountain about one mile west of Lake Roosevelt on the Columbia River. There is very little soil developed around this site with sparse to locally dense foliage development on the dry southern exposures and the protected damp northern slope areas respectively. The previously mined area has been mostly denuded to a generally bare rock surface with small shrubs, grasses and weeds. Surface material at the subject site comprises barite (barium sulfate), limestone and black shale. These sedimentary rocks have been partially metamorphosed and regionally and locally deformed. The entire area has been exposed to Pleistocene glaciation and freeze thaw weathering. Large barite boulders are scattered across the previously mined area indicating insufficient grade for processing during previous operations.

Slopes on the parcel are generally flat to moderately graded in the previously mined area and extremely steep around the periphery (see site map). Surrounding area land-use includes primarily open spaces, forest land and highly dispersed recreation. The highest monetary value for this property appears to be mineral resource development. Previous operations in the disturbed area and pit have removed 85,000 tons of barite ore.

B. Air Quality:

Air quality on the parcel is generally very good due to the remote mountain location, open space, nearly continuous southwesterly winds, rainfall and lack of concentrated populations near the site. Short term impacts related to this project will be dust, processing equipment and diesel generator off-gas and vehicular emissions. Barite is an inert, high specific gravity (heavy), naturally occurring compound which does not tend to remain suspended in the air for great periods of time. Inhalation of barite dust has been shown to be generally inconsequential initially or through retention in the lungs (Ott and Gelfand, 1983). The proposed operation site is completely surrounded by BLM and U.S. Forest Service land for about a mile in all directions from the mine site. The closest population center is Northport, WA located on the Columbia River about three miles to the northeast and about 2,320 feet lower in elevation than the mine site. Prevailing winds from the southwest would quickly disperse and dilute any dust emissions from the operation.

C. Water Quality:

No permanent surface waterways protected by the Clean Water act are present on or directly adjacent to this proposed mine site.

The subject parcel (mine site) is at an average elevation of about 3,600 feet above mean sea level (AMSL). The closest intermittent streams are located in excess of ¼ mile to the north and to the southwest. The nearest perennial stream is situated in excess of one mile to the northeast. . The

nearest permanent surface water feature in the area of the subject mine site is Lake Roosevelt on the Columbia River. It is situated about 1 mile to the southeast and about 2,300 feet down gradient from the site. Site drainage is to the southeast with a pathway distance to the Columbia River of about two miles. Perched groundwater tables are present regionally within natural depressions and basins in the metasedimentary basement rocks.

Currently only surface water occurs on the parcel from seasonal rains and snowmelt runoff. Overall there are no indications of water quality problems, previous mining contamination, forest fire impacts, road construction or timber harvest effects at or around this remote mine site. Washington State Department of Ecology does not rate the small intermittent streams adjacent to the mine area.

Section 303(d) of the Federal Clean Water Act requires Washington State to periodically prepare a list of all surface waters in the state for which beneficial uses – such as for drinking, recreation, aquatic habitat, and industrial use – are impaired by pollutants. These are water quality limited estuaries, lakes, and streams that fall short of state surface water quality standards, and are not expected to improve within the next two years. A description of the Washington State Water Quality Assessment can be viewed on the web at <http://www.ecy.wa.gov/programs/wq/303d/introduction.html>. The Columbia River, northeast of this proposed operation site, is rated as Category 5 waters. This contamination appears to be the result of concentrated historic smelter activities in the Northport and Trail BC, Canada areas and subsequent heavy metal concentrations in the channel sediments surrounding the town of Northport, WA.

D. Cultural Resources:

A Class III cultural inventory was completed for this site and no cultural resources were found.

E. Recreation Use:

Recreation on this site is currently limited to 4X4 and ATV driving and occasional camping near the proposed mine site. These activities would be lost on about 20 acres of the mine site during the life of the proposed operation. Alternate locations for these activities are available throughout the adjacent BLM parcel as-well-as the extensive Colville National Forest which surrounds the site. Upon completion of the project the area would be fully reclaimed for wildlife habitat and recreational use.

F. Soils:

Soils on this Federal parcel are poor and exhibit minimal, if any, organic A horizon. There are accumulations of organic matter which support vegetation on some portions of the parcel.

G. Vegetation:

Vegetation on the site is minimal and limited to some pine and fir trees on the periphery and brush, grasses and noxious weeds on the previously disturbed portions of the proposed mine site. Willows are present in the draws and on north aspect slopes where runoff water is captured and supports their growth. A BLM site evaluation found no special status plant species or communities of concern. A BLM Assessment species, *Sanicula marilandica*, occurs within one mile of the site, in a moist ravine with aspen and maple; similar habitat is not present on the site. Southern aspect and limited summer precipitation limit abundant vegetation at this site.

H. Visual Resources:

Visual resource impacts at this site are generally very limited. The area sits high on the shoulder of Flagstaff Mountain in a remote area of northeastern Washington. Previous mining at the site created a visual impact that already can be seen from small stretches of Lake Roosevelt reservoir and highway 25 which is situated on the east side of the Columbia River and about two miles to the southeast of the proposed project and five miles southwest of Northport, WA. Some disturbance would be visible from small sections of the reservoir and highway 25 during this proposed operation. Several other small historic mining operations are visible to the south along portions of the reservoir and highway 25.

I. Wildlife:

This parcel is composed of Douglas-fir and ponderosa pine forest and grassland. The project area is a previously disturbed open pit mine with small rock ledges and relatively young pine forest surrounding it. According to Washington GAP Analysis data, the project area is not within the range gray wolf, lynx, or grizzly bear (federally listed species). Townsend's big-eared bat (BLM sensitive) may occur in the vicinity, but no caves or adits exist in the project area. The only BLM sensitive species for which suitable habitat exists that may occur in the vicinity is moose. Other wildlife that could be affected includes wintering mule and white-tailed deer. Various species of migratory songbirds could be present in the vicinity of the mining area, but no riparian habitat, which is more productive for songbirds, is present. Bald eagles nest along the Columbia River located 1 mile away. The nearest documented bald eagle nest is 2.7 miles to the northeast.

M. Wetlands:

Field inspection of the site revealed no wetlands on or directly adjacent to the proposed mine area.

N. Transportation:

The previous mining activities at the site (85,000 tons) were accessed by a five mile long mine haul road which connects to the north end of the property and with Sheep Creek road to the north. The proposed operation is anticipated to produce 50,000 tons of barite concentrates per year. The original haul road was improved for the previous mining operation and remains in excellent condition. No additional offsite access road construction is required for the proposed action, although minor pothole repair on the haul road would be ongoing. Traffic from the site would consist of 50 ton rated highway belly-dump trucks carrying inert barite concentrate from the mine site concentrator. Trucks would travel about 4 miles northeast from the mine site, access Sheep Creek road, travel 3 miles to the southeast where they would enter onto the paved highway just north of Newport, WA.

O. Socio-economic:

Development of this site should have positive benefits for the local community. These benefits would include increased local mining job opportunities, increased tax revenues for local governments and increased local business revenues (i.e. food, lodging, services, etc.).

The U.S. Census Bureau data shows Stevens County median household income for 2004 to be \$37,354 and an unemployment rate of 5.7% in 2005 (**U.S. Census, 2000**). Mining related jobs such as equipment operation, heavy truck driving, and paving operation average \$46,000, \$47,500, and \$37,700 per year respectively (**Monster, 2007**). The proposed operation would probably employ 5 to 7 people in these higher paying positions.

P. Critical Elements of the Human Environment Not Present or Not Affected:

BLM evaluated the critical elements listed below and found that they were either not present, or would not be affected by the alternatives:

- Areas of Critical Environmental Concern
- Environmental Justice
- Prime or Unique Farm Lands
- Invasive, Non-Native Species (not effected)
- Migratory Birds
- Wastes, Hazardous or Solid
- Wilderness
- Wild and Scenic Rivers

IV. Environmental Impacts

A. Impacts from the Proposed Action:

Air Quality:

Direct impacts to local air quality as a result of this project would be short term in nature. Impacts would include on and off-site (haul road) fugitive dust generation, and motor vehicle emissions from on-site mining and processing operations. These impacts will increase initially and then decrease throughout the mining process as the operation reclaims portions of its operational disturbance footprint. Increased depth of the pit during mining will reduce wind speed locally and help to reduce migration of particulates outside of the pit. Air quality impacts should cease upon conclusion of mining and final reclamation.

Any fugitive dust issues will be addressed in the mining plan and controlled using a variety of processing water sprays and watering of roads within the site and those leading to and from the property. Dust emission from the new operation located on the BLM parcel would be required to meet local air quality standards as directed in the mine plan of operations. Remote location of this site would further minimize the effects of any fugitive dust.

Water Quality:

There should be no measurable effects on the any local surface streams or water bodies from this proposed operation due to the minimal size of the operation, its remote location and buffering distances to local streams. Surface water quality at the site may show some initial local impacts due to the disturbance of fine grained sediments associated with mining of sand and gravel. These “fines” should not present any environmental hazard due to the remote location of the proposed operation and the ability of surrounding soils to incorporate them. The pit will establish a centripetal (inward) drainage where the majority of runoff water at the site will flow towards the center of the pit for infiltration into the ground. Vehicle and equipment maintenance will be confined to specific areas with potential contaminant catchment facilities. Excess site runoff would be captured and directed into the drainage ditches. Overall, surface and groundwater quality at this site should not be significantly affected by this operation.

Cultural:

No cultural resources were identified on or within the proposed disturbance area, therefore no impacts are anticipated. The requirement to cease operations and contact BLM in the event that

cultural resources are encountered would minimize the potential for impacts to undiscovered resources.

Recreation:

Because of the limited recreational use of the BLM subject parcel, the small area required for mining activity and the availability of abundant surrounding parcels including adjacent U. S. Forest Service land, little disruption to recreational activities in this area is expected as a result of this project.

Soils:

What limited soils that are present at the site will be removed and stockpiled during development and mining. They will be redistributed during sequential reclamation of the pit walls and access roads.

Vegetation:

Most of the original surface vegetation has been removed within the pit area and weeds have been established in the open areas. What little available topsoil that is removed from adjacent future disturbance will be stockpiled for later application during the reclamation phase of this project. As the mine develops, mining and concurrent reclamation of the pit high walls would reduce slope angle and make the over steepened areas more safe. Re-introduction of vegetation would be engineered to provide native species preference, suitable slope control, and maximum wildlife habitat.

Visual Resources:

View shed for this area will be affected with the development of a 3.5 acre barite pit. View character relative to the current disturbance at the site, will not change greatly from any perspective. Distant (two miles) views from highway 25 and small sections of Lake Roosevelt reservoir to the southeast would be temporarily affected during development of the extreme southern end of the proposed pit. The remoteness of the site precludes other significant visual impacts. Long term visual resources should not be significantly impacted. This view impact should be reduced by visual barriers (berms) and vegetative screens. Visual impacts will be diminished as the pit is developed and southern portions of the highwall are concurrently reclaimed during mining.

Wildlife:

The proposed mining area is already heavily disturbed, and mining impacts would occur within the existing footprint. Following mining, approximately 20 acres would be reclaimed, thus enhancing the site for wildlife. No known water sources are located on the proposed mine site that would draw wildlife to the area. Disturbance from mining operations (noise and traffic) could limit wildlife use of habitat adjacent to the active mining area for 9 years. Noise is expected to occur year-round, except in the winter when operations cease due to weather. Moose would likely be displaced by the noise, but the site is surrounded with abundant habitat to support any displaced moose. Noise may prevent some migratory bird species from nesting in the vicinity of the mine. Wintering deer would be largely unaffected because mining activities will stop during this time.

Transportation:

Traffic in and around the pit area would be in the form a variety of pickups, water trucks, loaders, dozers, support vehicles and mine dump trucks. Dump trucks transporting barite concentrate would leave the site on the existing haul road to the north. It is estimated that full

haul production at the site would result in about 6 to 10 dump truck trips per day. Mining of the entire known resource is expected to require about nine years, at a rate of about 100,000 tons/yr.

Socio-economic:

This project would create an estimated 5 to 7 high wage employment opportunities (jobs) at the mine and trucking facility. The jobs should be available to local Stevens County residents and the surrounding area. In addition, a positive economic ripple effect to service these new jobs (restaurants, stores, etc.) will spread out into the local community increasing the number of service and support job opportunities.

B. Impacts from No Action

If no action is taken on this proposal, conditions at the site will remain relatively the same as they are now with previous disturbance on the idle mine site. Wind would continue to disturb and transport fugitive dust from the site. The area would remain remote with some increase in recreational activities and therefore increased public safety exposure to the mine site disturbance as local populations increase. Forestry would be the primary local industry surrounding the mine site. It is anticipated that there would be increased impacts on this BLM parcel related to refuse dumping and increased dust generation from increased use of deteriorating dirt roads on the parcel.

C. Cumulative Impacts

Air Quality:

Cumulative short term impacts related to this project will be dust, processing equipment and diesel generator off-gas and vehicular emissions. Barite is an inert, high specific gravity (heavy) compound which does not remain suspended in air for great periods of time. Inhalation of barite dust has been shown to be generally inconsequential initially or through retention in the lungs (Ott and Gelfand, 1983). The general mine area enjoys very clean air over the majority of the year due to its remote location and sparse population. The proposed operation site is completely surrounded by BLM and U.S. Forest Service land for about a mile in all directions from the mine. The closest population center is Northport, WA located on the Columbia River about three miles to the northeast and about 2,320 feet lower in elevation. Prevailing winds from the southwest would quickly disperse and dilute any dust emissions from the operation. There are also small borrow pits (mines) around the area which were used to acquire road building material. These pits are idle but most have not been operated for many years. Intermittent use of one or two of these local pits to produce road material is not considered significant due to their remote locations, small scale operation and distance from a population center.

A marble quarry mine is located about 12 miles to the southwest of Flagstaff Mountain. This mine is not anticipated to have any significant cumulative effect due to the long distance from the proposed Brokers Best operation and the lack of alignment of prevailing winds from one operation to another. While this operation will also generate some operational emissions and windblown dust, this material is inert and will dissipate over a very sparsely populated area.

The Pend Oreille lead/zinc mine and associated mill are located in Pend Oreille County, WA about 22 miles to the east of the proposed Brokers Best operation. The Pend Oreille mine is an underground mine and other than the newly constructed tailings pond area, it has little potential for particulate generation. The Pend Oreille mine fugitive dust area is generally separate and distinct from the Brokers Best mine and the marble mine to the south. Again, due to the great separation distance, it is anticipated that no cumulative effect will occur for this mine.

Forest fires appear to be the largest significant threat to air quality in the area of the proposed mine site. Other local air contaminant sources in the valley bottoms include forestry practices (logging), wind-blown agricultural soil, chemical herbicide spraying, dust from dirt roads, outdoor burning, vehicle emissions and burning in residential wood stoves. Dust abatement procedures designed into the Brokers Best mine plan and concurrent, phased reclamation should minimize short term cumulative air quality effects in the local or regional area. Long term, the local air quality will be only minimally impacted by the proposed operation.

Vegetation

Surface vegetation would be enhanced at the site through reclamation. Soil additives would help reestablish growth media and native species previously removed from the site. There are no known local activities planned that will cause a cumulative effect on reducing soils or vegetation productivity in this area. Re-introduction of vegetation would be planned and engineered to provide native species preference, suitable slope control, and suitable wildlife habitat.

Visual Resources

The lack of additional activities anticipated near this operation in the near future indicate that cumulative effects from this and other similar operations would not occur. The remoteness of the site precludes all but the most distant view impacts as a result of the operation. The natural rocky and barren character of the local environment combines with the relative low human activity to minimize potential visual impacts. Long term reclamation would further reduce visual impacts through contouring and natural dulling of soil disturbance brightness.

Wildlife

Sporadic mining, timber harvesting, hunting and recreation and residential development in the lowlands will have some effect on wildlife in this area. Disturbance from mining operations (noise and traffic) could limit wildlife use of habitat adjacent to the active mining area on a seasonal basis for about 9 years. These effects will be generally minor due to the huge adjacent areas of undeveloped land which surround the site, strong wildlife populations, relative small local human presence and infrequent seasonal activities in and adjacent to the proposed operation site.

This proposed mining operation should have very few negative and some positive effects on local wildlife. The site will be reclaimed concurrent with and upon completion of mining. Reclamation will include re-contouring to gentle contours, replanting with native vegetation and grasses and site soil stabilization utilizing berms and drainage contouring. The heavy disturbance which resulted from previous mining will be repaired and enhanced to benefit wildlife. Approximately 20 acres of additional range and forage will become available for wildlife. Previously, no known water sources were located on the proposed mine site. After mining, centripetal drainage design will direct runoff towards the pit center where it will pool and infiltrate into the local groundwater. Pooling water will provide a source for a variety of local wildlife and birds. Noise may temporarily prevent some migratory bird species from nesting in the vicinity of the mine. Wintering deer would be largely unaffected because mining activities will stop during this time. There are no adjacent activities similar to this operation and it is not anticipated that a cumulating effect on wildlife would occur at this site.

D. Mitigation Measures

Mitigation measures would be incorporated into the mining and reclamation plan as described in the Proposed Action.

V. Consultation and Coordination

A. Individuals and Organizations Consulted:

- Tribal consultation: Requested and pending.
- In a letter dated January 20, 2009, the State of Washington Department of Archaeology and Historic Preservation (DASP) concurred with the findings of the AHS cultural report, that “No Historic Properties are Effectuated” for the proposed Pit. Final concurrence is pending.

B. Databases Consulted:

The following databases were used to review the subject area for known cultural resources and threatened and endangered (T&E) plant and animal species at or near the project area.

- State of Washington-Department of Fish and Wildlife Priority habitat and Species Database.
- State of Washington-Department of Natural Resources-Washington Natural Heritage Plant Database.
- State of Washington-Office of Archaeology and Historical Preservation Site Database.
- Bureau of Land Management Resources Inventory Database and other records.

VI. List of Preparers

The following personnel were involved in the field evaluation of this parcel:

BLM Representatives

Rich Bailey	- Spokane District - Archeologist
Steve Smith	- Spokane District - Recreation Specialist
Barb Benner	- Border Resource Area - Botanist
Kelly Courtright	- Spokane District - Mining Engineer
Al Gardner	- Border Resource Area - Forester
Joe Kelly	- Spokane District - Fisheries Biologist
Rick McComas	- Border Resource Area - Range Specialist
Scott Pavay	- Spokane District - Environmental Coordinator
Thomas Sweeney	- Border Resource Area - Geologist
Jason Lowe	- Border Resource Area - Biologist

VII. References

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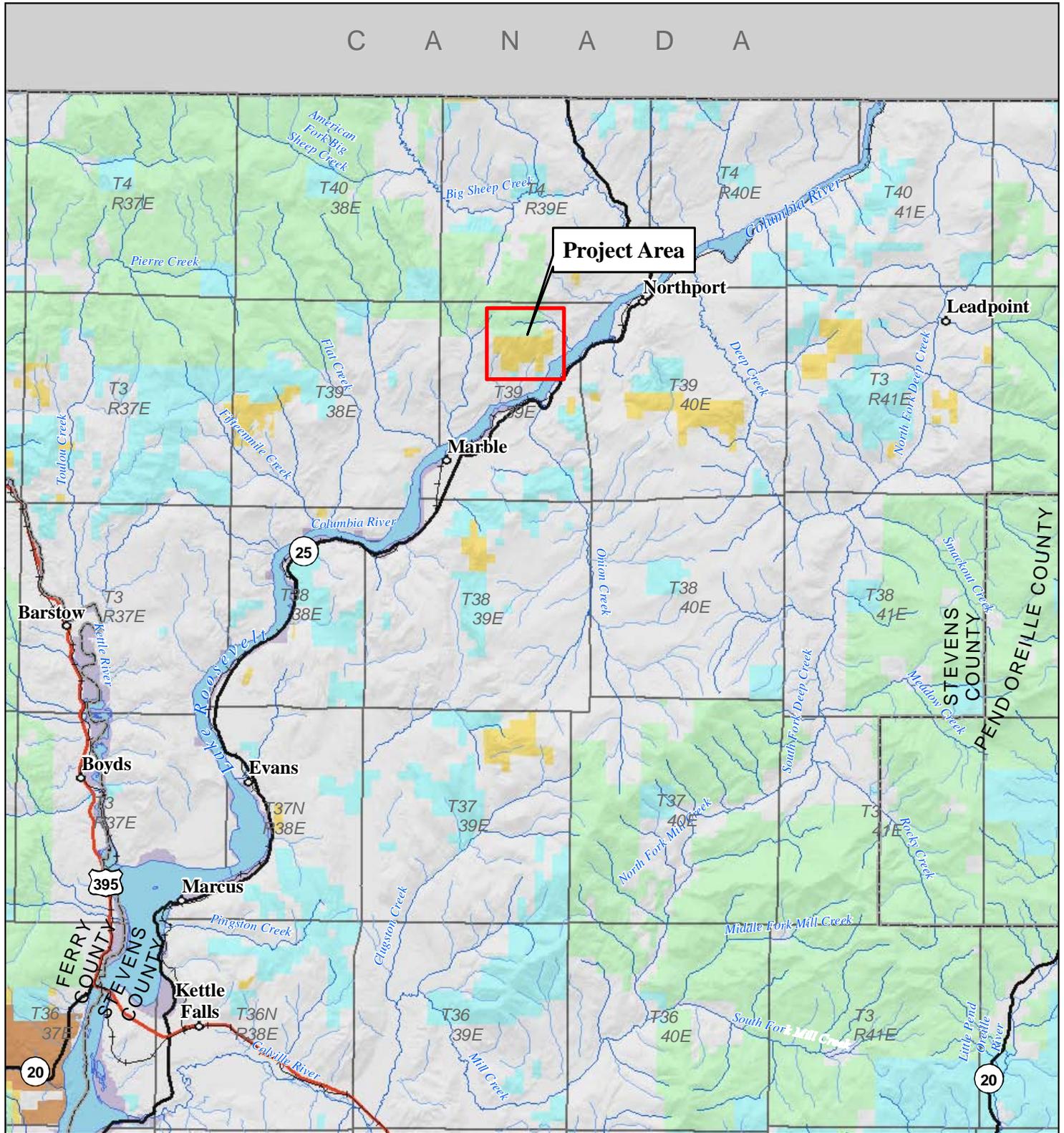
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VIII. Attachments:

Attachment: Plan of Operations (POO)

Brokers Best Proposed Area of Operations Project Vicinity



C A N A D A

-  Project Area
-  US Highway
-  State Highway
-  Bureau of Land Management
-  Forest Service
-  WA Dept. of Fish and Wildlife
-  WA Dept. of Natural Resources

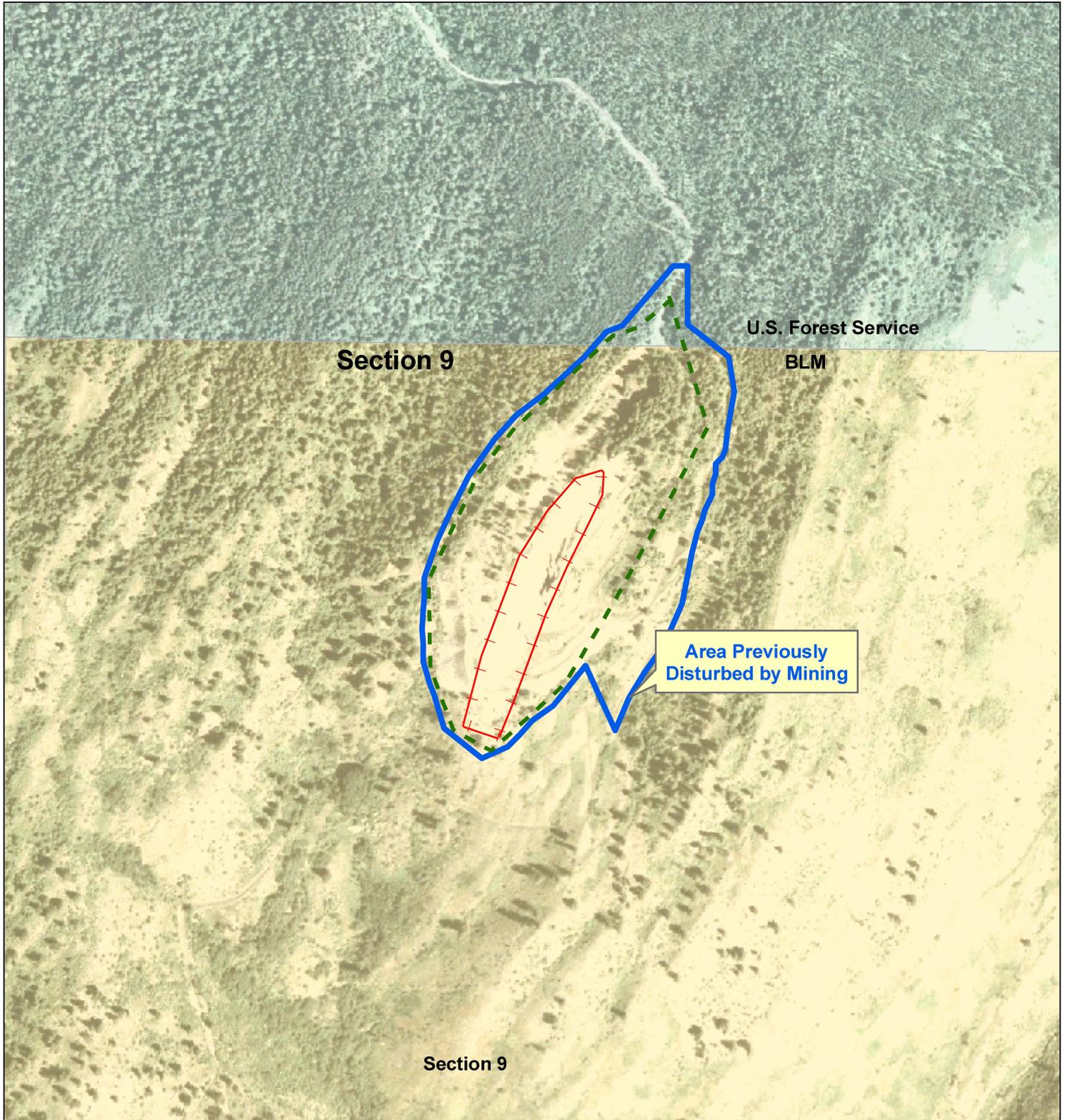


WASHINGTON

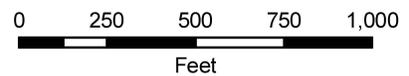
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Proposed Brokers Best Mine - Area of Operations

Township 39 North, Range 39 East, Section 9, N1/2



- - - Proposed Area of Operations
- - - Proposed Pit Area
- BLM Administered Lands
- U.S. Forest Service Lands



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