

“MARGARET DEPOSIT” ENVIRONMENTAL ASSESSMENT OF HARDROCK MINERAL LEASING

ENVIRONMENTAL ASSESSMENT

EA Number: EA-OR-936-06-00

BLM Office: OR-936.2 & OR-130,134

Date: March 8, 2007

Case File Number: WAOR-61215

Proposed Actions

(See Glossary for definition of terms in *italics* and the list of acronyms)

Applicant’s Proposed Action

Application

To issue a *fractional interest lease* for Federal *hardrock minerals* on lands within *Mineral Survey* (MS) 708 and a *fringe acreage lease* on adjoining lands included in MS-774, 1329, 1330, and 779 pursuant to Idaho General Mines, Inc., (IGMI) lease application of March 24, 2005 (assigned Bureau of Land Management (BLM) Serial Number WAOR-61215). The application was submitted consistent with regulations at 43 Code of Federal Regulations (CFR) §3501 – Leasing of Solid Minerals other than Coal and Oil Shale. The submission pertains to approximately 900 acres (referred to as the “Margaret Deposit”) in the Mount St. Helens Mining District of western Washington. Each MS has the following approximate acreages (see Figures 1, 2, and 4):

- MS-708 217.3 acres
- MS-774 267.7 acres
- MS-779 247.9 acres
- MS-1329 163.9 acres
- MS-1330 2.7 acres

Location

All of the subject lands (both surface and mineral estates) are within the Gifford Pinchot National Forest (GPNF) in northern Skamania County, Washington. The application area is situated on or adjacent to the south facing slope of Goat Mountain in Township 10 North, Range 6 East, of the Willamette Meridian, and includes parts of Sections 7, 8, 9, 16, 17, 18, 19, and 20 near the head of the Green River drainage. These lands are adjacent to and extend northeastward from the boundary of the legislated 110,300-acre Mount St. Helens National Volcanic Monument (see Figures 2 and 4) – approximately 12 miles northeast of the volcanic crater on the fringe of the 1980 eruption blast zone. Because these lands were patented at the time of Monument designation, Congress intentionally left them out of the volcanic area. The status of the subject lands is *acquired*.

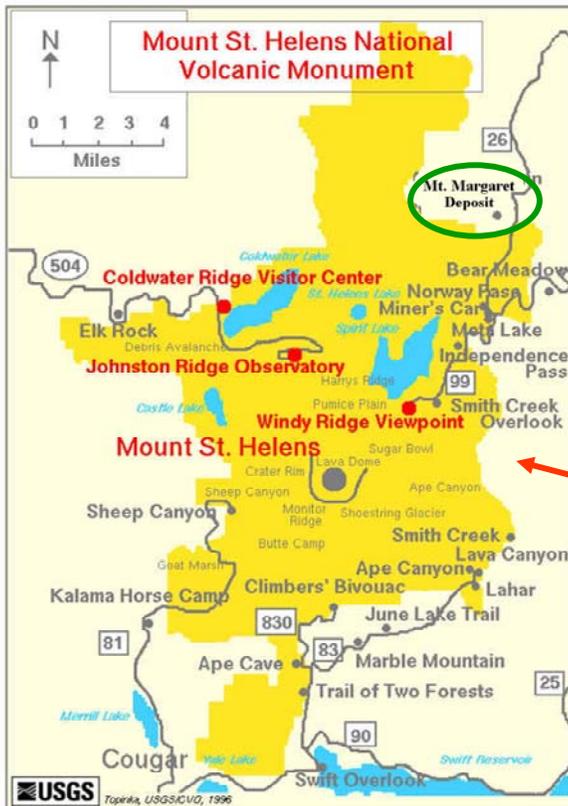
The application area can be accessed from east-west highway U.S. 12 between Interstate 5 and Yakima, WA. At Randle (49 miles east of I-5 and 69 miles west of Yakima), proceed south on State Route 131, then southward along improved Forest road # 26 adjacent to Quartz Creek to Ryan Lake, and then westward on Forest road # 2612 into the headwater area of the westward

flowing Green River. Overgrown logging roads and hiker/horse trails lead generally northward into the vicinity of the south facing slope of Goat Mountain (see Figures 3 and 4).

Applicant

Idaho General Mines, Inc., is incorporated under laws of the State of Idaho and is headquartered at North 10 Post Street, Suite 610, Spokane, WA 99201. IGMI is listed by the U.S. Securities and Exchange Commission with a stated business objective of acquiring and developing advanced-stage gold, silver, base metal, and strategic mineral properties with a focus on previously drilled deposits of substance. The applicant owns an undivided 50 percent interest to the mineral estate within MS-708 (see Background).

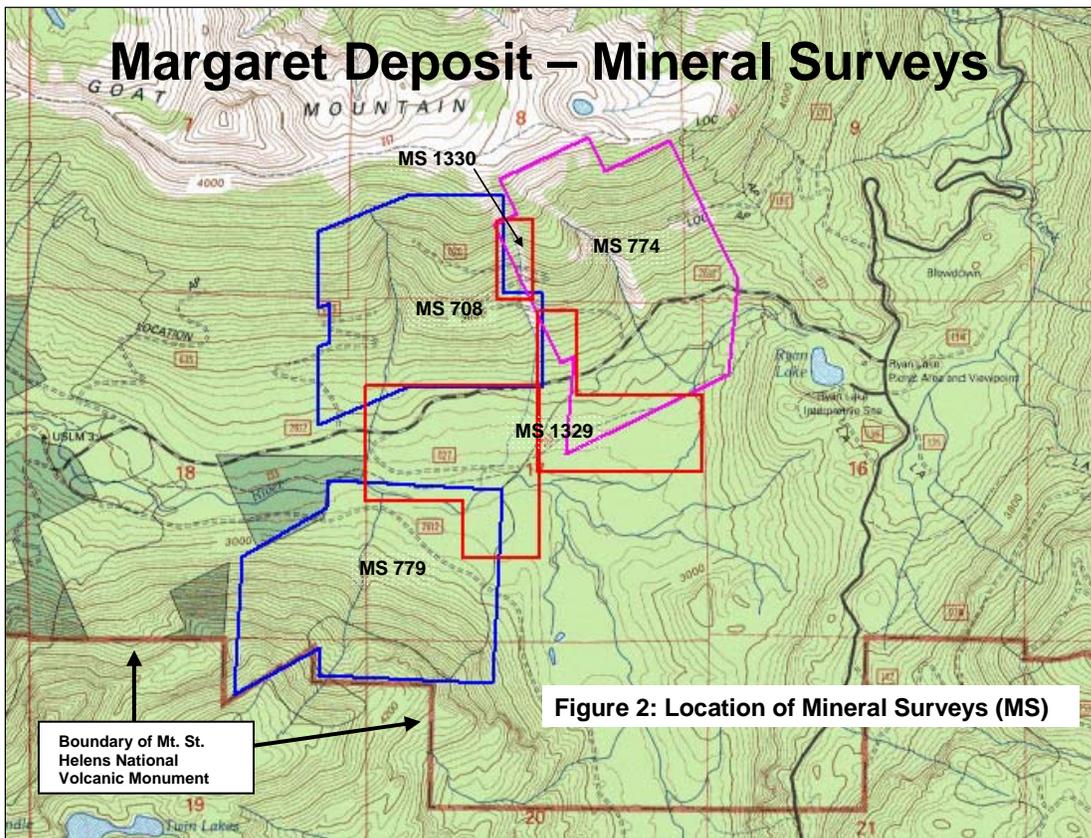
Margaret Deposit



Cu, Au, Ag, Mo Porphyry Deposit



Figure 1: General Location of the “Margaret Deposit”



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BLM’s Preferred Alternative

In accordance with authority at 43 Code of Federal Regulations (CFR), Part 3500 – Leasing of Solid Minerals other than Coal and Oil Shale, Subpart 3509, BLM may issue hardrock leases for *acquired* lands only with the written consent of the surface managing agency – in this case, the U.S. Forest Service (USFS).² Accordingly, BLM’s preferred alternative is to issue a 20-year *fractional interest hardrock mineral lease* consistent with the *contingent right stipulation* included in the USFS’ written consent to lease the approximately 217.3 acres of mineral estate within MS-708. These acres are more specifically situated on the south face of Goat Mountain (T10N, R6E, in portions of Sec. 7, 8, 17, and 18, W.M.) within the Gifford Pinchot National Forest (see Figures 2, 3, and 4).

As stated in the Proposed Action, IGMI also applied for a *fringe acreage lease* to the adjoining approximately 682 acres of MS lands. By regulations, BLM may issue noncompetitive fringe acreage leases for “...known deposits of leasable minerals in Federal lands adjacent to existing deposits, when the Federal deposits can be mined only as a part of an adjacent operation.”³ BLM’s preferred alternative is to address the *fringe acreage* portion of IGMI’s application when

¹ Adapted from IGMI Lease Application (see Applicants Proposed Action)

² The President’s Reorganization Plan No. 3 transferred authority to lease acquired lands to the Department of Interior (1946) with the written consent of the Department of Agriculture (16 USC Sec. 480 et. seq., and 520 allow mineral development as Weeks law status lands; 16 USC Sec. 402 transferred this authority to the Secretary of Interior with caveats).

³ 43 CFR §3501.10(e)

more substantive information becomes available with which to judge the criteria at 43 CFR §3510.15. Should the USFS grant consent to lease the area within the *fringe acreage*, it is reasonable to assume that it would be predicated on the same *contingent right stipulation* described later in this assessment (see USFS Consent).

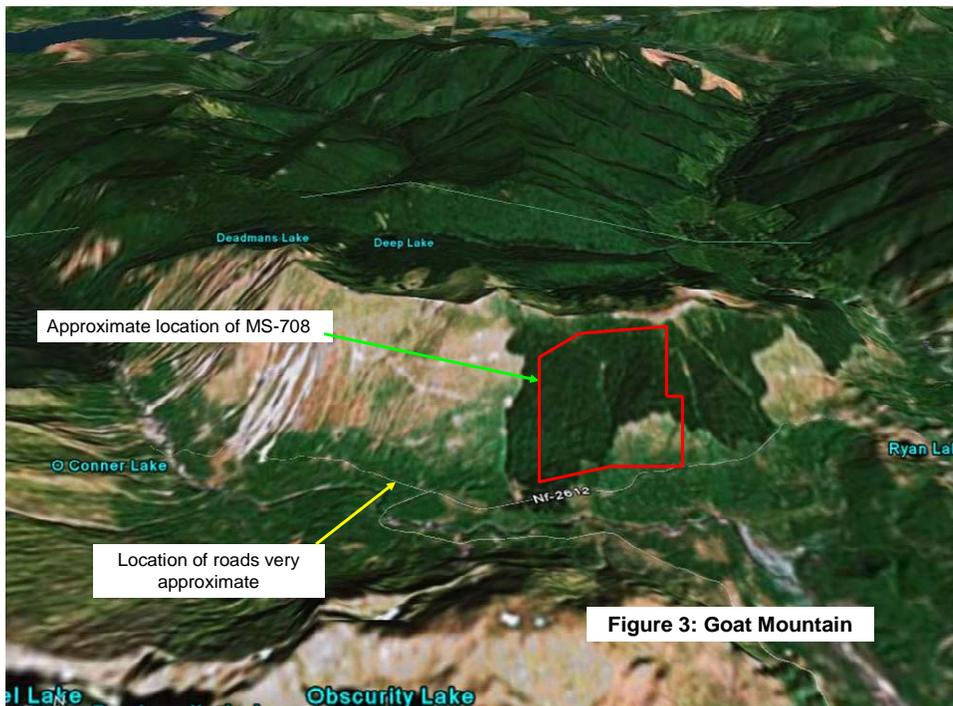
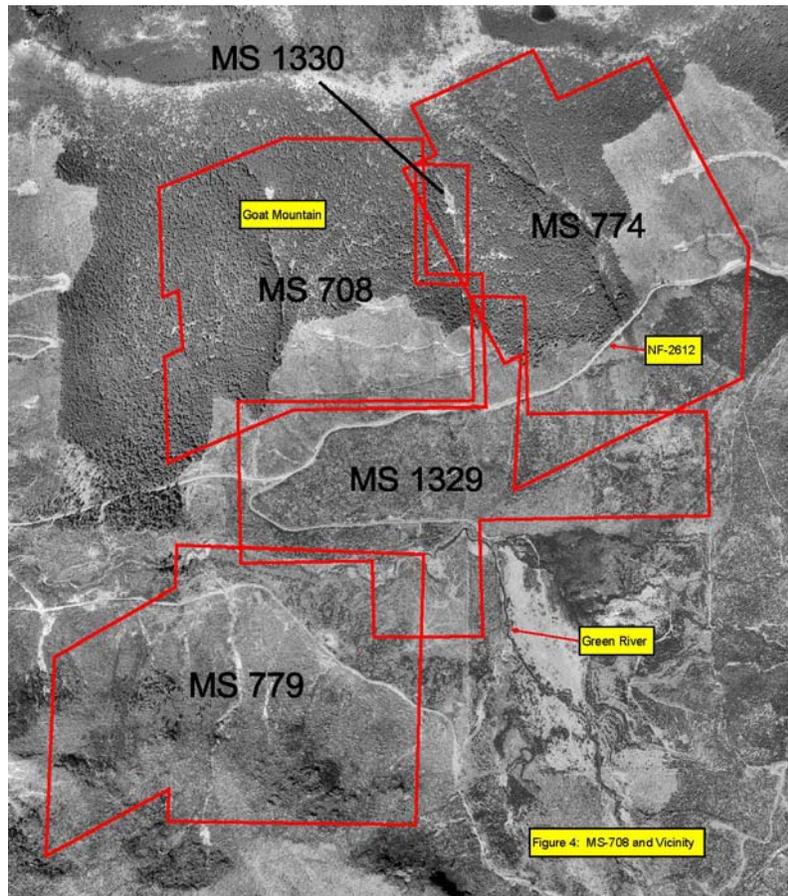


Figure 3: Goat Mountain



No Action Alternative

For all aspects of both the proposed action and the preferred alternative, the logical third alternative to be considered is “no action.” A decision not to issue a hardrock mineral lease would result in no changes or direct/indirect impacts to the existing environment. Since an analysis of the *no action* alternative would always be the absence of consequences, no further discussion is warranted.

Purpose and Need

In accordance with regulations at 43 CFR §3501.17, BLM will not issue a permit or lease unless it conforms with the decisions, terms, and conditions of an applicable comprehensive land use plan. BLM must also comply with any applicable environmental requirements before issuing a permit or lease. This Environmental Assessment is intended to address both requirements.

Background

IGMI’s application asserted that “the Margaret Deposit holds future promise” as a substantial porphyry copper mineral deposit, with associated gold, molybdenum, and silver values:

- 220 million tons at 0.77% copper
- 2.1 million ounces gold

- 46 million pounds molybdenum
- 15 million ounces silver

The application encompasses lands previously patented to Duval Corp in 1982 under the Mining Law of 1872.⁴ Following acquisition by Pennzoil, Duval divested its *hardrock mineral* holdings in 1984. The subject lands were subsequently *acquired* by the USFS in June 1986 through donation and purchase, mostly from The Trust for Public Lands (TPL), except for the privately held undivided 50 percent reserved mineral interest in MS-708.

Via quit claim deed dated September 28, 2004, IGMI obtained property title to the 50 percent undivided private mineral interests on the lands within MS-708 from the previous owner. The United States (U.S.) owns the other 50 percent interest in the mineral estate on this parcel and the entire surface estate, as well as 100 percent (*i.e., full fee*) of both the surface and mineral interests in the other MS lands included in IGMI's application. In accordance with the laws of the U.S., BLM encourages the exploration and development of energy and mineral resources in an environmentally sound manner.

The primary purpose for the USFS' acquisition was to preserve the integrity of the Green River upstream from the Mount St. Helens National Volcanic Monument, as well as for recreation and protection of scenic qualities.⁵ By appraisal the highest and best use of the lands was determined to be for timber production.⁶

Acquired status removes the subject lands from the mineral location provisions of the Mining Law of 1872. Instead, all Federal minerals, including hardrock minerals, are available only under the authority of the Mineral Leasing Act for Acquired Lands of 1947.⁷

Issuance of the proposed lease, as well as any subsequent approval of on-the-ground activities (*i.e.,* exploration and/or development), is fully discretionary to the Government. For National Forest System lands, BLM can issue a mineral lease only with the written consent of the USFS. On February 14, 2006, BLM requested same from the USFS, together with any stipulation(s) necessary for the protection of other resources (see USFS Consent).

Public Comments Received During Preparation of this Assessment

Following receipt of IGMI's application, both the BLM and the USFS received a number of public comments addressing a wide range of issues summarized in the following list:

- Legality of approving or issuing the requested leases
- Level of analyses necessary for administrative action on the application
- Conformity with:
 - National Environmental Policy Act
 - National Historic Preservation Act
 - Endangered Species Act

⁴ 30 U.S.C. §§21-47

⁵ U.S. DOA Proposed Land Purchase, January 16, 1986.

⁶ *ibid* (same as foregoing)

⁷ 43 CFR §3501.

- Clean Air Act
- Clean Water Act
- Federal Land Policy and Management Act
- National Forest Management Act
- Forest Service Organic Act
- American Indian Religious Freedom Act
- Archaeological Resources Protection Act
- Native American Graves Protection and Repatriation Act
- Compliance with regulatory requirements for *fringe* and *fractional* mineral leasing
- Consistency with the primary purpose for which the lands were acquired; primarily with Land and Water Conservation Funds intended by Congress for purchase of lands for recreation and conservation
- Extent of irreversible and irretrievable commitment of resources
- Impacts to human health, popular recreation areas, fish populations, old growth dependent species, and other wildlife, including elk wintering and calving grounds
- Construction or reconstruction of roads within an *Inventoried Roadless Area*
- Consequences to the Green River watershed and wildlife from:
 - Risk of acid rock drainage in an area with numerous wet soils
 - Effects of higher acidic levels in rivers and streams on the ecology of the area, including impacts on vulnerable fish populations and recreation opportunities
 - Impacts on water supply for the communities of Kelso, Longview, and Castle Rock
 - Potential for degradation of downstream agricultural lands by silt and toxic chemicals from the proposed 3,000-acre copper strip mine or failure of dams constructed as part mining and beneficiation
 - Changes in water quality that may threaten salmon and steelhead runs in the Green River
 - Uptake of other substances that might be released onto old growth forest habitat
- Prudence of locating a mine in an active seismic area
- Balance between clean-up costs and short-term economic benefits from resource extraction
- Impacts to hiking trails and recreation sites near Goat Mountain, Ryan Lake, and Quartz Creek
- Effects of dust, traffic, and noise on local flora and fauna, streams, and the quiet beauty of nearby areas

Mitigation

The aforementioned issues would be mitigated by implementation of the preferred alternative inclusive of the USFS' consent stipulation described in the next section (see USFS Consent). The mitigative effect would be that until fully developed exploration and/or mine and reclamation plans are submitted post-lease by IGMI and analyzed consistent with the National Environmental Policy Act (NEPA) process, issuance of a *fractional interest lease* with the following USFS *contingent right stipulation* would result in no authorization of surface disturbing activities. Accordingly, no direct, indirect, or cumulative effects would accrue within the context of the

local or regional environs, society, and land use as the preferred alternative would engender no alteration of the existing environment.

Issues specific to surface disturbance, as well as compliance with applicable regulations and the Acts listed in the foregoing section would be fully addressed during the NEPA review of any mineral exploration and/or mine development plans submitted by IGMI post-lease. Plans submitted subsequent to implementation of the preferred alternative would have to provide sufficient information and description of any related actions in order for the BLM and USFS to determine the range of critical issues and reasonable alternatives, and to understand and explain the environmental impacts including adverse effects which cannot be avoided or may result in any irreversible or irretrievable commitment of resources consistent with environmental analysis and NEPA disclosure.

USFS Consent

Contingent Right Stipulations

On May 2, 2006, consistent with 43 CFR §3503.13(a)(1), the USFS provided a written determination of consent together with a *contingent right stipulation*. The USFS consent stated the following:

In summary, our [USFS'] determination is that issuance of a hardrock mineral lease to Idaho General Mines, Inc. for the subject lands (MS 708), with the following contingent right stipulation, is compatible with both the purposes of the acquisition, and the Forest Plan (see Section on "Description of the Proposed Action"). The specific text of the contingent right stipulation is:

Notwithstanding any language to the contrary in Sections 2 and 14⁸ or any other provision of this lease, the lessee is not entitled to any exploration or development rights. Any plan to explore, develop, or in any other manner use the lands described herein, is subject to BLM's approval following environmental analysis and public disclosure required by the National Environmental Policy Act, or any other analysis undertaken by the Department of the Interior or the Department of Agriculture for any reason. The BLM has absolute discretion to deny any exploration or development operations. No operations may commence until BLM has issued a specific permit subject to prior USFS consent covering those operations.⁹

⁸ OMB approved lease form (No. 1004-0121), Section 2 of Part I (land description), and Section 14 of Part II (special stipulations).

⁹ Letter from Kimberly Evert Bown, Director, Recreation, Lands, and Mineral Resources, USFS, to Michael Mottice, Deputy State Director for Resource Planning, Oregon/Washington BLM, May 2, 2006.

Inventoried Roadless Areas

As the result of recent lawsuits regarding *Inventoried Roadless Areas* (IRA), the USFS would also require the following stipulation to be placed on any mineral lease that includes IRA lands:

For the purpose of compliance with the Order(s) of the District Court for the Northern District of California issued in *People of the State of California ex rel. Bill Lockyer, v. United States Department of Agriculture*, No. C05-03508 EDL consolidated with *The Wilderness Society v. United States Forest Service*, No. C05-04038 EDL (reinstating 36 CFR 294, Subpart B (2001) (Protection of Inventoried Roadless Areas) (hereinafter the “2001 Rule”)), surface occupancy or use is subject to the following special operating constraints:

No new temporary roads, permanent roads, road construction or reconstruction (as defined in 36 CFR 294.11) may occur within the lands described below:

Generally less than the northern one-third of MS-708

This stipulation may change in accordance with other applicable provisions. It would cease to apply in the event the District Court's Order reinstating the 2001 Rule is reversed, the 2001 Rule is set aside, or if the Forest Service determines that other events have caused the 2001 Rule to no longer be in effect or applicable to the lands within the leasehold.

Plan Conformance

Conformance with Applicable USFS Land Use Plan

MS-708 is located within the Gifford Pinchot National Forest administered by the USFS, Mount St Helens National Volcanic Monument, from offices at 42218 NE Yale Bridge Road, Amboy, WA 98601.

The applicable land use plan is the 1990 Gifford Pinchot National Forest (GPNF) Land and Resource Management Plan (LRMP) as amended by the Northwest Forest Plan (NFP) of 1994. Neither plan prohibits mining within the subject area. The Forest Plan, however, includes standards and guidelines that are required, when implementing other resource activities, that would take into consideration any proposed ground-disturbing activities. Consequently, depending on the potential to mitigate adverse resource damage, mining activities could be restricted or denied. This determination would be made following submission of any detailed proposals by IGMI.¹⁰

In general, the GPNF LRMP indicates that the area of the proposed action was originally designated as general forest with emphasis on timber production. This designation was later

¹⁰ USFS Determination on Whether or Not to Consent to BLM Issuing a Hardrock Mineral Lease..., attachment to letter to Mike Mottice, BLM, May 2, 2006.

amended by the NFP to *matrix lands* which are usually managed with few restrictions for multiple uses, including timber harvest and other silvicultural activities. A *riparian reserve* land use allocation occurs along the Green River and along other streams, water bodies, wetlands, and unstable areas. These reservations in the area are currently not mapped. Standards and guidelines for *riparian reserves* may prohibit ground-disturbing activities if resulting resource damage cannot be mitigated.¹¹

Less than the northern third of the proposed action area is within the Tumwater *Inventoried Roadless Area* (IRA) where road construction and reconstruction would generally not be allowed (see Figure 5 and USFS Consent). The general goal of the GPNF LRMP for this area is to maintain it in an undeveloped condition. The southern two-thirds of the lands encompassed by both the proposed action (*i.e.*, all MS lands) and the preferred alternative (*i.e.*, MS-708) are outside of the IRA, but within general forest or matrix ground, as noted in the Northwest Forest Plan, which allows management activities to occur including road construction and reconstruction. The southern portions of both areas are within the corridor of the Green River. The river has been determined to be eligible as a “recreation” classification and further study to determine if it should be added to the National Wild and Scenic Rivers System.

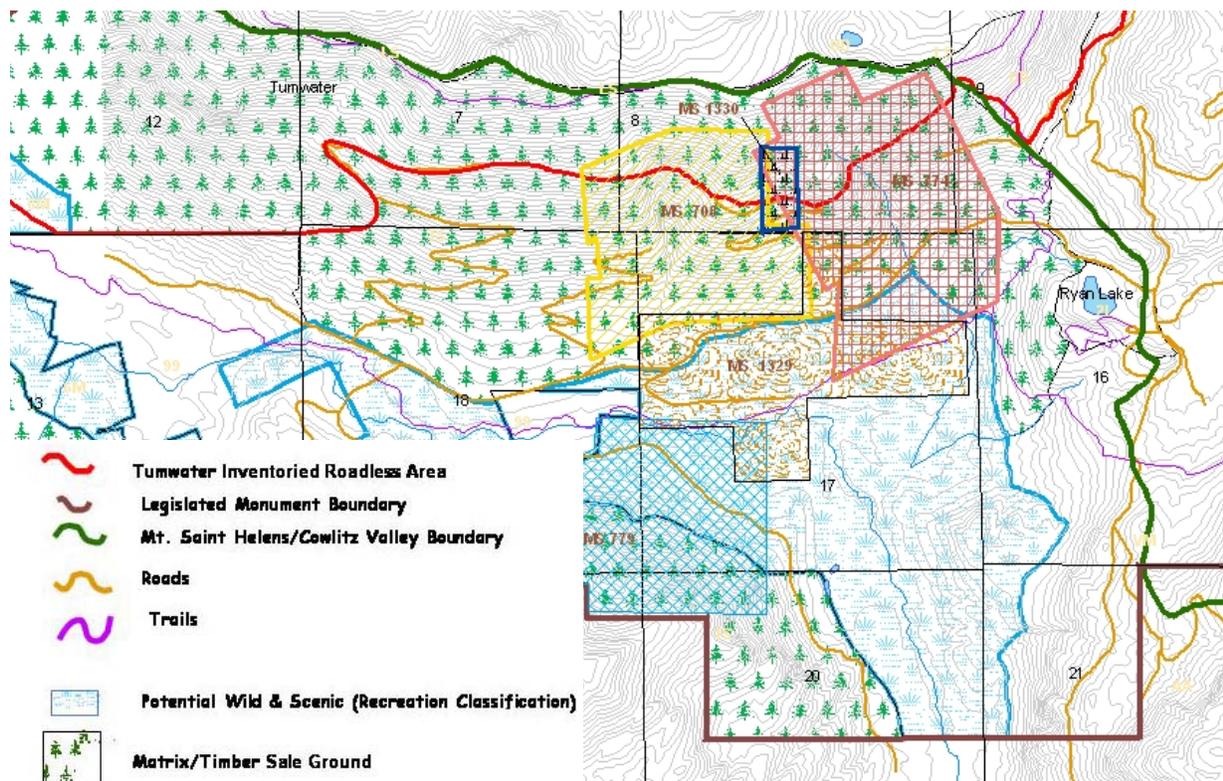


Figure 5: Tumwater Inventoried Roadless Area and Other Administrative Boundaries in the Vicinity of the Applicant's Proposed Action

While development is acceptable in this area, protection of the “outstandingly remarkable values” including scenery, recreational, geologic and historical (mining), as well as the visual

¹¹ USFS Determination on Whether or Not to Consent to BLM Issuing a Hardrock Mineral Lease..., attachment to letter to Mike Mottice, BLM, May 2, 2006.

quality objective of *partial retention*, and a recreation opportunity spectrum objective of *roaded natural* areas would need to be taken into account along with reasonable mitigation and reclamation measures to minimize surface disturbance, sedimentation, and visual impairment. These circumstances may limit the extent and type of acceptable ground-disturbing activities.¹²

Public Law 97-243 established the 110,300-acre Mount St. Helens National Volcanic Monument in 1982. The Act specified that it not be construed as authorizing or directing the establishment of protective perimeters or buffer zones around the Monument for the purpose of precluding activities outside the Monument boundary which would otherwise be permitted under applicable law. In a related report dated July 15, 1982, it was noted that the nearby Monument boundary was specifically drawn to exclude what was believed to be the "...most potentially productive of the [former] copper mining claims on Goat Mountain and its slopes above the [Green] river."¹³

In light of the foregoing, the USFS concluded that issuance of a *fractional interest lease* with a *contingent right stipulation* (FIL/CRS) would be compatible with the GPNF LRMP, because no surface-disturbing activities would be authorized. Whether any actual mineral exploration and/or development would be compatible with the Plan can only be determined when detailed plans for such a proposal(s) are received and administratively acted on. At that time, the primary environmental issues will likely include water quality, scenic quality, roadless area, and maintaining or enhancing the values of the Green River.

Conformance with Primary Purpose for which the USFS Acquired the Lands

Although there is no single definitive statement in the title docket, there are four items of correspondence which lead to the purposes for the USFS acquisition. The first is a letter from the Trust for Public Lands (TPL) dated November 9, 1984, indicating the intent of the Trust to donate approximately 730 acres of patented minerals located near the Mount St. Helens National Volcanic Monument to the United States. TPL acquired the patented minerals from Duval Corporation along with an additional 167 acres in *fee*. TPL's stated purpose for donating the minerals and land held in *fee* was to preserve the integrity of the Green River before it enters the Monument.¹⁴

The second document is the January 16, 1986, purchase option and contract from TPL to the USFS for Gifford Pinchot for the subject lands included in Tract 85c regarding the 50 percent undivided mineral interest. The option was concluded by the USFS' acceptance of a donation deed dated June 11, 1986, and a warranty deed dated May 9, 1986, both from TPL. Therein it is noted that the vendor agrees not to do, or suffer others to do, any act by which the value of title to said lands may be diminished or encumbered.¹⁵

The third document consists of several duplicate letters from the Forest Supervisor to members of the Congressional Delegation and County Commissioners on or about February 3, 1986. They noted that "...acquisition of this property by the United States will aid in the preservation of the

¹²USFS Determination on Whether or Not to Consent to BLM Issuing a Hardrock Mineral Lease..., attachment to letter to Mike Mottice, BLM, May 2, 2006.

¹³ House Report 97-636, Part 2 at 14, July 15, 1982.

¹⁴ *ibid.*

¹⁵ *ibid* 12

integrity of the Green River prior to its entering the National Volcanic Monument, and will also aid in the preservation of the scenic beauty of this area which is to become an important Monument portal.”¹⁶

The last document dated February 4, 1986, summarizes the USFS’ acquisition, in terms of estates, noting that ownership of a partial interest would still give the United States an advantage over other private purchasers if the owner of the other half decided to sell. The Government at such time could purchase the other half interest and attain fee title.¹⁷

Based on the foregoing, the explicit purpose of the USFS acquisition was to protect the Green River. Exclusion of mineral exploration and/or development was contemplated; in fact, the possibility of mining on the fractional interest lands was identified and attempts were made by the U.S. to acquire the severed mineral estate. This was rejected by the owner who eventually quitclaimed their interest to IGMI. Since the fractional mineral interest was not acquired by the U.S. for lands within MS-708, mining is deemed administratively acceptable. In addition, no restrictions or exceptions to land use were included by TPL.¹⁸

Whenever a surface-disturbing activity is proposed, the application will be analyzed in accordance with the NEPA process. The analysis will determine if the proposal, with or without modifications, would continue to result in a determination of compatibility with both the GPPF LRMP and the purpose for which the lands were acquired. If the activity would not be compatible, the USFS would either not issue consent and/or request the BLM to deny the activity, or the Service could amend the Forest Plan.

Effects of the Preferred Alternative

Implementation

Implementation of the preferred alternative would result in the issuance of a FIL/CRS to IGMI for the 50 percent undivided interest held by the United States in the mineral estate within MS-708 for an initial term of 20 years. If regulatory qualifications continue to be met, the lease could be renewed for additional 10-year terms. During the lease term or until it is relinquished – which ever comes first – no administrative action would be taken on lease applications from other parties for the same lands. Regardless, issuance of a lease and subsequent approval of any on-the-ground activities is fully discretionary to the Government.

Furthermore, implementation of the preferred alternative would be responsive to the request from a legitimate applicant with fractional property rights (see Background). This action would make it possible for IGMI to further consider the potential for exploration and development in an environmentally sound manner, as well as to help meet the Nation’s need for minerals. Moreover, it would neither be inconsistent with the applicable Forest Plan nor lessen the

¹⁶ USFS Determination on Whether or Not to Consent to BLM Issuing a Hardrock Mineral Lease..., attachment to letter to Mike Mottice, BLM, May 2, 2006.

¹⁷ *ibid.*

¹⁸ *ibid.*

discretion of the Government to approve or deny actual exploration or development based on NEPA review of specific proposals.

Affected Environment

The lands encompassed by MS-708 are located on the south facing slope of the east-west trending Goat Mountain situated in the area north of the Green River between 3,000 and 4,000 feet above sea level on the fringe of the area deforested by the 1980 eruptive blast of Mount St. Helens. Much of the area is covered by mature timber that escaped the effects of the 1980 eruption. Areas devastated by the eruption were salvaged logged and reforested. The current vegetative structure stage over the preferred alternative land varies from young forest plantations 18-25 years of age to forests up to 160 years of age that are potential habitat for spotted owls, and for Van Dyke's and Larch Mountain salamanders. Owl habitat may result in noise level and approach distance restrictions from March 1 through June 30 for activities other than public access or *casual use*.

The Upper Toutle River Watershed Analysis notes some unstable soils in the potential lease area. The amount of natural sediments washing into streams are a concern as there are resident fish in the upper portion of the Green River and anadromous fish have been observed as far up stream as Miner's Creek – several miles below the subject lands where further upstream movement is blocked by a natural waterfall. Rare botanical classes, including *sensitive species* and *survey and manage species*, may occur within the area. The site, however, appears to be outside of the nesting range of the marbled murrelet (*ie.*, approximately 55 miles from saltwater).

Human activity in the area has been dominated by recreation use, mineral prospecting, logging and related silvicultural activity, establishment of logging and mineral exploration roads and drill pads, and excavation of several small *adits*. Most of the more recent prospecting was carried out by the Duval Corp., during the 1970s and early 1980s, although mining has occurred in the area for nearly 100 years and is well documented in several publicly available technical papers.¹⁹ The Green River Horse Camp is located near the middle of the subject area. The site has eight camping spots for horse and trailer. Additionally, several USFS system trails skirt the area providing access for equestrian and hiker use.

Based on available information, the Margaret Deposit was discovered after the USFS extended a logging road into the area in the late 1960's. The porphyry copper deposit is related to the Spirit Lake Stock which is part of a multiple phase batholith of Tertiary age intruding a thick sequence of volcanic flows, pyroclastics, and associated volcanoclastic rock. Mineralization shows a complex erratic zoning pattern consisting primarily of copper and molybdenum with gold and silver values.²⁰

Issuance of a FIL/CRS, would neither authorize any surface-disturbing activities, nor result in direct or indirect impacts to the lands within MS-708, nor affect the "critical elements," listed below. Similarly, issuance would not result in cumulative effects, as the proposed action

¹⁹ Washington Department of Natural Resources, Information Circular No. 60, by Wayne Moen.

²⁰ Margaret Project Status Report, by J.D. Taylor, February 1980.

produces no incremental impacts to be considered in context with the consequence of any past, present, or reasonably foreseeable future actions.

Environmental Effects

Because issuance of a FIL/CRS consistent with the preferred alternative would not authorize any surface disturbing activities, there is no reasonably foreseeable development scenario and, therefore, no evaluation of environmental effects is needed nor can one be conducted, including consideration of a reasonably foreseeable development. Thus a FIL/CRS would result in no direct or indirect change or impact to any of the following critical elements or related tangible/intangible environmental factors because:

- No physical on-the-ground and/or surface-disturbing activities would be authorized; and
- Only a lease right would be granted.

Critical Elements	Affected (Yes)	Affected (No)
Air Quality		No
Areas of Critical Environmental Concern		No
Cultural, Scientific & Historic Features/Resources		No
Farmlands (Prime/Unique)		No
Floodplains		No
Invasive Species		No
Migratory Birds		No
Multiple Use-Sustained Yield		No
Survey & Manage Species		No
Threatened & Endangered Species		No
Wastes, Hazardous/Solid		No
Water Quality		No
Wetlands/Riparian Zones		No
Wild & Scenic Rivers		No
Wilderness		No

Aspects

Issuance of the proposed FIL/CRS would have no effects or impacts to the following aspects:

Critical Aspects	Effects
American Indian Religious Freedom	None – existing human activities; tangible or intangible features; and regional or local social institutions or societal interaction would be unchanged
American Indian Sacred Sites	None – existing human activities; tangible or intangible features; and regional or local

Critical Aspects	Effects
	social institutions or societal interaction would be unchanged
Archeological Resources	None – no on-the-ground actions would be authorized
Beneficial or Adverse Impacts	None – existing environs would be unchanged
Effects on Districts, Sites, Highways, Structures, or Objects Listed or Eligible for the National Register of Historic Places	None – no on-the-ground actions would be authorized
Environmental Justice	None – existing human activities; tangible or intangible features; and regional or local social institutions or societal interaction would be unchanged
Forest and Rangeland Renewable Resources Planning	None – no on-the-ground actions would be authorized
Irreversible & Irrecoverable Resources	None – existing environs would be unchanged
Loss or Destruction of Significant Scientific, Cultural, or Historical Resources	None – no on-the-ground actions would be authorized
Precedence for Future Actions	None – any future actions could only occur in accordance with specific authorization based on NEPA analysis of detailed exploration and/or mine development plans
Public Health or Safety	None – no on-the-ground actions would be authorized
Quality of the Human Environment	None – existing human activities; tangible or intangible features; and regional or local social institutions or societal interaction would be unchanged
Relation to Other Cumulative Significant Actions	None – no other application for new resource use authorization is pending within the geographic area of the proposed lease
Unique Characteristics of the Geographic Area	None – proximity of the proposed lease area to the Mt. St. Helens National Volcanic Monument is well described in the foregoing section on “Location of the Proposed Action”
Unique or Unknown Risks	None – no on-the-ground actions would be authorized
Violation of Federal, State, or Local Law	None

Impact Conclusion

Issuance of the proposed FIL/CRS would result in no direct, indirect, nor cumulative change or impact to any of the above listed critical elements or to related tangible / intangible environmental factors.

Description of Mitigation Measures and Residual Impacts

Issuance of the proposed FIL/CRS would neither result in direct, indirect, or cumulative change, nor residual impacts to any of the above listed critical elements or to related tangible/intangible environmental factors. Thus, no mitigation would be required.

Glossary

Terms

The following terms, denoted by *italicized* text throughout this assessment, have the meaning stated below:

- *Acquired Lands* means lands or interest in lands, including mineral estates, which the United States obtained through purchase, gift or condemnations to which the 'mineral leasing laws' have been extended.
- *Adits* are nearly horizontal drifts, tunnels, or passages from the surface excavated into and sometime through a hillside.
- *Casual Use* means activities that ordinarily result in no or negligible disturbance of the public lands or resources.
- *Contingent Right Stipulation* means a non-energy solid mineral lease issued consistent with the authority and limitations delineated by 43 CFR 3500 that are further restricted by the following condition:

“Notwithstanding any language to the contrary in Sections 2 and 14 or any other provision of this lease, the lessee is not entitled to any exploration or development rights. Any plan to explore, develop, or in any other manner use the lands described herein, is subject to BLM’s approval following environmental analysis and public disclosure required by the National Environmental Policy Act, or any other analysis undertaken by the Department of the Interior or the Department of Agriculture for any reason. The BLM has absolute discretion to deny any exploration or development operations. No operations may commence until BLM has issued a specific permit subject to prior USFS consent covering those operations.”
- *Fractional Interest Lease* is issued noncompetitively where the United States holds less than 100 percent of the mineral interest of the parcel and allows for the development of shared mineral interests.

- *Fringe Acreage Lease* is issued noncompetitively for known deposits of leasable minerals on Federal lands adjacent to existing deposits, when the Federal deposit(s) can be mined only as a part of an adjacent operation.
- *Full Fee* implies a simple 100 per cent undivided ownership of both the surface and mineral estates in the specified parcel of land.
- *Hardrock Minerals* include base metals, precious metals, industrial minerals, and precious or semi-precious gemstones.
- *Inventoried Roadless Areas* exhibit features such as high quality or undisturbed soil, water, and or; sources of public drinking water; diversity of plant and animal communities; habitat for threatened and endangered species; primitive, semi-primitive non-motorized dispersed recreation; landscape with high scenic quality; and other locally identified unique characteristics (36CFR §294 – Special Areas).
- *Matrix Lands* mean Federal lands within the range of the northern spotted owl, but outside of the six categories of designated areas set forth by the Northwest Forest Plan, that are usually managed for multiple uses, including timber harvest and other silvicultural activities.
- *Mineral Survey* is made to mark the legal boundaries of mineral deposits or ore-bearing formations on the public domain where the boundaries are determined by lines other than the normal subdivision of the public lands. Such surveys are frequently conducted to stake out a claim of specified dimensions in protection of the claimant’s rights and/or in order to apply for and obtain a patent.
- *No Action* alternative is not approving the proposed action and/or denying the application.
- *Partial Retention* is an area where management activities remain visually subordinate to the valued characteristic landscape. Scenery management refers to this as "high" appearing unaltered.
- *Roaded Natural* is an area characterized by predominantly natural appearing environments with moderate evidences of the sights and sounds of man. Opportunities for motorized and non-motorized forms of recreation are possible.
- *Riparian Reserves* or *Areas* are portions of watersheds required to maintain the hydrologic, geomorphic, and ecologic processes that directly affect standing and flowing waterbodies where dependent resources receive primary emphasis and are regulated by special standards and guidelines which limit activities that would retard or prevent attainment of the Northwest Forest Plan’s Aquatic Conservation Strategy. Related habitat conservation areas may extend outward to the extent necessary to achieve conservation objectives.
- *Sensitive Species* are those plants and animals identified by a Regional Forester for which population viability is a concern as evidenced by predicted downward trends in population or habitat capability.
- *Survey and Manage Species* include those that occur within or near the Northwest Forest Plan area closely associated with late-successional or old-growth forests that are not provided a reasonable assurance of persistence by the Plan.

Acronyms

The following acronyms used in this analysis are more fully described as stated below:

- BLM U.S. Bureau of Land Management
- CFR Code of Federal Regulations
- FLPMA Federal Land Policy and Management Act of 1976
- FIL/CRS Fractional Interest Lease with Contingent Right Stipulation
- GPNF Gifford Pinchot National Forest
- IGMI Idaho General Mines, Inc.
- IRA Inventoried Roadless Area
- LRMP Land and Resource Management Plan
- MS Mineral Survey
- NEPA National Environmental Policy Act of 1969
- NFP Northwest Forest Plan of 1994
- PL Public Law
- TPL Trust for Public Lands
- USC United States Code
- U.S. United States
- USFS U.S. Forest Service
- WM Willamette Meridian

Persons/Agencies Consulted

The following persons and/or agencies were consulted in the preparation of the environmental analysis:

- Eric Hoffman, Mining Engineer, BLM, OR/WA State Office, Minerals Section
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- Jim Chamberlin, Geologist, Gifford-Pinchot National Forest
- Bob Fujimoto, Group Leader for Minerals and Geology, USFS R-6

Attachments

- USFS Consent Determination (May 2, 2006, 8 pp.)
- Proposed “Margaret Deposit” Finding of No Significant Impact (5 pp.)

Date

This environmental analysis was completed on March 8, 2007.