



US Army Corps  
of Engineers  
St Paul District

APPLICANT: PolyMet Mining, Inc.

# Public Notice

ISSUED: 13 NOV 2015

EXPIRES: 14 DEC 2015

REFER TO: MVP-1999-05528-JKA

SECTION: 404 - Clean Water Act

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## NOTICE OF AVAILABILITY OF FINAL ENVIRONMENTAL IMPACT STATEMENT AND SUPPLEMENTAL NOTICE FOR SECTION 404 PERMIT APPLICATION

PURPOSE - The purpose of this public notice (PN) is twofold: first, provide notice to the public that the Final Environmental Impact Statement (FEIS) for the proposed NorthMet Mine is available for public review. Second, solicit comments on requested changes to wetland impacts and wetland mitigation that have been proposed since the U.S. Army Corps of Engineers, (Corps) St. Paul District's December 13, 2013, PN describing the proposed project.

1. A JOINT FEDERAL/STATE FINAL ENVIRONMENTAL IMPACT STATEMENT has been prepared by the Corps; the U.S. Forest Service, Superior National Forest (USFS); and the Minnesota Department of Natural Resources (MDNR) that describes the anticipated environmental and socioeconomic impacts of the proposed PolyMet Mining, Inc. (PolyMet) NorthMet Project and Land Exchange. PolyMet submitted a permit application to discharge dredged and fill material into waters of the United States, including wetlands, in conjunction with the development and operation of a proposed open pit mine, ore processing plant, and tailings basin. Additionally, a land exchange is proposed to eliminate a conflict between PolyMet's desire to surface mine and the United States' surface rights, including USFS administration of National Forest System (NFS) land. Low-grade disseminated sulfide-bearing ore would be mined and hauled approximately 8 miles on an existing railroad line to an idle taconite processing facility (the former LTV Steel Mining Company plant), which would be refurbished to process the ore. The ore would be crushed, ground, and concentrated to produce finished copper metal and various copper, nickel, cobalt and precious metals concentrates and precipitates. Tailings would be discharged into an existing taconite tailings basin. The proposed project is located near the cities of Hoyt Lakes and Babbitt in St. Louis County, Minnesota. This action is in accordance with Title 33 Code of Federal Regulations Section 325.2(a)(4), which discusses National Environmental Policy Act procedures and documentation.

Public review copies of the FEIS are available at the following locations: the DNR/MPCA Library, 520 Lafayette Road, St. Paul; the DNR Regional Office at 1201 East Highway 2, Grand Rapids; the DNR Division of Lands and Minerals Regional Office at 1525 Third Avenue East, Hibbing; the Hoyt Lakes Public Library at 206 Kennedy Memorial Drive, Hoyt Lakes; the Babbitt Public Library at 71 South Drive, Babbitt; the Duluth Public Library, 520 West Superior Street, Duluth; and the Minneapolis Public Library, 300 Nicollet Mall, Minneapolis.

The FEIS is also posted on the MDNR website at:

<http://www.dnr.state.mn.us/input/environmentalreview/polymet/index.html>

While the Corps is not soliciting comments on the FEIS during the 30 day review period, any substantive issues raised after the release of the FEIS that have not been addressed in the FEIS will be considered in our Record of Decision (ROD).

2. AN APPLICATION FOR A DEPARTMENT OF THE ARMY PERMIT was submitted to the Corps on August 19, 2013. This application requested authorization to discharge fill material into wetlands adjacent to the Partridge and Embarrass rivers to facilitate the construction and operation of an open pit copper-nickel mine; a railroad connection corridor to transport ore from the proposed NorthMet mine site to the existing LTV Steel Mining Corporation (LTVSMC) plant site; the plant site which includes the processing facilities area, the tailings basin, and the hydrometallurgical facility; Dunka Road and utility corridor; and Colby Lake water pipeline corridor. A public notice was issued on December 13, 2013, describing this proposal; comments were received; and a public hearing was held to give the public an opportunity to further consider this permit application.

The applicant has submitted a request to modify the August 19, 2013, application to include the discharge of fill material into an additional 1.37 acres of wetland. The requested change is described in more detail in paragraph 4 below.

#### SPECIFIC INFORMATION.

APPLICANT'S ADDRESS: PolyMet Mining, Inc.  
P.O. Box 475  
Hoyt Lakes, MN 55750

AGENT: Barr Engineering Company  
4700 West 77<sup>th</sup> Street  
Minneapolis, MN 55435-4803

PROJECT LOCATION: The overall project is located in Sections 5 and 6, Township 58 North, Range 14 West; Sections 1, 2, 3, 4, 9, 10, 11, 12, 15, 16, 17, and 18, Township 59 North, Range 13 West; Sections 3, 4, 5, 8, 9, 10, 13, 14, 15, 16, 17, 20, 23, 24, 29, and 32, Township 59 North, Range 14 West; and Sections 32, 33, and 34, Township 60 North, Range 14 West, near Babbitt and Hoyt Lakes in St. Louis County, MN.

3. BACKGROUND: The initial application was received and a public notice (PN) for the proposed NorthMet mine was issued on May 10, 2005. PolyMet submitted and updated application describing changes to the NorthMet proposal, which was publicly noticed on December 13, 2013. In response to comments received on the public notices, Draft EIS, and the Supplemental Draft Environmental Impact Statement (SDEIS), the EIS was revised to include changes to projected wetland impacts. These changes are included in the FEIS, and wetland impacts requiring a Department of the Army permit are summarized in this PN. This PN provides the opportunity to comment on the 1.37 acres of additional direct wetland impacts since the December 13, 2013 PN.

**DESCRIPTION OF PROJECT:** The applicant proposes to excavate and process a polymetallic ore deposit known as the NorthMet deposit. Open pit mining and waste rock disposal would occur at the mine site area, and ore processing (beneficiation) and tailings disposal would occur at the plant site, which is the currently inactive Cliffs Erie taconite processing facility and adjoining tailings basin.

An Adaptive Water Management Plan (AWMP) is also an integral component of the project. The purpose of the AWMP is to describe a system for implementing adaptive engineering controls that would ensure compliance with applicable water quality standards, and document performance standards for these engineering controls. The AWMP would also ensure the mechanical water treatment system is in place and operational to treat water until such a time that a non-mechanical water treatment system can be proven and built for long term site water management.

The project would develop open mine pits (up to 528 acres), stockpiles (up to 740 acres), and supporting infrastructure (up to 451 acres). Mine site environmental controls would include, among other features, liners and containment systems to collect seepage from stockpiles, a cover to limit infiltration through the permanent stockpile after closure, and a wastewater treatment facility (WWTF) to treat water that comes in contact with mining features. Water collected from pit dewatering and stockpile seepage would be treated, and then pumped to the plant site for use in ore processing. During operations, there would be no direct discharge of treated waste water from the mine site to waters of the U.S. or Minnesota public waters.

The plant site is a “brownfield” location which occupies approximately 4,417 acres. At the plant site the project would upgrade existing facilities (Beneficiation Plant, Tailings Basin, Area 1 Shop, Sanitary Treatment Plant, rail connections, access roads) and construct new facilities (Hydrometallurgical Plant, Hydrometallurgical Residue Facility (HRF), Concentrate Dewatering/Storage Building, and plant site wastewater treatment plant (WWTP)) on previously disturbed areas. The Flotation Tailings would be stored atop the existing LTVSMC Tailings Basin by staged construction of new dams.

Plant site environmental controls during mining operations would include: cover systems to limit infiltration of oxygen and water through the Tailings Basin dams and seepage capture systems to collect seepage from the Tailings Basin. During reclamation and long-term closure these environmental controls would continue to operate, and additional cover systems would be added to the flotation tailings basin (FTB) beaches and pond bottom. Most water used in processing would be recycled from the FTB Pond for use. A plant site WWTP would be constructed to treat any water that cannot be recycled prior to discharge to the environment.

**VEGETATION IN AFFECTED AREA:** Vegetation communities in much of the project area have been altered by previous mining and logging activities. In addition beaver activities have led to the transition of some forested wetlands to open, emergent marshes and wet meadows. Aside from areas disturbed from mining and logging activities, the project vicinity is currently a mosaic of upland and wetland native vegetation community types, which is typical of northeastern Minnesota.

While the mine site is located in an area that has not been directly disturbed by previous mining activities, extensive logging has occurred throughout the area. The USFS owns the surface rights at the mine site, and has managed the area for timber production. The USFS is separately evaluating a land

exchange proposal under which title to surface lands at the mine site would be exchanged for other land within the Superior National Forest. Logging activities have changed the vegetative character across the mine site, with shrub-lands and/or early and mid-successional forest replacing mature upland forest. These logged areas are currently in varying stages of regeneration and consist mostly of young aspen stands. Aside from logging and associated roads, the mine site is largely undeveloped, with a variety of natural vegetation communities present. These communities include coniferous and deciduous forests in the uplands and wetlands such as shrub swamps, marshes, forested swamps, and bogs in the lowlands. The more mature upland forested areas at the mine site are dominated by quaking aspen, jack pine, balsam fir, black spruce, and white spruce with lesser amounts of paper birch, red pine, and white pine.

The plant site was previously used as a taconite processing facility by LTVSMC and is largely devoid of natural vegetation. In addition, the road and railroad corridors are existing infrastructure and therefore previously disturbed areas.

Vegetation surveys were conducted across the project area using the MDNR and USFS Ecological Classification System (ECS). These vegetation surveys identified seven ECS vegetation communities across the project area: fire dependent, forested rich peatland, acid peatland, mesic hardwood, marsh, wet forest, and wet meadow. The uplands at the mine site are dominated by fire dependent forested communities, while the wetlands are dominated by acid peatlands (bogs).

**SOURCE OF FILL MATERIAL:** Local commercial sources and/or on-site material.

**SURROUNDING LAND USE:** The proposed mine site is currently undeveloped land in the Superior National Forest. The site is a mixture of wetlands and uplands. The mine site is approximately 3,015 acres. The mine site has been primarily used for logging and mineral exploration. It is likely that some recreational use (hunting, fishing, etc.) has also occurred on the site. The headwaters of the Partridge River circle the mine site on the north, east, and south. The Dunka Road, a mining road constructed by Erie Mining Company, and a mining railroad line run from southwest to northeast just south of the proposed mine site. The Peter Mitchell open pit taconite mine operated by Northshore Mining Company is located about two miles north of the proposed mine site. Wetlands and forested lands lie to the immediate east, west and south of the proposed mine site. The existing Cliffs Erie mine /stockpile/plant/ tailings basin complex (where the PolyMet processing facility and tailings disposal would be located) is about eight miles west of the proposed mine site.

4. **WETLAND IMPACTS:** Direct wetland impacts would increase by 1.37 acres over that described in the December 13, 2013, PN. As a result of this additional 1.37 acres of wetland impact, the discharge of dredged or fill material into wetlands would increase from an estimated 912.5 acres to 913.8 acres of wetlands.

The 1.37 acres of direct wetland impacts would occur in conjunction with the construction of the tailings basin containment system that manages tailings basin seepage. These additional wetland impacts would result in the loss of approximately an additional 0.7 acre deep marsh and 0.7 acre of hardwood swamp. These engineering controls have been incorporated to improve the quality of surface/groundwater. The new direct wetland impacts are labeled 1225, 1126, T13 and T13A on the attached figure labeled 4 of 4.

Wetland impacts caused by fragmentation remain unchanged at about 26.9 acres. Methods for impacts to fragmented wetlands were estimated considering the following criteria: change in the size of remaining wetland, wetland type, source of hydrology, direction of flow in the area, location in the current watershed, location in the future watershed, and connectivity to other wetlands.

TOTAL WETLAND IMPACTS BY ACRE AND TYPE

WETLAND TYPE	DIRECT & FRAGMENTED	FRAGMENTATION IMPACTS <sup>1</sup>
Fresh (Wet) Meadow (Type 2 wetland)	15.8	0
Sedge Meadow (Type 2 wetland)	23.9	0.3
Shallow Marsh (Type 3 wetland)	77.0	0.3
Deep Marsh (Type 4 wetland)	74.3	0.2
Shrub Carr (Type 6 wetland)	3.9	50 SQ. FT.
Alder Thicket (Type 6 wetland)	110.6	3.5
Hardwood Swamp (Type 7 wetland)	13.2	0
Coniferous Swamp (Type 7 wetland)	84.4	1.9
Open Bog (Type 8 wetland)	7.6	0
Coniferous Bog (Type 8 wetland)	<u>530.0</u>	<u>20.7</u>
	940.7	26.9

5. WETLAND MITIGATION

**AVOIDANCE AND MINIMIZATION:** PolyMet proposes to avoid and minimize wetland effects by optimizing the placement of mining features such as the mine pits, waste rock and overburden stockpiles, haul roads, water management systems, and supporting infrastructure. Additionally, the processing plant and the transportation and utility corridor would be located on land previously used for industrial purposes. This reuse would avoid the need to disturb additional lands (including wetlands) and would further reduce environmental effects. Avoidance and minimization techniques implemented since May 2005 have reduced direct wetland impacts by 316.3 acres from 1257 acres to 940.7.

**COMPENSATION:** Wetland compensatory mitigation proposed by PolyMet predominately consists of wetland restoration credits generated at compensation sites located: 1) off-site, within the same watershed as the project site (St. Louis River/Great Lakes Basin); and 2) off-site, outside of the St. Louis River/Great Lakes Basin. PolyMet proposes to fully compensate for the direct wetland impacts and potential indirect fragmentation impacts, which total 940.7 acres, by generating approximately 1,562.6 wetland mitigation credits at three off-site wetland mitigation sites, known as the Zim, Hinckley, and Aitkin sites. A description of the mitigation sites is provided in the table below. PolyMet plans to complete initial phases of restoration at the proposed off-site wetland mitigation sites at least one full growing season prior to the occurrence of the wetland impacts for which the mitigation would compensate. Based on additional review and refinement of the mitigation site plans, there has been a decrease of 51.7 acres of estimated mitigation credits that would be available from the three proposed mitigation sites.

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<sup>1</sup> Note Due to rounding error acreage numbers are approximate

Description of Proposed Compensatory Wetland Mitigation

Mitigation Site	Watershed Name, Bank Service Area (BSA)	County	Township (T), Range (R), Section (S)	Mitigation Method and Estimated Credits
Zim (off-site, within watershed)	St. Louis River #3, BSA #1	St. Louis	T55, R18, S2,3,10,11,26,27, and 34	Restoration/ Preservation 453.9 Credits
Hinckley (off-site, outside watershed)	Snake River #36, BSA #6	Pine	T39, R22, S5	Restoration 304.6 Credits
Aitkin (off-site, outside watershed)	Elk-Nokasippi #10, BSA #5	Aitkin	T47, R27, S1; T47, R26, S6	Restoration 804.1 Credits

6. REPLIES/COMMENTS: Interested parties are invited to submit to this office written facts, arguments, or objections to the described changes within 30 days of the date of this notice. Comments received may be forwarded to the applicant. The Corps will not edit comments to remove any identifying or contact information, and cautions against submitting any information that should not be publicly disclosed.

Replies may be addressed to the Regulatory Branch, St. Paul District, Corps of Engineers, 180 Fifth Street East, Suite 700, Saint Paul, MN 55101-1678 or by email at [polymet\\_pn\\_comments@usace.army.mil](mailto:polymet_pn_comments@usace.army.mil)

Or, IF YOU HAVE QUESTIONS ABOUT THE PROJECT, call Douglas Bruner at the St. Paul office of the Corps, telephone number (651) 290-5378 or Ralph Augustin, telephone number (651) 290-5329.

To receive Public Notices by e-mail, go to: [http://mvp-extstp/list\\_server/](http://mvp-extstp/list_server/) and add your information in the New Registration Box.

7. FEDERALLY-LISTED THREATENED OR ENDANGERED WILDLIFE OR PLANTS OR THEIR CRITICAL HABITAT: The Corps and the U.S. Forest Service have prepared a biological assessment (BA) for the proposed NorthMet mine and land exchange. The assessment included impacts to the following threated or endangered species: the Canada lynx, the grey wolf, and the northern long-eared bat. The BA has been forwarded to the Fish and Wildlife Service and we are awaiting the results of their Biological Opinion.

8. JURISDICTION: These new wetland impacts are being reviewed in accordance with current practices for documenting Corps jurisdiction under Section 404 of the Clean Water Act.

We have made a preliminary determination that the aquatic resources that would be impacted by the proposed project changes are subject to Corps' jurisdiction under Section 404 of the Clean Water Act.

The Corps will prepare an approved or preliminary jurisdictional determination prior to making a permit decision. Approved jurisdictional determinations are posted on the St. Paul District web page at the following link: <http://www.mvp.usace.army.mil/Missions/Regulatory.aspx>.

9. STATE OF MINNESOTA SECTION 401 WATER QUALITY CERTIFICATION: Valid Section 404 permits cannot be issued for any activity unless state water quality certification for the activity is granted or waived pursuant to Section 401 of the Clean Water Act. The state Section 401 authority in Minnesota is the Minnesota Pollution Control Agency (MPCA). It is the permit applicant's responsibility to request Section 401 certification from the MPCA, ensure that the MPCA has received a valid, complete application for state Section 401 certification, and to obtain a final Section 401 action from the MPCA.

The MPCA has indicated that it plans to issue its public notice of the Section 401 water quality certification action under Minnesota Rules Part 7001 at a later date. The MPCA has also indicated that the Section 401 process shall commence upon the receipt of a request for Section 401 certification from the permit applicant.

10. HISTORICAL/ARCHAEOLOGICAL: The Corps has reviewed information on known cultural resources and/or historic properties within and adjacent to the project area. The Corps in conjunction with the USFS has consulted with Indian Tribes that have historically lived in the area, and directed field and record surveys to identify properties eligible for listing in the National Register of Historic Places. These efforts have been completed and eligible properties have been identified. Effects to historic properties are addressed in the FEIS.

11. PUBLIC HEARING REQUESTS: Any person may request, in writing, a public hearing within the comment period specified in this notice that a public hearing be held to consider the additional proposed wetland impacts. Requests for a public hearing shall state, in detail, the reason for holding a public hearing. A request may be denied if substantive reasons for holding a hearing are not provided or if there is no other valid reason served.

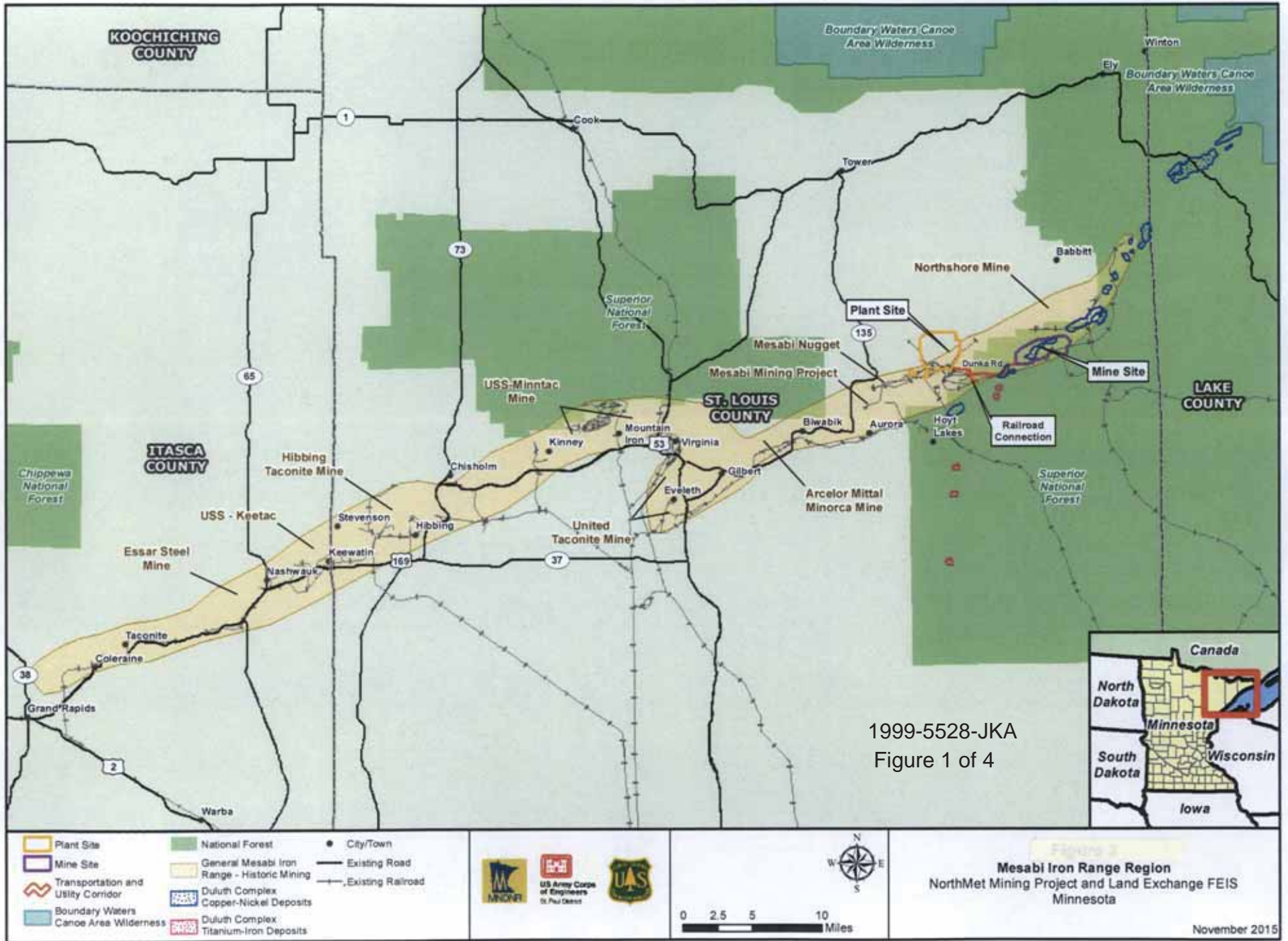
12. PUBLIC INTEREST REVIEW: The decision whether to issue a permit will be based on an evaluation of the probable impact, including cumulative impacts, of the proposed activity on the public interest. That decision will reflect the national concern for both protection and utilization of important resources. The benefit which reasonably may be expected to accrue from the proposal must be balanced against its reasonably foreseeable detriments. All factors which may be relevant to the proposal will be considered, including the cumulative effects. Among those are conservation, economics, aesthetics, general environmental concerns, wetlands, cultural values, fish and wildlife values, flood hazards, floodplain values, land use, navigation, shoreline erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food and fiber production and, in general, the needs and welfare of the people.

The Corps is soliciting comments from the public; Federal, State, and local agencies and officials; Indian tribes; and other interested parties in order to consider and evaluate the impacts of the described increase in wetland impacts and changes to proposed wetland mitigation that have occurred since the December 13, 2013, Public Notice. Any comments received will be considered by the Corps to determine whether to issue, condition, or deny a permit for this proposal.

Tamara E. Cameron  
Chief, Regulatory Branch

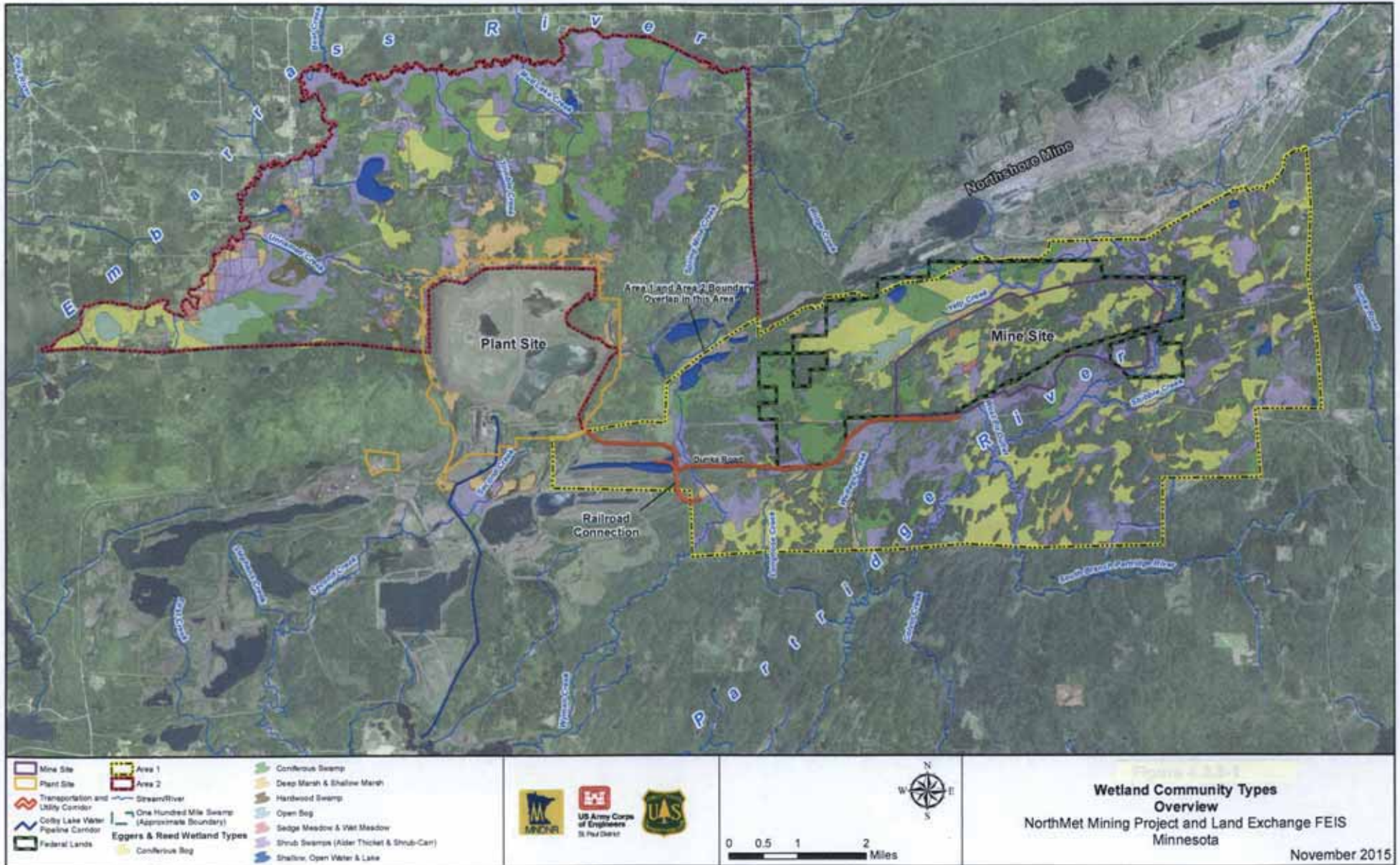
Enclosures





1999-5528-JKA  
Figure 1 of 4

**Figure 3**  
**Mesabi Iron Range Region**  
**NorthMet Mining Project and Land Exchange FEIS**  
**Minnesota**



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 Figure 2 of 4



1999-5528-JKA Figure 3 of 4

The proposed additional wetland impacts are the 4 numbered areas shown below.

