

PolyMet Mine Site: Important Natural Area Will Be Obliterated for Dangerous New Mine

A report by the Friends of the Boundary Waters Wilderness

The site for PolyMet Mining Corp.'s NorthMet sulfide mining project was identified as special habitat worthy of protection in several assessments performed by the U.S. Forest Service and the Minnesota Department of Natural Resources during the late 1990s.

Despite this, PolyMet and the Forest Service are proceeding with plans to transfer the land out of public ownership so that the mine can proceed, which would irreparably harm the ecological value of the land.

A history of the research and analysis process shows that the site passed multiple levels of evaluation and was deemed by agency scientists worthy of protection because it represents some of the highest-quality habitat left in the landscape.

PolyMet's mine would destroy approximately 2,000 acres of this natural area.

History of the evaluation process:

1. **January 1997:** In preparation for the Forest Plan Revision, the Superior National Forest set about identifying natural areas on the Forest to potentially designate for permanent protection. The focus was to develop a list and general description of the highest quality remaining examples of common ecosystems present within each Landtype Association ("landscape"). The goal was to have a list of sites to consider for permanent protection to be maintained as natural. Forest biologist Robin Vora conducted that assessment. His results were presented in a report titled "Identification of Potential Natural Areas, Including Representative Ecosystems, on the Superior National Forest." In the report he notes, "A network of natural areas helps to protect biological diversity at the genetic, species, ecosystem, and landscape scales. Natural areas representative of common ecosystems in natural condition serve as baseline or reference."

The site PolyMet intends to build its mine on is one of the identified potential natural areas from this assessment. It is known as the "100 Mile Swamp." It sits within LTA 8A, which is also identified in the study as lacking ecosystem representation in protected areas. Features that gave this area a high ranking were its watershed integrity, the size of its wetlands, the presence of riverine ecosystems, and the large amount of interior forest present.

2. **December 1997:** Minnesota Department of Natural Resources released a report called, "Evaluation of Selected Potential Candidate Research and Natural Areas as

Representative of Ecological Landtype Associations on the Superior National Forest, Minnesota.” This study was conducted by plant ecologist Chel Anderson. The purpose of this assessment was to continue the evaluations begun by Robin Vora. The assessment was to further assist the Superior National Forest in evaluating areas for protection for the Forest Plan Revision process. Anderson analyzed the 93 sites identified by Vora and developed a shorter list of 45 sites worthy of consideration as protected natural areas. The assessment notes that these sites represent the highest-quality remaining examples of characteristic ecosystems in each ecological Landtype Association on the Superior National Forest.

Again, the “100 Mile Swamp” appears on this list of worthy candidates. The report notes, “Inclusion of the 100 Mile Swamp site would very likely complete representation of the prominent ELTs (ecological landtypes), and provide some additional upland diversity.”

3. **February 1998:** The Nature Conservancy and the North Central Forest Experiment Station published “Research Natural Area Assessment for the Superior National Forest.” The report highlights the need for representative natural areas to preserve and maintain landscape ecosystem and species diversity and to serve as baselines for comparisons to manipulated ecosystems. It identifies the Laurentian Highlands, the ecological subsection in which the PolyMet mine site is located, as a high priority for protection of representative ecosystems. The report notes that this subsection has “almost no representation of its biological variety.”

Information about designated natural areas:

1. Representative ecological systems within the Laurentian Highlands include forested communities dominated by aspen-birch, jack pine barrens, red and white pine on uplands, and conifer bogs and swamps in the lowlands. The PolyMet mine site sits on a conifer bog and lowland swamp.
2. Within the Laurentian Highlands are 58 species identified as Species in Greatest Conservation Need, including 12 species that are federal or state endangered, threatened or of special concern. Habitat loss, habitat degradation and pollution represent some of the most pressing threats to these species. Lowland conifer forests have been identified (MN DNR) as key habitats for Species of Greatest Conservation Need in this subsection. Within the Laurentian Highlands, 22 Species of Greatest Conservation Need are typically associated with lowland conifer forests like the 100 Mile Swamp and PolyMet mine site. These include Gray Wolf, Canada Lynx, Sedge Wren, Bay-breasted Warbler, Black-backed Woodpecker, Golden-winged Warbler, and Boreal Chickadee.
3. The Minnesota DNR in its “North Shore Highlands, Toimi Uplands, and Laurentian Uplands Subsection Forest Resource Management Plan,” calls for managing forests to adequately protect wetlands and to increase black spruce conifer cover type.
4. The Superior National Forest’s Revised Forest Plan (2004) calls for protecting and enhancing watersheds and their components to provide for special habitat features, aquatic ecosystems and riparian ecosystems. It calls for re-establishing diverse mixes of trees at the site and landscape level that are representative of native vegetation

communities, including black spruce. It calls for maintaining acres of lowland conifer and lowland hardwood, and for increasing acres of young and old-growth lowland black spruce and tamarack forests.

The Revised Forest Plan for the Superior National Forest did not adopt the concept of representative natural areas in each landscape (LTA). In LTA 8A, the landtype association in which the PolyMet mine site is located, the “100 Mile Swamp” did not receive any designation. Only a smaller portion of one potential natural area was designated a “candidate Research and Natural Area.” This leaves the highest quality examples of this LTA’s ecosystems under-represented and without protection. It means that the 100 Mile Swamp remains an important example of its ecosystem type within its landscape.

Learn more about attempts to sell the PolyMet site in these two news articles:

- [PolyMet land deal upsets environmental groups](#) – Minnesota Public Radio, July 14, 2008
- [Hoyt Lakes land-sale plan erupting into clash of titans](#) – MinnPost, August 14, 2008

For more information on PolyMet and other sulfide mining proposals in Minnesota, visit the Friends’ website:

www.friends-bwca.org/issues/sulfide-mining/