

PolyMet Mine Threat to Environmental Health & Justice



Toxic Mercury Contamination of Fish

The PolyMet mine would **increase mercury in water and toxic methylmercury contamination of fish** from the St. Louis River headwaters downstream to Lake Superior due to sulfate and mercury releases and the destruction, dewatering, and rewetting of wetlands.

Methylmercury levels in fish can be 1,000,000 times higher than levels in the water itself. In 2011, the Minnesota Department of Health found **1 in 10 infants in the Lake Superior region are already born with unsafe levels of mercury** in their blood.¹

Environmental Injustice

The PolyMet mine would be located on 1854 Treaty lands, where Ojibwe people of the Fond du Lac, Grand Portage, and Bois Forte Bands retain rights to hunt, fish, and gather. The Fond du Lac Reservation is located downstream on the St. Louis River, and **the Band's water quality standards would be violated by PolyMet mine pollution.**

Sulfate pollution also decimates manoomin (wild rice) a plant that is both sacred and a culturally important food for the Ojibwe. The PolyMet mine would destroy and contaminate resources on which the Ojibwe rely for subsistence and cultural identity. **PolyMet pollution would unfairly burden low-income and tribal communities, fetuses, babies, and children.**

Weak State & Federal Permits

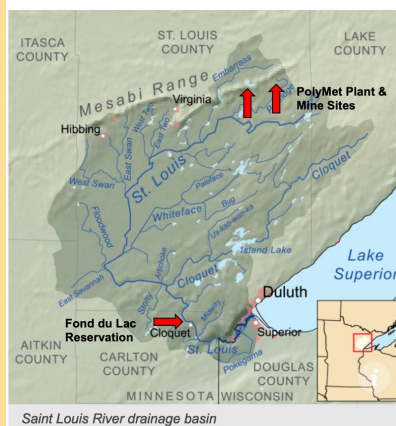
Groups representing more than 30,000 doctors and nurses asked for a health impact assessment for the PolyMet mine, but Minnesota agencies denied their request. The **Minnesota Department of Natural Resources (DNR), the Minnesota Pollution Control Agency (MPCA), and the U.S. Army Corps of Engineers granted PolyMet permits that would allow toxic pollution**, harm the health of downstream communities and destroy wetlands, habitats, and tribal resources.

Successful Challenges to PolyMet Permits

WaterLegacy, the Fond du Lac Band, and other allies have challenged PolyMet mine permits in court, resulting in the following successes:

- **PolyMet permit to mine was reversed** by the Minnesota Supreme Court and a contested case hearing required on control of acid mine drainage.
- **PolyMet water pollution permit was reversed** by the Minnesota Court of Appeals for failure to consider impacts of untreated mine and waste seepage.
- **PolyMet wetlands destruction permit is suspended** because of objection by the Fond du Lac Band due to violation of the Band's water quality standards.

ST. LOUIS RIVER: SUPERIOR WATERWAY



PolyMet Mine Threat to Climate Sustainability

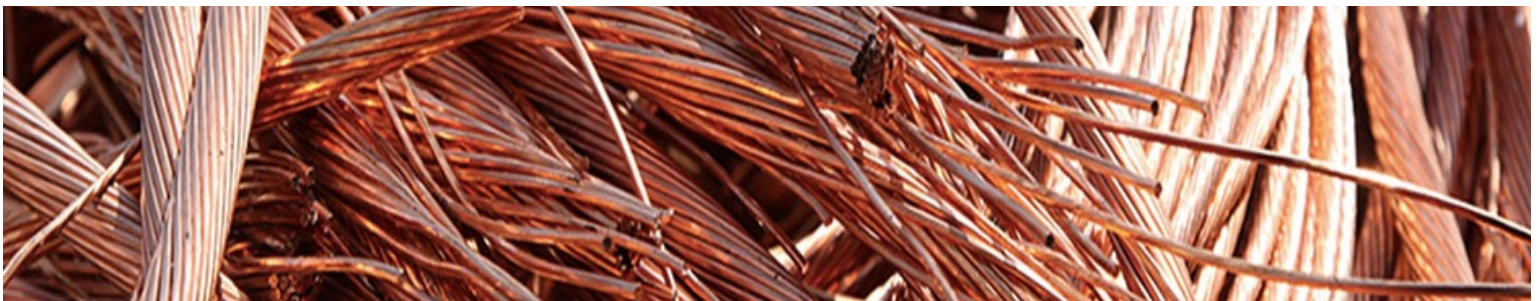


- The **PolyMet copper-nickel sulfide mine** would **destroy nearly 1,000 acres of wetlands and peatlands** and negatively impact thousands more acres as a result of mine drawdown and pollution.
- Peatlands and other wetlands release massive levels of greenhouse gases when they are drained and dewatered. The Minnesota DNR report has estimated that destruction of 1,000 peatland acres would **increase Minnesota's entire annual carbon footprint** by 2 percent.²
- Over a 20-year mine plan, PolyMet admits that it would produce **15.8 million tons of CO₂ equivalent pollution**³ – more than 10 million tons from burning fossil fuels.
- **Each year the PolyMet mine project would have about one-fourth the carbon footprint of the entire city of Duluth.**⁴
- **Minnesota has already experienced severe droughts, forest fires, extreme rain events, and floods as the result of climate changes.**



A Better Choice : Nonferrous Metals Recycling

- Copper and nickel can be recycled over and over and still retain their value. If all potentially recyclable copper scrap was recycled, **energy consumption associated with copper production would decrease by 15%** with alloy scrap as the largest contributor.⁵
- The **U.S. copper recycling rate is only 34%** of available supply.⁶
- **Incentives for reuse and recycling would support modern technology without the wasteful and destructive environmental and human health costs of copper-nickel mining.**



¹ *Mercury Levels in Blood from Newborns in the Lake Superior Basin Final Report*, Minnesota Department of Health, November 2011, p. 11, <https://www.health.state.mn.us/communities/environment/fish/docs/glnpo.pdf>

² *The Potential for Terrestrial Carbon Sequestration in Minnesota, A Report to the Department of Natural Resources*, Feb. 2008 <https://www.leg.state.mn.us/docs/2008/mandated/080174.pdf>

² *PolyMet Mining Inc./NorthMet Project Final Environmental Impact Statement (EIS)*, Nov. 2015, FEIS, 5-482. <https://www.dnr.state.mn.us/input/environmentalreview/polymet/feis-toc.html>

³ *City of Duluth Greenhouse Gas Emissions Inventory and Forecast*, March 2011, <https://waterlegacy.org/wp-content/uploads/DuluthGreenhouseEmissions2008.pdf>

⁴ *Copper Recycling and Sustainability*, Copper Development Association, Copper Alliance, <https://copperalliance.org.uk/knowledge-base/education/education-resources/copper-recycling-sustainability-2/>

⁵ Wang, T. et al. Copper Recycling Flow Model for the United States Economy: Impact of Scrap Quality on Potential Energy Benefit, *Env. Sci. Technol.* 2021, 55, 5485–5495, <https://pubs.acs.org/doi/pdf/10.1021/acs.est.0c08227>

⁶ USGS, National Minerals Information Center, 2021 Recycling Table, https://www.usgs.gov/search?keywords=recycling&f%5B0%5D=by_year%3A2021