



Mine Permitting and DNR Role

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Mining and Forestry Policy Committee



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What is Involved in Mine Permitting



MinnTac

- Waste Characterization
- DNR Environmental review
- As many as 20 approvals and permits

Waste Characterization

Waste Characterization and Research in the lab and in the field



DNR Environmental Review

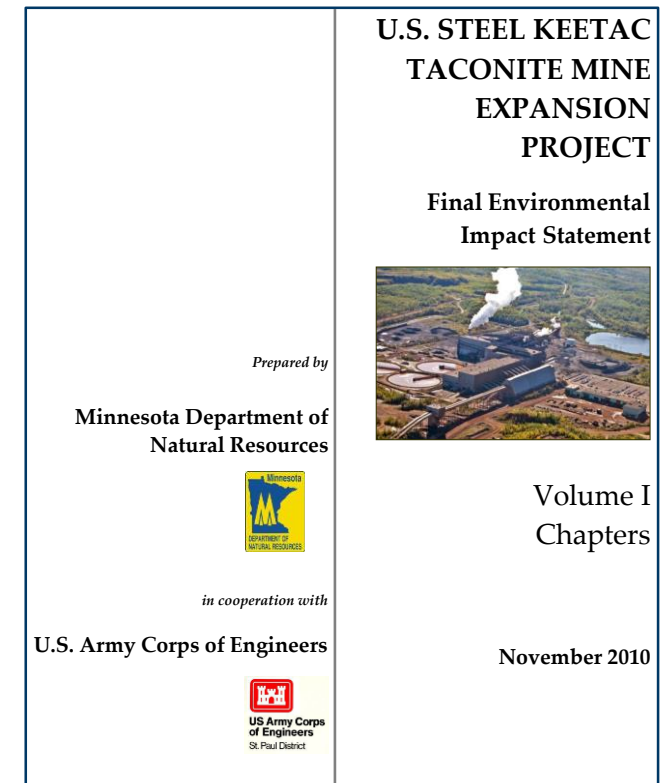
- The Minnesota Environmental Policy Act (MEPA) requires that an environmental impact statement (EIS) be conducted for all new mining operations.
- DNR is often the Responsible Government Unit (RGU).
- Often involves federal government depending on specific conditions at the site (land ownership, wetlands, etc.)



DNR Environmental Review

MEPA Triggers for ER: Metallic Mineral Mining and Processing

- What is an EAW and EIS
- Mandatory EAW
- Mandatory EIS
- Discretionary EAW or EIS



DNR Environmental Review

What Environmental Review Does

- Helps permit/approval decision makers understand the environmental and socioeconomic impacts of a proposed project
- Takes a hard look at the project for potentially significant impacts using the best available data
- Explores ways to avoid, minimize, or mitigate potential environmental impacts through alternate designs, technologies, or practices
- Gives the public early access to decision makers with multiple opportunities for public input
- Prohibits issuance of final permits until environmental review process is complete

DNR Environmental Review

What Environmental Review Does Not Do...

- Approve or deny a proposed project
- Guarantee that permits can be issued for a project
- Analyze every conceivable impact from a project
- Answer every & all questions about a project

DNR Permitting

MN DNR Divisions of Lands and Minerals & Ecological and Water Resources

- Water Appropriation
- Public Waters Permit
- Dam Safety Permit
- Permit to Mine



Water Appropriation, Public Waters & Dam Safety

- Water Appropriation Permit
 - Conserve and utilize the water resources of the state in the public interest
- Work in Public Waters Permit
 - Minimize adverse environmental effects
- Dam Safety Permit
 - Ensure safe construction, alteration, operation, maintenance, and closure of tailing basin dams
- Amendments needed for continued project modification, expansions, and closure.



DNR Permit to Mine

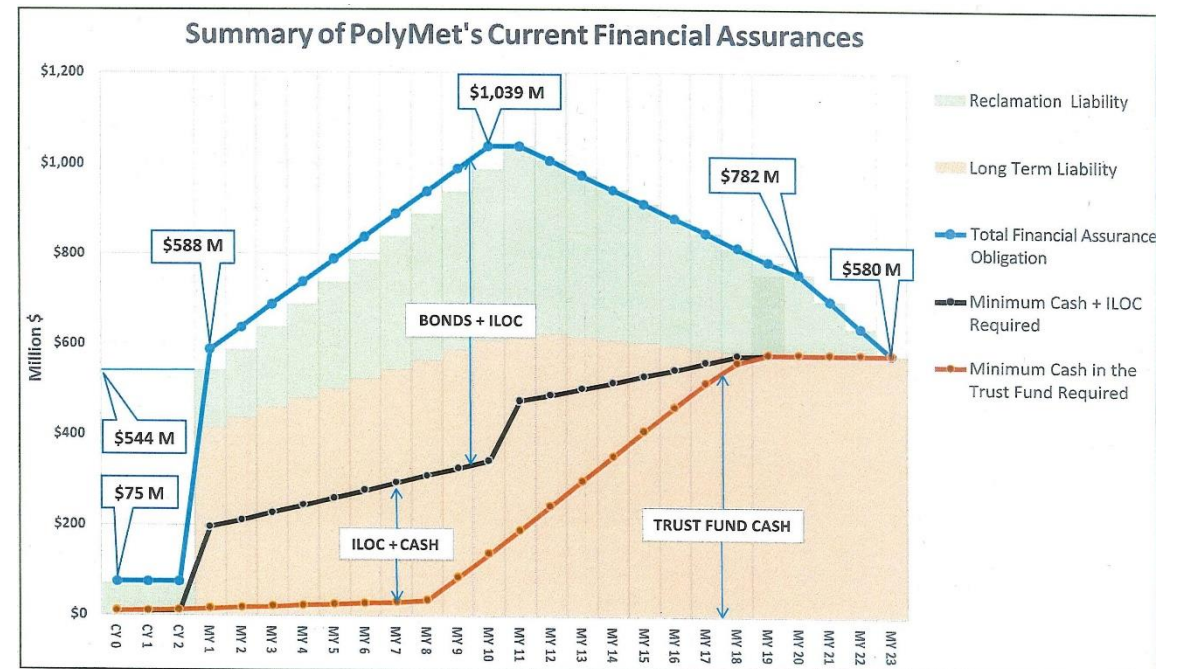
- Permit to Mine
 - Ferrous and Non-ferrous Projects
 - Reclamation
 - Wetland Replacement Plan (WCA)
 - Waste characterization
 - Financial Assurance



DNR Permitting

Permit to Mine: Non-Ferrous Financial Assurance

- Ensure that there is a source of funds to be used by the commissioner if the permittee fails to perform:
- Adequacy Determination of Financial Assurance
- Management of Financial Assurance



Other Agencies and Participants

- MPCA
- Tribal Governments
- Minnesota Department of Health
- U.S. Army Corps of Engineers
- U.S. Environmental Protection Agency
- U.S. Forest Service
- U.S. Fish & Wildlife Service

MPCA Permitting Components

- Air Emissions (PSD, Title V)
- Water Quality/Discharge (NPDES, SDS)
- Stormwater (Construction & Industrial)
- Wetlands Impacts (401 Certification)
- Solid Waste
- Hazardous Waste
- Storage Tanks



HibbTac

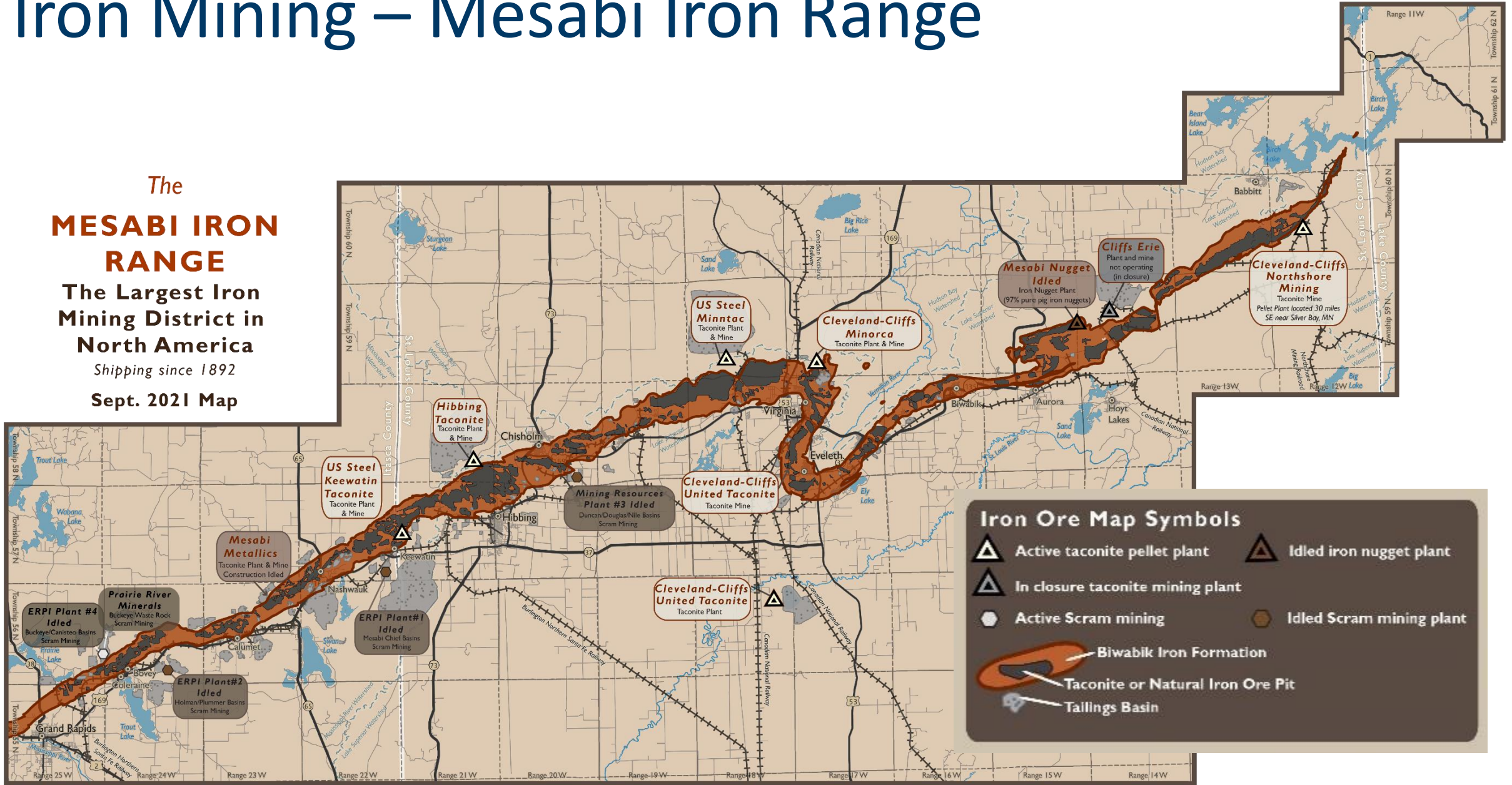
- MN is the #1 producer in USA
- 80% of the domestic supply of iron
- The Mesabi Iron Range is the oldest, continuously producing mining district in North America – almost 140 years old
- 6 operations running at full capacity – 42M Tons



Northshore

Iron Mining – Mesabi Iron Range

The
MESABI IRON RANGE
 The Largest Iron Mining District in North America
 Shipping since 1892
 Sept. 2021 Map



Iron Ore Map Symbols

	Active taconite pellet plant		Idled iron nugget plant
	In closure taconite mining plant		Active Scram mining
	Active Scram mining		Idled Scram mining plant
	Biwabik Iron Formation		
	Taconite or Natural Iron Ore Pit		
	Tailings Basin		

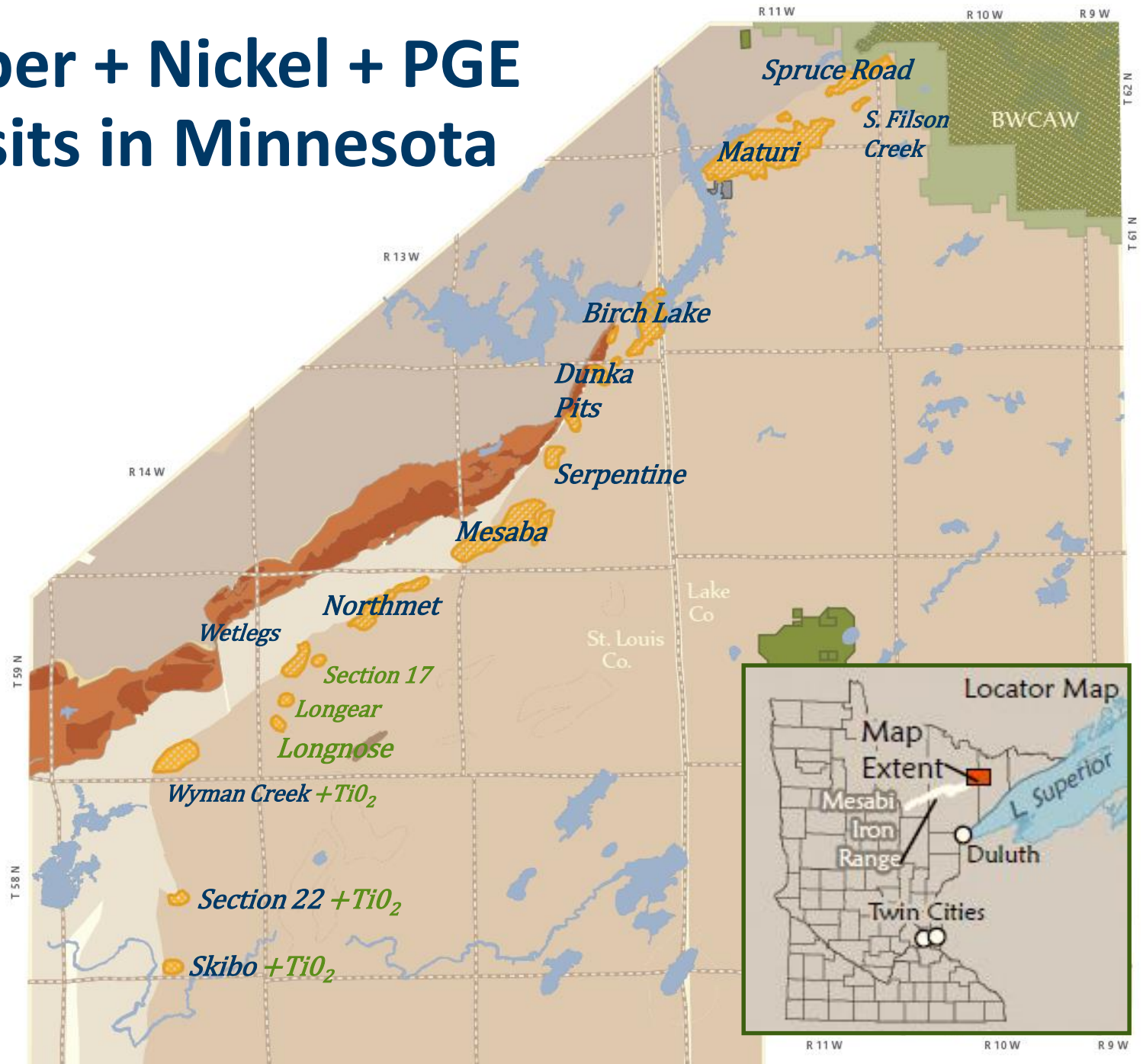
Distribution of Copper + Nickel + PGE and Titanium Deposits in Minnesota

▶ Cu+Ni+PGM Deposits

- ▶ Spruce Road
- ▶ South Filson Creek
- ▶ Maturi
- ▶ Birch Lake
- ▶ Dunka Pit
- ▶ Serpentine
- ▶ Mesaba
- ▶ Northmet
- ▶ Wetlegs
- ▶ Wyman Creek
- ▶ Section 22
- ▶ Skibo

▶ TiO₂ Deposits

- ▶ Section 17
- ▶ Longear
- ▶ Longnose
- ▶ Wyman Creek
- ▶ Section 22
- ▶ Skibo



Additional Development Projects not in Duluth Complex



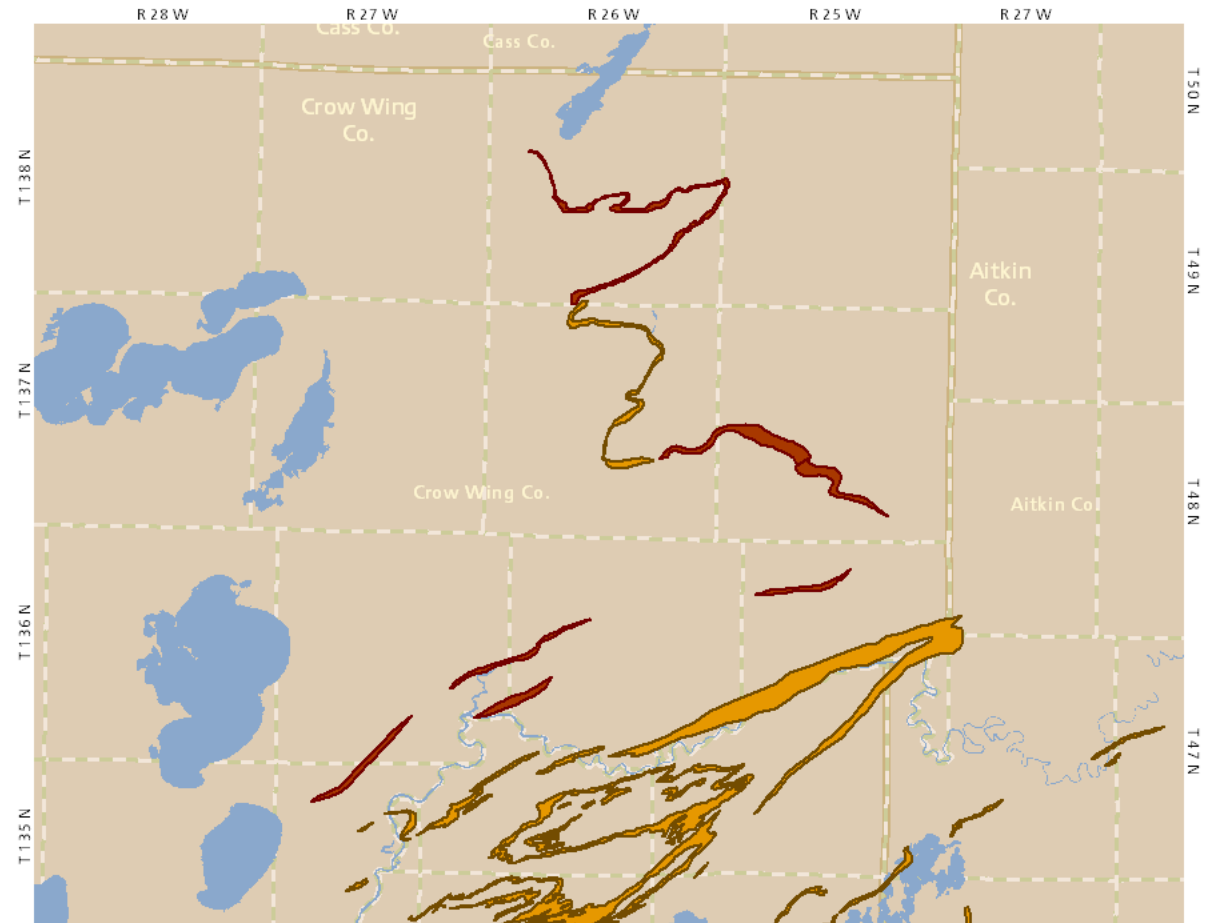
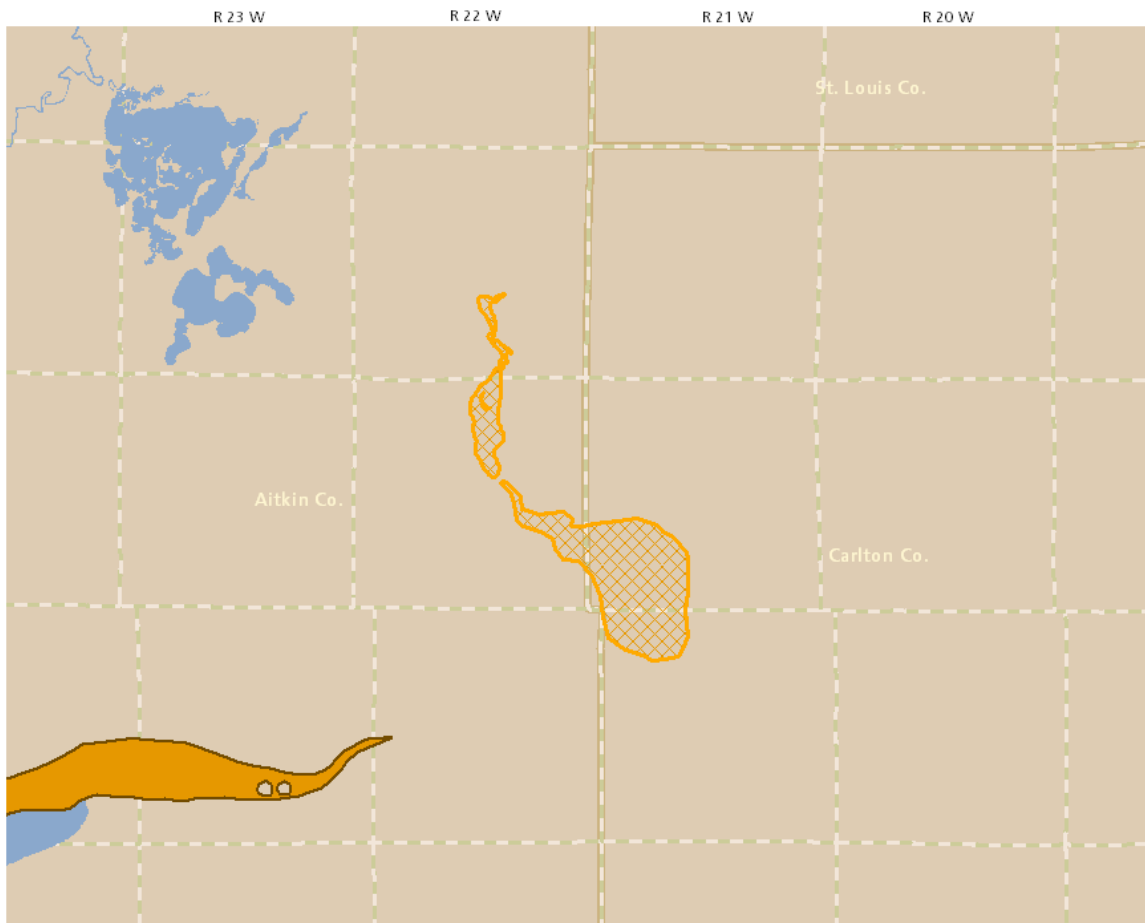
Emily formations
Manganese, iron



Tamarack deposit
Copper, nickel, cobalt



Other Cuyuna range iron formations



Summary Non-Ferrous Mines

- Mining of Copper, Nickel and Precious Metals
- Found in the Duluth Complex
- 1 (PolyMet) permitted in MN – under court challenges
- Open Pit Mines are much deeper than on the Mesabi Iron Range.
- Underground Mining (Twin Metals) - 1000-3000 feet below land surface.

Litigation

Current legal proceedings related to Lands and Minerals permitting

- PolyMet
- Mesabi Metallics
- ERPI bankruptcy
- Nonferrous mine siting rule challenge

Litigation – Nonferrous mine siting rule

- On June 24, 2020, Northeastern Minnesotans for Wilderness (NEMW) sued the DNR under the Minnesota Environmental Rights Act. NEMW claims in its lawsuit that Minnesota’s nonferrous mine siting rule is inadequate to protect the BWCAW.
- Currently, Minnesota Rule 6132.2000 prohibits mining in the BWCAW and prohibits mining that disturbs the surface in a specified area around the BWCAW.
- At the DNR’s request, the Court issued a September 13, 2021 order sending the case back to the DNR for further proceedings.
- The DNR opened a 30-day public input period, on the following question: “With express consideration of how Minn. R. 6132.2000, subp. 2A and subp. 3A fit within the broader context of all applicable environmental protection in state and federal law regulating nonferrous mining, are the exclusion of mining in the Boundary Waters Canoe Area Wilderness (BWCAW) set forth in Minn. R. 6132.2000 subp. 2A, and the prohibition of surface disturbance in the Boundary Waters Canoe Area Wilderness Mineral Management Corridor as set forth in Minn. R. 6132.2000, subp. 3A adequate to protect the BWCAW from pollution, impairment, or destruction or should further restrictions on mining be extended to all or part of the Rainy River- Headwaters defined as HUC 09030001?”
- The DNR received roughly 5,500 submissions during the public input period (about 5,000 via the online portal; fewer than 100 via emails; and fewer than 200 by mail).

Summary

- Minnesota has world class mineral resources and natural features
- Environmental Review and Permitting are complex tasks to protect all interests and involves multiple federal, state, and local governments
- There are transparent processes for input to agency decisions and appeals for final decisions.
- Mining projects are complex and are at various stages; development, expansion and closure
- DNR and State Leaders continue to improve coordination and processes to meet new challenges and opportunities.

Questions Thank You!

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