Iron Mining
In the Penokee Range-
What’s at Risk
Introduction

The Penokee – Gogebic Range extends 25 miles in far northern Wisconsin, through Iron and Ashland counties. The range consists of two steep, parallel ridges that dominate the local landscape rising 1200 feet from nearby Lake Superior. The topography of the area and the variety of soil conditions result in a wide range of habitat that supports a diverse group of species and natural communities.

For decades, this property has been managed for hardwood timber production, including maple and yellow birch. Pine, hemlock, ash and aspen are also on the property. Currently, the majority of the land is enrolled in Wisconsin’s Managed Forest Law. Managed Forest Law requires a management plan to sustain production of timber products and large areas for public recreational uses, including hunting, hiking, and snowmobiling.

The forests provide habitat and hunting opportunities for upland birds and big game including, ruffed grouse, white-tail deer and black bear. The forests are close to the state’s reintroduced elk herd. Many of the streams on the property are Class I trout streams with naturally reproducing populations of brook, brown and rainbow trout.

The majority of the Penokee Range is owned by RGGS Land and Minerals out of Houston Texas and La Point Mining Co in Minnesota. Together, these companies control a narrow 22-mile, 22,000 acre band in the Penokee Range from southwest of Hurley, WI to about six miles west of Mellen, WI. The Cline Group, out of Florida, has secured an option to obtain the mineral rights held for this property and has created a subsidiary called Gogebic Taconite (G-TAC) to move forward with the mining of iron.

Why is this land important

The Penokee mining land encompasses:

- Nearly 35 square miles of northern hardwood forest,
- Fifty-six miles of perennial river and stream frontage on more than 20 waterways,
- Frontage on English and Beaver lakes.

It is in close proximity to

- Copper Falls State Park,
- The Nature Conservancy/DNR cooperative project at Caroline Lake State Natural Area,
- Devil’s Creek State Fishery Area,
- Segments of the North Country National Trail.

This land helps maintain the forest cover in a landscape that links the Chequamegon-Nicolet National Forest in northern Wisconsin to the Ottawa National Forest in the Upper Peninsula of Michigan. This land provides habitat for wide ranging mammals, such as timber wolves and Pine martins, and for breeding populations of migrant songbirds, such as the black-throated blue warbler.
The Penokee Range is identified as an important area of high conservation significance due to its unique geology; many rare plants, animals and forest communities; and high quality recreational opportunities (WI Land Legacy Rpt, 2006). This landscape was included in the DNR’s Forest Legacy Assessment of Need (2001); The Wisconsin Wildlife Action Plan identified the Penokee Range as an Important Bird Area and a Conservation Opportunity Area of Continental Significance to maintain a large continuous climate change resistant forest (2008).

The Penokees have also been identified by The Nature Conservancy and its partners in the Great Lakes Ecoregional Plan (2000) as a large block of forest important for declining forest birds such as the golden-winged warbler, blackburnian warbler and goshawk. The forests also provide an important function in maintaining the quality and quantity of water that eventually empties into the Kakagon/Bad River Sloughs – a United State Department of Interior designated National Natural Landmark.
Risks to Unique Water Resources

The Penokee mining land has the potential to impact a large portion of the headwaters of the Bad River watershed. Fifty-six miles of perennial, and 15 miles of intermittent waterways flow through the mining land. Due to their high elevation and close proximity to Lake Superior, the Penokees average over 200 inches of snow a year. The quantity, temperature, and nutrients of this water have significant impacts on water resources downstream including the Bad River, the Kakagon/Bad River sloughs and finally Lake Superior.

The Bad River flows through a wide variety of habitats in a relatively short span. Starting in the forested heights of the Penokee range it quickly drops through deep forests in Copper Falls State Park and over the escarpment into spectacular canyons and waterfalls. Below Copper Falls, the Bad River flows through lowland forests and out to the sloughs where the river meets Lake Superior. Segments of the Bad River, Kakagon River, Bear Trap Creek, and Wood Creek are all designated as Outstanding Natural Resource Waters by the State of Wisconsin. These systems are all dependent on surface and ground water that originates in the Penokee Range. The Bad River also provides important spawning habitat for the lake sturgeon and many game fish.

At the mouth of the Bad River are some of the largest and highest quality coastal wetlands in the Great Lakes. The 16,000-acre Kakagon/Bad River Sloughs, which have been called Wisconsin’s Everglades, are an ecosystem of national significance and were designated as a National Natural Landmark by the U.S. Dept. of the Interior in 1983. The Kakagon-Bad River Sloughs are home to many threatened and endangered species such as the Piping Plover, Trumpeter Swan, Yellow Rail, Bald Eagle, wood turtle, and ram’s-head lady-slipper orchid.
The Penokee range is also a key piece of the land for drinking water. This area makes up the headwaters of the drinking water source both surface and groundwater, for the Municipalities of Ashland, Mellen, Highbridge, Marengo, Odanah, and Upson.

Finally the rise in elevation of the Penokees creates the hydrologic pressure that supports the abundance of artesian wells found along the Chequamegon Bay shoreline. Within Lake Superior itself, the groundwater upwellings generated by this hydrologic pressure are critical spawning areas for many great lakes fishes.
The following rivers/streams flow through the Penokee mining property (E and O indicate that portions of these waterways are designated as Exceptional or Outstanding Resource Waters):

<table>
<thead>
<tr>
<th>Apple Creek</th>
<th>Edies Creek</th>
<th>Montreal Creek</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bad River (E and O)</td>
<td>Erickson Creek</td>
<td>Opergard Creek</td>
</tr>
<tr>
<td>Ballou Creek (E)</td>
<td>Gehrman Creek</td>
<td>Potato River (O)</td>
</tr>
<tr>
<td>Barr Creek (E)</td>
<td>Gravelly Brook</td>
<td>Rocky Run</td>
</tr>
<tr>
<td>Camp Six Creek</td>
<td>Happy Creek</td>
<td>Rouse Creek</td>
</tr>
<tr>
<td>City Creek</td>
<td>Hardscrabble Creek</td>
<td>Tafelski Creek</td>
</tr>
<tr>
<td>Devils Creek (E)</td>
<td>Javorsky Creek (E)</td>
<td>Tyler Forks (E and O)</td>
</tr>
<tr>
<td>Dunn Creek</td>
<td>Krause Creek (E)</td>
<td>Several unnamed</td>
</tr>
</tbody>
</table>

![Potential Surface Water Impacts Map](image-url)
Conclusion

This document gives a short summary of the natural resources that have the potential to be impacted by mining activities in the Penokee Range. It is critical that these unique resources be identified, the threats to them recognized, and all efforts made to protect them. The Nature Conservancy believes there are many questions that need be answered to make sound policy decisions on this issue.

- What is the exact location and extent of actually strip mine
- Expansion plan – what is the potential scale of this mine 5, 10, 50 years
- How much water (actual) will this mine use, where will it come from and how will it be returned to the system
- What will be leached form the exposed rock, how will this be contained from reaching surface and ground water and how will it be treated
- What impact will this mine have on surface and ground water
- How does the groundwater move away from this site and what impact will that have on local communities
- How will the mine impact surface water, quality, quantity, timing and temperature
- How will this project impact endangered species

It is our hope that due diligence is done so that thoughtful and informed decision are made on how to proceed with any mining operation in this area. It is an area of the state that The Nature Conservancy and its partners have been working in for a long time and we hope our experience can help inform good policy decisions on this issue.

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