# Get Informed

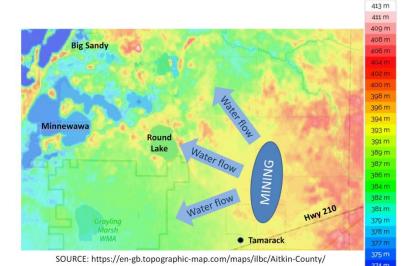
## High Sulfide Mines Create Acid Drainage Tamarack Talon Project – High Sulfide Mine

- The Talon Tamarack North Project mine covers nearly 32 square miles with plans to remove more than 8 million tons of high sulfide ore over an 8-12 year period.
- Nickel-Copper-Cobalt minerals are bonded to sulfur mined as sulfide ores.
  - When this ore is exposed to air and water, sulfuric acid is formed.
  - This acid migrates throughout the environment and leaches toxic heavy metals present in the waste rock, pit walls and tailings basin.
- Tamarack sulfide deposits (and tailings) also contain cobalt – a highly toxic mineral.
- The sulfuric acid along with dissolved heavy metals released onto the land will seep into the rich aquifers below and then into streams and lakes at levels that are toxic to fish and other aquatic life.
- This type of pollution is commonly referred to as Acid Mine Drainage (AMD)
- Sulfates associated with AMD support a biochemical process that increases the release of mercury from wetlands and stream sediments and changes inorganic mercury into methylmercury – a toxic substance.
- Our lakes, rivers and wetlands are all down stream of the mine site. All of the water bodies in the Tamarack area are linked by multiple aquifers.

The chemical reaction of sulfide ore/tailings to sulfuric acid can happen over long periods of time – potentially 1000's of years.

#### **SOURCES:**

https://earthworks.org/issues/acid\_mine\_drainage/ https://www.usgs.gov/mission-areas/water-resources/science/mine-drainage https://www.epa.gov/nps/abandoned-mine-drainage-additional-resources



- A literature review on acid mine drainage concluded that "no hard rock surface mines exist today that can demonstrate that acid mine drainage can be stopped once it occurs on a large scale."
- Acid runoff from the Summitville Mine in Colorado killed all biological life in a 17-mile stretch of the Alamosa River. The site was designated a federal Superfund site, and the EPA has spent over \$210 million on clean-up.
- Zortman Landusky mine in north central Montana filed for bankruptcy in 1998 leaving the state of Montana with the liability for \$33 million in longterm water treatment and reclamation costs.

#### **CALL TO ACTION**

- I. Share this flyer with others.
- 2. Contact us to give community talks at local organizations.
- 3. Join our mailing list at: tamarackwateralliance.org/php/articlereg.php

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