

# COPPER MINING *is a* GREATER ENVIRONMENTAL THREAT *than* IRON MINING

**M**ines create holes in the ground that fill with water after the mines area abandoned and pumping ceases. In some iron mine pits, this water remains clean enough that they can be reclaimed as recreational sources. But in copper mine pits, when sulfide rock is exposed to oxygen a chemical reaction occurs that creates water so toxic that it must be contained or treated for hundreds or thousands of years. Here are examples:



This is Miners Lake in Ely. This lake, created when the underground mine below collapsed, has water clean enough to support a healthy population of stream trout, bass, and panfish. It is a popular fishing lake. One of Ely's favorite recreational trails wraps around it.

*Inset: Ely's Miners Lake fishing dock is frequented by area residents and visitors.*



This is the Berkeley Pit in Butte, Montana. The groundwater filling this abandoned copper mining pit is as acidic as lemon juice because of the sulfuric acid pollution from waste rock. Acid leaching has created a toxic brew of heavy metal poisons including arsenic, lead, and zinc. In 1995, a flock of migrating snow geese stopped at the massive pond for a rest, and hundreds of them died there. Authorities now use firecrackers and loudspeakers to scare away migrating waterfowl, but other waterfowl fatalities have occurred nonetheless. No fish live there and no plants line the shores. This mile-long lake lies on the edge of Butte but no one is allowed to recreate on or along it.

*Inset: Necropsy photo of a snow goose that died in the Berkeley Pit from acid burns after it ingested the polluted water.*



This is Canada's Giant Mine, where gold was mined for decades. Waste materials were packed back into the shafts, much like Twin Metals proposes to do near Ely. But toxic arsenic leaching into the groundwater became a monumental public health threat. In a desperate unproven strategy to contain the damage by solidifying the groundwater, taxpayers will pay \$1 billion for a massive refrigeration system to literally freeze the mine forever.