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Risk Assessment of Yellow Pine Mining Area

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Yellow Pine Mining Area: A Superfund Site Risk Assessment

Noel Preece - BIOL 364

Background

The Yellow Pine Mining Area in Stibnite, Idaho is a previously-abandoned mining site that operated from the 1900s to the 1990s. During World War II, it was the United States' largest producer of strategic minerals such as antimony and tungsten. Recent efforts by Perpetua Resources to resume mining has drawn attention to a number of toxic and environmental concerns, leading to designation as a superfund site by the EPA.



Specific Aim

The aim of this project was to develop a perspective on the risk management of the Yellow Pine Mining Area superfund site, both relative to already-existing toxicity and likely future impacts given the stated plans of the current owners.

Conclusions

Perpetua Resources should not be allowed to resume mining in the area due to the risk of toxic accumulation of arsenic and other metals in wildlife. Additionally, cleanup efforts should be increased.



References

A full list of references and further information can be found on the manuscript by scanning this QR Code →



Methods

Background Research

Dose-Response
Assessment

Community Risk
Assessment

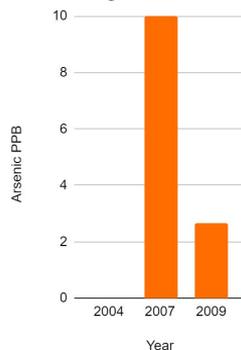
Hazard Identification

Surrounding Community

Assessment of Risk
Management

Results

Arsenic Contamination
in Drinking Water



- Drinking water downstream has exceeded health recommendations for arsenic (2ppb) but never exceeded legal limits (10ppb).
- The primary hazard to humans is recreational consumption of **fish** and other wildlife, as arsenic can accumulate to hazardous levels in animals.