Improving California's Response to the Environmental and Safety Hazards Caused by Abandoned Mines

Presented to:
Delta Tributaries Mercury Council

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Legislative Analyst’s Office
The Legislative Analyst's Office (LAO) provides nonpartisan fiscal and policy advice to the Legislature.

- The office serves as the "eyes and ears" for the Legislature to ensure that the executive branch is implementing legislative policy in a cost efficient and effective manner.
Introduction

➢ Report written by Shawn Martin

➢ DTSC – Frank Jimenez

➢ DOC – Eunice Roh
Background
Gold Rush led to a major increase in mining in California.

State and federal mining regulation were implemented in the 1970s.

About 47,000 abandoned mine lands (AMLS) across the state remain.
Figure 2
California’s Abandoned Mines Are Mainly Located on Federal Lands

- United States Fish and Wildlife Service 0.7%
- Department of Defense 4.3%
- National Park Service 16.5%
- Bureau of Land Management 33.5%
- United States Forest Service 45%
- Private Lands 31%
- State and Local Government Lands 2%
- Federal Lands 67%
Some Abandoned Mines Can Cause Environmental Contamination

- **Water Contamination**
  - Acid mine drainage
  - Metal contamination
  - Sedimentation
  - Mercury poisoning

- **Air Pollution**
Abandoned Mines Are Often Physical Hazards

- Every year, people are injured or die when they explore AMLs.
- About 84 percent of AMLs in California likely include features that could pose a threat to human life.
Addressing AML Issues Often Requires Coordination Across Multiple Agencies

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<th>State Agencies</th>
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<th>Environmental Regulation</th>
<th>Site Remediation</th>
<th>Technical Support and Other Functions</th>
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Largest, most complex site remediation projects are under the Superfund program, led by the U.S. EPA.

Most remediation projects are administered by state agencies—DTSC and SWRCB.
Remediation of Physical Safety Hazards

- Department of Conservation’s Abandoned Mine Lands Program inventories and assesses AMLs for physical safety hazards.
- State takes the lead on coordinating projects to remEDIATE physical safety hazards.
Key Challenges to Systematically Remediating AMLs
Remediation of Many AMLs Still Needed

- 30,000 mines still need to be inventoried.
- Tens of thousands are in need of remediation of physical safety hazards.
- Few thousands are in need of initial or further assessment to determine whether they are sources of environmental contamination.
Agencies prioritize remediation projects differently.

Project coordination occurs on an as-needed and voluntary basis.

Coordination is complicated by ownership issues.
- Private land
- Two or more properties with different owners
Total state costs to remediate environmental impacts and physical hazards could total billions of dollars or more.

Limited state funding is available for remediation.

Current funding levels leave tens of thousands of potential physical safety hazards unaddressed.
Recommendations
Designate Lead Agency to Coordinate Remediation Efforts

- **Lead Agency Responsibilities**
  - Prioritize AML remediation projects on a statewide basis.
  - Coordinate with federal land management agencies.

- **Potential Improvements**
  - Better coordinate and facilitate long-term planning.
  - Ensure efficient use of limited state and federal resources for remediating AMLs.
Require Lead Agency to Develop a Statewide Strategic Plan

- **Lead Agency Responsibilities**
  - Develop a statewide strategic plan to address AMLs.
  - Strategic plan should (1) be updated at least once every five years, (2) establish specific goals and measurable objectives, and (3) prioritize projects.

- **Potential Improvements**
  - Encourage a more systematic statewide approach to project selection.
  - Ensure limited resources are targeted to most critical projects.
  - Facilitate long-term planning and interagency cooperation.
  - Provide up-to-date source of data to inform funding decisions.
Establish State Fund to Support AML Remediation

- **New State Fund**
  - New fund would be established within lead agency, which would propose AML remediation projects based on strategic plan.
  - Supported by both existing revenue sources, as well as future state bonds, federal allocations, and General Fund.
  - Potentially supported by charge on active mining operation in the state.

- **Potential Improvements**
  - Provide dedicated ongoing funding source to address AMLs.
  - Leverage additional federal funds.
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