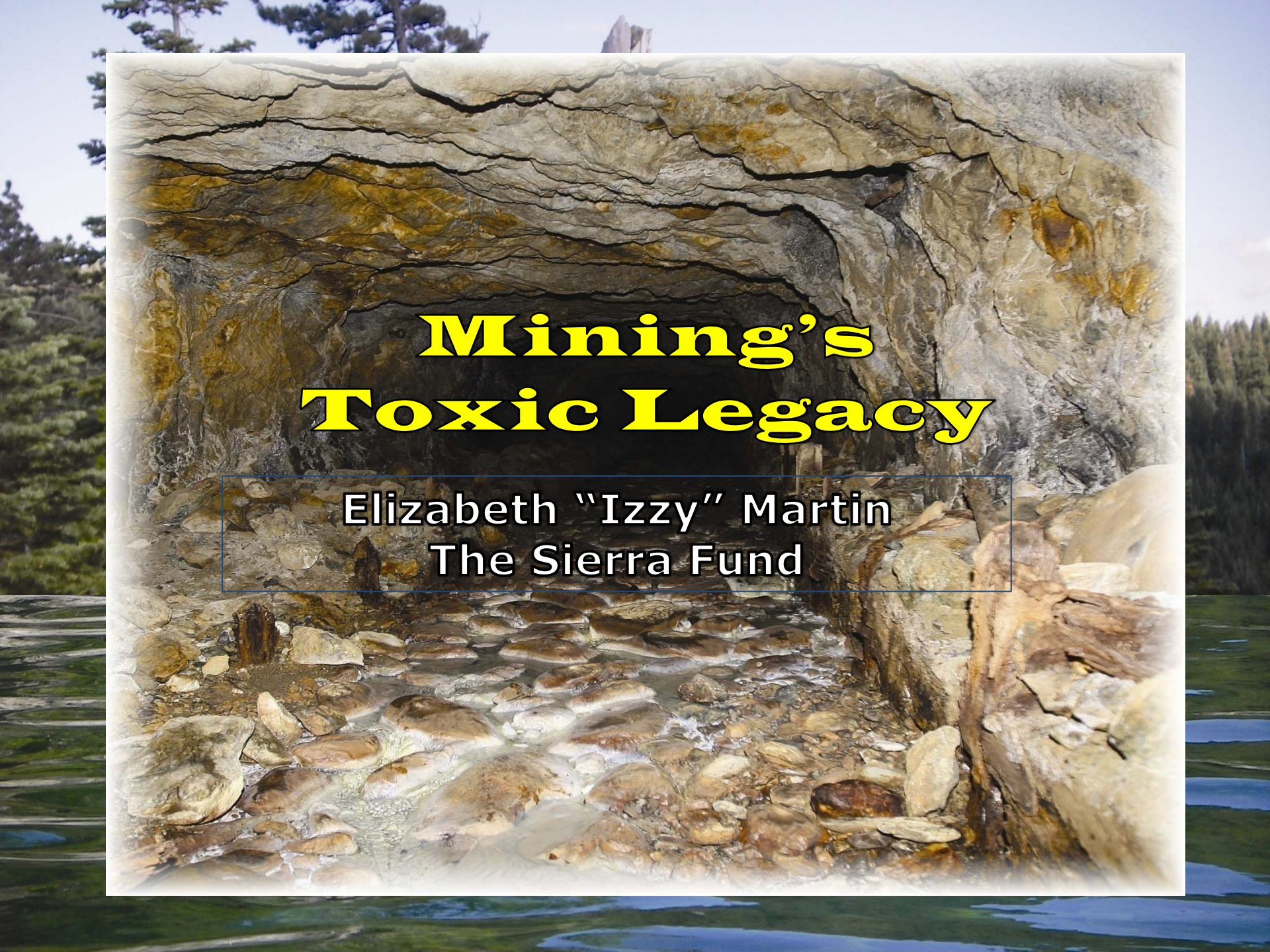
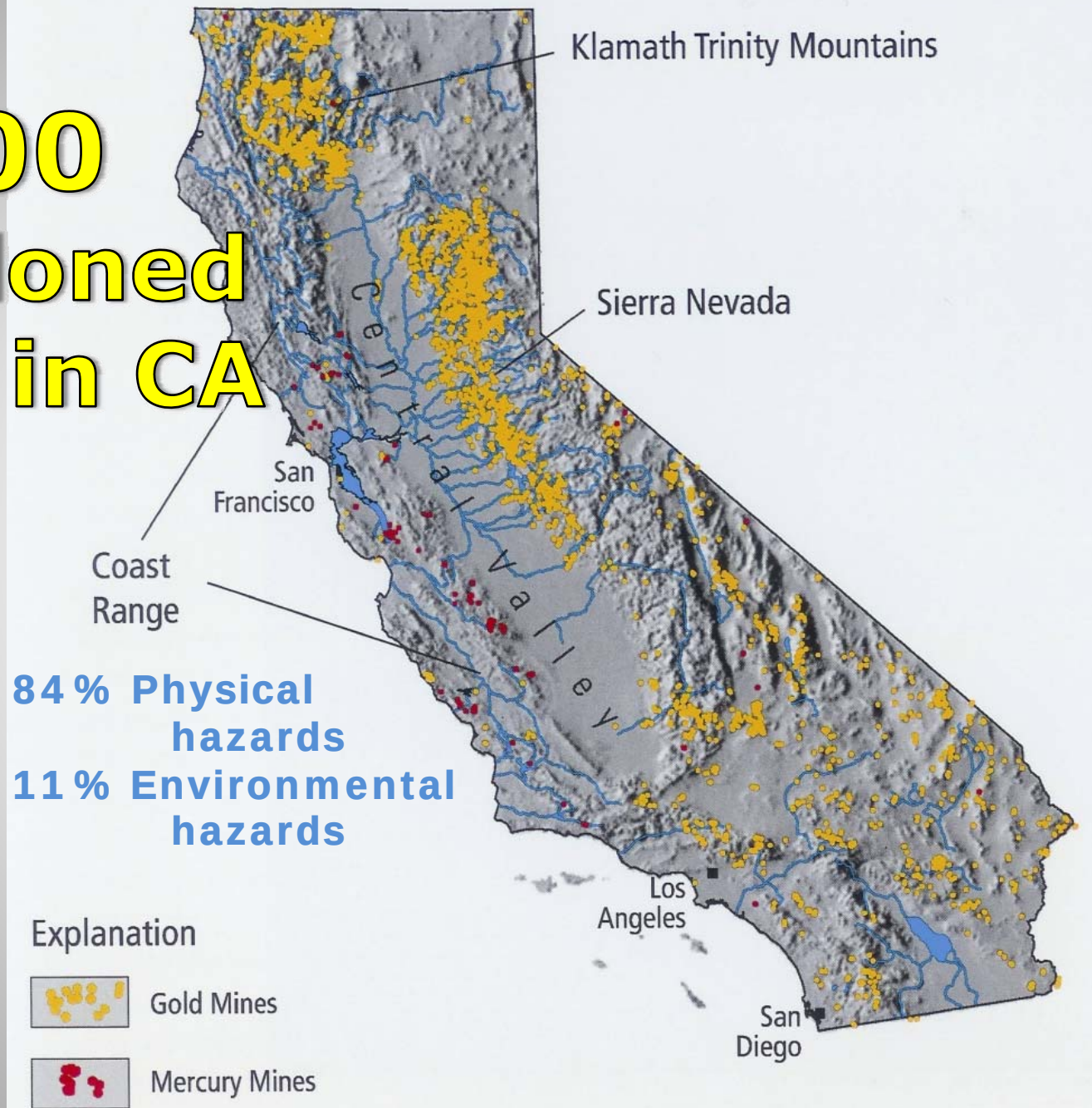


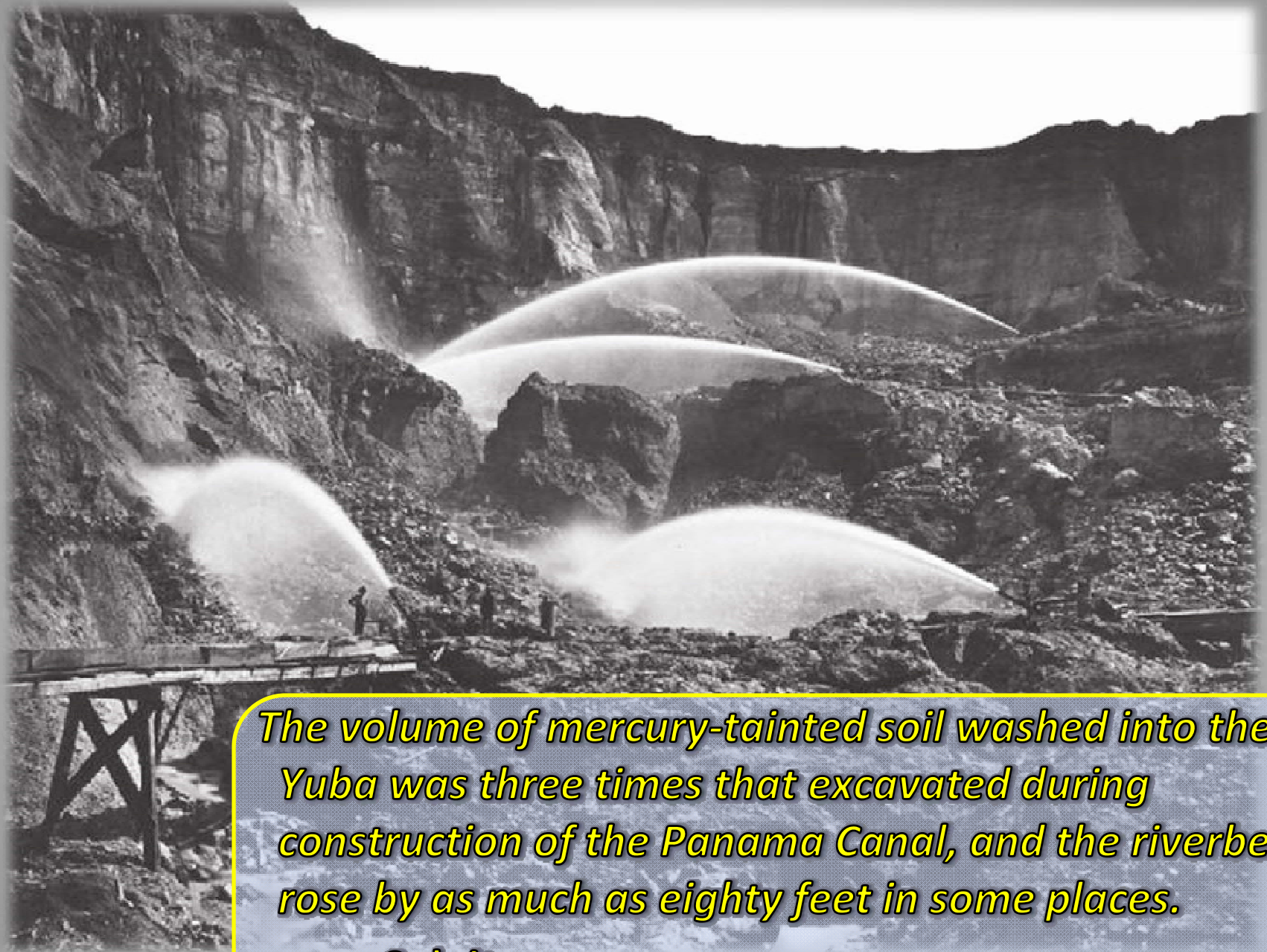


Mining's Toxic Legacy

Elizabeth "Izzy" Martin
The Sierra Fund

47,000 Abandoned Mines in CA





The volume of mercury-tainted soil washed into the Yuba was three times that excavated during construction of the Panama Canal, and the riverbed rose by as much as eighty feet in some places.

----- Solnit

Gold Country towns grew around the mines



Impacts of the Gold Rush:

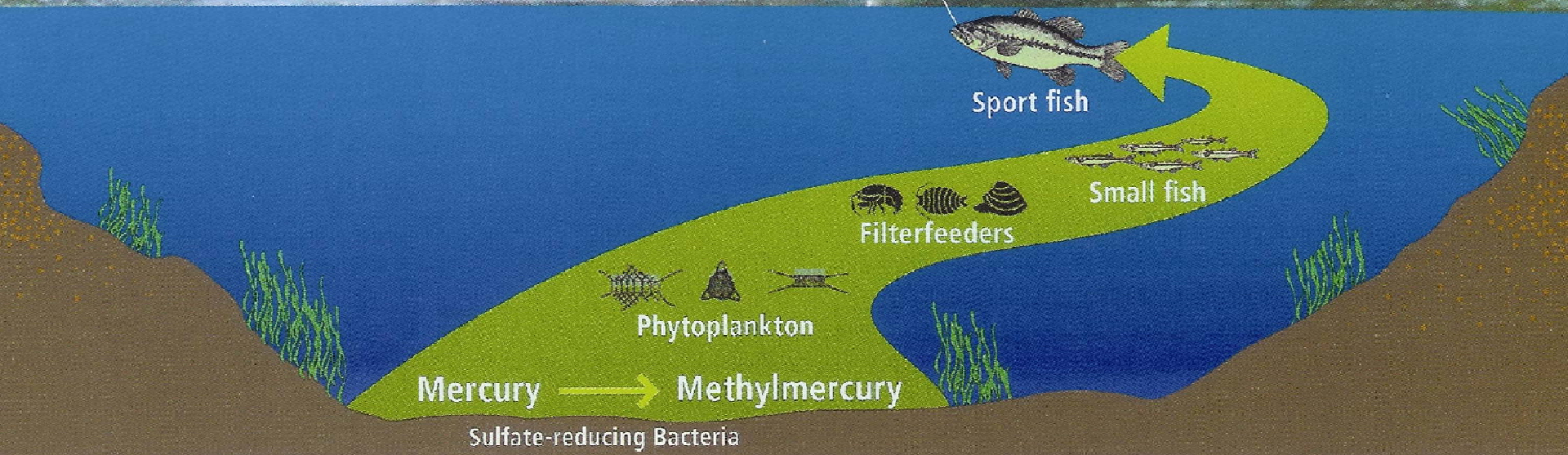


**Cultural
Health**



Environmental

Methylmercury Bioaccumulation



Water Bodies with Fish Consumption Advisories

Office of Environmental Health Hazard Assessment

Advisories in Northern Sierra Nevada Foothill Counties (1)



Advisory Chemical

- (1) = mercury
- (2) = PCBs
- (3) = DDT
- (4) = selenium
- (5) = chlordane

Freshwater Advisories in San Francisco Bay Area Counties (1)



Environmental Impacts

Mine Tailings

Abandoned Mines

Acid Mine Drainage

Crushed Rock and
Gravel Roads

Mercury Used



Solutions:

- * Increase Collaboration**
- * Fund Strategic Research**
- * Outreach & Education**
- * Direct and Fund Federal Programs**



1. Increase Collaboration



**Establish a Mining Toxins
Working Group to improve
coordination among
researchers**

2. Fund Strategic Research

- * Support development of pilot research projects that explore methods for reducing methylmercury in the Sierra Nevada
- * Support research into health impacts on Sierra residents of exposure to mining toxins.

3. Outreach and Education on Human Health



Support regional medical education and outreach on the impacts of legacy mining toxins on public health, including mercury.

4. Direct and Fund Federal Programs

- * Inventory, assess, and prioritize for remediation abandoned mines all federal land
- * Assess federal water projects (wetlands, reservoirs); establish programs that minimize mercury methylation.
- * Reform the Federal 1872 Mining Act to require mitigation of cultural and environmental impacts from historic mining; reform “Good Samaritan” laws to provide incentives for cleanup.
- * Support implementation of Phase 2 of the CALFED Mercury Strategy.

Thank You!



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