Year 2000 and 2001 Priority Actions

Cache Creek/Delta Mercury Source Control Projects - 21

1. General Description of the Action

Divert stormwater around mercury waste sites to preclude stormwater contribution from mercury mines to the Bay-Delta and the food web.

Mercury contamination of fish in the San Francisco Bay Delta estuary constitutes a health threat to humans. Mercury is a conservative neurotoxin that bioconcentrates through the food web. Some forms of non-bioavailable mercury is deposited in wetlands where it is converted to a bioavailable form. More or restored shallow water habitat could possibly enhance the rate at which mercury is taken up into the food web.

Mercury source control studies are being funded through the Category 3 - Ecosystem Restoration Program (to be let in 1999 at the $3.7 million level). An additional $3.0 million is needed to conduct early remedial activities on mercury sources that contribute to mercury in the food web of the delta.

Mercury removal is proposed to benefit the ecosystem and public health.

2. Cost Estimates

Approximately $3 million dollars is needed the first year. Two million dollars could be spent each year after that for 3 additional years. Full remedial activities should begin after 3 years, provided data is conclusive. Continued monitoring of selected mercury species should continue for several years. These activities should be coordinated with current mercury projects funded by CALFED Category 3.

CALFED Staff costs will be for a person on a 1/4 to 1/2 time basis to oversee and participate in remedial design and evaluation. Much of the rest of the staff requirements will be at the Department of Conservation, which has indicated their support. Some staff time would be from the Regional Water Board, we anticipate no trouble in getting a commitment from the Board.

3. Program Administration and Governance

The CALFED Water Quality Program should oversee the coordination of agencies and approval of funds spent. Contracts for work should be let through the Department of Conservation or the Regional Water Quality Control Board, Central Valley Region. Alternatively, the USDA Natural Resource Conservation Service should be the contract administrator in lieu of a state agency.

4. Program Coordination

The Department of Conservation has a Mine Reclamation unit that coordinates with owners on sites that could be reclaimed using low cost techniques. Conservation also has mapped much of the area to be used for site characterization.

The State and Regional Water Boards will provide scientists to assist in site characterization both before and after remediation.

The University of California Davis has scientists that have already worked on remedial plans for some of these mines.

5. Schedule

Some mine sites could be worked on immediately. Other sites may need a few months of reconnaissance to better determine the best methods of correction. All work can begin in mid to late 1999 and continue through 2000. Additional funding could be used to work on less critical sites over the next few years. Once preliminary remediation is complete, studies funded by Category 3 will be complete to direct the most cost efficient remediation for the future.

Mine remediation could encumber the State to remediate an abandoned mine as though the State owned it. While State Law allows a State Agency to provide corrective work on a mine site, the Federal Government has no such provision. Mine remediation should be done with a minimum of a signed "hold harmless" agreement or with Federal Environmental Good Samaritan protection.