

STATE OF CALIFORNIA
REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

STAFF SUMMARY REPORT (Lindsay Whalin)
MEETING DATE: December 12, 2018

ITEM: 7

SUBJECT: **Abandoned Mine Program and Mercury Mine Investigation and Cleanup Strategy– Status Report**

DISCUSSION: This item will describe our strategy for addressing abandoned mines in our region, including our highest priority, mercury mines. The 2015 Gold King Mine blowout and mining waste spill in Colorado reminded us of the substantial threat mines pose to human health and the environment. Though this threat may seem remote, there are tens of thousands of abandoned mines in California, and many have left a legacy of contamination that continues to impact the waterbodies we are charged to protect. It is unclear how many of the 600 State waterbodies impaired due to unknown sources of metal(loids) are caused by mining discharges. This is in large part because enough resources have historically not been dedicated to investigating the issue. This is starting to change statewide.

However, our region's staff have been evaluating and cleaning up mines since the 1990's, have addressed some of the worst mines in the region, and have recently undertaken an effort to evaluate, prioritize, and address the remaining mines using innovative tools and technologies. Our initiative was driven by necessity. Though the number of mines in our region is relatively small, impacts to the environment have been large, especially from mercury mines (including New Almaden, the world's second largest). Sixty of our region's water bodies, including San Francisco Bay, are listed as impaired due to mercury, and fish consumption advisories due to mercury have been issued for many, including seven associated with New Almaden alone.

Mercury is a unique metal that transforms under common natural biogeochemical conditions, affecting its mobility and toxicity. One form (methylmercury) biomagnifies up the food web and can cause neurological and reproductive impairment in wildlife and humans. This is of particular concern for subsistence anglers and their families who have limited to no alternatives and rely on fish as a primary source of food and protein.

Our mercury mines are our highest priority, and we are implementing innovative approaches to better, and more quickly and cheaply, characterize mines and target mobile, toxic forms of mercury to achieve biologically meaningful results. This presentation will summarize these approaches and provide the status of all our mines, the results of our desktop analysis and prioritization, and our progress on mine inspections.

**RECOMMEN-
DATION:** This report is presented for information purposes only – no action is needed.