

**Central Valley Water Board Comments on the CA Department of Fish and Game  
Suction Dredge SEIR  
28 April 2011**

Major Comment:

**The SEIR does not contain adequate justification to support selection of the Proposed Program instead of the No Program Alternative.** The SEIR recognizes impacts to water quality from suction dredging as significant and unavoidable. The No Program Alternative would continue the prohibition on instream suction dredging in California. This alternative would avoid all of the significant and unavoidable effects of the Proposed Program and is considered environmentally superior. The No Program option is the most protective of water quality. It is not clear from the document why CDFG did not select the No Program Alternative.

Other Comments:

If the No Program Alternative is not selected, the final SEIR should fully describe the mitigation programs to avoid or mitigate significant and unavoidable impacts. The draft SEIR describes mitigation actions that could possibly make impacts on water quality related to turbidity, mercury, and resuspension of trace metals less than significant. Mitigation actions that result in removal of mercury from stream environments should be considered in this SEIR. If mitigation actions would render the water quality impacts to be less than significant, then the mitigation programs should be fully developed under the proposed regulatory program. The Proposed Program must comply with the Clean Water Act and the Porter Cologne Water Quality Control Act. If the Proposed Program with mitigation programs does not adequately protect water quality under these Acts, it will be inadequate.

*Impact WQ-3: Effects of Turbidity / TSS Discharges*

The SEIR finds that turbidity and suspended sediment discharges from suction dredging operations to be less than significant. We have concerns with this finding for the following reasons:

1. The finding is based on regional sediment load conditions and doesn't recognize stream conditions in the northern Sierra and Klamath mining areas. Streams in these areas have fine grained sediment which, when discharged by suction dredging, can violate Basin Plan objectives. We have received public complaints about sediment discharges from suction dredges in these areas.
2. Suction dredging and associated rock and bank disturbance have the potential to promote channel migration and/or incisement which leads to accelerated erosion and increased sediment loads. Ongoing restoration projects to address accelerated erosion on Central Valley Region streams, and implemented with public funds, could be impacted by suction dredging.

For the above reasons, and the lack of effective mitigation for suction dredges working in finer grained sediments, we request this finding be changed to significant and unavoidable.

*Impact WQ-4: Effects of Mercury Resuspension and Discharge - Significant and unavoidable*

The recognition in the draft SEIR of the potential significant and unavoidable impacts of mercury during suction dredging underscores the need to minimize mercury impacts with a mitigation plan should the Proposed Program be selected. The presence of mercury has impaired the beneficial uses, specifically safe consumption of fish by humans and wildlife species, of many waters that may be subject to suction dredging. Suction dredging brings previously buried mercury into the water column, thus contributing to the impairment of the beneficial uses. The SEIR states, “any impact of suction dredging on Hg loading and MeHg concentrations in downstream environments might further exacerbate the existing Hg impairments.”

The report states that to reduce impacts of mercury, “potential mitigation includes closures or restrictions on suction dredging in areas impaired for Hg, or further restrictions on nozzle size, number of permits, and hours/days spent dredging. However, such closures are not within CDFG’s jurisdiction to implement since they are not believed to be necessary to avoid deleterious effects to fish, and are therefore considered infeasible. No other feasible mitigation measures exist. Therefore, this impact would be significant and unavoidable.” CDFG does not propose to close suction dredging areas with elevated mercury levels. Wildlife and humans consuming fish and other biota are impacted by mercury resuspended during dredging. CDFG has an obligation to protect and manage wildlife other than fish immediately in the dredging area. Even though mercury levels in the local fish may not be elevated enough to be deleterious, bioconcentration of mercury by organisms feeding on the fish could be significant.

#### *Impact Analysis of Proposed Program on Water Quality and Toxicology- Other Pollutants*

The SEIR should evaluate the significance of all local impacts and provide mitigation measures. The SEIR indicates many ancillary activities associated with suction dredging would have a less-than-significant impact on water quality. This finding appears to be based on comparisons of impacts of specific activities on a statewide level, i.e., the activities are widely dispersed and only impacts a small portion of the state as a whole. However, on a local level in the area near the suction dredging sites, the impacts could be significant. For example, a fuel spill or human waste from an undeveloped campsite could have local, but significant effects.

#### *Impact Analysis of Proposed Program on Hazards and Hazardous Materials*

In addition to the significant water quality concerns, mercury creates problems arising from accumulation and storage by dredgers and potential inhalation during “cooking” mercury-gold amalgam. Suction dredgers recover mercury with gold. Fate of that mercury includes reuse in sluice boxes, storage by dredgers in unsecured places, release to the air and inhalation by miners during gold refining, and according to information cited in the draft SEIR, illegal disposal. The draft SIER states that dredgers’ handling, storage and transport of mercury is a less than significant effect on human health. However, for human and environmental health reasons, mercury captured during suction dredging must be prevented from being released again to water or air. If the Proposed Program is implemented, we recommend that CDFG coordinate with State and Regional Water Boards, Department of Toxic Substances Control, and other appropriate state and local agencies to develop and implement a mercury collection program for mercury collected during suction dredging activities.

#### *Best Management Practice Pamphlet*

CDFG is proposing to create a “Best Management Practices” (BMP) pamphlet. The BMP pamphlet will give limited guidance to limit environmental impacts over which CDFG does not have jurisdiction. Only if CDFG can enforce compliance with best management practices should environmental impacts be considered less than significant with incorporation of mitigation measures in the form of BMPs. Use of best management practices should be a permit requirement and be enforceable.

#### *Alternatives Evaluation*

Please include text explaining why the Proposed Program was selected instead of the other alternatives that were evaluated. Table 6-1 provides a summary of the impacts of each of the alternatives compared to the Proposed Program. In the draft SEIR, however, we could not find justification for selection of the Proposed Program. This explanation is particularly important because the No Program, Water Quality, and Reduced Intensity Alternatives would cause fewer adverse environmental effects in comparison with the Proposed Program.

#### *Table 4.2-2*

References in Table 4.2-2 to human health criteria from OEHHA (2001) should be removed. OEHHA’s 2008 Advisory Tissue Levels and Fish Contaminant Goals report provides revised contaminant levels calculated with and without assumptions that there are health benefits from eating fish. OEHHA also revised all of its advisories in 2009 to issue advice for sensitive and other populations using different reference doses. To show the range of advice thresholds, the table could include OEHHA’s advisory tissue level and fish contaminant goal based on one fish meal/week (32 g/day) and/or the advice levels for the two different populations.