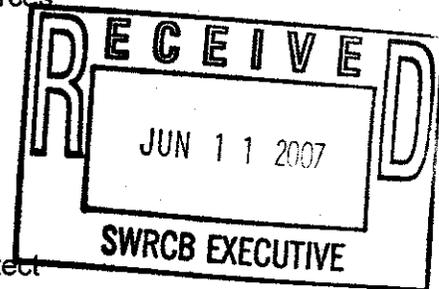


To: Song Her, Clerk to the Board, Executive Office, State Water Resources Control Board

"Comment Letter - Suction Dredge Mining." [for subject line of email to commentletters@waterboards.ca.gov]

Greetings;

Existing California regulations for suction dredge mining adequately protect public waterways in California, but they could be revised so that suction dredge miners could actually improve the quality of water in gold bearing waterways, particularly in over-sedimented dammed rivers and previously mined waterways.



Dammed waterways do not have adequate flushing flows which are necessary to migrate sediment to the ocean. As a result these waterways become choked with fine sediment, pools and riffles are flattened, waterways widen and temperatures of the water increase to levels which make traditional marine life difficult. Suction dredge mining in rivers and streams that are dammed affects these waterways positively because;

1. Suction dredge mining loosens choking sediment so that during increased winter flows, even though far less than pre-dammed flows, trapped sediment can migrate toward the ocean. The result of excess sedimentation migrating to the ocean helps deepen pools and re-establishes riffles which are so necessary for aerating, cooling and filtering, and
2. by loosening sediment in waterways so that it can migrate toward the ocean as was the case prior to dams, the re-establishment of intra-gravel flows of water (a) cools the temperature of the river, and (b) re-establishes the filtering ability of river gravel as during pre-dammed times.
3. Suction dredge miners normally remove lead and mercury from the rivers they mine because lead and mercury are almost as heavy as gold these two toxic metals remain in the sluice boxes of suction dredges. Regulations should provide safe means for disposing of mercury and lead removed from the waterways by dredge miners. For example, if lead and mercury were purchased so that they could be safely recycled miners would have an incentive to collect and bring them to recycling centers.

These are effects of suction dredge mining under existing California regulations. However, if research funds were made available for river hydrologists and suction dredge miners to work together, new suction dredge regulations could be devised which would further help the restoration of over-sedimented waterways. Regulations could help educate/guide suction dredge miners to structure their plans of operation so that river restoration and suction dredge mining could become simultaneous operations, and the effect would be that suction dredge miners would become river restorationists as they dredged for gold.

Existing suction dredge regulations prevent miners from using suction dredges in salmonid spawning areas. Doubtless there should be no suction dredging permitted during spawning periods, but regulations could be devised so that miners using suction dredges could actually improve spawning habitat with their suction dredges, especially by loosening spawning gravel and removing sediment.

Next, in many waterways the sizes of suction dredges could be increased greatly which would mean that much more unwanted sediment could be loosened so that it would migrate during winter storms. And finally, suction dredges can be designed to pump sediment clear out of the waterway in instances of waterways which are critically over-sedimented. This sediment could then be used to restore alluvial planes which were damaged by early miners. Restored alluvial planes would improve water quality by restoring the biodiversity of lands adjacent to waterways.

In summary, suction dredging in California's waterways helps loosen unwanted sediment so that it can migrate to the ocean, thus improving water quality, particularly in dammed waterways. Larger dredges could increase this process. And, studies by river hydrologists working with suction dredge miners could find ways of creating regulations which would permit suction dredge miners to improve degraded waterways simultaneously as they mine.

Yours truly,

Brian Hill
Anthropologist specialized in suction dredge mining for 30 years
Founder of the Association for Responsible Mining - www.communitymining.org