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SUPERIOR COURT OF THE STATE OF CALIFORNIA

COUNTY OF SAN BERNARDINO

Coordination Proceeding Special Title (Rule 1550(b) **SUCTION DREDGE MINING CASES**	Coordination Case No. JCPDS 4720 **DECLARATION OF STAFFORD LEHR IN SUPPORT OF DEFENDANTS' OPPOSITION TO MINERS' JOINT MOTION FOR INJUNCTION** Date: June 23, 2015 Time: 8:30 a.m. Dept: S36 Judge: Honorable Gilbert Ochoa Trial Date: None Set
Included Actions: Karuk Tribe of California, et al. v. California Department of Fish and Game Kimble, et al. v. Kamala Harris, Attorney General of California, et al. Public Lands for the People, et al. v. California Department of Fish and Game The New 49er's, et al. v. State of California, California Department of Fish and Game, et al.	 RG 12623796 - Alameda County CIVDS 1012922 - San Bernardino County CIVDS 1203849 - San Bernardino County SCCVCV120048 - Siskiyou County

I, Stafford Lehr, declare as follows:

1. I am the Chief of the Fisheries Branch for the California Department of Fish and Wildlife (CDFW) (named the California Department of Fish and Game before January 1, 2013) and have served in that specific capacity since February 2011. This is a position within the Wildlife and Fisheries Division of CDFW. I am responsible for developing and implementing Department-wide policies programs for fisheries and related aquatic resource management. This includes, for example: directing complex sensitive research activities involving statewide habitat monitoring, data collection, and analysis of inland sport fish regulations; recommending and/or establishing policy level direction on environmental issues involving California Environmental Quality Act review and impact on sensitive fish species and associated aquatic habitats. Additionally, I work with State, Federal and local government agencies, private organizations, and constituent groups to strategically develop and implement CDFW fisheries policies and programs. I represent the CDFW on high-level task forces and committees, before the legislature, and through various other venues relating to fishery issues. I also oversee the policy and programmatic operation of all CDFW fish hatcheries.

2. I have been employed by the CDFW since January 1992. From January 2008 to January 2011, I served as a Senior Environmental Scientist, in the North Central Region of CDFW, specifically supervising biologists in the Sierra districts (Calaveras to Plumas counties) of the Region. In that capacity, I supervised the staff involved in the development and review of the suction dredge analysis for the North Central Region of the Department. My staff participated in the review of the fisheries and aquatic resource distribution and accompanying analysis of effects of suction dredging upon those resources. From September 2006 until December 2008, I was a Senior Fisheries Biologist in the North Central Region of the CDFW. In that role I represented the Department in Federal Energy Regulatory Commission relicensing proceedings and other water rights and development projects. I performed technical analyses for aquatic resource issues associated with large-scale hydroelectric and water development. Those issues ranged from fish population, habitat, hydraulic, and temperature modeling to amphibian and benthic macroinvertebrate assemblages. During that time frame I was also acting District Fisheries

Biologist for Lake Tahoe and Alpine, Amador, Calaveras, and El Dorado counties. From 1992 through 2008, I was the District Fisheries Biologist for Lake Tahoe and Alpine, Amador, Calaveras, and El Dorado counties. In that capacity, I oversaw all fisheries management issues. Additionally, I evaluated existing fishery and ecosystem conditions for fish populations, amphibians, macroinvertebrates, riparian and habitat conditions and recommended management plans to enhance the fisheries or ecosystems on both federal and private lands. I also evaluated and assessed suction dredge operations in aquatic habitats under the 1994 regulations.

3. From August 1990 through December 1991 I was a Fisheries Technician for Habitat Restoration Group, a private consulting firm. I performed field evaluations of aquatic ecosystems for environmental compliance programs.

4. I have a Bachelor of Science degree in Wildlife Zoology, with an emphasis in Fisheries Ecology and three years of graduate course work in aquatic ecology and fish populations from California State University, San Jose.

5. In 2009, I was asked to participate in the amendment of 1994 regulations for suction dredge mining and the preparation of related studies and documentation for the California Environmental Quality Act (CEQA). In my capacity, as supervisor of the Sierra Districts of the North Central Region, I assigned staff to provide geographic and species specific expertise to the regulatory and CEQA analysis. During my 16-year tenure as a District Biologist I evaluated and performed site assessments for dozens of individual suction dredge operations in west slope Sierra Nevada river systems.

6. In April of 2013, I was asked to prepare a Declaration In Support of Defendant California Department of Fish and Wildlife's Opposition to Motion for Preliminary Injunction in *Kimble v. Harris*. (A copy of which is attached hereto as Exhibit A to this Declaration.)

7. All of the statements in my 2013 Declaration still hold true today.

8. I have reviewed the plaintiff's opening brief on this motion as well as well as the declarations of James Buchal, Joseph Greene, and Eric Maksymyk.

9. In 2014 and 2015 the Klamath River and its tributaries are experiencing deteriorating water quality and quantity conditions due to the exceptional drought conditions in California.

(The same conditions are being observed in waterbodies throughout the State of California.) Currently, flows are stable but dropping and we already are experiencing temperature and disease (*Ceratomyxa shasta*) stressors. As of May 13, 2015 close to 100 percent of wild fall run Chinook salmon (*Oncorhynchus tshawytscha*) juveniles have clinical signs of disease due to this parasite. Populations of State and federal-listed threatened coho salmon (*Oncorhynchus kitsutch*) have been stressed due to lack of suitable spawning and rearing habitat in the Shasta and Scott Rivers (major tributaries to the Klamath River). Spring-run Chinook are still depressed and further exacerbated by drought conditions.

10. The Department of Fish and Wildlife has engaged in an unprecedented effort to work with local landowners and non-governmental organizations to reach agreements in the Klamath River watershed to improve conditions. These agreements have put more water in the system by having landowners forego or reschedule water diversions. They have also allowed the Department to physically rescue and relocate (to places higher in the watershed, with more water) more the 116,000 juvenile coho and thousands of juvenile steelhead from the Shasta and Scott Rivers in 2014. .

11. If the miners were allowed to operate under the 1994 suction dredge regulations there would be no ability to suspend or close suction dredging due to adverse conditions resulting from drought. Under the 2012 regulations, cold water refugia areas would be protected. In either case, the conditions in the Klamath River watershed are under extreme duress due to drought, and suction dredge activity, whether on Federal or private property, is highly likely to have an adverse effect. Protection of cold water refugia is even more critical under the current drought conditions. State, Federal and Tribal interests are working on mitigating flow regimes in the Klamath River watershed to provide suitable water quality criteria. Monitoring of disease conditions raised the Alert Level for fish health to Orange, a high level. Agencies are positioning options to release pulse flows to mitigate high *C. shasta* spore levels and these conditions are likely to worsen through the summer and fall months. High parasite loads caused an extreme fish kill (greater than 40,000+ fish) in 2002 in the lower Klamath River and a similar event was prevented in 2014 due to pulse flows released from reservoirs in the Klamath-Trinity watershed.

12. If suction dredging were permitted in these drought conditions, habitat alteration could affect the minimal cold water refugia present near the confluences of tributary streams and within those systems where spring sources enter deeper pool networks. This would likely further stress populations of listed and non-listed salmonids. Alteration of spawning gravels could further reduce limited spawning habitat that is currently affected by the continued exceptional drought.

13. Due to the drought conditions, statewide water quality and quantity in many systems is likely to be inadequate to support fish survival as the summer progresses, resulting from impeded passage of spawning fish, increased vulnerability to mortality from predation and physiological stress. Furthermore, survival of eggs and juvenile fish in these systems over the coming months will be extremely low. The historically low water conditions in the Klamath River watershed will concentrate coldwater fish populations into shrinking pools of cold water habitat. Suction dredging along with other human-related disturbances within freshwater habitats when coupled with drought-related environmental stressors, such as high water temperature, low dissolved oxygen, and severely reduced suitable habitat, may seriously affect reproductive success and survival rates.

14. We do not know how all these factors will play out in the summer months, and where the tipping point will be to cause a massive fish kill in the Klamath River watershed or elsewhere. But the current drought conditions are very extreme. Adding one more stressful event, such as suction dredge mining, could have large impacts.

15. Other watersheds in California have been experiencing the fourth year of exceptional drought. As of May 11, 2015 the California snow pack was estimated at less than 1 percent. Streams and rivers are currently experiencing flow conditions that are more indicative of conditions in late-September/early October. If suction dredging were to be occurring in habitats where sensitive fish and amphibians reside there would likely be additional stressors on populations already negatively affected by the ongoing exceptional drought. Fish and amphibians already have limited nursery and rearing habitat and alterations of those habitats could result in negative impacts to those populations.

16. Many of the declarations submitted by the Miners state that the fish love to feed in the plumes and that the miners have never witnessed adverse effects upon the individual fish behavior. What they are missing is the altered feeding station effects that are artificially created by the dredge operation. When that operation ceases, the fish then must redistribute themselves into normal feeding station locations that may or may not be as productive due to the alteration of the habitat. Fish during the warmer summer months must position themselves in high feeding lanes to compensate for increased metabolic activity and fish swimming performance. The analogy is that the plumes created by suction dredge activities create a false feeding habitat and the fish are in something akin to a "zoo". Take the "zoo" away and the population must develop compensatory mechanisms to adapt. Intraspecific competition will then result in concert with artificially elevated fish densities brought forth from the artificial forage environment. In addition to this, suction dredge mining changes the bottom of streams to an artificially homogenous condition, without the places to hide and forage that fish (and especially juvenile fish) need to survive and thrive. All of these changes impact fish after the suction dredge miners leave, and so it is not the least bit surprising that miners do not see these effects.

17. I have reviewed the declaration submitted by Joseph Greene. Mr. Greene is an ecotoxicologist according to his Curriculum Vitae. He does not possess a degree in Fisheries biology or ecology and does not appear to have a degree in geomorphology. I would question his assessment of the purported positive effects of suction dredging on riverbed features and hydraulic dynamics as he states. He also does not possess credentials regarding fish biological responses to feeding strategies resultant from altered habitat conditions or water quality.

18. I have reviewed the declaration submitted by Eric Maksymyk. Mr. Maksymyk is obviously a highly educated veteran and an expert in Systems Management and Operations. His analysis and conclusions regarding the lack of negative effects upon native passerines does not take into consideration nesting habitat disturbance. I am not an expert ornithologist but many activities on public lands are regulated to protect nesting areas and surrounding habitat. Disturbance (for example, public recreational activities and other uses) are regulated to minimize negative effects upon nesting and breeding activity areas. Mr. Maksymyk states that birds do not

nest "in the middle of rivers and streams where they operate...." This is not a true statement. Several of the birds discussed in the 2012 environmental impact report are nesting in the river banks themselves, and many birds nest in branches and overhanging vegetation that can extend into areas where suction dredge activities may alter behavior patterns and thus the Department needs to provide minimization recommendations to protect that habitat.

I declare under penalty of perjury that the foregoing is true and correct. Executed this 9th day of June 2015, in Sacramento, California.

STAFFORD LEHR

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