Scoping Report

for the

Suction Dredge Permit Program Subsequent Environmental Impact Report

Prepared by:

California Department of Fish and Game

February 2010

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Suction Dredge Permit Program
Subsequent Environmental Impact Report

This report available online at: http://www.dfg.ca.gov/suctiondredge/

Alternate communication format available upon request. If reasonable accommodation is needed, call Jordan Traverso at (916) 654-9937 or the California Relay (Telephone) Service for the deaf or hearing-impaired from TDD phones at 1-800-735-2929 or 711.

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I. Introduction

This report summarizes the comments and questions raised during the public scoping period for the preparation of a Subsequent Environmental Impact Report (SEIR) being developed by the California Department of Fish and Game (DFG) for the Suction Dredge Permit Program (Program).

Scoping is the process of determining the coverage, focus, and content of a SEIR as prescribed by the California Environmental Quality Act (CEQA). Scoping helps to identify the range of actions, alternatives, environmental effects, and mitigation measures to be analyzed in depth in the SEIR. It also helps to select methods of assessment, and to eliminate from detailed study those issues that are not important to the decision at hand. Scoping is also an effective way to identify and consolidate the concerns of a project's proponents, interested Federal, State, and local agencies, and other interested parties, including opponents of the project.

The scoping process focused on determining the breadth of all the issues and concerns shared by miners, residents and other interested parties regarding the Program. This report includes written public comments received during the scoping period (November 4, 2009 to December 3, 2009). The report has been circulated with appropriate DFG staff, and will be used to identify important issues for analysis in the SEIR.

Background

The existing regulatory framework governing suction dredge, as administered by DFG, is rooted in statutory amendments to the Fish and Game Code that took effect originally in the late 1980's. Under the statute and associated regulations, any California resident or non-resident may obtain a suction dredge mining permit from DFG upon payment of a fee required by statute. On average, DFG has issued approximately 3,200 suction dredge mining permits to California residents every year for the last 15 years.

DFG's existing regulations governing suction dredge were promulgated after preparing and certifying an environmental impact report (EIR) under CEQA in 1994. DFG considered proposed amendments to the existing regulations governing suction dredge mining in 1997, releasing a draft subsequent environmental impact report for public review that same year. However, the 1997 Draft SEIR was never completed or certified.

Need for Subsequent Environmental Impact Report

A lead agency prepares a SEIR when, after having prepared and certified an earlier EIR for the same project, new information, changed circumstances, or project changes are proposed that involve new significant or substantially more severe environmental effects not previously addressed in the earlier EIR. A SEIR is also appropriate where the prospect of such new or more severe environmental

effects exist and more than minor additions or changes to the earlier EIR are necessary to provide meaningful, updated environmental review.

This project stems from a legal challenge to the existing permitting program initiated in Alameda County Superior Court in May 2005 (*Karuk Tribe of California et al. v. California Department of Fish and Game*). In December 2006, the Alameda County Superior Court issued an order directing the Department to "conduct further environmental review pursuant to CEQA of its suction dredge mining regulations and to implement, if necessary, via rulemaking, mitigation measures to protect Coho salmon and/or other special status fish species in the watershed of the Klamath, Scott, and Salmon rivers, listed as threatened or endangered after the 1994 EIR." Because DFG determined more than minor changes to the 1994 EIR would be needed, a decision was made to prepare a subsequent or supplemental environmental impact report that would be statewide in scope.

In close coordination with the State Water Resources Control Board (SWRCB), DFG is working with a CEQA consulting firm to prepare a SEIR. Public scoping for that effort occurred in November and early December of 2009 and a draft SEIR is anticipated to be available to the public in the fall of 2010. Any proposed updates to the suction dredge mining regulations would also be circulated alongside the draft SEIR.

Moratorium on Suction Dredging

On August 6, 2009, Governor Schwarzenegger signed SB 670 (Wiggins) into law, placing a temporary prohibition on the use of vacuum or suction dredge equipment for instream mining in any California river, stream or lake, regardless of whether the operator has an existing permit issued by DFG. The temporary moratorium affects both individuals and companies that use vacuums or other suction dredging equipment for instream mining in any California river, stream or lake. The temporary moratorium does not apply to suction dredging operations performed for the regular maintenance of energy or water supply management infrastructure, flood control, or navigational purposes.

The ban will remain in effect under SB 670 until three things occur:

1. DFG completes court-ordered environmental review of its permitting program;
2. DFG updates the existing regulations governing the program as necessary; and
3. The updated regulations take effect.

The court-ordered environmental review required by the California Environmental Quality Act (CEQA) is currently underway and DFG expects to complete the effort, including any updates to the existing regulations, by late summer 2011.

2007 Scoping Process Incorporated in Current Effort

As part of its effort to comply with the December 2006 Court Order, the Department issued a public notice in October 2007, soliciting information regarding the environmental impacts that may occur in California as a result of suction dredge mining under the Department's existing permitting program (Cal. Reg. Notice Register 2007, No. 42-Z, p. 1783, October 19, 2007) (hereafter, the October 2007 Public Notice). In so doing, the Department sought information from interested members of the public and various public agencies relevant to the following issues:

- Whether suction dredge mining results in adverse impacts to the environment;
- Whether suction dredge mining under the Department's current regulations governing such activities results in deleterious effects to fish;
- Whether there are changed circumstances or new information available since 1994 regarding suction dredge mining and the environment generally; and
- Whether changed circumstances or new information available since 1994 indicates that suction dredge mining under the Department's existing regulations is resulting in new significant or substantially more severe environmental impacts than previously considered by the Department in the 1994 EIR.

In response to the October 2007 Public Notice, DFG received comments from approximately 70 federal, state, and local agencies; various tribal, environmental, and mining interests; representatives of the academic and consulting community; and members of the public DFG subsequently determined that a SEIR was necessary and advised the courts accordingly. The 70 comments received in 2007 will be considered as part of the current effort and have been incorporated into this report.

Additionally in 2007, the State Water Resources Control Board (SWRCB) solicited comments regarding the effects of suction dredge mining on water quality. Comments were limited to the water quality concerns associated with suction dredge mining. While the SWRCB comment solicitation was not a CEQA process, the comments were reviewed as a part of preparing the Literature Review for this SEIR. The 2007 SWRCB comments are available online at: http://www.waterboards.ca.gov/water_issues/programs/cwa401/comments_suctiondredge.shtml

II. CEQA Scoping Process

The State of California's CEQA Guidelines provide guidance for the scoping process. Scoping has the following general objectives.

1. *To identify the concerns of the affected public and agencies.*
2. *To define the issues and alternatives that will be examined in detail in the SEIR while simultaneously devoting less attention and time to issues that cause no concern.*
3. *To appropriately scale the overall review process by obtaining early feedback on draft statements of the issues and preliminary findings. Environmental studies and evaluations can then be focused on areas and issues of outstanding concern.*

DFG is committed to a planning process that includes strong public involvement, is based on sound science, and is open and transparent.

Notice of Preparation

CEQA requires formal public announcement of the intent to prepare a SEIR for a proposed project. In compliance with CEQA, the DFG issued a Notice of Preparation (NOP) on October 26, 2009. The NOP presents general background information on suction dredging, the scoping process, the environmental issues to be addressed in the SEIR, and the anticipated uses of the SEIR. Included with the NOP was the Initial Study which provides a preliminary environmental impact analysis for the Program. Through the Initial Study, the range of environmental issues to be addressed in the SEIR will be narrowed down to include only those topics with potentially significant effects. The Initial Study also describes the Program as currently envisioned. The Program (i.e., the regulatory updates) will be refined during the process of preparing the draft SEIR, depending on, among other things, the conclusions of the Initial Study and input received in comments responding to this NOP. The Department prepared the NOP pursuant to CEQA Guidelines section 15082.

The NOP invited the public to offer comments during the scoping period, which began November 4, 2009 and closed December 3, 2009. A copy of the NOP is provided in Appendix A.

Public Outreach Undertaken

A press release was prepared regarding the meetings and was sent to various radio, television, and print media (Appendix B). Newspaper ads (Appendix C) were prepared and placed in the following publications:

Friday, Nov. 13:	*Fresno Bee*, Fresno, California
Monday, Nov. 16:	*Sacramento Bee*, Sacramento, California
Tuesday Nov. 17:	*Redding Record Searchlight*, Redding, California

In addition, a direct mailing (Appendix D) was prepared and sent to all current suction dredge permit holders and other interested parties.

Public Scoping Meetings

Three public scoping meetings were held to allow the general public and cooperating agencies an opportunity to learn about the SEIR process, the proposed project, and ask questions. The meetings were held as follows:

Fresno: Monday, Nov. 16, 5:00 pm
California Retired Teachers Association Building
3930 E. Saginaw Way
Fresno, CA 93726

Sacramento: Tuesday, Nov. 17, 5:00 pm
City of West Sacramento Galleria
1110 West Capitol Ave.
West Sacramento, CA 95691

Redding: Wednesday, Nov. 18, 5:00 pm
Shasta Senior Nutrition Program Center
100 Mercy Oaks Drive
Redding, CA 96003

Meeting Format

The Scoping Meeting opened and closed with an Open House. A formal meeting with presentations and a question and answer period was held in-between.

Open House

At each meeting, an Open House was held from 5 – 6 p.m. and again following the presentations and question and answer period. Workshop stations were staffed by DFG personnel and consultant staff. Attendees were invited to talk one-on-one with staff to ask questions and discuss perspectives. Signage and posters provided additional information. Attendees were advised that comments were not being recorded at the workshop stations – and that attendees should submit any comments in writing. The workshop stations were as follows:

Station 1: Sign-in / Orientation
At this station, sited at the entrance, staff welcomed the public and provided a set of handouts including the agenda, meeting ground rules, a Frequently Asked Questions (FAQs) document, a Comment Form, and a 4 x 6 index card. (Appendices E - G). Staff asked the attendees to sign-in and provide contact information for future project-related communications.

Station 2: CEQA Planning Process
Staff at this station explained the general CEQA process and where DFG is at in terms of developing and reviewing the suction dredge permit program. They also described why the SEIR is necessary and discussed the CEQA topics to be evaluated in the document. Staff answered

general questions about the CEQA and rulemaking process, how to engage during the workshop, and encouraged people to visit the other stations, ask questions, and develop scoping comments.

Station 3: Aquatic Biology
Staff at this station provided the public with the definition of "fish" under the Fish and Game Code, and provided some examples related to aquatic biology. They discussed why this topic is important and how the topic is being addressed in the DSEIR. Posters illustrating the life cycle model for an example species and the seasonal timing of and potential effects related to each life stage were displayed.

Station 4: Water Quality / Hydrology
Staff at this station explained why water quality is an important topic, and discussed how the topic is being addressed in DSEIR. The station included a list of impact mechanisms, and a map of key streams in California.

Station 5: Suction Dredge Mining
Staff at this station provided the public with an overview of how suction dredge mining is undertaken and what the current moratorium entails. A poster graphic with an illustration of suction dredging was displayed. FAQs regarding the moratorium were handed out. Copies of the Initial Study were available to anyone who asked for one. Copies of the Literature Review on the Effects of Suction Dredgers were available for review. Finally, staff provided interested suction dredgers with a copy of a draft suction dredge survey for discussion, and to obtain their initial input on the survey content and format.

Scoping Meeting Presentations

The DFG Suction Dredge Permit Program Project Manager, Mark Stopher, opened the scoping meeting around 6 p.m. He welcomed and thanked the public for attending. He presented a brief overview of the project and discussed the current moratorium on dredge mining. Mr. Stopher also presented an overview of the scoping process and the role that attendees can play in the process.

Facilitator Austin McInerny, Center for Collaborative Policy, also welcomed the public. He reviewed the purpose of the meeting, agenda, meeting format, and ground rules. Mr. McInerny expanded on the scoping process. He explained that a report summarizing the issues raised in all written comments received during the public comment period would be completed. He further explained that this report, when finished, would be publicly available and meeting attendees would be notified of its availability. Appendix E presents the standardized meeting agenda used for each meeting.

Michael Stevenson, Project Manager for Horizon Water and Environment, the consulting firm leading the preparation of the SEIR, then presented an overview of the CEQA and rulemaking process, as well as the major conclusions of the Initial Study.

The public was asked to write all questions on an index card and turn them in to the facilitator. Recognizing the large number of attendees, the purpose was to avoid duplicative questions and efficiently provide answers. There was no limit to the questions that an individual could ask, but the facilitator cautioned that time may not permit all questions to be publicly answered. Going

through the cards, the facilitator read a question and the appropriate staff or consultant provided the answer. As it turned out, there was adequate time in all three meetings to address all the questions. All questions submitted are listed in (Appendix H).

Mr. McInerny also reminded the public that while the questions would be included in the scoping report, it was important for concerned parties to submit written comments for consideration in the development of the SEIR. Attendees were encouraged to provide comments in writing either on the blank comment forms that were distributed at the meetings (Appendix G), by U.S. mail after the meetings, or by e-mail to dfgsuctiondredge@dfg.ca.gov.

Participating Staff

The following state agency representatives and supporting consultants participated in one or more of the scoping meeting:

Department of Fish and Game:

Yvette Adams
Nathaniel Arnold
Steven Baumgartner
Brian Beal
Dennis DeAnda
Michael Dege
John Hanson
Tim Hovey
Sherry Howell
Stafford Lehr
Mary Mason
Phi McKay
Rachel McNeal
Julie Means
Carol Oz
Robert Pelzman
Mark Stopher
Jim Whelan
Scott Willems

State Water Resources Control Board

Rick Humphreys

Center for Collaborative Policy

Austin McInerny
Jodie Monaghan
Christal Love

Horizon Water and Environment, LLC

Michael Stevenson
Sandy Devoto

Cramer Fish Sciences

Joe Merz

Theta Consulting Services

Tom Trexler

Meeting Attendance

The three meetings were well attended. The public was invited, but not required, to sign in and provide contact information to receive project information in the future. 77 people signed the attendance sheet at the Fresno meeting; 203 people signed the attendance sheet at the Sacramento meeting; 137 people signed the attendance sheet at the Redding meeting. A copy of the sign-in sheets can be found in Appendix I.

III. Public Comments Received

All written comments received in response to the NOP will be considered during the preparation of the draft SEIR. Collectively, 216 written comments were received via U.S. Mail, email, and hand delivery. The majority of the comments supported the resumption of suction dredging. Many comments were from suction dredge permit holders. There were also a substantial number of comments opposed to suction dredging and/or requesting that suction dredging be permanently banned. All written comments can be found in Appendix J.

In addition, the seventy (70) comments received in response to the October 2007 Public Notice will be considered as part of the current effort.

Review of Scoping Comments Received

To ensure that a neutral, transparent analysis of all public comments was conducted, DFG asked CCP to assist in the review, categorization, and memorialization of all comments. The comments presented reflect only the views of the individual commenter, and do not necessarily represent the views of neither DFG nor the SWRCB.

Through the process of analyzing all the comments, several major themes emerged. The following pages summarize the comments received and report them categorically under the main topics of:

- Key issues relevant to the environmental review;
- Rule making process and approaches to regulatory updates; and
- Issues outside the scope of the environmental review.

A brief summary of the major perspectives that surfaced during the review of all comments include:

1. Almost all dredgers believe that dredging is beneficial to streams and fish based on:
    a. Observations of fish feeding around dredges;
    b. No observations of fish mortality as a result of dredging;
    c. Improved habitat by providing holes, spawning gravel, and cool water areas; and
    d. Removal of mercury, lead, iron, and trash.
2. Most dredgers believe that “others” cause fish decline including:
    a. Tribal gill net fishing;
    b. Recreational and commercial fishing;
    c. Dam operations; and
    d. Industrial and agricultural pollution.

3. The term “fish,” as defined by the Fish and Game Code, does not appear to be well understood.

4. A small minority of comments oppose suction dredging on the grounds that it is harmful to fish and other riverine species and the environment.

5. Many believe that special interest groups are behind the moratorium on suction dredging.

Key Issues Relevant to the Environmental Review

Environmental Factors Potentially Affected

Aesthetics

- The SEIR should consider that there is, on average, only 1 dredge for every 2,500 miles of rivers and streams in the entire state. That hardly constitutes a "potentially significant impact."

- The SEIR should consider that the presence of a dredger does not constitute an adverse impact on a scenic vista.

- The SEIR should consider aesthetics from the fish's point of view. They likely don't care.

- A few comments suggested aesthetics should consider not only impacts occurring during dredging, but also residual impacts after dredging takes place (discarded hoses, abandoned equipment, ropes left tied to trees/rocks, etc).

- The SEIR should consider the effects of floating garbage (lost gas cans, runaway/abandoned dredges, etc).

Air Quality

- Many comments recommended that the SEIR analyze the actual impacts of suction dredging on air quality. How can 3,000 dredges throughout the state possibly produce emissions that exceed quantitative thresholds for ozone precursors with all of the millions of cars and trucks on the road?

- The SEIR should consider that a suction dredge engine does not impede compliance with greenhouse gas emission reductions mandated by SB32.

- The SEIR should consider air quality impacts of mercury vaporization during the gold recovery process.

- Cumulative GHG emission analysis should consider net benefits of suction dredging (i.e. not commuting).

- The odor emitted from suction dredging should be considered a potentially significant impact and evaluated accordingly.

Biological Resources

- The SEIR should consider the effects of dredging on the macroinvertebrates' life cycle - since macroinvertebrates support fish. This impact may be more important to fish than the direct impact of dredging.

- The SEIR should question the impacts to benthic invertebrates. There is limited displacement of insects after passing through a suction dredge. Additionally, recolonization is rapid (within 45 days of dredging).

- The SEIR should consider that adult fish are not acutely affected by entrainment.

- The SEIR should consider the benefits of fine silt on the growth of aquatic bacteria – a food source for young fish.

- The sediment runoff from dredging is too small to produce a bottom "blanket" which might adversely affect young fish eggs.

- By observation, silt and mud do not cause injury to the gills of a fish. Studies have shown that young salmon can live in concentrations of sediment in excess of 760 parts per million (ppm).

- Changing water levels, temperature fluctuations, and varying water flows due to man-made barriers are more deleterious to fish than suction dredging.

- The SEIR should consider studies that show dredge activities do not negatively affect juvenile steelhead and Coho salmon feeding, growth, and production.

- The SEIR should consider removal of the statement "dredge tailings may offer attractive yet potentially less stable material for spawning than natural gravels" - because these are natural gravels. Why would suction dredging change gravel quality? The SEIR should also consider that DFG projects are currently placing gravel that is not as good in the American River at Hazel Ave. below the bridge hatchery to promote spawning beds for salmon.

- Numerous comments requested the SEIR consider the actual effect of impacts of 3,400 miners working an average of 10 days per year versus the millions of visitor days to national forests and other public lands and waterways to fish, camp, raft, backpack, and engage in other recreational activities. The SEIR should consider the relative impacts from dredging and not the cumulative impacts from all recreational activities.

- Numerous comments requested the SEIR consider the adverse impacts from fishing. Fishing kills; dredging does not.

- The SEIR should look at the adverse impacts from miners destroying riparian habitat, destroying spawning beds, and leaving trash on public lands.

- The SEIR should consider the risk to aquatic life being pulled into the intake nozzle is very low as the intake is screened and restricted by a foot valve. The size of material inadvertently pulled into the pump is limited.

- The SEIR should consider banning suction dredging in the critical habitat of any listed or sensitive aquatic species until further analysis or studies prove that suction dredging has no adverse impact on these species.

- The SEIR should evaluate the effects of chronic disturbance on fish as suction dredge activities force fish to move to less favorable habitats.

- The SEIR should consider the anadromous lamprey (Pacific and river) who are particularly susceptible to dredging since ammocoetes spend up to five years in streams before emigration. The ammocoetes preferred habitat is fines and detritus, making them extremely vulnerable to dredging.

- The SEIR should consider freshwater mussels who are extremely susceptible to dredging and are imperiled species in California.

- The SEIR should evaluate disturbances to riparian vegetation, downed woody debris, and large rock/boulders outside the wetted stream surface caused by high-banking, camping, and trail and access route creation.

- The SEIR should use scientific evidence to evaluate the potential to degrade or substantially reduce the habitat of fish and wildlife.

- The SEIR should consider disturbance-related fungal impacts on frog egg masses.

- The SEIR should consider that fish populations remained relatively stable during the 80 year period (1890-1963) when antiquated gold mining activities were doing worse damage.

- Real pollution issues affecting water quality and fish habitat are related to agricultural diversions, dams, industry, logging, and fishing; not suction dredging. In comparison, the overall effects from suction dredging are small and of no consequence.

- The SEIR should characterize locations of thermal refugia in each river and disallow mining in those locations and adjacent buffer zones.

- The SEIR should consider the impacts on plants with cultural and medicinal uses.

- Many comments asked if the effects to the native "fish" (as defined to include benthic animals, mollusks, amphibians, etc) populations by suction dredging will be judged on the basis of specific river basins and those segments of a river delimited by dams. Several comments cited examples of survey research documenting river reaches above dams that are devoid of target anadromous fish species.

- The SEIR should include a new Biological Opinion (BO) to ensure protection of Coho salmon.

- The SEIR should consider the impact of transport of invasive species.

- Several comments asked if suction dredging is deleterious to fish, then fish populations should have correspondingly increased as suction dredge permits have decreased.

- The SEIR should consider the effects to amphibians by the removal of large woody debris through dredging practices.

- The SEIR should include fish stocking as part of the cumulative effects.

- The SEIR should include data that measures or monitors changes in the amount of algae, changes in the amount of plant life, changes in aquatic insect life, and changes in various physical characteristics in water (i.e. pH), dissolved oxygen levels, total nitrogen, total phosphorus, that may or may not occur during suction dredge mining. These are indicators of stream bed health and of the health of the fishery

- The SEIR should consider the impacts to wild trout streams.

- The SEIR should consider the impacts of suction dredging on egg masses and tadpoles of California Red-Legged Frog, Mountain Yellow-Legged Frog, and Foothill Yellow-Legged Frog.

- The SEIR should evaluate heavy metal contamination on fish embryos and the stream benthic community. The Biological Resources checklist in the Initial Study underestimates the problem.

Cultural Resources

- The SEIR should explain how dredging may “disturb human remains.”

- The SEIR should consider the loss of cultural artifacts from historical mining operations.

- The SEIR should consider that “Finds” could also be regarded as a benefit since they can be given to historians for study.

- The SEIR should consider the other effects on culture (activities) by the presence of miners.

- The SEIR should consider the ban of this activity as a loss of a cultural activity.

- The SEIR should discuss the impact of instream suction dredge mining on present-day cultural activities, including traditional ceremonies of Indian people and the use of traditional sites for gathering basketry materials and medicinal plants.

- The SEIR should discuss the cultural impact of the loss of salmon runs which are at the cultural center of some California Indian Tribes.

Geomorphology

- Several comments noted that dredging impacts on channel geomorphology are confined to the area dredged and the area immediately downstream.

- Many comments note that the SEIR should consider that impacts to geomorphology from suction dredging are short-lived and typically repaired by winter flows. No permanent harm is done to dredge sites or downstream users.

- Several comments cited high water events in the last 30 years that have washed away all human impacts and requested the SEIR consider potentially significant impacts in the context of natural and reoccurring events.

- The SEIR should consider the adverse impacts from over-dredging and the transformation of spawning grounds into moonscapes.

- The SEIR should not consider the effects of suction dredging on excavating stream banks. This is an illegal activity and miners do not do this.

- The SEIR should consider that suction dredging can cause changes in stream channel morphology leading to stream channel instability.

Hazards and Hazardous Materials

- The SEIR should consider the adverse impacts of instream refueling of suction dredges.

- The SEIR should evaluate the potential hazards of mercury both used and recovered by suction dredge miners. The Hazards and Hazardous Materials checklist fails to discuss fully the potential hazard.

- The SEIR should consider that the “significant hazard” created by the transport, use, and disposal hazardous materials such as gas, oil, nitric acid, mercury, etc. This applies to many other outdoor activities as well as suction dredging.

- The SEIR should consider that very little chemical processing of gold is done in the field. Most miners process their find at home.

- The SEIR should consider that suction dredges can be used to put out fires.

- The SEIR should consider the odor emitted from dredges to be a significant impact.

- The SEIR should consider the impacts of chemicals migrating to rivers via gravity.

- The SEIR should consider sewer and gravel plant spills/outflows; they are the real culprit of river health damage, especially in the Russian River.

Noise

- The SEIR should consider that aquatic life does not seem to be adversely affected by the noise of the dredge.

- The SEIR should consider that the noise produced by suction dredging is inconsequential compared to the noise created by boaters going down the river, yelling, splashing, and slapping their oars on the water.

- The SEIR should consider the adverse impacts of noisy dredge engines intruding on the peaceful tranquility of the outdoors.

- Sound from 2 stroke engines should be considered significant.

- The SEIR should evaluate the noise and vibration impacts on fish and birds from dredging activities in the water, as well as along riparian corridor habitats.

Public Services

- The SEIR should consider that suction dredges can be used to put out fires.

- Police and wardens do not provide enough enforcement of the ban. What enforcement would be provided for new regulations?

- More clarification is needed in the SEIR on illegal activity statistics.

Recreation

- Suction dredging impairs enjoyment by other recreational users and nearby residents (turbidity, sediment, noise, aesthetics, intimidation, garbage); a significant impact. SEIR should identify stream segments where significant densities of suction dredgers are located and provide mitigation to reduce impacts.

- Ban on dredging allows for other recreationalists to visit areas; economic impact can vary and should be considered in the SEIR.

- Dangers posed by dredge holes could be deadly. The SEIR should answer the question: couldn't the Department be held liable in the event of serious injury or death since they are the ones issuing the permits?

- The percentage of the population that is involved in gold dredging is less than .00932% of the total California population. This overall proportion should be reflected in evaluation of all impacts in the SEIR.

- Suction dredging is different than the other types of outdoor activities and recreational programs in California – and should not be considered 'recreational.' The term 'recreational' should be removed as it implies an unimportant and marginal activity.

Water Quality and Toxicology

- Mining debris is chemically inert, makes no oxygen demands on the stream and takes nothing away nothing from the flowing water that the fish need.

- The SEIR should consider that water quality is only impacted during the actual operation of a suction dredge. The average miner operates a suction dredge 2 – 4 hours a day, impacting water quality for a short time.

- The SEIR should not consider the effects of dredging disturbing mercury. Unless you can stop mountain streams from flooding every year, you cannot stop mercury transport.

- The SEIR should consider the adverse impacts of releasing long sequestered mercury into the waterways, posing a risk to wildlife and human health and safety.

- The SEIR should analyze the causal factors of mercury methylation and eliminate suction dredging as a cause of methylation.

- The SEIR should define "floured mercury" and how it occurs. Suction dredging does not break up mercury and pass it through the sluice box; mercury is concentrated into riffles.

- The SEIR should consider that the abiotic-formation of methyl mercury may involve the presence of other methylated metals to serve as potential methyl donors. The possibility that of passing mercury-containing sediments over the riffles in the sluice box will methylate the mercury is highly questionable. Suction dredging may actually reduce the biological formation of methyl mercury through the aeration of sediments.

- The SEIR should consider that the adverse impacts of methyl mercury should be readily identifiable through the definitive impact on sentinel fish, such as sensitive aquatic life. Malformed embryos, reduction in hatch, premature die-off of fry and reduction in adult populations should be readily observable indicators. Test sites within the state would allow DFG to study the issue under controlled conditions. Studying records of fish populations over time could provide similar information.

- The SEIR should further describe the paragraph "Otherwise substantially degrade water quality" (pg. 74, ¶ 3). How can activities have the potential to incrementally degrade water quality and still meet water quality standards? This seems like a contradiction.

- The SEIR should consider the California Department of Public Health, Division of Drinking Water's chemical data base which records the results of chemical analysis by public water supply systems. The results show that mercury in the mother lode counties is below the detection level for reporting of 1.0 ppb. Suction dredging clearly has a less than significant impact for water downstream of dredge operations.

- The SEIR should consider that jet skis have much bigger pumps than suction dredges – and create greater adverse impacts.

- The SEIR should focus on suction dredge impacts to water quality during low stream flows. There is not enough water to easily dilute or spread the sediment plume/turbidity/pollutants generated by suction dredging.

- The SEIR should consider that most suction dredging on the Klamath River are in areas on California's 2006 Section 393(d) list of impaired water bodies due to high water temperature, low dissolved oxygen, and excessive nutrients. DFG should restrict or prohibit the use of suction dredging where the beneficial uses of water can be adversely affected.

- The SEIR should consider chemicals that migrate downstream.

- The SEIR should consider the effects on water quality from sewer treatment plants and gravel mining operations in the rivers.

- The SEIR should thoroughly evaluate the re-suspension and release of mercury during suction dredging as a potentially significant adverse impact.

- The SEIR should consider the effect of turbidity on water temperature.

- The SEIR should consider if heavy metals are increasing in fish because they are forming water soluble salts.

- The SEIR should determine the percentage of mercury currently contained in fish.

- The SEIR should review Basin Plans and comply with all applicable polices contained in the plans.

- Certain activities may require permits from the State or Regional Water Boards and should be documented in the SEIR.

Additional Factors not Identified in the Initial Study

- The SEIR should include the category of Land Use / Planning. Prohibiting suction dredging would be a potentially significant impact because it conflicts with the federal land use plan. Most small scale suction dredging takes place on federal public domain lands open to mineral entry under the federal mining laws. The U.S. Forest Service and the Bureau of Land Management encourage, provide for, and allow mining on federal lands. A mining law expert should be consulted.

- Exclusive right of a claimant is all inclusive and is not limited to locatable materials.

- The moratorium on suction dredging amounts to a "taking."

- The CEQA process does not mandate socio-economic assessment, but the Siskiyou County Comprehensive Land and Resource Management Plan does – making the SEIR in conflict with local land use plans. Siskiyou County welcomes DFG's coordination on this project.

- An approved Plan of Operations may be required in USFS lands, as it uses mechanized equipment.

- The SEIR should consider socio-economic impacts on mining equipment manufacturers and local communities serving mining activities (e.g. grocery stores, campgrounds, etc.)

- The SEIR is required to consider economic impacts to determine if the benefits of suction dredging outweigh the unavoidable environmental risks, thereby making the adverse environmental effects "acceptable" (CEQA Title 14, Div. 6, Ch. 3, Art. 7, § 15093 – statement of Overriding Considerations).

- The SEIR should evaluate disturbances to riparian vegetation, downed woody debris, and large rock/boulders outside the wetted stream surface caused by high-banking, camping, and trail and access route creation.

- The SEIR should consider that the South Fork American River Management Plan specifically allows suction dredging and finds no significant adverse impacts.

- The SEIR should consider incorporating a section on Environmental Justice.

- The SEIR should evaluate traffic impacts; they are potentially significant.
- The SEIR should consider the risk to miners' health when dredging during toxic algae blooms.
- The SEIR should include the evaluation of mineral resources.

Benefits of Suction Dredge Operations

- Many comments requested that the SEIR consider the benefits of new pool area created by suction dredging (e.g. thermal refugia creation in dredge holes).
- Dredging can improve the inter-gravel environment for both fish eggs and benthos if the stream is mined in a uniform manner.
- Several comments reported that suction dredging duplicates, on a micro-level, annual winter storms. Numerous peer reviewed scientific articles have found that high water events benefit the environment.
- Many comments noted that dredgers remove trash from rivers and streams as well as the surrounding landscape.
- Miners are not just interested in gold; this is another way to be outdoors and enjoy nature
- Numerous comments noted that dredgers remove toxic lead and elemental mercury from streams. This benefits the food chain. Also, dredging is beneficial for fisheries as evidenced by the reported good salmon fishing on the Klamath and Trinity rivers – both of which are dredged.
- Suction dredging displaces benthic invertebrates that benefit feeding salmon.
- Quite a few comments noted that suction dredging provides a food source for fish at the suction nozzle and around the discharge end of the sluice box. In addition, the displacement uncovers worms, grubs, eels, and other taxa that are a source of food for fish.
- Miners improve the habitat for all creatures living in the water.
- Miners benefit local communities by way of jobs, tourism, retail sales, and generation of sales tax dollars.
- Many comments argued that miners are environmental stewards of the rivers, streams, and land.

- Some miners stated they watch over the land and chase off poachers, snipers, and illegal prospectors.

- Suction dredges can be used as a technique to restore degraded waterways (ecological or restoration mining).

- In areas where dams are located, mining helps to return beds to a more natural state since flows are restricted.

- Suction dredging oxygenates rivers and benefits species and rivers especially during summer months.

- Several comments noted that tourists enjoy seeing gold dredges.

Description of Suction Dredge Activities

- The manufacturers' statement of suction dredge capacity (cubic yard/hour) is overstated. The capacity is based on optimal conditions found only in a test laboratory. Table 2 is inaccurate; the amount of sediment moved by a suction dredge is significantly overstated. Studies by Sterns and Hassler prove that the actual instream capacity of a dredge is less than one-tenth of the advertised capacity.

- Suction dredges take more effort than identified in the Initial Study. Various factors affect dredge capacity including bed substrates, experience, fitness, water flow, clarity, etc. A significant amount of time is spent moving rocks by hand.

- The number of dredges does not necessarily correlate to numbers of permits issued. Many operate in groups using a single machine.

- Engines are not generally run at full power to reduce clogs and to allow the miner to see what they're sucking up. As such, a greater hp engine doesn't equate to an increase in dredge capacity.

- Text and figure description of dredges is archaic and out of date and/or simply incorrect.

- An 8 inch dredge is the norm for all significant rivers and 6 inch nozzle sizes for streams.

- The DEIR should use survey data to get real estimate of acres being mined.

Baseline Conditions

- The baseline of no dredging (in effect at the time of the NOP) conflicts with the previously permitted suction dredging and the definition of the proposed project. Required mitigation can hinge on whether an impact is measured against one or the other.

- The baseline of 'no dredging' is not possible to study since the current state of the river systems have been shaped by decades of suction dredging activities. Using this artificial baseline would require the use of hypothetical, non-existent physical conditions since these are not real-world conditions. Thus, this baseline would result in making impacts more adverse or significant than would otherwise be reported.

- The processing fee as stated in the Initial Study should be rechecked. $450/permit does not sound reasonable.

- Any mining claim discussion should include private land-owner held areas.

- The moratorium does not apply to restoration, maintenance projects, corporations, and suction dredge operations that are already subject to environmental review (e.g. commercial operations). The SEIR should not include such projects.

Scope of Affected Waterways

- The scope of affected waterways should be limited to those rivers (and or counties) where salmon are present or are able to migrate freely (no dams or fish ladders). There are no salmon in the N. Fork Feather River, Yellow Creek, and the Yuba River above Bullards Bar.

- The SEIR should consider that the waterways in California are much diversified; each has its own challenges.

- The SEIR should determine which river segments the Department can affirmatively prove that suction dredging will not cause deleterious impacts to fish.

Environmental Review Process

- The SEIR must be based on peer reviewed scientific studies.

- At least one public hearing on the draft SEIR should be held in the Los Angeles area.

- A public meeting should be held near Klamath River and closer to city of Orleans where the Karuk Tribe is located; public meeting locations should consider the economically disadvantaged.

- DFG should consult with the Northwest California Indian Tribes to consider issues raised in the SEIR.

- The SEIR should explain why the 1997 Draft EIR was not completed or certified. These earlier studies were adequate.

- The SEIR should explain, in detail, the "new significant and substantially more severe environmental impacts that may be occurring under the exiting permitting program that were not addressed by the Department during the prior review completed in 1994." Volumes of peer reviewed scientific studies have found that the effects of dredging commonly appear to be minor and local.

- How will the assessment of potential adverse effects be applied, as it relates to the evolution on the river system, over what time period? As an example the North Fork of the American was totally different in 1848 with no human intervention, as compared to 1868 after extensive hydraulic mining as compared to 1928 with no dams as to how it is in 2009?

- The SEIR should be based on the 1994 EIR. It is a workable document that protected the environment and dredgers.

- Directing impacts towards 'illegal' actions or violations in previously existing regulations, demonstrates the bias the EIR has. The document should focus on actual impacts, not illegal activities.

- DFG should consult with federal agencies that have statutory authority over some of the project area. Those agencies include the U.S. Forest Service and the Bureau of Land Management.

- Two weeks is inadequate time for meaningful comments to be submitted in response to the scoping meetings. Most of the public was unaware of the 30-day comment period until the scoping meetings – leaving only two weeks to submit comments.

- Many comments requested that the environmental review process take an unbiased view of suction dredge activities. The initial study appears to vilify miners.

- Many questioned whether DFG has the legal authority to regulate any suction dredging operations other than in-stream. The scope of the Initial Study exceeds the boundaries of DFG's authority. All impacts relating to accessing the site (e.g. aesthetics, Air Quality, geology and soils, etc.) are outside the scope of instream environmental impacts.

- The SEIR should consider that adequate measures are in place already to protect the environment.

- The SEIR should evaluate actual harm from significant impacts, not potential harm from possible impacts.

- Several comments suggested that DFG staff should be required to study the workings of a dredging operation first-hand. The benefit would be to understand mining operations and witness the "adverse impacts." Only then can effective and workable regulations be developed.

- Program objectives should include SWQRCB's compliance duties and DFG's obligation to comply with FGC 1600 Streambed Alteration Agreement.

- The SEIR should include high-banking and other excluded activities as they may have instream impacts

- Site-specific level of analysis should be conducted.

- The environmental review process should include other state agencies such as State Water Resources Control Board, Department of Toxic Substances Control and the California Air Resources Board instead of saying that impacts or regulation of impacts are beyond DFG's authority to regulate.

- The SEIR should include information on conflicting existing laws and other permitting programs.

Levels of Significance of Impacts

- The SEIR should use scientific evidence to evaluate the potential to degrade or substantially reduce the habitat of fish and wildlife.

- The initial study's description of "deleterious effect" does not adequately address the subject of environmental threat, for which a much lower threshold will be required. The threshold of significance must include cumulative effects in the context of previous serious environmental effects, which must be adequately analyzed.

Validity and Inclusion of Scientific Studies

- Studies used to evaluate impacts should be California-based studies. Studies done in other states are irrelevant to California.

- The 2005 Water Board mercury dredge study does not constitute scientific evidence.

- The 2003 Water Board Mercury study was done in a mercury hotspot – which is not typical of many mined areas. Also the study did not use 'miners moss,' a common component in most all dredges. This would have increased the capture of mercury in the study.

- DFG should conduct real-time suction dredge studies over an extended timeframe to determine the true impact of suction dredging and develop Best Management Practices (BMPs).

- The SEIR should use control studies of northern CA fish from watersheds that do not allow suction dredging for comparison of effects.

- Previous studies conducted for the 1994 and 1997 EIRs are conclusive and show no adverse effects. These should continue to be used in this report.

- Scientific literature/studies used for 1994 EIR are outdated and more updated information should be used for this report.

- The SEIR should consider the following studies (Note – only studies mentioned in the comment letters but not already cited in the Literature Review (September. 2009) have been included):

  Huber, C. and D. Blanchet, 1992, Water quality cumulative effects of placer mining on the Chugach National Forest, Kenai Peninsula, 1988-1990, U.S. Forest Service, Chugach National Forest, Alaska Region.

  U.S. Environmental Protection Agency, 2001, Fact Sheet NPDES Permit AKG-37-5000, U.S. Environmental Protection Agency, Region 10, Alaska Operations Office.

  Prussian, Royer, Minsall,1999. Impact of suction dredging on water quality, benthic habitat, and biota in the Fortymile River, Ressurection Creek, and Chatanika River, Alaska. Prepared for the Environmental Protection Agency, Region 10, Alaska Operations Office.

  Cooley, 1995, USFS. Siskiyou National Forest Service Yardage Estimate, A comparison of stream materials moved by mining suction dredge operations to the natural sediment yield rates. In house Report.

  Washington State Dept. of Ecology, March 2005, *Effects of small-scale gold dredging on arsenic, copper, lead, and zinc concentrations in the Simikameen River.*

  Bayley, Peter B. April 2003 Siskiyou National Forest study for the Department of Fish and Wildlife at Oregon State University.

Konopacky Environmental. 1996. Effects of Recreational Suction Dredge Operations on Fish and Fish Habitat: A literature review in Association with a Petition of the Idaho Gold Prospectors Association to the Idaho Land Board.

Roberts, B. and White, R. Effects of Angler Wading on Survival of Trout Eggs and Pre-emergent Fry. USFWS, Montana.

Donaldson, Edward. Reproductive Indices as Measures of Effects of Environmental Stressors in Fish. British Colombia, Canada.

Bouck, G. and Robert Ball. Influence of Capture methods on Blood Characteristics and Mortality in the Rainbow Trout.

Anderson, Douglas. Immunological Indicators: Effects of Environmental Stress on Immune Protection and Disease Outbreaks.

Ward, Henry Baldwin. 1938. Placer Mining on the Rogue River, Oregon, in its Relation to the Fish and Fishing in that Stream.

Harn, S., Dunn, R, & Keene, P, 2009. *The economic impact of suction dredging in California*, ICMJ Prospecting and Mining Journal, v.79, n.2, pgs. 37-38.

Cumulative Impacts

- Many comments suggested that suction dredging is not responsible for the decline of salmon. A substantial number of comments deny killing fish. The SEIR should evaluate only the adverse effects directly attributable to miners – not the cumulative adverse impacts resulting from recreational and commercial anglers, net fishing, pollution, and water management regimes.

- The SEIR should consider the negative impacts from dams without fish ladders on spawning salmonids rather than attributing the adverse impacts to suction dredging. (Including barrier effects and turbidity during water releases)

- The SEIR should consider that suction dredging and recreational activities can co-exist. Rafting guides often stop at dredges on the South Fork of the American River to show clients the gold operation. Anglers would likely find better fishing right behind the dredge.

- The SEIR should consider the effects of El Nino and climate change on salmonids populations. The resulting higher water temperatures have contributed to the salmonids population decline.

- The SEIR should consider the effect of pinnipeds preying on the salmonids – resulting in the current decline of fish populations.

- The threshold of significance must include cumulative effects in the context of previous serious environmental effects, which must be adequately analyzed.

- The SEIR should consider the impacts from other water dependent recreational opportunities and compare them to suction dredging to evaluate the level of significance attributable to suction dredging.

- The SEIR should consider the adverse impacts of brown trout on salmonids.

Definition of "deleterious to fish" and Related Issues

- The SEIR should consider changing the definition of "fish:" to reflect aquatic life with gills and fins. Including other aquatic life causes confusion and mis-assigns cause and effect.

- The Initial Study's description of "deleterious effect" does not adequately address the subject of environmental threat, for which a much lower threshold will be required.

- The SEIR should consider that recreational fishing is significantly more deleterious to fish than dredge mining.

- There has been a steady decline in the number of dredges in the Salmon River. If dredges are deleterious to fish, the fish populations should have increased each year as the number of dredgers decreased.

- Several comments mentioned that deleterious means harmful, a far lower standard than disastrous. The SEIR should clearly state the definition of the word, consistent with the legal definition of the word "deleterious," and assess impacts accordingly.

- Several comments suggested the Department should require that "deleterious effects" mean an appreciable and negative impact on populations of listed species – a substantial reduction in the range of any species or extirpation of a population. (i.e. not individuals or population units smaller than those defined for purposes of state or federal ESAs).

- The definition of "deleterious effects" should be expanded to include species that are not covered by the ESA.

- The SEIR should consider changing the definition of "fish: to reflect aquatic life with gills and fins. Including other aquatic life causes confusion and mal-assigns cause and effect.

- The definition of "fish" should be clarified to include all biological management indicators such as benthic macroinvertebrates and amphibians (all life stages).

Socioeconomics

- The proposed socio-economic survey presented at the scoping meetings should include businesses serving miners as well as the miners themselves.

Rule making process and approaches to the regulatory updates

- Dredge mining regulations should make miners aware of instream habitat needs of salmonids, reducing the most serious impacts of suction dredge mining. Current DFG regulations in Canyon Creek eliminate the conflict with salmonid spawning, incubation, and fry emergence by restricting the window of opportunity to suction dredge.

- Small suction dredge operations should be limited to nozzle sizes of 6" or less to minimize impacts to turbidity, water quality, and disturbance of macroinvertebrate communities.

- Regulations should require a polypropylene pad or other appropriate spill protections and a funnel or spill-proof spout when re-fueling to prevent possible contamination of surface waters or groundwater – per Oregon's requirements for suction dredge permit holders.

- Provide mercury and lead collection sites.

- Many comments recommended limiting the dredging season in small creeks to a period of May 15 to October 1 to avoid the spawning season.

- Dredgers should be required to clean the gravel they displace to provide appropriate spawning areas for salmonids.

- Regulations should require that large rocks or boulders (greater than 3ft) be replaced to reduce impacts on geomorphology and aesthetics.

- The regulations consider closure of various streams throughout the state that lie in areas affected by fires from the past season. Potential mud and debris flows are expected to result in significant impacts to stream course and the biota dependent on them.

- Restrict suction dredging during low flows when the greatest damage to streams can occur.

- Mining claims not within a club area protect the river by distributing and limiting the adverse affects. Consider limiting the density of dredgers in a club area. Consider limiting the area of clubs.

- The mining community should monitor it's own by enforcing DFG regulations.

- Removing trees should be illegal as it undermines banks.

- Regulations should include a statement that any found shipwrecks be monitored jointly with an archeologist.

- Dredges should be environmentally friendly designs using headerless boxes, deairation flaps, flarejet introductions systems, over under classification and solids return underwater to increase fines retention, prevent aeration, and decrease turbidity.

- A permanent working committee should be established to address dredging issues. In addition, the committee could mobilize dredgers to assist DFG with reclamation projects.

- Stricter regulations are preferable to a complete prohibition of suction dredging.

- Several comments suggested that DFG staff should be required to study the workings of a dredging operation to understand mining operations and witness the "adverse impacts" impacts first hand. Only then can effective and workable regulations be developed.

- Limit dredges to 4" on creeks.

- Require non-resident dredgers to have a claim before they can buy a permit.

- DFG should consider creating a dredging class to educate miners on the regulations. The class should be required before a permit is issued.

- DFG should work with mining clubs such as the New 49ers and the Lost Dutchman Assoc. to observe mining operations and create effective regulations.

- Restrict suction dredging on waterways that are a domestic water supply.

- Restrict suction dredging on all wild and scenic areas.

- The regulations should provide for greater enforcement. If there is inadequate enforcement staff, the program should be limited to what can financially/realistically be enforced.

- Require catchpans for all dredges to reduce impacts of leaks or spills

- The regulations should include inspections.
- Suction dredging should be restricted where beneficial uses of water can be negatively affected.
- Permit fees should be based on dredge nozzle size.
- Permit fees should be increased to reflect the increase in gold values (Resident: $100 per nozzle inch per week, non-resident: $150 per nozzle inch per week)
- The U.S. Forest Service and the Bureau of Land Management should be involved in the development of regulations, fees, and enforcement
- Each permit issued should undergo CEQA review
- Permit conditions should impose and require a mandatory protocol for hazardous materials handling and transport.
- Permit dredges with stickers for easier enforcement.
- Regulations should have a valid scientific-based reason for closing a stream. An area should not be closed simply because it is in a designated wilderness area.
- Habitats critical for daily survival, including thermal refugia areas, should be protected under any new regulations.
- Regulate dredging methods to be more environmentally friendly such as putting gravel and cobbles in separate piles and not panning concentrates back into the water.
- Propane fueled engines, better portable tank to engine tank transfer systems, battery driven electrics, or some type of inspection fee to make dredges compliant would be more prudent then shortening the season or reducing hose size.
- Regulations should limit out-of-state permits to those holding a valid claim.
- Regulations should include prevention programs for terrestrial and aquatic invasive species.

Issues Outside of the Scope of the Environmental Review

Supremacy of Federal mining law

- Many comments cited the supremacy of the U.S. Mining Laws of 1866 and 1872, and challenged DFG' authority to impose regulations, much less a moratorium, on federal public domain lands.

Reimbursement of permit fees

- Numerous comments requested reimbursement of suction dredge permit fees to compensate the loss of use due to the moratorium on suction dredging.

Other economic issues

- Many comments requested compensation for loss of property rights (i.e. mining claims) and loss of income as a result of the moratorium.

Other issues

- The SEIR should consider mercury removal in the San Francisco Bay.
- The SEIR should consider the impacts from other water dependent recreational opportunities and compare them to suction dredging to evaluate the level of significance attributable to suction dredging.
- The SEIR should make a distinction between recreational dredgers and mining claim owners when analyzing impacts.
- Salmon that make it up the river a certain distance should be able to exist without human interference.
- The number of fishing licenses should be limited each year and in indirect proportion to the number of fish taken by the tribes.
- Referring to dredgers as "hobbyists" makes it seem like it is a small thing to take away the right.
- Rescind the moratorium during the SEIR study period.

- Dams restrict the natural flow of rivers, allowing algae to grow. Removal of dams would restore natural flow and create the best habitat for fish.

- Seek a 200-mile fishing limit for foreign fishing vessels to reduce the depletion of salmon populations.

- Dams restrict the natural flow of rivers, allowing algae to grow. Removal of dams would restore natural flow, minimize algae growth, and create habitat for fish.

- The moratorium on suction dredging should be limited to water with salmon populations.

- The SEIR should consider the adverse impacts of brown trout on salmonids.

- The SEIR should consider a program for the U.S. Army Corps of Engineers to dredge the entrances to lower basin tributaries to allow fish passage into streams that are normal spawning grounds for Coho salmon.

- The SEIR should evaluate the efficacy of closing fish ladders to the hatcheries and allowing salmonids to find alternative sites to spawn naturally, making their off-spring “wild.”

APPENDICES

Notification and Scoping Meeting Materials

Appendix A: Notice of Preparation / Initial Study
Appendix B: Media Notification List and Press Release
Appendix C: Scoping Meeting Newspaper Ad
Appendix D: Direct Mail Postcard
Appendix E: Scoping Meeting Agenda
Appendix F: Scoping Meeting PowerPoint Presentation
Appendix G: Comment Form
Appendix H: Frequently Asked Questions (FAQs)

Scoping Meeting Attendees

Appendix I: Sign-in sheets from Fresno, Sacramento, and Redding scoping meetings

Input Received During Scoping Period

Appendix J: Questions Submitted at Scoping Meetings (from index cards)
Appendix K: Written Comments from:

- Federal Agencies, State Agencies, and Local Agencies
- Non-governmental Private Organizations
- Private Citizens