State of California – Natural Resources Agency
DEPARTMENT OF FISH AND WILDLIFE
Director's Office
1416 Ninth Street, 12th Floor
Sacramento, CA 95814
www.wildlife.ca.gov

EDMUND G. BROWN JR., Governor
CHARLTON H. BONHAM, Director

Report Summary
(April 1, 2013)

CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE REPORT TO THE LEGISLATURE REGARDING INSTREAM SUCTION DREDGE MINING UNDER THE FISH AND GAME CODE

This summary, prepared by the California Department of Fish and Wildlife, accompanies a report to the California Legislature regarding instream suction dredge mining in California. The report is available via the Department's web page at www.dfg.ca.gov/suctiondredge. A hard copy of the report can be ordered for a nominal cost by calling the Department at (916) 653-5581.

The Department prepared its report to the Legislature as directed by Senate Bill 1018 (SB 1018), effective June 27, 2012. (See Stats. 2012, ch. 39, § 7, amending former Fish & G. Code, § 5653.1.) SB 1018 directs the Department to consult with various agencies, and to provide recommendations to the Legislature regarding statutory changes or authorizations necessary for the Department to promulgate regulations to implement Fish and Game Code section 5653 which will, among other things, fully mitigate all identified significant environmental effects and include a fee structure that will fully cover Department costs to administer its related permitting program. (Fish & G. Code, § 5653.1, subd. (c)(1).) As directed by SB 1018, the Department consulted with the State Water Resources Control Board, Native American Heritage Commission, Departments of Public Health and Toxic Substances Control, and the State Lands Commission. Letters to the Department from each of these agencies are appended to the Department's report.

The Department's report includes a detailed history and background discussion of suction dredging in California, and related developments leading to the enactment of SB 1018. The Department's report also includes specific recommendations for the Legislature to consider. The central focus of those recommendations, consistent with the Department's statutory charge under the Fish and Game Code, are the fish and wildlife resources the Department holds in trust for all the people of California. The Department recommends, for example, that the Legislature consider broadening the existing statutory benchmark for the Department in the Fish and Game Code from *deleterious to fish* to *fish and wildlife*. Doing so would give the Department explicit statutory authority to adopt regulations implementing Section 5653 to ensure that no significant impacts to fish and wildlife occur as a result of instream suction dredge mining authorized by the Department. Likewise, the Legislature should consider raising the permit fee currently set by statute or, better yet, give the Department explicit statutory authority to set permit fees by regulation. The permit fees collected by the Department are currently set by statute, for example, with related legislation required to ensure the Department's permitting program is fully funded. (See *Id.*, § 5653, subd. (c).) Finally, the Department's report makes recommendations the Legislature may want to consider in the broader context of significant environmental impacts other than fish and wildlife resources.

I. INTRODUCTION

The Department of Fish and Wildlife (Department)[1] submits this report to the California Legislature as directed by Senate Bill (SB) 1018. (Stats. 2012, ch. 39, § 7, effective June 27, 2012.) SB 1018 directs the Department to consult with various agencies, and to provide recommendations to the Legislature regarding statutory changes or authorizations necessary for the Department to promulgate regulations to implement Fish and Game Code section 5653 which will, among other things, fully mitigate all identified significant environmental effects and include a fee structure that will fully cover Department costs to administer its related permitting program.[2] (Fish & G. Code, § 5653.1, subd. (c)(1).) Having consulted with various other state agencies as directed, the Department submits this report consistent with SB 1018.

For the sake of introduction, the Department notes as an initial matter that it is required to adopt regulations implementing Section 5653 under an existing provision of the Fish and Game Code. (*Id.*, § 5653.9.) Consistent with that obligation, the Department adopted updated regulations for the first time in 15 years following a multi-million dollar environmental review and rulemaking effort completed in March 2012. (Cal. Code Regs., tit. 14, §§ 228, 228.5, effective April 27, 2012; Cal. Reg. Notice Register 2012, No. 19-Z, p. 641.) Notwithstanding the updated regulations, instream suction dredge mining is currently prohibited by statute in California as it has been since August 2009. (See former Fish & G. Code, § 5653.1, subd. (b), added by Stats. 2009 (SB 670), ch. 62, § 1.)

---

[1] Prior to January 1, 2013, the California Department of Fish and Wildlife was known as the Department of Fish and Game. (Fish & G. Code, § 700, as amended by Stats. 2012, ch. 559 (AB 2402), § 8.)

[2] SB 1018 states in relevant part:

> To facilitate its compliance with subdivision (b), the department shall consult with other agencies as it determines to be necessary, including, but not limited to, the State Water Resources Control Board, the State Department of Public Health, and the Native American Heritage Commission, and, on or before April 1, 2013, shall prepare and submit to the Legislature a report with recommendations on statutory changes or authorizations that, in the determination of the department, are necessary to develop the suction dredge regulations required by paragraph (2) of subdivision (b), including, but not limited to, recommendations relating to the mitigation of all identified significant environmental impacts and a fee structure that will fully cover all program costs.
>
> (Fish & G. Code, § 5653.1, subd. (c).)

In submitting this report, the Department would like to acknowledge and express its appreciation to the Legislature for the specific request for input. The Department has a strong sense, as we indicated in March 2012, that existing state law governing suction dredge mining is ripe for comprehensive reform. We view the Legislature's request for input in that light, underscoring that many of the most important issues extend far beyond the Department's expertise, our regulatory authority under the Fish and Game Code, and our trustee mandate for fish and wildlife. Even so, the Department is the only state agency under current law with explicit regulatory authority over the use of vacuum and suction dredge equipment for instream mining. (Fish & G. Code, § 5653 et seq.) With our experience, we are well aware that many other public agencies and stakeholders have a keen interest currently in California's regulation of the activity. It is our sincere hope that this report, our efforts culminating in March 2012, and our ongoing commitment to California's fish and wildlife continue to inform broader dialogue.

The Department would also like to acknowledge and express its appreciation for the support of and related input from the Native American Heritage Commission (NAHC), State Water Resources Control Board (Water Board), the Departments of Public Health and Toxic Substances Control, and the State Lands Commission. Our recommendations to the Legislature as set forth below are informed by and reflect the input of our sister agencies. For your information, the letters the Department received from each of these agencies are included at the end of this report.

The Department would like to highlight, in particular, the effort and contribution of the NAHC and Water Board. As the Department noted in March 2012, we recognize the importance and benefit of robust coordination with California Native Americans. That is particularly true with respect to instream suction dredge mining and the need for and importance of continued coordination with the NAHC and California Native Americans generally. As to the Water Board, importantly, the Department was only able to complete its effort in March 2012 with the generous financial support of the Water Board and the technical expertise of its staff. The Water Board's regulatory authority and technical expertise regarding water quality proved invaluable to the Department during its environmental review and rulemaking effort, and we believe that will be the case for the Legislature as it considers the future of instream suction dredge mining in California. Water quality and cultural resource issues featured prominently in the Department's 2012 environmental review effort, they are a driving force in the context of SB 1018, and they should be a central focus of any related discussion in the Legislature.

As to substance, the Department notes as an initial matter that SB 1018's charge is actually quite specific. It directs the Department to recommend statutory changes pertaining to regulations implementing Fish and Game Code section 5653. Yet, the existing statutory benchmark, virtually unchanged since 1961,[3] is a determination by the Department that suction dredging authorized under its regulations "*will not be deleterious to fish*." (Fish & G. Code, § 5653, subd. (b) (emphasis added).) SB 1018, in this respect, asks for recommendations from the Department against the backdrop of regulations intended by law to protect fish from adverse impacts caused by instream suction dredge mining. Indeed, in adopting its updated regulations in 2012, the Department determined no such impacts would occur. (Cal. Code Regs., tit. 14, § 228.) Having made that finding, however, the Department also determined under the California Environmental Quality Act (CEQA) that suction dredging consistent with its updated regulations would also result in significant environmental effects unrelated to fish and, except in one instance, unrelated to fish and wildlife generally (e.g., water quality, cultural resources, and noise).[4]

The significant and unavoidable effects identified by the Department under CEQA are the understandable driving force behind SB 1018. Yet, the three specific impacts just mentioned also fall outside of and are not subject to the Department's current authority under the Fish and Game Code. Moreover, having consulted with various public agencies consistent with SB 1018, the Department does not believe its regulatory authority should be expanded beyond fish and wildlife. In our view – an opinion shared by many of our sister agencies – the significant non-fish and wildlife impacts identified by the Department in March 2012 are best addressed by the public agencies with related expertise under existing law. So too in our opinion are any related recommendations to the Legislature regarding statutory changes or other authorizations necessary to ensure that instream suction dredge mining authorized in California does not result in any significant impacts to the environment.

Against this backdrop and mindful of SB 1018's specific focus, the Department's recommendations as set forth below pertain generally to fish and wildlife, and funding for the Department's permitting program necessary protect those resources. For example, the

[3] See Stats. 1961, ch. 1816, § 1, adding former Fish & G. Code, § 5653.

[4] The Department found specifically that suction dredging as authorized under the 2012 regulations, when considered on a statewide basis, would resuspend and discharge mercury and other trace minerals, and increase turbidity and discharge of suspended sediment; could impact historical and unique archeological resources; expose the public to noise levels in excess of controlling local standards; and impact special status passerines (nesting birds) associated with riparian habitat, and affect non-fish wildlife species and their habitats. The Department concluded in March 2012 that these impacts remained significant under CEQA.

Department recommends the Legislature consider amending the *deleterious to fish* benchmark in broader terms necessary to protect fish and wildlife generally. Likewise as to funding, the Department would benefit from explicit statutory authority in the Fish and Game Code to set suction dredge permitting fees by regulation. Finally, the Department recommends the Legislature consider establishing a statutory definition governing the use of any vacuum or suction dredge equipment, or what it otherwise means as a matter of law to be instream suction dredge mining. For example, to avoid unintended consequences arising from restricting one category of placer mining to a greater extent than others, the Legislature may choose to address the fact that placer mining includes activities (e.g., high banking, booming, and power sluicing) that affect fish habitat but are not considered suction dredging.

Beyond its recommendations regarding fish and wildlife, and the regulations required to implement Section 5653, the Department notes with an eye toward the future that the Legislature may want to consider a broader range of regulatory options. Some of our sister agencies, for example, including the Water Board, believe the Legislature should consider extending the existing moratorium indefinitely; some of those agencies suggest the Legislature should consider establishing a comprehensive regulatory regime governing instream suction dredge mining that would be administered by a single state agency other than the Department where related permits would be issued, but only after required consultation with other agencies with resource-specific expertise.

II. HISTORY AND BACKGROUND

A. Suction Dredge Mining in California and Fish and Game Code Section 5653.

Instream suction dredge mining is but one of many notable parts of California's mining history. That history is discussed in detail in the *Suction Dredge Permitting Program Subsequent Environmental Impact Report* (SCH No. 2009112005) certified by the Department under CEQA on March 16, 2012 (hereafter, the "2012 Suction Dredge SEIR").[5] Chapter 3 of the Department's DSEIR discusses the history of suction dredging in California, provides a technical description of activity generally, and provides background information about the Department's permitting program. Additional background information is

[5] The 2012 Suction Dredge SEIR consists of both a draft and final analysis, dated February 2011 and March 2012, respectively. Where a distinction between the draft and final analysis is important, this report refers to the documents individually as the "DSEIR" and "FSEIR." The Department's 2012 Suction Dredge SEIR is available electronically at the Department's web page (www.dfg.ca.gov/suctiondredge)(last visited March 25, 2013).

provided in the FSEIR, including a discussion in Section 1.6 of the ongoing statutory moratorium in California, up to and including the enactment of Assembly Bill (AB) 120 in July 2011, which governed the ongoing moratorium at the time the Department adopted the 2012 regulations. (Stats. 2011, ch. 133, § 6, amending former Fish & G. Code, § 5653.1.) The 2012 Suction Dredge SEIR, prepared with the support of the Water Board, is the most comprehensive, up to date technical analysis of suction dredging and its related environmental effects ever prepared in California.

Under current law, the Department is the only state agency with explicit regulatory authority governing the use of vacuum or suction dredge equipment for instream mining in California. (*Id.*, § 5653 et seq.; see also Cal. Code Regs., tit. 14, § 228 et seq.) The principal statutory provision among the seven suction dredge-specific provisions in the Fish and Game Code has always been Section 5653.[6] Added to the Fish and Game Code in 1961, Section 5653 as originally enacted directed the Department to issue individual permits in mandatory terms if it determined the "operation will not be deleterious to fish[.]" The same benchmark still controls today, more than fifty years later: "If the Department determines, pursuant to the regulations adopted pursuant to Section 5653.9, that the *operation will not be deleterious to fish*, it shall issue a permit to the applicant." (Fish & G. Code, § 5653, subd. (b) (italics added).)

The legislative history from 1961 indicates California enacted Section 5653 to prevent adverse impacts to key salmon and trout spawning habitat.[7] California enacted Section 5653 specifically to protect fish from instream suction dredge mining during particularly vulnerable times of certain species' spawning life cycle.[8] As originally enacted in 1961, Section 5653 provided that any person, before suction dredging, had to submit an

[6] The California Fish and Game Code addresses instream suction dredge mining specifically in sections 5653, 5653.1, 5653.3, 5653.5, 5653.7, 5653.8, and 5653.9.

[7] See, e.g., Analysis of Senate Bill No. 1459, Legislative Analyst (June 9, 1961) (noting that suction dredging "has led to some problems with respect to disturbing spawning areas"); State of California Interdepartmental Communication to the Honorable Edmund G. Brown, Governor, from the Director, Department of Fish and Game (June 28, 1961) (recommending approval of the bill and noting that it is "very much concerned over the possible effects this [suction dredge] equipment may have on spawning areas as well as aquatic life"); Bill Memorandum from Alexander Pope, Legislative Secretary to Governor Brown (July 14, 1961) (noting that "damage to spawning areas [from suction dredging] is particularly feared"); Letter from Stanley Arnold to Honorable Edmund G. Brown, Governor of California (June 16, 1961) (noting "the [suction dredge] equipment will definitely disturb and remove both salmon and trout eggs which are laid in the gravel bottoms of streams.").

[8] See, e.g., Letter from Stanley Arnold to Honorable Edmund G. Brown, Governor of California (June 16, 1961) (noting that suction dredging could impact fish and aquatic life unless "activities are limited to less sensitive areas or are pursued during times of the year when damage would be minimal.").

application to the Department specifying the type and size of equipment, and where that equipment would be used. Permits were then issued if the Department determined the operation would not be deleterious to fish. The original section also provided that any person operating equipment not specified in the permit, suction dredging outside the area designated in the permit, or suction dredging generally without a permit, was a guilty of a misdemeanor. (Stats. 1961, ch. 1816, § 1.)

In 1975, related amendments preserved the same basic structure as the original section, also adding elements that remain in Section 5653 as it exists today. With respect to permit applications, the 1975 amendments authorized the Department to require "other information" it deemed necessary. The amendments also established specific permitting fees depending, in the Department's discretion, on the need for an onsite inspection. Likewise, the 1975 amendments authorized, but did not require the Department to designate specific waters open by permit and closed to suction dredging, and the maximum size and time of year when dredges could be used. (Stats. 1975, ch. 735, § 1.)

California amended Section 5653 again in 1988, increasing the statutorily-prescribed permitting fee and establishing a similar fee structure for nonresidents. The 1988 amendments also made it unlawful to possess a vacuum or suction dredge in or within 100 yards of waters closed to the activity. (See Stats. 1988, ch. 1037, § 1.) The same legislation added other related sections to the Fish and Game Code defining "river, stream, or lake" for purposes of Section 5653; authorizing warden inspection of dredging equipment; and providing the Department with explicit authority to close areas otherwise open to suction dredging in response to an unanticipated change in water level when necessary to protect fish and wildlife. (*Id.*, ch. 1037, §§ 2-4, adding Fish & G. Code, §§ 5653.3, 5653.5, 5653.7.) The 1988 legislation also provided the Department with the authority, but not the obligation to adopt regulations to implement Section 5653. (Stats. 1988, ch. 1037, § 5, adding former Fish & G. Code, § 5653.9.)

In 1994, California enacted AB 1688, amending Section 5653 and, importantly, Section 5653.9. (Stats. 1994, ch. 75, §§ 1-2.) With respect to Section 5653.9, the amendments directed the Department for the first time in mandatory terms to adopt regulations to implement Section 5653 specifically. With respect to Section 5653, the 1994 amendments also clarified for the first time in explicit terms that suction dredging is prohibited in California without a permit from the Department.

Significantly, the amendments also tied the Department's *deleterious effect to fish* determination to the required regulations specifically. That is, the 1994 amendments

clarify that the regulations the Department is required to adopt set forth where, when, and how suction dredge equipment may be used in California so that suction dredging will not be deleterious to fish. But for the statutory moratorium added in 2009 (discussed in more detail below), the 1994 amendments to Sections 5653 and 5653.9 were the last substantive changes to the suction dredge-specific provisions in the Fish and Game Code.[9]

With the explicit authority provided in 1988 and the mandatory obligation added in 1994, Department regulations to implement Section 5653 took effect for the first time on May 27, 1994. (See Cal. Reg. Notice Register 1994, No. 23-Z, p. 950, adding former Cal. Code Regs., tit. 14, §§ 228, 228.5.) Enacted following related environmental review under CEQA (SCH No. 93102046), the Department's 1994 regulations provided comprehensive time, place, and manner restrictions governing suction dredge mining generally; and water body-specific closures and seasonal restrictions in all rivers, streams, and lakes throughout California. Adopted consistent with the controlling *deleterious to fish* statutory benchmark, the Department's 1994 regulations remained on the books for nearly two decades, superseded in March 2012 by the Department's updated regulations. The 2012 regulations, as noted earlier, took effect for purposes of Title 14 of the California Code of Regulations on April 27, 2012. (Cal. Reg. Notice Register 2012, No. 19-Z, p. 641.)[10]

The enactment of Fish and Game Code section 5653 in 1961; subsequent amendments in 1975, 1988, and 1994; and the Department's adoption of related regulations in 1994 and 2012; mark important milestones in the history of instream suction dredge mining in

[9] California amended Fish and Game Code section 5653 in 2006, but those changes were entirely nonsubstantive, intended to simply "maintain" the code. (See Stats. 2006, ch. 538, § 185.)

[10] 1994 and 2012 mark the significant mileposts in terms of Department efforts to promulgate and update the regulations required to implement Section 5653. (See Fish & G. Code, § 5653.9.) The historical record indicates the California Fish and Game Commission, a constitutionally established entity distinct from the Department, adopted regulations governing suction dredge mining in 1962, the first year following the original enactment of Section 5653. (Cal. Reg. Notice Register 1962, No. 13, p. 50.2. Also compare Cal. Const., art. IV, § 20, and Fish & G. Code, § 700.) The Commission amended its regulations in 1976, coinciding with a related statutory change to Section 5653 establishing a permitting fee for the first time. (Cal. Reg. Notice Register 1976, No. 12, p. 50.2; Stats. 1975, ch. 735, § 1.) The Commission repealed its suction dredge regulations in 1981, also coinciding with an interesting milepost. (Cal. Reg. Notice Register 1981, No. 41, p. 46.) The repeal occurred as the number of permits issued by the Department hit its historic peak.

Also of note, in 2008, the Department repealed the "special permit" provisions originally included in the 1994 regulations. The Department adopted the repeal under the Administrative Procedure Act (APA) as an amendment without regulatory effect, deleting provisions authorizing the issuance of special permits to suction dredge in waters otherwise closed to the activity. The Department repealed the special permit provisions with the approval of OAL following a related court order issued in February 2007. (See Cal. Reg. Notice Register 2008, No. 16-Z, p. 620; *Eason v. California Dept. of Fish and Game et al.*, Super. Ct. Sacramento County, 2006, No. 06CS00768, judgment entered October 24, 2007.)

California. Although it does not have permitting data from 1961 through 1975, the Department issued 7,887 permits on average each year from 1976 through 1988. Of note, the number of permits issued by the Department increased dramatically in 1976 from 3,981 to the all-time high of 12,763 in 1980,[11] and from 1980 through 1988 the Department issued 9,545 permits on average every year. That latter figure is more than twice the annual average for the number of resident suction dredge permits issued by the Department in the 1990s (4,314), and nearly four times the annual average for resident permits issued by the Department from 2000 to 2009 (2,620). Also of note, for the five years prior to 2009 (the year the ongoing moratorium first took effect), the Department issued an average of 2,689 resident and 512 nonresident permits each year.[12] 2009 is the last year the Department issued any permits under Fish and Game Code section 5653.

B. Fish and Game Code Section 5653.1 and Continued Debate Regarding the Regulation of Suction Dredge Mining: Litigation and the Moratorium.

A history of the debate related to the Department's adoption of the 2012 regulations, the enactment of the statutory moratorium, and other developments leading to the adoption of SB 1018 are detailed in a number of important public documents. Interested parties may want to review the relevant portions of the Department's 2012 Suction Dredge SEIR. Chapter 1, Section 1.1, of the DSEIR bears mention, for example, as does Section 1 of the Department's Initial Study, which is included in the DSEIR as Appendix B. A related update focusing on, among other things, 2011 amendments to Fish and Game Code section 5653.1, appears in Section 1.6 of the FSEIR, and important elements of the underlying debate are highlighted further still in Section 4.1 of the same document. The latter section of the FSEIR, in particular, includes 16 master responses to comments that the Department prepared during the CEQA review effort leading to the adoption of the 2012 regulations implementing Section 5653. The CEQA "findings of fact" adopted by the Department as part of its final action in March 2012 also provide related context regarding the ongoing controversy in the context of the updated regulations. Particularly relevant sections include the Introduction to the Department's CEQA Findings, for example, found at pages 1 through 3, the Background and History discussion at pages 7 through 9, and the Statement of Overriding Considerations at pages 74 through 81.[13]

---

[11] This coincided with record gold prices of greater than $800/ounce. After accounting for inflation, that remains the highest price for gold to-date.

[12] Data regarding the number of suction dredge permits issued by the Department is available online at: http://www.dfg.ca.gov/licensing/statistics (last visited March 25, 2013).

[13] The 2012 Suction Dredge SEIR, including the DSEIR and FSEIR, and the Department's March 16, 2012 CEQA Findings are available online at: http://www.dfg.ca.gov/suctiondredge/ (last visited March 25, 2013).

For the Department, the underlying debate regarding suction dredging manifests most prominently in past and ongoing litigation, as well as in the judicially and legislatively enacted moratoria prohibiting the Department from issuing permits and generally prohibiting the activity throughout California, at least on an interim basis. The Department has been named as a defendant in 13 different but related lawsuits since 2005. Six of those actions remain pending and most of those, if not others, are likely to continue for some time. As the Department noted in its March 2012 CEQA Findings, absent comprehensive statutory reform, related controversy and litigation against, and cost to, the Department and the State of California generally will most certainly continue.[14]

In 2006, with the support of the Department and various tribal, environmental, and mining interests involved in the litigation, the Alameda County Superior Court issued an order and consent judgment.[15] That order, entered in what many now refer to as the *Karuk I* litigation, directed the Department to complete "further environmental review pursuant to CEQA" of its suction dredge permitting program and to promulgate, if necessary, updated regulations to protect special status fish species. The order and consent judgment followed on the heels of, among other things, statements in the litigation by the Department in October 2006 acknowledging the need for updated environmental review and related amendments to the 1994 regulations to bring the Department's permitting program back into compliance with Section 5653. Although the Department's related efforts were delayed as an initial matter for lack of funding, administrative proceedings began in earnest

---

[14] At the direction of the California Judicial Council, the six related lawsuits currently pending against the Department are now assigned as a single coordinated matter to the honorable Gilbert Ochoa, judge presiding, in San Bernardino County Superior Court. (*Suction Dredge Mining Cases*, Judicial Council Proceeding No. 4720, Super. Ct. San Bernardino County; order assigning coordination trial judge issued November 20, 2012; see also Cal. Rules of Court, rule 3.501 et seq. (coordination of complex actions).) Judge Ochoa held an initial case management conference in the coordinated proceedings on February 13, 2013.

The six actions included in the coordinated litigation pending in San Bernardino are the following: *The New 49'ers, Inc. et al. v. State of California et al.*, Super. Ct. Siskiyou County, 2012, No. SCSCCVCV 12-0000482, filed April 13, 2012; *Public Lands for the People et al. v. California Dept. of Fish and Game et al.*, Super. Ct. San Bernardino County, 2012, No. CIVDS1203849, filed April 12, 2012; *Karuk Tribe et al. v. California Dept. of Fish and Game et al.* (*Karuk II*), Super. Ct. Alameda County, 2012, No. RG12-623796, filed April 2, 2012; *Kimble et al. v. Schwarzenegger et al.*, Super. Ct. San Bernardino County, 2010, No. CIVDS1012922, filed September 15, 2010; *Hillman et al. v. California Dept. of Fish and Game et al.*, Super. Ct. Alameda County, 2009, No. RG09-434444, filed February 5, 2009; *Karuk Tribe et al. v. California Dept. of Fish and Game et al.* (*Karuk I*), Super. Ct. Alameda County, 2005, No. RG05-211597, filed May 6, 2005.

[15] See *Karuk Tribe of California et al. v. California Dept. of Fish and Game*, Super. Ct. Alameda County, 2005, RG05211597, Order and Consent Judgment entered December 20, 2006.

after the Department received a General Fund appropriation for the effort specifically as part of the budget for the 2008/2009 and 2009/2010 fiscal years. (See also Fish & G. Code, § 711, subd. (a)(1).) The Department completed its environmental review and rulemaking effort in March 2012, certifying the 2012 Suction Dredge SEIR and adopting the 2012 regulations. Of the pending lawsuits, three of six are direct challenges to that effort, and all were brought by the same parties involved in the other related actions.

Following the order and consent judgment in *Karuk I*, the next notable developments occurred in 2009. The first is an injunction issued in July of that year prohibiting the Department from issuing any permits under Section 5653 pending completion of the court-ordered environmental review and rulemaking effort. The Department stopped issuing permits consistent with the injunction on July 27, 2009, following clarification of the earlier order by the Alameda County Superior Court.[16] Nine days later, Governor Schwarzenegger signed SB 670 (Wiggins), prohibiting the Department from issuing any new permits under Section 5653 and enacting an immediate, statewide moratorium on instream suction dredge mining in California pending completion of the Department's administrative proceedings. (Stats. 2009, ch. 62, § 1, adding former Fish & G. Code, § 5653.1, effective August 6, 2009.)[17] The moratorium established by SB 670, now as amended, and the Department and the State of California's authority to regulate suction dredge mining generally, is at issue in the coordinated proceeding pending in San Bernardino.[18]

The final piece of background information concerns the statutory moratorium itself. As originally enacted in 2009 (SB 670), the end of the statutory moratorium turned on the Department's certification that: (1) it had completed the environmental review effort ordered by the court in *Karuk I*; (2) it had adopted new regulations, as necessary, to implement Section 5653; and (3) the new regulations had taken effect. (Former Fish & G.

---

[16] *Hillman et al. v. Department of Fish and Game et al.*, Super. Ct. Alameda County, 2009, No. RG09-434444, Order Granting Plaintiffs' Motion for Preliminary Injunction etc., July 10, 2009.

The *Hillman* injunction was issued in the context of a "taxpayer" action filed by the *Karuk I* plaintiffs and other parties pursuant to section 526a of the California Code of Civil Procedure to enjoin the allegedly illegal expenditure of public money. The California Court of Appeal for the First Appellate District set aside the *Hillman* injunction as moot in light of the statutory moratorium in an unpublished decision in December 2011. (*Hillman et al. v. Department of Fish and Game et al.* (December 28, 2011, A126402) [nonpub. opn.].)

[17] Governor Schwarzenegger vetoed an earlier bill with, among other things, a more limited moratorium on suction dredging in 2007. (See Assem. Bill 1032 (Wolk), 2007-2008 Reg. Sess., vetoed October 13, 2007.)

[18] Importantly, a mining interest motion for a preliminary injunction to enjoin the ongoing statutory moratorium on instream suction dredge mining is currently pending, under submission, in San Bernardino County Superior Court. (*Kimble et al. v. Schwarzenegger et al.*, Super. Ct. San Bernardino County, 2010, No. CIVDS1012922, filed September 15, 2010.)

Code, § 5653.1, subd. (b), added by Stats. 2009, ch. 62 (SB 670), § 1.) As enacted in 2009, subdivision (a) of Section 5653.1 also prohibited the Department from issuing any new permits until it completed the court-ordered environmental review. Subdivision (a) persists today as originally enacted, notwithstanding other amendments to Section 5653.1.

California amended Section 5653.1 for the first time as part of the Public Resources Trailer Bill for the 2011 Budget Act. (Stats. 2011, ch. 133 (AB 120), § 6, amending former Fish & G. Code, § 5653.1, effective July 26, 2011.) In so doing, the end of the statutory moratorium, as amended, turned on the earlier of June 30, 2016, or the Department's certification of two conditions in addition to the three originally enacted in 2009. The two conditions added in 2009 with the enactment of AB 120 continue to feature prominently; namely, that regulations adopted by the Department to implement Section 5653 "fully mitigate all significant environmental impacts" and that "a fee structure is in place that will fully cover all costs to the department related to the administration of the program." (Former Fish & G. Code, § 5653.1, subd. (b)(4)-(5), later amended by Stats. 2012, ch. 39 (SB 1018), § 7, effective June 27, 2012.)

Section 5653.1, as amended by AB 120 in 2011, controlled at the time the Department certified the 2012 Suction Dredge SEIR and adopted the updated regulations in March 2012. The Department's FSEIR discusses AB 120 and the two added conditions described above in some detail. A general discussion appears in Section 1.6 of the FSEIR, as noted earlier, with a particular focus on the added conditions. For example, that discussion notes that because related fees are set by statute, any change to the existing fee structure could only occur through legislation. (FSEIR, § 1.6, p. 1-5, citing Fish & G. Code, §§ 711, subd. (a)(1), 5653, subd. (c).)

As discussed in the Introduction above, the FSEIR includes a detailed discussion in Section 4.1, at pages 4-8 through 4-15, of the Department's substantive authority to address significant environmental effects in the regulations it is required to adopt to implement Section 5653. The latter portion of that discussion addresses the full mitigation condition added by AB 120 specifically, indicating the "*full mitigation* certification contemplated by Section 5653.1 does not provide the Department with the substantive legal authority necessary to address significant environmental effects beyond the reach of the Department's existing authority." (*Id.*, § 4.1, p. 4-15 (italics in original).) The CEQA Findings adopted by the Department in March 2012 also address AB 120 in a number of places, reiterating the same point. Those interested in the conditions added by AB 120 in particular may want to review the discussion that appears at page 81 of the Department's CEQA Findings.

California enacted SB 1018, amending Fish and Game Code section 5653.1, as noted earlier, approximately two months after the Department's 2012 regulations took effect. (Compare Stats. 2012, ch. 39, § 7, effective June 27, 2012; and Cal. Reg. Notice Register 2012, No. 19-Z, p. 641, amending Cal. Code Regs., tit. 14, §§ 228, 228.5, effective April 27, 2012.) SB 1018 amended Section 5653.1, subdivision (b), and deleted the June 30, 2016 end date for the moratorium. Under current law, for the moratorium to end, the Department must certify to the Secretary of State that all of the following have occurred:

1. The Department has completed the environmental review of its 1994 regulations as required by the *Karuk I* order and consent judgment;

2. The Department has adopted updated regulations, as necessary, to implement Section 5653;

3. The updated regulations are operative;

4. *The updated regulations fully mitigate all identified significant environmental effects; and*

5. *A fee structure is in place that will fully cover all costs to the Department to administer its permitting program.*

(Fish & G. Code, § 5653.1, subd. (b)(1)-(5) (emphasis added).)

This brings us to the current moment in time. The Department's final 2012 regulations are a substantial environmental improvement over the prior 1994 regulations. Moreover, the final regulations adopted by the Department in 2012 are an improvement environmentally over the proposed regulations the Department initially released for public review in 2011. (Compare Cal. Reg. Notice Register 2011, No. 11-Z, p. 374 (March 18, 2011), and Cal. Reg. Notice Register 2012, No. 7-Z, p. 174 (February 17, 2012).) By any measure, the 2012 regulations effective in April 2012 are the most environmentally protective, feasible regulations that the Department could enact under existing law to implement Section 5653. Even then, the Department has and continues to acknowledge that other significant environmental effects beyond its substantive reach under Section 5653 would still occur.

III. DEPARTMENT RECOMMENDATIONS REGARDING STATUTORY CHANGES GOVERNING INSTREAM SUCTION DREDGE MINING TO FURTHER PROTECT FISH AND WILDLIFE IN CALIFORNIA.

SB 1018 directs the Department to provide recommendations to the Legislature regarding two specific, substantive issues related to the regulation of suction dredge mining under Fish and Game Code section 5653. The first is adequate funding to fully cover all the costs for the Department to administer its related permitting program. The second substantive issue concerning full mitigation of all significant effects is more complicated.

A. Full Cost Recovery For The Department To Administer Its Suction Dredge Permitting Program Under Fish And Game Code Section 5653.

Section 5653, subdivision (c), establishes the fees the Department is authorized to collect for its suction dredge permitting program. However, Section 5653 does not provide accompanying authority to increase the fees as necessary to "fully cover all program costs." Effective January 1, 2013, Fish and Game Code section 1050, subdivision (e), provides the Department with general authority to establish and adjust statutorily imposed fees by regulation. (Stats. 2012, ch. 565 (SB 1148), § 5, amending former Fish & G. Code, § 1050.) Given SB 1018's direction to recommend statutory changes, the Department suggests the Legislature should build-upon Section 1050's general authority and consider the following:

- *Amend Fish and Game Code section 5653, subdivision (c), to raise the existing resident and nonresident permitting fees to an amount that will fully cover all Department costs to administer its permitting program, including among other things the cost for the Department to conduct onsite inspections of specific suction dredge operations authorized pursuant to Section 5653, to monitor and enforce permits as issued, to prepare an annual monitoring report for the program as a whole, and to fund related rulemaking and environmental review as necessary in the future.*

  OR

- *Amend Section 5653, subdivision (c), or add another provision to the Fish and Game Code to give the Department specific legal authority to set suction dredge permitting and inspection fees by regulation. As an example, the Department has similar specific authority in the Lake and Streambed Alteration Agreement context pursuant to Fish and Game Code section 1609.*

Either of these two actions would ensure the fees the Department collects under Section 5653 fully cover all program costs.

B. Fully Mitigating All Significant Environmental Effects Caused By Instream Suction Dredge Mining.

In adopting its updated regulations in March 2012, the Department found for purposes of CEQA that suction dredge mining authorized under Section 5653 could result in significant environmental impacts to non-fish resources. The Department identified the prospect of such effects in all of the following resource categories: water quality; cultural resources; noise; and non-fish biological resources, including passerines (nesting birds). As the Department explained in its CEQA Findings in 2012, it does not have the existing legal authority in the context of the regulations it is required to adopt to implement Section 5653 to ensure these impacts are less than significant for purposes of CEQA or otherwise fully mitigated for purposes of Section 5653.1. Even so, the Department also emphasized the expected significant effects would be reduced with the exercise of other existing authority in the Fish and Game Code, but not to a point where the Department could conclude under CEQA that those effects were less than significant.

As to the significant biological impacts on non-fish resources identified by the Department in March 2012 (i.e., riparian nesting birds), an amendment to Fish and Game Code section 5653 could give the Department specific legal authority necessary to address these effects in its Section 5653 regulations. Specifically, the Department recommends the Legislature considering deleting the *deleterious to fish* benchmark as it has existed in Section 5653 for more than 50 years, replacing it with a standard tied to *no significant impacts to fish and wildlife*. Doing so would provide the Department with specific substantive authority to amend the 2012 regulations to ensure that instream suction dredge mining does not result in any significant impacts to fish and wildlife trust resources generally.

Thus, the Department recommends the Legislature consider the following:

- *Amend Fish and Game Code section 5653 deleting the existing "deleterious to fish" benchmark and giving the Department explicit authority to ensure suction dredging authorized under the same section does not cause any significant effects to fish and wildlife.*

C. Defining By Statute "Use of Vacuum or Suction Dredge Equipment" And What It Means To Be "Instream Suction Dredge Mining."

For regulatory and enforcement clarity, the 2012 regulations adopted by the Department define suction dredging as follows:

> (1) For purposes of Section 228 and 228.5, the use of vacuum or suction dredge equipment (i.e., suction dredging) is defined as the use of a motorized suction system to vacuum material from the bottom of a river, stream, or lake and to return all or some portion of that material to the same river, stream, or lake for the extraction of minerals. A person is suction dredging as defined when all of the following components are operating together:
>
> (A) A hose which vacuums sediment from a river, stream, or lake; and
> (B) A motorized pump; and
> (C) A sluice box.
>
> (2) Motorized. For purposes of these regulations, "motorized" means a mechanical device powered by electricity or an internal combustion engine.
>
> (Cal. Code Regs., tit. 14, § 228, subd. (a).)

The Department adopted the definition in 2012 without controversy, building upon the 1994 definition, which provided until amended: "suction dredging (also called vacuum dredging) is defined as the use of a suction system to remove and return materials at the bottom of a river, stream, or lake for the extraction of minerals." (Former Cal. Code Regs., tit. 14, § 228, later amended effective April 27, 2012.) In so doing, the Department explained the legislative history regarding the "use of any vacuum or suction dredge equipment" as that phrase is used in Sections 5653 and 5653.1 pertains to mechanized, instream suction dredge mining. Based on review of that history, and following consultation with various equipment manufacturers, miners, and other members of the public, the Department also included the three required components mentioned above in

the updated definition. (See, e.g., DSEIR, § 2.2.1, pp. 2-2 to 2-4.) The definition is now a subject of controversy, worthy of mention to the Legislature in the context of SB 1018.[19]

In short, since the enactment of the ongoing moratorium as an initial matter in 2009, miners have increasingly turned to other forms of placer mining, especially high banking and power sluicing. The effects of these methods vary widely, particularly depending on location, timing and the extent of the operation. But they can potentially have substantial effects on streambanks and fish habitat. Further, certain members of the public have designed or devised ways to mine instream using some, but not all of the required equipment included in the definition set forth in the Department's 2012 regulations. Instream mining without a sluice box is one example. Although this method has raised substantial controversy lately but to date, another, more common, method is a "gravity dredge", using flexible plastic pipe to take advantage of the natural hydraulic head associated with rapidly flowing streams, but without a motor. In addition, several miners have modified their dredges by removing the vacuum hose. While various environmentally protective measures in the Fish and Game Code will help safeguard against related environmental impacts in some instances (see, e.g., Fish & G. Code, §§ 1600 et seq., 2080, 5650), these operations are not currently subject to the Department's regulatory authority under Section 5653 or the current moratorium on instream suction dredge mining established by Section 5653.1. Illustrating the complexity of the regulatory landscape against the current statutory backdrop , the Department received a March 20, 2013 Petition for Emergency Rulemaking (March 20th Petition) seeking, among other items, to revise the 2012 regulations to expand their definition of suction-dredging. On March 27, 2013, the Department received a second Petition for Emergency Rulemaking, challenging

[19] Former Senator Stanley Arnold, a proponent, perhaps the sponsor of Section 5653 as originally enacted by Californian in 1961, wrote to former Governor Edmund G. Brown on June 16, 1961, describing suction dredging as follows:

> The equipment is very simple, consisting of a gasoline engine and pump which can be floated on an innertube raft, an intake line to supply the pump, and a flexible high pressure line attached from the pump to a venture dredge. The water from the high pressure line is introduced into the neck of the dredge and directed backwards to create a vacuum or suction at the dredge nozzle. Silt, gravel, and rocks are picked up by the nozzle and carried through to the posterior end of the dredge where they pass over a riffle box into which the heavier particles settle. The dredge and its contained riffle box are relatively light and are easily moved about under water by a diver using self-contained air tanks for breathing. Equipment comes in a variety of sizes and prices.
>
> (Letter from Senator Stanley Arnold, First Senatorial District, to Honorable Edmund G. Brown, Governor, re: Senate Bill No. 1459, June 16, 1961.)

the rationale for the March 20th Petition and seeking that the Department repeal its 2012 regulations. As of this writing, the Department is reviewing both petitions.

Against this backdrop, the Department recommends the Legislature consider a statutory definition clarifying in specific terms what it means to "use any vacuum or suction dredge equipment" subject to Sections 5653 and 5653.1.

IV. RECOMMENDATIONS THE LEGISLATURE MAY WANT TO CONSIDER IN THE BROADER CONTEXT OF SIGNIFICANT ENVIRONMENTAL IMPACTS TO OTHER THAN FISH AND WILDLIFE RESOURCES.

In March 2012, the Department, for purposes of CEQA, identified a number of significant environmental impacts to non-fish and wildlife that it expected with suction dredge mining under its updated regulations (e.g., water quality, cultural resources, and noise). As to these significant effects, however, the Department believes recommendations regarding related statutory changes or other authorizations should come from the public agencies with related technical expertise and existing regulatory authority. Their institutional knowledge, staff expertise, and technological capacity related to their existing regulatory responsibilities renders those agencies much better suited to manage these impacts. The Water Board exercises regulatory authority in California governing water quality[20] and, with that expertise, just like other sister agencies with their own unique authority, the Department defers to those agencies regarding any recommendations to the Legislature. To that same end, and for the Legislature's information, included with this report are the letters the Department received from each of its sister agencies after related consultation pursuant to SB 1018.

With that broader context in mind, the Department offers the following general suggestions the Legislature may want to consider:

- *Establish a comprehensive statutory regime governing instream suction dredge mining administered by a state agency other than the Department where the issuance of any related permit or other authorization would be conditioned upon required consultation with other state agencies with related expertise, and only where such permit or authorization is subject to the conditions suggested by the expert consulting agencies.*

[20] Section 13001 of the California Water Code indicates, for example, that the Water Board and "each regional board shall be the principal state agencies with primary responsibility for the coordination and control of water quality" in California.

- *Establish a comprehensive statutory regime governing instream suction dredge mining administered by a state agency other than the Department that is vested with broad substantive authority to permit and otherwise regulate the activity, and all of its related environmental impacts across the resource spectrum.*

The first of these options reaffirms the existing general distribution of governmental responsibilities and authorities over affected resource areas (e.g., cultural, water, noise, and fish and wildlife). The second of these options would reallocate authority over suction dredge mining to a state agency other than the Department with newly vested with broad authority over instream suction dredge mining generally. The Department highlights this latter model in light of the Legislature's adoption of a similar regulatory framework in other subject areas (e.g., the Warren–Alquist Act, Pub. Resources Code, § 25000 et seq.).

The Department underscores yet again that the universe of regulatory approaches available to the Legislature for purposes of suction dredging in California is considerably broader than the scope of this report as called for by SB 1018. Thus, the suggestions and recommendations highlighted here are only a subset of possible options the Legislature may want to consider. Other strategies beyond the scope of this report were raised in the course of the Department's consultation process. These include, for example, a recommendation by the Water Board and NAHC that the Legislature consider the possibility of prohibiting the instream suction dredge mining in California indefinitely, subject to consistency with federal law. The Department agrees that an extension of the moratorium or prohibition is a possible mechanism to ensure no significant environmental impacts.

As the Legislature's decision-making unfolds, two sources of information may be particularly useful. First, the Legislature may choose to consider the technical analysis developed by the Department for its environmental review and rulemaking effort. That effort generally constitutes the most thorough, up-to-date technical analysis of suction dredging and its related effects in California history. It also is the product of considerable public input from across the stakeholder spectrum, including input from many private sector and public agency technical experts. A necessary and important component of the Department's final action on the regulations, that analysis may continue to help inform debate beyond the scope of this report regarding whether and how to regulate suction dredge mining in the years to come.

The second source of information, also suggested by NAHC, would be legislative workshops providing for multi-agency and Legislative consultation with individual tribal governments. In its CEQA findings, for example, the Department acknowledges that, although the new regulations provide a significant improvement over the 1994 regulations, these changes may be of little consolation in the eyes of Native American interests. Thus, the Department acknowledged and underscores here in this report that the State of California under Governor Brown, and the Department itself, recognize the importance and benefit going forward for robust coordination in the natural resource context with California Native Americans.

V. CONCLUSION

The Department appreciates the Legislature's request for input regarding statutory changes or authorizations necessary to develop a fee structure that fully covers all costs to administer the suction dredge program and adopt regulations that "fully mitigate" all identified significant environmental impacts associated with instream suction dredge mining in California. The above-described background and recommendations are offered to support the Legislature in any future considerations of the existing suction dredge statutory scheme.

State of California—Health and Human Services Agency
California Department of Public Health

RON CHAPMAN, MD, MPH
Director & State Health Officer

EDMUND G. BROWN JR.
Governor

MAR 20 2013

Mr. Charlton H. Bonham, Director
Department of Fish and Wildlife
1416 Ninth Street, 12th Floor
Sacramento, CA 95814

Dear Mr. Bonham:

Thank you for your recent letter inviting the California Department of Public Health's (CDPH) consultation with the Department of Fish and Wildlife regarding suction dredge mining pursuant to Fish and Game Code section 5653.1. CDPH has primary responsibility for the regulation of public water systems and our comments will be confined to that area.

CDPH believes the regulation of suction dredge mining must take into account the impacts this activity could have on public water systems which use surface water sources. Adequate provision should be made for assessment of the impacts on raw surface water quality, the proximity of this activity to public water system raw water intakes, and the impacts any degradation in raw water quality will have on a public water system's ability to treat water to meet required drinking water quality standards. Any change to existing law should adequately protect the quality of drinking water sources and provide the resources necessary to carry out that mandate.

Impacts to water quality are assessed by the State Water Resources Control Board (SWRCB) because it has primary responsibility for protection of water of the state for all beneficial uses. Drinking water is one of those beneficial uses that the SWRCB must consider. CDPH consults and works with SWRCB in matters concerning water quality which have the potential to impact drinking water supplies.

Sincerely,

Mark Starr, DVM, MPVM, DACVPM
Deputy Director for Environmental Health

cc: See Next Page

MAR 20 2013

cc: Mr. Tom Howard
Executive Officer
State Water Resources Control Board
P.O. Box 100
Sacramento, CA 95812-0100

Ms. Vicky Whitney
Deputy Director
State Water Resources Control Board
P.O. Box 100
Sacramento, CA 95812-0100

STATE OF CALIFORNIA

EDMUND G. BROWN JR., Governor

CALIFORNIA STATE
LANDS COMMISSION

EXECUTIVE OFFICE
100 Howe Avenue, Suite 100-South
Sacramento, CA 95825-8202

JENNIFER LUCCHESI, *Executive Officer*
(916) 574-1800 *Fax* (916) 574-1810
California Relay Service TDD Phone 1-800-735-2929
Voice Phone 1-800-735-2922

March 12, 2013

Charlton H. Bonham, Director
Department of Fish and Wildlife
1416 Ninth Street, 12th Floor
Sacramento, CA 95814

Subject: Agency Consultation Pursuant to Fish and Game Code Section 5653.1

Dear Mr. Bonham:

The California State Lands Commission (CSLC) staff has reviewed your request for consultation, pursuant to section 5653.1 of the Fish and Game Code, concerning the statewide Suction Dredge Permitting Program (Program). Specifically, the California Department of Fish and Wildlife (CDFW) has identified the CSLC as an agency whose management of sovereign and school lands, as described below, is potentially affected by suction dredge mining activities. As such, the CDFW is requesting the CSLC's input regarding amendments to statutes or regulations necessary to ensure suction dredge mining activities do not result in significant impacts to the environment. CSLC staff has prepared these comments consistent with its management obligations on school lands in the State as well as with its trust responsibility for activities that could directly or indirectly affect sovereign lands, their accompanying Public Trust resources or uses, and the public easement in navigable waters.

In providing the below comments, CSLC staff acknowledges the limits of CDFW's statutory and regulatory authority, in their current form, to impose measures needed to avoid or mitigate most of the effects the CDFW determined to be significant in the subsequent environmental impact report (SEIR)(Clearinghouse No. 2009112005) prepared and certified for the Program. While the issues of greatest importance to the CSLC, identified below, are beyond CDFW's current statutory authority, we believe the comments will be helpful to the CDFW, other agencies with jurisdiction, and the State Legislature in discussing the value of calling for statutory or regulatory changes to the management and oversight of suction dredge mining activities, particularly with regard to identifying the appropriate agency or agencies to administer the Program to achieve the most effective level of environmental protection.

CSLC Jurisdiction

The CSLC has jurisdiction and management authority over all ungranted tidelands, submerged lands, and the beds of navigable lakes and waterways. The CSLC also has

certain residual and review authority for tidelands and submerged lands legislatively granted in trust to local jurisdictions (Pub. Resources Code, §§ 6301, 6306). All tidelands and submerged lands, granted or ungranted, as well as navigable lakes and waterways, are subject to the protections of the Common Law Public Trust.
As general background, the State of California acquired sovereign ownership of all tidelands and submerged lands and beds of navigable lakes and waterways upon its admission to the United States in 1850. The State holds these lands for the benefit of all people of the State for statewide Public Trust purposes, which include but are not limited to waterborne commerce, navigation, fisheries, water-related recreation, habitat preservation, and open space. On navigable non-tidal waterways, including lakes, the State holds fee ownership of the bed of the waterway landward to the ordinary low water mark and a Public Trust easement landward to the ordinary high water mark, except where the boundary has been fixed by agreement or a court. Such boundaries may not be readily apparent from present day site inspections. The CSLC also has leasing jurisdiction, subject to certain conditions, over mineral extraction from State property owned and managed by other State agencies (Pub. Resources Code, § 6890, subd. (b)).

Shortly after becoming a State, California was also granted Sections 16 and 36 (2 square miles), or lands in lieu thereof, out of each township (36 square miles) then held by the federal government. The lands, classified as "school lands," were given to the State to help support public education. While many of the school lands were sold off over the years, the State retains an interest in approximately 1.3 million acres of fee owned and split estate lands, mostly desert and forest lands. The State's school lands and lieu lands are also under the jurisdiction of the CSLC. Since 1938, the State has reserved back one hundred percent (100%) of the mineral interest in these lands when they are sold, resulting in a split estate. Thus, there can be instances in which the State has an interest, either solely mineral or both surface and mineral, in the bed of a non-navigable waterway on a school land parcel that is subject to the State's permitting and leasing authority.

Activities on Sovereign Lands

Background:
From surveys of permitted suction dredgers who operated before the 2009 moratorium, CDFW identified the California bodies of water that likely experience the heaviest suction dredging activity (Appendix F of the SEIR); the beds of the lower reaches of many of these, including the South Yuba, Feather, American, Klamath, Merced and Stanislaus Rivers, as well as Suisun Bay, are sovereign lands under CSLC's jurisdiction.

Because the previous permitting program did not require permittees to submit locational information for dredging activities to CDFW, it is not possible to know the intensity or number of annual suction dredging occurrences on sovereign or school lands under the jurisdiction of the CSLC. From Geographical Information Systems (GIS) data produced from the results of CDFW's voluntary survey of dredgers permitted under the previous

program, it appears that at least some suction dredging takes place on State lands. Direct, unauthorized use, alteration or exploitation of public lands or resources is of obvious interest to the CSLC; however, given the findings of the SEIR's analysis of fluvial transport of mercury (Hg) and other heavy metals downstream from dredging, even activities upstream of the CSLC's jurisdiction, permitted under the Program, may affect State lands and resources and future activities located thereon. Under Division 6 of the California Public Resources Code, the CSLC reserves the right to require a lease or permit for the occupation or use of any lands under its jurisdiction, as well as negotiate royalties for mineral resources extracted from lands, including those lands subject to the proposed suction dredging permit program area.

Comments:
CSLC staff will continue to consult with CDFW to further understand the scope of the Program and its effects on lands under the CSLC's jurisdiction. CSLC staff also supports the legal requirement, consistent with the CDFW's March 2012 regulations that, when the CDFW issues a suction dredge permit pursuant to Fish and Game Code section 5653, nothing in that permit "relieves the permittee of responsibility to comply with [other] applicable federal, State, or local laws or ordinances." (Cal. Code Regs., tit. 14, § 228, subd. (n)). CSLC staff would further support development of an educational pamphlet or other disclosure to be provided to permittees regarding the CSLC's sovereign land jurisdiction and the Public Trust.

Mercury and Methylmercury

Background:
On April 22, 2010, the Central Valley Regional Water Quality Control Board (RWQCB) identified the CSLC as both a State agency that manages open water areas in the Sacramento-San Joaquin Delta Estuary and a nonpoint source discharger of methylmercury (Resolution No. R5-2010-0043), because subsurface lands under the CSLC's jurisdiction are impacted by mercury from legacy mining activities dating back to California's Gold Rush. Pursuant to a RWQCB Total Maximum Daily Load (TMDL), the RWQCB is requiring various local, State and federal agencies (stakeholders), including the CSLC and the CDFW, to develop a Delta Mercury Control Program, inclusive of studies to identify potential methylmercury control methods in the Delta and to participate in an Exposure Reduction Program (ERP). The goal of the studies is to evaluate existing control methods and evaluate options to reduce methylmercury in open waters under jurisdiction of the CSLC. The goal of the ERP is to increase understanding of fish contamination issues and reduce exposure to mercury in fish from the Delta. Consequently, any activity by suction dredge miners that results in continued Hg and methylmercury moving from upstream areas to the Sacramento-San Joaquin Delta Estuary may affect the CSLC's efforts to comply with the TMDL.

The SEIR noted that permitted suction dredging under the proposed requirements may transfer heavy metals from deeper or sheltered sediment upstream onto State sovereign lands downstream, potentially affecting future uses of or projects on lands held in trust for Californians. The case study cited in the SEIR of Hg transport from

suction dredging on the South Yuba River upriver of Englebright Lake estimated that 60% of smaller Hg particles (<63µm, those more prone to methylation and subsequent bioaccumulation) stirred up by dredging traveled at least downriver of Englebright Dam and, eventually, as far as the Delta. The bed of much of the river between Englebright Dam and the Delta, as well as much of the Delta itself, on which these particles would settle, is sovereign.

Further buildup of Hg and other heavy metals on CSLC-managed riverbeds and bays resulting from continued suction dredge mining, which are beyond whatever occurred under CDFW's previous permit program, may constrain future CSLC actions proposed or taken in the interest of the State. These settled particles, both in the lower South Yuba River and, presumably, other major rivers such as the American, Feather, and Klamath, become a liability or responsibility for projects which may be implemented by the CSLC or others on sovereign land. Future efforts to enhance and support Public Trust uses, including but not limited to navigation, water-related recreation, public access, habitat restoration and invasive species management, would potentially have to mitigate for disturbance of Hg and other metallic particles originating from upstream suction dredging. Such impacts and mitigation could add substantial costs or controversy to future projects that benefit Californians, their enjoyment of public lands and waterways, and the habitat values of these areas.

Comments:
CDFW's amended regulations are likely not sufficient to adequately limit suction dredging's contributions to Hg loading, increased methylation of disturbed Hg, and bioaccumulation of methylmercury in certain California waters; however, the State Water Resources Control Board (SWRCB) and the RWQCBs are currently vested, via sections 401 and 402 of the Clean Water Act, with the regulatory authority that CDFW lacks, and may mitigate these impacts to safer levels than CDFW can alone.

CSLC staff believes that statutory changes that would allow or require CDFW to regulate Hg and other water quality impacts, as would be likely under the requirements of Fish and Game Code section 5653.1 (i.e., "...fully mitigate all impacts..."), could create confusion and inefficiency in the management and remediation of Hg pollution, particularly with regard to the TMDL, as it would create duplicative, if not conflicting, jurisdictional agencies for water quality. Rather a mechanism by which the SWRCB and RWQCBs could engage more effectively on the water quality aspects of suction dredging, given that those agencies already have operating sediment management and Hg control programs, along with the relevant staff expertise, may be worth exploring.

Summary

Pursuant to Fish and Game Code section 5653, subdivision (b), the CDFW is *required* to issue permits for suction dredge mining activities if it determines, under the adopted Program regulations, that the activities would not be deleterious to fish. In promulgating regulations in 2012 to update the Program, CDFW determined several conditions and limitations were necessary in order to reduce such potential deleterious impacts to fish,

including: equipment specifications (i.e., nozzle size, hose size, and pump intake screens); method of operation; seasonal and year-round closures for various water bodies; and maximum number of permits to be issued annually. Other significant impacts identified in the SEIR do not concern fish and wildlife resources, and as an agency with limited, statutorily-derived jurisdiction, the CDFW does not currently possess the authority to impose non- fish and wildlife related conditions on suction dredge applicants; instead, control of these impacts are under the jurisdictions of other public agencies with the relevant expertise and existing regulatory authority.

CSLC staff understands that section 5653.1 of the Fish and Game Code, as amended in June 2012, directs the CDFW to, among other things, recommend to the Legislature statutory and regulatory changes necessary to "fully mitigate" *all* significant impacts resulting from suction dredging authorized under section 5653 of the Fish and Game Code. We are encouraged by the Legislature's desire to regulate suction dredge mining activities such that there is more effective oversight of the entire spectrum of environmental effects; however, we remain concerned that the current focus on CDFW and the Fish and Game Code alone may not result in a well-managed, efficient Program, primarily because there already exist other agencies with jurisdiction over the relevant resource impacts (e.g., water quality, cultural resources, and noise). For example, the above-described Hg and methylmercury impacts should and can be regulated under the existing authorities of the SWRCB and RWQCBs; to create a separate, duplicative authority for water quality under CDFW's control would likely increase confusion and conflict, and decrease effectiveness of overall regulation of these pollutants. As a result, CSLC staff recommends any statutory or regulatory changes considered continue to limit the CDFW's authority under the Fish and Game Code to fish and wildlife resources, and not broaden its substantive authority to issues and resources already under another agency's purview.

In closing, CSLC staff believes that the impacts resulting from suction dredge mining activities do affect the environment, including State sovereign lands and Public Trust resources and activities. We urge the Legislature to consider these impacts and options for regulating the activity; however, we do not believe that simply expanding the scope of the CDFW's statutory and regulatory authority to non-fish and wildlife related issues is the appropriate or most efficient solution. We recommend instead the Legislature focus on facilitating the development of a Program administration structure that can regulate suction dredge mining activities to a specific, defined standard (e.g., define "fully mitigate" as used in § 5653.1) in a coordinated, organized, and streamlined manner. This could, for example, involve creating a separate oversight entity or working group consisting of staff from all the affected jurisdictional agencies. Regardless of the eventual implementation approach the Legislature sees fit to pursue, the CSLC staff strongly supports providing the entity or entities with adequate authority, as well as adequate funding and staff resources, to effectively minimize and mitigate the spectrum of impacts caused by suction dredge mining activities.

Thank you for consulting the CSLC and for the opportunity to provide comments on potential improvements to the administration of the Program. Please do not hesitate to contact me at (916) 574-1800 or Jennifer DeLeon, Environmental Program Manager, at 916-574-0748 or by email at Jennifer.DeLeon@slc.ca.gov, with any questions about our input or for additional information about the CSLC's jurisdiction.

Sincerely,

JENNIFER LUCCHESI
Executive Officer

cc: Jennifer DeLeon

Department of Toxic Substances Control

Matthew Rodriquez
Secretary for
Environmental Protection

Deborah O. Raphael, Director
1001 "I" Street
P.O. Box 806
Sacramento, California 95812-0806

Edmund G. Brown Jr.
Governor

March 6, 2013

Mr. Charlton H. Bonham
Director
California Department of Fish and Wildlife
1416 Ninth Street, 12th Floor
Sacramento, California 95814

AGENCY CONSULTATION REQUEST - SUCTION DREDGING REGULATIONS

Dear Mr. Bonhman:

Thank you for your letter dated February 7, 2013, regarding the California Department of Fish and Wildlife's (CDFW) request for the Department of Toxic Substances Control (DTSC) to provide consultation to CDFW pursuant to Fish and Game Code Section 5653.1. CDFW is seeking input from DTSC regarding amendments to the Fish and Game Code or other law necessary to ensure that suction dredging in California does not result in any significant impacts to the environment or human health.

Background

A legislative moratorium on suction dredging was established by SB 670 (August 6, 2009) and extended in 2011 by AB 120, and in 2012 by SB 1018. CDFW is currently prohibited by court order from issuing suction dredge permits. The use of vacuum or suction dredge equipment in any river, stream, or lake in California is currently prohibited by statute. (Fish & G. Code, § 5653.1, subd. (b).)

Section 56531, as amended in June 2012, requires that CDFW submit a report to the Legislature with recommendations on statutory changes or authorizations needed for CDFW to adopt suction dredging regulations that include measures to mitigate all identified significant environmental effects.

On April 27, 2012, under the Administrative Procedure Act (APA), the Office of Administrative Law (OAL) approved updated regulations adopted by CDFW governing suction dredge mining under Fish and Game Code section 5653 et seq.

In response to CDFW's request, DTSC performed a cursory review of:

- "Final Statement of Reasons - Title 14, California Code of Regulations, Amended Sections 228 and 228.5, March 16, 2012;

- "Findings of Fact of the California Department of Fish and Game as a Lead Agency under the California Environmental Quality Act (CEQA), Suction Dredged Permitting Program, as Analyzed in the Suction Dredge Permitting Program, Subsequent Environmental Impact Report," dated March 16. 2012;

- Chapter 4.2, Water Quality and Toxicology and Chapter 4.4 Hazards and Hazardous Materials of the "Suction Dredge Permitting Program, Draft Subsequent Environmental Impact Report (DSEIR)", dated February 2011; and

- "Final Updated Regulations - Title 14. Natural Resources; Division 1, Fish and Game Commission - Department of Fish and Game; Subdivision1, Fish, Amphibians and Reptiles; Chapter 8, Miscellaneous; Section 228 and 228.5, Suction Dredging", approved by OAL on April 27, 2012.

Since a final Environmental Impact Report (2012 EIR)[1] has been issued and amended/updated regulations have been approved by OLA, DTSC is not offering comments on the scientific adequacy of the 2012 EIR or the subsequent Final Statement of Reasons and Findings of Fact presented in support of the Updated Title 14, Section 228 and 228.5 Suction Dredge Regulations.

The final EIR explores issues concerning environmental and human health concerns in regards to suction dredge activities. The Notice of Determination (NOD) for the Subsequent Environmental Impact Report (SEIR) acknowledges that there will be significant impacts to the environment, that mitigation measures were not made a condition of the approval of the project, and a statement of overriding considerations was adopted for this project.

DTSC believes that outstanding issues identified in the CEQA documents should be examined in additional detail. At this time, DTSC welcomes the opportunity to participate in any discussions to revisit the updated regulations in order to more fully consider and further address mitigation measures that may reduce potential adverse impacts to the environment or human health.

Please contact me at (916) 324-3148 if you have any questions.

Sincerely,

Stewart W. Black

Stewart W. Black, P.G.
Deputy Director
Brownfields and Environmental Restoration Program

[1] For the purposes of the Final Statement of Reasons, the 2012 EIR consists of the Draft Sequential EIR and the Sequential EIR. A Notice of Determination (NOD) for the Sequential EIR was filed on March 16, 2012.

STATE OF CALIFORNIA Edmund G. Brown, Jr., Governor

NATIVE AMERICAN HERITAGE COMMISSION
915 CAPITOL MALL, ROOM 364
SACRAMENTO, CA 95814
(916) 653-6251
Fax (916) 657-5390
Web Site www.nahc.ca.gov

March 12, 2013

Mr. Chuck Bonham, Director
Department of Fish and Game
Suction Dredge Program
Revisions to Proposed Amendments
DFG Northern Region
601 Locust Street
Redding, CA 96001

Re: **Agency Consultation Pursuant to Fish and Game Code Section 5653.1**

Dear Director Bonham:

The Native American Heritage Commission (NAHC) has received your letter of February 7, 2013, initiating consultation with the NAHC in compliance with Fish and Game Code §5653.1. This code prohibits the use of vacuum and suction dredge equipment in any river, stream, or lake until certain requirements are met. Subsection (b) (4) stipulates that any new regulations concerning vacuum or suction dredge mining permits fully *mitigate all identified significant environmental impacts.* Subsection (5) (1) states; to comply with Subsection (b) (4), the Department of Fish and Wildlife (DF&W) must consult with the other agencies, including the NAHC, on or before April 1, 2013.

In a letter dated April 21, 2011, the NAHC commented on the Draft Subsequent Environmental Impact Report (SEIR), SCH # 2005-09-2070, for the Suction Dredge Permitting Program. In its original comments the NAHC stated that the mitigation described in the document for *Historical Resources*, *Traditional Cultural Properties*, *Unique Archaeological Resources*, and Native American human remains and associated grave items were inadequate. The Suction Dredge Permitting Program regulations, approved April 27, 2012, do nothing to change our original assessment of the program.

The SEIR states *Riverine settings are considered highly sensitive for the existence of significant archaeological resources* (p. 4.5 – 14). The document clearly indicates that suction dredge mining has the potential to impact significant *Historical Resources*, including *Traditional Cultural Properties* (mitigation measure CUL-1, p. 4.5-11), and *Unique Archaeological Resources* (mitigation measure CUL-2, p. 4.5-14) *through riverbed suctioning and screening activities that could disturb or destroy cultural materials which may be located just below the surface of the riverbed or along its banks* (p. 4.5-14). The SEIR states that these impacts are *Significant and Unavoidable*. The SEIR also does not adequately mitigate program impacts to Native American human remains and associated grave goods, pursuant Health and Safety Code §7050.5 and PRC §5097.98 (CUL-3, p. 4.5-15).

The Department's solution to protecting these one-of-a-kind cultural resources is to provide an *informational packet*, acknowledged to be *advisory*, to suction dredge operators describing their obligation to follow state law regarding the impacts of their activities. Even if suction dredge operators had the will to actively protect *Historical Resources* and *Unique Archaeological Resources* from their activities, they do not have the knowledge and expertise required to do so. In the vast majority of cases, it is far more likely that if these resources are encountered and recognized that they will be subjected to looting.

In its *Findings* pursuant to *CEQA Guidelines* §15091(a), the California Department of Fish and Wildlife (CDF&W) states regarding the revised regulations for the Suction Dredge Permit Program:

> *the significant and unavoidable effects expected with the revised regulations will still persist beyond the existing substantive legal reach of the Department relevant in the narrow circumstances at hand....*
>
> *All things considered, the Department finds on balance that the benefits of final action outweigh the significant and unavoidable effects expected to occur with suction dredging as authorized under the revised regulations. The Department is mandated by statute and court order to complete the environmental review and rulemaking effort under existing law. Moreover, in fulfilling that mandate from a substantive perspective, the Department's legal authority is prescribed in narrow terms based on Fish and Game Code section 5653, subdivision (b), specifically. Though unpalatable and inconsistent with the Public Trust Doctrine and its trustee charge under the Fish and Game Code, the Department believes it can do no more.*

The NAHC does not believe that the Suction Dredge Permit Program's benefits outweigh the potential unavoidable adverse environmental impacts this statewide program will have on *Historical Resources*, *Unique Archaeological Resources* and Native American human remains and associated grave items. This program jeopardizes California's historical and archaeological heritage for what are essentially hobbyist gold miners. When considered statewide, with individual permits potentially in the thousands the impacts of the Suction Dredging Permit Program will be considerable.

The SEIR does not identify or mitigate the potential impacts of the suction dredging permit program on contemporary Native American communities. As they were in pre-contact times, California waterways, whether they are springs, creeks, rivers, or ocean and the wildlife in and around it continue to be vital elements in Native American spiritual and ceremonial life. The SEIR only discusses the physical impacts of this program on Native American cultural resources. It does not address the noise and visual impacts suction dredging will have on Native American spiritual and ceremonial pursuits. The disruption caused by suction dredging could make places along California's waterways that have been used for Native American spiritual and ceremonial activities for hundreds of years unusable. While, Fish and Game Code §5653.1 states that the Department must consult with the NAHC regarding this program, the NAHC believes that the only legitimate avenue to resolve the impacts of this program is through consultation with the Native American community, which did not occur in the preparation of the SEIR.

In the SEIR (p. 4.5 – 15), it states that DF&W does *not have the jurisdictional authority to adopt or enforce mitigation for impacts to unique archaeological resources. Therefore, impacts to such resources are considered significant and unavoidable.* In fact, it appears no state agency has a clear line of authority to mitigate impacts to Native American cultural resources in such cases. CEQA Guidelines §15091, regarding *Findings (a)(1)* states:

> *(a) No public agency shall approve or carry out a project for which an EIR has been certified which identifies one or more significant environmental effects of the project unless the public agency makes one or more written findings for each of those significant effects, accompanied by a brief explanation of the rationale for each finding. The possible findings are:*
>
> *(1) Changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the final EIR.*
>
> *(2) Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency.*

The NAHC does not have that *responsibility and jurisdiction* for Native American cultural resources under state law. It is not considered a state *Trustee Agency*, as described in *CEQA Guidelines* 15386 for the protection of these resources. The appellate court decision in *Environmental Protection Information Center (EPIC) v. Johnson* (170 Cal. App. 3d 604, 216 Cal. Rptr.502) ruled that the NAHC:

> *has special expertise on the subject of Native American historical sites. The commission has jurisdiction to identify sites of special religious and spiritual significance to Native Americans **[170 Cal. App. 3d 626]** and their heritage, to make recommendations regarding sacred places located on private lands, and to consider the environmental impact on property identified or reasonably identified as a place of special religious significance to Native Americans*

The NAHC believes that the decision in this case should have resulted in changes to state law that would give the NAHC *trustee* authority.

There is one legal avenue in state law that the NAHC could pursue to protect Native American cultural resources from the impacts that may be caused by the DF&W Suction Dredge Permitting Program. After reviewing California Public Resources Code and California Civil Code, it is probable that both the State Lands Commission and the NAHC have the authority to protect and mitigate the potential impacts of the Suction Dredge Permitting Program on Native American cultural resources on public land.

California Public Resources Code §6301 gives the California State Lands Commission exclusive jurisdiction over all ungranted tidelands and submerged lands owned in the state and the beds of navigable rivers, streams, lakes, bays, estuaries, inlets and straits, including tidelands and submerged lands or any interest therein, whether within or beyond the boundaries of the State.

California Civil Code, §830 describes the State's ownership of tidelands, submerged lands and beds of navigable waterways includes lands laying below the ordinary high water mark of tidal waterways and below the ordinary low water mark of non-tidal waterways. It states the area between the ordinary high and low water marks on non-tidal waterways is subject to a *public trust easement,* which is under State Lands Commission jurisdiction. These codes and case law would apply to permits issued by DF&W on public lands through the Suction Dredge Permitting Program.

Public Resources Code §5097.9 delegate certain *Powers and Duties* to the NAHC, for the protection of Native American cultural resources on public property, stating:

> *No public agency, and no private party using or occupying public property, or operating on public property, under a public license, permit, grant, lease, or contract made on or after July 1, 1977, shall in any manner whatsoever interfere with the free expression or exercise of Native American religion as provided in the United States Constitution and the California Constitution; nor shall any such agency or party cause severe or irreparable damage to any Native American sanctified cemetery, place of worship, religious or ceremonial site, or sacred shrine located on public property, except on a clear and convincing showing that the public interest and necessity so require....*

The provisions of this code are enforced by the NAHC, pursuant to PRC §§5097.94 and 5097.97, which authorize the Commission, after being advised by *any Native American organization, tribe, group, or individual* that and action by a *public agency may cause severe or irreparable damage to a Native American sanctified cemetery, place of worship, religious or ceremonial site, or sacred shrine located on public property, or may bar appropriate access thereto...* authorizes the NAHC to conduct an investigation and if it finds, after a public hearing, that the proposed action will result in *damage or interference,* the Commission *may recommend mitigation measures for consideration by the public agency proposing to take such action. If the agency fails to accept the mitigation measures, the commission may assist the Attorney General to take appropriate legal action pursuant to subdivision (g) of Section 5097.94.*

While these statutes may give the NAHC a way to mitigate the impacts of the Suction Dredge Permitting Program on Native American cultural resources, including Native American human remains and associated grave items, efforts to do so will place the NAHC in an adversarial position with another state agency. A position the NAHC would prefer to avoid. The NAHC would rather work with the legislature, the Native American community, and the DF&W to, as the DF&W suggested in their statement of *Findings* to achieve a *comprehensive regulatory reform to address and resolve the complex issues associated with the future of suction dredging in California.*

The NAHC encourages the legislature to provide a clear line of authority in cases such as the one presented by the Suction Dredging Permit Program, as well as other programs and projects that impact the protection of Native American cultural resources, which includes Native American human remains and associated grave items. In these cases, the NAHC should have the same *responsibility and jurisdiction* as a *trustee agency* for California Native American cultural resources, as the DF&W has for California's wildlife. The Suction Dredging Permit Program is just one example of how current state law limits NAHC ability to address the protection of these dwindling resources.

Sincerely,

Cynthia Gomez
Executive Secretary
Native American Heritage Commission

CALIFORNIA
Water Boards

Edmund G. Brown Jr.
GOVERNOR

Matthew Rodriquez
SECRETARY FOR
ENVIRONMENTAL PROTECTION

State Water Resources Control Board

MAR 11 2013

Mr. Charlton H. Bonham, Director
Department of Fish and Wildlife
1416 Ninth Street, 12th Floor
Sacramento, CA 95814

Dear Mr. Bonham:

Thank you for the opportunity to share our concerns and recommendations on behalf of the State Water Resources Control Board (State Water Board). The State Water Board and our sister agencies, the regional water quality control boards, are tasked with the protection, control, and utilization of all waters of the state. Through our delegated authority set forth in the Porter-Cologne Water Quality Act (Wat. Code, § 13000 et seq.) and the federal Clean Water Act (33 U.S.C. § 1251, et seq.), the State Water Board may regulate any activity or factor which may affect water quality. As such, below are the State Water Board's recommendations for the Legislature on how to fully mitigate all identified significant environmental impacts from recreational suction dredge mining as identified in the Department of Fish and Wildlife's (Department) Final Subsequent Environmental Impact Report (FSEIR).

Based on the water quality impacts of recreational suction dredging, we recommend that the existing moratorium be continued indefinitely, or that this activity be permanently prohibited. Given the current scientific understanding of this activity's impacts, this is the only and the most cost-effective method to fully mitigate all significant water quality impacts. The FSEIR identifies two significant and unavoidable water quality impacts: mercury resuspension and discharge, and effects from resuspension and discharge of other trace metals (e.g., copper, lead, zinc, cadmium, chromium, arsenic).

The resuspension and discharge of mercury is a potent neurotoxin that is harmful to both humans and wildlife. Mercury builds up in the bodies of fish that live in waters with even small amounts of mercury; and in the bodies of humans who eat contaminated fish. Because much of our state's in-stream mercury is a result of historic gold mining activities, recreational suction dredging activities specifically target these locations and resuspend mercury from many known and unknown "hotspots."

Recreational suction dredging as a whole has a disproportionately greater effect on mercury resuspension when compared to other natural events or human activities. Suction dredging operators often target deep sediments, resulting in the mobilization of mercury that may not be mobilized by typical winter high-flow events. This leads to substantially increased mercury

loading in the downstream water body. According to the peer-reviewed findings in the FSEIR, a single 4-inch dredge could discharge up to 10 percent of an entire watershed's mercury loading during a dry year. Additionally, recreational suction dredging occurs in the summer months when water temperatures are higher and oxygen levels are lower. These conditions are conducive to increased rates of methylation of mercury; the process by which elemental mercury binds with organic molecules and becomes more readily absorbed by living tissue and significantly more toxic to humans and wildlife.

Recreational suction dredging also has the significant effect of resuspending and discharging sediment containing mercury and other trace metals. Many of these other trace metals are detrimental to aquatic life and are regulated under the California Toxics Rule (CTR), as is mercury. The toxicity of resuspended metals is determined, in part, by the aquatic pH value in which the metals occur. Metals in waters with a low aquatic pH value are more toxic than metals in waters with a higher pH value. Historic copper, lead, and silver mines are located throughout the Sierra Nevada and Klamath-Trinity Mountains. These locales are also the sites associated with many acid mine draining issues; i.e., locations with low aquatic pH values. Dredging at these locales has the potential to increase the level of one or more trace metals in a water body such that they exceed the levels allowed under the CTR.

As stated above, the indefinite continuation of the existing moratorium is the State Water Board's recommendation and is the only option that fully mitigates all environmental impacts. However, within the State Water Board's existing authority, the Board can adopt one or more general orders regulating the discharges associated with recreational suction dredging. The general order(s) could prohibit the activity in any water body impaired for mercury, sediment, or any trace metal, along with its tributaries.

This option raises a number of concerns. First, while such a prohibition will likely encompass many of the waters containing mercury and other trace metal hotspots; it will not account for those hotspots that are unknown. To fully account for such hotspots, the State Water Board would need to conduct a lengthy, resource-intensive inventory of all water bodies within the state. Also, any general order would not fulfill the Legislature's mandate to "fully mitigate all identified significant environmental impacts" as set forth in Fish and Game Code section 5653.1. Lastly, any such general order is likely to require a significant amount of State Water Board resources to develop the order; execute and enforce the terms of the order; and, defend the order from inevitable legal challenges. In essence from the State Water Board's perspective, this option would create a new and unfunded regulatory program.

Regardless of what action the Legislature takes pursuant to the Department's report, we respectfully request that any action taken provide clear authority and sufficient resources to fulfill the Legislature's directive. Any authority and accompanying resources should provide for robust scientific research, implementation, and enforcement by the Department and/or any sister agencies deemed necessary by the Legislature. Additionally, any action taken should provide flexibility for the regulatory agency to adapt to the ever-evolving nature of the activity and our understanding of the environmental conditions and scientific understanding behind recreational suction dredging activities.

For example, it has come to the State Water Board's attention that the suction dredging community is conducting dredging activities without the use of a sluice box. Absent the use of a sluice box, their activities are not considered "suction dredging" pursuant to the Department's regulations (see Cal. Code Regs., tit. 14, § 228, subd. (a)(1).) Unfortunately, whether or not a sluice box is used, the detrimental effect on water quality, and subsequently humans and

aquatic life, remains the same. This is an example of the evolving nature of the activity. In order to adapt under the current regulatory scheme, the Department needs to undertake a cumbersome rulemaking proceeding subject to the requirements of the California Environmental Quality Act, the Administrative Procedures Act, and involve the Office of Administrative Law. Alternatively, the Legislature could consider a statutory amendment to block this or other attempts to circumvent environmental regulation of this activity.

Again, the State Water Board thanks you for the opportunity to share our concerns and recommendations. If you have any questions, please contact Deputy Director, Elizabeth Haven at (916) 341-5457 or Liz.Haven@waterboards.ca.gov

Sincerely,

Thomas Howard

Thomas Howard
Executive Director

cc: Michael A.M. Lauffer, Esq. **[via email only]**
Office of Chief Counsel
State Water Resources Control Board
1001 I Street, 22nd Floor [95814]
P.O. Box 100
Sacramento, CA 95812-0100
Michael.Lauffer@waterboards.ca.gov

Jonathan Bishop, **[via email only]**
Chief Deputy Director
State Water Resources Control Board
1001 I Street, 24th Floor [95814]
P.O. Box 100
Sacramento, CA 95812-0100
Jonathan.Bishop@waterboards.ca.gov