

The New 49'ers

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10 April 2011

RE: Comments regarding SEIR and Proposed Regulations for suction dredge mining in California

Dear Sir:

Thank you for allowing us the opportunity to comment on the California Department of Fish & Game's (DFG) Suction Dredge Permitting Program Subsequent Environmental Impact Report (SEIR) and Proposed Regulations.

My name is Dave McCracken. I personally have been operating dredges in California, mostly for financial gain, since 1980. I publish four books on the subject, along with three how-to video productions. My company maintains the most extensive and informative web site in the world on the subject of suction gold dredging. In addition to my work in California, I have consulted on dredge projects all over the world, and I have trained hundreds of people, perhaps over a thousand, on how to do serious underwater mining for the purpose of finding and developing high-grade (economically viable) gold deposits. The California courts have allowed me to testify as an expert in suction dredging. My experience over the past 25 years in helping thousands of New 49'er members become more successful provides me with a unique viewpoint. This is because I have likely devoted more time on more dredging programs than any other person alive. I was intimately involved with the development of the 1994 EIR that supported suction dredge regulations in California until the recent moratorium was imposed. I was also involved with the litigation in Alameda Superior Court which led to the Court's Order for DFG to update your analysis of the environmental consequences of the existing (1994) regulations. Therefore, I am very qualified to provide comments to help this Administrative Process along.

I am the founder and General Manager of The New 49'er Prospecting Association. Our organization has been operating along the gold bearing waterways of Siskiyou County since 1986. While I am the author, these comments are the result of the collaborative efforts of our staff and numerous responsible members that also have substantial experience in dredging matters. We presently have more than 2,000 active members that

depend upon our Association to provide the best small-scale mining opportunities available today, and to defend them against unreasonable regulation. More than half of our members were dredging in California before the recent moratorium was imposed. Therefore, our Association represents about one third of the people who possessed suction dredging permits in California during 2008 & 2009.

We have taken considerable time to review your SEIR, along with the appropriate sections of the California Fish & Game Code, the Resources Code and the Government Code; and I hope you will give careful consideration to my following comments.

The reason these comments are a bit long is that I have copied relevant portions of your SEIR and Code Sections in order to make my points. This is to save you from having to look up your own language. It is also for the benefit of others who have not reviewed the SEIR as closely as we have.

Congratulations are in order!

Before we get into the SEIR and Proposed Regulations, we would like to take a moment and congratulate the Department upon a job well done by coming up with such a workable EIR and productive set of regulations which supported our industry so well during the 14 mining seasons which between 1994 and 2009 when we were stopped by the moratorium. The Department's own survey results project that our suction dredging (small business) industry recovered over 7 tons of gold and removed more than 4 tons of mercury from California's waterways during that time period, all without creating a deleterious impact upon California's fishery resources; or for that matter, harming a single fish!

Having been present as the 1994 regulations were developed, I am not sure anyone involved at the time was convinced that we found a reasonable balance between resource protection and regulation which was not too burdensome upon our industry. Now that the initial 14-year project is behind us, I believe most people can look back with admiration for how we all made an effort to come up with something that worked for everyone.

Having acknowledged the past, we can only hope to achieve the same results this time around:

This SEIR has Adopted Too Narrow of a View Concerning Perceived Environmental Impacts, and has not Balanced those to the Actual Economic & Social Impacts

We find it disturbing that this SEIR has gone to such extensive lengths to address the potential negative impacts of suction dredging upon California's historical resources (which you consider "significant and unavoidable") in some part because suction dredging has the potential to disturb sites which may be present as a result of historical gold mining operations, or could perhaps disturb a small boat which may have been left

behind at the bottom of some “confidential” waterway by some unnamed ancient tribe. You have considered the potential negative disturbances upon others which the sound of our dredge motors might impose upon others. You have considered the feelings which other river-users might have when suction dredgers might occupy some of the limited parking along river roads. You even included a substantial discussion about the aesthetic viewpoints which might be affected when a passerby sees a suction dredge along the river.

But what is entirely missing from your SEIR is a discussion about the sociological impact that your proposed regulations are going to have upon suction dredgers, American property owners and other Americans as the California Department of Fish & Game grinds forward with the intent to disenfranchise them/us of the opportunity to make a living (liberty) and continue to have some control over their/our own private property.

The SEIR defined its objective as follows:

6.2.1 Program Objectives

The Program was developed to achieve the following objectives:

- Comply with the December 2006 Court Order;*
- Promulgate amendments to CDFG’s previous regulations as necessary to effectively implement Fish and Game Code sections 5653 and 5653.9 and other applicable legal authorities to ensure that suction dredge mining will not be deleterious to fish;*
- Develop a Program that is implementable within the existing fee structure established by statute for the California Department of Fish and Game’s suction dredge permitting program, as well as the existing fee structure established by the CDFG pursuant to Fish and Game Code section 1600 et seq.;*
- Fulfill the CDFG’s mission of managing California’s diverse fish, wildlife, and plant resources, and the habitats upon which they depend, for their ecological values and for their use and enjoyment by the public; and*
- Ensure that the development of the regulations consider economic costs, practical considerations for implementation, and technological capabilities existing at the time of implementation.*
- Fulfill the CDFG’s obligation to conserve, protect, and manage fish, wildlife, native plants, and habitats necessary for biologically sustainable populations of those species and as a trustee agency for fish and wildlife resources pursuant to Fish and Game Code section 1802.*

Please recognize that there is no objective stated within the SEIR to also balance real concerns for environmental protection with the rights of property owners and existing business opportunities (especially small business) which exist within the areas that would be affected by the proposed regulatory changes.

Having read the entire SEIR, along with the appropriate Code Sections, we are convinced that DFG is attempting to complete the Administrative Process with too narrow of a view. Your approach appears to be to remove any and all risk to fish, no matter how

insubstantial or theoretical, **regardless of the costs which the affected small businesses and property owners will have to pay.**

The SEIR claims that the “...purpose of promulgating the draft proposed regulations is to ensure that suction dredge mining consistent with the Proposed Program is not “deleterious to fish” (Fish & G. Code § 5653). **(2.1.2 Program Objectives)**

But F&G Section 5653’s mandate must also be interpreted in light of all the other mandates the California Legislature has placed upon State agencies. For example, under the endangered species act you are to develop measures that protect species “while at the same time maintaining the project purpose [here suction dredging] **to the maximum extent possible**” (Fish and Game Code § 2053; emphasis added). As a general matter, mitigation “*measures or alternatives required shall be roughly proportional in extent to any impact on those [listed] species caused . . .*”. (Id. § 2052.1). This legislation refutes the notion that you can restrict dredging operations because of mere “*potential*” for adverse impacts on fish. To be lawful, any restrictions must make tangible improvements in the community or species-level survival of fish. The SEIR does not present a record to support the restrictions you that you are proposing.

We ask you to recognize that the legislature has also acknowledged the importance of maintaining and encouraging a viable minerals industry:

Public Resources Code 2650: (a) It is the continuing policy of the State of California, in the interest of the needs of society for the wise use of mineral resources and for other sound conservation practices, to foster and encourage private enterprise in all of the following activities:

(1) The development within the state of economically sound and beneficial mineral industries and metal and mineral product reclamation industries.

(2) The orderly and economic exploration, development, and utilization of the state's mineral resources and reclamation of metal and mineral products (emphasis added).

Public Resources Code 2711: (a) **The Legislature hereby finds and declares that the extraction of minerals is essential to the continued economic well-being of the state and to the needs of the society,** and that the reclamation of mined lands is necessary to prevent or minimize adverse effects on the environment and to protect the public health and safety (emphasis added).

These Code Sections mandate respect for mining as an activity that cannot lawfully be singled out for significant restrictions. If mere “*potential*” for adverse interactions were the criterion for regulation, you should be forbidding all swimming, rafting, kayaking and fishing in the river -- and even camping near the river, all of which pose as much “*potential*” to injure fish as mining—and certainly more so in the case of fishing.

In going through the SEIR, it appears that DFG decided from the beginning to overlook the important negative economic and social benefits which your proposed regulations

will certainly have upon the gold mining community. One reason we say this is that while DFG has loaded the SEIR with scientific justification in an attempt to support its proposed regulatory changes, there little-to-no explanation about how the changes (from the 1994 regulations) are going to seriously harm the small businesses and property owners that will be negatively impacted.

Public Resources Code 21001: The Legislature further finds and declares that it is the policy of the state to:

(e) Create and maintain conditions under which man and nature can exist in productive harmony to fulfill the social and economic requirements of present and future generations (emphasis added).

(g) Require governmental agencies at all levels to consider qualitative factors as well as economic and technical factors and long-term benefits and costs, in addition to short-term benefits and costs and to consider alternatives to proposed actions affecting the environment.

Public Resources Code 21002: The Legislature finds and declares that it is the policy of the state that public agencies should not approve projects as proposed if there are feasible alternatives or feasible mitigation measures available which would substantially lessen the significant environmental effects of such projects, and that the procedures required by this division are intended to assist public agencies in systematically identifying both the significant effects of proposed projects and the feasible alternatives or feasible mitigation measures which will avoid or substantially lessen such significant effects. **The Legislature further finds and declares that in the event specific economic, social, or other conditions make infeasible such project alternatives or such mitigation measures, individual projects may be approved in spite of one or more significant effects thereof** (emphasis added).

We suggest that DFG is deliberately attempting to dismiss the real impacts the proposed regulations will have upon the social and economic wellbeing of the most-affected stakeholders (gold dredgers and property owners) because of the arbitrary baseline which DFG has adopted. Even though the SEIR has acknowledged multiple times that suction dredging has been active within California since the 1960's, DFG decided to compare impacts from the proposed regulations to the existing situation whereby the Alameda Superior Court has imposed a no dredging moratorium until DFG completes this CEQA process. Yet, the purpose of the CEQA process from the beginning was to determine if existing (1994) dredge regulations were creating a **deleterious** impact upon fish.

DFG submitted Declarations within the Alameda litigation stating that you had doubts that existing regulations were providing enough protection for fish. Therefore, you began this process with it in mind that you were going to impose more restrictive regulations over suction dredgers. Therefore, we are assuming that DFG is making an economic comparison to **"no dredging"** under the existing moratorium so you can avoid the required balancing act of also taking into consideration how the proposed regulations will burden the thousands of dredger miners and the thousands of property owners who have invested into the existing (1994) regulatory framework. Here is the way you positioned the SEIR:

Impact MIN - 1: Availability of, or Access to, Placer Gold Deposits

(Beneficial): ...Implementation of CDFG's Program would lift an existing ban on suction dredging and would increase the potential access to placer gold deposits using this mining method (emphasis added).

By permitting the use of suction dredges, the Program would provide another means for recovery of gold from placer deposits. Adoption of the Proposed Program would result in a beneficial impact by allowing an additional method for extracting mineral resources (i.e., increasing the availability of such resources). The Proposed Program may also include measures to permanently or seasonally restrict suction dredging activities in certain areas of the State. However, these restrictions on suction dredging activities would not preclude other methods of mineral extraction. Therefore, the Proposed Program would not result in a loss of availability from the existing baseline conditions (i.e., prohibition of suction dredging) and would only change the allowable methods of mineral recovery. Therefore, the Proposed Program would have a beneficial impact on the availability and access to placer gold deposits (emphasis added).

These statements are misleading, because they are not making a comparison to all of the business activity which has invested itself to the existing (1994) regulations. Your SEIR should make it more clear that the proposed regulations would eliminate suction dredging across the state in most places where existing regulations allow it to occur. In addition, your SEIR should make it more clear that in the places where dredging would be allowed under the proposed regulations, effective mining capacity would be reduced to one quarter because suction nozzles would be reduced to 4-inches from 6-inches¹. In addition, California's most productive rivers would be reduced to 1/8th of existing capacity because allowable nozzles would be reduced from 8-inches to 4-inches.

While DFG states that dredgers may be allowed under the proposed regulations to increase capacity by entering into a Section 1600 Agreement, nothing is said about how lengthy and expensive the process is, ultimately which would make it impossible for many or most dredgers to gain approval during the same mining season that the dredger is pursuing the mining project.

¹ The standard rule of thumb in suction dredging is that in experienced hands, a 5-inch dredge will process twice the volume over a 4-inch dredge and efficiently excavate a hole one foot deeper into the streambed; that a 6-inch dredge will process twice the volume over a 5-inch dredge and efficiently excavate a hole one foot deeper into the streambed; that a 6-inch dredge will process twice the volume over a 5-inch dredge and efficiently excavate a hole two feet deeper into the streambed; and that an 8-inch dredge will process twice the volume over a 6-inch dredge and efficiently excavate a hole two feet deeper into the streambed. This formula has to do with the area-opening of the suction nozzle (rather than the diameter) and the percentage of larger-sized rocks within an average streambed that can be sucked up the nozzle rather than be packed by hand out of the excavation. The formula is the result of countless excavations which I have made over the many, many years. It is not something I just made up. You will find it in the books and articles which I and others have published long before this CEQA process was started.

DFG's has also understated the economic opportunities which were possessed by suction dredgers under the existing (1994) regulations in the way the dredger survey results have been interpreted:

Chapter 4.8: *Of the in-state permit holders, approximately 82% of those surveyed identified themselves as "recreational" miners, while approximately 74% of out - of - state permit holders identified themselves as such;*

This statement is a mischaracterization, perhaps because DFG really does not understand the mining process. The Survey identifies "**Recreational Dredgers**" as follows:

"Recreational Dredger (Not significant source of income)"

Just because someone does not realize a significant source of income from dredge mining does not mean that they are not serious about the amount of gold they are recovering. There is a learning curve; so it would be unreasonable for a dredge miner to have high expectations of gold recovery until some experience is obtained. Locating a valuable discovery normally requires a period of prospecting (sampling) during which time not very much gold is being recovered. Finding a valuable discovery normally requires some time. Therefore it takes longer for part time prospectors.

Even a person who believes he or she is "**only dredge mining for fun**" will become deadly serious about recovering the gold (because it is extremely valuable) once a valuable deposit has been located.

It is incorrect for DFG to characterize dredging as just another form of recreation on the grounds that it can also be an enjoyable activity in the outdoors. The thing that makes suction dredging different than other outdoor activities is that a very valuable substance is being pursued, gold; which when found, immediately turns the activity into a small business program. I have devoted countless hours with many, many suction dredgers; and I can tell you with absolute certainty that every dredger becomes very serious about gold recovery once a valuable deposit is located. The SEIR does not provide enough emphasis that, by its nature, dredge mining becomes a small business concern once a valuable gold deposit is discovered.

Out of all the people surveyed, the average dredger used a 4-inch dredge and recovered around 3.4 ounces of gold, working about 5.25 hours per day for approximately 31 days of work. These are average numbers. Approximately 25% said they recover gold as a source of income. It is reasonable to assume more gold was recovered by more-serious operators who were using larger-sized dredges than 4-inches. But if we just take the average amount of gold that dredgers were recovering during 2008 under the existing (1994) regulations, at today's value of \$1,475 per ounce, the gold adds up to \$5,300. Divide that amount by the 31 days which the average dredger had been working, and you have \$171 per day. This comes to more than \$32.62 per hour, **which is a good wage!** This is especially true in view of California's existing unemployment figures. You might rework the numbers a bit and come up with a different amount. But it will still come out to real money and important business!

Furthermore, there is no acknowledgement in the SEIR that all of this gold is a source of true wealth coming into California. This is not paper money that is coming off the government's printing presses, or credit created by the fractional banking schemes used by banks or the perception of value that is created by the financial markets as capital ebbs and flows to different kinds of investments. Gold is real wealth that will still exist long after today's markets and currencies are a thing of the past. Every additional ounce of gold brought into the market through dredge mining makes California just that much more valuable. According to your survey, suction dredgers recovered 12,410 ounces of gold in California during 2008; or more importantly, 173,750 ounces of gold during the 14-year period which the 1994 regulations have served us -- and your SEIR has not presented a single example where any fish was harmed!

It is reasonable to assume that dredge miners who depend upon the gold they recover as a source of income are taking on the activity as a small business enterprise. If 25% of dredgers during 2008 were pursuing the activity for financial gain as your survey suggests, that amounts to 900 small businesses across the state that were operating under existing regulations, all or most who would be negatively-impacted by the proposed regulations. **There is not enough emphasis in the SEIR about this.**

There is also nothing within the SEIR's economic discussions which project future gold prices based upon the existing growth curve; not even a mention! Financial experts uniformly expect the value of gold to go up. Some suggest the price is nearly certain to reach \$2,000 per ounce even before our updated suction dredging regulations will take affect in 2012. That would place the average value in gold recovered by dredgers under the 1994 regulations at more than \$200 per day; more than \$36 per hour! This creates a very substantial small business opportunity in California for the thousands of suction dredge miners that will be directly and negatively impacted by your proposed regulations. This cannot be ignored or overlooked!

The SEIR must consider the value of gold at the time the EIR is finalized.

There is also the matter of how the proposed regulations will undermine California's competitiveness with other states. California's existing (1994) regulations are about the same as Alaska's suction dredge regulations. However, California has a distinct dry season which Alaska does not enjoy. The summer season is also longer in California, providing California dredgers a competitive edge over Alaska under the 1994 regulations. However, the proposed regulations would eliminate dredging in most places across California, reduce nozzle sizes to 1/8th the effective capacities of dredges being allowed in Alaska, and shorten dredging seasons so drastically that Alaska will actually have a longer dredging season than California!

While Oregon provides a statewide permit (the permit only costs \$25 per year even for nonresidents) which allows dredge mining (with no limit on the number of permits issued) in most parts of the state, their Department of Environmental Quality (DEQ) also allows dredgers to apply for a special dredging permit to operate larger sized dredges.

Since DFG's proposed regulations would impose a limit on the number of permits and close suction dredging across most of California, if enacted, they would also provide Oregon with a competitive advantage. None of this is addressed within the SEIR, as it is supposed to be:

Government Code 11346.3: (a) State agencies proposing to adopt, amend, or repeal any administrative regulation **shall assess the potential for adverse economic impact on California business enterprises and individuals, avoiding the imposition of unnecessary or unreasonable regulations** or reporting, recordkeeping, or compliance requirements. For purposes of this subdivision, assessing the potential for adverse economic impact shall require agencies, when proposing to adopt, amend, or repeal a regulation, to adhere to the following requirements, to the extent that these requirements do not conflict with other state or federal laws:

(2) The state agency, prior to submitting a proposal to adopt, amend, or repeal a regulation to the office, **shall consider the proposal's impact on business, with consideration of industries affected including the ability of California businesses to compete with businesses in other states.** For purposes of evaluating the impact on the ability of California businesses to compete with businesses in other states, an agency shall consider, but not be limited to, information supplied by interested parties (emphasis added).

The SEIR also does nothing to assess the social and economic impact the proposed regulations will have upon all of the people who have moved their residences to gold country in California so they can be closer to suction dredging opportunities which have been allowed under the 1994 regulations, but disallowed under the proposed regulations. There are dozens of families belonging to The New 49'ers who have completely pulled up their roots and moved to Happy Camp or other places within closer reach of our mining properties. We are certain that this is true along all of the productive gold dredging areas of the state. Many have bought property. I am aware some have taken early retirement or quit their jobs so they could relocate closer to the productive dredge mining areas. What about the social impact upon them under the proposed regulations?

Another very important negative economic and social factor which DFG has overlooked in the SEIR are the millions upon millions of dollars in lost property value which Americans would lose as a direct result of the proposed regulations. This is about the many thousands of federal mining claims and parcels of private property which exist along the gold bearing streams and rivers within the state. Thousands of miles of property along these waterways would be completely closed to suction dredging under your proposed regulations. Those areas which would remain open to dredge mining under the proposed regulations would be reduced to a quarter or a mere eighth of the productive capacity which exists under the 1994 regulations (reduction of allowable dredge sizes from 6 or 8-inches down to 4-inches). This would dramatically undermine existing property values! The EIR waves off this reality as follows:

2 6.3.1: In relation to mineral resources, the No Program Alternative would not result in any discernable change from the Proposed Program. Though this alternative would no longer permit the use of a particular device to conduct gold

*mining, it does not entirely prohibit gold or other mineral extraction. **This is similar to the Proposed Program in that methods other than suction dredging would still be allowed in the streams subject to seasonal or permanent closures under the proposed regulations (emphasis added).***

Impact MIN - 2: Compliance with Applicable Federal and State Mining Regulations (No Impact): Implementation of the Proposed Program would not affect the ability of placer miners using other mining techniques to comply with the applicable federal and state mining regulations because the Proposed Program would only apply to suction dredging miners (emphasis added).

DFG is ignoring information which experienced suction dredgers provided during the PAC meetings when they explained that suction dredging is the only viable method of recovering valuable gold deposits which rest at the bottom of California's active waterways. It would be near-to-impossible, under the state and federal environmental protection reality of the day, for any reasonable person to believe we could obtain the required permits to use heavy earth-moving equipment to extract gold from active waterways in California; especially within the waterways which DFG is proposing to close to suction dredging!

High-grade gold deposits at the bottom of most waterways are buried under too much streambed material to excavate with hand tools. Anyone who has ever tried to excavate with hand tools underwater has already discovered how slow and difficult it is. "Slow and difficult" relates to a non-viable mining program!

The EIR does not place an appropriate amount of emphasis on the reality that the proposed regulations would eliminate the only effective method of gold extraction upon thousands of miles of California's waterways, therefore reducing the value of property which Americans own there, in some cases, eliminating the value altogether. Millions upon millions of dollars have been invested in mining properties which derive most of their value because suction dredges have been allowed to operate there under the 1994 regulatory framework.

While the SEIR goes to great lengths to justify the reasons why DFG wants to impose more restrictive regulation upon suction dredge miners, it has made zero effort to study how many thousands of existing properties along California's waterways would lose some or all of their value. We have not seen that DFG has many any attempt to contact or notify property owners who will be negatively impacted by the proposed regulations. This suggests that DFG is not really making a serious effort to balance the real costs of the proposed regulations to the American people, small business and property interests, something you are supposed to do in this Process.

To place some perspective on this, several years ago our Association decided to sell a number of mining properties (less than 10 mining claims) which were located along the main stem of the Salmon River in Siskiyou County. Several of these properties included some gravel bars along the side where hand-mining could take place; but the true value of

the properties, and the reason people wanted to buy them, was because our organization had managed several group dredge-sampling projects along that portion of the Salmon River and had established a steady high-grade line of gold under an average of 7-feet of streambed. The properties were sold at auction so we could establish their actual value. In all, we realized more than \$350,000 for the group of properties, more than \$70,000 for the claim which sold at the highest price. The entire reason why Americans bought those mining properties was so they could develop the economically-viable gold deposits which we had established at the bottom of the river under the regulatory scheme (1994) which was in affect at the time. When people pay tens of thousands of dollars for a mining claim, they are mostly doing it for business reasons. The main stem Salmon was allowing 6-inch dredges under those regulations. Your proposed regulations of a 4-inch limit would place those very same high-grade gold deposits effectively out of reach.

Some of the mining claims we sold along the Salmon River were located in canyons where bedrock walls dropped directly into the river. Therefore, gold dredging is the only effective method of mineral extraction there. We had also done some sampling along the surface where gravel bars existed on some of the claims. And while gold existed there, we could not find any deposit rich enough to pay wages for gold panning or other types of high-banking activity. The real value was in the original underwater high-grade deposits which had never been mined in the past.

You make statements in the SEIR that even with dredging eliminated or reduced because of the proposed regulations, prospectors would still have the option of pursuing other types of mining activity on the same properties. This viewpoint shows that you really do not understand mining. **Viable gold deposits are not evenly disbursed everywhere.** They exist where you find them. These deposits are always contained within very-defined boundaries. Dredge miners have to locate and develop the deposits where they exist.

Under the federal mining law, an exclusive right (mining claim) can only be established as a matter of law once a viable gold discovery has been made. By “*viable*,” this means a small business opportunity exists. If the discovery can only be viably-developed with the use of a 6-inch or 8-inch dredge (under the 1994 regulations), and you impose a 4-inch reduction in the mining capacity (or disallow dredging altogether), you have eliminated the viable discovery which creates the mining claim in the first place as a matter of law. Saying that the person can still pan gold on the property is like apples and oranges. If you prohibit use of the very equipment which makes it economically viable to work the property, you have undermined the legal foundation which allows the person an exclusive right to develop the property. This means you have taken the person’s ownership interest away.

Furthermore, the restricted nozzle size which is proposed in the SEIR would eliminate viable sampling and productive capacity in most of the areas which would remain open to dredging, namely the larger waterways within the state. As just one example, the Klamath River streambed runs an average of 8-to-10 feet thick (sometimes more than 20 feet thick). But the efficient depth-capacity of a 4-inch dredge in experienced hands is only 4 feet. Therefore, DFG is proposing to make nearly all of the areas which remain

open along the Klamath River off limits to **effective sampling** for viable gold deposits! This terrible reality will exist along all of the waterways which you propose to leave open to dredge mining. Therefore, the proposed regulations would reduce or eliminate the property values in the areas remaining open to suction dredging.

The SEIR repeats over and over that dredge miners would have the option to pursue a Section 1600 Agreement to operate larger suction dredges. But there is no guarantee of approval, and there is zero discussion inside the SEIR of how lengthy and difficult that process has become.

I have written very extensively on the subject of using dredges to sample for high-grade gold deposits. And I can tell you with certainty that there is no way that a person **in the business** of dredge mining can afford to stop and apply for another Section 1600 Agreement every time he or she wants to move to the next sample location. The process of sampling must be more fluid than that; because the prospector is tracing the path of gold in the waterway, along with the layer which it rests upon, as he or she is able to follow it through more and more sampling. Each sample requires another test hole; sometimes a distance up or down the waterway; sometimes to one side or the other. The process of finding high-grade is already challenging. Adding the requirement of a Section 1600 Agreement each time the dredger wants to test a new location would render the sampling process impossible.

The SEIR fails to acknowledge that the proposed regulations would effectively undermine most suction dredgers' ability to sample for valuable gold deposits within those places in California which would remain open. This would create economic losses in two ways:

- (1) Dredgers would recover less gold, consequently undermining the business of small-scale mining across the state.
- (2) If dredgers cannot find viable gold deposits along the state's waterways (which could otherwise be found if dredging under the 1994 regulations), then the value of those properties would be undermined. This is a discussion about what others would be willing to pay for the properties.

We are all reminded about the property rights which Americans possess under the federal mining law in **USA V SHUMWAY, Ninth Circuit, 22/28/99:**

"The miners' custom, that the finder of valuable minerals on government land is entitled to exclusive possession of the land for purposes of mining and to all the minerals he extracts, has been a powerful engine driving exploration and extraction of valuable minerals, and has been the law of the United States since 1866."

"The Supreme Court has established that a mining "claim" is not a claim in the ordinary sense of the word--a mere assertion of a right--**but rather is a property**

interest, which is itself real property in every sense, and not merely an assertion of a right to property (emphasis added)."

"[W]hen the location of a mining claim is perfected under the law, it has the effect of a grant by the United States of the right of present and exclusive possession. **The claim is property in the fullest sense of that term (emphasis added).**"

I encourage DFG to consult with your legal staff concerning **CALIFORNIA COASTAL COMM'N v. GRANITE ROCK CO., 480 U.S. 572 (1987)**. My own read of this important Supreme Court Decision brings me to the conclusion that while a State Agency may have some limited authority to regulate a mining activity on the public lands, there is **no authority to prohibit mining, or to impose unreasonable regulations** or to override the clear intent of Congress.

DFG does not have the authority to declare that suction dredgers are nothing more than "recreationalists," to be managed just like any other outdoor activity on the public lands (like fishing or hunting). If you have any authority at all to regulate dredge mining on the public lands, it is only within the language of F&G Code Section 5600, namely to work in cooperation with miners to find reasonable ways to prevent a deleterious impact upon fish. DFG's interpretation of "deleterious" in **Section 2.2.2** of the SEIR is as follows: ***"an effect which is deleterious to Fish, for purposes of section 5653, is one which manifests at the community or population level and persists for longer than one reproductive or migration cycle."***

Under GRANITE ROCK, we do not believe you have any authority to impose some kind of state "recreational status" or other regulatory scheme upon dredgers that does not align with the federal management of our program. Therefore, it would appear that all the work which you devoted to addressing how suction dredgers would affect the aesthetics of scenic vistas, noise levels and parking was a complete waste of time. Here is how the U.S. Forest Service defines us:

DEPARTMENT OF AGRICULTURE, Forest Service, 36 CFR Part 228 RIN 0596-AC17; ACTION: Final rule: "Neither the United States mining laws or 36 CFR part 228, subpart A, recognize any distinction between "recreational" versus "commercial" miners, or provide any exceptions for operations conducted by "recreational" miners. **The same rules apply to all miners.** Thus, to the extent that individuals or members of mining clubs are prospecting for or mining valuable deposits of locatable minerals, and making use of or occupying NFS surface resources for functions, work or activities which are reasonably incidental to such prospecting and mining, **it does not matter whether those operations are described as "recreational" or "commercial (emphasis added).**

The clear intent of Congress concerning how the federal agencies are directed to oversee mining on the public lands was confirmed in the controlling case of **USA V SHUMWAY, Ninth Circuit, 22/28/99:**

"A mineral claim is a parcel of land containing precious metal in its soil or rock."

“Mining claims located after the effective date of the 1955 Act are subject, prior to issuance of patent, **to a right of the United States to manage surface resources** and for the government and whomever it permits to do so to use the surface, **so long as they do not endanger or materially interfere with prospecting, mining, or processing** (emphasis added).”

“As required by the Forest Service's organic act, **the Secretary of Agriculture was delegated the authority to promulgate regulations for the protection of the forests:**

“The Secretary of Agriculture shall make provisions for the protection against destruction by fire and depredations upon the public and national forests which may have been set aside . . . ; and he may make such rules and regulations and establish such service as will insure the objects of such reservations, namely, to regulate their occupancy and use and to preserve the forests thereupon from destruction.”

That same organic legislation limited that power, **requiring that no such rule or regulation "prohibit any person from entering upon the national forests for all proper and lawful purposes, including that of prospecting, locating and developing the mineral resources thereof."** "Such persons must comply with the rules and regulations covering such national forests." **Interpreting these statutes in United States v. Weiss, we held that the Secretary may adopt reasonable rules and regulations which do not impermissibly encroach upon the right to use and enjoyment of . . . claims for mining purposes."** Thus, under Weiss, the Forest Service may regulate use of National Forest lands by holders of unpatented mining claims, like the Shumways, **but only to the extent that the regulations are "reasonable" and do not impermissibly encroach on legitimate uses incident to mining and mill site claims** (emphasis added).”

“Congress has refused to repeal the Mining Law of 1872. **Administrative agencies lack authority effectively to repeal the statute by regulations** (emphasis added).”

The California legislature also has mandated that state regulatory agencies should be careful about imposing unreasonable regulations which conflict with federal regulations:

Government Code 11346.2: Every agency subject to this chapter shall prepare, submit to the office with the notice of the proposed action as described in Section 11346.5, and make available to the public upon request, all of the following:

(5) A department, board, or commission within the Environmental Protection Agency, the Resources Agency, or the Office of the State Fire Marshal shall describe its efforts, in connection with a proposed rulemaking action, **to avoid unnecessary duplication or conflicts with federal regulations contained in the Code of Federal Regulations addressing the same issues...**(emphasis added)

There are also requirements for “necessity” and “non-duplication” pursuant to Government Code Sections 11349 and 11349.1 that are implicated here. In the Alameda litigation, we have painstakingly described a comprehensive scheme of federal oversight concerning suction dredge mining on federal lands, which constitute most of the areas addressed in your SEIR. In particular, we explained how federal law has created a statutory right to use the waters within the boundaries of national forests for mining (16 U.S.C. § 481) consistent with comprehensive federal regulations addressing and reviewing the environmental impacts of such mining (the 36 C.F.R. Part 228 regulations). Federal forest rangers receive individual “*Notices of Intent*” for suction dredge mining operations and make individualized determinations as to whether such operations may create a “*significant impact upon surface resources*” (which include the bottom of waterways). See generally *Karuk Tribe v. U.S. Forest Service*, No. 05-16801 (9th Cir. April 7, 2011). The SEIR and proposed regulations completely fail to take account of this system by attempting to impose additional (unreasonable) burdens under California law.

DFG’s proposed regulations unreasonably prohibit the use of suction dredges across most of the public lands in California along gold bearing waterways where the only viable method of location and development of high-grade gold deposits is with the use of suction dredges. In those remaining areas where the proposed regulations allow suction dredging (larger waterways), a reduced nozzle size will amount to a “prohibition” in most areas because smaller-sized dredges cannot effectively reach the viable gold deposits which exist under deeper streambeds. All of this, without the SEIR presenting any evidence that dredging under the existing (1994) regulations has ever created any deleterious impact upon a single fish, much less the Department’s definition of deleterious within the SEIR:

2.2.2 Definition of “Deleterious to Fish: *Generally, CDFG concludes that an effect which is deleterious to Fish, for purposes of section 5653, is one which manifests at the community or population level and persists for longer than one reproductive or migration cycle. The approach is also consistent with the legislative history of section 5653. The history establishes that, in enacting section 5653, the Legislature was focused principally on protecting specific fish species from suction dredging during particularly vulnerable times of those species’ spawning life cycle (emphasis added)*

We see no emphasis within the SEIR about the important cultural and economic impacts which small-scale miners have played in the history of California, especially to the smaller, rural communities near to where gold mining has taken place. **The entrepreneurial spirit embodied through small-scale mining in California predates California Statehood!** This is not about “*recreational mining,*” as the SEIR has attempted to define the heart of our industry. It is about the legacy of small-scale entrepreneurs who risk everything and work our guts out in hopes of striking it rich, or at least making a discovery which will provide enough income to keep a prudent person hopeful.

With only an occasional exception, the only reasonable hope of striking it rich or making real money for a small-scale miner today exists with the use of suction dredges. This reality was made abundantly clear to DFG during the PAC meetings. It is the modern suction dredgers who carry forward the 150-year-old legacy of viable small-scale miners in California. For the reasons we have outlined above, the proposed regulations would be nothing short of cultural genocide upon the viable small-scale mining community. All that would remain are those who have no hope of making real money from the activity. Pursuing the American dream through small-scale gold mining with the use of suction dredges would be a thing of the past. Yet, federal policy on the public lands is to encourage viable mineral development, not recreation; so that it remains a **“powerful engine driving exploration and extraction of valuable minerals.”** There is nothing explained within the SEIR that the proposed regulations will substantially **“encroach on legitimate uses incident to”** viable mining business opportunities which have been available under the 1994 regulations.

Because the proposed regulations attempt to impose such a heavy burden upon our industry, we took special time to carefully review all of the biological considerations which are contained within the SEIR; and we are very surprised, that with the exception of DFG’s concerns over mercury (which we will address elsewhere), **your biological concerns are the very same ones that were substantially addressed within the Final EIR that was published in 1994!** Your SEIR addresses the very same tired arguments that have already been looked at and dismissed (in relation to DFG’s definition of “deleterious”) in numerous studies, and also within the 1994 EIR.

Completely missing from the SEIR is a single example of any fish ever having been harmed as a result of 14 years of suction dredging activity under the 1994 regulations!

Rather than adopt a balanced approach in considering the real impacts from 14 years of activity, DFG has chosen in this SEIR to compare **“possible impacts”** (which were compared in 1994 to **“ongoing dredging activity”**) to a **“no existing dredging activity”** baseline because of the existing moratorium. Here is the way the SEIR attempts to dance around this:

*1.3.1: A state or local lead agency prepares an SEIR when, after having prepared and certified an earlier EIR for the same project, new information, **changed circumstances**, or project changes are proposed that involve new significant or substantially more severe environmental effects not previously addressed in the earlier EIR (emphasis added).*

*Finally, it bears noting that this SEIR extends beyond the scope of a typical SEIR, in that it presents a comprehensive evaluation of the full range of potential environmental impacts, **including topics which were previously addressed in the 1994 EIR.** The 1994 EIR, in general, utilized a fairly broad and qualitative approach in evaluating impacts. To bring additional specificity and clarity to the impact discussion and conclusions, **this SEIR revisits many of these topics, even where there is not information to suggest that there may be new***

significant or substantially more severe environmental effects than were evaluated in the 1994 EIR. In large part, the change in existing environmental conditions at the time of preparation of these planning documents lends to the increased scope of this report compared to a typical SEIR. As explained in more detail below, the Hillman injunction and the passage of SB 670 prohibiting CDFG from issuing new suction dredge permits necessitate a change in baseline conditions from which to assess potential effects, as compared to an environmental baseline that includes ongoing suction dredging activities consistent with the existing regulations in Title 14 as analyzed in the 1994 EIR (emphasis added).

1.3.2 Baseline Conditions: Under CEQA, the environmental setting or “baseline” serves as a gauge to assess changes to existing physical conditions that will occur as a result of a proposed project. Per CEQA Guidelines (Cal. Code Regs., tit. 14, §15125), **for purposes of an EIR, the environmental setting is normally the existing physical conditions in and around the vicinity of the proposed project as those conditions exist at the time the Notice of Preparation (NOP) is published.** As underscored by appellate case law, however, the appropriate environmental baseline for a given project may be different in certain circumstances in order to provide meaningful review and disclosure of the environmental impacts that will actually occur with the proposed project (emphasis added).

In the present case, CDFG has determined that a conservative approach to identifying the environmental baseline is appropriate. As described above, instream suction dredge mining is currently prohibited in California pursuant to a state law enacted shortly before the publication of the NOP for this SEIR. (Fish & G. Code, 5653.1, added by Stats. 2009, ch. 62, § 1 (SB 670 (Wiggins).) The same law and a related court order also prohibit CDFG from issuing new suction dredge permits. **CDFG has determined that the appropriate environmental baseline for purposes of CEQA and the analysis set forth below is one that assumes no suction dredging in California, because that was (and remains) the state of the regulatory and physical environment at the time the NOP was published. The SEIR provides a “fresh look” at the impacts of suction dredge mining on the environment generally** (emphasis added).

4.0.2 Significance of Environmental Impacts: According to CEQA, an EIR should define the threshold of significance and explain the criteria used to determine whether an impact is above or below that threshold. Significance criteria are identified for each environmental category to determine whether implementation of a **project would result in a significant environmental impact when evaluated against the environmental setting/baseline conditions** (emphasis added).

Please allow us to review: During the ongoing litigation in Alameda Superior Court, DFG has made several formal Declarations that it possesses “**new information**” which suggests there may be a deleterious impact upon fish **as a result of dredging activity under the 1994 regulations.** Therefore, the Court issued a moratorium upon suction dredging and Ordered DFG to review the impacts. And rather than come forward with any new biological information that would support its concerns, you have seized upon the

opportunity of the “*no dredging*” baseline to completely reevaluate the biological impacts which were previously considered during 1994, which were then measured against ongoing dredging activity!

Adoption of a “*no dredging*” baseline is extremely arbitrary. The CEQA baseline is a set of physical conditions in the affected area; which in the context of an SEIR, as opposed to an initial EIR, plainly includes such conditions that exist as a result of the ongoing “project” of issuing permits (Fish and Game Code § 5653.1(a)). A temporary moratorium enacted because of your failure to update the CEQA analysis in a timely fashion is precisely the sort of “temporary lull or spike in operations that happens to occur at the time environmental review . . . begins [and] and should not depress or elevate the baseline”. *Communities for a Better Environment v. South Coast Air Quality Management District* (2010) 48 Cal.4th 310, 328.

Moreover, your focus on a no-mining baseline, if adopted, would have to be consistent as to all the effects. It is well known, for example, that salmon redd counts increased substantially along the Salmon River after significant dredging activity loosened compacted river beds and made them more attractive spawning habitat. A true no-mining baseline would have to assume the absence of such spawning habitat and summer refugia holes created by mining, and a return to generally compacted and poor conditions in many of the affected areas. In reality, the benefits of mining persist for some time, and so the proper baseline is one that is associated with the ongoing mining activity.

Conversely, the SEIR says in the Introduction of the EXECUTIVE SUMMARY: “*This SEIR and related review under CEQA analyzes the new significant and substantially more severe environmental impacts that may be occurring under the 1994 permitting program that were not previously addressed by CDFG in the 1994 EIR.*” Only people working for a government agency could believe that you can have it both ways! The only reason the impacts have become “*significant and substantially more severe*” is because you are now measuring them against an unreasonable and arbitrary baseline! **In other words, the only important new factor is the baseline which you are measuring against!**

ARBITRARY AND CAPRICIOUS: Absence of a rational connection between the facts found and the choice made. *Natural Resources. v. U.S.*, 966 F.2d 1292, 97, (9th Cir.'92). A clear error of judgment; an action not based upon consideration of relevant factors and so is arbitrary, capricious, an abuse of discretion or otherwise not in accordance with law or if it was taken without observance of procedure required by law. 5 USC. 706(2)(A) (1988).

DFG’s decision to proceed on this tact is fundamentally dishonest, extremely arbitrary and very unreasonable. Here is the way you are mandated by the legislature to perform the CEQA Process:

CEQA Guidelines 15002. GENERAL CONCEPTS: (g) A significant effect on the environment is defined as a substantial adverse change in the physical conditions which exist in the area affected by the proposed project. (See:

Section 15382.) Further, when an EIR identifies a significant effect, the government agency approving the project must make findings on whether the adverse environmental effects have been substantially reduced or if not, why not. (See: Section 15091.) (Emphasis added)

CEQA requires that decisions be informed and balanced. It must not be subverted into an instrument for the oppression and delay of social, economic, or recreational development or advancement. (*Laurel Heights Improvement Assoc. v. Regents of U.C.* (1993) 6 Cal.4th 1112 and *Citizens of Goleta Valley v. Board of Supervisors* (1990) 52 Cal.3d 553) (Emphasis added)

While the impacts from suction dredging have not changed since the 1994 EIR was completed, this SEIR has largely focused upon the fact that more species have been added to the list which require special protection. And from that, DFG has apparently decided that these species deserve special protection from suction dredgers across the entire state of California through the proposed regulations, even though there has been zero evidence presented in the SEIR that any harm has ever occurred to any of these species as a result of the existing (1994) regulations. All this, while there are no meaningful restrictions being imposed upon hikers, swimmers, boaters, rafters, bird-watchers, camping enthusiasts, hunters or other nature lovers or actual recreationists that do not enjoy a mandate from Congress with a right to be present on the public lands! While the SEIR does not present any real evidence of harm from the 1994 regulations, it makes an unreasonable proposal to prohibit suction dredging anywhere that suitable habitat exists for these special species:

2.2.3 Development of Regulations: *For certain species, CDFG determined that any level of dredging activity in suitable or occupied habitat would have the potential to result in a deleterious effect to the species. For these species, occupied or suitable habitat is proposed to be closed to dredging (i.e., Class A).*

Please read the Code references which I have quoted above and below. Our conclusion is that DFG does not have the authority to prohibit mining on the public lands without at least being able to provide a specific demonstration of substantial harm. The statute does not direct you to decline to issue permits based upon the “*potential to result in a deleterious effect.*” More specifically, you can find an absence of deleterious effect even if there is “*a potential deleterious effect,*” and you should do so.

As a general matter, the legislature has made it clear that although EIRs can appropriately consider potential effects, which should be disclosed and considered, regulatory prohibitions require actual effects. Dredge mining in occupied habitat under the 1994 regulations do not have any actual deleterious impact.

It is especially unreasonable for you to prohibit dredging based upon “*potential*” effects when healthy fish populations persisted through decades of extremely invasive hydraulic mining with orders of magnitude more impact upon the environment than modern suction dredge mining.

You have suggested, in part, that regulation of potential impacts may be based upon a **“precautionary approach”**. This approach is unreasonable in the context of an activity which has impacts that are both potentially positive and potentially negative. As we demonstrated in the Alameda litigation, suction dredge activity provides some of the only available summer habitat in many areas; suction dredging improves the quality of spawning beds, and operates to feed juvenile fish. These concrete positive effects cannot be imagined away by the potential that juvenile fish may react adversely to the mere presence of operators (especially given evidence that they cluster about the dredge output looking for food), or that the body heat of dredgers might somehow interfere with “cold water refugia.”

Indeed, we would argue that the **“precautionary principle,”** as a general principle, is itself unreasonable, because it presumes, contrary to fact, that any change is bad. The very purpose of preparing an EIR is to substitute balanced consideration of actual impacts for subjective presumptions in favor of or against particular activities.

Finally, the “precautionary approach is unreasonable to enforce upon Americans who have a statutory right to develop viable gold deposits, especially while using the only effective method available along the bottom of California’s waterways, in this case, suction dredging. Rather, here is what the California legislature has to say about balancing environmental protection with existing social and economic needs:

CEQA GUIDELINES 15021: DUTY TO MINIMIZE ENVIRONMENTAL DAMAGE AND BALANCE COMPETING PUBLIC OBJECTIVES: (d) **CEQA recognizes that in determining whether and how a project should be approved, a public agency has an obligation to balance a variety of public objectives, including economic, environmental, and social factors and in particular the goal of providing a decent home and satisfying living environment for every Californian** (Emphasis added).

CEQA GUIDELINES 15043: AUTHORITY TO APPROVE PROJECTS DESPITE SIGNIFICANT EFFECTS: A public agency may approve a project even though the project would cause a significant effect on the environment if the agency makes a fully informed and publicly disclosed decision that:
(a) There is no feasible way to lessen or avoid the significant effect (see Section 15091); and (b) **Specifically identified expected benefits from the project outweigh the policy of reducing or avoiding significant environmental impacts of the project** (Emphasis added).

CEQA GUIDELINES 15093: STATEMENT OF OVERRIDING CONSIDERATIONS: (a) CEQA requires the decision-making agency to balance, as applicable, the economic, legal, social, technological, or other benefits, including region-wide or statewide environmental benefits, of a proposed project against its unavoidable environmental risks when determining whether to approve the project. **If the specific economic, legal, social, technological, or other benefits, including region-wide or statewide environmental benefits, of a proposed project outweigh the unavoidable adverse environmental effects, the adverse environmental effects may be considered “acceptable”** (Emphasis added).

Conclusion

The SEIR is attempting to balance the economic and social impacts from the proposed regulations by comparing their value to a “**no dredging**” scenario which is the result of the existing moratorium. In addition to this being an exercise in bad faith, this is all a waste of time; because DFG does not have the authority to decide the value of mining which takes place on the public lands. Congress has already established the value by clearly informing federal management agencies that **mining is the most valuable use of public lands** once a valuable discovery has been made – and even while a prospector is actively pursuing a mineral discovery. **It is well established that suction dredging is by far the most effective method today of locating and developing gold deposits along the bottom of a waterway, and the only practical way to do so.** Therefore, the SEIR should be balancing the impacts of proposed regulations to well-established federal values, rather than arbitrary social and economic values in a deliberate by DFG to marginalize suction dredgers.

It also appears, that rather than come forward with substantial evidence that dredging activity under existing (1994) regulations is “*deleterious*” to fish (under DFG’s definition), the SEIR has unreasonably changed the baseline that was used in 1994 to a “*no dredging*” scenario. This, even though the SEIR admits that the average number of suction dredge permits has been 3,650 per year since the 1994 regulations were adopted. The existing moratorium is a direct result of DFG’s Declarations that it had evidence in its possession which suggested a deleterious impact from ongoing suction dredging activity. Still, the SEIR does not contain evidence of a single “*take*” of any fish, much less that of a fish that has been granted special protection. There especially is no evidence of a deleterious impact upon an entire species!

Therefore, the Department’s “*precautionary approach*” which exists as the foundation of the proposed regulations is not supported by a properly-done CEQA Process. These regulations would prohibit suction dredging altogether across most of the public lands in California, and reduce dredge capacity so much in the remaining open areas that it would amount to a general prohibition of mining as a business. The proposed regulations would create very substantial losses to economic and longstanding social values in California while producing no demonstrable benefit to the public.

Mercury is not a problem!

Here is what the SEIR has to say about mercury:

Impact CUM - 7: Discharge from Suction Dredging (Significant and Unavoidable): As detailed in Chapter 4.2 Water 1 Quality and Toxicology, the discharge and transport of total Hg (THg) loads from suction dredging of areas containing sediments highly elevated in Hg and elemental Hg is substantial relative to background watershed loadings. Additionally, the flouting of elemental

Hg during the suction dredging process would result in an increased Hg surface area and increased potential for downstream transport of Hg to areas favorable to methylation (i.e., downstream reservoirs and wetlands). Therefore, suction dredging has the potential to contribute considerably to: (1) watershed Hg loading to downstream reaches within the same water body and to downstream water bodies, (2) MeHg formation in the downstream reaches/water bodies, and (3) bioaccumulation in aquatic organisms in these downstream reaches/water bodies.

This impact summary appears to assume an adverse impact from “**bioaccumulation;**” but the relevant question is whether any adverse effects occur to the aquatic organisms (e.g., are “deleterious to fish”), or humans who consume fish. As set forth below, there is essentially no evidence of any adverse effect from such bioaccumulation and, more importantly, no credible evidence that suction dredging will have any appreciable impact on watershed Hg loading—other than a long-term benefit.

As to the latter point, the SEIR relies mostly upon the conclusions of Charles Alpers of the USGS as a result of some work that he recently did near the confluence of Humbug Creek and the South Fork of the Yuba River in California. This was actually a BLM-funded project with the stated purpose of discovering if standard suction dredges can be used to effectively-recover mercury from submerged mercury hot spots. Apparently, thousands of pounds of mercury had been lost from the sluice boxes of one of California’s largest historic hydraulic mines last century. Most of the lost mercury is assumed to have been washed down Humbug Creek into the South Yuba River along with the tailings from the mine.

As suction dredgers reported to BLM that they were finding pools of mercury in the South Yuba River below the confluence of Humbug Creek, after some further investigation, BLM and the California Water Resources Control Board, along with other entities, designated the area as a hazardous waste, submerged mercury hot spot. Further suction dredging in that area of the river was prohibited until BLM could determine how effective mercury recovery was going to be. This was the purpose of the study which generated the report from Charles Alpers of the USGS.

I personally have substantial experience in heavy metal recovery with the use of suction dredges. Therefore, I was invited to participate in this study. Several other experienced dredgers were also involved. We supplied the excavation tools, and **we performed all of the dredging and digging for the Alpers project.** Therefore, I have an intimate knowledge of what took place; and I know exactly why the conclusions made by Charles Alpers cannot reasonably be relied upon in the SEIR. It is my intention to draft a more-detailed rebuttal of the Alpers conclusions in a separate set of comments. But for the moment, I will present some very important facts.

The purpose of the study was to determine how effectively an 8-inch dredge with a standard recovery system would capture mercury. The study was to take place over a 2-year period. The first year (2007) involved a trial run using a 3-inch dredge. The main purpose of the trial run was so the USGS scientists could establish the best way to capture

sediment and water samples off the back-end of the 8-inch dredge recovery system during the following year.

Dredging was performed using the 3-inch dredge during 2007. However, USGS did not establish any measurable increase in mercury in the captured sediments or water samples discharged from the dredge recovery system.

It did not occur to Charles Alpers and his team to measure the volume of excavated material so that these and future results could be quantified to the actual capacity of a suction dredge.

The following year, The California Water Resources Control Board informed BLM that they were prohibited from using any suction dredge within the South Yuba River. Since the 8-inch dredge could not be used, I suggested to BLM that I could provide a prototype, closed circuit suction device (not a dredge under the definition of F&G Code 5653) that potentially could remove 100% of the mercury from a submerged mercury hot spot without any discharge back into the active waterway. Since we were not allowed to continue the study using a dredge, I switched gears into coming up with an alternative method of cleaning out the mercury from submerged hot spots.

Note: I made the mistake of assuming the ultimate purpose was to discover an effective way of removing mercury from California's waterways. That is probably too much to expect out of government today.

When we resumed the study during 2008, Charles Alpers relied upon me to choose the two places along the South Yuba River where we would excavate material. This was because Mr. Alpers was relying upon my considerable expertise to excavate samples where elevated levels of mercury (heavy metals) were most likely to be present in the gravel. I chose one location out on a gravel bar in the middle of the South Yuba River. This was directly out from the confluence of Humbug Creek. I chose this location mainly because it was an ideal place to operate my closed circuit prototype.

I chose the second location where there was some exposed bedrock immediately downstream from the confluence of Humbug Creek. While we were not able to set up my prototype in that particular location, the site was likely to turn up the highest levels of mercury in the entire area.

No other dredge was used during this study except the 3-incher during 2007.

After digging a hole on the gravel bar, we put my closed circuit prototype to work. **Mr. Alpers and his team made it clear this part of the program was not part of their study;** that it was being allowed only for R & D purposes. We used the prototype for about an hour. Nobody timed the work, and there was no accurate measurement taken of the material which we excavated. The device utilized a suction nozzle to excavate material and water from the hot spot directly into a large plastic water tank. Water from inside the tank was recirculated by a motorized pump to provide suction at the nozzle.

This created a closed circuit system whereby contaminated material and water could be sucked into the tank with zero discharge into the active waterway. There was no recovery system other than the water tank itself. **Importantly, there was no dredge recovery system present.** There was also no way to measure how many times the very same water in the tank was recirculated to excavate the contaminated material; perhaps hundreds or thousands of times. It would just be a guess. The purpose of this design was to capture 100% of the contaminated water and material within the closed circuit.

Improper Conclusion: In fact, the water from my closed system test appeared to be so contaminated, USGS staff ordered special stainless steel containers flown in so they could send the water out by helicopter and dispose of it properly! It was mainly from these water samples which Charles Alpers later formed his conclusion that suction dredges may discharge mercury into the active waterway. But the water from my tank had been continuously used over and over again to excavate and capture 100% of the mercury from highly-contaminated material. Therefore, it is unreasonable to take water from a closed circuit system like this and make any kind of scientific estimate what might come off the back of a dredge system using a recovery system which only uses water one time (in a completely different way) to excavate material. **This is atrocious science!**

Improper Conclusion: Then Charles Alpers concluded that the levels of mercury captured from our second excavation could be used as a baseline for how much mercury might exist throughout all of California's waterways. Charles Alpers makes some estimations of how much mercury suction dredgers could potentially re-suspend elsewhere in California, based upon the amount of mercury that we excavated off bedrock, just below the source of mercury, in one of California's worst mercury hot spots? **How scientific is that?**

Improper Conclusion: Furthermore, Alpers related the potential statewide impacts to the estimated production yardage figures which Keene Industries (dredge manufacturer) publishes in their promotional material. Even though the USGS team stood by and watched my team excavate using a 3-inch dredge, they did not take the opportunity during the study to measure the volume. **Therefore, Charles Alpers reached out to projected estimates from a promotional brochure?** There are so many variables in play while dredging (make up of the streambed, speed of the river water, depth of the excavation, type of power jet, experience of the operator, etc), that there is no way Charles Alpers could use unproven information from a promotional brochure to make reasonable statewide projections in a scientific conclusion! But he did it anyway.

Improper Conclusion: Mr. Alpers suggests in his report that most mercury contamination at the bottom of California's waterways is locked in place by armored streambeds and should be left in place until some better method of recovery is developed. However, any experienced dredge miner will tell you that annual flood events, especially the larger ones, naturally tear up armored streambeds and move the material further downstream. The fact that we find man-made objects underneath the armoring is testimony that streambeds are highly mobile:

4.1.2 California Hydrology and Climate: Typically, rain-on-snow events are of a higher magnitude and occur most frequently during the winter months, whereas the peak snowmelt - driven events are of a lower magnitude and occur in spring. This hydrologic setting creates a bimodal distribution of flood events i.e., there is a population of floods associated with snowmelt events, and a distinct population of floods generated from rain - on - snow events that occur, on average, once every 10 years.

Charles Alpers is very wrong in his belief that mercury is trapped forever beneath armored streambeds. How do you think the mercury and streambeds got there in the first place if they were not moved there by a storm event?

Charles Alpers' Conclusions are just one more example of a government employee who has allowed his personal political agenda get in the way of real science. We will be making a formal complaint about this to the USGS. Meanwhile, we insist that this SEIR should not rely upon the Alpers' Conclusions.

The SEIR is conspicuously silent on the peer-reviewed study data provided to DFG by the dredge mining community in the PAC meetings about how natural selenium within California's waterways prevents mercury from causing adverse impacts even if bioaccumulation does occur. **Specifically, bioaccumulation of mercury has no adverse impact whatsoever on fish or those who consume them when the accumulation of such mercury consists of mercury bonded to selenium.** This is because that bond isolates the mercury from further biological activity.

The leading study suggesting adverse effects on humans from mercury bioaccumulation was based on Faroe Islanders who consumed the mercury in whale flesh (not fish flesh) which contains lower levels of selenium.

While there is plenty of peer-reviewed study material which demonstrates that there is a **continuous migration of mercury flowing down some of California's waterways**, there is zero evidence suggesting that the levels have any relationship to suction dredge activity.

The SEIR also does not give enough weight to the Humphries Report (California Water Resources Control Board). Mr. Humphries used an older-model 4-inch suction dredge to recover 98% of the mercury from a confirmed mercury hot spot in California. The SEIR does not provide adequate acknowledgement that a 98% recovery rate is a positive impact; **because suction dredging is the only activity within existence that removes any mercury from California's waterways.**

Rather, the SEIR seizes upon Mr. Humphries' unproven assumption that the 2% of lost mercury was floured (broken down into particles too small for the dredge recovery system to catch) by the dredge. But Mr. Humphries has admitted that he performed no tests of the streambed material before it was sucked up to see if floured mercury pre-existed there! His report also suggests that floured mercury preexisted in the streambed in areas that had not been suction dredged. Having substantial experience in this given

area, I can tell you with certainty that it requires violence over an extended period of time to break mercury down to millions of microscopic particles. The 9-second ride through a suction dredge is not enough.

Therefore, the SEIR's conclusions that dredge flour some portion of the mercury, which then travels downstream to threaten the food chain is not based upon good science.

The SEIR does not acknowledge, based upon the survey results, that suction dredgers remove over 7,000 ounces of mercury (or more) every year from California's waterways. That amounts to 98,000 ounces during the 14 years we operated under the 1994 regulations!

Since California State agencies are doing nothing to remove mercury from California's active waterways, it is grossly irresponsible for your SEIR to point the finger at suction dredgers who are the only ones that are removing the mercury, at no cost to the taxpayers!

Adoption of the SEIR position would be fundamentally unreasonable in a context where the mercury is inevitably migrating downstream to areas where you believe it to be potentially harmful. There is no coherent analysis in the SEIR to suggest that, contrary to common sense, it is better to leave all the mercury moving downriver than to take action which removes at least 98% of it from the ecosystem!

Practical Suggestions

Government Code 11340.1(a): It is the intent of the Legislature that agencies shall actively seek to reduce the unnecessary regulatory burden on private individuals and entities by substituting performance standards for prescriptive standards wherever performance standards can be reasonably expected to be as effective and less burdensome, and that this substitution shall be considered during the course of the agency rulemaking process.

CEQA Guidelines 15204: FOCUS OF REVIEW: (a) In reviewing draft EIRs, persons and public agencies should focus on the sufficiency of the document in identifying and analyzing the possible impacts on the environment and ways in which the significant effects of the project might be avoided or mitigated. Comments are most helpful when they suggest additional specific alternatives or mitigation measures that would provide better ways to avoid or mitigate the significant environmental effects.

In view of the comments we have made above, we submit the following practical suggestions in an effort to assist the Department to modify its SEIR and proposed regulations so that they adequately mitigate real environmental concerns while placing less burden upon the small businesses and property owners that are associated with our industry.

High-banking is not suction dredging: We agree with the following policy statement that you have acknowledged in several places within the SEIR:

6.2 Alternatives Considered and Dismissed: *In general, these provisions of the Fish and Game Code provide that CDFG's permitting authority is limited to in - stream use of vacuum or suction dredge equipment within any river, stream, or lake in California. As such, CDFG's regulatory authority under this Program does not extend to other methods of placer mining or other activities that may be associated with suction dredging which occur in upland areas.*

The following is a list of activities that are not considered suction dredging subject to CDFG's permitting authority under Fish and Game Code section 5653, subdivision (b)...

- Use of a high banker or sluice box above the ordinary high water line and above the current water level, where aggregate is vacuumed into the highbanker or sluice box from a gravel deposit outside the current water level of a river, lake or stream but which may be wetted by a water pump. This method is often referred to as booming;*
- Processing of materials collected using a suction dredge, in upland areas outside of the current water level of a river, stream or lake;*
- Use of suction dredge equipment (e.g. pontoons, water pump or sluice box) on a river, stream or lake where the vacuum hose and nozzle have been removed;*
- Sluicing or power sluicing for gold when no vacuum hose or nozzle is used to remove aggregate from the river, stream or lake; and*
- Use of vacuums (e.g. shop - vacs) and hand tools above the current water level.*

Required identification in the permit application: The proposed regulations should allow for a foreign passport or driver's license be used to provide identification for visitors from other countries so they can apply for nonresident suction dredge permits. Otherwise, California will be discouraging the many visitors which we already receive that like to do their gold prospecting here.

DFG should not limit the number of suction dredging permits: We do not see reasonable justification within the SEIR for the Department to limit the number of suction dredging permits in the final regulations. This is particularly because there is no evidence presented that 14 years of dredging activity under the 1994 regulations ever harmed a single fish, much less threatened the viability of an entire species. We also do not believe that a state agency has authority to impose a generalized prohibition to suction dredge mining on the public lands. As noted above, mining within national forest lands is already subject to individualized ranger scrutiny and there is no basis whatsoever

for limiting the number of permits for operations within national forest boundaries. Non-arbitrary limitations, based upon local conditions, may arise through the federal regulatory process and/or on site inspections by DFG staff.

Your proposed ***“precautionary measure”*** of limiting the number of permits would amount to a prohibition upon any person desiring to prospect for or develop viable gold deposits with the use of a suction dredge after the limit is reached, without providing a reasonable environmental justification to the person. What if he or she wants to operate the dredge in some part of the state where there would not be a deleterious impact? A limit on permits would prohibit the person from using a suction dredge without a viable reason.

Allowing additional dredge permits after site inspection: Having said that, in the event that the Department decides that you must place a limit on the number of permits issued under a **statewide blanket permitting program**; once the limit is met, rather than prohibit additional dredge-mining, the Department should issue additional permits as long as no deleterious impact (by DFG’s definition) can be determined through a site inspection. This would include consideration of permit applications to dredge with larger-sized dredges that are not allowed in a statewide permit, or in areas (or time periods) that are otherwise closed to dredging.

Said another way, in the event that DFG decides that there must be (reasonable) limits set in a blanket statewide permit program that will allow for most suction dredgers, we do not believe DFG has the authority to declare a wholesale prohibition to dredge mining in the other vast areas which exist on the public lands that would not be covered by the blanket permit. That would be an unreasonable closure. DFG has a site inspection mechanism which allows you to consider more individualized impacts in areas, and during time periods, when and where dredging would not be allowed in a statewide permit.

There needs to be a place on the permit where a site inspection can be signed off: There should not be some bureaucratic delay involved with signing off on a site inspection when the DFG official can identify no problem (deleterious impact). During my own past site inspections, the local DFG officers immediately signed off on my application and gave me the okay to proceed.

If there is some uncertainty, there must be a time limit in the regulations whereby the application should be allowed or disapproved. The regulations should include what due process is to be allowed the dredge miner if he or she decides to appeal a local denial.

Prior existing rights on permit acquisition: There must be an allowance for prior existing rights. This is mining, not recreational fishing or hunting; and it is in many cases conducted as a matter of right under federal statutes, on federally-protected mining properties. Since work was already active to eliminate (and therefore discourage) dredging during the 2009 season, prior existing rights should at least extend to the 2008 season. Some in our organization believe prior existing rights should extend back five

seasons. Otherwise, dredgers who have already invested in property, equipment and even mining claims could potentially lose their prior existing right to work their mine or other mining opportunity (mining club they paid to join so they would have access to mining property).

In this case, DFG would send out renewal notices and allow some kind of due process before a prior existing permit would be returned to the pool to be made available to someone else. We suggest, once prior existing rights are taken care of, it might be more equitable to make the remaining permits available in a drawing, rather than first come, first served.

Statewide permits, if limited, should be transferable: If there is going to be a limit placed on the number of permits allowed under a statewide blanket program, the permits should be transferable. This would allow a dredge miner to develop a mining property and then transfer it to someone else who could also acquire the right to suction dredge on the property. Otherwise, miners will make the substantial investment into developing a viable mine and then not be able to transfer ownership to someone new who will be able to dredge it, therefore losing some or most of the value.

The dredging permit could be signed over like the title on a vehicle. This would allow new generations of prospectors to purchase an existing permit from someone else in the event of a cap on permits.

DFG should not further-limit the size of dredges under the statewide permitting program: The only justification we can see in the SEIR for reducing dredge sizes in the proposed regulations is your “*precautionary approach.*” As we have explained above, there is no basis for using such an approach at all, much less in this context. It is patently illegal under the CEQA guidelines, which state, among other things, that “there must be an essential nexus (i.e. connection) between the mitigation measure and a legitimate governmental interest” and “the mitigation measure must be ‘roughly proportional’ to the impacts of the project”. 14 CCR 15126.4(a)(4). Obviously, “mitigation measures are not required for effects which are not found to be significant” (id. § 15126(a)(3)), and the SEIR presents no evidence that dredge sizes allowed under the 1994 regulations created a deleterious impact upon fish.

It is important to understand that you are proposing to undermine the effective capacity of gold mines all across California. As outlined in comments above, reducing capacity will effectively undermine the economic viability of many properties, and future economic activity all across the state.

It would be one thing if you could point to some evidence showing that dredge size limits under 1994 regulations have caused real problems. But you have not done that. The problem with your approach is that there is never any end to it. When I began dredging in California, it was easy to obtain a permit which would allow me to operate a 12-inch dredge along the Klamath River. Then the limit was reduced to an 8-inch dredge. Now you are proposing to reduce the limit to a 4-inch dredge. Yet, as many times as the

department performed site inspections on my 12-inch operation, **they never expressed any concerns about harmful impacts!** No concerns have been expressed about harmful impacts from the many 8-inch dredges that have operated along the Klamath River over the past 30 years. No concerns have been expressed about the 5 and 6-inch dredges operating in the smaller tributaries, either! So without providing any specific details of why existing capacities are harmful, you are proposing to reduce them 8-fold in many places. Why?

Using this same approach, you are likely to reduce us to mining with teaspoons in the next set of proposed regulations! You must try and understand that not everyone receives a check in the mail from the government. Some of us actually have to create more value than we consume. Since those of us who produce the wealth (which supports those of you in government service) must be allowed to get on with it, you should stop trying to slow us down or kill us off when there is no benefit to the public that you serve. Please try to look through your narrow view of protecting the world (from us), and stop trying to impose unreasonable restrictions upon us.

We suggest that DFG does not have the authority to step onto the public lands and impose a permit restriction upon active mines which would effectively reduce our productive capacity without also coming up with specific reasons why existing capacities are creating a deleterious impact upon fish. Therefore, we strongly encourage the Department to leave nozzle restriction sizes as they exist in the 1994 regulations.

Important note: To avoid unreasonable and unnecessary conflicts between dredgers and DFG field staff, the regulations must allow a wear tolerance factor on nozzle restrictor rings. The reason for this is that the standard material which is available to manufacture these rings can be found in 4-inch, 5-inch, and 6-inch inside diameters. If the statewide limit is a 6-inch ring (1994 regulations), a 6-inch ring is what will be used. Some reasonable allowance must be written into the regulations so that the dredgers and wardens are all on a level playing field. The ring begins wearing with the first rocks that are sucked up. At what point does it need to be replaced? We suggest 3/8 of an inch (diameter) is reasonable.

Allowing larger-sized nozzles after site inspection: If a dredger wants to operate a dredge having a larger nozzle than is allowed under a statewide permitting scheme, the Department should allow the activity as long as no deleterious impact (by DFG's definition) can be determined through a site inspection. We do not believe DFG has authority to make a wholesale prohibition upon the use of some particular type of mining equipment (suction dredge of any size) being used on the public lands. Dredge miners should be afforded due process, and should be allowed to proceed as long as no deleterious impact is determined by an on site inspection

DFG should not further-limit the places where dredging is allowed: We suggest that DFG does not have the authority to step onto the public lands and impose a prohibition upon suction dredging across vast areas. This is very discriminatory, since **any kind of mining or other activity** may submit an application to proceed, and would

be afforded reasonable due process in the very same areas where the proposed regulations would prohibit suction dredgers.

At the very least, in order to prohibit a suction dredge from being operated in any given location, DFG must be able to demonstrate a deleterious impact upon fish.

Therefore, we strongly encourage the Department to leave areas open to suction dredging as they exist within the 1994 regulations. Gold miners should be afforded due process, and should be allowed to proceed in areas which are not allowed under any statewide permit, as long as a site inspection cannot turn up evidence of a deleterious impact.

Reduction of our existing dredging seasons is unreasonable: Once again, we do not see that the SEIR contains evidence of a deleterious impact upon fish to impose a reduction of existing dredging seasons. This proposal is supported only by your *“precautionary approach.”* Just as one of many examples, I have been dredging along the Klamath River since 1983. Existing dredge regulations, and the regulations we were held to prior to 1994, have always allowed year-around dredging on this river. The colder off-season months and wet season already naturally-limit the amount of dredging activity between October and June. In all the time I have been involved with this river, there has never been a single example that dredging has ever harmed a single fish during the months which the proposed regulations want to close the river to suction dredging. Your desire to close the river to this productive economic activity (suction dredging) for 9 months out of the year is arbitrary and unreasonable!

Indian, Thompson and Elk Creeks (Siskiyou County) are another example. During 25 years of overseeing our extensive dredging properties on these creeks in cooperation with local U.S. Forest Service (USFS), DFG and Karuk fish biologists, there has never been a single instance brought to our attention of any harm to any fish or their habitat. So why do you want to completely eliminate productive economic activity by Americans in those areas?

Furthermore, the SEIR does not acknowledging that we have already worked out an agreement with USFS and Karuk fish biologists to keep dredges away from the refugias and limit the number of dredges to 3 per mile on the creeks and 10 per mile along the river. Your proposed regulations are attempting to reach out onto the public lands and prohibit the use of suction dredges altogether, or for substantial parts of the year, on these very same waterways without any resulting positive benefit to the people of California

We strongly suggest, except for those areas where you can demonstrate that a deleterious impact has been created under the existing regulations, that you leave our dredge seasons as they have been since 1994.

The proposed 3-foot rule is unreasonable: We view this as just another overreach of DFG upon the public lands based upon your *“precautionary approach.”* The SEIR has not presented any real evidence that dredging within three feet of the streambank has ever harmed a single fish.

There are also practical difficulties with this proposal. Why prevent someone from dredging within three feet if the side of the river is made up of bedrock? This prohibition would also prevent beginners, non-swimmers or children from starting closer to the shore where water is shallower and/or safer.

There are many places where viable gold deposits exist out in swift water that would not be accessible unless a dredger can begin an excavation closer to the shore to get beneath the strong current. If the proposed regulations would also prevent the dredge from floating or dropping tailings within three feet, it will be nearly impossible to tie off dredges along the shore either when they are operating or sitting idle. Prohibiting dredging within three feet of the edge of the river will eliminate a significant portion of the operational value (perhaps even all of it) on some dredging properties. And to what gain?

Rather than impose an unreasonable 3-foot prohibition, we suggest that DFG and the mining community would be better served with some expanded language describing what the **“bank”** is (in relation to dredge mining) that we are not allowed to dredge into or undermine within the existing regulations. With rising and lowering water flows (sometimes daily) in some waterways, there is a lot of confusion about this with dredgers and wardens alike. For example, is there a **“bank”** in relationship to a gravel bar out in the waterway that is partially out of the water? What about a bar alongside the waterway that is submerged during the spring, but emerges more and more out of the water as the dry season evolves?

Suction dredge regulations should not impose the requirement of Section 1600 Agreements: We do not believe DFG has the authority to impose a Section 1600 Agreement requirement upon a gold dredger unless the surface disturbance rises to the level which triggers Section 1600 of the Fish & Game Code.

F&G Code 1602: (a) An entity may not **substantially divert or obstruct** the natural flow of, or substantially change or use any material from the bed, channel, or bank of, any river, stream, or lake, or deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it may pass into any river, stream, or lake... (emphasis added).

Section 5600 already allows a site inspection mechanism for the Department to determine if a dredging program is deleterious to fish. Therefore, also imposing a Section 1600 requirement upon dredgers who wish to operate a larger nozzle than is allowed under a statewide permit, when there is little or no chance the dredging program will create a substantial impact upon the bed or bank of the waterway, is arbitrary and discriminatory against suction dredgers. Nobody else in California is required to pursue a Section 1600 permit until their activity rises to the level of requiring one.

We have never heard of a case where local DFG officials expressed concern about a potential Section 1600 violation when the dredger was operating within the 1994 regulations.

We all know how long these Section 1600 Agreements can take to work out. They also cost real money! Why impose that upon a dredge miner whose activity has not created a substantial impact upon surface resources? This is bad policy. There is nothing in Section 5600 which allows DFG to place a Section 1600 Agreement requirement upon someone merely because the person applies to the Department to operate outside of a statewide dredge permitting process. Forcing dredgers to pursue a 1600 Agreement is terribly wasteful of creative resources and will stifle investment into productive economic activity.

Government Code 11813: The Legislature finds and declares the following:

(a) Waste and inefficiency in state government undermines the confidence of Californians in government and reduces the state government's ability to adequately address vital public needs.

(b) State government, in many instances, is a morass of bureaucratic red tape and regulations that ultimately stifle economic revitalization and further alienate the people the agencies were created to serve (Emphasis added).

This also applies to the use of power winches. Gold miners can use a power winch anywhere on the public lands without the requirement of pursuing a 1600 Agreement, unless our program creates a substantial impact upon surface resources that are associated with a waterway. But the proposed regulations would prohibit the use of the same winch if a dredge is involved unless we also pursue an Agreement – even if there is not a substantial impact. **Why would you do this?**

This was already explained to you during the PAC meetings: In some dredge holes, a power winch provides the only safe and efficient means of progressing either when a rock is too heavy to move by hand, or when it cannot be rolled over other rocks that are in the way. We are discussing how heavy something is to move. Each person is different, but everyone has a limit. Some people are disabled. Some heavy rocks can exist up off the bedrock, and must be removed in order to avoid a very serious safety issue. All of this normally takes place down below the surface of the streambed where the result (of moving the rock 4-to-10 feet) will not have any impact upon the waterway above.

Furthermore, from looking at the surface of a streambed, there is no way for a dredge miner to determine in advance if boulders exist down below that will be impossible to move out of the way without some mechanical assistance. With a prohibition on winches, or the requirement to go through yet another time-consuming regulatory process, many dredgers will be forced to abandon dredge projects that otherwise would be productive. The prohibition on the use of power winches in your proposed regulations would result in stopping progress on some dredge programs, and also force operators to take unnecessary risks.

Please note that nearly all rocks of any size can be moved down beneath the surface of a streambed in dredging which will not cause any important impact upon the water flows or the surface of the bed. You guys are overreaching when you believe you must regulate the movement of every rock in the river! How can you believe that Americans can

possibly be productive if we have to ask the government for permission on so many unimportant things? Do you really want to tie up the Department's limited resources managing the rocks that need to be moved by dredge miners?

We do not believe DFG has authority to reach onto the public lands and impose a prohibition upon power winches anywhere, at least until the Department can demonstrate that a substantial impact is happening. The *“precautionary approach”* will not work here, either!

Imposition of the 3/32-inch intake requirement on pumps is

unreasonable: Do you really want your wardens out there measuring screen sizes on our pump intakes, when there is no deleterious impact on fish in the first place? In 30 years of dredging, having likely been present on more dredging operations across California than anyone else alive, I have never witnessed or heard of a single occurrence where these intakes did not adequately prevent fish from being sucked into the pump, or even trapped against the screen.

The 1994 regulations already prohibit operation at times when fish are too small to swim away from pump intakes as they are already being manufactured.

The two dredge manufactures who sell the most units in California are Pro Line and Keene Industries. Pro-Line manufactures a pump intake with 3/16th inch holes. Keene manufactures intakes using 15/64th inch holes. Therefore, the proposed regulations would place nearly every dredge in California out of compliance, and require dredge manufacturers to completely retool or resource their material, all for zero gain to the public benefit. The SEIR does not take account of the obvious adverse impacts arising from placing an entire category of mining capital stock out of regulatory compliance.

We suggest, if you want to make sure that fish are protected from dredge pump intakes, that you adopt a hole size that is bigger than larger of the two holes that are being used on most dredges in California.

Allowance of locations on permit applications must be more broad: Your proposed regulations, as presently written, require dredge miners to be very specific about where we intend to mine. This would be substantially burdensome to dredge miners wishing to sample multiple properties which belong to mining associations like ours. Our organization makes more than 60 miles of the Klamath River available to our members. Some of our properties extend three miles or longer along the river.

To save limited time, most members obtain their suction dredge permits before they arrive (especially if there is going to be a cap on the number of permits issued), **but they do not know where they will decide to dredge on the river until after they come and take a look at the many options.**

We already have an agreement with USFS to prevent more than 10 dredges per mile on the river or 3 per mile on the creeks. So any concern about over concentration is already

being managed. Therefore, the requirement that dredgers notify the Department of the exact place they intend to work is not reasonable.

Since the existing regulations already set the times and places where dredging is allowed, we do not see any practical reason to force dredge miners to inform DFG exactly where they are dredging – and then hold them to the location unless the permit is amended. This was never done in the past. **Where is the deleterious impact?**

In the event that DFG decides that locations are needed on the application, we strongly suggest you broaden the requirement to identification of the waterways which the person intends to work. This would at least allow dredge miners some flexibility to move around in search of gold without having to make an extended and expensive trip to the closest Department license sales office (which could be more than 100 miles away) each time they want to move around the next bend in the river.

The proposed dredge marking system is not workable: Suction dredges are not boats. The pontoons typically are of molded Marlex floatation which will not allow paint, tape or glue to adhere. If you screw something into the Marlex, then you may incur leaking or perhaps structural problems. If you place a sign on the dredge, it is either in the way or is likely to fall into the river and float away. By “in the way,” we mean blocking the dredger’s ability to remove plug-ups or manage the motor (especially fueling).

Since the average size of dredge during 2008 was less than 4-inches, and there are many dredges in existence larger than 4-inches, there must also be many dredges smaller in size than 4-inches. We challenge the Department to come up with any practical way of attaching a sign meeting your proposal to a 2-inch, 3-inch or one of the mini-4-inch dredges; it is totally impractical!

We also question how this proposed imposition has anything to do with the language of Section 5653, or has anything to do with preventing a deleterious impact upon fish? Do you really want your wardens out there measuring the size of numbers on suction dredges?

In the event that DFG decides it must have an identification number on the dredge, we strongly suggest you eliminate the 3-inch number requirement and allow the numbers to be marked on both sides of the dredge; either on the pontoons or on the sluice box, but only if it is possible to do so. This would allow for smaller numbers in the case of smaller dredges.

Fuel should be allowed within 100 feet of the waterway if kept within a water-tight container or a boat: California already has plenty of laws on the books that prevent us from spilling gasoline into the water. Now you want miners and wardens out measuring the distances between our fuel cans and the waterway? **When does the overregulation stop?**

Here is another place where we believe DFG is reaching out far beyond your authority to impose a prohibition on the public lands; specifically to prohibit the placement of a can of fuel within 100 feet of the waterway only if there is a suction dredge involved.

No other activities within California are held to this proposed 100 foot regulation! Millions of boaters all over California are allowed to keep fuel safely in their boats.

The truth is that the more you have a dredge miner tromping up and down the embankment (in wet-suit and bulky boots), the more you will have him disturbing all of the other values in the riparian zone that you believe are so important to protect elsewhere in the SEIR, and the more you increase the chances that the person will fall down and spill the fuel!

There are plenty of effective ways to prevent fuel from leaking into the waterway without making a dredge-miner walk 100 feet up the embankment. At the very least, fuel can be placed inside of a boat, or inside a sealed catch tub of some kind up on the embankment to prevent leakage. These catch tubs are already routinely part of a dredge program to assist with cleanup of concentrates.

We suggest, rather than attempt to impose a regulation that ultimately will have your wardens out in the field pacing the distance to fuel cans (even when they are placed in a safe place), that you make some helpful suggestions in your Better Practices handout.

Disturbance of mussel beds: This is an unreasonable proposal that is not consistent with preventing a deleterious impact to a species.

Some rivers are so inundated with muscles, that this imposition would amount to a suction dredge prohibition in a large part of the waterway.

Are you proposing that every dredge miner must now do a survey before dredging to make certain that there is no place within 30 feet downriver where more than 40 muscles per square yard exist? How unrealistic is this? Are you also going to have your own wardens out underwater counting mussels?

What about a dredge miner who makes a valuable discovery in the river, and is in the process of developing it when he comes up into a mussel bed containing 42 per square yard? What then? Is the State of California going to impose a criminal citation for sucking up muscles? Or is the State of California prepared to buy his gold mine in order to save the muscles for the public benefit? Or is the State of California going to require an expensive and long-delayed study and perhaps require licensed experts to replant the muscles somewhere else? Where does all this nonsense stop?

What is to prevent you guys from issuing a regulation against killing ants if there are more than 40 per square yard? What's next?

We strongly advise DFG to withdraw from the notion that you should be prohibiting dredge mining to protect any species (from extinction as a result of the dredging) which is not afforded special protection. Because you are taking away the rights of Americans to be productive. There is a cost for this. You are also going to experience this when the State no longer has any money to meet your pension obligations.

Rather than impose a criminal penalty for sucking up or dropping tailings near mussels, we suggest you discuss them in your Better Practices handout.

Returning the site to the pre-mining grade to the greatest extent

possible: It is clear that whoever thought this up had zero experience in suction dredging!

Please allow us provide some insight: Sampling is the process of making multiple sample holes in an attempt to locate a high-grade gold deposit (business program). Sampling is a process, not a single hole. Sometimes a dredge miner makes a discovery, but wants to continue sampling to determine the length and width of the deposit, or to see if he deposit might provide better results that he can develop first. Your proposal would require him to fill each hole, even if he is not finished there.

Nearly always, once a discovery is made and defined, an experienced dredge miner drops further downstream doing more short tests in an attempt to find the lower-end of the gold deposit. Then he begins the development project there so tailings will not be dropped on top of the deposit and moved again.

Sample holes are not filled in, because the prospector may need to go back and take another look! **Your proposal on this seeks to manage the way a mining operation is done.** Even the federal agencies have no authority to manage a mining program! But you would have your wardens out there writing criminal citations to a serious dredger that is attempting to trace down a mineral deposit with several open excavations? This proposal proves that DFG does not understand the mining process that you are trying to regulate, and that you have not seriously considered the input from the mining community, especially during the PAC meetings.

Here is the reality: It is entirely impractical for you to believe we can somehow take our dredge tailings and refill the holes. There are water currents involved which prevent the material from being shoveled and carried 30 feet upstream, or even dredged upstream. Furthermore, according to the SEIR's extensive information in Chapter 4; no matter what we do, the light gravel (tailings) will remain unstable until the next storm event places them behind a natural obstacle in the waterway.

Ample evidence shows that salmon are less likely to place their redds in a heaped tailing pile than they are on a pre-mining grade which is unstable. So your proposal will actually create more harm than good! While it occasionally happens, there are very few cases on the record where salmon have spawned in a heaped tailing pile, because they

seem to have an instinct that the pile is unstable. So wouldn't it be better to leave it alone and allow the next storm event to settle things where they belong?

On this subject, the SEIR does not contain enough acknowledgment about the proven positive impacts that result from suction dredging. It is well established that these tailings eventually wash downstream to create ideal spawning habitat where it may not have existed before. In addition, it is well established that the holes we leave behind create cool water refuges where salmon and other fish hold up during the warm summer months. The piled cobbles create protected habitat where fingerlings are able to hide from predators. And you would have us destroy these improvements right at the time when the fish need them the most? **Why is that?**

It is well established that the river will overrule any reclamation efforts which dredgers attempt and return the waterway **exactly the way it is supposed to be** during the next flood event. It is perplexing why the Department would have us bury the holes which are helping fish in the meanwhile.

Furthermore, since it would be impossible to move tailings and rocks upstream in a swift current, where would you have us source the material to fill in our holes? The regulations already prevent us from importing material off the bank. The only other source would be from upstream in the waterway. But then we would be disturbing other habitat (and mussels) from another part of the river that the SEIR has expressed so much concern about.

We strongly suggest that you eliminate this whole idea from your regulatory proposal about managing the way that dredge miners prospect and mine. Because you are not being realistic. This would be a subject better suited to your Best Practices handout.

Dredge mining between one half hour after sunrise to sunset: You would attempt to prohibit mining on the public lands after sunset? **Your authority is limited to preventing a deleterious impact upon fish!**

We suggest you drop this from proposed regulations and leave it to local authorities where it belongs.

Thank you very much for giving careful consideration to our comments and suggestions!

Sincerely,

Dave McCracken, President
New 49'er Prospecting Association

