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Nov 27, 2017

To: Idaho Water Resource Board & Idaho Dept of Water Resources 322 E Front Street Boise, ID 83720

Attn: IWRB Chairman Roger W Chase &

IDWR Deputy Director Mathew Weaver

Dear sirs:

After reviewing the memo distributed on Nov. 22 by Nikki Regent, we find ourselves compelled to object to the application of some of the asserted statements and referenced statutes and quoted reports. There are several incorrect statements and instances in the memo where references used simply have no relationship to the statements they are supposedly offering support and credence to. As the memo has been distributed to most stake-holders and known parties interested in the dredging regulations and the special supplement being applied to permits issued on the South Fork of the Clearwater River we have no choice but to point out these obvious inconsistencies as they occur and offer some additional insights and references to better inform the public and parties having an interest in these matters.

We will attempt to cover each of the statements here as accurately as possible and offer our opinions on the comments afterwards.

Starting at the beginning of the assessment comments of what are called:

2017 Special Condition 1: Dredge mining shall occur only within the wetted perimeter below the mean high water mark (as defined in IDWR Stream Channel Rule 10.08) between July 15, 2017 and August 15, 2017. Activities which would expand the wetted perimeter are not authorized.

In the narratives, the July 15 to Aug 15 seasons have been in effect since 2001 when in fact there have been 3 variations of the season allowed by permits issued during those years.

It is further stated here that condition language describing work within the wetted perimeter is consistent with the language found at IDAPA 37.064.04 or (Rule 64.04).

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However, review of Rule 64.04 shows a simple definition of dredging operations being conducted in such a way that they do not undercut stream banks.

(BACKGROUND OF STATUTORY INTENT)

IDAPA 37 is the state statute for the standards of operations for stream alterations. Suction dredging below the mean high water mark of any continuously flowing stream is specifically defined as requiring a permit for stream alterations.

IDAPA 37 further identifies small scale suction dredging as a stream alteration and specifically defines this activity at:

IDAPA 37.010. DEFINITIONS (RULE 10). 01. Alteration. To obstruct, diminish, destroy, alter, modify, relocate or change the natural existing shape of the channel or to change the direction of flow of water of any stream channel within or below the mean high water mark. It includes removal of material from the stream channel and emplacement of material or structures in or across the stream channel where the material or structure has the potential to affect flow in the channel as determined by the director.

Stream banks are identified by the mean high water mark and stream channels exist within the perimeters of the mean high water marks as defined at:

IDAPA 37.010. 08. Mean High Water Mark. A water level corresponding to the "natural or ordinary high mark" as defined in Section 58-104(9), Idaho Code, and is the line which the water impresses on the soil by covering it for sufficient periods of time to deprive the soil of its terrestrial vegetation and destroy its value for commonly accepted agricultural purposes.

OPINION: Permits for suction dredging, or stream alterations by suction dredging, have clearly been limited by statute to activities below the mean high water mark and are regulated under IDAPA 37 to not permanently alter stream channels as they exist below the mean high water line or the "wetted perimeter" in such a way as to change or undercut the stream bank. This has been codified by the stream channel alteration rules found in IDAPA 37 and are not subject to indiscriminant revisions by any individual's personal desires or point of view.

For these reasons the Tenmile Mining District has previously asked for this condition in the Special Supplement to be revised and to have clearer language used. The revision suggested by the Tenmile Mining District was this:

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"Suction dredging may only occur below the Ordinary High Water Mark and may not be conducted in such a way as to create undue erosion of the stream bank or to alter the direction of the stream channel in a way that causes undue erosion of stream banks above the mean high water mark."

OPINON: The rest of the comments regarding Special Supplement Rule #1 read like an unbelievable context of assumptions of potential worst case scenarios imaginable and do nothing but provide misdirection of the intent of the rule and the mitigation of impacts it is intended to create. The narration is shockingly biased and secular in its point of view and not at all reflective of the majority of actual peer-reviewed and accepted data available on the subject. *

These statements have no more contextual application than saying, "If you drive a car you might run someone over someday." That is certainly a possibility, however highly unlikely... The same can be said for the application of the comments of the researcher's comments quoted by Mr. Golart.

[On a side bar note here: In early 2016 during a meeting in Mr. Golart's office he stated to me that "although there have been very few reports generated from research on the impacts of dredging, most accredited reports showed that dredging had a significant and detrimental impact on streams and fisheries." I was somewhat taken aback by his statement and assured him that the exact opposite was true on both counts.

To my knowledge there have probably been more studies conducted on the effects and impacts of suction dredging on stream quality and fisheries than any other single activity being conducted on public lands. I have personally reviewed more than 50 and have participated in activities contributing to at least 3 studies to date.

In hopes to provide a solid basis for Mr. Golart's determinations and subsequent actions as the IDWR Stream Protection Coordinator I provided him a partial list of studies and reports that were funded by the USFS, various state fish and wildlife agencies, various state water boards and other credible sources. (I believe it was a list of 27 studies). At the time I thought perhaps he was simply unaware of the volumes of research that had been done, however it becomes apparent now, that may not have been the case at all, instead he apparently simply chooses to ignore data that supports the fact that when properly operated suction dredging creates no significant impact to stream resources or fisheries.

* At the end of this memo there is a list of research reports which thoroughly discuss the impacts of suction dredging. Included are 3 reports on research conducted specifically on the South Fork of the Clearwater River. Anyone desiring the true facts regarding unbiased research on this subject should review copies of these reports. Interested parties can contact the offices of the Tenmile Mining District for assistance or, if you prefer to find them yourselves, most of them

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can be located online and downloaded from the original sources.

2017 Special Condition 2: Dredge mining cannot occur until IDWR and a state and/or federal fisheries biologist inspect the proposed dredge sites to identify acceptable dredge locations to avoid reducing the quality of migratory, spawning, and holding habitat for salmonids

Special Condition #2, as written here, reflects changes in its wording previously suggested by the Tenmile Mining District and in this form is more acceptable than the verbiage used originally in 2016. As this condition is currently codified by the SF Clearwater Basin Water Plan we are compelled to agree with the changes applied here by Mr. Golart.

2017 Special Condition 3: Suction dredges shall have a nozzle diameter of five inches or less and a horsepower rating of 15 horsepower or less. Pump intakes (but not dredge nozzles) must be covered with 3/32-inch mesh screen.

Special Condition #3, as written is a subtle change from the actual wording we saw in the original text which are not acceptable conditions to the majority of dredgers on the South Fork. Additionally, the following comments provided here reflect assumptions not verifiable by any facts in evidence or by the studies conducted on the SF Clearwater:

This condition limits turbidity, water quality degradation, creation of fines in active channel, degrading substrate quality, noise, and total area of disturbance. The small mesh screens protect small fish, eggs, and invertebrates, as well as pumps and valves on the dredge itself.

OPINON: It is our opinion the 3/32 screen size does nothing to protect fish eggs because those eggs are not present during the season of authorized dredging operations. The dredging seasons are specifically designed to not allow dredging activities during spawning cycles.

FYI: to avoid clogging and damaging impellers, the pumps seals and drive mechanism, intake (foot) valves are typically not placed in the substrate of the riverbed and as such are unlikely to ever "suck-up" any invertebrates. We find the use of a protecting screen beneficial to both the dredger and the resource, however the screen size of 3/32 seems to be a bit too small for practical use on the Clearwater because of the natural algae growth which rapidly develops in the stream and collects on the screen which requires regular cleaning and puts unnecessary strain on the pumps by restricting the flow of the intakes.

The Tenmile Mining District suggests these changes to this rule:

Suction dredges shall have a nozzle diameter of 5 inches or less and a horsepower rating of 15 horsepower or less. Pump intakes (but not dredge nozzles) must be

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covered with 3/32-inch mesh screen or other appropriate size.

2017 Special Condition 4: *An IDWR SFCR suction dredge ID card shall be attached to the dredge in a visible location at all times the dredge is located on the SFCR.*

Special Condition #4 describing the requirement for a Dredge ID Card is something we see no reason for. Dredgers have to carry their permits with them according the conditions of the letter permit and operations can be conducted under that permit by a team of up to 5 people. Operators have always been able to allow others to operate their equipment under this permit. IDWR's statements here indicating this card somehow will now allow others to work on your site when they could not before is not an accurate interpretation of previous standards.

However we have previously decided to accept this burdensome requirement at this time. We do reserve the right to address some suggestions for change here that would benefit both the miners and the protection of the resource in future discussions.

Special Condition #5 requiring operations to be during daylight hours has always been acceptable to the mining community. However the following statements made by IDWR to support this have no evidentiary support what-so-ever. The NMFS is notorious for interjecting non-supported opinions and comments as if they were scientifically proven

2017 Special Condition 5: In-stream mining activities shall only take place during daylight hours.

facts. Here at the Tenmile Mining District we base our decisions and recommendations on proven scientific research and not on unverified conjectures and for that reason object to the usage of these opinions here:

This condition allows unimpeded fish movement and normal behavior at night, reduces mining effort which helps limit sedimentation and total area of disturbance, and limits light and noise disturbance. The SFCR is generally a shallow, clear water river during summer low flows. During daylight, most fish seek refuge in substrates, banks, pools, and other cover to avoid predators. In these conditions, fish migration and other movement often occurs in low light and at night. 5 Suction dredge mining primarily occurs in summer, when water flows are lower, water temperatures higher, and water clarity is greatest. As water clarity is important, dredging occurs during daylight hours. Fish primarily feed early and late in the day while suction dredge mining occurs during daylight hours. Although there may be a short period of overlap between fish feeding and mining, it may not be of sufficient duration to impede the fish ability to secure prey (NMFS 2016).

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OPINION: Operating suction dredges does not impede the natural movements of fish during daylight or night conditions. (Several studies show this to be a fact and any person who participates in a dredging activity has seen this first hand.) Fish tend to congregate around dredges and operators in the water and show no signs of fear of them under water.

The volume of material moved and the level of fine particulate matter present in that material is the only factor affecting redistribution of sedimentation. Whether the operation is during the day or at night has no contributing factor to this.

Fish typically seek out dredging activities during their feeding cycles which are complexly influenced by not only lighting but also by water temperature changes and barometric pressures fluctuations that are created from weather patterns, moon phases, and cannot be categorized as being primarily during low light conditions.

2017 Special Condition 6: *Dredge mining sites shall consist of a maximum of two separate locations of* **150-linear feet each.**

Special Condition #6 limiting the size of dredging area to two 150' lineal feet reaches per permit sounds reasonable based on the average volumes moved by dredgers but in actuality it not only is overly restrictive on the permit holder it is also extremely inhibitive to the process of exploration to locate the more profitable mineral deposits on the permit holders claim. This restrictive rule is beneficial only to monitoring teams and offers no mitigation of impacts which is the purpose of the Special Conditions. Trying to validate this restriction with these statements does not change the fact the rule is unnecessary:

Limiting dredge mining sites to two locations of 150 linear feet each creates manageable areas for IDWR staff and a fishery biologist to inspect and delineate sites as required by the SFCR Plan. Ideally, sites are proposed by the miner and delineated on-site with the miner before the season or at the start of the season. The delineated sites are then inspected during the season and after the season. Review of 2015 and 2016 post-season reports completed by the USFS NPCNF staff for dredge sites on the SFCR shows that the total linear feet dredged per site ranged from about 10 to 100 feet, with an average of about 42 feet per site. The reports showed that most miners dredged a total of about 50 linear feet per site. The 2015 report showed several miners working two separate sites of not more than approximately 50 linear feet per site. One miner reportedly worked three sites that were 31 to 38 feet each and a cumulative total of about 104 linear feet. The current 150 linear foot dredge site limitation is similar, although greater in magnitude, than average dredge site lengths reported by USFS NPCNF staff. IDWR has used a special condition on SFCR Special Supplement approvals in prior years limiting the number of sites to three and total cumulative linear feet to no more than 1,500 feet.

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OPINION: The only reason reports listed here show miners using only the short reaches was due to the delineations done by USFS Biologists restricted them to specific areas and if they wanted to move their site they had to wait on an inspection that said they had back-filled holes and completed reclamation on the site they were on and then wait additional time for a biologist to inspect and delineate a new section for them.

Since most dredgers only operate around 15 days in an entire season this often took more time than they had available to spend dredging.

Prior to 2015 a dredger could apply for a permit for their claim area which most typically would contain around 1300 lineal feet of river or less. The permit would allow for 3 - 500' sections of dredging activities. In order to determine were the gold deposits were concentrated, an experienced dredger would put their dredge in at an easy access point on their claim and move it into a location they thought would have a good deposit and run a test hole down to bedrock and then test the results to see what volumes of gold were there. Then they would move to another location and conduct the same test procedure. Then continue to do this along the entire claim area (or suitable portions of it). Often if they hit a particularly rich deposit area they would concentrate dredging there until it was exhausted. If they did not find one they would continue testing and keep track of ore they found in each area. (This is called PROSPECTING and is the basis for locating your mineral deposits in the stream channels.)

Sometimes I have personally moved my dredge back and forth along the length of my claim multiple times in a season and other times I have moved less than 100' feet in an entire season. The point here is it should be at the discretion of the miner when he feels he needs to move his dredge and it should have nothing to do with the ease of allowing an agency representative to monitor their activities.

The Tenmile Mining District advocates changing the wording of this rule and even though we are of the opinion there is no justification or scientific bases for any restriction on the size of dredging sites the District has previously suggested this:

A dredging location plan shall consist of no more than 3-500' locations encompassing an area not greater than 1500 lineal feet on the main stem of the South Fork of the Clearwater River under any one permit. (as per original special supplement conditions)

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(new)-If there exists sections in a claim area that the fishery biologists feel should not be dredged when initially inspecting an area those should be discussed with the miner and marked off accordingly to be avoided. This would be a much easier process than the one currently being used to try to accommodate the miners and the monitoring team.

[On a sidebar note here: It is the opinion of the Tenmile Mining District, and its legal counsel, that restricting access to a mining claim for arbitrary and capricious reasons constitutes an act of taking away from the real property granted under that federal mineral grant.

Once legally located on Federal Public Land a Federal Mining Claim constitutes a mineral grant from the Federal Government. The owner of such is entitled to unrestricted access to these minerals. Any arbitrary and capricious conditions applied by a state (or any other) permit process restricting this access on federal land could be considered a "taking" of this right and as such the holder of the mineral grant is entitled to compensation for his diminished capacity to access his granted mineral claim.]

2017 Special Condition 7: Dredged or excavated holes shall be back filled with the same material that was excavated on or before August 15, 2017 (i.e. the last day of the 2017 SFCR dredge mining season).

Special Condition #7 in its current form is an unacceptable condition to the Tenmile Mining District and to dredge miners in general. Using the following narrative to attempt to validate this special condition by using unrelated data shows a lack of understanding of the conditions created during dredging:

Dredge holes and tailings piles that are restored to original grade improves aesthetics and reduces the likelihood of permanently altering channels and flow. In addition, un-reclaimed dredge holes and sediment piles constitute hazards in the stream channel to boaters and other users of the river leading to liability concerns as a result of permitted dredge activity. Deposited sediment affects stream biota via changes to substrate structure, reduction of habitat space, and food availability. The overall negative impact of sediment accumulation on biological response variables has been confirmed by several studies (for reviews, see Kemp et al. 2011; Jones et al. 2011, 2012). Other research finds that deposited sediment is a degrading stressor for stream biota (Olsen and Townsend 2003; Wagenhoff et al. 2012). Additional studies suggest that fine sediment deposition can cause sensitive invertebrates to decline (Burdon et al. 2013). Sedimentation has strong effects on two key ecosystem processes: primary production (algae biomass accrual) and leaf decomposition. Deposition of sand buries and impedes algal production and reduces microbial activity, which together reduce the overall energy production

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of streams. Increased sand deposition affects invertebrate habitat by clogging the gravel interstices and food availability by covering organic material (Wood and Armitage 1997; Danger et al. 2012).

OPINION: The only applicable portion of this narrative is that filling in holes improves the aesthetic appearance of the stream channel. Permanent alteration of stream channels is not related to the redistribution of stream cobbles from small scale suction dredging but is most generally a direct result of high volume flows created by spring snow melt or occasionally by scouring created by ice pack breakup in the early spring on rivers like the Clearwater.

The statement that un-reclaimed dredge holes constitute a hazard in the stream channel is an unsupported claim and these holes have actually been shown to provide both protective and thermal refuge for aquatic species. (especially in shallow rivers such as the South Fork of the Clearwater)

The rest of this narrative describes relationships of concentrated sediment deposits which are in no way related to small scale suction dredging activities when they are properly conducted under the general conditions of the letter permit issued to dredgers in Idaho.

Not satisfied with these attempts at IDWR's misdirection, the author here goes on with another narrative from the NMFS:

NMFS (2016) recently summarized information on the effects of suction dredging in the SFCR. The physical effects anticipated from excavation of substrate that creates holes and mounds in the stream bottom and the outfall of silt and sand below the dredge that causes turbidity and covers and fills stream substrate have the potential to: • Impede upstream and downstream movement of adult and juvenile salmon and steelhead; • displace the fish from spawning and rearing habitat; • expose particularly juvenile fish to adverse effects from turbidity; • reduce availability and quality of spawning gravels; • reduce survival of eggs and pre-emergent fry in the gravels; • reduce instream cover and interstitial spaces in the substrate for rearing and overwintering juvenile fish; • reduce production of invertebrate prey species for juvenile salmon and steelhead; and • alter reach hydrology and habitat function. Filling in dredge holes with the material that was removed will help to mitigate the outlined physical effects.

OPINION: In this, the second part of the IDWR narrative on Special Condition #7 the

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memo attempts to further justify a need this special condition. We see here more hypothetical opinions that have no evidentiary basis in any of the actual studies conducted on the South Fork or other streams containing similar fisheries but merely reflects more of the typical broad, sweeping statements of possible worst case scenarios created from the opinions of operatives for the NMFS whom, as we have stated previously, are notorious for interjecting non-supported opinions and comments as if they were scientifically proven facts.

For anyone interested in seeing reports from actual studies done on fishery impacts please review the report on the **4 year research project conducted by the US Fish & Wildlife Agency** and reported by Hassler on the effects of suction dredging on anadromous fish.

http://www.theminingalliance.com/research/dredgingstudies/Impacts%20of%20SD%20Mining%20on%20Anadromous%20F ish,%201986,%20Hassler.pdf. This is one of the most thorough and in depth studies ever done and is very objective in its reporting.

We also recommend reviewing the report created from the research conducted on **Effects of Suction**Dredging on Water Quality in the South Fork of the Clearwater River in 2001/2002 by the Idaho

Department of Environmental Quality.

https://www.deq.idaho.gov/media/837524-wq-summary-34-suction-dredge-mining.pdf

The Tenmile Mining District has previously suggested altering the verbiage of this rule to include:

Natural pools or pools created by dredging activities will not be backfilled or reduced in depth by the dredging operations. These pools provide critical thermal refuge and protection from predation for aquatic species. Natural current flows will adjust the morphology of the stream channel and bedding composition seasonally.

2017 Special Condition 8: Permittee shall not alter the stream channel in a manner that creates a physical barrier that prevents upstream or downstream fish movement.

Special Condition #8 is an improved version of the original conditions verbiage and is acceptable as written.

2017 Special Condition 9: Dredge mining shall be excluded in areas within 100 feet upstream and 300 feet downstream of perennial tributaries and shall not hinder fish access to fish-bearing tributary mouths through disturbance, turbidity, or modifications of channel depth or substrate arrangement. If

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a permittee proposes to dredge mine within 100 feet upstream and 300 feet downstream of a perennial tributary it must be determined acceptable by the IDWR and fisheries biologist during site inspection.

Special Condition #9 is still an unreasonable term of mitigation.

OPINION: Studies on dredging activities have shown that they have no effects on migratory salmonids travel patterns in stream channels and have no demonstrable effect on water temperatures or fisheries resources. There is no reasonable, scientific basis for the 100', 300' foot rule. The suitable areas for dredging area are already determined by on-site visits from a fisheries biologist. This should be sufficient enough mitigation of any possible impact to the resource and this special condition should be removed.

2017 Special Condition 10: Dredge mining shall not occur on gravel bars at the tails of pools. Dredge mining shall not occur in a manner that deposits fine sediment (sand or silt) on gravel bars to a depth of more than ½-inch.

Special Condition #10 seems to be a redundant relisting of a condition already in place in all dredging permits issued in Idaho and we see no reason for it to be relisted as a "Special Condition" on the South Fork. The Tenmile Mining District previously suggested altering this condition to read:

Incidental fall back and/or other discharges from dredges and/or any other types of concentrators or sluices, shall not be concentrated in a stream channel in such a manner as to create new deposits of fine silty sediment in excess of 0.5 inches in any stream reaches below the ordinary high water mark.

OPINION: In the narrative provided by IDWR we see a lot details about the effects of sedimentation on aquatic life cycles which is undisputed and well known. What we do not see here is any reference to the volumes of studies done on the specific affect suction dredging has on the creation of sedimentary deposits. There are a few points here that need to be discussed in conjunction with Condition #10 that IDWR has chosen to omit.

1. It has been suggested here that because studies show that massed sedimentation has been shown to cause many detrimental effects on aquatic cycles that suction

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dredging redistribution of fine materials will negatively affects stream biota by changing substrate structure, reducing habitat space, and reducing food availability. The cited studies show that massed sedimentation will produce these effects but studies also conclusively show suction dredging activities on the South Fork of the Clearwater River produce no sedimentation deposits above the acceptable standards created by statute and have no demonstrable impacts on the fisheries eco-system.

- 2. The TMDL created for the South Fork states that in order to achieve the recovery goals established for the SF Clearwater Basin, additions to the stream channels from placer/dredge mining needs to be limited to an annual increase of 7680 cubic yards a year.
- 3. Suction Dredge Mining does not produce any additional sedimentation or deposit anything into the stream channel that is not already there.
 An often overlooked fact is that suction dredging activities only redistribute materials already present in the streambed and contributes 0 yards of additional material each year and has de minimis impact on the overall volume of additions to the streams in which they operate.
- 4. The state has very specific guidelines for the safeguarding of water quality and the addition of fine sedimentation above natural background (which is measured as turbidity and is recorded in units of NTU). Idaho Department of Environmental Quality has established a set of structured requirements associated with all stream channel alterations that uses a formula involving the number of registerable NTU's present in relationship to volume and distance to safeguard against over depositing fine sedimentation into any section of Idaho streams. [IDAPA 58.01.02.060 and IDEQ § 401 Water Quality Certification for small placer miners in Idaho, IDEQ authorizes a 500 linear foot mixing zone for turbidity and establishes acceptable NTU levels within the mixing zone.]
- 5. IDEQ has conducted an extensive study (2001/2002) on specific effects of suction dredging on the South Fork of the Clearwater in relationship to turbidity and the effects these activities have on the macroinvertebrate communities there. The conclusions of their study were:

Turbidity

The Idaho Water Quality Standards criteria for turbidity were not violated within the sediment plumes of active recreational suction dredges.

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Macroinvertebrates

These short term recreational suction dredge mining activities monitored as part of this project do not appear to be impacting the benthic macroinvertebrate assemblages at the study sites. The seven metrics used in the Stream Macroinvertebrate Index score indicate the stream sites are in fair to very good condition. Improving macroinvertebrate assemblages at the downstream sites may be the result of temporary changes in substrate by the action of the suction dredges. Removing fine sediment from stream gravels creates interstitial spaces, which favor stoneflies and caddisflies, which are intolerant of fine sediment and indicators of good water quality. Large increases in Plecoptera (stonefly) and Trichoptera (caddisfly) Richness were seen at the downstream sites.

However, the score for each site may be interpreted as being within the natural variation of background conditions. Therefore, the macroinvertebrate data will not lend themselves to making any conclusions about impacts to water quality resulting from these recreational suction dredge mining activities to the macroinvertebrate populations present.

Surface Fine Sediments

Data collected for surface fine sediment was inconclusive. At one site, the surface fine sediments decreased, and at the other site, they increased below the perturbed area. These results could be due to background site variability or other parameters beyond the scope of the study...

Recreational Dredge Mining Impacts to South Fork Clearwater River...

As an overall conclusion, results from this study indicate that the limited recreational suction dredge mining activities occurring during 2001 on South Fork Clearwater River cause no measurable short term impairments on aquatic life beneficial uses.

(The complete results of studies conducted by the Idaho Department of Environmental Quality to determine the level of impacts created by suction dredging on the South Fork of the Clearwater River can be seen in this report):

https://www.deq.idaho.gov/media/837524-wq-summary-34-suction-dredge-mining.pdf

2017 Special Condition 11: Dredge mining shall not occur within two feet of stream banks. Permittee shall prevent the undercutting and destabilization of stream banks. Woody debris or boulders that extend from the bank of the channel shall not be disturbed.

Special Condition #11 once again attempts to alter conditions created by state statute previously described herein in our observations and OPINION statement regarding Special Condition #1.

OPINION: We see the continuing pattern here of attempting to connect unrelated

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conclusions of researchers to suction dredging. Nothing in IDWR's narration can be can shown as being caused by suction dredging and we openly dispute the conclusions here:

The prohibition of dredge mining adjacent to the stream banks and the removal of woody debris prevents unnecessary disturbance and negative effects on threatened and endangered species in the SFCR.

The conclusion of site specific studies done on the South Fork of the Clearwater and other similar watersheds shows that suction dredging has no demonstrable effect on threatened/endangered or any other species in the ecosystem. We see no scientific reason for any consideration of a restriction that would limit operations to being inside the visibly wetted perimeter. That is a description of an area that changes, depending on water levels, seasonally and is not a constant in any stream channel and is not the defining boundary of the stream bank.

Traditionally, and as described in codified regulations, dredging activities are permitted below the ordinary high water mark. No other types of excavations are authorized below that line. Work in these areas already require a level of reclamation that restores the contours and specific morphology of stream channels back to the conditions existing there before the stream alterations took place. This reclamation offsets any of the potential, hypothetical impacts described in the IDWR narrations regarding Special Condition #11.

There is no conclusive scientific basis to restrict access to, what is most often, the highest mineralized gravel deposits in the stream channel because of the incorrect application of hypothetical interpretations of data presented that clearly states it is merely the opinion of the researcher. The Tenmile Mining District has previously recommended changing this condition to remove the first paragraph and change the second part to this:

To the extent practicable, where such does not create a safety hazard to operators, woody debris or boulders extending from the bank and situated in a manner as to originate above the ordinary high water mark shall not be removed or dislodged from their location in order to prevent undue erosion of stream banks.

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2017 Special Condition 12: Dredge mining shall not disturb the stream bank and associated habitat, deposit sediment against the bank, cause erosion or destruction of the channel, undercut the bank, or widen the channel.

Special Condition #12 is a repeat of conditions described in Special Conditions #1 and #11 and has no particular application beyond the points already discussed and described under those Condition's narratives and should be removed completely from the Special Supplement.

2017 Special Condition 13: Permittee shall not remove, relocate, break apart or lessen the stability of substantial in-channel woody debris or in-stream boulders (greater than 12 inches median diameter) unless it was determined acceptable by the IDWR and fisheries biologist during site inspection.

Special Condition #13 is also duplicative of previous rules and the qualifiers in it create specific restrictions that are impracticable as written. The Tenmile Mining District has previously asked for this condition to be removed from the Special Supplement.

OPINION: The act of dredging requires the moving of rocks or cobble too large to pass through the dredge hose. Operators will move dozens of these in a typical day's operation and many of them larger than 12 inches are not visible until gravels have been dredged from around their location and operators could not practically receive pre-approval for each of these as suggested. This rule has no practical basis is science and is not practicable in any field operation.

2017 Special Condition 14: Permittee shall visually monitor the stream for 150 feet downstream of the dredge mining operation. If turbidity is observed more than 150 feet downstream, the operation must cease or decrease in intensity until no turbidity is observable more than 150 feet downstream.

Special Condition #14 is a reflection of a lack of reasonable conditions being applied to suction dredgers. It adds restrictions on suction dredgers that are not applied to any other types of stream alterations that require similar permits. This restrictive condition far exceeds the state statutory requirements for turbidity and mixing zones and has no reason based on any known scientific data ever collected.

[There are statutory guidelines established for turbidity levels below dredging operations and specific requirements for distances and levels inside the mixing zone. IDAPA 58.01.02.060 and IDEQ § 401

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Water Quality Certification for small placer miners in Idaho, IDEQ authorizes a 500 linear foot mixing zone for turbidity.]

There is no legal or scientific basis for applying a more restrictive rule, to apply only to dredgers, on the South Fork of the Clearwater or to even include the rule as a term of special conditions.

OPINION: Just as a side bar point: When an operator is underwater continually when actually dredging how is he supposed to monitor 150 feet of the stream channel for turbidity? You need to have consideration as to how a dredge operates if you are going create rules to be reasonably followed by its operator.

In review of the narrative provided for Condition #14 we find the following to be very objectionable:

Application of the 150-feet limitation on observable turbidity minimizes the adverse impacts related to sedimentation from dredge mining activity and should result in less time for the area to recover and reestablish natural stream processes.

It has already been established that suction dredging activities on the South Fork are in compliance with conditions established by both the SF Clearwater Water Basin Plan's TMDL and the IDEQ statutes for Water Quality. Research conducted on dredging activities on the Clearwater by the IDEQ, USFS, IDWR, NOAA and USF&G have shown no demonstrable impact on resources or fisheries ecosystems so we have to ask, what possible purpose could this condition serve?

2017 Special Condition 15: No mechanized equipment shall be operated below the mean high water mark except for the suction dredge, sluice, pump, or any life support system necessary to operate a suction dredge.

Special Condition #15 is duplicative of codified conditions listed in IDAPA 37.03.07 which applies to all suction dredging in the state making this "Special Condition" unnecessary. The Tenmile Mining District has previously asked for this condition to be removed for that reason.

2017 Special Condition 16: *Permittee must maintain a minimum spacing of at least 800 linear feet of stream channel between active mining operations.*

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Special Condition #16 is a condition that conflicts with existing statutes found at IDAPA 37.064.07. "Limitation of Mining Sites. Only one (1) mining site per one hundred (100) linear feet of stream channel shall be worked at one (1) time unless waived by the Director", this 100 foot spacing, when coupled with the other statutes requiring adherence to the water quality standards described at. IDAPA 58.01.02.060 and IDEQ § 401 create more than adequate protection of resources and water quality. For that reason the Tenmile has previously asked for this condition to be changed to follow the state statutes:

Operators will maintain a minimum spacing of 100 feet between each permitted operation.

OPINION: In Special Condition #16 we see here yet another restrictive condition that has no basis in statutes or scientific data supporting it, apparently reflecting only the ideologies of the author.

2017 Special Condition 17: All fuel, oil, and other hazardous materials shall be stored outside of the stream channel in containers approved by ANSI or UL for storage of the materials. Permittee shall not operate any equipment that leaks fuel, hydraulic fluid or other pollutants. Permittee shall use a funnel or spill proof spout when pouring fuel and place absorbent material, sufficient to absorb a spill, under and around the fuel tank when refueling. Petroleum absorbent spill kits of suitable size to handle combined fuel volume of all fuel storage containers shall be onsite in case of accidental spills and no petroleum products shall enter the stream when servicing the equipment.

Special Condition #17 is designed to address a potentially serious problem and the Tenmile Mining District commends the revisions created in this condition from previous versions to make it more practicable by operators in the field. We only see one additional problem in the wording that needs corrected:

...and place absorbent material, sufficient to absorb a spill, under and around the fuel tank when refueling...

The above is impracticable in the field. Most all small engines on modern suction dredges are positioned on the frames to be directly suspended within inches above the surface of the water or in such a way as no space exists beneath them to place absorbent material.

OPINION: We are uncertain as to the reason for this rules application to suction dredges. No such similar rule exists for other operators conducting activities on or near Idaho

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streams. (ie, boaters, campers, ATV operators, fishermen, etc) The comparatively few number of dredgers operating on or near Idaho streams, as compared to other activities that utilize combustion engines, makes us wonder at the reasonableness of this condition or the purpose behind it... However, we do feel that a form of this Special Condition is practical and practicable. The Tenmile Mining District has previously asked for the wording of this rule to be changed to the following:

All fuel, oil and other hazardous materials shall be stored in ANSI, UL approved fuel containers.

Operators will provide spill kits of suitable size to handle fuel volumes in all storage containers kept within 100' of any open waterway. Spill kits will be kept available on site for each operation.

Operator shall not operate any equipment that leaks fuel, hydraulic fluid or other pollutants.

2017 Special Condition 18: Permittee shall not entrain, mobilize or disperse any mercury discovered during mining operations. Permittee shall not use mercury, cyanide or any other hazardous or refined substance to recover or concentrate gold.

Special Condition #18 covers two very good topics but we here at the Tenmile Mining District feel that the wording could be improved to better align it with the statutory requirements found at: IDAPA 58.01.02.800 prohibiting storage or disposing of hazardous materials in or near state waters. For that reason the Tenmile Mining District has previously suggested changing the wording of this condition to read:

Any hazardous materials recovered during operations shall be disposed of only in compliance with state, local and federal laws for the disposal of such materials.

Operators shall not use any chemical agent, mineral or refined substance to aide in concentrating or separating minerals near or below the high water mark in any stream on the Tenmile Mining District.

[On a side note here it is difficult to understand the purposed intent of many of the various narrations used by IDWR in their memo. The purpose of the special conditions created for the South Fork was supposed to be the development of specific guidelines that mitigate real impacts created during the process of stream alterations. Somehow that purpose seems to have morphed into some sort of a "Witch

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Hunt" against suction dredging. We have not read a single point in these narrations quoting any supportive research on the activities conducted under the permit process in place. We ask the simple question here of, **Why is that?**

Is it not the job of the IDWR to present an unbiased point of view on the activities and make rules to protect our water resources based on actual scientific data and not conjectures and opinions???]

2017 Special Condition 19: To prevent the threat of aquatic invasive species, suction dredges, tools used while dredging and associated equipment shall be thoroughly cleaned and dried at least 5 days prior to use in the SFCR.

Special Condition #19 covers another important topic. We feel that additional safeguards to protect Idaho's streams and waterways from invasive species need to be applied here and the Tenmile Mining District has previously suggested that this rule be modified to read:

To prevent the threat of aquatic invasive species, suction dredges, tools incidental to their operations and all other associated equipment shall be inspected and certified at an IDEQ approved or other certified inspection site. In lieu of that inspection, dredges and equipment must be thoroughly cleaned and sanitized prior to use. Operations using equipment not inspected and certified at an inspection station must sign an affidavit certifying their equipment was properly cleaned and sanitized prior to using it on the Tenmile Mining District.

IDWR has suggested changing this condition to the following:

Operators must ensure their dredging equipment does not house invasive species. Equipment must be decontaminated prior to its placement in waters of the state. Furthermore, dredging equipment used in multiple streams should be decontaminated before each deployment. Decontamination procedures may be found at:

http://deq.idaho.gov/media/457155-decontamination_procedures.pdf

The Tenmile Mining District supports this revision.

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2017 Special Condition **20**: *Dredge mining equipment shall not be operated within 500 feet of a developed campground.*

Special Condition #20 is currently a statutory requirement under the SF Clearwater Basin Water Plan and will be followed until what time it because unnecessary.

2017 Special Condition **21**: *Permittee shall not secure dredge mining equipment by stringing ropes, wires, chain, etc. across the stream channel.*

Special Condition #21 covers good subject matter but provides no explanation of the need for this special condition. What is the purpose of this condition?

Opinion: It is assumed that this condition is being considered to allow unrestricted access to recreationalists on the river.

Prospecting and mining activities conducted on federal public land operate under the mineral grant process which creates certain vested rights that apply to mining activities on all public lands open to mineral entry. Miners are not required to alter their operations or jeopardize their safety in order to accommodate recreational activities on those lands. At the same time they are not allowed to restrict public access to portions of their claim they are not actively mining or prospecting on.

The Tenmile Mining District recognizes a need for mutual cooperation and an effort to protect the public safety in or around active mining operations but feels that this condition needs to be worded differently. The Tenmile Mining District has previously suggested altering the wording of this condition to:

Where practicable, dredge platforms or in-stream concentrators or free standing sluices shall be secured without stringing wire, cable, chain or ropes across the stream channel in such a way as to create a hazard for other users on the stream.

2017 Special Condition 22: This permit does not constitute: a. An easement or right-of-way to trespass or work upon property or mining claims belonging to others. Access is the responsibility of the permittee to negotiate and obtain permission as needed. b. Responsibility of the IDWR for damage to any properties due to operations of permittee.

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Special Condition #22 covers important subject matter and in its current form reflects changes in its wording from its original content suggested by the Tenmile Mining District.

2017 Special Condition 23: This permit may be canceled at any time to minimize adverse impact on the stream channel. Conditions where this could be likely: very low flows and high temperatures to reduce effects on ecosystem; very high flows for safety of miners and liability concerns.

Special Condition #23 is OK as written.

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This Memo has been prepared and published under the authorization of the Board of Directors of Tenmile Mining District, November 27, 2017.

References:

IDEQ and EPA. 2003. South Fork Clearwater River Subbasin Assessment and Total Maximum Daily Loads. October 2003. IDEQ, Lewiston, Idaho and U.S. EPA, Boise, Idaho. 303 p., plus appendices.

Water Quality Summary Report 34; A Recreational Suction Dredge Mining Water Quality Study on South Fork Clearwater River Idaho County, Idaho, January 13, 2003, Prepared by: Idaho Department of Environmental Quality, 17 page summary

IDEQ. 1999. Beneficial Use Reconnaissance Project Workplan for Wadeable Streams. Prepared by the Beneficial Use Reconnaissance Project Technical Advisory Committee for the Idaho Division of Environmental Quality: Boise, ID. 100 pp.

(208)968-1052

contact_us@tenmileminingdistrict.com

DeRito, J. 2000. Summary Report of the Suction Dredge Monitoring Program: 1995-1999, Nez Perce National Forest. 9 pp.

Grafe, C.S., C.A. Mebane, M.J. McIntyre, D.A. Essig, D.H. Brandt, D.T. Mosier. 2002. The Idaho Department of Environmental Quality waterbody assessment guidance, 2nd ed. Idaho Department of Environmental Quality: Boise, ID. 114 pp.

Stewart, D.D. 2002. Personal communications and notes. Idaho Department of Environmental Quality. Grangeville Satellite Office.

Impacts of Suction Dredge Mining on Anadromous Fish, Invertebrates and Habitat in Canyon Creek California; US Fish & Wildlife Services, Thomas J. Hassler William L. Somer Gary R. Stern; 124 page summary.

Recommended reference materials with links...

Water Quality Summary Report 34; A Recreational Suction Dredge Mining Water Quality Study on South Fork Clearwater River Idaho County, Idaho, January 13, 2003, Prepared by: Idaho Department of Environmental Quality, 17 page summary

https://www.deq.idaho.gov/media/837524-wq-summary-34-suction-dredge-mining.pdf

Impacts of Suction Dredge Mining on Anadromous Fish, Invertebrates and Habitat in Canyon Creek California; US Fish & Wildlife Services, Thomas J. Hassler William L. Somer Gary R. Stern; 124 p http://www.theminingalliance.com/research/dredgingstudies/Impacts%20of%20SD%20Mining%20on%20Anadromous%20Fish,%201986,%20Hassler.pdf