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TWSA Members:

Cave Rock Water System
Edgewood Water Company
Glenbrook Water Cooperative
Incline Village GID
Kingsbury GID
Lakeside Park Association
North Tahoe PUD
Round Hill GID
Skyland Water Company
South Tahoe PUD
Tahoe City PUD
Zephyr Water Utility

8/27/2020

Submitted via tahoekeysweeds@trpa.org on August 27, 2020

To the Lahontan Regional Water Quality Water Board, Tahoe Regional Planning Agency and other interested parties,

Re: Tahoe Water Suppliers Association (TWSA) Comments on the Draft Environmental Impact Report (DEIR) / Environmental Impact Statement (DEIS) / {Tahoe Keys Target Aquatic Weed Control Methods Test - Draft Joint TRPA Environmental Impact Report, TRPA File # EIPC 2018-0011, Tahoe Keys, City of South Lake Tahoe, CA Project Number 510-101-00}

On behalf of the Tahoe Water Suppliers Association (TWSA) Board of Directors, we submit the following comments on the DEIR:

Statements on Proposed Project and Alternatives:

1. The TWSA Board continues to support the testing of non-herbicide methods before chemical treatment is considered. The US EPA and Californian EPA both recognize Lake Tahoe as an “Outstanding National Resource Water, Tier 3. (ONRW). There are only two ONRWs within the State of California. The State of Nevada has classified Lake Tahoe as “A Water of Extraordinary Aesthetic or Ecological Value”. These designations warrant the thorough testing of non-chemical methods to precede any herbicide testing. The introduction of herbicides (even as a ‘one-time’ test) into Lake Tahoe, as a Tier 3 Outstanding National Resource Water with 6 filtration exempt water systems (out of 60 nationally), is not appropriate at this time, before non-chemical methods have been tested on a larger scale.
2. We Support (5.7) Action Alternative 1 (AA1 = non-herbicide tests only) which was identified as the “environmentally superior alternative” in the CEQA DEIR. TWSA historical comments have long supported this approach, now clearly defined in the DEIR. Larger scale, well designed, well conducted and properly monitored, non-chemical tests should be tested for (at least) the 3 years proposed.
3. We Support Action Alternative 2 (dredge and replace substrate). TWSA early comments supported this non-chemical alternative, coupled with monitoring and mitigation for turbidity. Strategic site selection will be necessary to avoid disturbing alum concentrations in the sediment, along with strong mitigation and monitoring protocols. Dredging and substrate replacement offer a long-term corrective action on the physical conditions of the lagoons, conditions that support plant growth due to years of nutrient and sediment deposition.

Comments on Drinking Water Concerns Analysis in the DEIR:

4. TWSA acknowledges the in-depth investigation of 'fate and transport' concerns for the surface water treatment operators with emphasis on understanding potential impacts to the filtration exempt water purveyors. These concerns were identified in Issues UT- 1 (Utilities) and EH 3 (Environmental Health). The detailed analysis on Protection of Filtration Exemption Status is discussed in the Built/Human Environment section (pgs. 3.4-10 to 14). * Excerpts are referenced at end of this letter.

The overall evaluation determined in the DEIR/DEIS is that the Lake Tahoe drinking water intakes are not at risk, due the containment measures proposed, monitoring and detection program outlined, and in the end, the volume of water in Lake Tahoe between the treatment areas and the intakes. The TWSA Board is not totally comfortable with the determination that, in the end, dilution will protect the lake source intakes. Yes, 39 trillion gallons of water provides an excellent dilution safety factor. However, there are key pieces of key information in the pending anti-degradation analysis that must be co-evaluated.

Questions and Concerns:

5. We strongly feel that more information is needed in the DEIR on implementation of Group B methods. Working out the details now, on Group B logistics, is critical to the success of the entire testing program. The flow charts provide a decision-making matrix, but an actual operational / implementation plan has not been provided. The newly released *Mitigated Negative Declaration on the Draft Environmental Assessment for Lake-wide Control of Aquatic Invasive Species Project – Lake Tahoe, California and Nevada (August 2020)* provides extensive support information on operational logistics of various non-chemical control methods.
6. Diver Assisted Suction Harvesting (DASH) is reserved as a Group B option. We suggest that DASH be considered on a larger scale (reconsider in Group A category). The DASH method is highly selective and effective. Divers manually removes the entire plant which reduces concerns over re-growth or nutrient loading from plant die-off. This method has been successfully used in Emerald Bay in past control work. At Squam Lake, New Hampshire this method is used exclusively to manage 50 acres of milfoil, using an AmeriCorps natural resources training program. The Tahoe RCD is working successfully with this method currently at several Lake Tahoe locations.
7. We still maintain some concerns about the potential failure of turbidity curtains to contain herbicides within the treatment sites. To provide additional protections at any potential herbicide site, we suggest the portable water treatment plant be prepared for the treatment sites (not just TK wells) in the mitigation and emergency response plan. The current contingency plan referenced in the DEIR, addresses potential issues at the drinking water wells, only. (Carbon Filtration Contingency EH-3f).
 - Emergency carbon-filter treatment of the water should be a 'ready-to-implement' mitigation for treatment site use, in the case of containment failure. Details are needed on how this equipment would be accessible and this mitigation performed. Powdered activated carbon for an emergency spill may be another option?

8. PhosLock has been added for evaluation for sequestering Phosphorous (K) out of the water column and the sediment. We feel this holds potential but should be investigated further. What is the state or regional board experience with the use of Phoslock in California, especially with use in drinking water sources?
9. We support the added mitigation of Laminar Flow Aeration (LFA) to all treatment sites for increasing oxygen levels, reducing nutrient reduction and offering mitigation against potential harmful algal blooms. LFA holds great potential to improve water quality conditions in the Tahoe Keys, based on initial reports of its use at Ski Run Marina.
<https://www.clean-flo.com/wp-content/uploads/2020/05/Ski-Run-Marina-First-Year-Report-Jan-2020.pdf>
10. TWSA has concerns that the herbicides selected will have limited effect on all three species of concern (Issue AQU-2). Chemical removal of Eurasian Water Milfoil (EWM) may offer Curlyleaf Pondweed (CP) an unintended competitive advantage. This is a major uncertainty with proposed chemical treatment.

Endothall = non-selective, kills all 3 target plants, but is contact type only, not systemic
Triclopyr = selective, systemic; kills EWM and CP - but not Coontail
Procelleacor (Florpyrauxifen-benzyl) selective, systemic; possible only kills EWM

“AQU-2: Competitive Exclusion of Aquatic Macrophytes Due to Increased Growth of Curlyleaf Pondweed. Based on manufacturer’s labels, only one of the three aquatic herbicides being considered for the CMT (endothall), is labeled for the control of curlyleaf pondweed. However, other studies suggest that florpyrauxifen-benzyl can also control curlyleaf pondweed (Anderson 2020, Heilman per. Comm.; Heilman and Getsinger 2018). Application of herbicides that are not effective in controlling curlyleaf pondweed (e.g., triclopyr) could provide this invasive species with a competitive advantage and result in its increased growth within treatment areas. Recent surveys by TKPOA have found that curlyleaf pondweed is growing at deeper depths in the lagoons. This information was used to evaluate how control measures might result in increased growth of curlyleaf pondweed, in particular, by applying herbicides that may not selectively target the species. It was assumed that pre-treatment surveys would be effective in selecting the appropriate herbicide based on species composition, and reduce the likelihood that curlyleaf pondweed density could increase due to competitive exclusion. (pgs. 3.3.5-2; 3.3.5-21)”

11. Procelleacor (Florpyrauxifen-benzyl) is still pending CA EPA approval.
TWSA feels it is inappropriate to consider an unapproved product in this CEQA DEIR/DEIS.
12. Coontail, considered a ‘nuisance native’, is non-rooting and free floating. We suggest more consideration be directed towards aggressive harvesting/mechanical removal of this native plant. Mechanical removal would directly reduce nutrient loading to the water column by removing the plants entirely.

- 13.** There has been a positive shift in plan development from years past. This plan now recognizing the impact of nutrient cycling and a need for water quality mitigation of existing conditions, with a goal to oxidize nutrients in the water column and avoid potential algae blooms. Breaking the nutrient loading cycle is a key strategy in controlling plant growth, and we appreciate the in-depth study done to analyze and rank loading sources. The research identified water column loading from the plants (during die-off) as the primary source of water borne nutrients; with storm-water designated a secondary source.
- 14.** Critical pieces in the regulatory decision-making process (Anti-degradation policy) are still pending. This decision is a major judgement in national and state anti-degradation policy and ONRW protection. Not having this information makes commenting on the DEIR more difficult.
- 15.** Cost information is another key item missing for overall decision. There are no costs presented for any methods. Cost analysis is necessary to determine approach. We feel the cost for CEQA DEIR/DEIS analysis should be heavily pro-rated towards the cost of herbicides. Information presented by agency staff, in public meetings, has acknowledged the herbicide component of the proposed project as the piece that triggered the need for full CEQA analysis; all other methods require less intensive review.
- 16.** Per anti-degradation guidance, the Non-Point Source Plan should be augmented with additional storm-water and fertilizer management improvements to reduce land-based, non-point source loading. Such enhancements could include: Nitrogen fertilizer restrictions, requiring buffer strips with a 'turf setback' zone (removing turf to edge of water landscaping), and the addition of storm drain inlet filters. Storm water was identified as the second major contributor to water column nutrient loading in the DEIR. The Keys water conditions are a result of ongoing, unmitigated conditions from land-based activities. It is clearly stated in anti-degradation policy that all cost-effective and reasonable BMP's must be in place before the State authorizes degradation of high quality waters.

40 CFR § 131.12 (2) - Antidegradation policy and implementation methods: "Where the State intends to provide for development, it may decide under this section, after satisfying the requirement for intergovernmental coordination and public participation, that some lowering of water quality in "high-quality waters "is necessary to accommodate important economic or social development. Any such lower water quality must protect existing uses fully, and the State must assure that the highest statutory and regulatory requirement for all new and existing point sources and all cost-effective and reasonable BMPs for nonpoint source control are being achieved on the waterbody. We interpret Section 131.12(a)(2) as REQUIRING States to adopt an anti-degradation policy that includes a provision that will assure that all cost-effective and reasonable BMPs established under State authority are implemented for nonpoint sources before the State authorizes degradation of high quality waters by point sources (see USEPA,1994a.)" -

<https://www.epa.gov/sites/production/files/2014-10/documents/handbook-chapter4.pdf>
[page 9.](#)

“The comparative lack of water clarity in the lagoons can be attributed to resuspension of fine sediments accumulated from aquatic plant decomposition and storm-water, internal cycling of nutrients, shallow and warmer waters that support more algal growth, and limited circulation with and dilution from lake Tahoe waters.” (DEIR pg. 3.3.4-12)

- 17.** A requested analysis on the socio-economic impacts to the DRINK TAHOE TAP® brand was determined outside the scope of this DEIS. (Pg. 3.1-15) The DRINK TAHOE TAP® brand has been under development for more than 10 years regionally and currently receives broad community support. The introduction of herbicides may have a strong impact on consumer confidence in the tap water, despite the precautions and mitigations. Tahoe Tap is an award winning, very high quality tap water. We are under the assumption that this question is being evaluated as part of anti-degradation analysis? The international brand, Evian Water, was recently negatively impacted by the detection of an EU banned fungicide (chlorothalonil) in their protected spring source.
- 18.** Turning off wellheads and providing bottled water as a mitigation for potentially impacted TKPOA wellheads is not sustainable. This mitigation ignores the other household water needs for residents.

19. Edits/Corrections:

DEIR pg. 3.2-5 – LPA is listed a filtration exempt; they are a filtering purveyor.

DEIR pgs. 3.14.12-13, Glenbrook should be Kingsbury

Other edits were previously submitted.

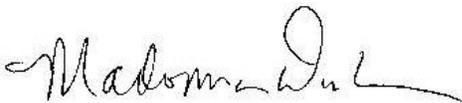
Additional Comments:

- 20.** In addition to this letter, the Tahoe Water Suppliers Association has commissioned an independent review of this CEQA DEIR/DEIS by Water Quality & Treatment Solutions Inc. The consultant comments are attached here (in this document), and we ask these also be included as part of our formal record.

Thank you for the opportunity to comment.

Respectfully Submitted on behalf of the Tahoe Water Suppliers Association Board,

Madonna Dunbar, TWSA Executive Director



Suzi Gibbons, TWSA Board Chair



Reference: DEIS excerpts on drinking water analysis:

Issue UT 1: Effects on Water Supply – Due to dilution, no detectable concentrations of herbicides or degradants attributable to the test program would occur at drinking water intakes, and therefore no impact would occur and no mitigation is required. TKPOA has proposed contingency plans, including monitoring and alert systems to be implemented if necessary to remove herbicides and treat the potable water before distribution.” (pg. ES-24).

EH-3: Protection of Drinking Water Supplies. Although even minimal dilution would prevent concentrations exceeding drinking water criteria from reaching drinking water supplies, degradation would occur if concentrations of active ingredients and chemical degradants of herbicides proposed for testing were detectable in or near the locations of potable water intakes. The potential for detectable concentrations at drinking water supply intakes is a function of the potential for transport of chemicals to these locations, the environmental fate and persistence of each herbicide proposed for testing, and the maximum allowable application rates for the proposed herbicides.(pg. ES10)

Issue UT-1: Effects on Water Supply. Effects could occur if herbicide residues and degradants reached water supply intakes on Lake Tahoe, and led to the loss of filtration exemption for purveyors drawing from the lake. An impact could occur if turbidity increased in nearshore shallows near drinking water intakes as a result of the dieback and decay of aquatic weeds. (pg.ES-24)

“the IEC/IS found that surface water intakes are not located is sufficient proximity to the Tahoe keys lagoons to be affected.” (page 3.1-19)

“potential changes in lagoon water quality are not expected to be measurable in the greater Lake Tahoe, and consequent environmental health effects would not be distinguishable either.” (page 3.2-1)

“Thus, the distance from the proposed test sites to existing drinking water intakes, together with the isolation of herbicide tests behind barriers within the Tahoe Keys (coupled with monitoring to assure that residuals are well below levels that would be required to meet drinking water standards even if purveyors intakes were within the lagoons themselves), would be well more than sufficient to assure that the potential for any herbicides or degradates of concern to affect drinking water is negligible. There would be no impact to Issue UT-1.” (pg. 3.4-14)

Federal USEPA antidegradation policy ONRW III discussion: “...given the dilution factor of the volume of water in the Tahoe Keys and Lake Tahoe, no exceeding of drinking water standards is anticipated to occur”. (pg. 3.2-3).

**TAHOE KEYS LAGOONS AQUATIC WEED CONTROL METHODS TEST
DRAFT EIR/EIS REVIEW**

PREPARED FOR:

TAHOE WATER SUPPLIERS ASSOCIATION

PREPARED BY:

WATER QUALITY & TREATMENT SOLUTIONS, INC.

CHAMBERS GROUP



AUGUST 2, 2020

Procedural Review

The El Dorado County Clerk currently has no record, and is not able to confirm, if the Notice of Availability/Notice of Completion had been submitted and circulated to the El Dorado County Clerk (per phone call on 7/30/2020). If the notice has not been posted, the project has not complied with CEQA Guidelines 15072 (d) that states the following:

“The county clerk of each county within which the proposed project is located shall post such notices in the office of the county clerk within 24 hours of receipt for a period of at least 20 days.”

EIS/EIR Review

Executive Summary

As noted in the Executive Summary, this EIR/EIS only analyzes the test of a variety of control methods, and another environmental analysis would be required for any future implementation of a full-scale aquatic weeds control program. If this is the case, future full-scale weeds control should be analyzed as a cumulative project.

The Executive Summary should indicate the total acreage of the lagoon areas that would be treated. The Executive Summary could include information from Table 2-1 to give the reader a better idea of acreage involved for the Proposed Project and alternatives. Section ES 3.2 would be an appropriate section to add this information.

Section ES 3.2 indicates that the Group B follow up methods would only be used if a Group A test method achieved 75% reduction of non-native species. Recommend that the percent reduction of a Group A test method be noted and recorded, but no matter what percent reduction was achieved the Group B methods should be employed at all test sites. This could provide data for a more complete evaluation of initial and follow up methods.

Based on the fact that an Exemption Application was submitted to the Lahontan RWQCB for the application of pesticides, the information included in the Antidegradation analysis would have been helpful to include in the EIR/EIS.

We recognize that Action Alternative 1 was identified as the Environmentally Superior Alternative, and that the No Action Alternative (NAA) is the only alternative that may have potentially significant unavoidable impacts. (Typo on page ES-8 calls it the NOA; it should be the NAA).

Table ES-1:

For mitigation listed for EH-2, EH-3d: It would be helpful if a description of what is considered a detectable concentration of an herbicide be added in these sections. How would this be measurable in the mitigation?

EH-3d West Channel monitoring and contingencies (page ES-11). States “If herbicides are detected within the West Channel, additional monitoring stations would be sampled outside the Tahoe keys in Lake Tahoe and monitoring would continue south and north of the channel. Recommend if herbicides are tested, the monitoring plan should specify that the laboratory be required to Rush turn-around-time for results, and not wait the full holding time.

EH-3b states “If herbicides are detected in nearby wells, contingency plans include shutting off the wells and distributing water to all users until residues are no longer detected in the samples.” This is repeated in EH-3d. If shut off the water supply, people cannot flush toilets and they cannot stay in their homes. Appropriate response would be that TKPOA issue a notice to residents not to drink the water and supply drinking water (bottled water) to the residents.

For Mitigation Measure EH-5a, we recommend that the measure be revised to provide examples of BMPs that would be used to minimize sediment disturbance and turbidity. As written, it is unclear how this measure would reduce impacts.

For Mitigation Measure EH-5b, what would be the response if during testing aluminum levels do not comply with water quality criteria?

For mitigation listed for EH-6: Include the date range for spring surveys (as described in Section 3.2.2, page 3.2-17). The mitigation also states that the treatment areas would be as small as possible. Since the draft EIR/EIS includes pre-determined sizes for the test sites (Section 2), it would help to clarify what rationale was used to determine “small size” to better understand the mitigation.

EH-6 HABs. Based on previous occurrence of HABs and cyanotoxins, and the potential occurrence of HABs in response to the proposed CMT, the mitigation proposed appears limited to minimizing the treatment areas and use of LFA. Would the TKPOA want to apply an aquatic algaecide, (i.e., use another chemical to reduce algal counts)? Use of treatment could lyse cyanobacterial cells releasing increasing amounts of cyanotoxins. No details are provided regarding the frequency of monitoring for increases in algal counts and testing for cyanotoxins and what would be the response to occurrence of HAB or detection of elevated cyanotoxins.

For mitigation listed for ER-1: Provide the specific restrictions (such as speed limits and what are defined as travel restrictions).

For mitigation listed for AQU-5: It is unclear how and why mitigation would result in Group A methods to not substantially change or reduce the diversity of the aquatic community.

Some mitigation measures identify which action alternatives they apply to and some do not. We recommend that each measure indicate which action alternative(s) it would apply to.

WQ-5a states: “Herbicide applications would occur in the late spring when target weed species are in their early stages of growth and plant biomass in minimal and the timing would be adjusted based on pre-application macrophyte survey.” Response: given that the lagoons have exceeded water quality objectives for several constituents, this mitigation seems vague in terms of “minimal” biomass and potential impacts on water quality.

UT-1 Effects on Water Supply states “Due to dilution no detectable concentration of herbicides or degradants attributable to the test program would occur at drinking water intakes, and therefore no impact would occur and no mitigation is required. TKPOA has proposed contingency plans, including monitoring and alert systems to be implemented if necessary, to remove herbicides and other chemicals to treat the potable water before distribution.” Response: Given the time it would take to mobilize and install additional treatment (as described on page 3.2-16, Section EH-3f Carbon filtration contingency) to remove synthetic organic herbicides before drinking water is served, the treatment technology should be onsite and installed ready to operate, if needed.

Throughout Table ES-1, many mitigation measures are missing mitigation numbers/labels; this makes it difficult to track impacts and mitigation throughout the document. The lack of labels also makes it difficult to determine which measures are mitigation and which are design features or “resource protection measures.”

Section 1.0: Introduction

Figure 1-2 notes areas in Lake Tahoe that had infestations that were previously treated; an explanation and description of what methods were used elsewhere in Lake Tahoe would be helpful to include in the EIR/EIS, as it seems the aquatic weeds were successfully treated in these areas. Could this analysis help provide insight as to why TKPOA believe non-herbicide methods have been unsuccessful in the Keys?

The Purpose & Need notes controlling the spread of nonnative target aquatic weeds; however, the introduction mentions that coontail is a native plant. Would this “undesirable native plant” also be targeted in the CMT? Should this be noted in the Purpose & Need?

The Federal Requirements section notes the need for a complete Antidegradation Analysis; however, this was not included in the EIR/EIS analysis.

Section 2.0 Project Description and Alternatives

Earlier the document defines CMT as Control Methods Test; however, in the Project Description it is defined as a Comprehensive Methods Test. Make sure this is clarified and consistent throughout document.

The fact that most of the treatment sites are located further from the West Channel entrance, and the closest treatment site is for LFA, in combination with the double

turbidity curtain barriers, provides greater confidence that water quality in the waters of Lake Tahoe would largely be protected.

Page 2-4, Figure 2-3, recommend that the document provide the rationale for using 0.3 acre as the trigger for determining what Group B follow up would be employed.

Page 2-6 states “In determining whether an alternative was infeasible due to legal factors alternative screening considered the antidegradation policy and prohibition exemption criteria outlined in the LWB Basin Plan, including the potential to violate any water quality objective; the potential to cause long-term degradation of water quality and the ability to limit any short-term degradation of water quality to the shortest possible time and confine it to the smallest area necessary for success.” How was feasibility determined when the antidegradation analysis has not been completed?

Page 2-7, discusses non-chemical control methods and states “...their success in the Tahoe Keys has been shown to be short-term and recolonization is common.” Why does this eliminate non-chemical means? Has TRPA and LHRWQCB reviewed the design of previous studies conducted by the TKPOA? Did these studies include appropriate, timely follow up and if not, was recolonization inevitable? The CMT appropriately includes follow up treatment for the proposed project as well as the two alternatives.

Page 2-9 indicates that “mechanical harvesting would continue to be performed at all sites (both test and control sites) during the testing period. There should be no use of mechanical harvesting in test and control sites. The use of mechanical harvesting could confuse results of testing and offers no benefit to protect water quality.

Page 2-15 states “...all aquatic herbicides may be applied at rates that are below the maximum concentrations allowed by the product registration, yet are anticipated to produce desired efficacy based on mesocosm studies...However, maximum allowable rates may be used to ensure the best efficacy results are obtained at a pilot scale.” Table 4 in the TKPOA’s APAP (Appendix C) indicates that the proposed application rate for endothall would be 2.0 mg/L (below the maximum allowable rate of 5.0 mg/L) and the proposed application rate for triclopyr would be 1.0 mg/L (below the maximum allowable application rate of 2.5 mg/L). These values are not consistent with the application rate (in mg/L) for endothall and triclopyr presented in Tables 2-2 and 2-3 (page 2-16).

Page 2-22, second paragraph, last sentence is missing the words “cause of the” after “the” and before “decrease.”

Page 2-23, Figure 2-6 presents an example of the layout for a combination herbicide and UV light treatment site. If herbicides are approved for use, samples for the herbicide should be collected within the UV light treatment area to understand potential drift of herbicides into the UV light area.

Page 2-25, states “contingency plans described in the APAP include shutting off the wells and distributing water to all users until residues are no longer detected in samples.” As

indicated in earlier comment, if shut off the water supply, people can't flush toilets, and they can't stay in their homes. A more appropriate response would be to notify residents not to drink the water until further notice.

Page 2-25, footnote #5, it should be clarified that there is no drinking water standard for triclopyr. Information that is included in the EIR/EIS is taken from the label for triclopyr. There is, however, a drinking water Maximum Contaminant Level (MCL) for endothall. To establish the MCL, the regulatory agency (in this case the US Environmental Protection Agency) must follow the Administrative Procedures Act including opportunities for public review and comment. If the MCL for endothall were exceeded that is a violation of a drinking water standard and would require public notification including posting the notice in the local newspaper. The violation would have to be included in the annual Consumer Confidence Report distributed to all customers of the water system. That would not be required under the Safe Drinking Water Act if exceeded the drinking water label value for triclopyr.

Page 2-38, Section 2.6.1 states "Mechanical harvesting has been underway in Tahoe Keys since the 1970s yet has not been effective at reducing aquatic weed populations and has accelerated the weed infestation because the machines produce weed fragments that can propagate new plants." If mechanical harvesting has been used for 50 years and has caused exceedances of water quality objectives and failure to protect beneficial uses why has mechanical harvesting been allowed to continue...while dismissing other non-herbicide technologies based on limited information? Furthermore, Section 1.1.3.1 includes a quote from the TKPOA that "until the 1980s" the Keys were largely clear and free of invasive weeds. That seems to contradict the statement on page 2-38 that mechanical harvesting has been underway since the 1970s.

Section 3.0 Affected Environment and Environmental Consequences

Section 3.2 – Environmental Health

Under Section 3.2.1, Mitigation and Resource Protection Measures, it is very difficult to determine which of these are mitigation measures and which are resource protection measures (and how these are, in turn, related to the impact issues listed in ES-1). Since mitigation measures are only required to reduce potentially significant impacts, it is important for the reader to understand which of these are preventative measures versus which ones are mitigation measures intended to reduce or minimize impacts. For example, are the double turbidity curtain barriers a part of the Proposed Project design, a Resource Protection Measure, or Mitigation? For EH-5a, what kind of Best Management Practices (BMPs) would be implemented? Provide some examples so that it is clear what the applicant will do to minimize sediment disturbance.

As discussed in CEQA Guidelines 15126.4 (a) (1) (A) "The discussion of mitigation measures shall distinguish between the measures which are proposed by project proponents to be included in the project and other measures proposed by the lead, responsible, or trustee agency or other persons which are not included but the lead agency

determines could reasonably be expected to reduce adverse impacts if required as conditions of approving the project. This discussion shall identify mitigation measures for each significant environmental effect identified in the EIR. In addition, under 15126.4 (a) (3), "Mitigation measures are not required for effects which are not found to be significant." Without the clarification of whether these listed measures are Mitigation, part of the Proposed Project, or are Resource Protection Measures, it is unclear if these discussions are in compliance with these sections of the CEQA Guidelines.

EH-6, page 3.2-5 Harmful Algal blooms (HABs). Page 3.2-5. For completeness the discussion should mention that the US Environmental Protection Agency has issued Drinking Water Health Advisories for microcystins and cylindrospermopsin for children under the age of six.

Page 3.2-10, states Compounds with "acute values >100 ppm are classified as "practically non-toxic" (the best possible rating)." The inclusion of the parenthetical "best possible rating" seems to indicate a bias, rather than just leaving the description with the regulatory agency's description: "practically non-toxic." Recommend that the "best possible rating" and "second best classification" be deleted.

EH-3f, page 3.2-16 indicates that a mobile filtration system would also be available to pump and treat water at wells where exceedances are detected above drinking water standard concentrations. If endothall or triclopyr are detected (not just above the MCL for endothall) the water should be treated and residents/homeowners should be notified that herbicides were detected. Otherwise asking the residents to drink the excess herbicide.

Page 3.4-10 Under the section heading "State," there is a statement that DPH establishes drinking water standards for contaminants. That is not correct. Drinking water standards in California are established by the State Water Resources Control Board Division of Drinking Water (DDW).

Section 3.3 – Natural Environment

Under 3.3.1 Earth Resources Mitigation and Resource Protection Measures, similar to the comment above, it is very unclear which of these items are intended to be mitigation that reduces potentially significant impacts discussed for Action Alternative 2. Is the replacement of docks or bulkheads mitigation that is tied to performance criteria? How would there be assurances that this would be implemented. Similarly, the following language is unclear and does not appear to be fully enforceable or provide potential impacts that would ensure that performance standards would be achieved, "Mitigation and resource protection measures would address any the potential effects of spills in the dredge handling area at the WTP would by installing containment barriers and impermeable layers. The effects of spill in transport would be remediated by clean-up operation."

Under 3.3.3 Hydrology, Mitigation and Resource Protection Measures, the “mitigation” discussed is unclear and possibly unenforceable. The supposed mitigation language discusses limiting routing of treated dewatering effluent to Lake Tallac to only the late summer/early fall months. However, the mitigation measure needs to be more specific. What months would this entail? How would this measure quantitatively reduce impacts to below thresholds?

Under the 3.3.4 Water Quality introduction, the statement is made that the “potential changes in lagoon water quality from testing aquatic weed control methods are not expected to be measurable in the greater Lake Tahoe,” however, no reasoning beyond the size differential between the lagoons and the lake is given for this statement. This statement requires substantiation. In addition, there are some inconsistencies in labeling items as Issue 3, or Issue WQ-3, etc. Consistency in naming throughout the section on whether it is a mitigation, an Impact Issue, etc. would help navigate the document.

Under Section 3.3.4 Potentially Impacts, discussion of dissolved oxygen, total phosphorus, and total nitrogen, general statements are made that the effects on overall conditions are expected to have a less than significant impact. However, no numbers or data are given to substantiate this claim or to show how the Proposed Project or alternatives would have the potential to impact these levels.

Under Section 3.3.4 Proposed Project Mitigation and Resource Protection Measures, it is unclear which of these are mitigation versus protection measures. For example, on page 3.3.4-57, in the second paragraph – some sections of the document indicate less than significant with mitigation but do not state what mitigation needs to be implemented. Edits should be made to make clear what significant impacts the mitigation measures are reducing versus which measures are project features, and which mitigation is required for which activities.

Under Section 3.3.4 Alternative 2 Potential Impacts, the discussion notes that “If rigorous implementation of spill control and containment plans and treatment of any dredge spoil dewatering effluent meets turbidity limits, these potential impacts are expected to be less than significant with mitigation.” This statement has numerous unknowns. The requirement of meeting the control and containment plans as well as details regarding treatment should be part of the mitigation measures. The specific mitigation measures that will reduce these impacts and how they will reduce impacts to below levels of significance should be outlined.

Under Section 3.3.4 Alternative 2 Mitigation and Resource Protection Measures, for Issue WQ-2, all the items discussed should be individual mitigation measures (or resource protection measures) so that it can be tracked in the MMRP for who is responsible for enforcing compliance with each measure and what the performance criteria would be, where appropriate.

Under Section 3.3.5 Aquatic Biology and Ecology, Proposed Project Mitigation and Resource Protection Measures, since none of the issue areas seem to have any significant

impacts, this section should be clear about what these measures are intended to do. Are they part of the project description, to include surveys and potential adjustments to treatment locations based on results? In addition, measure are provided in Table ES-1, which included mitigation measures. However, since there are no significant impacts, it is not clear why these measures are needed.

Under section 3.3.6 Terrestrial Biology and Ecology, Proposed Project Mitigation and Resource Protection Measures, the description of MM-BIO-1 is how each mitigation measure should be indicated throughout the EIS/EIR. This measure describes the mitigation, how it will reduce impacts, what will be required of which entity, and specific actions required to be taken. In addition, the labeling of the mitigation measure is helpful and can be a way to refer to which mitigation measure(s) will reduce impacts in the impacts discussions; this labeling should be used universally for each mitigation measure.

Section 3.4 – Built/Human Environment

Under Section 3.4.3, the Traffic discussion includes a mention of “speed limits and travel restrictions” similar to what is listed as mitigation language in ES-1 for Earth Resources. However, these should be clearly outlined here as well, if it is being included as a mitigation or resource protection measure. For example, what will the speed limits be? Or what would the travel restrictions include?

Under Section 3.4.3, the Traffic discussion does not mention SB 743 or Vehicle Miles Traveled (VMT) thresholds or impacts, which is a new requirement of traffic analysis in CEQA. Action Alternative 2 should at least contain an explanation of how truck trips are not included in this type of analysis. Although we do not expect these impacts to be significant, the lack of discussion of VMT impacts is a concern in terms of the completeness of the analysis.

Under Section 3.4.4 Noise, for Alternative 2, the noise levels of the equipment that is used for dredging activities is not mentioned or quantified, only that it would be similar to ambient noise levels. Without understanding what the ambient noise levels are and what the noise of the dredging equipment would be, the statement is not substantiated that noise levels at the nearest sensitive receptors would be less than significant with mitigation.

Under Section 3.4.5 (Cultural Resources), under Methods and Assumptions, is CR-1 an applicant proposed measure or Resource Protection Measure? It is unclear what it means to have this type of measure in the methods and assumptions section since it is almost written like a mitigation measure.

Under Section 3.4.6 Recreation, Action Alternative 2, Resource Protection Measures, this section identifies what measures would be implemented but should clearly state if this is a mitigation. This reference is not provided in the language above or on the ES table. The section should clearly state how the mitigation would address the impacts under Alternative 2.

Section 4.2 Environmental Health (Cumulative Impacts)

Under the Proposed Project, Issue EH-5, the discussion assumes that for aluminum concentrations, “fish and other aquatic life are generally able to swim away and avoid exposure.” While fish could be expected to leave an area during a period of test activities, there is little evidence provided in the discussion that substantiate that fish would stay away, and the possibility that they could return to an area still impacted by elevated levels of aluminum.

Section 4.4 Built/Human Environment

Under Section 4.4.4 Traffic and Transportation, Alternative 2, this section calls out that with mitigation implemented, Alternative 2 is not anticipated to have significant traffic impacts. What mitigation is this referring to and how would the mitigation address the cumulative traffic effects?

Section 5.1 Summary of Significant Effects and Measures or Alternatives to Reduce or Avoid Effects

The summary of effects should point to labeled mitigation measures (similar to what was included in Section 3.3.6) for easier reference throughout the document. As written, it is unclear which are mitigation measures to reduce significant impacts and which are project measures already in place to avoid impacts. The identification of mitigation measures would also make the discussion clearer in terms of which issue areas would have less than significant impacts, and which would be less than significant with mitigation incorporated.

Section 5.7 Environmentally Superior Alternative

For Table 5-1, Alternatives Comparison, although this is helpful information, the comparison of impacts usually involves an identification if, for example Alternative 1 would have “reduced” or “increased” impacts in comparison to the proposed project. As is, the table only identifies if there are significant, unavoidable effects, growth-inducing effects, or irreversible/irretrievable effects; but there is no real comparison between the alternatives. The only thing made clear is that the No Action Alternative is the only one that has potentially significant unavoidable effects. The table also has sections that are highlighted under the No Action Alternative/Potentially significant unavoidable effects continue for long term. It is unclear what the highlight means for that resource area.

Section 6.0 Compliance, Consultation, and Coordination

In Section 6.1.4, Federal Antidegradation Policy, the discussion mentions that certain project components (aquatic herbicides, injection of acetic acid) would be subject to antidegradation policies; however, it cannot be determined at this time how the project or chosen alternative would comply with the Federal Antidegradation Policy.

In section 6.1.4, it states if detectable concentrations of applied aquatic herbicide active ingredients or select degradation byproducts are present longer than “weeks to months,

not years” the discharges would be assessed to cause long-term water quality degradation. Has the same criteria been applied to the decades of mechanical harvesting, has mechanical harvesting been assessed to cause long-term water quality degradation?

Section 6.1.5, page 6-5. Section on the Safe Drinking Water Act. The last sentence directs the reader to section 5.2.8 and the Porter Cologne Water Quality Control Act. Porter-Cologne has nothing to do with drinking water regulations. Recommend the last sentence be deleted. California’s drinking water legislation is the State’s Safe Drinking Water Act, that gives the State the authority to regulate drinking water and to set and enforce drinking water standards.

Appendix E

Page E-5 discusses problems with background herbicide monitoring and presents the reason as to why no testing was conducted. “...it would [be] best to wait and collect the baseline samples shortly before herbicide applications, if approved.” Given the environment and uses in the Tahoe Keys, recommend that testing and reporting be required for a wide array of synthetic organics (not just herbicides) in Tahoe Keys, whether or not the use of herbicides is approved.

Recommended Edits to Appendix E

Figure 8, page E-18, the legend needs to be fixed. Currently cannot tell which line/symbol is bottom and which represents surface location. The Y-axis units should indicate °C, and not just C.

Pages E-18 and E-19, Figures 8 and 9 are poor quality reproductions. Is it possible to replace these figures with better quality/higher resolution figures?

Top of page E-31, states that 90th percentile values exceed the 0.15 mg/L numerical water quality objective for total nitrogen, and that “10% of the samples from each location exceeded the criterion.” The footnote to Table 13 indicates that because of the small number of samples at each depth, the 90th percentile value and the maximum are equivalent. Recommend that the text drop the statement that 10 percent of the samples exceeded the criterion.

Page E-32, Figure 14. Recommend that the range of values for the y-axis be changed from 0 to 8 mg/L, to 0 to 2 mg/L, in order to better observe results.

For Figures 17 and 18, recommend that the y-axis scale be changed from 0 to 8 mg/L to 0 to 2 mg/L in order to better present the results. If needed, add information to the legend regarding 8.0 mg/L. The quality of both figures is poor. Recommend replace them with better quality figure.

Figure 19, page E-39. Recommend that two sets of figures be prepared. For locations E1, E2, E3 W4, W5 W6, W7 and W8 change the y-axis scale from 0.00 to 0.30 mg/L to 0.00 to 0.10 mg/L to improve presentation of the results. For the remaining figures leave the y-

axis range as currently indicated. Add text to the discussion to alert the reader to the differences in the y-axis scales in the two sets of figures.

Figure 23, page E-50. Recommend that the legend be fixed, cannot tell which are bottom and which are surface location results.

Figure 24, page E-51. Recommend replace poor quality figure with one of better quality.

Figure 25, page E-56. Recommend that the legend be fixed, cannot tell which are bottom and which are surface location results.

Figure 26, page E-57. Recommend that the legend be fixed, cannot tell which are bottom and which are surface location results.

Page E-68. The discussion of pH figures includes parenthetical phrase “became more acidic” with increasing water depth. With the exception of the Lake Tallac locations, few recorded results at the various locations would be considered acidic...but in general the pH at the various lagoon locations moved towards a neutral pH with increasing depth. Recommend deleting the phrase “became more acidic” and replace it with “decreased towards a neutral pH.” Also, the figures appear to indicate significant seasonal differences in pH that could be included in the discussion.

Figure 30, page E-72. Need to fix the legend.

Figure 31, page E-73. Replace figure with better quality figure.

Lahontan RWQCB Basin Plan Review

Based on review of the “Proposed Waste Discharge Prohibition and Exemption Criteria Language Pesticide Basin Plan Amendment,” we noted that the Regional Board may consider application of pesticides in the cases of “public interest because they protect public health and safety or provide ecological preservation.” One of the exemptions is for “control of aquatic invasive species or other harmful organisms under emergency or non-emergency situations (e.g., control of harmful cyanobacteria blooms affecting a drinking water supply, control of aquatic invasive species interfering with safe navigation).” As noted in the exemption criteria, if the Water Board decides to approve an exemption and issue a permit, Water Board staff would propose numeric limits for each aquatic pesticide project, and requirements are intended to ensure that project design and implementation will not unreasonably affect beneficial uses. In addition, “if an aquatic pesticide project is allowed to occur, the Regional Board must find that the discharge complies with the antidegradation policies, and water quality objectives are restored within the treatment area, within the shortest time reasonably possible after the application event.”

This will be something to note once the Antidegradation Analysis is provided for review.