









January 10, 2022

Lahontan Water Board
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Lahontan Water Board Executive Officer, Mike Plaziak
c/o Board Clerk
RB6-Lahontan@waterboards.ca.gov
(sent via email)

Subject: Tahoe Keys Lagoons Aquatic Weed Control Methods Test Draft NPDES Permit, Exemption and Mitigation and Monitoring Reporting Program

Dear Members of the Lahontan Water Board, Executive Officer Plaziak:

Lake Tahoe is a national treasure and Tier III Outstanding National Resource Water (ONRW), renowned for the purity and clarity of its waters and its scenic beauty. All decisions affecting the long-term ecological health of Lake Tahoe require your utmost attention and concern. The Proposed Orders permitting the Tahoe Keys Property Owner's Association (TKPOA) Control Methods Test (CMT) on the January Board meeting agenda would authorize the first-ever use of aquatic herbicides in Tahoe Keys waters connected to Lake Tahoe. This will set a very dangerous precedent for the long-term use of herbicides throughout Lake Tahoe.

Herbicides are viewed as a quick fix for a rapidly worsening problem of the weeds spreading throughout the Lake. The Sierra Club contends that other alternatives and non-chemical control methods have not been sufficiently considered to warrant this unprecedented project. Herbicides will not reduce the underlying source of the invasive weed growth in the Tahoe Keys lagoons: the unnatural, stagnant, increasingly warmer waters, and decades of nutrient loading to the waters and sediments by stormwater from the Keys and South Lake Tahoe. TKPOA

acknowledges this source of the problem, stating that "The general conditions of the lagoons provide ideal habitat for prolific plant growth with abundant light, nutrients in the sediment, and near optimal water temperatures for most of the summer months." Until the lagoon design with its stagnant, warm waters and nutrient problems are effectively addressed, the weeds will continue to plague the lagoons, whether or not herbicides are used.

Like every other invasive weed-infested lake in the US, the Keys' lagoons would require <u>annual</u>, <u>perpetual herbicide treatment</u> (see Exhibits). Indeed, the documents provided to the Lahontan Water Board by TKPOA plans to submit future applications for multiple years of herbicide treatments. TKPOA has previously submitted permit applications for up to 12 years of herbicide treatments. Future annual, perpetual herbicide treatments in the Tahoe Keys and elsewhere in Lake Tahoe, a national treasure and Tier III ONRW, would grossly violate non-degradation regulations and threaten the Lake's priceless water quality.

Lahontan Basin Plan Pesticide Prohibition Exemption Criteria

Adopting this precedent-setting permit to discharge herbicides before available non-chemical methods have been thoroughly evaluated and determined to be ineffective will violate the Lahontan Basin Plan. Two available non-chemical methods, UV light and laminar flow aeration, have shown promising results at Lake Tahoe, yet they have not been proven infeasible for the Keys, based on the trials in the Tahoe Keys and elsewhere, to date. The proponents of the CMT assert that the Tahoe Keys infestation cannot possibly be controlled by non-chemical methods because the infested area is so large and the infestation is so severe. However, the proponents have not provided any quantitative analyses supporting this conclusion.

The Pesticide Exemption Staff Report claims that CMT use of herbicides is justified by the CMT's simultaneous testing of chemical and non-chemical methods. This argument is not consistent with or relevant to the criterion that non-chemical methods must first be shown to be infeasible. If this justification is accepted, simultaneous use of chemical and non-chemical methods could justify <u>any</u> project and effectively nullify the Basin Plan exemption criteria. When the Basin Plan was amended in 2011, the exemption criteria were included to ensure that no pesticides would be used in the Lake without adequate justification and demonstration that all other less toxic approaches had been shown to be ineffective. The Proposed Project is essentially an attempt to circumvent both the intent and the regulatory standard of the Basin Plan.

Antidegradation Regulations

The State Water Board's "Statement of Policy With Respect to Maintaining High Quality of Waters in California" states; "... discharge to existing high quality waters will be required to meet waste discharge requirements which will result in the best practicable treatment or control of the discharge necessary to assure that (a) a pollution or nuisance will not occur and (b) the https://discharge.necessary.org/ assure that (a) a pollution or nuisance will not occur and (b) the https://discharge.necessary.org/ assure that (a) a pollution or nuisance will not occur and (b) the https://discharge.necessary.org/ assure that the maximum benefit to the people of the State will. be maintained." The antidegradation analysis in the draft NPDES permit claims that the

water quality degradation from herbicide discharges will be to the maximum benefit of the people of the state because the discharges of herbicides will improve water quality by reduction of the invasive weed infestations at the Keys and preserve the outstanding features of the Lake which are essential to the \$5 billion recreation-based economy. However, boating is a subset of a multitude of recreational activities at Lake Tahoe, and therefore a subset of the entire recreation economy. Boating by Keys homeowners, who are the primary beneficiaries of the discharge of herbicides, is an even smaller portion of that subset. Furthermore, no information is provided about the alleged decrease in economic value of recreation attributable to existing aquatic weed infestations in the Tahoe Keys and at shoreline sites elsewhere around the Lake, or whether herbicides are necessary to protect this economic value. The antidegradation analysis fails to support its claim that discharges of herbicides would be consistent with the maximum benefit to the people of the State because they preserve the outstanding features of the Lake. Sierra Club asserts that the maximum benefit to the people would result from fixing the source of the weeds in the first place: the stagnant, warming waters and nutrient load in the Keys.

The antidegradation analysis also cites EPA's policy interpreting "short-term" to mean "weeks to months, not years." Annual, perpetual herbicide treatment, at the Keys or anywhere else in the Lake¹ would violate this policy. Surely, it's logical to conclude that this inevitable violation of antidegradation policy is a sufficient reason to deny a permit for the use of herbicides. Yet, the CMT is clearly designed to set a precedent for routinely permitting herbicide use (otherwise why include it in the test). Indeed, it is difficult to imagine what different conditions could justify denying permits for herbicide use elsewhere if herbicides are permitted in the Tahoe Keys. Thus, future permits will be routinely granted despite antidegradation regulations, thereby clandestinely circumventing those regulations.

The Real Quick-Fix: A Barrier

A reasonable and feasible quick fix, which could have been implemented years ago, is installing a barrier separating the West Channel from the Lake. Boats entering the Channel from the lagoons could be inspected for weed fragments while they are being hoisted up and over the barrier. The Sierra Club requested that a barrier alternative be analyzed during the 2019 scoping phase of the environmental review process. Our request was ignored. All of the Sierra Club comment letters on the CMT (scoping, DEIR/DEIS comments, and draft permit comments) have emphasized the absolute necessity of formulating and ordering the implementation of a long-term plan to, as completely as possible, eliminate the source of the Tahoe Keys weed infestation – the stagnant, shallow, warming, nutrient-filled waters and sediments in the

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lagoons – using only non-chemical methods. We also emphasized that the long-term plan must eliminate transport of weed fragments into the Lake by boating from the Tahoe Keys during the lengthy implementation of the plan. We have received no substantive responses to these comments.

We urge you not to set a dangerous precedent by permitting the first-ever use of herbicides, to approve testing only non-chemical methods, and to order that work on devising a long-term plan addressing the source of the problem – stagnant waters and nutrients from years of stormwater inputs – be initiated. Should the Water Board have done more in the past to prevent this situation from getting so bad? Absolutely. The public needs to know why Lahontan staff allowed the water treatment and circulation systems to be discontinued in the late 1990's and 2000's, respectively, without any public input, and at the same time began laying the groundwork for herbicide discharges to the Lake. The public would also like to know if the \$4,000 per lot mitigation fees required by Resolution 82-10, which TKPOA filed a legal action against (see Exhibits), were ever used "to accomplish projects designed to achieve a net reduction of nutrients entering Lake Tahoe equivalent to that generated by the Tahoe Keys development." TAHOE KEYS PROPERTY OWNERS ASSOCIATION v. STATE WATER RESOURCES CONTROL BOARD | FindLaw (https://caselaw.findlaw.com/ca-court-of-appeal/1760635.html)

TKPOA and TKPOA's allies – the LWB staff, TRPA, and the League to Save Lake Tahoe – may have concluded that pouring herbicides into Lake Tahoe is a good idea simply because herbicides have been sold to them as the cheapest and easiest solution. TKPOA and its allies are trying to avoid the hard choices required to save Lake Tahoe from the disastrous construction of the Tahoe Keys 60 years ago. Many people inside and outside the Tahoe Basin think that pouring herbicides into Lake Tahoe is an appalling approach that will not address the source of the weed problem: the lagoons' stagnant, warm, nutrient-rich waters and nutrient-rich sediments.

The inevitable outcome of applying herbicides will be more weeds and perpetual use of herbicides. It's time to require real solutions, not toxic chemical Band-Aids. After the devastation from the Caldor, all efforts at Lake Tahoe must be made to restore the ecological health of the Tahoe Basin, restoring the natural function of watersheds and wetlands in the basin, not opening to door to continued use of unnatural, toxic chemicals.

Please deny these Orders and direct staff to draft permits for use of non-chemical methods.

Tobi Tyler, Tahoe Area Group Vice Chair

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Richard McHenry, PE California Sportfishing Protection Alliance Director of Compliance, Board Member

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Janus Toman

Judith Tornese, President Friends of the West Shore

/s/ Fredric Evenson
Fredric Evenson, Director
Ecological Rights Foundation

Jason Flanders

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Exhibits

Evidence of Perpetual Treatment in Other US Lakes

The Michigan Riparian, Winter 2015, Hybrid Milfoil: Management Implications and Challenges, Hybrid Milfoil Riparian 2015.pdf (lakemissaukee.org) "Herbicide applications are the most commonly-used method to control Eurasian milfoil. However, in some lakes, herbicide treatments have become less effective. Dose rates that historically provided good control of milfoil are sometimes only partially effective, and plant die-back is incomplete and/or regrowth occurs more rapidly. Recent research indicates that hybrid milfoils may exhibit increased tolerance to some herbicides."

<u>Full article: Effects of repeated, early season, herbicide treatments of curlyleaf pondweed on native macrophyte assemblages in Minnesota lakes (tandfonline.com)</u> "Multiple years of treatment may be needed to see significant increases in overall native macrophyte abundance because significant changes in abundance were not observed within 4 years of treatment; however, consecutive early season, lakewide endothall treatments of curlyleaf pondweed can control curlyleaf pondweed without substantial harm to native macrophytes."

Minnesota, Aquatic Invasive Species Curly-leaf pondweed: <u>Curly-leaf pondweed factsheet (state.mn.us)</u> "Past experience in Minnesota and elsewhere has shown that eradication or elimination of curly-leaf pondweed from lakes is not a realistic goal."

1994 TKPOA sued State Water Board over mitigation fees

TAHOE KEYS PROPERTY OWNERS ASSOCIATION v. STATE WATER RESOURCES CONTROL BOARD | FindLaw, "In 1982, by resolution No. 82–8, Lahonton reclassified the Tahoe Keys as a man-modified stream environment zone. The resolution contains factual findings in support of the reclassification. Included among Lahonton's determinations were findings that the modification of the upper Truckee Marsh resulted in significant reduction of the natural water treatment capacity of the zone and that substantial deterioration of Lake Tahoe had resulted, and construction and continuing operation and maintenance of the Tahoe Keys lagoons and peninsulas contributes significant quantities of nutrients to the waters of Lake Tahoe. The resolution imposes requirements for the buildout of the area. The requirement with which we are concerned here is that a mitigation fee of \$4,000 be paid for each lot to be developed. The fees thus collected were to be used to establish a mitigation fund which would be used, with the participation of TKPOA, to accomplish projects designed to achieve a net reduction of nutrients entering Lake Tahoe equivalent to that generated by the Tahoe Keys development.

Comment Letters on 2011 Basin Plan Amendment

Don and Nancy Erman's Comments: Microsoft Word - LRWQCB Basin Plan Changes/11 (ca.gov).

Tahoe Area Sierra Club's Comments: Microsoft Word - basin plan brief comments 4-2011.doc (ca.gov)