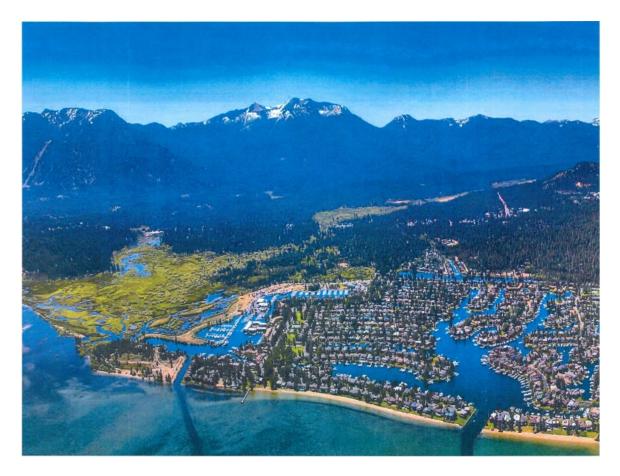


FINAL Environmental Impact Report / Environmental Impact Statement

Appendix A Written Comments Received during Public Review Period

Tahoe Keys Lagoons Aquatic Weed Control Methods Test



Lead Agencies: Tahoe Regional Planning Agency and Lahontan Regional Water Quality Control Board





Appendix A List of DEIR/DEIS Commenters

Comment Code	Commenter Name	AFFILIATION	DATE RECEIVED
	A	gencies	
A-1	Jennifer Thompson	US Army Corps of Engineers Sacramento District	July 7, 2020
A-2	Jacques Landy Coordinator	U.S. Environmental Protection Agency, Lake Tahoe Basin Division	September 3, 2020
A-3	Jason Burke Stormwater Program Coordinator	City of South Lake Tahoe	September 3, 2020
	Or	ganizations	ł
O-1 letter	Carolyn Willette, Tahoe Area Group Chair	Sierra Club	July 27, 2020
0-2	2,648 Individuals (see Appendix A)	Beyond Pesticides	August 27, 2020
email	Leslie W. Touart, Ph.D Senior Science and Policy Analyst	Beyond Pesticides	August 27, 2020
O-3 letter	Susan Gibbons, Board Chair Madonna Dunbar, Executive Director	Tahoe Water Suppliers Association (TWSA)	August 27, 2020
O-4 letter	David Blau, Chief Strategy Officer Jesse Patterson, Program Committee Chair	League to Save Lake Tahoe	September 1, 2020
O-5 letter	Joe Sherry, Board President	Tahoe Keys Property Owners Association	September 1, 2020
O-6 letter	Jan Brisco, Executive Director	Tahoe Lakefront Owners' Association	September 2, 2020
O-7 email	Nicole Cartwright, Executive Director	Tahoe Resource Conservation District	September 3, 2020
O-8 letter	434 Sierra Club members See attached list	Sierra Club	7/16/2020–8/3/2020
	Ir	ndividuals	
l-1 email	Howard Steidtmann	Sierra Club	July 16, 2020
l-2 email	Janet Carter	Sierra Club	July 16, 2020
I-3 email	Carol Garlington	Sierra Club	July 17, 2020
l-4 email	Constance Howard	Sierra Club	July 17, 2020

Comment Code	COMMENTER NAME	AFFILIATION	DATE RECEIVED
I-5 email	John Comeaux	Sierra Club	July 17, 2020
I-6 email	Laura Smith	Sierra Club	July 17, 2020
I-7 email	Myrna Nizen	Sierra Club	July 17, 2020
I-8 email	Sarah Newsome	Sierra Club	July 17, 2020
I-9 email	Shonna Ingram	Sierra Club	July 17, 2020
l-10 email	Susan Bentley	Sierra Club	July 17, 2020
I-11 email	Taylor Becker	Sierra Club	July 17, 2020
I-12 email	Theodore Desmarais	Sierra Club	July 17, 2020
I-13 letter	Madonna Dunbar	Tahoe Water Suppliers Association	July 21, 2020
I-14 email	Jeanie Murphy	Sierra Club	July 22, 2020
l-15 email	Maryon Tilley	Sierra Club	July 22, 2020
I-16 email	Maya Borhani		July 22, 2020
l-17 email	Lisa Dekker	Sierra Club	July 24, 2020
l-18 email	Kate Doyle		
l-19 email	Brian Beffort	Sierra Club	7/28/2020
l-20 email	Natalie Servantes	Sierra Club	7/28/2020

Appendix A List of DEIR/DEIS Commenters

Appendix A	List of DEIR/DEIS Commenters
------------	------------------------------

Comment Code	Commenter Name	AFFILIATION	DATE RECEIVED
I-21 email	Richard Cooper	Sierra Club	7/28/2020
l-22 email	Janet Wesse	Sierra Club	7/29/2020
I-23 email	Jennifer Aspuria	Sierra Club	7/29/2020
I-24 email	Scott Sady	Sierra Club	7/29/2020
I-25	Greg Felton		7/29/2020
I-26 email	Annise Adams	Sierra Club	7/30/2020
I-27 email	S. May	Sierra Club	7/30/2020
I-28 email	Mitchell Rittiman	Sierra Club	7/31/2020
I-29 email	Donna Walters	Sierra Club	8/2/2020
I-30 email	Harold Singer		8/3/2020
I-31 email	David VonSeggern	Sierra Club	8/5/2020
I-32 email	Dorothy Hudig	Sierra Club	8/5/2020
I-33 email	Lynn Boulton	Sierra Club	8/5/2020
I-34 email	Catherine Schmidt	Sierra Club	8/6/2020
I-35 email	Kathleen Keef	Sierra Club	8/6/2020
I-36 email	Patricia Marinelli	Sierra Club	8/6/2020
I-37 email	Teresa Bell	Sierra Club	8/6/2020

Appendix A	List of DEIR/DEIS Commenters
------------	------------------------------

Comment Code	COMMENTER NAME	AFFILIATION	DATE RECEIVED
I-38 email	Sarah Berry	Sierra Club	8/7/2020
I-39 email	Reese Sutfin	Sierra Club	8/8/2020
I-40 email	A Hernday	Sierra Club	8/9/2020
I-41 email	Alan Hern	Sierra Club	8/9/2020
l-42 email	Anthony Filippone	Sierra Club	8/9/2020
l-43 email	Carol Schneider	Sierra Club	8/9/2020
I-44 email	David Bezanson	Sierra Club	8/9/2020
I-45 email	David Lamonica	Sierra Club	8/9/2020
I-46 email	David Marancik	Sierra Club	8/9/2020
l-47 email	Doris Grinn	Sierra Club	8/9/2020
I-48 email	Elizabeth Trudell	Sierra Club	8/9/2020
I-49 email	Faith Herschler	Sierra Club	8/9/2020
I-50 email	Fritz Brunner	Sierra Club	8/9/2020
I-51 email	Gayle Dufour	Sierra Club	8/9/2020
I-52 email	Glenn Stewart	Sierra Club	8/9/2020
l-53 email	Hannah MacLaren	Sierra Club	8/9/2020

Appendix A	List of DEIR/DEIS Commenters
------------	------------------------------

Comment Code	Commenter Name	AFFILIATION	DATE RECEIVED
I-54 email	James McPherson	Sierra Club	8/9/2020
I-55 email	Jessica Fielden	Sierra Club	8/9/2020
l-56 email	Jimandellanj Smith	Sierra Club	8/9/2020
I-57 email	Joan Jacobs	Sierra Club	8/9/2020
l-58 email	Joan Smith	Sierra Club	8/9/2020
l-59 email	Judith Baker	Sierra Club	8/9/2020
I-60 email	Ka Higgins	Sierra Club	8/9/2020
I-61 email	Kathleen Aberegg	Sierra Club	8/9/2020
I-62 email	Keith Forrest	Sierra Club	8/9/2020
l-63 email	Kelly Dewing Wedel	Sierra Club	8/9/2020
I-64 email	Lainey Green	Sierra Club	8/9/2020
I-65 email	Laura Gormley	Sierra Club	8/9/2020
I-66 email	Lesley Hunt	Sierra Club	8/9/2020
I-67 email	Leslie Lihou	Sierra Club	8/9/2020
l-68 email	Leslie Rader	Sierra Club	8/9/2020
l-69 email	Lisa Reutter	Sierra Club	8/9/2020

Appendix A	List of DEIR/DEIS Commenters
------------	------------------------------

Comment Code	COMMENTER NAME	AFFILIATION	DATE RECEIVED
I-70 email	Margaret Eadington	Sierra Club	8/9/2020
I-71 email	Marijane Poulton	Sierra Club	8/9/2020
I-72 email	Marilyn Jasper	Sierra Club	8/9/2020
I-73 email	Marjorie Lutz	Sierra Club	8/9/2020
I-74 email	Marlene Massetti	Sierra Club	8/9/2020
l-75 email	Mary Alice Pisani	Sierra Club	8/9/2020
l-76 email	Mary Ames	Sierra Club	8/9/2020
l-77 email	Mary Doane	Sierra Club	8/9/2020
I-78 email	Matthew Brockhaus	Sierra Club	8/9/2020
I-79 email	Melanie Truan	Sierra Club	8/9/2020
l-80 email	Michael Cooke	Sierra Club	8/9/2020
I-81 email	Pam Nelson	Sierra Club	8/9/2020
I-82 email	Pat Tilley	Sierra Club	8/9/2020
I-83 email	Patricia Albright	Sierra Club	8/9/2020
I-84 email	Patricia Williams	Sierra Club	8/9/2020
I-85 email	Paul Maysonave	Sierra Club	8/9/2020

Appendix A	List of DEIR/DEIS Commenters
------------	------------------------------

Comment Code	COMMENTER NAME	AFFILIATION	DATE RECEIVED
I-86 email	Penelope Ward	Sierra Club	8/9/2020
I-87 email	Phoebe Diaz	Sierra Club	8/9/2020
l-88 email	Richard Angell	Sierra Club	8/9/2020
I-89 email	Richard Hillix-Di Santo	Sierra Club	8/9/2020
I-90 email	Rick Gaston	Sierra Club	8/9/2020
I-91 email	Rita A	Sierra Club	8/9/2020
I-92 email	Russ Dahler	Sierra Club	8/9/2020
I-93	Sally Maier	Sierra Club	8/9/2020
I-94 email	Sarah Mahoney	Sierra Club	8/9/2020
I-95 email	Shana Van Meter	Sierra Club	8/9/2020
I-96 email	Sharon Sullivan	Sierra Club	8/9/2020
I-97 email	Shelly Ryan	Sierra Club	8/9/2020
I-98 email	Sunny Powell	Sierra Club	8/9/2020
I-99 email	Sydney Pitcher	Sierra Club	8/9/2020
I-100 email	Tim Odetto	Sierra Club	8/9/2020
I-101 email	Vicki Bookless	Sierra Club	8/9/2020
I-102 email	Victor Kamendrowsky	Sierra Club	8/9/2020

Appendix A	List of DEIR/DEIS Commenters
------------	------------------------------

Comment Code	Commenter Name	AFFILIATION	DATE RECEIVED
I-103 email	William Dickert	Sierra Club	8/9/2020
I-104 email	Yvonne Fisher	Sierra Club	8/9/2020
I-105 email	Zena Josephs	Sierra Club	8/9/2020
I-106 email	Larry Van Sant		8/9/2020
I-107 email	Barbara Brunell	Sierra Club	8/10/2020
I-108 email	ElsaMarie Butler	Sierra Club	8/10/2020
I-109 email	Greg Rose	Sierra Club	8/10/2020
I-110 email	Gretchen Whisenand	Sierra Club	8/10/2020
I-111 email	Joan Hartmann	Sierra Club	8/10/2020
I-112 email	Karl Collins	Sierra Club	8/10/2020
I-113 email	Lea Wiggington	Sierra Club	8/10/2020
I-114 email	Sonia Noemi Cross	Sierra Club	8/10/2020
I-115 email	Stevan Leonard	Sierra Club	8/10/2020
I-116 email	Susan Mach	Sierra Club	8/10/2020
I-117 email	Carolyn Willette		8/11/2020
I-118 email	Andrew Bearer	Sierra Club	8/11/2020

Appendix A	List of DEIR/DEIS Commenters
------------	------------------------------

Comment Code	COMMENTER NAME	AFFILIATION	DATE RECEIVED
I-119 email	Catherine Atherton	Sierra Club	8/11/2020
I-120 email	John Moore		8/11/2020
I-121 email	Chip Carroon	Sierra Club	8/13/2020
l-122 email	Daniel Kulchin	Sierra Club	8/13/2020
I-123 email	Janice Graef	Sierra Club	8/13/2020
I-124 email	Julie Dunn	Sierra Club	8/13/2020
I-125 email	Beverly Nichols	Sierra Club	8/20/2020
I-126 email	Jim Boone	Sierra Club	8/20/2020
I-127 email	Kristin Waldstad	Sierra Club	8/20/2020
I-128 email	Stephanie Wozniak	Sierra Club	8/20/2020
I-129 email	Fatima Uribe	Sierra Club	8/21/2020
I-130 email	Rory Lamp	Sierra Club	8/20/2020
I-131 email	Ainslee Archibald	Sierra Club	8/21/2020
I-132 email	April Grant	Sierra Club	8/21/2020
I-133 email	Ashlee Forman	Sierra Club	8/21/2020
l-134 email	Barbara Ziegler	Sierra Club	8/21/2020

Appendix A	List of DEIR/DEIS Commenters	
/ ppondix//		

Comment Code	COMMENTER NAME	AFFILIATION	DATE RECEIVED
I-135 email	Betty Sabo	Sierra Club	8/21/2020
I-136 email	Debbie Clarkson	Sierra Club	8/21/2020
I-137 email	Denise Martini	Sierra Club	8/21/2020
I-138 email	Doug Vacek	Sierra Club	8/21/2020
I-139 email	Elizabeth Kramer	Sierra Club	8/21/2020
I-140 email	Eric Fernandez	Sierra Club	8/21/2020
I-141 email	G. Schewbel	Sierra Club	8/21/2020
I-142 email	Gary Johnson	Sierra Club	8/21/2020
I-143 email	Iris Jehle Peppard	Sierra Club	8/21/2020
I-144 email	Jeanette Miller	Sierra Club	8/21/2020
I-145 email	Karen Nielsen	Sierra Club	8/21/2020
I-146 email	Mark Wildes	Sierra Club	8/21/2020
I-147 email	Patti Babore	Sierra Club	8/21/2020
I-148 email	Rachel Jo	Sierra Club	8/21/2020
I-149 email	Sarah Behrens	Sierra Club	8/21/2020
I-150 email	William Carrico	Sierra Club	8/21/2020

Appendix A	List of DEIR/DEIS Commenters
------------	------------------------------

Comment Code	COMMENTER NAME	AFFILIATION	DATE RECEIVED
l-151 email	William Huggins	Sierra Club	8/21/2020
I-152 email	Linda Jones	Sierra Club	8/22/2020
I-153 email	"C.P."	Sierra Club	8/23/2020
I-154 email	Adrian Griffin	Sierra Club	8/23/2020
I-155 email	Anne Kallus	Sierra Club	8/23/2020
I-156 email	Christiane Brown	Sierra Club	8/23/2020
I-157 email	G. Clemson	Sierra Club	8/23/2020
I-158 email	Jane Bramley	Sierra Club	8/23/2020
I-159 email	Lisa Foley	Sierra Club	8/23/2020
I-160 email	Lisa Passmore-Quade	Sierra Club	8/23/2020
I-161 email	Lori De Sena	Sierra Club	8/23/2020
I-162 email	Louis Bubala III	Sierra Club	8/23/2020
I-163 email	Lucrecia Belancio	Sierra Club	8/23/2020
I-164 email	Mark Spohr	Sierra Club	8/23/2020
I-165 email	Nancy Cencula	Sierra Club	8/23/2020
l-166 email	Susan Potts	Sierra Club	8/23/2020

Appendix A	List of DEIR/DEIS Commenters
------------	------------------------------

Comment Code	COMMENTER NAME	AFFILIATION	DATE RECEIVED
l-167 email	Wendy Boszak	Sierra Club	8/23/2020
l-168 email	Chris Omeara-Dietrich		8/27/2020
I-169 email	John Scott		8/27/2020
I-170 email	Theo Giesy	Beyond Pesticides	8/27/2020
I-171 email	Chris Kasper	Sierra Club	8/28/2020
I-172 email	Dawn David	Sierra Club	8/28/2020
I-173 email	Jane Grey	Sierra Club	8/28/2020
I-174 email	Kirt Willard		8/28/2020
I-175 letter	Leslie Touart	Beyond Pesticides	8/28/2020
I-176 email	Nancy Dollard		8/28/2020
I-177 email	John Roukema		8/29/2020
I-178 email	Kevin Hubbard	PLM Family of Companies	8/29/2020
I-179 letter	Leslie Touart	Beyond Pesticides	8/29/2020
I-180 email	Ronald Clayton	Beyond Pesticides	8/30/2020
I-181 email	Kyle Roerink	Sierra Club	9/1/2020
l-182 email	JoEllen Rudolph	Beyond Pesticides	9/1/2020

Appendix A List of DEIR/DEIS Commenters

Comment Code	COMMENTER NAME	AFFILIATION	DATE RECEIVED
I-183 letter	Lauri Kemper		9/1/2020
l-184 email	LeeAnn Bennett		9/1/2020
l-185 email	David Berry		9/2/2020
l-186 email	Jessica Patton	Sierra Club	9/2/2020
I-187 letter	Lauri Kemper		9/2/2020
I-188 letter	Pablo Ortega		9/2/2020
l-189 email	Robert Lober		9/2/2020
l-190 email	Stephen Alastuey		9/2/2020
l-191 email	B. Lewicki		9/3/2020
I-192 letter	Elise Fett		9/3/2020
l-193 email	Carolyn Willette, Anne Macquarie, and Sean Wirth	Sierra Club	9/3/2020
l-194 email	Sue Berry		9/3/2020
l-195 email	Trish Friedman		9/3/2020
l-196 email	Grazia Caroselli	Sierra Club	9/3/2020
I-197	Walter Mirczak		9/3/2020
l-198 email	Grazia Caroselli	Sierra Club	9/3/2020
l-199 email	Steve Bridges		9/4/2020

Appendix A List of DEIR/DEIS Commenters

Comment Code	COMMENTER NAME	AFFILIATION		DATE RECEIVED
I-200 letter	Lisa DeBruyckere	Crea	tive Resource Strategies	9/7/2020
I-201 email	434 Sierra Club members: See Appendix A	Sierr	a Club	7/16/2020 - 8/3/2020
I-202 email	Kathryn Bricker Kait Krolik	Sierr	a Club	7/22/2020 8/6/2020
	Publ	ic Mee	tings	
	TRPA Governing Bo	oard Me	eting, July 22, 2020	
	Laurel Ames		Laurie Kemper	
	David Blau	Jesse Patterson		
Madonna Dunbar			Eric Ronning	9
Elise Fett			Julie Soules	3
Trish Friedman			Tobi Tyler	
	Public Webir	nar Aug	ust 11, 2020	
	David Blau		Andy Kopania	
	Madonna Dunbar		Jacques Landy	
	Elise Fett		John Moore	
Trish Friedman		Tobi Tyler		
Lauri Kemper		Kirk Wooldridge		
TRPA Advisory Planning Commission Meeting, August 12, 200				
	David Blau		Gavin Feige	r
Elise Fett			Trish Friedma	an

Appendix A-1 Comments from Federal, State, Regional and Local Agencies

From: Jen Mair <jen@zephyrcollaboration.com>
Sent: Tuesday, July 7, 2020 2:04 PM
To: Thomason, Jennifer C CIV USARMY CESPK (USA) <Jennifer.C.Thomason@usace.army.mil>
Cc: Caelan McGee <zephyr.collaboration@gmail.com>; Kimberly Caringer <kcaringer@trpa.org>;
Dennis Zabaglo <dzabaglo@trpa.org>; Paul Nielsen <pnielsen@trpa.org>; Norman,
Russell@Waterboards <Russell.Norman@waterboards.ca.gov>
Subject: Re: [Non-DoD Source] Tahoe Keys Control Methods Test Draft EIR/EIS Posted, Public
Comment Period Begins (UNCLASSIFIED)

Thank you Jennifer for your comment on behalf of the USACE Sacramento District, Regulatory Division. We will make sure the lead agencies receive it.

Best,

Jen

On Tue, Jul 7, 2020 at 1:44 PM Thomason, Jennifer C CIV USARMY CESPK (USA) <<u>Jennifer.C.Thomason@usace.army.mil</u>> wrote:

CLASSIFICATION: UNCLASSIFIED

Hi Jen,

I offer the following comment on behalf of the USACE Sacramento District, Regulatory Division:

Please be advised that the U.S. Army Corps of Engineers, through the Regulatory Program, administers and enforces Section 10 of the Rivers and Harbors Act of 1899 (RHA) and Section 404 of the Clean Water Act (CWA). Under RHA Section 10, a permit is required for work or structures in, over or under navigable waters of the United States. Under CWA Section 404, a permit is required for the discharge of dredged or fill material into waters of the United States. If this project will place fill material below the ordinary high water mark of a regulated water, a permit may be required from this office. More information regarding our regulatory program is available on our website at, http://www.spk.usace.army.mil/Missions/Regulatory.aspx.

REG-3

Thank you,

Jennifer C. Thomason Senior Project Manager Nevada Utah Section Reno Regulatory Office Office: (775) 784-5304 Mobile: (775) 525-03

From:	Landy, Jacques
То:	TRPA
Cc:	<u>TenBrook, Patti; Mues, Pascal; Louis, Gail; Vitulano, Karen</u>
Subject:	[EXTERNAL] EPA comments on TK CMT DEISRE: Last Chance to Submit Comments about Tahoe Keys Weeds
Date:	Thursday, September 3, 2020 9:09:06 AM
Attachments:	09-03-20 EPA DEIS Comments TKPOA CMT.pdf

This is an **EXTERNAL** email. Do not click links or open attachments unless you validate the sender and know the content is safe.

Dear Dennis and Russell,

Attached are EPA's comments on the DEIS. Thanks for the opportunity to comment, and please contact me if you'd like to discuss.

Cheers,

Jack

Please note during this shelter-at-home period I can be most easily reached by phone at: 530-314-9338. Thanks!

Jack Landy

U.S. EPA Lake Tahoe Basin Coordinator c/o Tahoe Regional Planning Agency 128 Market Street/PO Box 5310 Stateline, NV 89449 Tel: (775) 589-5248 e-mail: landy.jacques@epa.gov

www.epa.gov/lake-tahoe

From: TRPA <TahoeKeysWeeds@trpa.org>
Sent: Friday, August 28, 2020 5:59 PM
To: Landy, Jacques <Landy.Jacques@epa.gov>
Subject: Last Chance to Submit Comments about Tahoe Keys Weeds



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION IX 75 Hawthorne Street San Francisco, CA 94105-3901

September 3, 2020

Dennis Zabaglo Tahoe Regional Planning Agency P.O. Box 5310 128 Market Street Stateline, Nevada 89449

W. Russell Norman, P.E. Lahontan Regional Water Quality Control Board 2501 Lake Tahoe Boulevard South Lake Tahoe, CA 96150

Subject: Draft Environmental Impact Statement for the Tahoe Keys Lagoons Aquatic Weed Control Methods Test

Dear Messrs. Zabaglo and Norman:

The U.S. Environmental Protection Agency (EPA) Region 9 has reviewed the above-referenced document. We appreciate the opportunity to provide comments on the subject project.

The Tahoe Regional Planning Agency (TRPA) and Lahontan Regional Water Quality Control Board (Water Board) propose to evaluate different methods, including herbicide use, to control target aquatic weeds in designated test areas within the Tahoe Keys lagoons in Lake Tahoe, California. The applicant proposes a two-year program to test the use of multiple methods, independently and in combination, and that includes measures to minimize the potential for infestations within the Tahoe Keys lagoons to affect Lake Tahoe. The project proponent, the Tahoe Keys Property Owners Association, is seeking: (1) approval from TRPA to test aquatic herbicides as a potential aquatic invasive species control tool, and (2) an exemption from the Water Board from the prohibition on the use of aquatic pesticides in the Lake, contained in the Water Quality Control Plan for the Lahontan Region (Basin Plan).

The EPA has concerns regarding:

- analysis of the proposed herbicides,
- the potential for harmful algal blooms to occur during the project and measures to mitigate them if they should occur,
- scientific review of the project, and
- mitigation of adversely impacted receiving water beneficial uses during the project.

Our enclosed Detailed Comments include the following recommendations:

- for additional information to be included in the Final Environmental Impact Statement (FEIS) concerning proposed herbicide registration status, monitoring and degradates,
- for the FEIS to consider increased cyanotoxin monitoring at testing sites and the public notification and access restrictions that will be imposed if monitoring detects the presence of cyanotoxins,

- for lead agencies to enlist the Tahoe Science Advisory Council in developing and/or peer reviewing both the experimental design and the effectiveness monitoring program of the selected project, and
- for measures to minimize aquatic weed dispersal, including bubble curtains, seabins, and boat back-up stations to be included in the project.

The EPA appreciates the opportunity to review this DEIS. When the Final EIS/EIR is released for public review, please send me notification of its availability at <u>landy.jacques@epa.gov</u>. If you have any questions, please contact me via e-mail or at (775) 589-5248.

Sincerely,

Jacques Landy

Jacques Landy Lake Tahoe Basin Coordinator

Enclosure: EPA's Detailed Comments

EPA'S DETAILED COMMENTS ON THE DRAFT ENVIRONMENTAL IMPACT STATEMENT FOR THE TAHOE KEYS LAGOONS CONTROL METHHODS TEST, EL DORADO COUNTY, CALIFORNIA, SEPTEMBER 3, 2020

Analysis of Proposed Herbicides

The EPA has the following observations concerning the herbicides included in the DEIS for potential application during the Control Methods Test (CMT):

• Endothall

There are three forms of Endothall that EPA's Office of Pesticide Programs (OPP) has assessed in the registration process (2005 risk assessment: <u>https://beta.regulations.gov/document/EPA-HQ-OPP-2009-0081-0143</u>). Endothall is applied as either the dipotassium salt or the alkylamine salt. Either way, the chemical breaks down quickly to endothall acid, which is the active herbicide. It is appropriate for any post-application monitoring to look for the endothall acid. For aquatic life, the alkylamine salt is more toxic (2-3 orders of magnitude) than either of the other two, which are of similar toxicity. Per the EPA Reregistration Eligibility Decision, the acid breaks down in <10 days (this degradation rate is consistent with that reported in the Pesticide Properties Database: https://sitem.herts.ac.uk/aeru/ppdb/en/Reports/265.htm.)

Recommendation: The EPA recommends that the Final Environmental Impact Statement (FEIS) contain information concerning post-application monitoring of Endothall, if it is proposed to be used in the CMT. Such monitoring should be for endothall acid.

• Florpyrauxifen-benzyl

There is one product registered for aquatic use: ProcellaCOR EC (EPA Reg No 67690-80). There could be others, but most products with this active ingredient are not registered for use in water. According to the registration spreadsheet, a product containing Florpyrauxifen-benzyl has yet to be registered in California, so this herbicide should not be used in the CMT before that happens.

Recommendation: The EPA recommends that the Final Environmental Impact Statement (FEIS) contain information concerning the California registration status of Florpyrauxifen-benzyl, and confirm that this herbicide will be registered for use in California before it is used in the CMT.

• <u>Triclopyr triethylamine salt (rapidly dissociates into triclopyr acid in water)</u>

The EPA's most recent risk assessment includes a complicated assessment of degradates, but summarizes it as follows: "The major degradates of triclopyr acid are TCP and 3,6 DCP and both are exposure concerns. Additionally, the degradates 5-CLP and 6-CLP could also be of exposure concerns as they are expected to form in major amounts in some aerobic aquatic systems ... Exposure modeling was conservatively executed considering the maximum label rates and minimum application intervals." The spreadsheet for the Tahoe Keys project includes only TCP and 2-MP as degradates. 2-MP (CAS No. 3155-34-3) is called TMP in the EPA risk assessment and is found to be a minor degradation product. The full document is here: (https://beta.regulations.gov/document/EPA-HQ-OPP-2014-0576-0026), and includes information about relative persistence and toxicity of degradates.

Recommendation: The EPA recommends that the Final Environmental Impact Statement (FEIS) include information concerning all degradates of Triclopyr triethylamine salt.

Potential for Harmful Algal Blooms to Occur During the Control Methods Test and Measures to Mitigate Them if they Should Occur

The DEIS describes the historic occurrence of toxin-producing Harmful Algal Blooms (HABs) in the Tahoe Keys and states that existing programs to monitor and warn people when cyanotoxins are present are expected to continue to be effective in protecting against any additional risks of exposure to cyanotoxins. Given the possibility of synergistic effects of proposed herbicides and HABs in the event these should occur during the project, given that HABs have occurred in the Tahoe Keys during spring—when herbicides are proposed to be used—and given that conditions that cause cyanobacteria to produce cyanotoxins are not well understood, and do not necessarily coincide with visible algae blooms, augmentation of existing cyanotoxin monitoring may be warranted during the CMT.

Recommendation: The EPA recommends that the FEIS consider increased cyanotoxin monitoring at testing sites and measures to restrict public access to testing sites during periods of maximum HAB risk during the CMT. The FEIS should describe in detail the public notification and access restrictions that will be imposed if monitoring detects the presence of cyanotoxins.

Scientific review of the CMT project

The DEIS characterizes the CMT as a scientific study project (p. 3.4-7). The Tahoe Science Advisory Council provides technical peer review of scientific studies within the Lake Tahoe Basin.

Recommendation: The EPA recommends that lead agencies enlist the participation of the Tahoe Science Advisory Council in developing and/or peer reviewing both the experimental design and the effectiveness monitoring program of the selected CMT.

Mitigation of Adversely Impacted Receiving Water Uses During Project

The DEIS describes measures to reduce plant fragments from leaving the lagoons and proposes that they would continue under the No Action alternative. The EPA considers that these measures, including seabins, bubble curtains, and boat back-up stations, have the potential to protect beneficial uses of Tahoe Keys and Lake Tahoe and could be included in all the project alternatives, and in the long-term strategy following CMT completion.

Recommendation: The EPA recommends that measures to minimize aquatic weed dispersal, including bubble curtains, seabins, and boat back-up stations, be included in the CMT project. We recommend requiring use of the boat back-up stations during the project, and that their effectiveness be monitored and evaluated.

PP-13

CYB-6

AWMM-3



"We will reflect the National Treasure in which we live"

TRANSMITTAL VIA EMAIL ONLY: tahoekeysweeds@trpa.org

Dennis Zabaglo Aquatic Resource Program Manager Tahoe Regional Planning Agency dzabaglo@trpa.org

RE: Draft EIR/EIS for the proposed Tahoe Keys Lagoons Aquatic Weed Control Methods Test

Dear Mr. Zabaglo:

The City of South Lake Tahoe (City) appreciates the opportunity to provide comments on the Draft EIR/EIS for the Tahoe Keys Lagoons Aquatic Weed Control Methods Test ("Project"). This Draft EIR/EIS for the Project is an important document that provides the public and decision makers with complete and accurate information for which to base decisions on.

Throughout the document, there is some inconsistency in correctly identifying services provided by the City of South Lake Tahoe and the South Tahoe Public Utility District (STPUD). The City owns, operates and maintains the public storm water drainage system, which operates under a National Pollutant Discharge Elimination System (NPDES) permit (Order R6T-2017-0100). STPUD provides sanitary sewer services for the areas within the City boundary, including the project area. This is correctly noted on Page 1-13 (Table 1-1) within the DEIR/DEIS:

 Table 1-1: Correctly defines STPUD as a Local Agency that operates the sanitary sewer and wastewater treatment plant and would require a special permit agreement if treated dewatering effluent is discharged to the local sanitary sewer system.

In a few locations, the Draft EIR/DEIS incorrectly implies the City owns, operates and maintains the sanitary sewer, which is not correct. If dewatering effluent is discharged to the City's storm water system, it will simply flow back into the lagoons. The following sections should clarify that the sanitary sewer is managed by STPUD, not the City of South Lake Tahoe, and that permits, and approval will be needed from STPUD for disposal of treated dewatering effluent in the sewer system, not the City:

- Page 3.3.6-30 (Section 3.3.6.3 Action Alternative 2, Issue TE-2): "...three sites within the western lagoon would be dredged, and dewatering effluent could be

J:\DATA-T-Z\TKPOA\2020AIS_TestMethods EIR\CSLT-DEIR_DEIS_Comment Letter20190903.docx

REG-11

discharged to the City of South Lake Tahoe sanitary sewer system or Lake Tallac..."

Page 5-7, third paragraph: "Under Action Alternative 2, three sites within the western lagoon would be dredged, and dewatering effluent could be discharged to the City of South Lake Tahoe sanitary sewer system or to Lake Tallac and ultimately Pope Marsh. If treated effluent is discharged water to the City of South Lake Tahoe system, there would be no significant impact."

Page 1-18 (1.4.4 Local Requirements-South Lake Tahoe Public Utility District). This paragraph correctly notes STPUD would require a special discharge permit agreement, but then states "*The City retains all its police powers under applicable Federal and State law, court cases....*" It seems likely that the reference to the City should be replaced by STPUD in this occurrence.

Page 2-35 (2.5.5 Dredge Dewatering Effluent Treatment and Disposal, third paragraph) refers to the general "South Lake Tahoe sanitary sewer" pump station at the corner of Tahoe Keys Boulevard and Venice Drive and again more generally in the second paragraph on page 2-37: "The South Lake Tahoe sanitary sewer has relatively modest additional capacity" This should state that the sanitary sewer system is managed by STPUD, which is correctly noted in the subsequent paragraph.

The City of South Lake Tahoe is dedicated to addressing water quality impairments in order to protect and improve the pristine clarity of Lake Tahoe. The City supports the process of developing the best methods to address invasive aquatic weeds in the constructed lagoons within the Tahoe Keys. Please feel free to contact me with any further questions.

Sin51- fZA

Jason Burke Stormwater Program Coordinator City of South Lake Tahoe

(530) 542-6038 (o)

j <u>burke@citvofslt.us</u>

REG-11

Appendix A-2 Comments from Organizations



Date: July 27, 2020

Patty Kouyoumdjian, Executive Officer Mike Plaziak, Assistant Executive Officer Russell Norman, P.E. Lahontan Regional Water Quality Control Board 2501 Lake Tahoe Blvd. South Lake Tahoe, CA 96150

Joanne Marchetta, Executive Director Dennis Zabaglo, Aquatic Resources Program Manager Tahoe Regional Planning Agency 128 Market Street Stateline, NV 89449

Subject: Tahoe Keys Lagoons Aquatic Weed Control Methods Test Draft EIR/EIS

While the Tahoe Area Sierra Club continues to review the Tahoe Keys Lagoons Aquatic Weed Control Methods Test Draft Environmental Impact Report/Environmental Impact Statement (DEIR/DEIS), we are writing to urge the Lahontan Regional Water Quality Control Board (Lahontan) and the Tahoe Regional Planning Agency (TRPA) (Lead Agencies) to delay the comment deadline of September 3, 2020, due to the lack of antidegradation analysis in the DEIR/DEIS. The antidegradation analysis is a critical element of the Proposed Project to use aquatic herbicides in Lake Tahoe for the first time. During the scoping phase of this project, stakeholders were assured that it would be part of the DEIR/DEIS.

Lake Tahoe and the Tahoe Keys lagoons are designated as Tier 3 Waters, or "Outstanding National Resource Waters" (ONRW) meaning its high water quality must be protected and maintained according to State and Federal anti-degradation regulations. In fact, the DEIR/DEIS states that Project effectiveness will be evaluated based on performance criteria as specified, in part, on antidegradation requirements (pg. 1-9). The importance of the antidegradation analysis cannot be understated and, as such, it is discussed in the DEIR/DEIS sixty times. Therefore, without the antidegradation analysis to review, the DEIR/DEIS is incomplete. PP-2

Due to the absence of the analysis in the DEIR/DEIS, we request that the deadline for the DEIR/DEIS comments be delayed to 60 days from the date of the release of the antidegradation analysis, which we have been told would be "later this summer."

Thank you for your consideration of this important request. If you have any questions about this request, please feel free to contact me. The favor of a reply is requested.

Curryn Willette

Carolyn Willette, Tahoe Area Group Chair Email: <u>tahoegroupsierraclub@gmail.com</u> Tahoe Area Group P.O. Box 16939 South Lake Tahoe, CA, 96151 PP-2



August 27, 2020

Patty Kouyoumdjian, Executive Officer Russell Norman, P.E. Lahontan Regional Water Quality Control Board 2501 Lake Tahoe Blvd. South Lake Tahoe, CA 96150

Joanne Marchetta, Executive Director Dennis Zabaglo, Aquatic Resources Program Manager Tahoe Regional Planning Agency 128 Market Street Stateline, NV 89449

Re: Draft Environmental Impact Report (EIR) in accordance with the California Environmental Quality Act (CEQA) and a TRPA Environmental Impact Statement (EIS) for the proposed Tahoe Keys Lagoons Aquatic Weed Control Methods Test

Dear Ms. Kouyoumdjian, Ms. Marchetta, Mr. Norman, and Mr. Zabaglo:

These comments are submitted on behalf of Beyond Pesticides and the Toiyabe Chapter of the Sierra Club. Founded in 1981 as a national, grassroots, membership organization that represents community-based organizations and a range of people seeking to bridge the interests of consumers, farmers and farmworkers, Beyond Pesticides advances improved protections from pesticides and alternative pest management strategies that reduce or eliminate a reliance on pesticides. Our membership and network span the 50 states and the world. Sierra Club's Toiyabe Chapter is the region's largest volunteer, grassroots conservation organization, working in Nevada and eastern California to protect our public lands, wildlife refuges, forests, parks and wilderness for all.

We are writing in response to the call for comments on the draft EIR/EIS for the proposed Tahoe Keys Lagoons Aquatic Weed Control Methods Test. In general, we find the draft EIR/EIS fairly detailed and thorough. The historical background and scope of the aquatic weed infestation in Lake Tahoe and the Tahoe Keys lagoons specifically are well described. Details of the various control alternatives to be considered for testing are also well explained, except the final location of the anticipated test plot locations may be adjusted based on the results of spring macrophyte surveys to ensure that target weed infestations are dominant in

GEN-37

treatment areas. In addition, it is not certain that the herbicide florpyrauxifen-benzyl will be included as it is pending approval for use in California and the herbicide triclopyr would be its declared substitute. A subjective choice of exact plot based on perceived level of infestation and/or pesticide used could introduce some degree of experimental bias in the test program and impact interpretation of the results.

We agree with the draft EIR/EIS authors that the Action Alternative 1: Testing of Non-Herbicidal Methods Only is the environmentally superior choice and recommend that the TRPA/LRWQCB select this alternative for the proposed weed control test program. The herbicides chosen for consideration in this program pose risks of potential health and environmental harm not fully assessed in the EIR/EIS and the non-herbicidal methods alone may prove sufficiently effective for the weed control sought.

Herbicide risks not fully considered in the EIR/EIS

Florpyrauxifen-benzyl (ProcellaCOR EC liquid) is a recently registered systemic herbicide in the U.S. that is a member of a new class of synthetic auxins (plant growth hormones), the arylpicolinates.¹ The herbicide differs in binding affinity compared to other currently registered synthetic auxins and is effective at substantially lower concentrations than existing aquatic herbicides. Synthetic auxins at herbicidal rates overstimulate plant growth and cause excessive elongation of plant cells that ultimately kills the plant.² Susceptible plants will show a mixture of atypical growth (larger, twisted leaves, stem elongation) and fragility of leaf and shoot tissue. Conceivably, an indirect environmental impact of a synthetic auxin used in spot treatments, as its use is proposed in the weed control test program, is stimulation and excessive weed growth in untreated areas adjacent to the treatment plots due to diluted dispersal of the synthetic plant growth hormone—hence, potentially exacerbating an aquatic weed problem in untreated areas.

This herbicide has not presently been approved for use by California and may not be included in the test program unless approved. EPA has identified no risks of concern to human health since no adverse acute or chronic effects, including carcinogenicity or mutagenicity, were observed in the submitted toxicological studies for florpyrauxifen-benzyl regardless of the route of exposure.³ However, the European Food Safety Authority (EFSA) determined that the endocrine disruption potential for this compound has to be addressed with regards to the occurrence of mammary gland tumors observed in males in a 2-year rat study. It was recommended that the underlying mode of action needs to be investigated with at

HE-127a

ALT-54

¹ Wisconsin Department of Natural Resources. 2018. Florpyrauxifen-benzyl Chemical Fact Sheet. Florpyrauxifenbenzyl_ProcellaCOR_Fact-Sheet.pdf

² Ibid.

³ EPA. 2017. Florpyrauxifen-benzyl: New Active Ingredient, First Food Use. Human Health Risk Assessment for the Establishment of Permanent Tolerances on Rice, Fish, and Shellfish and Registration for Uses on Rice and Freshwater Aquatic Weed Control. EPA-HQ-OPP-2016-0560-0013.pdf.

Tahoe Keys Lagoons Draft EIR/EIS

least *in vitro* studies (e.g. estrogen receptor binding and transduction assay).⁴ For ecological effects, no toxicity of concern to terrestrial non-plant wildlife was identified in the submitted studies. However, although risks to aquatic animals were deemed minimal by EPA, a deeper examination of the data do raise some uncertainties and legitimate concerns. A key confounder is that florpyrauxifen-benzyl is a difficult-to-test substance with maximum native solubility of ~ 15 μ g/L and only around 50 μ g/L with use of a cosolvent.⁵ Although no mortalities to aquatic animals were observed up to solubility limits in acute exposures, certain sublethal effects were recorded. In chronic exposures, the mysid (*Americamysis bahia*) and midge (*Chironomus dilutus*), toxic effects were recorded at the lowest concentrations tested (LOAEC 1.1 μ g/L and LOAEC 4 μ g/L respectively) such that NOAEC values could not be determined. Therefore, statistically significant effects below concentrations of 1 to 4 μ g/L can be expected.⁶ Albeit the maximum label rate for the PorecellaCOR EC liquid is 50 μ g/L, the maximum proposed rate for the project is listed as 3 μ g/L which would indicate a potential threat to aquatic invertebrates with similar sensitivities, such as the mysid *Mysis relicta* which can be found in the Tahoe Keys lagoons.

Although the mysid *M. relicta* is a non-native species introduced into Lake Tahoe in the early 1960s and considered somewhat invasive and detrimental to Lake Tahoe clarity,^{7,8} toxicity of florpyrauxifen-benzyl to mysids is nonetheless relevant as a surrogate for other potentially susceptible aquatic invertebrate taxa. Toxicity data reported in EPA's risk assessment⁹ were for only seven species to represent literally thousands of aquatic invertebrate species, and two of these tested species (a mysid and a midge) demonstrated sensitivity below the expected exposure concentrations. Therefore, the use of florpyrauxifen-benzyl in the Tahoe Keys weed control test program would likely impact invertebrate populations and community with uncertain long-term consequences.

Triclopyr (Renovate liquid or granular) is in the carboxylic acid chemical family and another, though structurally different, synthetic auxin that, similar to other herbicides with this mode of action, causes the growing tips of the plant to elongate, followed by distortion, withering, and the death of the plant.¹⁰ The most common breakdown product of triclopyr in

⁴ European Food Safety Authority (EFSA), Arena, M., Auteri, D., Barmaz, S., Brancato, A., Brocca, D., Bura, L., Carrasco Cabrera, L., Chaideftou, E., Chiusolo, A. and Civitella, C., 2018. Peer review of the pesticide risk assessment of the active substance florpyrauxifen (variant assessed florpyrauxifen-benzyl). *EFSA Journal*, *16*(8), p.e05378.

⁵ EPA. 2017. Florpyrauxifen-benzyl: Environmental Fate and Ecological Risk Assessment for the Section 3 New Chemical Registration. EPA-HQ-OPP-2016-0560-0011.pdf.

⁶ EPA. 2017. Florpyrauxifen-benzyl: Environmental Fate and Ecological Risk Assessment for the Section 3 New Chemical Registration. EPA-HQ-OPP-2016-0560-0011.pdf.

⁷ Morgan, M.D., Threlkeld, S.T. and Goldman, C.R., 1978. Impact of the introduction of kokanee (Oncorhynchus nerka) and opossum shrimp (Mysis relicta) on a subalpine lake. *Journal of the Fisheries Board of Canada*, *35*(12), pp.1572-1579.

⁸ Richards R, Goldman C, Byron E, Levitan C. 1991. The mysids and lake trout of Lake Tahoe: a 25-year history of changes in the fertility, plankton, and fishery of an alpine lake. Am Fish Soc Symp 9:30-8.

⁹ EPA. 2017. Florpyrauxifen-benzyl: Environmental Fate and Ecological Risk Assessment for the Section 3 New Chemical Registration. EPA-HQ-OPP-2016-0560-0011.pdf.

¹⁰ Ware, G.W. 2000. The pesticide book. Fifth edition. Fresno CA: Thompson Publications. p. 190

Tahoe Keys Lagoons Draft EIR/EIS

mammals, as well as in soil and water, is 3,5,6-trichloro-2-pyridinol (TCP)¹¹ and also, of note, the highly toxic and controversial organophosphate insecticide chlorpyrifos which is banned in California. The most significant health hazard identified for TCP is that it may be especially hazardous to children. Researchers studied the ability of TCP to disrupt the development and maturation of the nervous system that occurs in fetuses, infants, and children.¹² Using a laboratory test system (a cell culture), the researchers showed that exposure to TCP inhibits neurons (nervous system cells) from undergoing normal growth. Concentrations of only 0.2 ppm were sufficient to disrupt growth.¹³ Concentrations equal to this level have been measured in the brains of fetal laboratory animals whose mothers were exposed to pesticides. In addition, when researchers compared TCP concentrations in brains of fetal laboratory animals with those in their mothers' brains, the fetal concentrations were between two and four times greater than those in maternal brains, suggesting that TCP accumulates in fetal brains.¹⁴ TCP also poses an environmental hazard as it is "very mobile" in a variety of soil types and is also often more persistent than triclopyr itself.¹⁵ The Renovate product for aquatic weed control contains the triclopyr triethylamine salt. Triethylamine is damaging to eyes and can cause abnormal vision and irreversible eye damage, it is extremely destructive to skin and the upper respiratory tract with symptoms of exposure that include coughing, wheezing, headache, and nausea.^{16,17}

Endothall (Aquathol K liquid) is a currently-registered herbicide that is used for direct application to water (primary use) to control exotic and invasive plants. Endothall acid is the active ingredient in all of the endothall-containing herbicide formulations but is only formed as a degradation product. The endothall formulations consist of one of two endothall acid salts, either a dipotassium salt (Aquathol K) which is proposed for use in the weed control methods test or an N,N-dimethylalkylamine salt. The dissociation constants of both of the endothall salts indicate that at most environmental pH levels, the endothall salt, endothall acid, and the corresponding cation (potassium or coco-alkylamine) will all be present. In addition, there are significant differences in toxicity to certain organisms between the endothall dipotassium salt and the endothall N,N-dimethylalkylamine salt, the dipotassium salt being less toxic. Persistence (half-life) of the endothall acid (active ingredient) is expected to be <10 days in treated areas, however in EPA's exposure assessment¹⁸ for direct application of Aquathol K to

¹¹ U.S. EPA. Prevention, Pesticides and Toxic Substances. 1998. Reregistration eligibility decision (RED): Triclopyr. Washington, D.C., Oct. Pp.2-5

¹²Das, K.P. and S. Barone. 1999. Neuronal differentiation in PC12 cells is inhibited by chlorpyrifos and its metabolites: Is acetylcholinesterase inhibition the site of action? Toxicol. Appl. Pharmacol. 160:217-230

¹³ Das, K.P. and S. Barone. 1999. Neuronal differentiation in PC12 cells is inhibited by chlorpyrifos and its metabolites: Is acetylcholinesterase inhibition the site of action? Toxicol. Appl. Pharmacol. 160:217-230.

¹⁴ Hunter, D.L., T.L. Lassiter, and S. Padilla. 1999. Gestational exposure to chlorpyrifos: Comparative distribution of trichloropyridinol in the fetus and the dam. Toxicol. Appl. Pharmacol. 158:16-23.

¹⁵ U.S. EPA. Prevention, Pesticides and Toxic Substances. 1998. Reregistration eligibility decision (RED): Triclopyr. Washington, D.C.

¹⁶ U.S. EPA. Integrated Risk Information System. 1993. Triethylamine. www.epa.gov/iris

¹⁷ Sigma Chemical Co. 2000. Material safety data sheet: Triethylamine. St. Louis, MO. http://info.sial.com.

¹⁸ EPA. 2005. Environmental Fate and Ecological Risk Assessment of Endothall – Revised. EPA-HQ-OPP-2004-0370-0005.pdf.

an impoundment with an initial target exposure of 5 mg/L, the Estimated Exposure Concentration (EEC) at subsequent time intervals post-application was:

- 4-day = 4.7 mg/L
- 21-d = 3.8 mg/L
- 60-day = 2.4 mgL
- 90-day = 1.8 mg/L.

These concentrations would be expected to represent the upper bounds for endothall concentrations in the immediate vicinity of the weed control project endothall treatment sites. These concentrations pose a severe risk to finfish as significant reductions in survival, length, and wet weight were reported in a 28-day fathead minnow early life stage test at 2.6 mg/L for endothall acid which exceeds the relevant EEC.¹⁹ Early life stage data are not available for Aquathol K or endothall acid for coldwater salmonid species that are prevalent in Lake Tahoe. Likewise, no life-cycle or reproduction toxicity data are available to assess chronic risk of endothall dipotassium salt or acid to fish. Additionally, there are insufficient data to assess potential endocrine disrupting effects of endothall in aquatic organisms.

The target endothall treatment rate of 5 mg/L and maximum concentrations that may be expected for several weeks in the Tahoe Keys test plots and adjacent lagoons exceed the Maximum Contaminant Level (MCL) for endothall in drinking water established by EPA of 0.1 mg/L. This will pose a significant risk to drinking water drawn from the Tahoe Keys waters and precautions/mitigation considered in the EIR/EIS may not be sufficient to prevent contaminated water supplies.

Conclusions and Recommendation

The EIR/EIS listed the following topics as areas of controversy:

- Potential environmental and health effects of using aquatic herbicides
- The need to act quickly on the environmental threat of the spread of aquatic weed
- Maintaining beneficial uses of the Tahoe Keys.

By proceeding with the Action Alternative 1: Testing of Non-Herbicidal Methods Only, the TRPA/LRWQCB would avoid valid environmental and health concerns arising from use of herbicidal chemicals. The non-herbicidal methods, including ultraviolet light, laminar flow aeration [LFA], bottom barriers, and diver-assisted techniques can be quickly implemented to reduce and curb the spread of current weed infestation. Such action is considered the environmentally superior choice for the weed control test program and it maintains the beneficial uses of the Tahoe Keys. If these methods prove effective, then a large-scale

ALT-54

¹⁹ EPA. 2005. Environmental Fate and Ecological Risk Assessment of Endothall – Revised. EPA-HQ-OPP-2004-0370-0005.pdf.

implementation of these methods can begin and avoid any future consideration or use of herbicidal products and their inherent risks.

We disagree with the general conclusion in the EIR/EIS that "all effects for the Proposed Project and Action Alternatives have been reduced to less than significance". The Proposed Project, Action Alternatives, and the No Action Alternative all could have potentially significant effects to water quality issues (water temperature, turbidity, dispersal of aquatic fragments, changes in pH, dissolved oxygen, total phosphorus, and total nitrogen concentrations) and aquatic community stability (species diversity, species dominance, seasonal succession). The limited herbicide spot-treatment usage as part of the Proposed Project poses substantial localized risks to human health and environment as earlier detailed. A full-scale herbicide use throughout the Tahoe Keys lagoons would be seriously detrimental to the Keys and potentially to the broader Lake Tahoe. We believe that the Action Alternative 1: Testing of Non-Herbicidal Methods Only would have the least potential for any serious and unwanted effects. Action Alternative 1 is the environmentally superior choice and will likely demonstrate the effectiveness of non-herbicidal methods in controlling the aquatic weed problem. We recommend that the TRPA/LRWQCB select this alternative for the proposed weed control test program.

Nutrient inputs into the Tahoe Keys, separate from the weed test control program, from residential and landscape fertilizer use and vehicular (auto and boat) exhaust emissions²⁰ contribute to the eutrophication and weed problem in the Keys and Lake Tahoe in general. We also recommend that TRPA/LRWQCB continue and expand existing efforts limiting nutrient inputs that aggravate aquatic weed proliferation in the Tahoe Keys lagoons and will continue to hinder weed control efforts.

Respectfully,

L. WTet

Leslie W. Touart, Ph.D. Senior Science and Policy Analyst

AWM-23

ALT-54

HE-118

HE-118

²⁰ Lee, G. F. and Jones-Lee, A. 1992. Role of Vehicular Exhaust NOx and Lawn-Shrubbery Fertilizers as a Cause of Water Quality Deterioration in Lake Tahoe, Report of G. Fred Lee & Associates, El Macero, CA.

Charlette Herbesen	Caralina Cávilla
Charlotte Harbeson	Caroline Sévilla
Mary Graves	Judith Cohen
Pamela VourosCallahan	Alan Papscun
Linda Avinger	Sally Hinshaw
Diane Olson	Mary Bobadilla
James Donahue	Megan Faber
Cesar Raposo	Joe Tutt
Kristyn MacPhail	Marianne Hoffman
Michael Parsons	Doug Franklin
Mauria Sazonov-Robinson	Frances Carpenter
Kim Allen	Sharon K Wilson
Juliann Rule	Katherine Wright
Michele Page	Thomas Connor
William Dolly	Sherry Vatter
Mary A Leck	Lisa Acher
Cynthia Edwards	Candace Bassat
Winston Huang	Robert Sargent
Susan Schmidt	Mark Youd
Betsey Porter	Linda Gazzola
Shirley Gilford	Bil Polesnak
Sherry Beck	Susan Turner
Veronica Bourassa	Mary Shabbott
Carol Taggart	Vic Bostock
Andy Lynn	Avis Deck
Chris Dacus	Stephanie Mory
Alice Rim	Calli Madrone
Connie Grogan	Martha Wallace
Linda Fleming	Pam Evans
Jon Pitt	Sue Harrington
Carol Wagner	Michaeline Hade
Paula Cohen	Laurie Denis
Karen McGuinness	Joelle Porter
Julia Skelton	Tara Lakshman
Maureen Wheeler	Amber Sumrall
Norm Wilmes	Veronica Schweyen
Holly Garland	Martha Burton
Claudia Devinney	Steve Iverson
Deborah Landowne	Mary Rojeski
James McBride	Marci Moss
Joan McCormicl	George Stradtman
Karen Spurr	Stephen Hulick
Arlene Zuckerman	Kathleen Hulick
Kathi Ward	Carolyn Nieland

Josephine Cristobal	Paula Morgan
Tara Gonzales	Joan Murtagh
Dan Carroll	Frank Sennett
Garry Taroli	Christina Babst
Barb Powell	Julie Levine
Marya Zanders	Liz Erpelding-Garratt
Tanya Piker	Thomas Nieland
Lorrie Montgomery	Elizabeth Ende
Joanne Conti	Timothy Post
Thomas Baron	Allie Tennant
Sharon Davlin	Casee Maxfield
Mary Kornbau	Kimberly Seger
Marie Wakefield	John Everett
Elena Perez	Elvira Johns
William G Gonzalez	Terry Shistar
Louise Wallace	Aixa Fielder
Pablo Bobe	Elaine Cuttler
Lisa Horn	Jean Cameron
Pamela Noyes	Kathy Kelly
Mitch Dalition	Jeremy Spencer
John Wheeler	Marianella Torres
Susan Cann	Marjorie Clisson
John Scott	Bonnie Barfield
Nancy Cencula	Charles Massey
Rob Rondanini	Theodore Johns
Janet Hofmann	Ronald C Faas
Pam Zimmerman	Karen Soloman
Kathy Oppenhuizen	Geri Collecchia
Chey Richmond	Lisa Mazzola
Vic Burton	Aleta Halter
Kimberly Musselman	Charlie Burns
Lynne Glaeske	Cat Tailer
Randy Hernandez	Janet McCalister
Linda Hassa	Tracy Boyle
David Marshall	Jane Lyon
Becky Monger	Pamela Miller
Michele Johnson	Brad Budnik
Janice Banks	Shelly Wallace
Susan Sorkenn	Elaine Becker
Ellen Sanford	William Ryder
Maria Gomez	Lloyd Lloyd Hedger
Tanina Linden	Susan Dean
Paula Martin	Michael Schumm

Kris Cordova	Sally Morrow
Janice Dlugosz	Katherine Le Clercq
Jo Harvey	Eduardo Castro
Cindy Shoaf	Andrea Nutley
Kris Knoll	Douglas Cooke
Myra Berario	Chris Stiff
Tracey Katsouros	Brent Spencer
Paul Jarocki	Cori Bishop
John Stevens	Susan Burian
Courtney Franklin	Jeff Douglas
Gail Jarocki	Dawn Kenyon
Dianne Alpern	Craig Clark
Michael Dorer	Brenda Spoo
Lynette Ridder	Brenda Eckberg
J.P. Sherman	Donald Taylor
Jeanne Marple	Joan Clement
Gloria McClintock	Saula Siegel
Mary Jean Sharp	Dagmar Mclaughlin
Faith Franck	Suzy Sayle
Karl Lohrmann	Gina Stiff
W.A. Milani	Julianne Ramaker
E. Neiman	Linda McCrosky
Robert Foley Jr	Michele Paxson
Helga Guequierre	Carlos Arnold
Marilyn Byrne	Jeffrey Hurwitz
James Jackson	Chris Wren
Brandie Deal	Robert Kennedy
Jane B. Middlesworth	Janet Robinson
Sy Kover	Gael Faller
Carolyn Marion	Margaret Schulenberg
Rebecca Banner	Robert Reed
Jeffrey McCollim	Ron Bartosh
Hilary Back	E Paxson
Lynnward Lacy	Dena Lenard
Karen Fedorov	Harriet Cohen
Dia Tsung	Sammy Low
Kathie Noga	Janet Walls
Alexandra Manning	William Ridgeway
Vance Arquilla	James Howarth
Anne Hedberg	Janis Todd
Bree Pugh	Melissa Marcolina
Lenore Reeves	MC Hagerty
John Dodge	Pamylle Greinke

Judy Savard
Anne Ambler
Evan Morgan
Charlene Henley
James Roberts
Peter Kahigian
Andrew Robbins
Susan Porter
Anthea Wray
George Fairfax MD
Robert Haslag
Paul Kalka
Katherine Wright
Kathryn Johanessen
Richard Tregidgo
Michelle Diss
Robert Cobb
Phil Fitzgerald
Linda Pluschke
Jud Woodard
Robin Franco
Patricia J Rose
P Lepore
Candice Barnett
Deborah Smith
Debra Rehn
Jeff Zagray
George Leddy
Karen Kirschling
ĴΗ
Caridad Romaine
Steve Lucas
Phil Fitzgerald
Denise Wheeler
Paul Daly
Doug Dyer
Susanne Hesse
Laura Long
Wendy Adams
Lance Ofenloch
Todd Wolf
David Pomeroy
Teri Smith

Jacoba Dolloff Elizabeth Adan Rebecca O'Dell Jamila Garrecht Meryl Pinque Susan Kalan Linda Swan Shannon Mondor Joan Cummings Nagi Mato Bridgett Heinly Anne Parzick Dale Riehart Joan Bell-Kaul Benita J. Campbell Joan Peter Joyce Niksic Grace Neff James Mulcare Kathleen Medina Malcolm Elgut Nancy Ellingham Karen Christiansen José Leroux Dennis Dougherty Edward Cavasian Vicki Jenkins Mary Kelchak Camille Gilbert Janice Williams Rita Lemkuil Chad Johnson Knud Padborg Jayni Chase Judi Poulson Aurelie Ward George Baschiera Katherine Hutchins Colette Love-Battista Sheri Spain Cynthia Rose Debra Heathelry **Clifford Myers**

Silvia Rocha	Jim Melton
Julian Corley	Anita Simon
Rebecca Carey	Susan Ford
Jim Abbondante	Warren Alle
David Broadwater	Kevin Crupi
Brenda Gaines	Sharon Your
Karen LeMay	Marilyn Wal
Elaine Edell	Susan Cliffor
Diana Gazzola	David Dzikov
Bruce Hlodnicki	Matt Lope
Marie Banks	Marlena Tza
Cynthia Kobak	Robert Obrie
Patti Eckert	Fritzi Cohen
Rick Blanchett	Jude Lotz
Yvette Goot	Maureen Ly
Deborah Dahlgren	Barbara Tho
Joe McCullough	Bonnie Gorr
Georgia Goldfarb	Diane Eisenł
Claudia Wornum	Elaine Holde
Donna Bonetti	Yvonne Mat
Karen Spradlin	Jamie Green
Sandra Parciak	Vera Lazar
Dawn Albanese	Sandy Newh
William McGunagle	Tina Ann
William McMullin	Jonathan Mi
Louise Calabro	Michael Bon
Ryan Bradley	Candace Car
Silvia Hall	Dudley Cam
Leo Lieber	Kimberly Pe
Gloria Picchetti	Jill Madigan
Phoebe McLeod	Sarah Silva
John Peeters	Polly D Pitsk
Marie D'Anna	Nicolette Fro
Mike Turner	Ezra Mann
Connie Tate	Crystal Fairle
Querido Galdo	David Soare:
Heather Cross	Maureen Sh
llse Burch	Denise Host
Don Booker	Ellen McCan
Toby Ann Reese	Sandra Tuck
Mary Foley Foley	Randy Gyory
Barb Boinest	Theresa Mu
Karen Peterson	Edward Ciac

mons ord Allely rupi Young Waltasti lifford zikowski pe a Tzakis Obrien hen tz en Lynch Thomas-Kruse Gorman RN isenhower lolder Mathewson ireen zar lewhouse n n Mitchell Bondoc e Campbell Campbell y Pettit igan ilva Pitsker te Froehlich nn Fairley oares en Sheahan Hosta cCann Tucker Syory Murphy Ciaccio

Cindy M. Dutka Juli Van Brown Gina Caracci Aimee Millensifer Stephen Boletchek Kristin Vyhnal Angela Stuebben Michelle Lind Krista Slavin **Fllen Halbert** Lisa Witham Jeff Lowry Dorene Randall Michael Morningstar **Flaine Parker** Flise McCoubrie Carla Earl Marsha Lowry Denise Halbe Linda Szurlev Lois Jordan Annie McCann Mary Williams Susan Galante Lois Dunn Kathryn Lemoine G.W. Cheney John Jumonville Margaret Easter Mike Brinkley **Robert Beggs** Kendra Knight **Michael Deangelis** Andrew Jackson Marie Curtis Nancy Burger Sandra Dal Cais Wolfgang Burger Caroline Hair Karen Dushek Donna D Varcoe Barbara Tountas Kevin O'Rourke

Janeene Porcher Sarah Townsend **Rosemary Bilchak** Diane Hestich **Rvan Burger** Adrienne Metter Paul Dougherty **Gregory Duncan** Barbara McMahan Laurie Gorman Holly Marczak Thomas Edmonds Joseph Rodriguez **Ruby Loust** K Krupinski William Cramer Carlos Nunez Art Glick Marilyn McMullen Andy Tomsky Paula Rust Colette Wilson Maxine Clark Susan Siniard Angie Dixon Patrick Gorman Jeb Fries Joseph Zemgulys **Douglas Sedon** Nancy Or Monica Wood Marta Guttenberg Doris Luther Phyllis Chavez Mark Soenksen Devon Benton Anthony Mehle Sharon Longyear Alana Hendrickson Virginia Broadbeck **Randy Harrison** Andrelene Babbitt Marge Schwartz

Wayne Ott	١
Margo Wheeler	E
Kathleen Carr	J
Irwin Hoenig	F
Tina Wilson	[
Albert Ceriale	Ν
François Charpenay	[
Joyce Stoffers	F
Terri Knauber	L
Alison Cabell	E
Jerry Druch	F
Jim Hemmingsen	L
Tom Miller	J
Marian Cooley	Ν
Keith D'Alessandro	E
Mark Hanisee	k
Richard Kite	١
Paul Eisenberg	S
Sara Simon	Ν
Lisa Bergerud	(
Lisa Keim	١
Susan Linden	F
Daniel DuBoise	A
Linda Hendrix	F
BC Shelby	J
Alice Petersen	S
Cheryl Watters	Ν
Sandra Lambert	(
Dan Horton	[
Ciara Preston	J
Deanna Horton	S
Virginia Schneider	(
Dona LaSchiava	A
Kathryn Robinson	S
Carol Fletcher	L
Sudi McCollum	J
Mary Zack	S
Mark Meeks	k
Pat Matz	L
Stephanie Walton	[
James Hartley	F
Andre Meaux	F
Richard Creswell	(

Wendy Fast Elaine Eudy Jill Greer Patricia Packer DJ Fura Melissa Milano Diane Verna Richard Pendarvis Leonard Epstein Elizabeth Edwards Robert Palmer Lily Swartz Jill McManus Michael Martin Elizabeth Werner Katharine Christie Nadine Duckworth Suzanne Lippuner MaryAnna Foskett Cindy Moczarney Marilyn Logan Ron Juftes Anthony Straka Peter Wood Judy Moran Sandra Franz Michael Lee C E Mone Denise De Stefano Jeffrey White Shawn Johnson Cherine Bauer Alice Artzt Susan Kozinski Lilli Ross Jackie Tryggeseth Sandra Stofan Ken Schefter Lucinda Tucker Doug Krause Rachel Wolf Pamela Magathan Carolyn Ryan

Deyond resticides ronni Letters	
Peri Doubleday	Diana Williams
Mike Lynch	Patti McKinley
Jesse Gore	Janet Kregelstein
Lori Albert	Samuel Durkin
Amy Schumacher	Deborah Stull
Lily Mejia	Joyce Harrington
Dana Wilson	Cara Ammon
Ramona Thompson	Cheryl Kallenbach
Brian Gottejman	Dawn Pesicka
M. K. Russell	Julie Harris
Thomas Brenner	Sarah Dow
John Hahn	Claire Joaquin
Janice Hahn	Susan Wechsler
Steve Savitz	Millard Martin
Theresa Kardos	Meredith Tucker
Ruth A. Yacko	Jim Traweek
l Hurd	Dick Dierks
Diane Kokowski	Elizabeth Butler
Lisa Cubeiro	Andrea Whitson
Maria Jose Orobitg	Christopher Dill
Marilyn Kagan	Stanley Barreto
Christine Zecca	Mare Wahosi
Patti Ford	Sandra Cobb
Sharon LaLond	James Knott
Kathie Cunningham	Jeanne Dixon
Bruce Revesz	Gary Gover
llsa Lottes	William Crist
G. Willis	Cassandra Treppeda
Maria Steffen	Jan Beauchamp
Michael Lewandowski	Julie Parcells
Dorothy Stoner	Morgan MacConaugha-Snyder
Barbara Poissant	Jessica Mitchell-Shihabi
Cathy Holden	Beth Goode
Jerry Brown	Mark Reback
David Osterhoudt	Chas Martin
Daryl Stanton	Hans R Herren
Linda Wasserman	Jeffrey Gordon
Neil Puckett	Connie Beck
Mary Puckett	Janet H.
Kathy Emerdon	Marie Lohr
Michelle Mondragon	Stacie Hartman
Linda Williams	Elena Knox
Eleanor Weisman	Georgia Wier

Stephanie Reynolds	Dario Morell
Pat Blackwell-Marchant	Rob Jursa
Karen Thomas	Terry Bergeron
Nolan Bagalso	Richard Grove
Lindsay Suter	Lisa Brehm
Elizabeth Major	Elizabeth Darovic
Lavonne Knutson	Chris Hastings
A Kasbarian	Toni Noll
Rosemary Tann	Jane Butler
John Leonard	Joseph A. Wieczorek
Darcey Laine	Cornelia Teed
Cecil Philip	Jo K.
Charles Arnold	Kathleen Moraski
Paul Albrecht	Jan Modjeski
Michelle Richardson	Constance Walker
Patty Viers	Jennifer Schusterman
Evelyn Coltman	Chris Drumright
Stefon Lira	Jo Heaning
Robert Okroi	Rich Heaning
Lisa Pezzella	Dave Ogilvie
George Erceg	Jennifer Keys
Charlene Rush	Melinda Richards
Marjorie Faust	Elizabeth Roberts
Gail Amshel	Lois Lommel
Joe R	Babette Lewis
Kathleen Lee	Sandra Breakfield
Jill Davine	P Valentin
Elizabeth Bryant	Michael Iltis
Caroline Cunningham	Theresa Kelly
Robert Nerger	Vicki Burns
David Anderson	Susan Babbitt
Martha Richards	Maria Nowicki
llyana landes	Sandra Hazzard
Joseph Shulman	Elaine Dorough Johnson
Sheila Tran	Shanna Rose
Bernardo Alayza Mujica	Hillary Culver
Nancy Gregory	Art Wilkinson
Lee Walker	Kenneth McLean
Shari Sharp	Vicki Macina
Suzanne Hume	Don Pew
Michael Peterman	George Schneider
Allison Fradkin	Traci Hamilton
Joan Glasser	Fay Forman
	,

Beyond resticides ronn Letter.	S Necchica
Francine Traniello	Maria Soares
Lynne Bemer	Lynn Matarelli
Karen Steele	Erica Risberg
Pamela Llewellyn	Susan Yarnell
Bryant Belli	Stephen Brittle
Karen Orner	Mark Grotzke
Betty Marr	Karen Scanlon
Juliet Pearson	Joan Farber
Susan Vogt	Jill Meier
Kevin Branstetter	Jim Gergat
Charles R Shelly	Janet Kennington
Fournier Fernande	Beth Jane Freeman
Jana Perinchief	E. Neal
Elaine Davis	Donald Betts
Nancy Hartman	Cave Man
John Estes	Amy Henry
Ad Koch	Jeffrey Freilich
Jesse Williams	Virginia Bottorff
Kathleen Doyle	Cathie Sekendur
Nancy Heck	Marcelo Vazquez
Margaret Jensen	Susan Betourne
Colleen Lobel	Janette Shablow
Maryann Barulich	Gordon MacMartin
Ray Goldsberry	Laura Cicholski
Benjamin Valentine	Kathy Abby
Felena Puentes	Ernst Boyd
Mike Rolbeck	Annie Fernald
Ann Bein	Gloria Shen
Valerie Clark	Brooke Mcgowen
Liz Field	Ann Coz
Jorge De Cecco	Annapoorne Colangelo
Mary McCoy	Diane Knight
Gilly Lloyd	Les Roberts
Stefan Ciosici	Gerald Kuhn
Alessandra Urist	Kathleen Ward
JL Charrier	Emily Boone
Jeffry Anderson	Justin Small
Sue Biederman	Lisa Annecone
Desiree Nagyfy	Jason Steadmon
Namhi Lee	Stephen Newberg
Lois Nottingham	Robin Newberg
Debra Atlas	Michelle Anthony
Barbara Van Camp	Kathy Grieves

Crystal Chaffin	Luan Le
Brook Castrejon Solis	Susan Watts-Rosenfeld
Teri Lamour	James Dawson
Ronlyn Schwartz	Bruce Grobman
Kathy Zelaya	Julie Roedel
Jennifer Scott	Don Barth
Eve Saglietto	Leslie Mclean
Gary Hamm	John Harris
Donald Seeger	Carol Patton
C Emerson	David Meade
Suzanne Scollon	Laura Sholtz
Chris Chojnicki	Deb Sands
Marshall Sanders	Marcy J. Gordon
Judith Murphy	Jennifer Gindt
Dori Cole	Michael Laird
Katherine Robertson	Caroline Mead
Erline Towner	Takako Ishii-Kiefer
Judith Peter	Christina Nillo
George Casner	Richard Shannahan
Doretta Miller	Mary Tuma
Erica Munn	Agatha Forest
James Falsken	Doug Scheele
Wendy Ryden	Blaise Brockman
Carrie Darling	Pamela Harshman
Anastasia LaGuardia	William Skirbunt-Kozabo
James Lowe	Chad Fuqua
Merry Harsh	Terry Vollmer
Sarah Salter	B. Rodriguez
Laura Rich	Fritzi Redgrave
James Noordyk	Mindy Maxwell
Deb Lincoln	Joyce Crowley
Lillian Nordin	Laura Stewart
Diane Cornwall	Charles Savoie
Barbara Greenwood	Mary Langeron
Linda Brunner	Leon Cheong
Jeffrey Baker	Francois De La Giroday
Jeff Wilson	Philip Kritzman
Mary Hanley	Dwight Bodycott
Patricia Nadreau	Kirsten Wolner
Nancy Chismar	Joseph Haemmerle
Vira Confectioner	Robert Lombardi
Verlaine Halvorsen	Ward Giblin
Pamela Jiranek	Suzy Juncker

beyond resticides ronn Letter	Sheeenvea
Edh Stanley	Brian Deeley
Georgina Wright	Stephanie C. Fox
Dorothea Vanderstoep	Clifford Provost
Lisa Gordon	Karen Slote
Rena Lewis	Brandie Deal
Gavin Dillard	Gloria Lewis
Yves Decargouet	James Mulcare
Dawn DiBlasi	Jeffrey Sanders
Alexia Valdora	Aurelie Ward
Twyla Meyer	Meryl Pinque
Jamie Caya	Karin Strayer
Susan Finley	Mary Fraser
Lowell Young	Susan McCarthy
Michelle Hays	Susan Selbin
John Schmittauer	Jan Hartsough
Gail Roberts	David Hartsough
Liz Mahony	Muriel Strand
CT Bross	Karen Rhoads
Frank Kroger	Christine Wordlaw
Delene Hanson	Yvette Fernandez
Elizabeth Major	Rebecca Levinson
Noelle Eagle	Tammy Nogles
Kevin M McCarron	Terry Shistar
Kelly Choi	Jeffrey DeCristofaro
Sidne Baglini	Erica Hoffman
Lorraine Hartmann	Dan Norris
George Viveiros	Joyce Recker
John Livingston	Michael Olenjack
Mark M Giese	Ashley Hunsberger
Rita Pesini	Silvia Bertano
Bob O'Neil	Lisa Whipple
Lisha Doucet	Linda Hillman
Deirdre Morris	Kelly Byrnes
Paul Clinch	Pamela Alvesteffer
Laura Boss	Sherry Weiland
Harry Knapp	Nichole Diamond
Brian Waak	Joyce L Britcher
michael wohlleb	Tim Rose
Douglas Klein	Valerie Friedman
Sandra Joos	Catherine Hess
Lillian Anderson	Linda Howie
Jane Leatherman Van Praag	Pablo Ortega
Molly Kenney	Suz Bellew

Cara Schmidt Jennifer Quick Mary Smith Susanne Groenendaal Charles Dineen Victoria Peyser Sheila Miller Charlene Boydston Jennifer Will **Dennis Morley Colonel Meyer Kimberly Carden** Robert Good Theresa Bohannan Linda Kane Abdullah Goldstein Montserrat Ciurana **Stacey Francis Flizabeth Seltzer** Karen Robinson Gordon Kelly Jave Bergen Renee Carl Tracey Katsouros Cassie A. Murphy Charyse Kirby Janice Keiserman Chris Worcester Marilyn Martin Laura Jav Natasha Nitz Lvnn Wilbur Michael Crowden Priscilla Newcomer Cammy Colton Jocelyn Stowell Nicholas Prychodko Leslie Scales Kent Lennox Amy Roberts Eileen Reznicek Jacqueline Kelley Adele E Zimmermann **Connor Hansell** Javier Rivera-Diaz Michael Bertrams Bennette Reed-Dibben Dibben Sonja Malmuth Brendalee Smith Janine McNamara Anne Marie Call Jim Thompson Judith Dobkevich Marie lee Max Ventura Fred Karlson Michele Alexander Mindye Fortgang Donald Hunt Daniela Bosenius Susan Lantow Kathv Shores Macrina Rodriguez Thom Peters Maria Miller Hou Ba Mary Johnson James Covella Mary Seegott Michelle Oroz Marketa Anderson Shannon Velazquez Mickey White Geoff Skews Donna Selquist Grace Byrne Stephanie Clark Tracie Batson Lorren James Lauren Richie **Tim Barrington Rosiris Paniagua** Gloria Diggle Carl Barta Claudia Greco Judith Embry

Pete Childs	Susan Crispino
Emma Thomas	Scott Bathke
Pablo Voitzuk	Melanie Fisher
Roger Peirce	Tom Emmott
Dolores Pino	Anna Camarata
Frances Bell	Janie Martinez
Ann Stratten	Scott Weston
	Cathleen Weston
Pat Copenhaver Barbara Fite	Kitty Savage
Eileen King	Drew Martin
Mark Swoiskin	Daniel Mink
G. Countryman-Mills	Sharon Byers
Lois Grosshans	I R
Terrie Williams	John Delgado
John Nowlin	Darlene Jakusz
Nancy Hartman	Micaela Pronio
Marilyn Shepherd	McKenzie Blair
Vivian Dowell	Claire Gervais
Vicki Hughes	Mary Tarallo
Gayle Richardson	Tania Cardoso
Rhonda Bradley	Shadoe Drury
Dana Bleckinger	Thomas Goff
Dorothy Mirmak	Laurel Watson
Melvin Bautista	Anne Autry
Karl Birns	Megan Straughen
Mindy Stone	Linda Walters
Carol Jurczewski	Christiane Collienne
Gerard Hevey	Dione Del Monico
Suzanne a'Becket	Gloria Sharp
Debi Combs	Hey Hi
Alice Bowron	Steve Vicuna
Patricia Always	Julia Broad
Steven Wetstein	Sarai Aveleira
Ronald Drahos	Severine Chance
Gail Burns	Clare Halloran
Cathie Ernst	Shelley Strohm
Marilyn Rose	Victor Hemmy III
Priscilla Trudeau	Kerry Beane
Dawn Czapski	Sarah Koolsbergen
Joe Smith	Karen Hewelt
Charesa Harper	Robert Rivage
Jamie Thomas	Laura Collins
Gerry Milliken	Sandy Commons
.,	,

Carole Smudin	Steve Ford
Jack Zeilenga	Susan Caswell
Blaze Bhence	Elaine Livingston
Ellen Homsey	Donna Pope
James Walton	Deborah Allison
Maria Aragon	Vince Mendieta
Kat Stranger	Semena Curlik
Jayne Rosenberg	Paul Lauenstein
Darla Kravetz	Christine Becker
Mark Hollinrake	Laura Lessly
Carole Williams	Tina Doolen
Michael Malloy	Frances Dunham
Kirk Rhoads	Michael Caputo
Jana Austin	Mary Smetana
Anna Freeman	Kent John Clark
Joe Buhowsky	Ellen Gutfleisch
Virginia Douglas	Dan Perdios
Renee Bradford	Leigh Ann DiCarlo
Jim Dale	Joseph Hoess
Barbara Dale	John Ferguson
Steven Nelson	Bryan Rosen
Mary Steinmetz	Celine Montijo
Rebecca Levinson	Wilmalyn Puryear
Kathleen Sumida	Svetlana Savchuk
Carol Niemi	Jessica Hunt
Michael Peale	Tricia van Oers
Elizabeth Schwartz	Jan Salas
Nathan Vogel	John Oda
Robert Oberdorf	Richard Busse
James Klein	Rhonda Lawford
Shiela Cockshott	Galina Gorodetsky
Thomas Littelmann	Marianne Corona
Red Mendoza	Richard Packer
Dan Rauschenberg	Walter Elmore
Joyce Ciotti	Bob Chirpin
J. Beverly	Steven Skal
Paul Moss	Carol Tuveson
Bryan Bennett	T Gargiulo
Lisa Hammermeister	Katherine Nelson
Ann Lopez	Lori-Ann Kohler
Stephanie McKay	Peter Cohen
Pamela La Rue	Julie Gallagher
Arlene Baker	Ann Marie Sardineer

Mikki Chalker	Linda Muntner
Kate Holland	Patricia Borri
Robert Russo	Therese Ryan
Sam Morrison	Debbie Thorn
Cindy Yates	George Hartman
Anatoliy Shanin	Natasha Williamson
Nick Alzuro	Laura Kabernagel
Michael Tucker	Genie Moody
Nigel Sawyer	Lee Schondorf
Russ Ziegler	Linda Francisco
Cathy Beers	Deborah Coviello
Carol Devoss	Paige McGlaughlin
Timothy Larkin	Virginia Gomez
Zola Packman	Paula Dinerstein
Louisa Beckett	Jan Zanoni
Andrew Sellman	Robert Keiser
Joan Makurat	Janelle George
Lisa Stone	David Dzikowski
Dana Galbavy	Barbara Delgado
Belinda Howell	Susan Foley
Barry De Jasu	Mary Walker
Jordan Longever	Irene Welch
Ericka Kohn	Jan Repp
Paul Markillie	Rod Repp
Sheryl Williams	Mary Adomeit
Neil Stafford	Stephen Jacobs
Lisa Lewis	John Stewart
Marty Landa	Sheila Cowden
Darlene Schanfald	Susan Cox
Steven Carpenter	Brian Reynolds
Sheila Cook	Jeannie Park
James Sim	Elaine Fischer
Roger E. Sherman	Cassius Glikshtern
Eric Steele	Larry Morningstar
Debra Pratt	Eugene Bachmanov
James Roma	Anton Kalafati
Jane Anderson	Peter Glikshtern
Lori Ugolik	Anastasia Glikshtern
Joan Diggs	Danielle Buckley
Richard Laybourn	Roy Johnson
Melanie Cahan	Nicole Green
Trina Aurin	Gumus Ozkok
Julie Griffith	Susi Hulbert

Mary Eide	Linda Carroll
Bartley Deason	Stacy Reedy
Fawn King	Marcia Jimenez Scott
Edward Laurson	Elizabeth Scherbak
Bruce Krawisz	Maureen Quinn
Darius Fattahipour	Ralph Corbo
Kimberlee Martin	Sarah Gallagher
Mary Barbezat	Donna Browne
Paul Horne	Colleen Noland
S S Barbuto	Ginger Brewer
Kris Strate	Denise Jennings
Susan Kutz	Terri Maldonado
George Grace	Lynn Shoemaker
Marcel Liberge	Michael Tezla
Cara Brzezicki	Beth Braun
Rob Weinberg	Cheri Kirschenheuter
Steve Kent	Amanda Yoder
Elizabeth Ramsey	Susan Wolf
Renee Skudra	Madeleine Souza
Gretchen Grayum	Susan Pernot
Deborah Brooks	Joe Salazar
Frank Fredenburg	Mark Trombly
Sandra Woodall	Barbara Trombly
Bill Rubin	Deborah Schneider-Murphy
Maria Gonzalez	Bernardo Alayza Mujica
Rebecca Gentry	Grace Ramirez
Robin Nadel	Barbara Hitching
Melissa Friedman	Brandi McCauley
Boris Dirnbach	Mary McKenzie
Claudia Fischer	Larry buckler
Carole Mark	Bonita Staas
Catherine McNamara	Aimee Kardulas
V.L. Brandt	Peggy Acosta
John Chenoweth	Robert Rohner
Judith Abel	Colin Broadwater
Jeffery Olson	John Markham
Erika Wanenmacher	Teri Forester
Carolyn Stallard	Kyle Jones
Brian Field	Debbie Schlinger
Richard Gillaspie	Lisa Salazar
Kim Hall	Robert Camp
Ginger Hipszky	Silvana Borrelli
Deborah Bryant	CT Bross

Patricia Mchugh	Mindy Bradburn
Joanna Kling	Lynn Camhi
Debra Bruegge	Dirk Rogers
Margaret Handley	Nancy Reyering
Eric Czerwony	John Markham
Annabelle Herbert	Ravi S
Paul McCullough	Adina Parsley
Anne Marie Call	Pearl Zalon
Carol Thompson	Raymond Arent
Birgit Hermann	Judith West
Art Jacobson	Lyn Capurro
Gerald Quenell	Steven Zien
Miriam Baum	Maryn Jones
Bianca Molgora	Sharma Gaponoff
Linda Greene	Kristina Lamons
Prisca Gloor	Tara Wheeler
Elizabet Baker-Smith	Kelly Riley
Gerritt Baker-Smith	Bryan Bell
Elana Katz Rose	Art Hanson
Jeanne Heldwarmkessel	Leslie Burpo
Mike baldasio	Leslie Spurling
R Tippens	Richard Peterson
Sharon Zayac	Anne Doane
Kurt Speidel	Russell Novkov
Jacqueline Bobnick	Nicole Shaffer
Patricia Chambers	Laura Waterworth
Colleen Lobel	Rowena Caldwell
J Wilson	Pamela Unger
Heather McMillan	Karen Rubino
Barbara Lafaver	Nicole Shaffer
Peggy Quentin	Frances Mackiewicz
Nancy Yarosis	Carol Grady MacRae
Carol Storthz	Dara Alexander
Mary Stock	John Watson
Steve Sheehy	Sandra Uribe
Anne Lazarus	Mary Rivas
Matt Geer	Gaye Webb
Cody Dolnick	Kerri Piazza
Alexandria Gardner	Tina Bailey
Laura Alleman	Andrea Hall
Randy Monroe	Virginia Mendez
Neal Steiner	Tiffany Baker
Michele Temple	Meredith Tucker

Sarah Dean Pamela Sieck Anita Buffer Christi Dillon Dorothy Lynn Brooks Judith Hazelton James K Hadcroft David Fiedler Gail Tanner Jennifer Barbara Sylvia Dumford **Tia Triplett** Ian Moody Joan McGrath Janeane Moody Jacqueliine Baruch Susan Dorchin **Deborah Spencer** Katherine Nolan Nancy Newton Judy Fairless S. Nam Nathan Cassiano Nancy Van Affelen Lois White Deb Giannetti Daniel Brant Janice Haggerty Patrick Niese **Deimile Mockus** Jean Ann Marwick Karen Kalavity Ruth Cook Donna Fountain Diane Basile Monique La Marca John P Davis Corinne Ferre Maria O Donnell Cristin Hill Daniel Denis Kim Zwicker Karin Braunsberger Sally Newman Karen Kravcov Malcolm Lozz Starseed Elizabeth Mitchell Lorraine Heagy **Richard Stern** Jason Nichols Terry Jess Tracy Foster Adi S June Elliott-Cattell **Bonnie Duman** Linda Thompson Johnny Sauter Elizabeth Smith Irene Stumberger **George Bourlotos** WF Clement J.A. Clayman Steve Trammell Matthew Weaver Christa Neuber Alexa McMahan Helen Engledow Jody Schulman Morena Dunn Andrea Zinn Tim DiChiara Greg Gregg John Crosby **Kimberly Nieman** Jeffrey Hemenez Stanley Peterson **Caroline Themm** Nancy Pichiotino **Phyllis Burks Rick Hallin** Bonnie Dombrowski Marian Sandweiss Gerald Shaia Nicholas Prychodko Debra Miller Miller Barbara Pohl

Heidi Ahlstrand Elizabeth Ashby Kathleen Williams Wanda Plucinski Jennifer Brandon John Brown Laurie McCartin M S Dillon III Steven Adams Judy Scriptunas Ken Mundy Anne M Maureen McCullough Michael McMahan Amanda Smock Elizabeth MacKelvie Tricia Reeves Joan Menter Nilah M. MacDonald Cynthia Hull Frank Pilholski Kellyann Morander Carolyn Kostopoulos Amitav Dash Richard Han Mary Stanton Ruth Steenwyk Sherri Wright Melinda Keith-Singleton Diane Kossman Susan Eck Parrie Henderson Donna Butler Ilva Turov Peggi Woodmansee Kathy Brown Marie Driscoll Lorenz Steininger Christina Roe Shawna Whiteaker Roxanne Bohana Joanna Grinberg-Ayala Lorne Beatty Frank Stroupe **Grayson Porter** Sherry Knoppers Julie Rice Joan McGrath Landis Crockett **Roberta Young** Patric Kearns Sherry Goodreau Michael Haskell Laura Ackerman Lynda West Andrea Kilcher **Michele Colopy** Alexandra D. Pappano Judith lam Marie Michl Mark Cutter Lora Leland Christina Vollbrecht Frank Matalone Carole Klumb Tammy Fait Susan Eikenbary S. L. **Bonnie Wassmer** David Gross Linda Sparks Dana May Ellen Bander **Randal James** Donald Leisman Patricia Shafchuk Michael Rosen John Hila Joanne Hedge Maren Kentfield **Barbara Frances** Gloria Aguirre Debra Gleason Erika Mohos Julia Cranmer Michele Denski

Pam Rumble Sara Sexton Vickie Bianco Sha Davies Carol Hoke Joseph Suarez Anna Browder Anah McMahon Dolores Guarino Tracy Marotta **BK Young** David Burtis Jeff Reynolds April Tarabocchia Jerome Milks Margo Wyse Matthew Lipschik Deidre Brown **Robert Fingerman** Ronald Brown Mary Hard Greg Espe Dennis Ledden Joe Rov Kalinke ten Hulzen Paige Harrison RN James Peloquen **Gladys** Reyes Carrie Watson Kris B James Dinsmore loe S. Dan Esposito Sandy J. Pamela McDonald Sarah Johnson Jamie Le Carrie Swank Linda Prostko Karl Koessel Gina Norton Janick Sanson **Debbie Lyons Deborah Brooks** Nady Corvers Laurel Facev Irene Radke Diane Salsitz Nina Diamante Gary Thaler Vera Cousins Shivangi Singh Teresa Lovino Angela Bellacosa Norda Gromoll David R Wilcox Nancy Thelot Marek Musnicki Nina Diamante Ken Canty Holly Zersen Lynn Luther Mike Souza E Pajak **Gregory Whynott** Mary Ann McFarland Marco Pardi Gerhild Paris Patricia Foley Mike McCool Lezlie Ringland Erin Znidar Linda Townill Mike Benco Judith Smith Andrea Benco Lisa Kellams Susan Cunningham Elaine Sloan Michael Cecil Melanie Mahoney Stopyra Jean Goetinck Amanda Busch Dawn Coppola Henry Miller Ann Atwater

Thomas Hallal	Jessica Likens
Carol Jagiello	Steve S
Wendy Stevens	Judy Rees
Michael Combatti	Monika Ph
Landis Helie	Susan Sorg
Palmeta Baier	Christopher Ecker
Jennifer Emerle-Sifuentes	Debbie Haman
Dave Ringle	Carlin Freeman
Hilary Noonan	Melinda Geiger
James Williams	Ragen Serra
Jan Kampa	Arleen Ferrell
Justin Maxwell	Clara Rincon
Stephanie Willett-Shaw	Shannon Markley
Sally Small	Theresa Hebron
Jean Cheesman	Kira Durbin
Sally Spelbring	Charles Casper
Ruth Woodcock	Marina Martinez
H Brown	Steve Crase
Pamela Hamilton	Sonia Romero Villanueva
Susan Levin	Noel Orr
Ana-Paula Martins-Fernandes	Diana Saxon
Barbara Beier	Lou Orr
Lyn du Mont	JoEllen Rudolph
Jackie Pomies	Suzanne Gordon
Mark Mansfield	Steven Kranowski
Laura Regan	S. Kaehn
David Nichols	Jo Greenwald
David Gerke	Adam Levine
Alisa Battaglia	Carol Bostick
Gail Walter	Judith Falck-Madsen
Sylvia Duncan	J Cannon
Ronit Corry	Barbara Blackwood
Desiree Reynolds	Susanne Berntsson
Erika Davis	Nicholas Lenchner
Jon Krueger	Emily Willoughby
Thane Bedard	Greg Rosas
TJ Thompson	Lea Coreau
Michael Pan	Ann Nevans
Susan Torres	Ruth Clifford
Steve McNeill	Susan Goldberg
Julie Knutson	Barbara Cohn
H. Porter	Pietro G. Poggi
Karen Mayer	Denia Tsiriba

Janet Bindas	Helen Anderson
Nancy Dollard	Isabelle Lorans
Leslie Spoon	The Rev Dr Edward Kern
Karl Steinberg	Michael Worsham
Kathryn Burns	Jo Forkish
Janell Smith	Hank Keeton
Dita Skalic	Leuise Crumble
Myles Hunt	Crystal Reamer
Nivo Rovedo	Yvette Tapp
Katherine Dander	Iris Rochkind
Sharon Kelts	Bonnie Svec
Brian Gibbons	Evelyn Pietrowski-Ciullo
Georgia Mattingly	G. G. Johnson
Johanna Abate	Leo G Younger
Laurel Tarbis Brandt	Jeffery Shuben
Daniel Slade	Beverly Antonio
Brett Mitchell	Lascinda Goetschius
Cathy Hope	Jan Schachter
Christine Lindenmuth	Satya Vayu
Sherry Hill	Raleigh Koritz
Jarrett Cloud	Carlos Echevarria
Stacey Dillingham	Ross Heckmann
Jodi Rodar	Sharon Fetter
Claire Perricelli	Virginia Watson
Judy Jolin	Holly Hall
Sally Maish	Diana Rothman
Lisa Klepek	Michele Nihipali
Lawrence East	D Bello
Rhoda Levine	Carla T Dilgard
Nancy Fleming	Dennis Adkins
Carole Mathews	Pamela Coker
Cynthia Liss	Patricia Pruitt
Elizabeth Enright	David Hammond
Georges Raymond	Laurie Eisler
Sherrill Futrell	Pamela Johnston
Andrea Snyder	Jeremy Baptist
Rhonda Johnson	Autumn-Ray Russell
Dina Koehly	Robert Burkowski
Laura Colston	Peter Souza
A Piri	Cathyelizabeth Levin
Sue Velez	Catherine Foley
Susan Hauser	Marie Grenu
Mox Ruge	Edie Bruce

EC	Rob R
George Weinkotz	Timmie Smith
Dennis Feichtinger	Hannah Salvatore
Carol Kommerstad-Reiche	Jennifer Cunningham
Diana Bohn	Pierre Schlemel
Nicola Nicolai	Terry Friedman
Charlotte Nuessle	J. Barry Gurdin
Lynne Walter MSW	Meya Law
Helene Rosen	Carla Tevelow
Tia Pearson	Gary Brooker

Linda Bridges Alexia Valdora Walter Schmitt Lana Schmitt Jim Yarbrough Kelsey Kennedy Tracy Feldman Kathleen O'Connell d'Anne MacNeil Neilia Pierson Linda Tabb Candace Rocha Lori Kegler Linda Chase Dale La Cognata Maureen O'Neal Elise Phillips Margulis Darren Mitton Crystal Hart Cheryl Walker Adrienne Ross Gilda Fusilier Harrison P. Bertram Jack Phillips P Nunez Jeffrey Sanders Barbara Singer **Diane Ethridge** Tina Brenza April Doyle Maureen Ackerman Shannon Meckley Karen D Felts Stephanie McFadden **Ron Price** Patricia Harlow Linda Alwardt Danielle Montague-Judd Toni Thomas Allison Anderson Kathy O'Brien Margy Weinberg L. Fielder

Additional Comment or format

JoEllen Rudolph John Scott Lisa Claydon Christopher Lish **Ronald Clayton** Lary McKee **Douglas Morse** Theo Giesv Chris Omeara Dietrich Sonja Fanz Leona Bochantin Kelly Ryerson Megan Bogue **Elaine Stevick Christopher Stevick** Jenelle Potvin Shubra Sachdev Dietmar Zapf Deborah Auer Kurt Neff **Dennis Mayer** Vickie Mrva Robert Kremer Nanette Oggiono **Stephanie Frick** Lauren Murdock Wende Schoof Lisa Salazar Brian Reynolds **Diane Pulsifer** Julus Cornett Nicole Lenihan Pamela Roger Cynthia Lee Probyn Gregory Cristal Garcia A.L. Steiner Hannah Lange Ariel Holdsworth Christopher Benjamin **Diane Berliner** Keiko M. Karen Sharrar

Michelle Kaufman Judy Alter Penelope Prochazka Lacey Hicks Jaremy Lynch Athena Fitch Rachel Ford Cornelia Shearer James H Fitch Mary Chieffe Nancy White Mary Keithler Christine Austin L. Rodriguez Phil James Mike Lanka Margaret Richardson Jon Kiesling Linda Gillaspy A. W. Karen Donaldson Kristine Frisbie **Beverly Gundlach** Craig Lipp Tim Porter **Dianne Ensign** Sabrina Fedel Barb Galordi Priscilla Skerry Leonard Wojno **Richard Martin** Ellen Redish Jane Nachazel-Ruck Elizabeth Watts Jill Bohr Jacob Julie Smith Jaci Riley **Dianne Douglas** Kenneth Babineau Andrea Gruszecki B Methven Frank Wilsey Diane Schrack

Additional Comment or format

Carly Monnin Stefan Petersen Mayra Sanchez Natalie DeBoer

Betty Winholtz Cosima Krueger-Cunningham James Senger Kari Jackson Lib Smith Tracy Ouellette Tami Phelps Heather Roda Saveria Garcia-Macri Carolyn Massey **Robin Pinsof** Jason Husby Marcia Hoodwin Leslie Calambro Jeanne Thathcer Beatrice Elsamahy Dana Jacobsen Christina Bueno Roberta Claypool Maria Walker Genie McCombs **Bob McCombs** Ellen Hogarty Erica Coco Barbara Stenross Margo Salone Shannon Healey Brenda Barnes Jeff Omans Kathleen Repole Linda Gertig John Miskelly Jennifer Riso Jennifer Gitschier **Diane Phillips Robert Meyer** Michael Lombardi Mike Anuszewski David Dragon Don McKelvey **Beverly Harris** Sharon Wojno Paul Ghenoiu

Elizabeth Joseph Jonathan Jensen Joseph Quirk Antoinette Ambrosio Joseph Brigandi **Emily Sagovac** Nancy Currah Chris Guillory Mal Gaff **Bill Carroll Bob Wandle** Polly O'Malley Kathy Bradley Ken Sanford Chanda Farley Patricia Whitlock Kent John Clark Linda Thompson Adriana Nunez Lynn Costa Joyce Grajczyk Jackie Stolfi Sharon Nicodemus Deb Christensen Charlotte Curdes Joel Finley Susan Pelakh Guy Tourangeau Carolyn Villanova Harold Watson Chris Blyth Yazmin Gonzalez Pati Tomsits Mary McKenzie Hunter Klapperich Paul Howard **Bob Miller Diana Anderson** Karen Rome Jerry Clark **Bruce Higgins** Patricia Moorehead **Emily Rothman**

Marsha Stanek Renee Arnett **Rich Moser** Janice Jones Cathy Haft Jane Cease Debbie Blair Suzanne Andersen Gary Thaler Thomas Giblin Josephine Scipione Catherine Houtakker Gloria Fischer Ibn-Umar Abbasparker Joann Koch **Rachel Berg** Joyce Frohn Jeff Levicke Erica Johanson Mary Keil Christine Le Blanc Sylvia Chai Al Coury Christopher Smith Michael McCartin Gina Paige Judith Barnes Linda Costelloe Susan Leahy Lorraine Brabham Alfred Mancini Katherin Balles Dara Murray Charlie Graham Lynda Strecker Rebecca Oberlin Amy Hansen Henry Martinez Rebecca Canright Т Мо Katherine Barrett Zywan Marian Cruz Mark Glasser

Christy Molenkamp J. David Scott Mha Atma S Khalsa Brett O'Sullivan Karen Wolf Erin Znidar Kevin Walsh Joshua Seff Debra Brown Shirley Obeya Ann Craig Mark Canright Antonia Chianis **Edward Rengers** Nanette Oggiono Carol Baier Ann Morris Cockrell Heath Post Dallas Windham Elizabeth Conrey Karen Levins Susan Tucker Harriet McCleary Kathleen Eaton Doreen Gruchawka Cyndi Hunt Thomas Nelson Joann Ramos Barbara Rabin William Maynard Melodie Quall J.T. Smith Bita Edwards Gina Gatto Juanita Puntasecca S. E. Williams Lynn Ricci Cheryl Biale Philip Shook Lauren Wilson William Dresbach Katrina Dresbach Amber Angel

Nancy Hendrickson Vera Hauptfeld-Dolejsek Blake Wu Donlon McGovern **Hilary Capstick** Kat Thomas Chris Paterson Ellaine Janicki Nan Stevenson V Evan Grace Suenaga Jody Gibson Jan Stautz-Hamlin Brian Yanke Helen Jones Brian Yanke Joyce Dixon Bruce Long Lorna Paisley Nicole Knauber Valerie Romero Allan Peterson Lana Kelley Linda Jones Aimee Wyatt Christine Morrissey Barbara Rosenkotter Fran Watson Kay Randall Karen Intorcia Patti Schultze Linda McKillip Marilyn Hallihan James Robertson Kay Reinfried Barbara Andrew Eugene Son Lisa Daloia Cheryl Shushan Laura Chinofsky Stephanie Smedley Nadya Schmeder Jerry Curow

Justine Karadontes Jim Kelly Nina Kelly Ellen Koivisto Chuck Schwartz Keith Portka Nicholas De Santos Cricket Blanton Mandy Moon Janet Almond Tami McCready Priscilla Martinez James Felizola **Camie Rodgers** Catherine Loudis Matthew Schaut Carol Book David Scharf Cecilia Dunbar Hernandez Bernardo Alayza Mujica Pamela Shaw Christine Piekarski Kate Kenner Dale Gunn Mikki Aronoff Kym Waugh Francis Mastri Loryn Ankeny Stephen Harbulak **Beverly Jennings Temple Weste** Charles Wieland Melissa Lawrence Derek Gendvil Jaci Wilkins Patricia Christianson Cassandra Cranmer Annick Baud **Belinda** Colley Susan Brown **Terry Ring** Patricia Baley Victoria Miller

Shelley Hartz Jim Hale Don Parsons Margaret Lohr Aloysius Wald Kathleen Conner Darynne Jessler Soretta Rodack John Kirchner John Petroni Marcia Kellam Margaret Mogg Anne Veraldi Kathie Takush Constance Monath Deirdre Downev **Rickey Buttery Teresa** Pitts Barbara Laxon Linda Shirev Juli Hamilton Sonja Plumb Sharon Budde Martin Kornbluh Virginia Bennett Carrie West Galen Trembath C Porrello Patricia DeLuca Joan Ellen Mccoy Gail Noon Sharon Burge Gregory Zyzanski Jeff Schwefel Laurie Kinnings David A. Donna Newman **Jill Nicholas** Warren Woodward Amanda Gordon **Cheryl Gross** Claire Maddlone Lilly Knuth

David Paquette Sara Fogan Julia Bottom Mari Dominguez Ken Burritt Lanna Ultican Beth Darlington Heidi Ludwick Eric Robson Janice Baxter Diane Rohn G. M. Audrey Morgan Michael Lyons Jane Oldfield Christopher Wenzel Bo Breda Sheila Ward Amanda Dewey Pete Wilson **Emily Fano** Ann Hansen Stephanie Jones Carolyn Latierra James Deshotels Shelley Wehberg **Tracey Bonner** Susan Adams Edith Crowe Jeanne Fletcher Maryke Petruzzi Carol Collins Frances Stefanski Val Laurent Karen Christian **Robert Smith** Karen Halbisen Brenda Hartman Wayne Teel John Fleming Jean Fleming Angeles Méndez Martin Hecht

Leslee Eldard Rael Nidess MD Mark Grenard Lisa Butler Debra Shepler Steven Gaylord Charlotte Bolinger John Wienert Greg Dudley Nancy Warlick Ashley Farreny Thomas Warner Nelson Baker Stephanie C. Fox David Bezanson PhD Sally Oesterling Carol Ohlendorf Dan Fischer Wendy Fischer Heidi Sikina Megan Ramsey **Eleanor Smithwick** Alison Lees-Taylor **Robrert Swift** Patricia Rossi C. Kasey Janet Neihart Karen Stein-Ferguson Kathryn Kushman **Bonnie Faith-Smith Phyllis Chavez** Tami Hillman Michael Sarabia Margaret Rangnow Karen Maxa Michele St Peter Rob Lawrence Margi Mulligan Sheila Desmond April Eversole Sarah Jenkins **Becky Andrews Diane** Pease

Mary Camardo Martin Kornbluh Jacqueline Eckert Robert Knauber jr Sean San José Martha Strother Nichole Warwick Eric Simpson Sandra Smith Tamra Miller Marlena Langg Donna Walker **Phyllis Schmidt** Nena Cook Lawrence Bojarski Gaia Cole Francesca Testa Lisa Palermo Mary Lebert Robert Janusko Terry Colegate James Sullivan Deborah Voves Christine Muldoon Laurence Margolis Rosemarie Shishkin Nancy Kelley Dawn Mello Jean Newcomb Lucymarie Ruth Jean Naples **Bennie Scott** Gail McMullen Linda McCaughey Barbara Potter Dennis Trembly John Cielukowski Monica Bonualas Pamela Kjono **B** DEmilio Rosanne Cataldo Stacy Bell Kate Skolnick

Paul Lifton Kian Daniel Michael Gumpert Cal Cole **Rochelle Gravance** Ed Cornwell Marjorie Xavier Pete Lesinski Madalyn Pickering Tobi Tyler Sandra Mann Jack Milton Stephen Craig Rolston Leotien Parlevliet Croitiene ganMoryn Jessica Fielden MD Evelyn Kirby Joanne Dean Dana Barela John Graham Heidi Palmer Frank Belcastro Lisa Isley Lynn Gazik Cheryl Carney Charles Fox Tonya Stiffler Nancy Stamm Karen Berger Pati Tomsits Karen Reid Bobi Lynch Nora Sotomayor Joyce Frohn **Peter Fairley** Kathy Pearson Susan Kepner Denise Hosta Judith King Ken Sanford Dawn Kenyon Stephanie Nunez **Claudette Ashley**

Caroline Miller Connie Curnow Montserrat Aragonés Ciurana Elizabeth Kinney Antoni Grippi Sandra Tucker David Anderson Carol Joan Patterson Marsha Lowry Heidi Handsaker Amanda Collins Samantha Turetsky Debra Roy Anne M Craig Clark Janice Banks Frank Aktabowski Eva von Bronk Karen D Felts Jean Marie Naples, MD-Ph.D. Mark Glasser MaryLynn Michaelis Elizabeth O'Mara Mary A Leon Lisa Cossettini Eileen Juric S. Nam **Denise Romesburg** Kerry Beane Maria Kordes Linda McCaughey Mary Gant John Finazzo George Baschiera Susan Ebershoff-Coles Judy Moran Celeste Anacker Lisa Jack Т Мо Amy Kacher Claudia Correia Isabel Cervera Laetitia Petit

Charlette Herbesen	Caralina Cávilla
Charlotte Harbeson	Caroline Sévilla
Mary Graves	Judith Cohen
Pamela VourosCallahan	Alan Papscun
Linda Avinger	Sally Hinshaw
Diane Olson	Mary Bobadilla
James Donahue	Megan Faber
Cesar Raposo	Joe Tutt
Kristyn MacPhail	Marianne Hoffman
Michael Parsons	Doug Franklin
Mauria Sazonov-Robinson	Frances Carpenter
Kim Allen	Sharon K Wilson
Juliann Rule	Katherine Wright
Michele Page	Thomas Connor
William Dolly	Sherry Vatter
Mary A Leck	Lisa Acher
Cynthia Edwards	Candace Bassat
Winston Huang	Robert Sargent
Susan Schmidt	Mark Youd
Betsey Porter	Linda Gazzola
Shirley Gilford	Bil Polesnak
Sherry Beck	Susan Turner
Veronica Bourassa	Mary Shabbott
Carol Taggart	Vic Bostock
Andy Lynn	Avis Deck
Chris Dacus	Stephanie Mory
Alice Rim	Calli Madrone
Connie Grogan	Martha Wallace
Linda Fleming	Pam Evans
Jon Pitt	Sue Harrington
Carol Wagner	Michaeline Hade
Paula Cohen	Laurie Denis
Karen McGuinness	Joelle Porter
Julia Skelton	Tara Lakshman
Maureen Wheeler	Amber Sumrall
Norm Wilmes	Veronica Schweyen
Holly Garland	Martha Burton
Claudia Devinney	Steve Iverson
Deborah Landowne	Mary Rojeski
James McBride	Marci Moss
Joan McCormicl	George Stradtman
Karen Spurr	Stephen Hulick
Arlene Zuckerman	Kathleen Hulick
Kathi Ward	Carolyn Nieland

Josephine Cristobal	Paula Morgan
Tara Gonzales	Joan Murtagh
Dan Carroll	Frank Sennett
Garry Taroli	Christina Babst
Barb Powell	Julie Levine
Marya Zanders	Liz Erpelding-Garratt
Tanya Piker	Thomas Nieland
Lorrie Montgomery	Elizabeth Ende
Joanne Conti	Timothy Post
Thomas Baron	Allie Tennant
Sharon Davlin	Casee Maxfield
Mary Kornbau	Kimberly Seger
Marie Wakefield	John Everett
Elena Perez	Elvira Johns
William G Gonzalez	Terry Shistar
Louise Wallace	Aixa Fielder
Pablo Bobe	Elaine Cuttler
Lisa Horn	Jean Cameron
Pamela Noyes	Kathy Kelly
Mitch Dalition	Jeremy Spencer
John Wheeler	Marianella Torres
Susan Cann	Marjorie Clisson
John Scott	Bonnie Barfield
Nancy Cencula	Charles Massey
Rob Rondanini	Theodore Johns
Janet Hofmann	Ronald C Faas
Pam Zimmerman	Karen Soloman
Kathy Oppenhuizen	Geri Collecchia
Chey Richmond	Lisa Mazzola
Vic Burton	Aleta Halter
Kimberly Musselman	Charlie Burns
Lynne Glaeske	Cat Tailer
Randy Hernandez	Janet McCalister
Linda Hassa	Tracy Boyle
David Marshall	Jane Lyon
Becky Monger	Pamela Miller
Michele Johnson	Brad Budnik
Janice Banks	Shelly Wallace
Susan Sorkenn	Elaine Becker
Ellen Sanford	William Ryder
Maria Gomez	Lloyd Lloyd Hedger
Tanina Linden	Susan Dean
Paula Martin	Michael Schumm

Kris Cordova	Sally Morrow
Janice Dlugosz	Katherine Le Clercq
Jo Harvey	Eduardo Castro
Cindy Shoaf	Andrea Nutley
Kris Knoll	Douglas Cooke
Myra Berario	Chris Stiff
Tracey Katsouros	Brent Spencer
Paul Jarocki	Cori Bishop
John Stevens	Susan Burian
Courtney Franklin	Jeff Douglas
Gail Jarocki	Dawn Kenyon
Dianne Alpern	Craig Clark
Michael Dorer	Brenda Spoo
Lynette Ridder	Brenda Eckberg
J.P. Sherman	Donald Taylor
Jeanne Marple	Joan Clement
Gloria McClintock	Saula Siegel
Mary Jean Sharp	Dagmar Mclaughlin
Faith Franck	Suzy Sayle
Karl Lohrmann	Gina Stiff
W.A. Milani	Julianne Ramaker
E. Neiman	Linda McCrosky
Robert Foley Jr	Michele Paxson
Helga Guequierre	Carlos Arnold
Marilyn Byrne	Jeffrey Hurwitz
James Jackson	Chris Wren
Brandie Deal	Robert Kennedy
Jane B. Middlesworth	Janet Robinson
Sy Kover	Gael Faller
Carolyn Marion	Margaret Schulenberg
Rebecca Banner	Robert Reed
Jeffrey McCollim	Ron Bartosh
Hilary Back	E Paxson
Lynnward Lacy	Dena Lenard
Karen Fedorov	Harriet Cohen
Dia Tsung	Sammy Low
Kathie Noga	Janet Walls
Alexandra Manning	William Ridgeway
Vance Arquilla	James Howarth
Anne Hedberg	Janis Todd
Bree Pugh	Melissa Marcolina
Lenore Reeves	MC Hagerty
John Dodge	Pamylle Greinke

Judy Savard
Anne Ambler
Evan Morgan
Charlene Henley
James Roberts
Peter Kahigian
Andrew Robbins
Susan Porter
Anthea Wray
George Fairfax MD
Robert Haslag
Paul Kalka
Katherine Wright
Kathryn Johanessen
Richard Tregidgo
Michelle Diss
Robert Cobb
Phil Fitzgerald
Linda Pluschke
Jud Woodard
Robin Franco
Patricia J Rose
P Lepore
Candice Barnett
Deborah Smith
Debra Rehn
Jeff Zagray
George Leddy
Karen Kirschling
ĴΗ
Caridad Romaine
Steve Lucas
Phil Fitzgerald
Denise Wheeler
Paul Daly
Doug Dyer
Susanne Hesse
Laura Long
Wendy Adams
Lance Ofenloch
Todd Wolf
David Pomeroy
Teri Smith

Jacoba Dolloff Elizabeth Adan Rebecca O'Dell Jamila Garrecht Meryl Pinque Susan Kalan Linda Swan Shannon Mondor Joan Cummings Nagi Mato Bridgett Heinly Anne Parzick Dale Riehart Joan Bell-Kaul Benita J. Campbell Joan Peter Joyce Niksic Grace Neff James Mulcare Kathleen Medina Malcolm Elgut Nancy Ellingham Karen Christiansen José Leroux Dennis Dougherty Edward Cavasian Vicki Jenkins Mary Kelchak Camille Gilbert Janice Williams Rita Lemkuil Chad Johnson Knud Padborg Jayni Chase Judi Poulson Aurelie Ward George Baschiera Katherine Hutchins Colette Love-Battista Sheri Spain Cynthia Rose Debra Heathelry **Clifford Myers**

Silvia Rocha	Jim Melton
Julian Corley	Anita Simon
Rebecca Carey	Susan Ford
Jim Abbondante	Warren Alle
David Broadwater	Kevin Crupi
Brenda Gaines	Sharon Your
Karen LeMay	Marilyn Wal
Elaine Edell	Susan Cliffor
Diana Gazzola	David Dzikov
Bruce Hlodnicki	Matt Lope
Marie Banks	Marlena Tza
Cynthia Kobak	Robert Obrie
Patti Eckert	Fritzi Cohen
Rick Blanchett	Jude Lotz
Yvette Goot	Maureen Ly
Deborah Dahlgren	Barbara Tho
Joe McCullough	Bonnie Gorr
Georgia Goldfarb	Diane Eisenł
Claudia Wornum	Elaine Holde
Donna Bonetti	Yvonne Mat
Karen Spradlin	Jamie Green
Sandra Parciak	Vera Lazar
Dawn Albanese	Sandy Newh
William McGunagle	Tina Ann
William McMullin	Jonathan Mi
Louise Calabro	Michael Bon
Ryan Bradley	Candace Car
Silvia Hall	Dudley Cam
Leo Lieber	Kimberly Pe
Gloria Picchetti	Jill Madigan
Phoebe McLeod	Sarah Silva
John Peeters	Polly D Pitsk
Marie D'Anna	Nicolette Fro
Mike Turner	Ezra Mann
Connie Tate	Crystal Fairle
Querido Galdo	David Soare:
Heather Cross	Maureen Sh
llse Burch	Denise Host
Don Booker	Ellen McCan
Toby Ann Reese	Sandra Tuck
Mary Foley Foley	Randy Gyory
Barb Boinest	Theresa Mu
Karen Peterson	Edward Ciac

mons ord Allely rupi Young Waltasti lifford zikowski pe a Tzakis Obrien hen tz en Lynch Thomas-Kruse Gorman RN isenhower lolder Mathewson ireen zar lewhouse n n Mitchell Bondoc e Campbell Campbell y Pettit igan ilva Pitsker te Froehlich nn Fairley oares en Sheahan Hosta cCann Tucker Syory Murphy Ciaccio

Cindy M. Dutka Juli Van Brown Gina Caracci Aimee Millensifer Stephen Boletchek Kristin Vyhnal Angela Stuebben Michelle Lind Krista Slavin **Fllen Halbert** Lisa Witham Jeff Lowry Dorene Randall Michael Morningstar **Flaine Parker** Flise McCoubrie Carla Earl Marsha Lowry Denise Halbe Linda Szurlev Lois Jordan Annie McCann Mary Williams Susan Galante Lois Dunn Kathryn Lemoine G.W. Cheney John Jumonville Margaret Easter Mike Brinkley **Robert Beggs** Kendra Knight **Michael Deangelis** Andrew Jackson Marie Curtis Nancy Burger Sandra Dal Cais Wolfgang Burger Caroline Hair Karen Dushek Donna D Varcoe Barbara Tountas Kevin O'Rourke

Janeene Porcher Sarah Townsend **Rosemary Bilchak** Diane Hestich **Rvan Burger** Adrienne Metter Paul Dougherty **Gregory Duncan** Barbara McMahan Laurie Gorman Holly Marczak Thomas Edmonds Joseph Rodriguez **Ruby Loust** K Krupinski William Cramer Carlos Nunez Art Glick Marilyn McMullen Andy Tomsky Paula Rust Colette Wilson Maxine Clark Susan Siniard Angie Dixon Patrick Gorman Jeb Fries Joseph Zemgulys **Douglas Sedon** Nancy Or Monica Wood Marta Guttenberg Doris Luther Phyllis Chavez Mark Soenksen Devon Benton Anthony Mehle Sharon Longyear Alana Hendrickson Virginia Broadbeck **Randy Harrison** Andrelene Babbitt Marge Schwartz

Wayne Ott	١
Margo Wheeler	E
Kathleen Carr	J
Irwin Hoenig	F
Tina Wilson	[
Albert Ceriale	Ν
François Charpenay	[
Joyce Stoffers	F
Terri Knauber	L
Alison Cabell	E
Jerry Druch	F
Jim Hemmingsen	L
Tom Miller	J
Marian Cooley	Ν
Keith D'Alessandro	E
Mark Hanisee	k
Richard Kite	١
Paul Eisenberg	S
Sara Simon	Ν
Lisa Bergerud	(
Lisa Keim	١
Susan Linden	F
Daniel DuBoise	A
Linda Hendrix	F
BC Shelby	J
Alice Petersen	S
Cheryl Watters	Ν
Sandra Lambert	(
Dan Horton	[
Ciara Preston	J
Deanna Horton	S
Virginia Schneider	(
Dona LaSchiava	A
Kathryn Robinson	S
Carol Fletcher	L
Sudi McCollum	J
Mary Zack	S
Mark Meeks	k
Pat Matz	L
Stephanie Walton	[
James Hartley	F
Andre Meaux	F
Richard Creswell	(

Wendy Fast Elaine Eudy Jill Greer Patricia Packer DJ Fura Melissa Milano Diane Verna Richard Pendarvis Leonard Epstein Elizabeth Edwards Robert Palmer Lily Swartz Jill McManus Michael Martin Elizabeth Werner Katharine Christie Nadine Duckworth Suzanne Lippuner MaryAnna Foskett Cindy Moczarney Marilyn Logan Ron Juftes Anthony Straka Peter Wood Judy Moran Sandra Franz Michael Lee C E Mone Denise De Stefano Jeffrey White Shawn Johnson Cherine Bauer Alice Artzt Susan Kozinski Lilli Ross Jackie Tryggeseth Sandra Stofan Ken Schefter Lucinda Tucker Doug Krause Rachel Wolf Pamela Magathan Carolyn Ryan

Deyond resticides ronni Letters	
Peri Doubleday	Diana Williams
Mike Lynch	Patti McKinley
Jesse Gore	Janet Kregelstein
Lori Albert	Samuel Durkin
Amy Schumacher	Deborah Stull
Lily Mejia	Joyce Harrington
Dana Wilson	Cara Ammon
Ramona Thompson	Cheryl Kallenbach
Brian Gottejman	Dawn Pesicka
M. K. Russell	Julie Harris
Thomas Brenner	Sarah Dow
John Hahn	Claire Joaquin
Janice Hahn	Susan Wechsler
Steve Savitz	Millard Martin
Theresa Kardos	Meredith Tucker
Ruth A. Yacko	Jim Traweek
l Hurd	Dick Dierks
Diane Kokowski	Elizabeth Butler
Lisa Cubeiro	Andrea Whitson
Maria Jose Orobitg	Christopher Dill
Marilyn Kagan	Stanley Barreto
Christine Zecca	Mare Wahosi
Patti Ford	Sandra Cobb
Sharon LaLond	James Knott
Kathie Cunningham	Jeanne Dixon
Bruce Revesz	Gary Gover
llsa Lottes	William Crist
G. Willis	Cassandra Treppeda
Maria Steffen	Jan Beauchamp
Michael Lewandowski	Julie Parcells
Dorothy Stoner	Morgan MacConaugha-Snyder
Barbara Poissant	Jessica Mitchell-Shihabi
Cathy Holden	Beth Goode
Jerry Brown	Mark Reback
David Osterhoudt	Chas Martin
Daryl Stanton	Hans R Herren
Linda Wasserman	Jeffrey Gordon
Neil Puckett	Connie Beck
Mary Puckett	Janet H.
Kathy Emerdon	Marie Lohr
Michelle Mondragon	Stacie Hartman
Linda Williams	Elena Knox
Eleanor Weisman	Georgia Wier

Stephanie Reynolds	Dario Morell
Pat Blackwell-Marchant	Rob Jursa
Karen Thomas	Terry Bergeron
Nolan Bagalso	Richard Grove
Lindsay Suter	Lisa Brehm
Elizabeth Major	Elizabeth Darovic
Lavonne Knutson	Chris Hastings
A Kasbarian	Toni Noll
Rosemary Tann	Jane Butler
John Leonard	Joseph A. Wieczorek
Darcey Laine	Cornelia Teed
Cecil Philip	Jo K.
Charles Arnold	Kathleen Moraski
Paul Albrecht	Jan Modjeski
Michelle Richardson	Constance Walker
Patty Viers	Jennifer Schusterman
Evelyn Coltman	Chris Drumright
Stefon Lira	Jo Heaning
Robert Okroi	Rich Heaning
Lisa Pezzella	Dave Ogilvie
George Erceg	Jennifer Keys
Charlene Rush	Melinda Richards
Marjorie Faust	Elizabeth Roberts
Gail Amshel	Lois Lommel
Joe R	Babette Lewis
Kathleen Lee	Sandra Breakfield
Jill Davine	P Valentin
Elizabeth Bryant	Michael Iltis
Caroline Cunningham	Theresa Kelly
Robert Nerger	Vicki Burns
David Anderson	Susan Babbitt
Martha Richards	Maria Nowicki
llyana landes	Sandra Hazzard
Joseph Shulman	Elaine Dorough Johnson
Sheila Tran	Shanna Rose
Bernardo Alayza Mujica	Hillary Culver
Nancy Gregory	Art Wilkinson
Lee Walker	Kenneth McLean
Shari Sharp	Vicki Macina
Suzanne Hume	Don Pew
Michael Peterman	George Schneider
Allison Fradkin	Traci Hamilton
Joan Glasser	Fay Forman
	,

Beyond resticides ronn Letter.	S Necchica
Francine Traniello	Maria Soares
Lynne Bemer	Lynn Matarelli
Karen Steele	Erica Risberg
Pamela Llewellyn	Susan Yarnell
Bryant Belli	Stephen Brittle
Karen Orner	Mark Grotzke
Betty Marr	Karen Scanlon
Juliet Pearson	Joan Farber
Susan Vogt	Jill Meier
Kevin Branstetter	Jim Gergat
Charles R Shelly	Janet Kennington
Fournier Fernande	Beth Jane Freeman
Jana Perinchief	E. Neal
Elaine Davis	Donald Betts
Nancy Hartman	Cave Man
John Estes	Amy Henry
Ad Koch	Jeffrey Freilich
Jesse Williams	Virginia Bottorff
Kathleen Doyle	Cathie Sekendur
Nancy Heck	Marcelo Vazquez
Margaret Jensen	Susan Betourne
Colleen Lobel	Janette Shablow
Maryann Barulich	Gordon MacMartin
Ray Goldsberry	Laura Cicholski
Benjamin Valentine	Kathy Abby
Felena Puentes	Ernst Boyd
Mike Rolbeck	Annie Fernald
Ann Bein	Gloria Shen
Valerie Clark	Brooke Mcgowen
Liz Field	Ann Coz
Jorge De Cecco	Annapoorne Colangelo
Mary McCoy	Diane Knight
Gilly Lloyd	Les Roberts
Stefan Ciosici	Gerald Kuhn
Alessandra Urist	Kathleen Ward
JL Charrier	Emily Boone
Jeffry Anderson	Justin Small
Sue Biederman	Lisa Annecone
Desiree Nagyfy	Jason Steadmon
Namhi Lee	Stephen Newberg
Lois Nottingham	Robin Newberg
Debra Atlas	Michelle Anthony
Barbara Van Camp	Kathy Grieves

Crystal Chaffin	Luan Le
Brook Castrejon Solis	Susan Watts-Rosenfeld
Teri Lamour	James Dawson
Ronlyn Schwartz	Bruce Grobman
Kathy Zelaya	Julie Roedel
Jennifer Scott	Don Barth
Eve Saglietto	Leslie Mclean
Gary Hamm	John Harris
Donald Seeger	Carol Patton
C Emerson	David Meade
Suzanne Scollon	Laura Sholtz
Chris Chojnicki	Deb Sands
Marshall Sanders	Marcy J. Gordon
Judith Murphy	Jennifer Gindt
Dori Cole	Michael Laird
Katherine Robertson	Caroline Mead
Erline Towner	Takako Ishii-Kiefer
Judith Peter	Christina Nillo
George Casner	Richard Shannahan
Doretta Miller	Mary Tuma
Erica Munn	Agatha Forest
James Falsken	Doug Scheele
Wendy Ryden	Blaise Brockman
Carrie Darling	Pamela Harshman
Anastasia LaGuardia	William Skirbunt-Kozabo
James Lowe	Chad Fuqua
Merry Harsh	Terry Vollmer
Sarah Salter	B. Rodriguez
Laura Rich	Fritzi Redgrave
James Noordyk	Mindy Maxwell
Deb Lincoln	Joyce Crowley
Lillian Nordin	Laura Stewart
Diane Cornwall	Charles Savoie
Barbara Greenwood	Mary Langeron
Linda Brunner	Leon Cheong
Jeffrey Baker	Francois De La Giroday
Jeff Wilson	Philip Kritzman
Mary Hanley	Dwight Bodycott
Patricia Nadreau	Kirsten Wolner
Nancy Chismar	Joseph Haemmerle
Vira Confectioner	Robert Lombardi
Verlaine Halvorsen	Ward Giblin
Pamela Jiranek	Suzy Juncker

beyond resticides ronn Letter	Sheeenvea
Edh Stanley	Brian Deeley
Georgina Wright	Stephanie C. Fox
Dorothea Vanderstoep	Clifford Provost
Lisa Gordon	Karen Slote
Rena Lewis	Brandie Deal
Gavin Dillard	Gloria Lewis
Yves Decargouet	James Mulcare
Dawn DiBlasi	Jeffrey Sanders
Alexia Valdora	Aurelie Ward
Twyla Meyer	Meryl Pinque
Jamie Caya	Karin Strayer
Susan Finley	Mary Fraser
Lowell Young	Susan McCarthy
Michelle Hays	Susan Selbin
John Schmittauer	Jan Hartsough
Gail Roberts	David Hartsough
Liz Mahony	Muriel Strand
CT Bross	Karen Rhoads
Frank Kroger	Christine Wordlaw
Delene Hanson	Yvette Fernandez
Elizabeth Major	Rebecca Levinson
Noelle Eagle	Tammy Nogles
Kevin M McCarron	Terry Shistar
Kelly Choi	Jeffrey DeCristofaro
Sidne Baglini	Erica Hoffman
Lorraine Hartmann	Dan Norris
George Viveiros	Joyce Recker
John Livingston	Michael Olenjack
Mark M Giese	Ashley Hunsberger
Rita Pesini	Silvia Bertano
Bob O'Neil	Lisa Whipple
Lisha Doucet	Linda Hillman
Deirdre Morris	Kelly Byrnes
Paul Clinch	Pamela Alvesteffer
Laura Boss	Sherry Weiland
Harry Knapp	Nichole Diamond
Brian Waak	Joyce L Britcher
michael wohlleb	Tim Rose
Douglas Klein	Valerie Friedman
Sandra Joos	Catherine Hess
Lillian Anderson	Linda Howie
Jane Leatherman Van Praag	Pablo Ortega
Molly Kenney	Suz Bellew

Cara Schmidt Jennifer Quick Mary Smith Susanne Groenendaal Charles Dineen Victoria Peyser Sheila Miller Charlene Boydston Jennifer Will **Dennis Morley Colonel Meyer Kimberly Carden** Robert Good Theresa Bohannan Linda Kane Abdullah Goldstein Montserrat Ciurana **Stacey Francis Flizabeth Seltzer** Karen Robinson Gordon Kelly Jave Bergen Renee Carl Tracey Katsouros Cassie A. Murphy Charyse Kirby Janice Keiserman Chris Worcester Marilyn Martin Laura Jav Natasha Nitz Lvnn Wilbur Michael Crowden Priscilla Newcomer Cammy Colton Jocelyn Stowell Nicholas Prychodko Leslie Scales Kent Lennox Amy Roberts Eileen Reznicek Jacqueline Kelley Adele E Zimmermann Connor Hansell Javier Rivera-Diaz Michael Bertrams Bennette Reed-Dibben Dibben Sonja Malmuth Brendalee Smith Janine McNamara Anne Marie Call Jim Thompson Judith Dobkevich Marie lee Max Ventura Fred Karlson Michele Alexander Mindye Fortgang Donald Hunt Daniela Bosenius Susan Lantow Kathv Shores Macrina Rodriguez Thom Peters Maria Miller Hou Ba Mary Johnson James Covella Mary Seegott Michelle Oroz Marketa Anderson Shannon Velazquez Mickey White Geoff Skews Donna Selquist Grace Byrne Stephanie Clark Tracie Batson Lorren James Lauren Richie **Tim Barrington Rosiris Paniagua** Gloria Diggle Carl Barta Claudia Greco Judith Embry

Pete Childs	Susan Crispino
Emma Thomas	Scott Bathke
Pablo Voitzuk	Melanie Fisher
Roger Peirce	Tom Emmott
Dolores Pino	Anna Camarata
Frances Bell	Janie Martinez
Ann Stratten	Scott Weston
	Cathleen Weston
Pat Copenhaver Barbara Fite	Kitty Savage
Eileen King	Drew Martin
Mark Swoiskin	Daniel Mink
G. Countryman-Mills	Sharon Byers
Lois Grosshans	I R
Terrie Williams	John Delgado
John Nowlin	Darlene Jakusz
Nancy Hartman	Micaela Pronio
Marilyn Shepherd	McKenzie Blair
Vivian Dowell	Claire Gervais
Vicki Hughes	Mary Tarallo
Gayle Richardson	Tania Cardoso
Rhonda Bradley	Shadoe Drury
Dana Bleckinger	Thomas Goff
Dorothy Mirmak	Laurel Watson
Melvin Bautista	Anne Autry
Karl Birns	Megan Straughen
Mindy Stone	Linda Walters
Carol Jurczewski	Christiane Collienne
Gerard Hevey	Dione Del Monico
Suzanne a'Becket	Gloria Sharp
Debi Combs	Hey Hi
Alice Bowron	Steve Vicuna
Patricia Always	Julia Broad
Steven Wetstein	Sarai Aveleira
Ronald Drahos	Severine Chance
Gail Burns	Clare Halloran
Cathie Ernst	Shelley Strohm
Marilyn Rose	Victor Hemmy III
Priscilla Trudeau	Kerry Beane
Dawn Czapski	Sarah Koolsbergen
Joe Smith	Karen Hewelt
Charesa Harper	Robert Rivage
Jamie Thomas	Laura Collins
Gerry Milliken	Sandy Commons
.,	,

Carole Smudin	Steve Ford
Jack Zeilenga	Susan Caswell
Blaze Bhence	Elaine Livingston
Ellen Homsey	Donna Pope
James Walton	Deborah Allison
Maria Aragon	Vince Mendieta
Kat Stranger	Semena Curlik
Jayne Rosenberg	Paul Lauenstein
Darla Kravetz	Christine Becker
Mark Hollinrake	Laura Lessly
Carole Williams	Tina Doolen
Michael Malloy	Frances Dunham
Kirk Rhoads	Michael Caputo
Jana Austin	Mary Smetana
Anna Freeman	Kent John Clark
Joe Buhowsky	Ellen Gutfleisch
Virginia Douglas	Dan Perdios
Renee Bradford	Leigh Ann DiCarlo
Jim Dale	Joseph Hoess
Barbara Dale	John Ferguson
Steven Nelson	Bryan Rosen
Mary Steinmetz	Celine Montijo
Rebecca Levinson	Wilmalyn Puryear
Kathleen Sumida	Svetlana Savchuk
Carol Niemi	Jessica Hunt
Michael Peale	Tricia van Oers
Elizabeth Schwartz	Jan Salas
Nathan Vogel	John Oda
Robert Oberdorf	Richard Busse
James Klein	Rhonda Lawford
Shiela Cockshott	Galina Gorodetsky
Thomas Littelmann	Marianne Corona
Red Mendoza	Richard Packer
Dan Rauschenberg	Walter Elmore
Joyce Ciotti	Bob Chirpin
J. Beverly	Steven Skal
Paul Moss	Carol Tuveson
Bryan Bennett	T Gargiulo
Lisa Hammermeister	Katherine Nelson
Ann Lopez	Lori-Ann Kohler
Stephanie McKay	Peter Cohen
Pamela La Rue	Julie Gallagher
Arlene Baker	Ann Marie Sardineer

Mikki Chalker	Linda Muntner
Kate Holland	Patricia Borri
Robert Russo	Therese Ryan
Sam Morrison	Debbie Thorn
Cindy Yates	George Hartman
Anatoliy Shanin	Natasha Williamson
Nick Alzuro	Laura Kabernagel
Michael Tucker	Genie Moody
Nigel Sawyer	Lee Schondorf
Russ Ziegler	Linda Francisco
Cathy Beers	Deborah Coviello
Carol Devoss	Paige McGlaughlin
Timothy Larkin	Virginia Gomez
Zola Packman	Paula Dinerstein
Louisa Beckett	Jan Zanoni
Andrew Sellman	Robert Keiser
Joan Makurat	Janelle George
Lisa Stone	David Dzikowski
Dana Galbavy	Barbara Delgado
Belinda Howell	Susan Foley
Barry De Jasu	Mary Walker
Jordan Longever	Irene Welch
Ericka Kohn	Jan Repp
Paul Markillie	Rod Repp
Sheryl Williams	Mary Adomeit
Neil Stafford	Stephen Jacobs
Lisa Lewis	John Stewart
Marty Landa	Sheila Cowden
Darlene Schanfald	Susan Cox
Steven Carpenter	Brian Reynolds
Sheila Cook	Jeannie Park
James Sim	Elaine Fischer
Roger E. Sherman	Cassius Glikshtern
Eric Steele	Larry Morningstar
Debra Pratt	Eugene Bachmanov
James Roma	Anton Kalafati
Jane Anderson	Peter Glikshtern
Lori Ugolik	Anastasia Glikshtern
Joan Diggs	Danielle Buckley
Richard Laybourn	Roy Johnson
Melanie Cahan	Nicole Green
Trina Aurin	Gumus Ozkok
Julie Griffith	Susi Hulbert

Mary Eide	Linda Carroll
Bartley Deason	Stacy Reedy
Fawn King	Marcia Jimenez Scott
Edward Laurson	Elizabeth Scherbak
Bruce Krawisz	Maureen Quinn
Darius Fattahipour	Ralph Corbo
Kimberlee Martin	Sarah Gallagher
Mary Barbezat	Donna Browne
Paul Horne	Colleen Noland
S S Barbuto	Ginger Brewer
Kris Strate	Denise Jennings
Susan Kutz	Terri Maldonado
George Grace	Lynn Shoemaker
Marcel Liberge	Michael Tezla
Cara Brzezicki	Beth Braun
Rob Weinberg	Cheri Kirschenheuter
Steve Kent	Amanda Yoder
Elizabeth Ramsey	Susan Wolf
Renee Skudra	Madeleine Souza
Gretchen Grayum	Susan Pernot
Deborah Brooks	Joe Salazar
Frank Fredenburg	Mark Trombly
Sandra Woodall	Barbara Trombly
Bill Rubin	Deborah Schneider-Murphy
Maria Gonzalez	Bernardo Alayza Mujica
Rebecca Gentry	Grace Ramirez
Robin Nadel	Barbara Hitching
Melissa Friedman	Brandi McCauley
Boris Dirnbach	Mary McKenzie
Claudia Fischer	Larry buckler
Carole Mark	Bonita Staas
Catherine McNamara	Aimee Kardulas
V.L. Brandt	Peggy Acosta
John Chenoweth	Robert Rohner
Judith Abel	Colin Broadwater
Jeffery Olson	John Markham
Erika Wanenmacher	Teri Forester
Carolyn Stallard	Kyle Jones
Brian Field	Debbie Schlinger
Richard Gillaspie	Lisa Salazar
Kim Hall	Robert Camp
Ginger Hipszky	Silvana Borrelli
Deborah Bryant	CT Bross

Patricia Mchugh	Mindy Bradburn
Joanna Kling	Lynn Camhi
Debra Bruegge	Dirk Rogers
Margaret Handley	Nancy Reyering
Eric Czerwony	John Markham
Annabelle Herbert	Ravi S
Paul McCullough	Adina Parsley
Anne Marie Call	Pearl Zalon
Carol Thompson	Raymond Arent
Birgit Hermann	Judith West
Art Jacobson	Lyn Capurro
Gerald Quenell	Steven Zien
Miriam Baum	Maryn Jones
Bianca Molgora	Sharma Gaponoff
Linda Greene	Kristina Lamons
Prisca Gloor	Tara Wheeler
Elizabet Baker-Smith	Kelly Riley
Gerritt Baker-Smith	Bryan Bell
Elana Katz Rose	Art Hanson
Jeanne Heldwarmkessel	Leslie Burpo
Mike baldasio	Leslie Spurling
R Tippens	Richard Peterson
Sharon Zayac	Anne Doane
Kurt Speidel	Russell Novkov
Jacqueline Bobnick	Nicole Shaffer
Patricia Chambers	Laura Waterworth
Colleen Lobel	Rowena Caldwell
J Wilson	Pamela Unger
Heather McMillan	Karen Rubino
Barbara Lafaver	Nicole Shaffer
Peggy Quentin	Frances Mackiewicz
Nancy Yarosis	Carol Grady MacRae
Carol Storthz	Dara Alexander
Mary Stock	John Watson
Steve Sheehy	Sandra Uribe
Anne Lazarus	Mary Rivas
Matt Geer	Gaye Webb
Cody Dolnick	Kerri Piazza
Alexandria Gardner	Tina Bailey
Laura Alleman	Andrea Hall
Randy Monroe	Virginia Mendez
Neal Steiner	Tiffany Baker
Michele Temple	Meredith Tucker

Sarah Dean Pamela Sieck Anita Buffer Christi Dillon Dorothy Lynn Brooks Judith Hazelton James K Hadcroft David Fiedler Gail Tanner Jennifer Barbara Sylvia Dumford **Tia Triplett** Ian Moody Joan McGrath Janeane Moody Jacqueliine Baruch Susan Dorchin **Deborah Spencer** Katherine Nolan Nancy Newton Judy Fairless S. Nam Nathan Cassiano Nancy Van Affelen Lois White Deb Giannetti Daniel Brant Janice Haggerty Patrick Niese Deimile Mockus Jean Ann Marwick Karen Kalavity Ruth Cook Donna Fountain Diane Basile Monique La Marca John P Davis Corinne Ferre Maria O Donnell Cristin Hill Daniel Denis Kim Zwicker Karin Braunsberger Sally Newman Karen Kravcov Malcolm Lozz Starseed Elizabeth Mitchell Lorraine Heagy **Richard Stern** Jason Nichols Terry Jess Tracy Foster Adi S June Elliott-Cattell **Bonnie Duman** Linda Thompson Johnny Sauter Elizabeth Smith Irene Stumberger **George Bourlotos** WF Clement J.A. Clayman Steve Trammell Matthew Weaver Christa Neuber Alexa McMahan Helen Engledow Jody Schulman Morena Dunn Andrea Zinn Tim DiChiara Greg Gregg John Crosby **Kimberly Nieman** Jeffrey Hemenez Stanley Peterson **Caroline Themm** Nancy Pichiotino **Phyllis Burks Rick Hallin** Bonnie Dombrowski Marian Sandweiss Gerald Shaia Nicholas Prychodko Debra Miller Miller Barbara Pohl

Heidi Ahlstrand Elizabeth Ashby Kathleen Williams Wanda Plucinski Jennifer Brandon John Brown Laurie McCartin M S Dillon III Steven Adams Judy Scriptunas Ken Mundy Anne M Maureen McCullough Michael McMahan Amanda Smock Elizabeth MacKelvie Tricia Reeves Joan Menter Nilah M. MacDonald Cynthia Hull Frank Pilholski Kellyann Morander Carolyn Kostopoulos Amitav Dash Richard Han Mary Stanton Ruth Steenwyk Sherri Wright Melinda Keith-Singleton Diane Kossman Susan Eck Parrie Henderson Donna Butler Ilva Turov Peggi Woodmansee Kathy Brown Marie Driscoll Lorenz Steininger Christina Roe Shawna Whiteaker Roxanne Bohana Joanna Grinberg-Ayala Lorne Beatty Frank Stroupe **Grayson Porter** Sherry Knoppers Julie Rice Joan McGrath Landis Crockett **Roberta Young** Patric Kearns Sherry Goodreau Michael Haskell Laura Ackerman Lynda West Andrea Kilcher **Michele Colopy** Alexandra D. Pappano Judith lam Marie Michl Mark Cutter Lora Leland Christina Vollbrecht Frank Matalone Carole Klumb Tammy Fait Susan Eikenbary S. L. **Bonnie Wassmer** David Gross Linda Sparks Dana May Ellen Bander **Randal James** Donald Leisman Patricia Shafchuk Michael Rosen John Hila Joanne Hedge Maren Kentfield **Barbara Frances** Gloria Aguirre Debra Gleason Erika Mohos Julia Cranmer Michele Denski

Pam Rumble Sara Sexton Vickie Bianco Sha Davies Carol Hoke Joseph Suarez Anna Browder Anah McMahon Dolores Guarino Tracy Marotta **BK Young** David Burtis Jeff Reynolds April Tarabocchia Jerome Milks Margo Wyse Matthew Lipschik Deidre Brown **Robert Fingerman Ronald Brown** Mary Hard Greg Espe Dennis Ledden Joe Rov Kalinke ten Hulzen Paige Harrison RN James Peloquen **Gladys** Reyes Carrie Watson Kris B James Dinsmore loe S. Dan Esposito Sandy J. Pamela McDonald Sarah Johnson Jamie Le Carrie Swank Linda Prostko Karl Koessel Gina Norton Janick Sanson **Debbie Lyons Deborah Brooks** Nady Corvers Laurel Facev Irene Radke Diane Salsitz Nina Diamante Gary Thaler Vera Cousins Shivangi Singh Teresa Lovino Angela Bellacosa Norda Gromoll David R Wilcox Nancy Thelot Marek Musnicki Nina Diamante Ken Canty Holly Zersen Lynn Luther Mike Souza E Pajak **Gregory Whynott** Mary Ann McFarland Marco Pardi Gerhild Paris Patricia Foley Mike McCool Lezlie Ringland Erin Znidar Linda Townill Mike Benco Judith Smith Andrea Benco Lisa Kellams Susan Cunningham Elaine Sloan Michael Cecil Melanie Mahoney Stopyra Jean Goetinck Amanda Busch Dawn Coppola Henry Miller Ann Atwater

Thomas Hallal	Jessica Likens
Carol Jagiello	Steve S
Wendy Stevens	Judy Rees
Michael Combatti	Monika Ph
Landis Helie	Susan Sorg
Palmeta Baier	Christopher Ecker
Jennifer Emerle-Sifuentes	Debbie Haman
Dave Ringle	Carlin Freeman
Hilary Noonan	Melinda Geiger
James Williams	Ragen Serra
Jan Kampa	Arleen Ferrell
Justin Maxwell	Clara Rincon
Stephanie Willett-Shaw	Shannon Markley
Sally Small	Theresa Hebron
Jean Cheesman	Kira Durbin
Sally Spelbring	Charles Casper
Ruth Woodcock	Marina Martinez
H Brown	Steve Crase
Pamela Hamilton	Sonia Romero Villanueva
Susan Levin	Noel Orr
Ana-Paula Martins-Fernandes	Diana Saxon
Barbara Beier	Lou Orr
Lyn du Mont	JoEllen Rudolph
Jackie Pomies	Suzanne Gordon
Mark Mansfield	Steven Kranowski
Laura Regan	S. Kaehn
David Nichols	Jo Greenwald
David Gerke	Adam Levine
Alisa Battaglia	Carol Bostick
Gail Walter	Judith Falck-Madsen
Sylvia Duncan	J Cannon
Ronit Corry	Barbara Blackwood
Desiree Reynolds	Susanne Berntsson
Erika Davis	Nicholas Lenchner
Jon Krueger	Emily Willoughby
Thane Bedard	Greg Rosas
TJ Thompson	Lea Coreau
Michael Pan	Ann Nevans
Susan Torres	Ruth Clifford
Steve McNeill	Susan Goldberg
Julie Knutson	Barbara Cohn
H. Porter	Pietro G. Poggi
Karen Mayer	Denia Tsiriba

Janet Bindas	Helen Anderson
Nancy Dollard	Isabelle Lorans
Leslie Spoon	The Rev Dr Edward Kern
Karl Steinberg	Michael Worsham
Kathryn Burns	Jo Forkish
Janell Smith	Hank Keeton
Dita Skalic	Leuise Crumble
Myles Hunt	Crystal Reamer
Nivo Rovedo	Yvette Tapp
Katherine Dander	Iris Rochkind
Sharon Kelts	Bonnie Svec
Brian Gibbons	Evelyn Pietrowski-Ciullo
Georgia Mattingly	G. G. Johnson
Johanna Abate	Leo G Younger
Laurel Tarbis Brandt	Jeffery Shuben
Daniel Slade	Beverly Antonio
Brett Mitchell	Lascinda Goetschius
Cathy Hope	Jan Schachter
Christine Lindenmuth	Satya Vayu
Sherry Hill	Raleigh Koritz
Jarrett Cloud	Carlos Echevarria
Stacey Dillingham	Ross Heckmann
Jodi Rodar	Sharon Fetter
Claire Perricelli	Virginia Watson
Judy Jolin	Holly Hall
Sally Maish	Diana Rothman
Lisa Klepek	Michele Nihipali
Lawrence East	D Bello
Rhoda Levine	Carla T Dilgard
Nancy Fleming	Dennis Adkins
Carole Mathews	Pamela Coker
Cynthia Liss	Patricia Pruitt
Elizabeth Enright	David Hammond
Georges Raymond	Laurie Eisler
Sherrill Futrell	Pamela Johnston
Andrea Snyder	Jeremy Baptist
Rhonda Johnson	Autumn-Ray Russell
Dina Koehly	Robert Burkowski
Laura Colston	Peter Souza
A Piri	Cathyelizabeth Levin
Sue Velez	Catherine Foley
Susan Hauser	Marie Grenu
Mox Ruge	Edie Bruce

EC	Rob R
George Weinkotz	Timmie Smith
Dennis Feichtinger	Hannah Salvatore
Carol Kommerstad-Reiche	Jennifer Cunningham
Diana Bohn	Pierre Schlemel
Nicola Nicolai	Terry Friedman
Charlotte Nuessle	J. Barry Gurdin
Lynne Walter MSW	Meya Law
Helene Rosen	Carla Tevelow
Tia Pearson	Gary Brooker

Linda Bridges Alexia Valdora Walter Schmitt Lana Schmitt Jim Yarbrough Kelsey Kennedy Tracy Feldman Kathleen O'Connell d'Anne MacNeil Neilia Pierson Linda Tabb Candace Rocha Lori Kegler Linda Chase Dale La Cognata Maureen O'Neal Elise Phillips Margulis Darren Mitton Crystal Hart Cheryl Walker Adrienne Ross Gilda Fusilier Harrison P. Bertram Jack Phillips P Nunez Jeffrey Sanders Barbara Singer **Diane Ethridge** Tina Brenza April Doyle Maureen Ackerman Shannon Meckley Karen D Felts Stephanie McFadden **Ron Price** Patricia Harlow Linda Alwardt Danielle Montague-Judd Toni Thomas Allison Anderson Kathy O'Brien Margy Weinberg L. Fielder

Additional Comment or format

JoEllen Rudolph John Scott Lisa Claydon Christopher Lish **Ronald Clayton** Lary McKee **Douglas Morse** Theo Giesv Chris Omeara Dietrich Sonja Fanz Leona Bochantin Kelly Ryerson Megan Bogue **Elaine Stevick Christopher Stevick** Jenelle Potvin Shubra Sachdev Dietmar Zapf Deborah Auer Kurt Neff **Dennis Mayer** Vickie Mrva Robert Kremer Nanette Oggiono **Stephanie Frick** Lauren Murdock Wende Schoof Lisa Salazar Brian Reynolds **Diane Pulsifer** Julus Cornett Nicole Lenihan Pamela Roger Cynthia Lee Probyn Gregory Cristal Garcia A.L. Steiner Hannah Lange Ariel Holdsworth Christopher Benjamin **Diane Berliner** Keiko M. Karen Sharrar

Michelle Kaufman Judy Alter Penelope Prochazka Lacey Hicks Jaremy Lynch Athena Fitch Rachel Ford Cornelia Shearer James H Fitch Mary Chieffe Nancy White Mary Keithler Christine Austin L. Rodriguez Phil James Mike Lanka Margaret Richardson Jon Kiesling Linda Gillaspy A. W. Karen Donaldson Kristine Frisbie **Beverly Gundlach** Craig Lipp Tim Porter **Dianne Ensign** Sabrina Fedel Barb Galordi Priscilla Skerry Leonard Wojno **Richard Martin** Ellen Redish Jane Nachazel-Ruck Elizabeth Watts Jill Bohr Jacob Julie Smith Jaci Riley **Dianne Douglas** Kenneth Babineau Andrea Gruszecki B Methven Frank Wilsey Diane Schrack

Additional Comment or format

Carly Monnin Stefan Petersen Mayra Sanchez Natalie DeBoer

Betty Winholtz Cosima Krueger-Cunningham James Senger Kari Jackson Lib Smith Tracy Ouellette Tami Phelps Heather Roda Saveria Garcia-Macri Carolyn Massey **Robin Pinsof** Jason Husby Marcia Hoodwin Leslie Calambro Jeanne Thathcer Beatrice Elsamahy Dana Jacobsen Christina Bueno Roberta Claypool Maria Walker Genie McCombs **Bob McCombs** Ellen Hogarty Erica Coco Barbara Stenross Margo Salone Shannon Healey Brenda Barnes Jeff Omans Kathleen Repole Linda Gertig John Miskelly Jennifer Riso Jennifer Gitschier **Diane Phillips Robert Meyer** Michael Lombardi Mike Anuszewski David Dragon Don McKelvey **Beverly Harris** Sharon Wojno Paul Ghenoiu

Elizabeth Joseph Jonathan Jensen Joseph Quirk Antoinette Ambrosio Joseph Brigandi **Emily Sagovac** Nancy Currah Chris Guillory Mal Gaff **Bill Carroll Bob Wandle** Polly O'Malley Kathy Bradley Ken Sanford Chanda Farley Patricia Whitlock Kent John Clark Linda Thompson Adriana Nunez Lynn Costa Joyce Grajczyk Jackie Stolfi Sharon Nicodemus Deb Christensen Charlotte Curdes Joel Finley Susan Pelakh Guy Tourangeau Carolyn Villanova Harold Watson Chris Blyth Yazmin Gonzalez Pati Tomsits Mary McKenzie Hunter Klapperich Paul Howard **Bob Miller Diana Anderson** Karen Rome Jerry Clark **Bruce Higgins** Patricia Moorehead **Emily Rothman**

Marsha Stanek Renee Arnett **Rich Moser** Janice Jones Cathy Haft Jane Cease Debbie Blair Suzanne Andersen Gary Thaler Thomas Giblin Josephine Scipione Catherine Houtakker Gloria Fischer Ibn-Umar Abbasparker Joann Koch **Rachel Berg** Joyce Frohn Jeff Levicke Erica Johanson Mary Keil Christine Le Blanc Sylvia Chai Al Coury Christopher Smith Michael McCartin Gina Paige Judith Barnes Linda Costelloe Susan Leahy Lorraine Brabham Alfred Mancini Katherin Balles Dara Murray Charlie Graham Lynda Strecker Rebecca Oberlin Amy Hansen Henry Martinez Rebecca Canright Т Мо Katherine Barrett Zywan Marian Cruz Mark Glasser

Christy Molenkamp J. David Scott Mha Atma S Khalsa Brett O'Sullivan Karen Wolf Erin Znidar Kevin Walsh Joshua Seff Debra Brown Shirley Obeya Ann Craig Mark Canright Antonia Chianis **Edward Rengers** Nanette Oggiono Carol Baier Ann Morris Cockrell Heath Post Dallas Windham Elizabeth Conrey Karen Levins Susan Tucker Harriet McCleary Kathleen Eaton Doreen Gruchawka Cyndi Hunt Thomas Nelson Joann Ramos Barbara Rabin William Maynard Melodie Quall J.T. Smith Bita Edwards Gina Gatto Juanita Puntasecca S. E. Williams Lynn Ricci Cheryl Biale Philip Shook Lauren Wilson William Dresbach Katrina Dresbach Amber Angel

Nancy Hendrickson Vera Hauptfeld-Dolejsek Blake Wu Donlon McGovern **Hilary Capstick** Kat Thomas Chris Paterson Ellaine Janicki Nan Stevenson V Evan Grace Suenaga Jody Gibson Jan Stautz-Hamlin Brian Yanke Helen Jones Brian Yanke Joyce Dixon Bruce Long Lorna Paisley Nicole Knauber Valerie Romero Allan Peterson Lana Kelley Linda Jones Aimee Wyatt Christine Morrissey Barbara Rosenkotter Fran Watson Kay Randall Karen Intorcia Patti Schultze Linda McKillip Marilyn Hallihan James Robertson Kay Reinfried Barbara Andrew Eugene Son Lisa Daloia Cheryl Shushan Laura Chinofsky Stephanie Smedley Nadya Schmeder Jerry Curow

Justine Karadontes Jim Kelly Nina Kelly Ellen Koivisto Chuck Schwartz Keith Portka Nicholas De Santos Cricket Blanton Mandy Moon Janet Almond Tami McCready Priscilla Martinez James Felizola **Camie Rodgers** Catherine Loudis Matthew Schaut Carol Book David Scharf Cecilia Dunbar Hernandez Bernardo Alayza Mujica Pamela Shaw Christine Piekarski Kate Kenner Dale Gunn Mikki Aronoff Kym Waugh Francis Mastri Loryn Ankeny Stephen Harbulak **Beverly Jennings Temple Weste** Charles Wieland Melissa Lawrence Derek Gendvil Jaci Wilkins Patricia Christianson Cassandra Cranmer Annick Baud **Belinda** Colley Susan Brown **Terry Ring** Patricia Baley Victoria Miller

Shelley Hartz Jim Hale Don Parsons Margaret Lohr Aloysius Wald Kathleen Conner Darynne Jessler Soretta Rodack John Kirchner John Petroni Marcia Kellam Margaret Mogg Anne Veraldi Kathie Takush Constance Monath Deirdre Downev **Rickey Buttery Teresa** Pitts Barbara Laxon Linda Shirev Juli Hamilton Sonja Plumb Sharon Budde Martin Kornbluh Virginia Bennett Carrie West Galen Trembath C Porrello Patricia DeLuca Joan Ellen Mccoy Gail Noon Sharon Burge Gregory Zyzanski Jeff Schwefel Laurie Kinnings David A. Donna Newman **Jill Nicholas** Warren Woodward Amanda Gordon **Cheryl Gross** Claire Maddlone Lilly Knuth

David Paquette Sara Fogan Julia Bottom Mari Dominguez Ken Burritt Lanna Ultican Beth Darlington Heidi Ludwick Eric Robson Janice Baxter Diane Rohn G. M. Audrey Morgan Michael Lyons Jane Oldfield Christopher Wenzel Bo Breda Sheila Ward Amanda Dewey Pete Wilson **Emily Fano** Ann Hansen Stephanie Jones Carolyn Latierra James Deshotels Shelley Wehberg **Tracey Bonner** Susan Adams Edith Crowe Jeanne Fletcher Maryke Petruzzi Carol Collins Frances Stefanski Val Laurent Karen Christian **Robert Smith** Karen Halbisen Brenda Hartman Wayne Teel John Fleming Jean Fleming Angeles Méndez Martin Hecht

Leslee Eldard Rael Nidess MD Mark Grenard Lisa Butler Debra Shepler Steven Gaylord Charlotte Bolinger John Wienert Greg Dudley Nancy Warlick Ashley Farreny Thomas Warner Nelson Baker Stephanie C. Fox David Bezanson PhD Sally Oesterling Carol Ohlendorf Dan Fischer Wendy Fischer Heidi Sikina Megan Ramsey **Eleanor Smithwick** Alison Lees-Taylor **Robrert Swift** Patricia Rossi C. Kasey Janet Neihart Karen Stein-Ferguson Kathryn Kushman **Bonnie Faith-Smith Phyllis Chavez** Tami Hillman Michael Sarabia Margaret Rangnow Karen Maxa Michele St Peter Rob Lawrence Margi Mulligan Sheila Desmond April Eversole Sarah Jenkins **Becky Andrews Diane** Pease

Mary Camardo Martin Kornbluh Jacqueline Eckert Robert Knauber jr Sean San José Martha Strother Nichole Warwick Eric Simpson Sandra Smith Tamra Miller Marlena Langg Donna Walker **Phyllis Schmidt** Nena Cook Lawrence Bojarski Gaia Cole Francesca Testa Lisa Palermo Mary Lebert Robert Janusko Terry Colegate James Sullivan Deborah Voves Christine Muldoon Laurence Margolis Rosemarie Shishkin Nancy Kelley Dawn Mello Jean Newcomb Lucymarie Ruth Jean Naples **Bennie Scott** Gail McMullen Linda McCaughey Barbara Potter Dennis Trembly John Cielukowski Monica Bonualas Pamela Kjono **B** DEmilio Rosanne Cataldo Stacy Bell Kate Skolnick

Paul Lifton Kian Daniel Michael Gumpert Cal Cole **Rochelle Gravance** Ed Cornwell Marjorie Xavier Pete Lesinski Madalyn Pickering Tobi Tyler Sandra Mann Jack Milton Stephen Craig Rolston Leotien Parlevliet Croitiene ganMoryn Jessica Fielden MD Evelyn Kirby Joanne Dean Dana Barela John Graham Heidi Palmer Frank Belcastro Lisa Isley Lynn Gazik Cheryl Carney Charles Fox Tonya Stiffler Nancy Stamm Karen Berger Pati Tomsits Karen Reid Bobi Lynch Nora Sotomayor Joyce Frohn **Peter Fairley** Kathy Pearson Susan Kepner Denise Hosta Judith King Ken Sanford Dawn Kenyon Stephanie Nunez **Claudette Ashley**

Caroline Miller Connie Curnow Montserrat Aragonés Ciurana Elizabeth Kinney Antoni Grippi Sandra Tucker David Anderson Carol Joan Patterson Marsha Lowry Heidi Handsaker Amanda Collins Samantha Turetsky Debra Roy Anne M Craig Clark Janice Banks Frank Aktabowski Eva von Bronk Karen D Felts Jean Marie Naples, MD-Ph.D. Mark Glasser MaryLynn Michaelis Elizabeth O'Mara Mary A Leon Lisa Cossettini Eileen Juric S. Nam **Denise Romesburg** Kerry Beane Maria Kordes Linda McCaughey Mary Gant John Finazzo George Baschiera Susan Ebershoff-Coles Judy Moran Celeste Anacker Lisa Jack Т Мо Amy Kacher Claudia Correia Isabel Cervera Laetitia Petit



1220 Sweetwater Road Incline Village, Nevada 89451 775-832-1212

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 Taho, 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:

- 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.
- 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.

HE-119

ALT-30

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?

WS-2

ALT-32

ALT-33

WS-3

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?

ALT-35

ALT-34

- 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 pretreatment 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.

HE-120

AWM-24

- 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-degredation 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.)" -

<u>https://www.epa.gov/sites/production/files/2014-10/documents/handbook-chapter4.pdf</u> page 9. REG-6

AWM-25

REG-5

CST-1

HE-123

"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

Madomadul

Suzi Gibbons, TWSA Board Chair

Suzi Gibbons

_ WS-5 _ WS-6

SOC-1

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?

PP-7

CUM-1

ED-1

ALT-36

AA-6

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 **HE-121** 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 **HE-122** 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 WQM-1 written, it is unclear how this measure would reduce impacts. For Mitigation Measure EH-5b, what would be the response if during testing aluminum WQM-2 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 ALTM-1 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 rational 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 CYB-3 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 **TRNM-1** what are defined as travel restrictions). For mitigation listed for AQU-5: It is unclear how and why mitigation would result in Group AQUM-1 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 **MI-9** 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 WQM-3 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 **MI-12** 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 AQU-20 "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 ED-5 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 **ALT-39** entrance, and the closest treatment site is for LFA, in combination with the double

AWM-26

	_
turbidity curtain barriers, provides greater confidence that water quality in the waters of Lake Tahoe would largely be protected.	ALT-39
Page 2-4, Figure 2-3, recommend that the document provide the rational for using 0.3 acre as the trigger for determining what Group B follow up would be employed.	ALT-40
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?	ALT-41
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.	ALT-42
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.	ALT-43
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 studiesHowever, 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).	ALT-44
Page 2-22, second paragraph, last sentence is missing the words "cause of the" after "the" and before "decrease."	ED-6
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.	ALT-46
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	ALT-47

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

MI-14

AWMM-2

ALT-50

ALT-49

ALT-47

v

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."

EH-2

REG-7

MI-14

CYB-4

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 is 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

WQ-10

WQ-11

MI-17

WQ-12

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.

TRNM-2

TERM-1

TRN-2

NOI-1

CR-1

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,

MI-23

TRNM-3

EH-3

ED-2

AA-8

AA-9

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.

<u>Appendix E</u>

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 ^OC, 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-

ALT-51

AA-9

REG-8

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.

ED-3

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 nonemergency 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.

REG-9

O-4



Sepetmber 1, 2020

Tahoe Regional Planning Agency Dennis Zabaglo, Aquatic Resources Program Manager 128 Market Street, Stateline, Nevada 89410 *Submitted via email – tahoekeysweeds@trpa.org*

Re: Tahoe Keys Lagoons Aquatic Weed Control Methods Test DEIR/S

Dear Mr. Zabaglo,

The purpose of this letter is to express the League to Save Lake Tahoe's (League) support for the "Proposed Project" as detailed in the Draft EIR/EIS (DEIR/S) for the Tahoe Keys Lagoons Aquatic Weed Control Methods Test posted on July 6, 2020 (Project).

Introduction

The League is dedicated to protecting and restoring the environmental health, sustainability and scenic beauty of the Lake Tahoe Basin. In connection with our mission, we advocate for projects that control and manage aquatic invasive species (AIS) in the Lake Tahoe watershed to a point of ecological insignificance, thus protecting Lake Tahoe's fragile ecosystem.

The League has worked closely with the Tahoe Keys Property Owners Association (TKPOA) over the last eight years on addressing the largest aquatic weed infestation at Lake Tahoe, located in the Tahoe Keys lagoons. A formal stakeholder process initiated by the Lahontan Regional Water Quality Control Board (Lahontan) and the Tahoe Regional Planning Agency (TRPA) that began in 2018 has resulted in the current proposal to conduct a test of a variety of control methods, one chemical and several non-chemical, in the Tahoe Keys lagoons. As the DEIR/S states, the Project would allow TKPOA and resource managers to study, analyze and compare a variety of options in combination and isolation prior to developing, evaluating and implementing a future full-scale, long-term aquatic weeds control project in the Tahoe Keys lagoons. It is encouraging to see the DEIR/S conclude that all of the potentially significant impacts of the "Proposed Project" are fully mitigated. The significant environmental impacts resulting from the "No Action" Alternative provide a sense of urgency and compelling basis for acting soon. Control, management, and monitoring of AIS (including aquatic weeds) is a high priority for the League, and we look forward to continuing our work with all partners to assist with ongoing monitoring efforts throughout and following the Project.

We support the three-year testing program

The League advocates for a suite of test methods because we need additional, proven, effective invasive weeds treatments in the toolbox. Lake Tahoe is a unique cultural and environmental resource, which demands utmost confidence that any AIS control project can be conducted safely and without damaging the Lake. The "Proposed Project" would test the effectiveness and prove the safety of existing and new tools before full-scale implementation.

AWM-38

- Immediate action is required to stop the infestation in the Tahoe Keys lagoons from growing, expanding farther into the Lake proper, and spreading to other areas of the Lake.
- We strongly recommend the Proposed Project become the Preferred Alternative.
- The tools we have now are not sufficient to tackle the complexity and scale of the Tahoe Keys lagoons infestation a unique and innovative solution is needed.
- We support the science-based approach to testing all potential control methods as a cohesive three-year program, conditional on the findings of the Antidegradation Analysis forthcoming from Lahontan (as required by the U.S. Environmental Protection Agency due to Lake Tahoe's designation as a Tier III Outstanding Natural Resource Water).¹

Immediate action is required

The infestation of aquatic weeds in the Tahoe Keys lagoons must be addressed immediately to minimize or prevent its many impacts, including degradation of water quality, causal relationship with hazardous algal blooms, deleterious effects to native species and negative impacts on recreational boating and swimming opportunities, which are currently and increasingly affected by the aquatic weed infestation. The Tahoe Keys lagoons infestation (at nearly 172 acres) is ground zero for AIS at Lake Tahoe, and the infestation of aquatic weeds is spreading further into Lake Tahoe every day. The infestation spreading from the mouth of the Tahoe Keys lagoons now comprises the largest population in Lake Tahoe proper (over 100 acres) and will continue growing with each moment we delay advancing our efforts.

The DEIR/S identifies significant impacts to Lake Tahoe will occur if no action is taken, other than continuing current ineffective methods of control and management. The No Action Alternative would have potentially significant, unavoidable effects on all water quality issues (temperature, turbidity, dispersal of aquatic plant fragments, pH, dissolved oxygen, and phosphorus and nitrogen concentrations), as well as a significant effect on recreational boating, because aquatic weeds would continue to propagate. The current control methods are limited to mechanical harvesting and sporadically installing bottom barriers – both of which have been proven ineffective for an infestation of this scale and complexity. As the 2018 TKPOA application states, cutting and harvesting is a method for maintaining navigable waterways and not a control method compatible with the biomass reduction goals of the Project². Additionally, this method results in significant plant fragmentation which accelerates aquatic weed spread. The application also reports that bottom barriers – the installation of mats – would be needed for three to four continuous seasons to successfully reduce plant biomass. This is cost-prohibitive at a large scale and technically infeasible in many parts of the Tahoe Keys lagoons, where there are rocky areas and horizontal and vertical obstructions.

Containment measures funded, developed and supported by the League – a bubble curtain, laminar flow aeration and a boat back-up station – while effective and necessary as part of the near-term control effort, are only stop-gap measures until the larger infestation is brought under control.

ALT-67

AWM-38

¹ United States Environmental Protection Agency (US EPA) 2014. Water Quality Standards Handbook, Chapter 4: Antidegradation.

² Tahoe Keys Property Owners Association (TKPOA) 2018. Tahoe Keys Lagoons Restoration Project, Application for Approval to Reduce Aquatic Invasive and Nuisance Plant Species. July 25, 2018.

"Preferred Alternative" designation

The DEIR/S does not identify a "Preferred Alternative" but rather presents the "Proposed Project" as submitted by the applicant (TKPOA). While there is no legal requirement to designate a "Preferred Alternative" under CEQA or the TRPA environmental review process, it is advisable so that the public understands the intended action. The League supports the Proposed Project, as the DEIR/S demonstrates that all potentially significant impacts can be mitigated to "less than significant" in all relevant categories (Environmental Health, Water Quality, and Aquatic Biology). However, should the Antidegradation Analysis forthcoming from Lahontan conclude otherwise, the League would undoubtedly reassess its position. We believe the impacts on recreation that would occur due to the Proposed Project are short-term and minor in comparison to the current scale of the aquatic weed infestation in the Tahoe Keys lagoons and active spread of a now 100-acre infestation in Lake Tahoe proper. We also believe that the DEIR/S is objectively written, legally defensible and science-based, leading to the conclusion that the Proposed Project with testing of all methods – chemical and non-chemical – would not have a significant negative impact on the environment at Lake Tahoe.

Current tools are not sufficient

There have been limited preliminary tests of newer control methods, such as ultraviolet light and laminar flow aeration, at Lake Tahoe. While initial results in locations outside of the Tahoe Keys lagoons are promising, those have not yet proven adequate for the complexity and scale of the Tahoe Keys lagoons infestation, nor for the water quality conditions that persist. In short, there is no silver bullet. We need to test all tools – proven and innovative – to find the right combination for eventual, large-scale and long-term treatment.

One of the three performance measures set for the Project is to reduce the biomass of aquatic weeds by 75%.³ The three-year testing program aims to find out if this is initially possible using a set of "Group A" methods, which would then be maintained for two years by using non-chemical Group A methods along with the "Group B" methods. Based on experience in the Tahoe Keys lagoons and other parts of Lake Tahoe, the full combination of methods in the Proposed Project is likely required to achieve that goal. We do not believe that unproven, non-chemical methods alone – Alternative 1 – would be effective. Furthermore, we do not want to allow the problem to get worse while testing some, but not all, safe, available options we believe may work.

The proposed ultraviolet light (UV) treatment appears to be an effective method of plant control at one test treatment site at Lakeside Marina and beach. Less than 0.5 acres of unobstructed water area was treated multiple times over multiple years and now seems to be largely free of aquatic weeds for two seasons running. The DEIR/S notes that UV will not kill the plant roots or turions. Therefore, the long-term effectiveness and ongoing costs must be evaluated to see if this method can be used at a large scale to reduce biomass by 75% and maintain it at that level in perpetuity. It is also evident that UV light can only be used in the center of channels and lagoons, thereby requiring another method to be used in tandem to address the edges where there are numerous obstructions from the 900 docks and associated pilings.

ALT-68

AWM-38

³ Tahoe Regional Planning Agency and Lahontan Regional Water Quality Control Board (TRPA & Lahontan) 2020. Tahoe Keys Lagoons Aquatic Weed Control Methods Test DRAFT Environmental Impact Report/Environmental Impact Statement (DEIR/S) Section 1.2.2.2. July 6, 2020.

- Similarly, early results of a Laminar Flow Aeration (LFA) project appear to indicate an effective method of plant control at one 0.5-acre test treatment site at Ski Run Marina. While a 5.9-acre LFA system (funded by the League) has been operating in the Tahoe Keys lagoons since April 2019, the results have not been the same, and it is too early to determine if this test can yield results similar to those seen at Ski Run Marina. Ultimately, this method may be effective as a spot treatment, but it has not been proven successful on a large scale to significantly reduce biomass within one year or over multiple years.
- While targeted hand-pulling and spot suction dredging with SCUBA divers are likely to be an effective part of the solution for small, persistent and hard-to-access infestations, large-scale dredging and disposal of spoils and wastewater – Action Alternative 2 – has many adverse impacts. In addition to the high cost, as DEIR/S points out, there are many adverse environmental impacts resulting from this method, including potentially increasing the spread of curlyleaf pondweed. Dredging can also result in significant increases in turbidity and has the potential to release nutrients and contaminants contained in the substrate.
- Targeted herbicides have not been tried in Tahoe. In other lakes, the specific herbicides proposed are a demonstrated method of targeted plant control at treatment sites for at least one season. The Proposed Project would test this method only at the beginning of the first year to initially achieve the biomass reduction performance measure. The remaining two years of the Project would continue to test the suite of other non-chemical methods described in the DEIR/S to maintain the 75% reduction in biomass. Chemicals are not proposed to be used beyond the first year and the League does not support the use of chemicals for more than one year during the three-year testing program.

This approach to use Group A (chemical and non-chemical) methods to knock back the biomass of an infestation and then Group B methods (non-chemical) to maintain the condition is both unique and innovative, and it ensures that chemical methods cannot and will not be used in perpetuity at Lake Tahoe. Compared to other lake environments, we have the opportunity to control aquatic weeds in Lake Tahoe before their populations get completely out of hand. This opportunity starts at the Tahoe Keys lagoons with a multi-faceted, science-based, strictly monitored and safe test. The results of the test will form the foundation of a pragmatic, data-based proposal for a long-term solution to the largest infestation of aquatic weeds at Lake Tahoe.

A scientific test

This Project is a test; it is not a full-scale, long-term program. The goal of the test is to learn which methods are most effective, on their own and in combination with other methods. Of course, a large-scale approach – even a three-year test project – needs to not only achieve a 75% reduction in biomass but also meet the performance measure of protecting the Lake's water quality in the Tahoe Keys lagoons, including antidegradation requirements required by the U.S. EPA (owing to Lake Tahoe's designation as a Tier III Outstanding Natural Resource Water).⁴

ALT-70

⁴ TRPA & Lahontan 2016, Section 1.2.2.2

The detailed DEIR/S is the most extensive environmental review, in conjunction with a very inclusive stakeholder and public input process, we have ever seen for a testing project. It includes many layers of protections and precautions, including several mitigation measures and robust monitoring plans. The rationale for the methods in Group A and in Group B is stated very clearly⁵, as well as why additional tools were not included in either category⁶. The testing of every idea, concept and method imaginable – in spite of known flaws or costs – is neither pragmatic nor efficient when it is evident that near-term action is urgently needed. The description of the combinations and timing of control methods that would be tested is comprehensive and well supported. There is a very detailed description of the three potential herbicides that could be used and their respective half-lives and degradants, as well as their target plant species, and application and containment methods.⁷ The No Action Alternative is given a full analysis of environmental impacts, which is rare in an EIS or EIR. The potential adverse impacts of this Alternative are the greatest of any proposed, underscoring the urgency to solve the problem quickly. That said, there is nothing urgent enough to put the long-term health of Lake Tahoe at risk.

The League has concerns about any use of chemicals at Lake Tahoe and understands that any consideration of their use, even for testing, needs to provide numerous protections, mitigation and extensive monitoring. We are encouraged by the analysis in the DEIR/S and the successful use of the proposed chemicals in other lake environments.⁸ As the DEIR/S points out, the Proposed Project would apply lower concentrations than what is allowed by EPA. There would also only be one application – not ongoing applications as allowed by the EPA. Similar lake environments use chemicals year after year, which the League currently does not support for Tahoe. The Project does not even consider this and is very clear that one-time use of chemicals is all that is being tested. Perhaps the Project can provide another example of Tahoe's innovation in addressing environmental challenges that can be used as a model elsewhere in the world.

Summary

Joining the decades of attention from TKPOA, the League has been working to address the aquatic weed infestation in the Tahoe Keys lagoons for the past eight years. Our involvement includes the last two years working as part of an enhanced Stakeholder process, which resulted in the TKPOA Project application that is the subject of this DEIR/S. Because of the thorough, robust and defensible DEIR/S, which includes all of the feasible control methods to meet the Project's performance measures, we are supportive of the Proposed Project and recommend it as the Preferred Project to move forward in the Final EIR/S, with the expectation that the Antidegradation Analysis demonstrates no long-term water quality deterioration.

We must act now by testing as many feasible and effective methods as possible, while sparing the Lake from any harm. The Project achieves these goals.

HE-143

⁵ *Ibid.* Section 2.2.

⁶ *Ibid.* Section 2.7

⁷ Ibid. Section 2.3.2.3

⁸ Ibid.

The League will continue our extensive involvement to address the aquatic weed infestation in the Tahoe Keys lagoons while protecting the health and clarity of Lake Tahoe.

Thank you for the opportunity to comment and do not hesitate to contact us directly with any questions.

Sincerely,

Jesse Patterson Chief Strategy Officer

David Blau League Board Member and Program Committee Chair

CC: W. Russell Norman, P.E. Water Resources Control Engineer, Lahontan Regional Water Quality Control Board, 2501 Lake Tahoe Boulevard, South Lake Tahoe, CA 96150. <u>russell.norman@waterboards.ca.gov</u>.



September 1st, 2020

Dennis Zabaglo Aquatic Resources Program Manager Tahoe Regional Planning Agency P.O. Box 5310 128 Market Street Stateline, Nevada 89449

Re: Comments on the Draft EIR/EIS for the Tahoe Keys Lagoons Aquatic Weed Control Methods Test

Dear Mr. Zabaglo:

The Tahoe Keys Property Owners Association (TKPOA) appreciates the opportunity to provide comments on the Draft Environmental Impact Report and Environmental Impact Statement (DEIR/EIS) for the Tahoe Keys Lagoons Aquatic Weed Control Methods Test project ("Project"), prepared by the Tahoe Regional Planning Agency (TRPA) and Lahontan Regional Water Quality Control Board ("Lahontan Regional Board").

TKPOA is acutely aware of the infestation of invasive aquatic weeds in the Tahoe Keys vicinity and has long taken an active role in seeking out the most effective and ecologically sound method to address it. TKPOA greatly appreciates the public-private partnership that has given rise to the current effort to combat invasive weeds in Lake Tahoe, supports the DEIR/EIS's recommendation to proceed with the Aquatic Weeds Control Methods Test ("Proposed Project"), and looks forward to continued cooperation and coordination with TRPA and the Lahontan Regional Board to implement this environmentally beneficial Project.

TKPOA offers the following comments to supplement the robust analysis in the DEIR/EIS, specifically with regard to the comparative risks and benefits of the Proposed Project and Action Alternative 1.

I. <u>The DEIR/EIS Understates the History of Weed Management Efforts in the Tahoe</u> Keys and Underplays the Urgency of the Proposed Project.

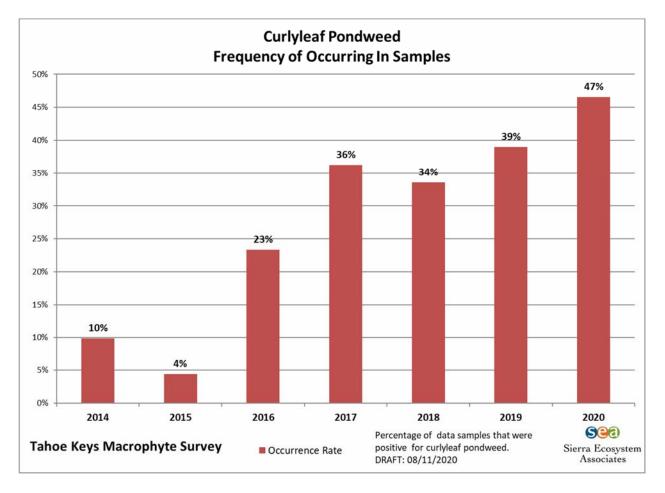
As presented by Tahoe Keys representatives at numerous stakeholder and agency meetings, the Tahoe Keys has invested a substantial amount of time and money evaluating numerous methods to manage the aquatic weeds infestation. It is because of this effort and the lack of identification of an effective combination of non-chemical solutions that the Proposed Project is so urgent. By essentially disregarding this history, the DEIR/EIS does not provide sufficient context for decision makers to fully understand the urgency of the Project and the need to act decisively and aggressively at this time. An effective summary of the past history of actions taken by TKPOA should include, at a minimum:

AWM-45

 Initial AIS control efforts began in the 1970s with installation of a water treatment system to, in part, reduce nutrients that promote weed growth, and a requirement from the City of South Lake Tahoe to begin harvesting; Rotovating field trial in the Keys lagoons – 1988 First mesoccosm studies – 2000 and 2001 Tahoe RCD, TRPA, and TKPOA jointly research available control methods and test jute and synthetic bottom barriers – 2011 through 2013 Convened expert panel of government and academic scientists – 2013 WDRs issued and initiated Non-Point Source Water Quality Control Plan measures and Integrated Management Plan – 2014 Expert panel findings presented at stakeholders and public meeting – 2015 Subsequent to issuance of the WDRs, TKPOA has implemented the following specific actions: Weed fragment production studies (pre and post-harvest) Seasonal weed surveys Water quality monitoring (15 parameters at 13 sites and 5 depths, monthly from April to October for the past 7 years) Bottom barrier program (large-scale test and individual homeowner installations) Multiple Rhodamine dye studies beginning in 2010 Channel dredging Additional review of rotovating Additional mesoccosm studies Greenhouse Gas Emission study Goose droppings nutrient study Atmospheric deposition of nutrients study Benthic Macro-invertebrates (BMI) study Installation of Boat Backup Station Installation of West Channel bubble curtain and Sea Bins 6-acre Laminar Flow Acration test beginning in May 2019 and operated almost 	AWM-45
continuously since.	
implementation to control the target aquatic weed infestation in the Keys. Despite those efforts, the infestation continues to expand and new species, such as Curlyleaf Pondweed (CLP), are proliferating.	
The items listed above were described in some detail in the application documents submitted by TKPOA and many of the related studies are available on the <u>www.keysweedsmanagement.org</u> website maintained by TKPOA.	WM-45
We also strongly recommend that the following information, readily available in the annual Macrophyte Survey reports and annual Integrated Management Plan Updates, be included in the DEIR/EIS. They are critical for decision makers and the general public to accurately understand	

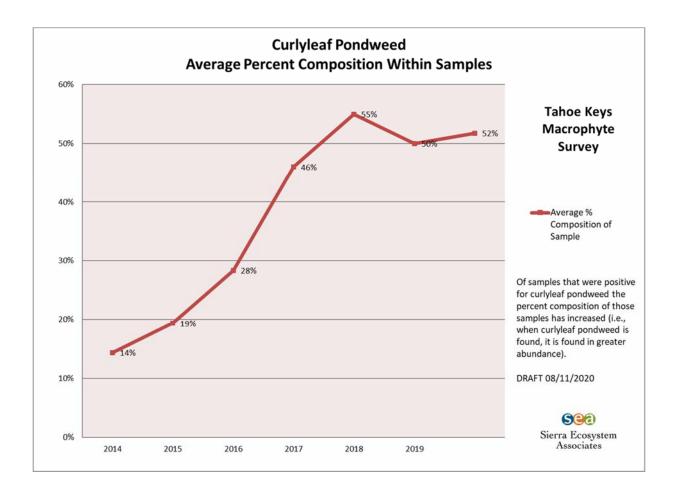
the existing environmental setting and the urgency this effort deserves to address the rapidly proliferating CLP infestation.

The bar chart, below, shows the frequency with which CLP has been identified in the annual Macrophyte Survey point sampling. In 2014 and 2015, CLP was found at 10 percent or less of all Macrophyte Survey sample locations. Since 2016, this percentage has rapidly increased such that the 2020 data show that CLP was present at almost 50 percent of all locations surveyed in the Keys lagoons.



In addition, not only is there an increasing trend in the number of locations at which CLP is present, the fraction of the weed volume that consists of CLP is also increasing quite dramatically. The trend graph below shows that in 2014, CLP constituted only 14 percent of the weed volume within the samples observed during the annual Macrophyte Survey. From 2014 to 2018, that percentage increased to 55 percent and has remained above 50 percent the last two years. Thus, at locations where CLP is present, the abundance of that species compared to other species has increased substantially over the past five to six years.

TKPOA feels that it is very important to fully disclose and describe the above information in the DEIS/EIR. Without an accurate understanding of the rate that the target weeds continue to proliferate, despite the substantial efforts that have been taken to try to manage them, the proper



urgency with which the Proposed Project needs to be deployed is substantially understated and misrepresented.

II. <u>The Proposed Project is the Environmentally Superior Alternative.</u>

The DEIR/EIS was prepared to evaluate options for managing the aquatic invasive weed infestation in Lake Tahoe and the Tahoe Keys. The document is intended to comply with the California Environmental Quality Act (CEQA) for purposes of TKPOA's application for a National Pollutant Discharge Elimination System (NPDES) permit from the Lahontan Regional Board, and to comply with the Tahoe Regional Planning Compact and TRPA's Code of Ordinances and Rules of Procedure with regard to TKPOA's application to the Lahontan Regional Board and TRPA to test the effectiveness of herbicides in the Tahoe Keys lagoons. The DEIR/EIS evaluates the environmental impacts of the Proposed Project and several potential alternatives.

The Proposed Project includes a test of herbicide control methods alongside non-herbicide control methods, most notably laminar flow aeration (LFA), ultraviolet light (UVL), and follow-

1653400v2

When an agency determines that a proposed project triggers CEQA review, it typically prepares an Initial Study (IS) to evaluate the potential environmental impacts of the project. The IS guides the agency's determination of what type of CEQA document to prepare: if the IS finds that there are no potentially significant impacts, or that all potentially significant impacts can be mitigated to a less-than-significant level, the agency may prepare a Negative Declaration (ND) or Mitigated Negative Declaration (MND). (CEQA Guidelines, § 15063(c).) If the agency determines that the project may have significant and unavoidable impacts, or that there was insufficient information available at the time the IS was prepared to determine the level of significance, then the agency must prepare an Environmental Impact Report (EIR), including an analysis of project alternatives. (CEQA Guidelines, §§ 15063(b), 15126.6; Pub. Resources Code, § 21002.1(a).) The purpose of the alternatives analysis is to *identify alternatives that* could reduce or avoid the project's significant and unavoidable impacts. (CEQA Guidelines, § 15126.6(a).) If the detailed CEQA analysis finds that there are no significant and unavoidable impacts, the alternatives analysis serves no purpose. Likewise, it is inappropriate to identify an alternative to the Proposed Project as the Environmentally Superior Alternative (ESA) because the Proposed Project itself does not have any significant and unavoidable impacts. CEQA has no provisions for making a comparison between degrees of insignificance.

up non-herbicide spot treatments. Action Alternative 1 only includes the non-herbicide control

Since the DEIR/EIS Found that the Proposed Project Will Have No

Significant and Unavoidable Impacts. There is No Basis in CEOA to Assert

The DEIR/EIS concludes that Action Alternative 1 is the ESA under CEQA. In fact, as

methods, relying most heavily on LFA and UVL. (DEIR/EIS, p. ES-6.)

That an Alternative Will Have Less Impacts.

explained more fully below, the Proposed Project is the ESA.

A.

B. Action Alternative 1 Will be Ineffective and Will Not Meet the Project Objectives, Allowing the Infestation to Grow and Causing Significant Environmental Degradation of the Lake.

The main objective of the Proposed Project (DEIR/EIS, Section 1.2.2.1.) is to <u>test</u> a range of large-scale and localized aquatic weed control methods suitable for management of target aquatic weeds, to determine what combination of methods within the test areas will:

- Reduce target aquatic weed infestations as much and as soon as feasible.
- Bring target aquatic weed infestations to a level that can be managed over the long term with localized non-herbicidal treatment methods.
- *Improve the water quality of the Tahoe Keys lagoons and reestablish native aquatic habitat.*
- Improve navigation and enhance recreational benefits and aesthetic values.

The Proposed Project, the only feasible alternative evaluated in the DEIR/EIS that would actually accomplish the objective to test a range of methods that can meet the bulleted goals, is environmentally superior, as it is the only alternative that would provide fully comparable information on which treatment method, or combination of treatment methods, would be feasible

ALT-81

ALT-80

and effective. Accordingly, the Proposed Project is the only option that will allow TKPOA and the agencies to move beyond the test project to determine what combinations of methods would quickly and effectively manage the aquatic weed infestation, preventing proliferation of the infestation and long-term harm to the Lake Tahoe environment.

The invasive aquatic weed infestation in and around the Tahoe Keys was discovered in the 1970s and now affects up to 80 to 90 percent of the wetted area in the Tahoe Keys lagoons. Efforts to manage aquatic invasive weeds in Lake Tahoe have been underway for decades, and the problem has grown to a very large scale; immediate and effective treatment is of critical importance. A significant body of data, along with the independent expert panel convened in 2013, demonstrates that, in addition to being entirely safe, herbicides are necessary to manage an infestation of this scale.

Neither of the primary treatments contemplated by Action Alternative 1—LFA and UVL—has ever been deployed on a commercial scale, and neither is currently commercially available for a Project of this nature and size. The effectiveness of these treatments under the conditions that exist within the Tahoe Keys lagoons is unknown. In fact, obtaining such information is one of the primary purposes of the project. Until such information is obtained, it is speculative at best to conclude that the primary treatments in Action Alternative 1 can meet project goals.

UVL has only been tested at Lakeside Beach and Marina in South Lake Tahoe, which has a different bottom substrate and much better water clarity and water quality than in the Keys. In a recent article in the Reno press (https://mynews4.com/news/local/ultraviolet-light-used-to-kill-algae-at-lake-tahoe), the technology developer, John Paoluccio of Inventive Resources, acknowledges that additional modifications are still necessary, after two to three years of treatment, to be able to address the much more straightforward aquatic weed issue at Lakeside. Overall, this technology is still developing and is unproven in the Keys.

LFA alone has never been proven to reduce rooted aquatic plant growth or reproductive capacity at the scale needed for this project. In fact, LFA is primarily aimed at reducing harmful algae. TKPOA has been operating a 6-acre test system nearly continuously since May 2019 (with less than 30 days of downtime over more than 400 days for routine maintenance and replacement of a faulty compressor). While it appears that LFA may have been successful in mixing the water column to more uniformly distribute dissolved oxygen, TKPOA has yet to see any evidence that it is altering nutrient availability in the shallow sediments such that it might discourage aquatic weed growth. Current observations in the Keys are similar to those at Ski Run Marina, showing that, while the LFA system may reduce aquatic weed growth in the area of the diffusers, the weed growth is unaffected, and may be enhanced, along the margins of the channels. In addition, the potential for LFA to cause independent potential impacts on the environment that would require mitigation and adaptive management (e.g. by circulating nutrients into dead-end areas) was not adequately evaluated in the DEIR/EIS.

The DEIR/EIS does not present substantial evidence that UVL and/or LFA (alone or together) could meet project objectives related to reducing the target aquatic weed infestation as quickly as possible. There is also no evidence that UVL would improve water quality. Furthermore, since neither UVL nor LFA are species specific, their deployment could actually confound the

AWM-46

objective to reestablish aquatic native habitat. The DEIR/EIS does not adequately consider the degree to which Action Alternative 1 may or may not be consistent with the project objectives.

Because there is no substantial evidence available at this time that Action Alternative 1 could adequately and quickly control invasive weeds in the CMT areas, it is comparable to the No Action Alternative, which would have long-term adverse environmental impacts in terms of allowing invasive weeds to proliferate in Lake Tahoe. (DEIR/EIS, pp. 5-18, 5-24–5-29 [discussing the significant and unavoidable impacts of continued weed infestation on water quality and aquatic species].)

In contrast, the Proposed Project includes control methods that are proven to quickly and effectively control invasive aquatic weeds. The proposed herbicides were developed for safe and effective use against the type of aquatic weeds targeted in the Proposed Project, and have been approved by the United States Environmental Protection Agency, specifically to be able to perform in a manner that would achieve the stated goals of this project. They are commercially available and used throughout the country for exactly that purpose. Thus, there is little risk that these control methods would be ineffective, and they are more likely to achieve project objectives than Action Alternative 1.

It is critical that the Lahontan Regional Board and TRPA take into consideration the environmental impacts that will occur if the invasive weed infestation is allowed to further proliferate. The long-term, documented history on aquatic invasive plants at Lake Tahoe and the Tahoe Keys lagoons going as far back as 1995 has demonstrated that purely physical control methods (i.e., harvesting, bottom barriers, diver-assisted hand removal, and localized dredging) have not adequately reduced the populations of aquatic weeds in the Tahoe Keys lagoons, nor prevented populations from expanding within Lake Tahoe. This 25-year history of attempted physical management, without incorporating available, proven effective aquatic herbicides has clearly failed to achieve project goals, and has not mitigated continuing threats to Lake Tahoe's ecosystem health. Because Action Alternative 1 proposes methods that have not been demonstrated to be effective, it will likely allow the infestation to grow, potentially continuing to compromise the ecological integrity of the lake. The Proposed Project is the only alternative that utilizes effective means of sustainably managing the invasive weeds, and therefore is the ESA.

C. <u>The Determination That Action Alternative 1 is Environmentally Superior</u> <u>Under CEOA is Based on Incorrect Conclusions and a TRPA-Only Impact.</u>

In addition, even setting aside concerns about effectiveness, Action Alternative 1 was deemed the ESA based on a determination that the Project would potentially impact recreational boaters. (DEIR/EIS, p. 5-19, third paragraph.) However, this finding in Section 5.7 is inconsistent with the analysis in the DEIR/EIS and the comparison presented in Table 5-1. In addition, it conflates two legal concepts and does not, in fact, support the finding that Action Alternative 1 is the ESA.

The Proposed Project and Action Alternative 1 are very similar with respect to environmental impacts. The main difference, and the reason that Action Alternative 1 is deemed environmentally superior in Section 5.7, is the statement that the Proposed Project would "have potentially significant unavoidable impacts on recreational boating." (See DEIR/EIS, p. 5-19, third paragraph.) Action Alternative 1 is stated to "reduce the potentially significant effects of

ALT-82

ALT-81

the Proposed Project by avoiding the application of herbicides." (DEIR/EIS, p. 5-19, first paragraph.) Both of these statements in Section 5.7 of the DEIR/EIS, discussing the ESA, are incorrect. The detailed analyses presented in Sections 3 and 4 of the DEIR/EIS, and the comparison of alternatives presented in Table 5-1, do not identify any significant and unavoidable impacts from the Proposed Project related to recreational boating. Likewise, there are no "potentially significant effects" related to the application of herbicides identified anywhere in the analysis. Thus, the stated basis in Section 5.7 for Action Alternative 1 being the ESA is flawed and based on incorrect information. As stated in Item II.A, above, in the absence of any identified significant and unavoidable impacts for the Proposed Project as the ESA.

Furthermore, the requirement that the agency select an ESA is a CEQA requirement and must be based on impact areas designated for analysis under CEQA. Recreational boating is not an impact area for CEQA. Although "recreational impacts" are considered under CEQA, the analysis focuses on whether existing facilities, such as parks, are adequate to serve a project, or whether new facilities should be constructed. The Tahoe Keys Marina launching facilities are a private commercial business and not a public recreational facility, so consideration of potential impacts to that facility is not consistent with the CEQA recreational criteria (See CEQA Guidelines, Appendix G.) And, as noted above, the statement on page 5-19 of the DEIR/EIS that the Proposed Project would have any potential impact on recreational boating is inconsistent with the conclusion of the environmental analysis.

While TRPA is obligated to consider impacts to recreational boating for its own purposes (TRPA Code of Ordinances, § 80.3.2.G.), impacts of the Proposed Project on recreational boating are not CEQA impacts and should not be considered when selecting the ESA, as required by CEQA. Accordingly, the impacts of the two alternatives are equivalent under CEQA, and the Proposed Project is the ESA.

III. <u>Mitigation Should Be Revised to Include Additional Detail for Adaptive</u> <u>Management.</u>

As the NPDES permittee and agency implementing the Project and its mitigation, TKPOA understands the importance of including definite standards in mitigation measures for the Project's potentially significant impacts. (See *North Coast Rivers Alliance v. Marin Municipal Water Dist.* (2013) 216 Cal.App.4th 614, 647.) Accordingly, TKPOA respectfully requests that additional detail be added to ensure that TKPOA, the agencies, and the public understand what specific measures will be undertaken to protect the Project environment under certain circumstances.

Some mitigation measures do not include monitoring to verify performance of the mitigation. As an example, Mitigation Measure EH-3g states that double turbidity curtain barriers would be installed to "ensure that herbicide residues or chemical transformation products do not migrate toward the West Channel connecting the West Lagoon to Lake Tahoe." However, the measure includes no monitoring to verify performance of the curtains and their effectiveness in mitigating the potential impact. In addition, Mitigation Measure EH-3b could be incorporated as part of the monitoring for EH-3g to provide a more coordinated monitoring and evaluation process of herbicide fate and mitigation.

AWMM-4

Alternatively, some mitigation measures for the Proposed Project rely on monitoring programs to identify and take actions to avoid potential environmental impacts, but lack specifics on the monitoring requirements. For example, see Mitigation Measures EH-3d, WQ1, WQ4, and WQ5b. Mitigation Measure EH-3b states that "[i]f herbicides are detected within the West Channel, additional monitoring stations would be sampled outside the Tahoe Keys in Lake Tahoe ... " This measure does not specify the appropriate analytical methods, the frequency of monitoring, or what level of detection would trigger the need for additional monitoring. The measure states that the monitoring locations should be south and north of the West Channel but does not contain guidelines about the number and location of the additional monitoring location that would be required once the trigger is reached. Any sampling locations south of the West Channel would not be located in Lake Tahoe, contrary to the measures specification that the monitoring stations would be "outside the Tahoe Keys". The measure does specify that if target chemicals are detected within 500 feet of the West Channel, the Lahontan Water Board would be notified within 24 hours. However, the measure does specify whether that is 500 feet north or south of the West Channel and does not identify what corrective actions would then be implemented to address the detection and bring the project back into compliance with the NPDES permit.

Similarly, in Mitigation Measure WQ1, if the temperature monitoring results indicate that the use of UVL control methods or hot water injections are exceeding NPDES permit limits, these results "would be used to determine whether the rates of ultraviolet light application or injection of hot water under barriers would need to be reduced." Again, there is limited guidance as to when and what actions should be taken to address these potential impacts.

TKPOA supports the use of dynamic monitoring and adjustments to the use of various control methods as needed, in order to ensure appropriate adaptive management of this important ecosystem. As the permittee, TKPOA values transparency and believes that it is crucial that the public and agencies be able to understand precisely what measures will be taken to respond to particular environmental conditions that may arise during project implementation. In addition, further clarity on these conditions will assist TKPOA in complying with its NPDES permit. Accordingly, TKPOA recommends that mitigation measures be refined to more specifically define triggers for implementation of particular corrective actions.

IV. <u>The EIR's Evaluation of "Environmental Health" Impacts Falls Outside the Scope</u> of CEOA and the TRPA Statutes.

Laws governing environmental review, including CEQA, require agencies to disclose and mitigate for impacts in a number of enumerated categories, including water quality, air quality, transportation, and public utilities (to name a few). In response to public comments and concerns, the DEIR/EIS considers additional categories of impacts, including "environmental health" impacts. While TKPOA recognizes that analysis of potential health impacts is of interest to the public and stakeholders, it is important to note that this analysis is not required under CEQA nor the laws governing TRPA, and is not relevant to the legal adequacy of the DEIR/EIS. Despite the above points, TKPOA concurs with the findings of the DEIR/EIS that there are no significant potential environmental health effects associated with the Proposed Project.

EH-5

V. <u>Conclusion</u>

In closing, TKPOA supports TRPA's selection of the Proposed Project and the DEIR/EIS prepared for the Project. TKPOA greatly appreciates your consideration of these comments and looks forward to working cooperatively with TRPA and the Lahontan Regional Board moving forward.

If you have any questions about the comments included in this letter, please reach out to Kirk Wooldridge at 530-542-6444 Extension 224, or <u>kwooldridge@tahoekeyspoa.org</u>.

Sincerely,

Joe sherry

Joe Sherry Board President

1653400v2



P.O. Box 7073 · Tahoe Ci1y. CA · 96145 · (530) 583-5253 · FIX (530) 583-04.01 · TLOA.1H;l

September 2, 2020

Mr. Dennis Zabaglo Tahoe Regional Planning Agency PO Box 5310 Zephyr Cove, NV 89449

Re: Draft EIR//EIS Tahoe Keys Lagoons Aquatic Weed Control Methods Test

Dear Mr. Zabaglo:

We are pleased to submit the following comments pertaining to the above. Please note that we will remain engaged in the process as it progresses and appreciate the opportunity to provide our comments.

It does not appear that private water intake lines were identified or analyzed as part of the inventory or addressed in potential impacts. While we understand this process is experimental, we remain concerned about long term potential impacts.

Upon reviewing the application, we have designed a statement in regards to moving forward with the management plan. We hope you will take into consideration our comments and concerns when making the final decision on which management plan is the most effective in controlling aquatic invasive plants.

A.) Chemicals/ Adverse effects:

In regards in determining the utility of and potential for integrating aquatic herbicides into Lake Tahoe we are hesitant to experiment with chemicals in the lake before we have scientific-based evidence proving 1.) no long-term water contamination and 2.) no long-term adverse effects on health.

Due to the uncertainty of health risks involved with herbicides, we are hesitant to move forward with experimental methods of the three herbicides Penoxsulum, Triclopyr, and Endothall introduced into the Lake Tahoe Keys. Byproducts of herbicides are associated with endocrine disruptors, and even in low doses are unsafe.2 Experimenting with these herbicides could have the potential for contaminating the natural water resource and creating long-term health effects. According to the articles by the Wisconsin Department of Natural resources on the three herbicides to be introduced, Penoxsulum is classified as suggestive evidence of carcinogenic potential and may be required by the EPA to undergo additional testing for endocrine disruptors.³ For Triclopyr and Endothall, there is no consistent pattern and insufficient evidence at this time to list as a carcinogen.^{4,5} This suggests that further testing should apply before experimenting in Lake Tahoe.

One more concern we would like to address is the dangers of herbicides and the chemicals they break down into once they are introduced. Pesticides and herbicides have been increasing in our aquatic ecosystem. Once these compounds breakdown, it can take days, months, and even years

WS-7

O-6

EH-4

HE-24

before degrading. Due to the increased uptake of the chemicals in our lakes and rivers, a higher frequency of cyanobacterial harmful algal blooms is causing water quality degradation and can produce toxins that have the potential to cause human harm.⁶

B.) failures

Clear Lake has seen an exponential rise in cyanobacterial growth in the past years due to agricultural runoff from sun-ounding areas. The nutrient-rich herbicides and pesticides in combination with wann, calm, shallows waters have allowed cyanobacterial growth creating a numbers of water quality problem. Big Bear Lake has been implementing herbicide treatment since the early 2000s. After using aquatic herbicides annually, weeds persist. Meaning that once the experiment in the Tahoe Keys is final, the herbicide treatment management plan will move forward. Continuation of treatments will be needed, increasing the concentration of broken-down chemicals in the lake. Due to the warm conditions and nutrient abundant environment of the Tahoe Keys, these chemicals can favor weed and cyanobacterial algae growth.

C.) Alternatives

There are several innovative water management plans which are chemical-free that have proven to be effective. Ultraviolet C lights, inversion oxygenation, and bioaugmentation, aeration systems, and large mats with controlled air pockets have all tested to be effective in managing invasive weeds. All non-chemicals methods should be tested and then retested in a coalition with each other before we begin to experiment with chemicals. Herbicide treatment is a temporary fix with the potential to encourage weed and cyanobacterial growth that degrades the quality of our natural recourse. It is critical to explore all non-chemical treatments to ensure the safety and longevity of our natural resources and use herbicides as a last resort. We all want what is best for Lake Tahoe. We hope that you will take into consideration our thoughts and concerns before implementing a management plan involving chemical treatment.

We appreciate your attention to this matter.

Sincerely,

Jan Brisco Executive Director

CYB-5

AWM-28

This is an **EXTERNAL** email. Do not click links or open attachments unless you validate the sender and know the content is safe.

Please accept the attached Tahoe Keys Lagoons Aquatic Weed Control Methods Test comment letter on behalf of Tahoe Resource Conservation District. Thank you,

Nicole Cartwright (*she/her/hers*) Executive Director office: <u>530.543.1501 x111</u> | cell: <u>530.570.3334</u>

 Tahoe Resource Conservation District

 tahoercd.org | Like us on Facebook



870 Emerald Bay Road Suite 108, South Lake Tahoe, CA 96150 • 530.543.1501 PH • 530.543.1660 FAX • TahoeRCD.org

September 2, 2020

Dennis M. Zabaglo, Aquatic Resources Program Manager Principal Environmental Specialist Tahoe Regional Planning Agency

Subject: Tahoe Keys Lagoons Aquatic Weed Control Methods Test

Dear Mr. Zabaglo,

Thank you for the opportunity to provide comments on the proposed Tahoe Keys Lagoons Aquatic Weed Control Methods Test. Tahoe RCD has been an active member of the Tahoe Keys Stakeholder Committee since it was formed in 2018, and subsequently has an indepth understanding of the aquatic invasive plant problem in the Tahoe Keys. We have worked closely with our fellow stakeholders to develop the proposed project while incorporating important stakeholder interests and concerns.

We fully support the proposed project's focus on testing a variety of methods on a smaller scale to inform a future treatment plan within the Tahoe Keys lagoons. Over the past 10 years, Tahoe RCD has used a similar testing strategy to evaluate mechanical aquatic invasive plant control methods. While our tests have been conducted on infestations that were isolated and much smaller than the infestation in the proposed project area, this prudent approach has resulted in critically improved insights on timing and effort required to successfully treat aquatic invasive plant populations beyond the short-term.

We are very interested in the data and knowledge that will be gathered from these tests, and look forward to continuing our participation on the Tahoe Keys Stakeholder Committee to treat and manage the aquatic invasive plant problem in the Tahoe Keys lagoons.

Sincerely,

Nicole Cartwright Executive Director Tahoe Resource Conservation District

We Do Conservation

The mission of the Tahoe RCD is to promote the conservation, stewardship and knowledge of the Lake Tahoe region's natural resources by providing leadership and innovative environmental services to all stakeholders.

Date: September 3, 2020

Patty Kouyoumdjian, Executive Officer Mike Plaziak, Assistant Executive Officer Russell Norman, P.E. Lahontan Regional Water Quality Control Board 2501 Lake Tahoe Blvd. South Lake Tahoe, CA 96150

Joanne Marchetta, Executive Director Dennis Zabaglo, Aquatic Resources Program Manager Tahoe Regional Planning Agency 128 Market Street Stateline, NV 89449 Subject: Sierra Club Comments on the Tahoe Keys Lagoons Aquatic Weed Control Methods Test Draft EIR/EIS

This letter submits the comments of the Tahoe Area Group, the Toiyabe Chapter, and the Mother Lode Chapter of the Sierra Club on the Draft Environmental Impact Report/Environmental Impact Statement (Draft EIR/EIS) for the Tahoe Keys Lagoons Aquatic Weed Control Methods Test. The Sierra Club opposes the Proposed Project to use aquatic herbicides in the Tahoe Keys.

The Tahoe Area Group has more than 900 members in Nevada and California. Sierra Club Groups are subdivisions of Chapters. Group members in Nevada are members of the Toiyabe Chapter (more than 6,200 members); Group members in California are members of the Mother Lode Chapter (more than 17,400 members). Tahoe Area Group members have engaged on issues related to the health of Lake Tahoe for many years and are intensely interested in the outcome of this process for our current and future members as well as for the health of our precious national treasure, Lake Tahoe. Protection of the health of Lake Tahoe is also a high-priority issue for the Toiyabe and Mother Lode Chapters as well as members across the country.

The Tahoe Keys is a case study showing how NOT to develop land in a fragile subalpine ecosystem on a world-renowned scenic lake. We are certain that such a development destroying a wetland would not be permitted today. The Tahoe Keys is a private residential development of more than 1500 homes and a marina. It was constructed in the 1960s by dredging Lake Tahoe's largest wetland, the Upper Truckee

Marsh, to create lagoons. The homes and infrastructure were subsequently constructed atop the piled-up dredge spoils. Construction of the Keys destroyed the function and hydrology of the marsh, which filtered and purified the inflow from the largest tributary to the Lake. The legacy of this 60-year-old development is the 172 acres of largely stagnant artificial Keys "lagoons". An aquatic weed infestation covers ninety percent of the lagoons' surface, causes harmful algal blooms, and impedes navigation in the lagoons. Boats entering the Lake from the lagoons transport weed fragments throughout the Lake, spreading the infestation and endangering the Lake's ecology and its famed clarity. Infestations have occurred at numerous locations around the Lake. **ALT-86**

GEN-43

And now, because of the explosive weed growth at the Keys over the past several decades and its inevitable spread to many locations in Lake Tahoe, millions of dollars are being spent and will be spent in the future to prevent and remove weed infestations along shorelines and in marinas around the Lake. Because the Lead Agencies have avoided requiring proactive aquatic management solutions that could have been implemented to help slow or prevent the build-up of muck and nutrient-laden sediment in the Keys, such as proper land use management, maintenance of beneficial vegetative buffers and sediment traps, and installation of aeration systems, they are now resorting to the all-too common use of herbicides. The Lead Agencies make no attempt with this Draft EIR/EIS to <u>solve</u> the problem, but instead only try to manage it. Including herbicides in this test will only lead to its perpetual use. The Lead Agencies' past avoidance of the problem also now means that the public is being asked to pay for their past avoidance of the problem. The time to act on solving this problem and saving the lake from the Keys is now.

In 2018, the Tahoe Keys Property Owners Association (TKPOA) applied to the Lahontan Regional Water Quality Control Board (Lahontan) and the Tahoe Regional Planning Agency (TRPA) (the Lead Agencies) for permission to use herbicides, never before used in Lake Tahoe, to control weeds in the Tahoe Keys lagoons. The Lead Agencies determined that an EIR/EIS was required, released the Notice of Preparation (NOP) for the EIR/EIS on June 17, 2019, and published the Draft EIR/EIS on July 6, 2020. The Proposed Project proposes to test the use of herbicides in the lagoons to control the invasive weeds Eurasian milfoil, Curlyleaf Pondweed, and coontail, and also test non-chemical control methods. The Draft EIR/EIS includes two other action alternatives: Action Alternative 1, which proposes removing the sediment from the bottom of the lagoons by dredging and replacing it with coarser sand and gravel. The Draft EIR/EIS identified Action Alternative 1 as the environmentally superior alternative. The Sierra Club is proposing an enhanced Action Alternative 1, described later in these comments, and strongly encourages you to adopt the enhanced alternative.

The required No Action Alternative, which would continue the present ineffective management, was not supported by public scoping comments. The Proposed Project will only test <u>managing</u> the weeds so that boating from the Keys can continue, not

eliminate the grave threat to Lake Tahoe. The Proposed Project will lead to perpetual herbicide use for weed management everywhere around Lake Tahoe. Long-term holistic approaches must be implemented that would eliminate the source of the problem, the unnatural habitat created in the 1960s by destroying the Upper Truckee River freshwater marsh. Amazingly enough, the Draft EIR/EIS asserts that only the No Action Alternative has "significant and unavoidable" impacts, even though the mere presence of herbicides in Lake Tahoe and connected waters is a significant and unavoidable impact of the Proposed Project. This assertion is just one of the many examples of the bias toward the Proposed Project exhibited by the authors of the Draft EIR/EIS.

GEN-43

REG-18

ALT-86

2

Table of Contents

General Comments	3
Specific Comments	20
Executive Summary	20
Section 1.0 Introduction and Statement of Purpose and Need	25
Section 2.0 Project Description and Alternatives	26
Section 3.0 Affected Environment and Environmental Consequences	34
Section 3.1 Approaches to Environmental Analysis	34
Section 3.2, Environmental Health	45
Section 3.3, Natural Environment	52
Appendix F Comments	62
Closing Remarks	64

General Comments

By this comment letter, the Sierra Club objects to approval of the project, and objects to issuance and/or certification of a Final Environmental Impact Report/Environmental Impact Statement (EIR/EIS) for the project. The Draft EIR/EIS for the project is so inadequate that it has precluded meaningful analysis of the proposed project, environmental impacts, and alternatives. The agencies must prepare a revised Draft EIR/EIS and circulate same for public and decision-maker review, and for public comment. Furthermore, a response to these comments must be a substantive response to each of these comments and not merely a statement such as "comment noted."

1. The Antidegradation Analysis has been unlawfully deferred and segmented from the EIR/EIS process instead of being integrated with the EIR/EIS process

The Draft EIR/EIS recites (at p. 1-13),

A complete Antidegradation Analysis (AA) will be required for the Proposed Project consistent with State and Federal antidegradation policies, following the Administrative Procedures Update on Antidegradation Policy on Antidegradation Policy implementation for National Pollutant Discharge

Elimination System (NPDES) Permitting (State Water Board 1990), the Water Quality Control Plan for the Lahontan Region (Basin Plan) and policy originating from the process developed to allow for exemptions to the Basin Plan prohibition on use of aquatic pesticides and herbicides. The AA will include an evaluation of whether the project has any unreasonable effects on beneficial uses, such as long-term water quality degradation, exceedance of Basin Plan water quality objectives, and impacts to non-target native species. Consistent with State and Federal antidegradation policies and State Water Board Resolution 68-16 Statement of Policy with Respect to Maintaining High Quality in California, the AA will also address balancing potential degradation with social economic effects of the Proposed Project and alternative approaches to aquatic weed control at the Tahoe Keys lagoons test areas. **PP-10**

PP-9

The Antidegradation Analysis is apparently scheduled to be completed in November. The agencies have refused to extend the comment period on the Draft EIR/EIS so that public reviewers and commenters, and decision-makers, would have the benefit of the critical information to be provided by the Antidegradation Analysis. Depriving the public of the Antidegradation Analysis during the review period for the Draft EIR/S is astonishing. In addition to being astonishing, this deprivation violates CEQA. The CEQA Guidelines are codified at 14 Cal. Code Regs § 15000 et seq. The second sentence in CEQA Guidelines § 15124(d)(1)(C) requires, "To the fullest extent possible, the lead agency should integrate CEQA review with these related environmental review and consultation requirements." CEQA's policy is to conduct integrated review. Banning Ranch Conservancy v, City of Newport Beach (2017) 2 Cal.5th 918, 939, 942. Moreover, "Lead agencies in particular must take a comprehensive view in an EIR." Banning Ranch Conservancy, 2 Cal. 5th 918, 939, citing CEQA, Public Resources Code § 21002.1(d.)

CEQA Guidelines § 15378(c) provides,

The term 'project' refers to the activity which is being approved and which may be subject to several discretionary approvals by government agencies. The term 'project' does not mean each separate governmental approval.

CEQA prohibits the segmentation, or piecemealing, of environmental analysis. The agencies have failed to proceed in the manner required by CEQA because of the deferral and segmentation of the Antidegradation Analysis from the Draft EIR/EIS document and process.

NEPA also requires concurrent preparation and integration of other environmental impact analyses with a Draft EIS. The NEPA Regulations are codified at 40 C.F.R. § 1500 et seq. NEPA Regulation § 1501.7(b)(6) requires that an agency,

Identify other environmental review and consultation requirements so the lead and cooperating agencies may prepare other required analyses and studies

4

concurrently with, and integrated with, the environmental impact statement as provided in <u>§ 1502.25</u>.

NEPA Regulation § 1502.15(a) requires,

To the fullest extent possible, agencies shall prepare draft environmental impact statements concurrently with and integrated with environmental impact analyses and related surveys and studies required by the Fish and Wildlife Coordination Act (<u>16 U.S.C. 661 et seq.</u>), the National Historic Preservation Act of 1966 (<u>16 U.S.C. 470 et seq.</u>), the Endangered Species Act of 1973 (<u>16 U.S.C. 1531 et seq.</u>), and other environmental review laws and executive orders.

Comprehensive, honest, and accurate analysis is essential to the future of a beautiful and beloved national treasure – Lake Tahoe. The Draft EIR/EIS admits, "The spread of aquatic invasive species (AIS) is threatening Lake Tahoe's

Also REG-19

AA-15

ecosystem, water quality, iconic clarity, and \$5 billion recreation-based economy." Also (Executive Summary, p. ES-1.) Use of aquatic herbicides as a treatment method **HE-147** would be "a method that has never been utilized in Lake Tahoe before-.." (Id.) The agencies are failing to proceed in the manner required by CEQA, and NEPA, **AA-15** because they have deferred and separated the Antidegradation Analysis from the Draft EIR/EIS analysis and process. The public has been unlawfully precluded from having the Antidegradation Analysis to review along with the public's review of the Draft EIR/EIS. The decision-makers have blinded themselves to the informed public review and comment on the Draft EIR/EIS that should be but is not informed by the missing Antidegradation Analysis. 2. The absence of the Antidegradation Analysis renders the Draft EIR/EIS so inadequate that meaningful public review and comment has been precluded, requiring recirculation under both CEQA and NEPA. CEQA Guidelines § 15088.5(a)(4) requires recirculation when, The draft EIR was so fundamentally and basically inadequate and conclusory in nature that meaningful public review and comment were precluded. NEPA Regulation § 1502.9(a) requires, Draft environmental impact statements shall be prepared in accordance with the scope decided upon in the scoping process. The draft statement must fulfill and satisfy to the fullest extent possible the requirements established for AA-116 final statements in section 102(2)(C) of the Act. If a draft statement is so inadequate as to preclude meaningful analysis, the agency shall prepare and circulate a revised draft of the appropriate portion. The agency shall make every effort to disclose and discuss at appropriate points in the draft 5 statement all major points of view on the environmental impacts of the alternatives including the proposed action. The absence of the Antidegradation Analysis renders the Draft EIR/EIS so inadequate as to preclude meaningful analysis, review, and comment by the public, and meaningful analysis and review by the decision-makers. Consequently, revision and recirculation are required by both the CEQA Guidelines, and the NEPA Regulations. Recirculation of a revised Draft EIR/EIS must take place after the Antidegradation Analysis is available for public review. 3. The discharge of herbicides would violate the Basin Plan. The Lahontan Basin Plan requires demonstration that all non-chemical measures available failed to address the target plants prior to granting an exemption to the **REG-20** Basin Plan's discharge prohibition of herbicides. The Exemption Criteria for Control Aquatic Invasive Species (AIS) and Other Harmful Species in the Adopted Basin

Plan Amendment includes exemption criterion 1, which states:

"Demonstration that non-chemical measures were evaluated and found inappropriate/ineffective to achieve the project goals. (Alternatives to pesticide use must be thoroughly evaluated and implemented when feasible (as defined in CEQA Guideline 14364: "Feasible" means capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, legal, social, and technological factors.))" (emphasis added)

TKPOA has not complied with this criterion, as shown in Appendix C (TKPOA's application), because they have not thoroughly tested the ultra-violet light (UV) treatment and Laminar Flow Aeration (LFA) methods at the Keys. Therefore, granting a discharge prohibition exemption for the release of herbicides by the Lahontan Water Board would violate the Basin Plan.

The revised Draft EIR/EIS must justify the project's piloting herbicide use when the effectiveness of non-chemical is still being evaluated. If non-chemical methods haven't been fully evaluated, how can the criterion that other non-chemical methods have not addressed the problem effectively be satisfied?

4. The agencies have failed to proceed in the manner required by law because the Draft EIR/EIS unlawfully includes a finding of no significant impact.

As set forth in more detail below in General and Specific Comments, the use of herbicides is a significant and unavoidable impact that cannot be mitigated because its mere initial presence alone violates the toxicity, biostimulatory substances, and chemical constituent water quality objectives in the Basin Plan. Consequently, the findings in the Draft EIR/EIS, of no significant impact (p. ES-8; Chapter 5.), are the opposite of full environmental disclosure. The findings are false.

Under NEPA, "If the district judge finds that the agency did not make a reasonably adequate compilation of relevant information and that the EIS sets forth statements that are materially false or inaccurate, he may properly find that the EIS does not satisfy the requirements of NEPA, in that it cannot provide the basis for an informed evaluation or a reasoned decision." Sierra Club v. U.S. Army Corps of Engineers (2d Cir. 1983) 701 F.2d 1011, 1030. NEPA serves as an "environmental full disclosure law." Silva v. Lynn (1st Cir. 1973) 482 F2d 1282, 1284.

A primary goal of CEQA is "transparency in environmental decision-making." Save Tara v. City of West Hollywood (2008) 45 Cal.4th 116, 136. "CEQA requires full environmental disclosure." Communities for a Better Environment v. City of Richmond (2010) 184 Cal.App.4th 70, 88.

The findings that there are no significant and unavoidable impacts that cannot be mitigated are not supported by substantial evidence. That violates CEQA Guidelines § 15091(b.) Because there are significant and unavoidable impacts that cannot be mitigated, the project cannot be lawfully approved without findings of overriding concern. CEQA Guideline § 15092(b.) A statement of overriding considerations, supported by substantial evidence, would be required if the project is approved. CEQA Guidelines §15093.

REG-21

6

REG-20

5.	The Draft EIR/EIS fails to include the required range of reasonable alternatives	
	The agencies have failed to proceed in the manner required by CEQA and NEPA because the Draft EIR/EIS fails to include the required range of reasonable alternatives. The Draft EIR/EIS admits the elimination of a number of alternatives from consideration in section 2.7. Alternatives eliminated include isolating Tahoe Keys Lagoons from Lake Tahoe, filling Tahoe Keys Lagoons, and Tahoe Keys Wetland Restoration. (Draft EIR/EIS, section 2.7, at pp. 2-39-2-41.)	
	The Draft EIR/EIS admits the Tahoe Keys Lagoons have "caused several adverse effects to cold water ecosystems, impaired navigation, created potential health and safety risks, impaired fishing and aesthetic quality, and led to increased predation of native fish species by invasive fish species, (p. ES-2.) "The accumulation of nutrient-rich organic sediment in the lagoons as a result of aquatic weed growth and die-off contributes to elevated water column nutrients and can contribute to the occurrence of harmful algal blooms (HAB), which can lead to the presence of cyanotoxins." (Id.)	ALT-87
	It is necessary to include alternatives that would actually address the health and safety risks and other environmental impacts such as isolating or filling Tahoe Keys Lagoons in a revised and recirculated Draft EIR/EIS. That would allow public reviewers and decision-makers to actually focus on the trade-offs involved among a reasonable range of alternatives to effectively address, "The abundant growth of non-native and undesired native aquatic plants ("aquatic weeds") in the Tahoe Keys Lagoons" (DraftEIR/EIS p. ES-2.)	

The Lahontan Basin Plan requires demonstration that all non-chemical measures available failed to address the target plants prior to granting an exemption to the Plan's prohibition of herbicides. The Draft EIR/EIS fails as an environmental full disclosure document. The Draft EIR/EIS refers to the prohibition but fails to inform the reader of the criteria for seeking an exemption; one of which is demonstrating that non-chemical methods have not been effective. (Draft EIR/EIS, pp. ES-3, 1-8, 1-13, 3.2-4.) Technologies such as LFA and UV light have not been fully tested in Tahoe Keys as required by the Basin Plan.

"Evaluation of project alternatives and mitigation measures is 'the core of an EIR."" Banning Ranch Conservancy v. City of Newport Beach (2017) 2 Cal.5th 918, 937. An EIR must "describe a range of reasonable alternatives to the project . . . which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives." CEQA Guidelines § 15126.6(a). "[T]he discussion of alternatives shall focus on alternatives to the project or its location which are capable of avoiding or substantially lessening any significant effects of the project, even if these alternatives would impede to some degree the attainment of the project objectives, or would be more costly." § 15126.6(b).

7

REG-22

When the project would have significant adverse environmental effects, agencies are "required to consider project alternatives that might eliminate or reduce the project's significant adverse environmental effects." Friends of the Eel River v. Sonoma County Water Agency (2003) 108 Cal.App.4th 859, 873.

Pursuant to NEPA Regulation § 1502.14, "This [alternatives] section is the heart of the environmental impact statement." The alternatives section should "sharply" define the issues and provide a clear basis for choice among options by the decision-maker and the public. Id. reasonable alternatives must be included even if they are not within the jurisdiction of the lead agency. NEPA § 1502.14(c.) Moreover, "an alternative may be reasonable, and therefore required by NEPA to be discussed in the EIS, even though it requires legislative action to put it into effect." Kilroy v. Ruckelshaus (9th Cir. 1984) 738 F.2d 1448, 1454.

So, what the Draft EIR/EIS presently consists of is a proposed project that is unlawful because herbicides are prohibited by the Basin Plan; the Antidegradation Analysis is missing; and the criteria for seeking and obtaining an exemption to the prohibition have not been met or even disclosed in the Draft. On the other hand, alternatives that are lawful have been eliminated from consideration in the Draft EIR/EIS. This works to skew the process in favor of the herbicide alternative and against reasonable, lawful alternatives under existing policies and plans.

Revision and recirculation of the Draft EIR/EIS are required by the absence of the required range of reasonable alternatives. CEQA Guideline § 15088.5(a)(3) requires

recirculation when "A feasible project alternative or mitigation measure considerably different from others previously analyzed would clearly lessen the significant environmental impacts of the project, but the project's proponents decline to adopt it."

6. The discussion of the impacts in the Draft EIR/EIS is inadequate to serve as the informational document required by CEQA and NEPA

CEQA Guideline §15262(a) specifies required contents of an EIR, including in pertinent part,

The Significant Environmental Effects of the Proposed Project. An EIR shall identify and focus on the significant effects of the proposed project on the environment... Direct and indirect significant effects of the project on the environment shall be clearly identified and described, giving due consideration to both the short-term and long-term effects. The discussion should include relevant specifics of the area, the resources involved, physical changes, alterations to ecological systems, and changes induced in population distribution, population concentration, the human use of the land (including commercial and residential development), health and safety problems caused by the physical changes, and other aspects of the resource base such as water, historical resources, scenic quality, and public services...

ALT-88

8

REG-23

	The discussion of the impacts in the Draft EIR/S is inadequate to serve as the informational document required by CEQA. See Sierra Club v. County of Fresno (2018) 6 Cal.5 th 502, 515-522. The information provided is inadequate with respect to determining whether an exemption to the herbicide prohibition is desirable or even lawful; assessing the public health and safety impacts of herbicide use and of the increased risk of harmful algal blooms; the impacts on water quality and fish and wildlife; and other issues. The missing Antidegradation Analysis is an example of the inadequacy of the Draft EIR/EIS to serve as the full disclosure informational document required by CEQA.		REG-23
	NEPA imposes a procedural requirement on federal agencies to "take [] a 'hard look' at the potential environmental consequences of the proposed action." Northern Plains Resource Council, Inc. v. Surface Transp. Bd. (9 th Cir. 2011) 668 F.3d 1067, 1075. Just as the information provided by the Draft EIR/EIS is inadequate under CEQA; it is likewise inadequate under NEPA. Instead of taking a hard look at the environmental consequences of the proposed action; the agencies have obscured any look at the environmental consequences by steaming full speed ahead without the Antidegradation Analysis.		
7.	The Draft EIR/EIS is inadequate because of the absence of accurate economic information to allow informed comparison of alternatives		
	9	9	REG-24
	Accurate economic information is required by NEPA. In Natural Resources Defense Council v. U.S. Forest Service (9th Cir. 2005) 421 F.3d 797, 811, the Ninth Circuit held that "[i]naccurate economic information may defeat the purpose of an EIS by 'impairing the agency's consideration of the adverse environmental effects' and by 'skewing the public's evaluation' of the proposed agency action." Accurate economic analysis is required "to allow an informed comparison of the alternatives considered in the EIS." 421 F.3d at 813.		
	The Draft EIR/EIS, however, fails to provide the required accurate economic analysis to allow an informed comparison of alternatives.		
8.	The Draft EIR/EIS substitutes argument, speculation, and unsubstantiated opinion for substantial evidence		
	CEQA Guidelines § 15384(b) defines "substantial evidence" as including "facts, reasonable assumptions predicated upon facts, and expert opinion supported by facts." "Argument, speculation, unsubstantiated opinion or narrative, evidence which is clearly erroneous or inaccurate, does not constitute substantial evidence." (§ 15384(a.)		GEN-44
	As shown in more detail below in the General and Specific Comments, the Draft EIR/EIS is generally lacking in substantive supporting documentation and references to support the assertions and conclusions. That is true, for example, with respect to the findings of no significant impacts anywhere with the exception of the no action alternative.		

Again, the Draft EIR/EIS for the project is so inadequate that it has precluded meaningful analysis of the proposed project, environmental impacts, and alternatives. The agencies must prepare a revised Draft EIR/EIS and circulate same for public and decision-maker review, and for public comment.

9. The Draft EIR/EIS does not address the source of the problem: these artificial lagoons, which were dredged out of the Upper Truckee River marsh, beginning over 60 years ago, were destined to become highly eutrophic and susceptible to invasion by weeds. This destiny is due to both the nutrient-rich marsh from which the lagoons were dredged, plus the 60 years of accumulated stormwater inputs from the Tahoe Keys and other surrounding neighborhoods with their fertilizer-enriched, verdant green lawns. Maintaining this environmental disaster at the south end of one of the world's deepest and clearest oligotrophic lakes without anticipating these systemic, built-in causes is tantamount to negligence.

A eutrophic system of lagoons connected to Lake Tahoe will always be in conflict with the rest of the Lake, which was a perfect example of an oligotrophic lake. With increased warming due to climate change, the problem will only worsen if it is not addressed head-on with holistic solutions. Knee-jerk band aids like the Proposed Project, whose goal is saving a few boat-owners' ability to boat to the Lake from their

backyard, will not suffice. The best way to protect the Lake in the short term until the real solution, restoring the dead-end lagoons to nutrient-filtering marsh, is implemented and completed, is to install a barrier between the Lagoons and the Lake. The suggestion was offered more than three times by the Sierra Club and by community members to include an analysis of this suggestion in the Draft EIR/EIS was ignored.

Our scoping comments requested that the Agencies document and analyze the source of the problem – the unnatural environment that was created by destroying the marsh. Nutrients have accumulated for decades in this unnatural environment and perpetual treatment of the nutrient-stimulated weed growth will be required. The Agencies ignored this request. In fact, the Draft EIR/EIS conveys the illusion that using herbicides only once will miraculously solve the problem. The numerous studies of lakes elsewhere in the United States that have initiated aquatic herbicide use have had to continue its use on a regular basis. The Draft EIR/EIS does not include any examples of lakes treated with herbicides that have successfully reduced weeds significantly from one treatment.

10. Lake Tahoe has been designated as a Tier III Outstanding National Resource Water (ONRW). The high water quality of Tier III ONRWs is protected and maintained by antidegradation regulations. Any proposal or action to degrade the high water quality, for example by discharging chemical substances into Lake Tahoe, requires an antidegradation analysis as well as a National Pollutant Discharge Elimination System (NPDES) permit. "Any action" includes CEQA/NEPA actions. The antidegradation analysis should have been included in the Draft EIR/EIS, and in fact

10 AWM-49

GEN-44

AA-17

Lead Agency staffs stated during the scoping phase workshops that the analysis would be included. The Sierra Club has requested that the Lead Agencies extend the comment deadline to 60 days from the release of the antidegradation analysis. The Agencies have not responded to our letter and have recently stated that the antidegradation analysis would not be completed until months after the comment deadline.

The State Water Resources Control Board has issued an Administrative Procedures Update for the Antidegradation Policy Implementation for NPDES Permitting (APU). The APU states (page 3) "When a discharge is included in a project requiring CEQA documentation, the antidegradation analysis should be integrated in the environmental review process. If the Regional Board is not the lead agency on a project requiring an antidegradation finding, the Regional Board should ensure that the lead agency includes the antidegradation information in the EIR." (emphasis added) The EPA requires States to develop an antidegradation policy, States/Tribes also are required to identify their implementation method. In so doing, the State/Tribe establishes how and when the policy will be applied and what

criteria will be used in its decision-making." (emphasis added) The APU is the State's antidegradation implementation method and therefore must be followed.

In addition, Appendix I-5 to the APU, which is EPA's Guidance on Implementing the Antidegradation Provision of 40 CFR 131.12, states the following:

"Actions covered by antidegradation provisions include, but are not limited to the following: ... Other Actions... 3. Other "major Federal action" (pursuant to NEPA and the Endangered Species Act). (emphasis added)

For Tier III waters, no degradation of water quality is allowed other than short-term, temporary changes. How can a conclusion be made that the Antidegradation Policy allows for short-term degradation if an antidegradation analysis has not been provided? Therefore, the antidegradation analysis must be included in a revised Draft EIR/EIS.

- 11. The Lead Agencies' prioritization of recreational boating over the health of Lake Tahoe is contrary to these Agencies' purposes and missions. The Lead Agencies are also prioritizing the interests of Tahoe Keys homeowners over the interests of other communities in the Lake Tahoe Basin and the interests of visitors from around the country and world. This is contrary to the requirements of an antidegradation analysis.
- 12. Some potential non-chemical control measures are not evaluated in this Draft EIR/EIS. Floating Treatment Wetlands, included in the list of resources in https://www.keysweedsmanagement.org/resources-1, have been studied, but were found to be "too obtrusive for use in the Main and Marina lagoons of the Tahoe Keys, where there is heavy boat traffic and docks." The agencies are clearly

AA-17

REC-4

AA-18

AWM-50

prioritizing recreation over reducing the nutrients, the source of the problem. This control measure should have been analyzed in the Draft EIR/EIS.

13. The Proposed Project's use of herbicides requires compliance with the State's Antidegradation Policy, State Water Resources Control Board Resolution 68-16, which states (in part): "2. Any activity which produces or may produce a waste or increased volume or concentration of waste and which discharges or proposes to 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 highest water quality consistent with the maximum benefit to the people of the State will be maintained." (emphasis added). We contend that neither (a) nor (b) can be assured; and that therefore the discharge of herbicides would violate the State's antidegradation policy. First, the use of herbicides increases the likelihood of harmful algal blooms, including deadly cyanobacteria, to an unavoidably significant level (Harris et al, 2016). Therefore, requirement (a) of the resolution is not satisfied. Second, the use of herbicides must maintain the highest water quality consistent

with the maximum benefit to the people of the State. The previous general comment pointed out that the sole beneficiaries of herbicide use would be Tahoe Keys homeowners. Therefore, the use of herbicides is not consistent with the maximum benefit to the people of the State and must not be allowed.

14. The APU also requires a finding that "specifies that water quality degradation is permissible when balanced against benefit to the public..." And "If the Regional Board finds that lowering of water quality is consistent with the conditions established in the State policy [which it does not as pointed out in the previous comment] and the federal regulation, the finding should indicate: 1) The pollutants that will lower water quality; 2) The socioeconomic and public benefits that result from lowered water quality; and 3) The beneficial uses that will be affected." (emphasis added) Again, use of herbicides would benefit only Tahoe Keys homeowners, a very small group. The maximum benefit to the maximum number of people in the State would be realized from (a) installation of a barrier in the channel between the lagoons and Lake to provide short-term protection to the Lake, and (b) restoration of the dead-end lagoon portions of the Keys to nutrient-filtering wetland marsh. Eliminate the habitat for the weeds and you eliminate both the weeds and need for herbicides. Restoring the canals to wetland would immediately improve the water quality and clarity by filtering nutrients, sediments and pollution from the surrounding neighborhood of the Keys. The homeowners would keep their houses and only lose their ability to boat to the Lake from their backyards. We believe this is not too large a price to pay to save Lake Tahoe from the Keys. The Keys' homeowners could instead either launch their boats from the Tahoe Keys Marina or one of the other south shore marinas.

AWM-50

AA-19

REG-25

15. Under the Antidegradation Policy, degradation is allowed (assuming the requirements are met), but water quality standards and objectives may not be exceeded. Since the discharge of herbicides would cause an immediate exceedance of the water quality objective for toxicity by killing native plants, as well as cause a violation of the biostimulatory substances and chemical constituents water quality objectives, the proposed discharge of herbicides is not allowable. In addition, while the application of an herbicide may be of short duration, the degradation of beneficial uses may be long term by killing native vegetation and creating a condition whereby biostimulatory substances are released from the release of nutrients to the water column.

The APU also states "A Regional Board may decide that an antidegradation finding is not required because the proposed discharge is prohibited under either the State or federal policies. For example, if the proposed discharge will violate water quality objectives in the receiving water, no discharge will be allowed and therefore no antidegradation analysis is required." (emphasis added) This statement

applies to the Proposed Project's discharge of herbicides, since a discharge would result in immediate and certain violation of the following water quality objectives:

- a. The toxicity water quality objective in Lahontan's Basin Plan would be immediately violated by the discharge of herbicides. The toxicity water quality objective states "All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life." And, "The survival of aquatic life in surface waters subjected to a waste discharge, or other controllable water quality factors, shall not be less than that for the same water body in areas unaffected by the waste discharge ... " (emphasis added). The phrase "all waters" includes the treatment zone where herbicides would be applied even though the December, 2011, Basin Plan Adopted Amendment suggests that the receiving water refers to the water outside the treatment area. Also, the Draft EIR/EIS claims that the herbicides are not toxic because their LC50's (concentration at which 50 percent of test organisms exhibit a lethal response) are within acceptable limits, but the herbicides are toxic substances synthesized to kill aquatic plants, including native aquatic plants. There are also chronic toxicity effects on organisms trapped within the treatment zone that have not been considered or discussed anywhere in this Draft EIR/EIS. Therefore, the toxicity water quality objective is violated immediately by discharges and such discharges must not be allowed.
- b. The Chemical Constituents water quality objective, which states "Waters designated as MUN shall not contain concentrations of chemical constituents in excess of the maximum contaminant level (MCL) or secondary maximum contaminant level (SMCL) based upon drinking water standards specified in the following provisions of Title 22 of the California Code of Regulations,

which are incorporated by reference into this plan: Table 64431-A of Section 64431 (Inorganic Chemicals), Table 64431-B of Section 64431 (Fluoride), Table 64444-A of Section 64444 (Organic Chemicals), Table 64449A of Section 64449 (Secondary Maximum Contaminant Levels-Consumer Acceptance Limits), and Table 64449-B of Section 64449 (Secondary Maximum Contaminant Levels Ranges). This incorporation-by-reference is prospective including future changes to the incorporated provisions as the changes take effect." Since the beneficial uses for the waters of Lake Tahoe include MUN (Municipal and Domestic Supply), this water quality objective would be violated immediately by discharge of aquatic herbicides. The target endothall treatment rate of 5 mg/L and maximum concentrations that may be expected for several weeks in the Tahoe Keys test plots and adjacent lagoons exceed the Maximum Contaminant Level (MCL) for endothall in drinking water established by EPA of 0.1 mg/L. This will pose a significant risk to drinking water drawn from Lake Tahoe or the Tahoe Keys Water

Company's wells. (See Specific Comment 56 below.) Therefore, discharges of herbicides must not be allowed.

- c. The biostimulatory substances water quality objective state: "Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect the water for beneficial uses." Chapter 3 of the Basin Plan also states "The concentrations of biostimulatory substances shall not be altered in an amount that could produce an increase in aquatic biomass to the extent that such increases in aquatic biomass are discernible at the 10 percent significance level." The use of herbicides would cause a rapid increase in the nutrient concentration in the water column, and consequently, an increase in harmful algal blooms (HABs) including cyanobacteria. Therefore, the application of herbicides would violate the biostimulatory substances water quality objective.
- 16. Lahontan's Basin Plan requires demonstration that all available non-chemical control methods have not effectively controlled the target plants prior to granting an exemption to the Plan's prohibition. During the scoping phase, the Sierra Club's comments stated that the Proposed Project's testing of herbicides was premature and in violation of the Basin Plan. The Draft EIR/EIS mentions the prohibition exemption required by the Basin Plan and even refers to "exemption criteria under which an exemption can be granted", but does not include a list of these criteria, one of which is demonstrating that all available non-chemical methods have not been effective.

TKPOA cannot fully satisfy this criterion because the newer technologies, such as laminar flow aeration (LFA) and ultraviolet light (UV), have not been fully tested in the Keys, as required in the Basin Plan. TKPOA's primary method of managing the weeds has been mechanical harvesting (mowing), which removes the top several

REG-25

14

REG-26

feet of weeds to facilitate boating. Mowing has exacerbated the problem by releasing fragments that then take root and grow elsewhere. TKPOA has not thoroughly evaluated and tested other non-herbicidal treatment methods, such as those that would be tested under Action Alternative 1, and has certainly not met the prohibition exemption requirement of demonstrating the ineffectiveness of non-herbicide treatment methods before an exemption can be granted. TKPOA's application (Appendix C) attempts to provide rationale and justification for the use of herbicides in stating that the use of bottom barrier, hand pulling and/or diver-assisted suction removal, dredging (in other areas of the lake), and mechanical rotovating (harvesting) have failed over the course of the last 30 years. An adequate and extensive demonstration of the failure of non-chemical methods has not been done especially since LFA and UV light, newer technologies used very successful results elsewhere, have not been thoroughly tested in the Tahoe Keys.

- 17. Action Alternative 1 is clearly the environmentally superior alternative. In fact, the Draft EIR/EIS correctly states this in 3 places (pgs. ES-6, ES-8, 5-19). Therefore, the Sierra Club advocates that the Lead Agencies choose this Action Alternative 1. This alternative, however, does not go far enough. There should be an enhanced Action Alternative 1 that tests the non-herbicidal methods in greater areas than those proposed.
- 18. The use of herbicides in Tahoe Keys cannot reasonably be expected to be a onetime event, as there is no documented evidence that a one-time use of aquatic herbicides effectively reduces invasive aquatic weeds. The Draft EIR/EIS does not provide any supporting evidence for the assertion that a one-time use of herbicides will be effective for longer than a few months. In fact, TKPOA's application dated July 25, 2018 requested exemption for 12 years of herbicide treatment. For reasons that are not disclosed, Appendix C of the Draft EIR/EIS contains a different application, dated July 12, 2018, which does not discuss any long-term herbicide use. However, the July 25, 2018 application proposes to apply aquatic herbicides to the Lagoons for up to ten years after the initial two years of project implementation, with protocols based on lessons learned during the initial two years. This application also contains information about several environmental impacts of weed control in the Lagoons, information that would contribute significantly to assessing impacts but which is not readily available to the public. The request for an exemption for up to 12 years of herbicide use shows that TKPOA strongly doubted that a one-time application would suffice. Our comments point out that experience elsewhere suggests that indefinite repeated applications would almost certainly be required, and the project proponents concur.

An application filed in January 2017 and an Amended Supplemental application filed in July 2017 proposed that a water-filled barrier be installed in the channel connecting the Lagoons to Lake Tahoe to prevent pollution of the Lake by herbicides and decay products. The potential environmental impacts of the barrier are **HE-148**

ALT-90

REG-26



discussed in the IEC/IS and noted in section 3.1.2 of the Draft EIR/EIS. The barrier would remain for at least 14 days after herbicide application and until pollutants could not be detected within 500 feet of the West Channel. The CMT proposal does not include installation of a barrier and does not justify this omission. Installation of a barrier to prevent pollution of the Lake from the indefinite repeated applications of herbicides would be even more essential. Making the 2017 applications and the July 25, 2018 application available to the public would significantly promote public understanding of the environmental impacts of herbicide use and the analysis of these impacts in the revised DEIR/EIS.

TKPOA has recognized the need for repeated herbicide treatments to be effective in two of their NPDES and Basin Plan Pesticide Prohibition Exemption applications. However, the Draft EIR/EIS asserts that a one-time use of herbicides and

subsequent non-chemical spot treatments will so effectively reduce the weeds that further herbicide applications will not be needed. If the Lead Agencies continue to assert that a one-time herbicide application and follow-up spot treatments will be effective, the Revised Draft EIR/EIS should provide evidence that similar infestations have been effectively treated by a single application of herbicides. Repeated use of herbicides does not meet the definition of "temporary and short-term changes in the water quality."

- 19. Competitive exclusion and impacts from potentially increased growth of curlyleaf pondweed would be a smaller problem with non-chemical methods because of the targeted nature of the herbicides proposed and non-targeted nature of the non-chemical methods. Also, harmful algal blooms (HABs) and deadly cyanobacteria (blue-green algae) would be less likely to occur with non-chemical methods, since herbicides cause a faster die-off of submerged aquatic vegetation (SAV) and higher rates of nutrient release to the water column, increasing the likelihood of HABs and cyanobacteria. In addition, the prevalence of cyanobacteria is increased by the use of persistent organic pollutants, such as herbicides (Harris et al, 2016).
- 20. There are numerous findings of no significant impact in the Draft EIR/EIS lacking adequate justification or substantiation by analyses and references, which violates CEQA Guidelines. (See General Comment 4, last paragraph, above.) An example of this is the finding of no significant impact of the risk of HABs, including deadly cyanobacteria (blue-green algae), from the use of herbicides is not a significant impact, even though the likelihood of HABs and cyanobacteria increases with the use of herbicides. HABs have been a significant issue in the Keys in recent years.
- 21. There is no discussion in the Draft EIR/EIS of the herbicides' inert (other) ingredients or the herbicides' adjuvants, materials added to a pesticide formulation prior to application. Very little information is generally available on an herbicide's other ingredients, because the identity of the other ingredients is often regarded as proprietary information. This lack of information often makes pesticide risk

ALT-90

16

HE-149

CYB-12

AQU-1

CYB-13

HE-150

assessments incomplete. "While EPA encourages expanded inert statements on product labels that specifically identify the inert ingredients, doing so is not a requirement." (Durkin, <u>SERATR-052-16-04a, 2009</u>) When information on other ingredients is disclosed, the toxicity information is often limited. The Human Health and Risk Assessment of Endothall by Durkin (2009) states: "The very limited acute inhalation data on endothall (Section 3.1.13) suggests that the formulations may be more toxic than technical grade endothall with respect to inhalation exposure." Moreover, EPA changed the term from "inert" ingredients to "other" ingredients in recognition of the potential toxicity of these ingredients. This Draft EIR/EIS does not mention inert ingredients or adjuvants once. Therefore, the environmental analysis of the impacts of the herbicides to be used is woefully inadequate.

- 22. Except for the water budget section, the Draft EIR/EIS generally lacks substantive supporting documentation and references to support the assertions and conclusions, particularly with regard to the findings of no significant impacts of any of the action alternatives. See numerous examples in Specific Comments below and General Comment 8 above regarding CEQA Guidelines "substantive evidence."
- 23. The discussion of the Control Methods Test (CMT) experimental plan and analysis of the results in section 2.3 is very incomplete. The topics discussed inadequately or not at all include: (1) the instruments used to measure the results of treatments and their ability to measure the results accurately in diverse lagoon conditions; (2) the principal advantages of the selected set of experimental sites and the selection's avoidance of major deficiencies; (3) the principal advantages of the tentative assignment of treatments to the experimental sites; (4) the limitations on modifications of the experimental plan by plant survey results; (5) the heterogeneity of the experimental sites with respect to numerous factors and the potential confusing of comparisons of treatments by heterogeneity; (6) the apparent invalidation of comparisons between treatments by mechanical harvesting of test sites during the CMT, a potentially serious problem; (7) the limitations of comparisons of treatments replicated only three times.
- 24. The dredging, removal and replacement alternative, Action Alternative 2, was proposed because scoping comments urged the Agencies to investigate it. Dredging would have an extremely serious environmental impact. The sediments that would be removed by dredging contain aluminum, which is toxic to fish and other aquatic organisms. Large quantities of aluminum sulfate were poured into the lagoons in the 1960's to settle the suspended sediments created by the initial dredging yet only 5 samples were taken in the West Lagoon to characterize the level of toxicity that could occur during a dredging operation. The reported aluminum concentrations of all but one of these samples are suspect because of the pH of 4 samples was "outside the range for model inputs" and holding temperature of three of the samples exceeded recommended temperatures. The Draft EIR/EIS does not specify adequate mitigation that would reduce the impacts of this toxicity to less than

SIG-6

17

HE-150

ALT-91

significant levels. The environmental impacts of Alternative 2 are so serious that it must be rejected.

- 25. The costs of dredging are not discussed, analyzed, or estimated in the Draft EIR/EIS. Although we have asserted that Alternative 2 is not a viable alternative for environmental reasons, commenting on this omission is necessary. Including cost estimates in environmental documents is essential to transparent decisions by Agencies. Evidence from other lakes shows that dredging is the most expensive method of managing aquatic weeds. The additional costs of removing aluminum from the dredged sediments would no doubt increase costs so much that dredging would be economically infeasible.
- 26. The costs of all this are heavily weighted toward the benefit of a few (Keys' property owners) over the benefit of the many, yet the many (taxpayers) are being asked to pay for this proposal just so that the Keys' owners can boat to the Lake from their backyards. This is a shameful waste of taxpayer's money who would likely be much more willing to pay for protecting the Lake with a barrier and restoring the lagoons to marsh than using toxic herbicides or expensive dredging operations.
- 27. Scoping comments are part of the public record and must be available to the public. The comment matrix in the Scoping Comment Report is potentially helpful, but also quite confusing. All the comments on the Draft EIR/EIS will be part of the public record and must also be made available to the public.
- 28. The unnatural ecosystem of the Keys has detrimental effects on the ecology of the Lake from the dispersion of aquatic weeds and adverse impacts on the health of native fish and benthic macroinvertebrates. The Keys' habitat today is suitable only for boating and invasive weeds. Even the fish present in the Keys are nonnative and are not considered recreational game fish by the California and Nevada wildlife agencies. Also, with 1500 homes on the banks of the lagoons, there is a significant likelihood that other invasive species that could spread to Lake Tahoe will be introduced into the lagoons. Aquarium species have been introduced into the lagoons in the past. Restoring at least the dead-end lagoons to marsh is the only effective long-term solution.
- 29. The Draft EIR/EIS does not discuss or analyze the potential for hybridization of Eurasian milfoil which is more prevalent where aquatic herbicides have been used. (Thum et al. 2017) There are multiple, genetically-distinct types (genotypes) of hybrids of invasive Eurasian milfoil and native watermilfoil, and a genetic study should have been done to investigate hybridization potential at the Keys.
- 30. See attached comments, herein incorporated by reference, from <u>Beyond Pesticides</u> regarding the specific herbicides proposed for use in the Draft EIR/EIS.

ALT-92

CST-3

18

CST-4

PP-11

RES-14

AQU-2

31. The stakeholder process has been severely flawed. The "inner circle" of stakeholders only had one member, the Water Suppliers Association, that were very concerned about herbicides. All other groups selected for the inner circle of stakeholders were pro-herbicides, including the League to Save Lake Tahoe. Also, because of the pandemic, public participation has been limited and the ability to speak up at webinars was extremely limited and controlled. Only two public webinars were held, the first one only three days following the release of the Draft EIR/EIS and the second that did not allow the public to speak at all. Also, there were no follow-up discussions allowed and both email questions and questions asked during the webinars went unanswered.

19

PP-12

Specific Comments

- 1) The executive summary, page ES-7, states: "CEQA requires a statement of issues to be resolved and areas of controversy." Taking that to mean that issues and areas of controversy need to be discussed in the Draft EIR/EIS so that they can be resolved, the list of 12 issues to be resolved includes several that are not discussed or discussed only cursorily. These are:
 - a. The antidegradation analysis, which the Lead Agencies have stated will not be published until months after the Draft EIR/EIS comment deadline.
 - b. The "need for long-term aquatic weed control and prevention of further dispersal of fragments into Lake Tahoe" is <u>only</u> discussed in terms of the no action alternative, which (as far as we know) was not supported by any scoping comments. (The agencies have not made the scoping letters public.) The Draft EIR/EIS completely ignores two key elements of the Sierra Club's scoping comments relevant to long-term management: (i) 60 years of accumulated nutrient-rich stormwater inputs that are feeding the explosion of aquatic weeds, and (ii) the need to analyze removing the habitat for the weeds by restoring the lagoons to marsh, a lower cost long-term solution.
 - c. The Draft EIR/EIS cites the "long-term costs of aquatic weeds management, and of inaction to control weeds." However, the Draft EIR/EIS does not look at costs at all. It only looks at costs in relation to the environmental impacts of no action, which was not supported by any scoping comments. The Draft EIR/EIS does not look at the estimated costs of each alternative in any manner whatsoever, though knowledge of the estimated costs is essential for informed evaluation of the alternatives as stated above in the General Comments.
- 2) Table ES-1, under the Mitigation column for EH-2, Detectable Concentrations of Herbicides and Degradants in Receiving Waters, states: "Detectable concentrations of discharged herbicides and their degradants would be controlled as a temporary condition allowable only for weeks to months."
 - a. Any detectable concentration (i.e., the very act of discharge) violates the Toxicity and Chemical Constituents water quality objectives and therefore is a

AWM-51

AA-20

REG-27

significant and unavoidable impact that requires a statement of overriding considerations.

- b. Inert or adjuvant ingredients were not discussed or evaluated, as previously mentioned in the General Comments; their environmental impacts must be analyzed.
- 3) Table ES-1, under the Mitigation column for EH-2, states: "A spill prevention and response plan would be implemented by a QAL holder to minimize and contain any spills during herbicide mixing and application, submitted for review as required by permitting agencies, and implemented at the work site."
 - a. A spill prevention and response plan does not mitigate the presence of aquatic herbicides which violates the Toxicity and Chemical Constituent water quality objectives.
 - b. Such a plan should have been provided as part of this Draft EIR/EIS. If "Measures to Prevent Spills and Spill Containment in Event of Spill" in the TKPOA application, Appendix C, is the final Spill Prevention and Response Plan (SPRP), it is wholly inadequate. If it is not, then a final SPRP should have been included in this Draft EIR/EIS and must be included in a revised Draft EIR/EIS. As stated in General Comment above, the discussion of the impacts in the Draft EIR/EIS is inadequate to serve as the informational document required by CEQA. See Sierra Club v. County of Fresno (2018) 6 Cal.5th 502, 515-522. The information provided is inadequate with respect to assessing the public health and safety impacts of herbicide use.
- 4) Table ES-1, under the Mitigation column for EH-3b, Protection of Drinking Water Supplies, states: "contingency plans include shutting off the wells and distributing water to all users until residues are no longer detected in the samples." This is a completely unacceptable mitigation measure and certainly is not mitigation that would reduce this significant impact to less than significant. All mitigation must be feasible and fully enforceable, and all feasible mitigation must be imposed by lead agencies. (CEQA Guidelines, § 15041.) This mitigation measure is infeasible and unenforceable because of the sheer numbers of people that could be affected. Also, this does not address the affects on the skin from showering in water tainted with herbicides. "If any suggested mitigation is found to be infeasible, the lead agency must explain why and support that determination with substantial evidence, presented in their findings and a statement of overriding considerations. (CEQA Guidelines, §§ 15091 and 15093.)" (AEP, CEQA Portal) In addition, the impact to drinking water supplies would be a violation of the chemical constituents water quality objective and, therefore, herbicides must not be allowed.
- 5) Table ES-1, under the Mitigation column for EH-3c, states: "Sampling would be conducted at all three TKPOA well water intakes." Who would do this sampling, TKPOA? The monitoring and sampling must be administered by an independent contractor and those details should have been disclosed in the Draft EIR/EIS.

REG-27

ERM-2

20

UTM-2

WQM-4

- 6) Table ES-1, under the Mitigation column for EH-3d, states: "the LWB would be notified within 24 hours" if herbicide residue is detected within 500 feet of the West Channel. Notification is not mitigation. What do the authors of this Draft expect the Lahontan Water Board could or would do to mitigate this impact? This section also states that "contingency plans would include shutting off wells and distributing bottled drinking water until residues are no longer detected in the samples." As noted in comment #4, this is an inadequate mitigation measure and does not satisfactorily reduce the significant impact to less than significant.
- 7) Table ES-1, under the Mitigation column for EH-3g, states: Double turbidity curtain barriers would be installed outside West Lagoon areas where herbicides testing sites are located..." Turbidity curtains notoriously fail to completely prevent mixing with waters outside the curtains, particularly if there are stormwater outlets behind the curtains. Stormwater inflows typically exert high enough pressure on the curtains to overwhelm them. Also, turbidity curtains are kept in place by weights on their lower edges. These weights will change position and disturb sediments full of aluminum sulfate, a consequence of large quantities of alum having been added to the lagoons during construction to settle the sediments. Estimates of the quantities of alum and the aluminum sulfate content of the sediments are not discussed in this Draft. Aluminum is extremely toxic to aquatic organisms. Therefore, the turbidity curtain mitigation would create other impacts; these impacts are not acknowledged and their mitigation is not discussed.
- 8) Table ES-1, under the Mitigation column for EH-5a, Short Term Increases in Aluminum Concentrations, states: "Best management practices to minimize sediment disturbance would be followed. Turbidity would be monitored to ensure that sediment disturbance and the consequent potential for mobilization of aluminum into the water column is minimized. BMPs also would be used to prevent accidental releases of sediment to the lagoons during dredge spoils transport and handling." The BMPs discussed later in the document are inadequate; the turbidity curtains do not mitigate the impacts because, as previously stated, the curtains themselves cause sediment disturbances sufficient to mobilize aluminum into the water column.
- 9) Table ES-1, under the Mitigation column for EH-5c, states: "Containment plans would assure adequate storage and safe handling of dredge spoils during processing. The plans would minimize the risk of dredged sediment containing aluminum from being released outside of approved discharge locations." The containment plans cited later in the Draft EIR/EIS are inadequate as they lack specificity and analysis; e.g., the containment structure, the old treatment plant, to be used is decades old and no analysis of its structural integrity has been performed.
- 10) Table ES-1, under the Mitigation column for EH-6b, Harmful Algal Blooms (HABs), states: "Aeration technologies such as LFA would be implemented at each herbicide

HERM-2

21

AWMM-5

ERM-3

ERM-4

CYNM-1

test site immediately after target aquatic weeds die back from the herbicide application. Aeration during plant decomposition would improve aerobic microbial degradation of herbicide active ingredients and reduce the risk of HABs by breaking up thermal stratification, reducing near-surface water temperature, and stabilizing pH conditions." This mitigation is inadequate because it does not address the rapid addition of nutrients from the dead weeds to the water column. This pulse of nutrients will promote the rapid development of HABs, including deadly

cyanobacteria. The use of non-chemical methods would reduce this risk because non-chemical methods cause less rapid dieback.

- 11)Table ES-1, under the Impact Issues column for ER-1, Suction Dredging and Dredge Materials Disposal, states: "Effects could also occur if spills of dredged sediment (consisting of organic silt and fine sand, plant roots and other organic matter, and lagoon water) occur during transported by pipeline to the location of the old Tahoe Keys Water Treatment Plant for handling, dewatering, or during transport for ultimate disposal." This is the only impact identified in the Earth Resources section (except for destabilizing the private boat docks). The structural integrity of the "old Tahoe Keys Water Treatment Plant" has not been evaluated and concentrations of aluminum in the sediment have not been disclosed or analyzed. These additional impacts must be analyzed and discussed to disclose the full impacts of this alternative.
- 12)Table ES-1, under the Mitigation column for ER, states: "Any bulkheads or docks removed or destabilized by dredging would be fully mitigated by replacing them in kind, and any slopes that are destabilized would be mitigated by slope restabilization after the dredging test is completed." Would taxpayers pay for the rebuilding of these private docks and the re-stabilization of slopes? The estimated costs of these treatments and the anticipated sources of funding must be disclosed.
- 13) Table ES-1, under the Mitigation column for WQ-2, Sediment Disturbance and Turbidity, states: "Silt curtains would be used to confine water quality impacts within test sites during dredging and substrate replacement." Silt curtains are an erosion control BMP, not a dredging BMP. The authors probably meant turbidity curtains; this mistake and others suggest that the authors are not well informed. And again,
 (a) the very act of placing and removing the turbidity curtains creates sediment disturbance and turbidity, and (b) inflows from stormwater outlets behind the curtains will likely overwhelm the curtains; these two impacts are not discussed.
- 14)Table ES-1, under the Mitigation column for WQ-2, states: "Spill control and containment plans would be used to control accidental spills of dredge spoils, and would include provisions for adequate storage for safe handling of dredge spoils during processing. No discharge of dewatering effluent would be allowed until monitoring has demonstrated that treatment systems reduced turbidity sufficiently to meet standards, as required by contract performance specifications. Treatment

CYNM-1

22

ALT-95

ERM-5

AWMM-6

ERM-6

system designs could include settling and flocculation in batches stored in tanks for testing before discharge to the sanitary sewer system or Lake Tallac." (emphasis added) The type of flocculant that would be used and its risks are not disclosed. The sanitary sewer system is designed to treat sewage, not to receive millions of gallons of sediment-laden water. No sanitary sewer system in the Lake Tahoe Basin has accepted suction dredging disposal wastes in the last 15 years; therefore, this is not

a viable mitigation strategy. Whether Lake Tallac has sufficient capacity to receive the treated water, considering that it also receives stormwater from the surrounding City of South Lake Tahoe, is not discussed and must be discussed in order to understand the feasibility of this alternative and its full environmental impacts.

- 15)Table ES-1, under the Mitigation column for WQ-3, Dispersal of Aquatic Weed Fragments (during herbicide, UV, LFA, and suction dredging), states: "Performance specifications for sand or gravel used for substrate replacement would require that the material not contain excessive amounts of organic matter that could increase amounts of floating materials." This mitigation strategy is not even relevant to the aquatic weeds fragment dispersal impact cited under Impact Issues in Issue WQ-3. This is additional evidence that the document was not thoroughly reviewed before publication.
- 16)Table ES-1, under the Mitigation column for WQ-6, Increases in Total Phosphorus Concentrations, states: "The overall reduction in aquatic weed biomass from testing control methods is generally expected to reduce TP release from macrophytes at test sites....This timing is expected to minimize the biomass of decaying vegetation, mitigating the effects of nutrient release that could occur from dieback of mature plants." The total phosphorus (TP) in the water column may be reduced in the fall because the biomass that had taken up phosphorus in the sediment would be smaller and therefore the release of TP into the water column during fall die-off would be smaller. However, the Proposed Project does nothing to reduce the total TP in the sediment and water column and does nothing to reduce the accumulation of TP in the system during the last 60 years. In fact, the 60 years of accumulation of nutrient inputs from stormwater and groundwater is not addressed anywhere in the Draft EIR/EIS. LFA has achieved promising reductions in the amount of nutrients in the sediment and must be fully tested in an enhanced Alternative 1. Alternatively, recreating marsh would bury the entire unnatural system, and the marsh would then take up the nutrient inputs to the system from stormwater. Recreating marsh would be a cheaper and more environmentally advantageous alternative.
- 17)Table ES-1, under the Mitigation column for WQ-7, Increases in Lagoon Water Total Nitrogen Concentrations, states: "This timing is expected to minimize the biomass of decaying vegetation, mitigating the effects of oxygen depletion and nutrient release that could occur from dieback of mature plants." Early season herbicide treatment doesn't mitigate the amount of total nitrogen (TN) in the lagoon system. The TN in the unnatural ecosystem (water column and sediments) is taken up by the plants

ERM-6

23

AWMM-7

WQM-5

WQM-6

from sediments, so the only thing that targeting the immature plants does is produce less dead biomass. If that dead biomass is not removed, the TN stays the same. Removing mature plants from the system entirely could reduce the TN in the system or using the non-chemical LFA approach has shown promise to reduce nutrients, but herbicides will do nothing to reduce nutrients in the system.

18)Table ES-1, under the Mitigation column for UT-1, Effects on Water Supply, states: "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." (emphasis added) Who will determine whether implementation is necessary? Determination by TKPOA, which strongly favors the use of herbicides, would not inspire public confidence and would not guarantee timely and reliable mitigation.

Section 1.0 Introduction and Statement of Purpose and Need

- 19)The Draft EIR/EIS states on page 1-3: "Pope Marsh comprises a non-WOUS area to the west and south of the Tahoe Keys." This is incorrect. Pope Marsh is a hydrologically connected wetland to Lake Tahoe, and therefore is a jurisdictional wetland and water of the US (WOUS).
- 20) The first paragraph on page 1-4 describing the Tahoe Keys does not mention that it is a private resort development whose facilities are available only to homeowners and guests of homeowners. This information is important to place the issue in context.
- 21)The Sierra Club objects to the stated goal of the Proposed Project on page 1-9 of the Draft EIR/EIS, the "long-term management of the target aquatic weeds." This goal is flawed for many reasons:
 - a. It does not address the sources of the problem. As discussed above, the Proposed Project does nothing to reduce the six decades of accumulated nutrient inputs from stormwater and over-fertilized lawns that have fed the growth of these weeds. Nothing is being done to reduce the nutrient inputs from fertilizers poured on the numerous vibrant green lawns adjacent to the lagoons everywhere in the development. Instead, the Proposed Project would only test curbing the growth of weeds by adding toxic chemicals to the lagoons.
 - b. One of the bullet points under this goal is to "reduce the potential for target aquatic weed re-infestation after initial treatment." However, this cannot be achieved without drastically reducing the nutrient inputs which have fueled the flourishing growth of weeds. The potential for target aquatic weed re-infestation might be reduced by continued herbicide use, which has been required at other lakes where herbicide use has been initiated, but the Draft EIR/EIS dishonestly purports that a one-time use of herbicides will effectively reduce the weeds without further applications. As stated repeatedly in these

WQM-6

24

AWMM-8

WET-2

GEN-45

GEN-46

comments, the Sierra Club is opposed to all herbicide use in Lake Tahoe and connected waters.

25

- c. Why should the public be asked to pay for <u>managing</u> an unnatural system so that a small number of property owners, most of whom are second homeowners, can continue to boat into Lake Tahoe from their backyards? That the public would be asked to pay to sustain this privilege in this time of pandemic and economic collapse is obscene.
- d. The long-term goal should be to fix the problem, not to exacerbate it by using toxic chemicals to manage it in perpetuity.

Section 2.0 Project Description and Alternative

- 22)The discussion on page 2-5 regarding the feasibility criterion for selecting alternatives states "The CEQA Guidelines and the TRPA both define feasible as "Capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, legal, social, and technological factors." (State CEQA Guidelines Section 15364). In determining which alternatives are potentially feasible, this DEIR/DEIS focuses on consideration of technical and economic feasibility/practicality; the potential to violate federal, regional or State statutes or regulations; and whether an alternative balances relevant economic, environmental, social, and technological factors." Yet, no cost estimates are disclosed in the Draft EIR/EIS, the dredging alternative (AA2) was added after scoping comments complained about the lack of alternatives (even though AA2 is clearly the most costly alternative), and the Sierra Club's scoping requests for study of a barrier and restoration (much cheaper alternatives) were dismissed.
- 23)In this same section on page 2-6, under "a.," there appears to be a leftover agency comment on the Administrative Draft that inadvertently was not removed: "The only discussion on infeasibility of an alternative that I see in this chapter relates to dry dredging. How was Lahontan's antidegradation analysis and water quality objectives used to consider the "infeasibility" of an alternative? Many of our approved permits and the underlying discharge associated with them have the potential to exceed a water quality objective (that is why we include effluent limitations in the permit). I don't think we exclude those as being infeasible. I'm supposing that alternatives that were certain to create long term degradation and violation of objectives were not discussed. This may or may not need to be rewritten. I would first like to understand how our Basin Plan was used to determine infeasibility." Was this agency person's question ever answered? The question of whether the discharge of herbicides is infeasible because either it violates the antidegradation analysis or water quality objectives (as it does – see previous comments), is a good question, and this Draft EIR/EIS clearly fails to answer it. The response to these comments and the revised Draft EIR/EIS must also answer it.

ALT-117

ED-4

REG-28

GEN-46

24)The second paragraph of section 2.3 (page 2-9) states: "Barriers in place to prevent herbicide movement toward the West Channel would be briefly pushed below the

surface just enough to enable the passage of shallow-bottom boats used for mechanical harvesting and fragment control. The boat motors would be turned off during passage to prevent any damage to the barrier from propellers." This proposed lowering of the turbidity curtains would immediately cause mixing of the waters inside and outside the curtains and thus completely nullify this supposed mitigation measure. The Draft EIR/EIS fails to address this very likely release of herbicides to the surrounding waters. The response to these comments and the revised Draft EIR/EIS must also address this issue.

25)The discussion of the experimental plan and analysis of the results of the CMT, in section 2.3 is very incomplete. This comment and the next three comments present the evidence supporting that assertion. The second paragraph of section 2.3 (page 2-9) states: "Mechanical harvesting would continue to be performed at all sites (both test and control sites) during the testing period. As a baseline condition of the test project, harvesting would be conducted when and as needed following the existing harvesting protocol implemented by TKPOA."

Harvesting the control sites following the existing harvesting protocol is indeed the "treatment" to be applied to control sites. Routine mechanical harvesting of the experimental sites is not the appropriate baseline. The measures of treatments' effects on test sites are the treatments' percentage reductions of vegetation biovolume. These biovolume reductions are the data used in the statistical analysis of the CMT results. If test sites are mechanically harvested before the after-treatment biovolumes have been measured, the "treatments" whose effects on the sites are measured would be the effects of the experimental treatments for varying time periods plus harvesting.

Experimental treatments plus harvesting are not the treatments to be compared by the CMT. There appears to be no possibility of distinguishing the effects of the experimental treatments on the after-treatment biovolumes from the effects of harvesting. Because the effects cannot be distinguished, all the comparisons of experimental treatments involving the test sites that have been harvested would be invalidated. Leaving the experimental sites unharvested until the after-treatment biovolumes have been measured is also the appropriate baseline because TKPOA has proposed the CMT to test alternatives to mechanical harvesting.

If the project designers believe that mechanical harvesting of test sites will not invalidate comparisons between test sites, they must provide detailed justifications in the Final EIR/EIS. The phrase "harvesting would be conducted when and as needed" implies that test sites would be harvested to ensure that homeowners with docks in the test sites would be able to use their boats during the test.

26

HE-151

Inconvenience to these homeowners is not a sufficient justification for invalidating the comparisons of the CMT.

- 26)Section 2.3.1.2 discusses "Location and Size of Test Plots, Including Controls." The experimental sites are characterized by seven factors (section 2.3.1.2) which may significantly affect a site's responses to treatment. The seven factors are: water depths, water clarity, nutrient inputs, water circulation, shoreline conditions (e.g. bulkheads vs rocky or irregular shores), density and sizes of docks, and effects of wind and weather. Numerical or categorical values of several of these factors may be available for sites, but it is doubtful that values of some factors, for example effects of wind and weather, are available. Information about the magnitudes of the factors' effects on treatment responses is likely to be limited or unavailable. Consider the effects of the differences between the factor values of sites receiving the same treatment on the estimation of the variability of the responses to that treatment. The differences of factor values may significantly affect those sites' responses to the treatment and consequently affect the estimation of variability between sites. Next, consider the effects of the differences between the factor values of the sets of sites receiving different treatments on the comparison of the treatments. The differences between the factor values of the sets of sites likewise may significantly affect and confuse the comparisons of the treatments. If the number of replications of each treatment were much larger than three, then claiming that (1) the effects of heterogeneity on the variability of sites' responses within treatments are similar across treatments and (2) heterogeneity does not significantly affect comparisons of the treatments might be plausible. These assertions are not plausible for three replications. The data analysis plan should acknowledge the potential effects of heterogeneity on the estimations of variability and comparisons of treatments. There may be factors whose potential effects on estimations and comparisons are obvious, even if unquantifiable. The effects of these factors should
- 27)Section 2.3.2 states: "Detailed hydroacoustic and aquatic macrophyte ... survey results [in the test sites] would provide information on the species mix and biovolumes of macrophytes, and would be used to decide (1) final test site locations and boundaries to minimize effects on non-target species, and (2) which of the proposed herbicides to apply at each herbicide test site to best match the target species present." Best matching the target species present would increase herbicide and herbicide+UV treatments, and bias all the comparisons involving these treatments. The experimental plan should include detailed discussion of whether significant improvements in the test can be expected from this use of the survey results. The difficulties of making detailed adjustments in the application of herbicides, the varied locations of non-target species within the sites, and the dispersion of herbicides might defeat attempted minimization of effects on non-target species. The requirement that each herbicide be applied to three herbicide sites and

be noted in the interpretations of results.

ALT-119

27

ALT-118

three herbicide+UV sites may strongly constrain attempts to best match the target species.

- 28)Section 2.3.2.2 states: "Testing three replicates for each treatment would allow statistical comparisons of data (e.g., Analysis of Variance "ANOVA") both among treatment sites and with non-treated "control" sites. The replications would provide data on variability among those sites treated with the same herbicide, as well as in comparison to other herbicide treatments, non-herbicide weed control methods, and control sites." Though these statements are rather imprecise, they correctly note the importance of replication of each treatment on several test sites. In general, the greater the number of replications, the greater the confidence in the results. Detecting differences between treatments large enough to be of practical significance for weed control is one of the primary objectives of the CMT. The greater the number of replications, the higher the probability that such differences will be detected if in fact they exist. Three is a small number of replications, especially considering the heterogeneity of the sets of test sites where treatments will be replicated. (The comment on Section 2.3.1.2 is a detailed discussion of the effects of heterogeneity.) The Overview of the Test Program should discuss the limitations on project resources and the reasoning which justified the choice of three replications.
- 29)The Proposed Project would apply aeration only to herbicide and herbicide+UV sites, and not to UV sites. Action Alternative 1 would not apply aeration to UV sites. Applying aeration to UV test sites would mitigate some environmental impacts of controlling aquatic weeds with UV light. According to the Draft EIR/EIS, aeration would (1) counteract the oxygen demand and water quality impacts from decomposing vegetation and (2) help eliminate anoxic conditions at test sites that can cause the release of phosphorus from the sediments to the water column where it can stimulate algal blooms. The Proposed Project and Action Alternative 1 should be modified to apply aeration to UV sites. Aeration should be applied to the nine UV sites in the enhanced Action Alternative 1.
- 30)Action Alternative 1 (AA1) treats only three sites with UV light. AA1 should be enhanced to treat nine sites with UV light - the 3 UV sites and the 6 herbicide+UV sites where the Proposed Project (PP) applies UV light. Treating nine sites and a greater variety of sites would estimate the effectiveness of UV treatment with a narrower confidence interval. Treating the nine sites where the PP applies UV light would be feasible. The specifications and planned use of the UV treatment equipment needed to perform all the UV treatments of the PP are discussed in section 2.3.3.
- 31)Section 2.3.2.3 describes the herbicides proposed for use in the CMT. See the following comments as well as Beyond Pesticides comments, which are incorporated by reference in these comments:

ALT-96

ALT-120

ALT-97

ALT-98

ALT-99

- a. Endothall (e.g., Aquathol K liquid) <u>Washington State Department of Ecology</u>, July 2000, states that "Sites that have never been exposed to endothall products may degrade Aquathol®, Aquathol® K and Hydrothol® more slowly than sites that have had a previous exposure history. This is because it normally takes several weeks for bacteria capable of using endothall as their sole carbon source to develop out of their lag-phase and rapidly degrade applied endothall."
- b. Triclopyr (e.g.. Renovate liquid or granular)
 Californian's for Alternatives to Toxics states: "Commercial triclopyr products are typically composed of 40-50% of the triclopyr acid or salt, and 50-60% of inert ingredients or surfactants. Many of these additives have shown to be significantly more toxic to both humans and animals than triclopyr itself. One of these compounds ethylenediamine tetraacetic acid (EDTA) has been shown to cause birth defects, cleft palate, and abnormal skeletons in test animals. EDTA has also been shown to be 10-fold more toxic to fish than the Garlon formulation alone. Another inert, triethylamine is extremely toxic to the eyes, skin and respiratory system. At least one commercially available triclopyr products contains kerosene, which has been linked to severe gastrointestinal, respiratory and nervous system toxicity."
- c. Florpyrauxifen-benzyl (e.g., Procella ED liquid) is not approved for use in California.
- 32)Table 2-3, Proposed Test Herbicide Application Treatment Site Details, does not actually provide the quantities of each of the herbicides proposed for use; it only lists the application rate in parts per million. The actual volumes of herbicides, depending on the estimated volume of water to be treated, should be provided for full disclosure and complete analysis of impacts. Also, the application rates in Table 2-3 are the maximum allowable rates that the USEPA allows according to Table 2-2. No rationale or justification is provided for this maximum dose allowed by regulation.
- 33)Herbicide Containment is discussed beginning on page 2-17. Regarding Double Turbidity Curtains, the Draft states: "A 2016 rhodamine dye study tested the performance of double turbidity curtains at two dead-end lagoon locations in the southwestern area of the Tahoe Keys West Lagoon (Anderson 2016). In that study, the curtains retained 98 percent to 99 percent of the injected dye for at least 12 to 14 days of monitoring, and similar curtains would be deployed for the CMT." However, the dye was injected at the two dead-end lagoon sites on July 22 and 25, 2016, when stormwater inflows were minimal to non-existent. The Proposed Project, on the other hand, would be applying herbicides in late spring when snowmelt and

stormwater inflows are much more likely to overwhelm the turbidity curtains and cause release of the herbicides outside the curtains. The much greater magnitudes of late spring inflows and the potential herbicide releases outside the curtain that ALT-100

ALT-99

30

may result are not discussed in the Draft EIR/EIS and must be addressed in the revised Draft EIR/EIS..

- 34)The discussion of Monitoring and Reporting Programs on page 2-18 states that an Aquatic Pesticide Application Plan (APAP) will be implemented to "prevent accidental spills, contain herbicides within the treatment area, monitor concentrations and movement of the aquatic herbicide chemicals and degradates after application, and alert the public and water purveyors should aquatic herbicides move beyond the treatment areas into areas of the lagoons or Lake Tahoe beyond planned containment." The risk of accidental spills remains too high even with the best plan to prevent them. An APAP will only minimize the risk of a spill, not prevent the occurrence of spills. Therefore, this mitigation measure does not mitigate the risk to less than significant, though the risk is asserted be less than significant later in the document.
- 35)Section 2.3.3 states "The ultraviolet light system was designed to treat rooted aquatic weeds so this control method would not be tested in areas where floating coontail are dominant or co-dominant, based on macrophyte surveys, and the final selection of test sites and determination of site boundaries would include this consideration." This assertion does not appear to be consistent with the results of the Aquatic Invasive Plant Control Pilot Project at the Lakeside Marina and Beach. The ultraviolet light system used in that project appears to have treated coontail successfully. Figure 9 of the report shows that coontail "treated with UV-C light in LSM and LSB treatment areas" lost turgor pressure and collapsed to the lake bottom as rapidly as Eurasian watermilfoil did and more rapidly than curlyleaf pondweed did. Are ultraviolet light systems that can treat floating weeds in the Tahoe Keys feasible? If they are not feasible, for what reasons are they infeasible?
- 36)Chapter 2 implies, but does not state precisely, that treatments' percentage reductions of biovolume (BV) of vegetation on a test site:

((preBV - postBV)/preBV)*100

are the measures of treatment effect used in comparisons of treatments. A precise definition should be stated.

37)The measurement instrumentation and its capabilities should be precisely and completely described. Instrumentation should be capable of measuring the biovolume in the entire cross-sections of the lagoons, including vegetation on the sides, if any, and on dock pilings and buoys. Inaccurate measurements of the

biovolumes on the sides, dock pilings, and buoys would confound comparisons of treatments.

38)Section 2.5 discusses Action Alternative 2, the Dredge and Replace Substrate alternative. The water quality impacts of the aluminum inevitably released into the

ALT-101

REGM-1

ALT-102

ALT-103

ALT-105a

water column during this alternative cannot be satisfactorily mitigated to less than significant levels. The following deficiencies in this section include:

- a. The itemized cost estimates for every task in this alternative removal, treatment, disposal and replacement should have been included.
- b. A "sheetpile cutoff wall" is proposed in Section 2.5.1. When this wall is removed, aluminum in the sediments will be released into the water and cause high levels of toxicity to aquatic organisms. This impact is not mentioned, and the sheetpile wall is not discussed further in the document.
- c. The Draft EIR/EIS does not contain any information about the amount of aluminum sulfate that was poured into the Keys lagoons after construction and the concentration of aluminum in the sediments. The IEC/IS states (p 41) that there were discharges of alum as late as 1998. This information should have been examined thoroughly before selecting AA2 as one of the alternatives to be fully evaluated in the DEIR/EIS.
- d. The discussion of facility needed for dredging support states: "Review of the site vicinity indicated that the mothballed Tahoe Keys Water Treatment Plant (TKWTP) located on the south side of Lake Tallac would be the most suitable location for dredge processing and dewatering." The structural integrity of the "mothballed" TKWTP is questionable, but there is no discussion of this potential problem. Also, there is no discussion of whether the TKWTP has the capacity to treat the huge volume of sediment-laden water that dredging would generate.
- e. The discussion of facilities also states: "the existing plant has a low berm around it, which may contain leakage, and probably could be increased to a height of three to four feet or reinforced with a liner to prevent outflow of any dewatering leaks." (emphasis added) What is the volume enclosed by the existing berm that is available for containing outflows, and what is the volume needed to contain the "leakage"? Instead of speculating about these issues, this section should have detailed fully the risks and costs of this proposed use of the TKWTP. The TKWTP is adjacent to and just south of Lake Tallac, a jurisdictional WOUS. Therefore, leaks from the TKWTP and potential failure of the berm would result in waste discharges to Lake Tallac and waters connected to it.
- f. Page 2.31 also states: "An anionic polymer would likely be employed to remove aluminum from dewatering effluent, which would chelate (bond to) the aluminum and settle out of solution." No information about this additive is provided in the Draft EIR/EIS or the appendices.
- g. Wastewater treatment plants are not designed to accept the large volume of water that would result from the dredging. Therefore, treatment by the TKWTP is most likely not possible, and the treated water, no doubt contaminated by the polymer and aluminum not captured by the polymer, will be released to Lake Tallac, which would violate water quality objectives in the

ALT-105g

32

ALT-105a

ALT-105b

ALT-105c

ALT-105d

ALT-105e

ALT-105f

Basin Plan. There is no discussion of the potential concentrations of aluminum and the polymer and their impacts on Lake Tallac.h. An estimated 36 million gallons of water/sediment is proposed to be treated

- through a series of Baker tanks to separate the sediment and aluminum from the water. Discussion of where these tanks would be placed and the impacts of their placement is absent. This is a highly unrealistic proposal for which no cost estimates or feasibility assessments are provided.
- i. We estimate that one thousand truckloads (285 + 715) of replacement sand for the dredged areas would be needed. It is extremely unlikely that 715 truckloads of treated sediment can be reused, as this section suggests. The treated sediment would almost certainly not satisfy the very low turbidity requirements that sand for any replacement projects, such as beach replacement projects, must satisfy. This is another unrealistic and costprohibitive aspect of this alternative, again showing that this alternative was merely proposed to add an alternative to the Draft EIR/EIS.

These numerous deficiencies in the analysis show that insufficient information has been provided to justify the conclusion that all the significant impacts of AA2 can be mitigated to less than significant. Therefore, AA2 should be eliminated from consideration.

- 39)Section 2.7 is called "Aquatic Weed Control Methods Eliminated from Group A Consideration." Why is this section not called "Aquatic Weed Control Methods Eliminated from Alternative Selection"? Group A is the herbicides, UV and LFA part of the Proposed Project. The eliminated weed control methods, such as barriers and wetland restoration, were suggested during the scoping phase as alternative methods for protecting Lake Tahoe. Since protecting Lake Tahoe should be the Lead Agencies number one concern, these alternative methods should have been included in the analyses of this Draft EIR/EIS.
 - a. Page 2-40 begins with "Isolate Tahoe Keys from Lake Tahoe." This suggestion should <u>not</u> have been dismissed. In fact, TKPOA has even considered a barrier, as discussed on pages 3.1-18, -19, and -20, 3.3.1-5, 3.4-15 (See also General Comment #18). There is no explanation of why this Group A control method was eliminated from consideration. A barrier, permanent or temporary, between the Keys' Lagoons and the Lake would be the most expedient and effective mechanism to protect the Lake. Yet, this alternative was dismissed for the sake of prioritizing recreational boating over the health of Lake Tahoe. Also, the West Channel Water Barrier was cited as

33

one of the mitigation measures in the Joint TRPA Initial Environmental Checklist and CEQA Initial Study (MM-HH-10 on page 58). What was the basis for the decision to eliminate this mitigation measure from the Draft EIR/EIS?

b. Page 2-41 discusses "Tahoe Keys Wetland Restoration," which was dismissed because "restoration would have substantive impacts to navigation,

ALT-105i

ALT-105a

ALT-105h

SIG-8

ALT-106

and to the recreational and aesthetic values underlying the appeal of Tahoe Keys properties, and thus to property values within the Keys." The paragraph continues with the following statement: "Wetland restoration options could be considered in a future environmental evaluation of long-term aquatic invasive species management of the Tahoe Keys. However, the purpose of the CMT is to test alternative methods of target aquatic weed control, and by definition aquatic weeds would not occur where their habitat has been eliminated, whether by filling or replacing the habitat that favors weeds with a natural wetland. Therefore, restoration alternatives do not require testing and were not carried forward for further evaluation in this DEIR/DEIS." Yet, the Lead Agencies have not justified the project's piloting herbicide use when the effectiveness of non-chemical is still being evaluated. (See General Comment #3) The Lead Agencies have declined to include a feasible project alternative that would clearly lessen the significant environmental impacts of the project. The Lead Agencies have not complied with CEQA on the basis of prioritizing recreational boating over the environmental fate and health of Lake Tahoe.

As previously stated in the General Comments, CEQA Guidelines state "[T]he discussion of alternatives shall focus on alternatives to the project or its location which are capable of avoiding or substantially lessening any significant effects of the project, even if these alternatives would impede to some degree the attainment of the project objectives, or would be more costly." § 15126.6(b). (emphasis added) Therefore, revision and recirculation of the Draft EIR/S are required by the absence of the required range of reasonable alternatives. CEQA Guideline § 15088.5(a)(3) requires recirculation when "A feasible project alternative or mitigation measure considerably different from others previously analyzed would clearly lessen the significant environmental impacts of the project, but the project's proponents decline to adopt it."

Section 3.0 Affected Environment and Environmental Consequences

Section 3.1 Approaches to Environmental Analysis

40)Issue EH-2, Detectable Concentrations of Herbicides and Degradants in Receiving Waters, (page 3.1-2) states: "State and federal antidegradation policies and the Basin Plan require that, in receiving waters outside herbicide treatment areas and in all areas after treatment events, detectable concentrations of introduced chemicals

are only allowable if beneficial uses are protected and maintained." That is not actually what the State and Federal antidegradation policies and Basin Plan say. The authors of this document have interpreted the policies and Basin Plan incorrectly, and the above statement should either be deleted or revised to correctly interpret antidegradation policies, which are cited below.

a. The Federal Antidegradation policy states in CFR 131.12(a)(3) is: "Where high quality waters constitute an outstanding National resource, such as

ALT-106

ALT-107

ALT-121 & CST-2

34

REG-29

waters of National and State parks and wildlife refuges and waters of exceptional recreational or ecological significance, that water quality shall be maintained and protected."

- b. EPA's guidelines on this state the following (Water Quality Standards Handbook, Chapter 4): "Outstanding National Resource Waters (ONRWs) are provided the highest level of protection under the antidegradation policy. The policy provides for protection of water quality in high-quality waters that constitute an ONRW by prohibiting the lowering of water quality. ONRWs are often regarded as highest quality waters of the United States: That is clearly the thrust of 131.12(a)(3). However, ONRW designation also offers special protection for waters of "exceptional ecological significance." These are water bodies that are important, unique, or sensitive ecologically, but whose water quality, as measured by the traditional parameters such as dissolved oxygen or pH, may not be particularly high or whose characteristics cannot be adequately described by these parameters (such as wetlands). The regulation requires water quality to be maintained and protected in ONRWs. EPA interprets this provision to mean no new or increased discharges to ONRWs and no new or increased discharge to tributaries to ONRWs that would result in lower water quality in the ONRWs. The only exception to this prohibition, as discussed in the preamble to the Water Quality Standards Regulation (48 F.R. 51402), permits States to allow some limited activities that result in temporary and short-term changes in the water quality of ONRW. Such activities must not permanently degrade water quality or result in water quality lower than that necessary to protect the existing uses in the ONRW." (emphasis added) The Sierra Club contends that the use of herbicides in Tahoe Keys cannot reasonably be expected to be a onetime event as there is no documented evidence that a one-time use of aquatic herbicides is effective in reducing invasive aquatic weeds, and repeated use of herbicides does not meet the definition of "temporary and short-term changes in the water quality."
- c. The State antidegradation policy states: "Whenever the existing quality of water is better than the quality established in policies as of the date on which such policies become effective, such existing high quality will be maintained until it has been demonstrated to the State that any change will be consistent with the maximum benefit to the people of the State, will not unreasonably

affect present and anticipated beneficial use of such water, and will not result in water quality less than that prescribed in the policies. Any activity which produces or may produce a waste or increased volume or concentration of waste and which discharges or proposes to 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 highest water quality consistent with maximum benefit to the people of the State will be maintained." REG-29

35

- d. The State Water Resources Control Board's guidelines on implementation state: "Regional Board staff shall not recommend that the activity be permitted unless all of the following conditions are met: ...(b) The reduction in water quality is consistent with maximum public benefit. (c) The reduction in water quality will not unreasonably affect actual or potential beneficial uses.
 (d) Water quality will not fall below water quality objectives prescribed in the Basin Plan." (emphasis added) Clearly, conditions (b), (c), and (d) cannot be satisfied. Therefore, the Water Board must recommend against herbicide use.
- e. The Basin Plan states (page 3-2): "On October 28, 1968, the State Water Resources Control Board adopted Resolution No. 68-16, "Statement of Policy with Respect to Maintaining High Quality of Waters in California," establishing an antidegradation policy for the protection of water quality. This policy requires continued maintenance of existing high quality waters. Whenever the existing quality of water is better that the quality of water established in this Basin Plan as objectives (both narrative and numerical), such existing quality shall be maintained unless appropriate findings are made under the policy." It also states: "Section 114 of the federal Clean Water Act also indicates the need to "preserve the fragile ecology of Lake Tahoe.""

Therefore, the policies and plans say nothing relevant to allowing detectable levels of chemicals outside treatment areas and after treatment within treatment areas if beneficial uses are protected and maintained. TRPA is certainly not complying with the Clean Water Act mandate to preserve Lake Tahoe by publishing a DEIS that would permit testing of herbicides in the Keys and prioritizing private boat recreation over the health of Lake Tahoe.

41)Issue EH-4, Introduction of Toxic Substances into the Environment, on page 3.1-2 states: "Basin Plan water quality objectives state that all waters shall be maintained free of toxic substances in concentrations that are toxic to, or produce detrimental physiological responses to, human, plant, animal, or aquatic life." Yet, this objective is omitted from the later discussion of each method's impacts on water quality objectives and other objectives, for example dissolved oxygen, are included. The

response to comments must acknowledge this omission, and the revised Draft EIR/EIS must include discussion of this water quality objective.

42)Issue EH-4 also states: "Application of aquatic herbicides can be expected to cause some mortality of non-target native aquatic plants within treatment areas, but the herbicides proposed for testing in Tahoe Keys lagoons would have no significant acute or chronic impact on people, fish, or freshwater invertebrates when used at recommended rates." The Draft EIR/EIS does not contain any data or references supporting this statement. "Some mortality of non-target native aquatic plants" is a violation of the toxicity water quality objective that would not occur with non-chemical methods. REG-29

WQ-13

EH-6

36

- 43)Issue EH-5, Short-term Increases in Aluminum Concentration, page 3.1-2, states: "To enable calculation of site-specific criteria for toxicity to aquatic life, surficial sediment samples were collected from the Tahoe Keys lagoons in 2019. Elutriate tests were conducted to mimic conditions that could occur in overlying water during dredging. Samples of overlying water were also collected and analyzed for dissolved organic carbon, hardness, and pH. Aluminum freshwater acute criteria (Criterion Maximum Concentrations or CMC) calculated for the lagoons ranged from 610 to 2,400 μ g/L. Short-term exposure to total recoverable aluminum concentrations above these acute criteria could cause harm to aquatic life." There are no references to the calculation of the criteria; even the location of the results of the elutriate tests is missing. The results show that the aluminum concentrations measured by elutriate tests exceeded both chronic and acute criteria for four of the eight Marina Lagoon stations and five of the eight Main Lagoon stations. The highest exceedance was 2000% of the corresponding criterion. How can these exceedances possibly be considered "short-term"?
- 44) Issue EH-6, Harmful Algal Blooms (HABs), on page 3.1-3, states "The conditions that cause cyanobacteria to produce cyanotoxins are not well understood..." Yet, it is abundantly clear from a simple search of "conditions that cause cyanobacteria" that the answer is "calm, nutrient-rich waters." (World Health Organization) The <u>Center for Disease Control</u> states "They usually multiply and bloom when the water is warm, stagnant, and rich in nutrients (phosphorus and nitrogen) from sources such as fertilizer runoff or septic tank overflows." And the <u>EPA</u> states "There is widespread agreement within the scientific community that the incidence of HABs is increasing both in the U.S. and worldwide. This recent increase in the occurrence of HABs has been attributed to increasing anthropogenic activities and their interaction with factors known to contribute to the growth of cyanobacterial blooms. Point sources ... and non-point sources (... roads and stormwater), may be high in nitrogen and phosphorus and can promote or cause excessive fertilization (eutrophication) of both flowing and non-flowing waters." (emphasis added) Yet, this Draft EIR/EIS does not address the nutrient inputs to the lagoons and the

37

CYB-14

accumulation of those inputs over 60 years of those inputs, but instead focuses on the cycling of nutrients into the water column from SAV decay. (see additional comments on Appendix F). The Draft EIR/EIS also ignores mentioning several cyanobacteria-related risks from herbicide use, such as:

- a. cyanobacteria become resistant to herbicides where their use is prevalent (Narusaka et al. 1998).
- b. Cyanobacteria have a higher tolerance to herbicides than other phytoplankton, therefore their abundance will increase with herbicide use (Powell et al. 1991, Forlani et al. 2008, Perez et al. 2011, Pannard et al 2009),
- c. Cyanobacteria's use of nutrients bound to herbicides to stimulate their growth (Bai et al. 2014), and

EH-7

- d. The presence of herbicides in elevated water temperatures increases cyanobacteria growth, Berard et al (1999).
- 45)Issue EH-6, Harmful Algal Blooms (HABs), on page 3.1-3, also states "Caution levels for human and animal health are triggered by visual indicators, cyanobacteria cell density greater than 4,000 cells/mL, and cyanotoxin levels of 0.8 μg/L for total microcystins, and 1 μg/L for anatoxin-a or cylindrospermopsin. Warnings are posted if cyanotoxin concentrations reach 6 μg/L for total microcystins, 20 μg/L for anatoxin-a, or 4 μg/L for cylindrospermopsin. Danger warnings are posted if cyanotoxin concentrations reach 20 μg/L for total microcystins, 90 μg/L for anatoxin-a, or 17 μg/L for cylindrospermopsin." This statement raises the following questions and concerns:
 - a. Is there routine testing for these toxins at the Keys? How many people at the Keys have been affected by exposure? If no health statistics have been gathered at the Keys, why haven't they been? This information would be critical to understanding the increased risks of HABs and cyanobacteria due to the initiation of herbicide use.
 - b. The list of additional Project Resources on the Tahoe Keys website (www.tahoekeysweeds.org) includes Cyanobacteria Test Results, namely concentrations of microcystin and anatoxin-a., The cyanobacteria water quality data collected in 2019 and displayed in Appendix E are concentrations of phycocyanin pigment, not concentrations of toxins. (Hollister, et al., 2016) The relationship of phycocyanin measurements to microcystin concentrations is not discussed in Appendix E. Health advisories are always issued for toxins like microcystin, not for related concentrations of pigments. The phycocyanin measurements, apparently difficult to relate to cyanobacteria concentrations, are not interpreted in the Draft EIR/EIS at all. The Revised Draft EIR/EIS should rectify this omission. What do the phycocyanin measurements in Appendix E signify in terms of cyanotoxin levels?
 - 38
 - c. Signs warning of "Harmful Algae" are posted at many locations in the Keys and appear to be posted at least all summer for the last several summers. When warning signs are always present, people tend to ignore them, which is very likely the case in the Keys.
- 46)HABs and cyanobacteria are a major concern at the Keys and the Draft EIR/EIS does not adequately examine all the risks posed by the use of herbicides as stated in the previous comment. Stagnant, warm, nutrient-rich waters, like the waters of the Keys lagoons, promote the growth of cyanobacteria and the production of cyanotoxins. The CMT would not test any methods for abating these conditions. The application of herbicides, which kill the plants quickly, releases nutrients to the water column much more rapidly than slower-acting non-chemical methods release them. The LFA method may partially abate this condition, but the LFA method should be fully tested first, prior to the overly risky method of herbicide application. The

CYB-15

CYB-14

CYB-16

proposed mitigation, applying the herbicides in the spring, is an insufficient mitigation measure, particularly because it appears that the volumes of macrophytes present in the spring have not been measured. There are no assurances that this mitigation measure will reduce the risk to less than significant if there are no estimates of the volumes of macrophytes that will die off and release nutrients. Therefore, herbicide use creates a potential for rapid release of nutrients and a dangerous and unmitigated risk of HABs, including deadly cyanobacteria, a violation of the Basin Plan's water quality objective for biostimulatory substances. Even short-term degradation is not allowed if that degradation violates any water quality objectives.

- 47)Section 3.1.1.5 states: "Testing the efficacy of aquatic weed control methods in improving water quality of the lagoons is a goal of the project." The lagoons do not presently satisfy water quality standards. Experience elsewhere shows that perpetual herbicide treatment of the lagoons would be required to control invasive weeds. Perpetual herbicide treatment would only worsen the below-standard water quality by adding toxic chemicals. The efficacy of the non-chemical methods must be tested first, as required by the Basin Plan.
- 48)Section 3.1.1.5 compares the volume of Lake Tahoe to the volume of the Keys. This comparison is repeated in the Draft EIR/EIS several more times. The significance of these comparisons of volumes is not discussed. The exchange rate between the lake and lagoons is not mentioned anywhere in the document, but the references to the differences in volumes either imply complete mixing occurs or that the affected area for herbicides, 16.9 acres, is relatively small. In either case, repeated mention of the two volumes has no apparent purpose. Page 3.3.5-15 mentions the "lack of mixing between the lagoons and greater Lake Tahoe." LaPlante's Masters Thesis (2008) found that the range of mean residence times for the West Lagoon is 2 to 7 days. However, these mean residence times were determined only for the 1/3 of the West Lagoon area immediately inside the channel connecting the West Lagoon to

the Lake. Thus, there is minimal to no mixing between the Lake and the dead-end sections of lagoons.

49)Issues WQ-6 and 7 on page 3.1-8 refer, respectively, to the increased total phosphorus and nitrogen concentrations in the water column from the decaying aquatic plants during and after weed control treatments, but "lead to lower concentrations from aquatic dieback in the fall. Long term, a reduction in nitrogen [and phosphorus] release from decaying plants would be accomplished where dense aquatic weed beds are successfully treated." Water column concentrations may be reduced, but this statement is misleading at best because no nutrients are actually being removed from the system as a whole by the use of herbicides. The nutrients are taken up from the sediments by the plants during the growth cycle and partially released to the water column upon decay; the decaying plant tissues settle back into the sediment and return their remaining nutrients to the sediment. The conclusion that the use of herbicides will reduce the nutrient concentrations in the system is

WQ-14

39

CYB-16

AWM-52

false. Laminar flow aeration might very well reduce the nutrients, but herbicides will not.

- 50)The assertion that nutrient levels in the Keys are no different than those in other lakes in the Sierra Nevada is misleading at best (statement made during workshop on August 11, 2020 and cited in this Draft EIR/EIS in reference to the Homyak et al, 2014, study of 50 lakes in the Sierra Nevada). Appendix F even begins by stating "Annual average values for TN and TP in the Tahoe Keys exceeded their relevant WQOs for each year from 2007 to 2013 (SEA 2017a). In 2016, even the minimum values recorded for TN and TP exceeded relevant WQOs for the Marina Lagoon, the Main Lagoon and Lake Tallac. Clearly, the Tahoe Keys lagoons should be considered "enriched" with nutrients." If, indeed, it was truly the case that anthropogenic sources are not enriching the Tahoe Keys (as stated in numerous places throughout the Draft EIR/EIS, then what source are enriching the Keys and why is this not disclosed? The assertion that nutrient levels in the Keys are no different than other Sierra lakes is a specious argument that is further refuted by the following:
 - a. The few (8 total, including 3 duplicates) sediment samples taken in late July and September of 2019 (as shown in Appendix E and F) were taken at the height of, and after, plants have been absorbing nutrients from the sediment. The lakes in Homyak's study, if they have macrophyte problems at all, do not have huge macrophyte problems comparable to the problem in the Keys. Therefore, there is no similar uptake of nutrients by macrophytes in the 50 Sierra lakes.
 - b. Appendix E and F do not explain how the sediments were sampled and how that sampling method compares with the meticulous sampling method of Homyak et al., 2014. For instance, the Homyak study took cores that were 30

40

cm deep and generally found gradually declining P levels with depth (approximately 1200 mg/kg down to 800 mg/kg in Emerald Lake). Appendix E and F do not discuss any methods or sampling details, such as depth of the cores taken, which makes comparisons with the Homyak study, and conclusions based on those comparisons, very problematic.

c. Appendix E describes several sampling difficulties, such as "For some samples aquatic weeds were caught in the jaws of the sampler preventing complete closure, resulting in additional water that entered the Ponar and washed out some of the sediment in the grab.... In those samples the water was homogenized together with the sediment, which increased the water content in the sediment and may have diluted concentrations of nutrients." Also, the holding temperatures of all but one of the samples exceeded 6°C, the holding temperature recommended by QAPP guidance (noted as HTe in a footnote to Table 15). Therefore, the sampling results are highly suspect, and drawing any conclusions based on comparisons with the Homyak study is highly misleading and inappropriate.

WQ-15

between P and metal oxides, in particular Al." Well-oxygenated sediments are not the case in the Keys. e. Homyak's study looked primarily at phosphorus, yet Appendix F states "nitrogen is the more ecologically relevant nutrient (i.e., limiting to algal productivity) in the Main Lagoon." (Even though the Draft EIR/EIS states the Keys are co-limited with P and N.) Furthermore, the only sediment data provided in Appendix E were from a couple of days in late July and September of 2019 and the nitrogen sampled is only for TKN (total kieldahl nitrogen). Why wasn't total nitrogen sampled? WQ-16 f. Appendix F concludes "The sediment TP contents found in the three lagoons do not appear to be particularly enriched from anthropogenic sources" based on the comparison with the Homyak study's results, yet the Homyak study concluded that the P levels in these lakes was from atmospheric sources. g. A study entitled Evidence for nutrient enrichment of high-elevation lakes in the Sierra Nevada, California (Sickman et al. 2003) states "lakes throughout the Sierra Nevada are experiencing measurable eutrophication in response to the atmospheric deposition of nutrients." h. Another key difference is that the Keys are co-limited by phosphorus and nitrogen, according to the Draft EIR/EIS, whereas the lakes in the Homyak study are phosphorus limited. 51)Other key points with regard to nutrients in the Keys and the lack of full examination and disclosure in the Draft EIR/EIS include: 41 a. Appendix F, referring to the Chang paper, insinuates that excess nitrogen in the Keys is from atmospheric sources. The atmosphere is not the source; nitrogen is input by stormwater from lawns and streets in the Keys' neighborhood, the stormwater from the City of South Lake Tahoe, by groundwater from Lake Tallac's nitrogen-rich waters, and by sediment inputs from the City of South Lake Tahoe's stormwater that is discharged into Lake Tallac. Inputs from these sources were not analyzed in the Draft EIR/EIS. **WQ-17** b. The only place in the Draft EIR/EIS that addresses sediment nutrient levels, and then only in a speculative way, is on pages 3.3.4-45 and 46, and the only sediment sampling done was a few days in 2019. c. In a study titled Aluminum Control of Phosphorus Sorption by Lake Sediments (Kopacek et al. 2005): "Hypolimnetic P release occurs under reducing conditions that cause reductive dissolution of ferric hydroxide [Fe(OH)₃]. This

d. Homyak's study stated: "lake sediments behaved as P sinks, likely owing to well-oxygenated waters that limit reducing environments and to interactions

hypolimnetic P release may be naturally low or artificially reduced by sediment with naturally high or artificially elevated concentrations of aluminum hydroxide [Al(OH)₃]. We present field and laboratory data for a common extraction analysis of sediments from 43 lakes differing in trophic status, pH regime, climate, and P loading. The results indicate that a simple sequential extraction of sediment may be a useful predictor of sediment's ability to release P. Sequential extractions of sediment P, Al, and Fe by water (H₂O), bicarbonate-dithionite (BD), and NaOH (at 25 °C) showed that negligible amounts of P would be released from lake sediments during hypolimnetic anoxia if either (1) the molar Al_{NaOH~25}:Fe_{BD} ratio is >3 or (2) the molar Al_{NaOH~25}:P_(H2O+BD) ratio is >25. These ratios can be used as operational targets for estimation of sediment P release potential and Al dosing of P-rich sediment to prevent hypolimnetic P release under anoxic conditions." Due to the high aluminum and anoxic sediment layer at the Keys, one would expect that the release of P is lower than where aluminum levels are lower or closer to background levels of aluminum.

- d. Homyak's study also stated "Aluminum too can limit increases in lake water P concentrations under reducing environments, and at relatively high Al concentrations, P released from the reduction of Fe can be bound to Al-hydroxides (Kopacek et al. 2001, 2005)." Were there any studies at the Keys that looked at sediment and water column phosphorus levels in relation to (i) the high aluminum content in the sediment at the Keys from alum being poured into the Keys and (ii) the anoxic environment prevalent at the Keys? This relationship between aluminum and P under the conditions present at the Keys should have been further examined before including AA2 in the Draft EIR/EIS. Failure to examine the relationship is an example of the lack of seriousness with which the Lead Agencies undertook this alternative.
- e. The product "<u>Phoslock</u>" was mentioned during one of the public meeting webinars though not cited anywhere in the Draft EIR/EIS or appendices. Pesticide regulations in the following states prohibit shipping Phoslock to

Connecticut, Massachusetts, New Hampshire, New York, Maine, Rhode Island, and Vermont. If Phoslock were to be used to remove phosphorus, this product should have been disclosed in the environmental document.

- 52)Section 3.1.1.6, Aquatic Biology and Ecology, states (page 3.1-8) that aquatic weed control will improve the habitat. The Keys are an unnatural habitat suitable mainly for invasive weeds (and boats) and a few highly tolerant species, both native and non-native. Non-chemical aquatic weed control methods may improve water quality in the Keys and reduce weeds if the nutrients that nourish their growth are reduced. But the habitat will remain a stagnant lagoon system that is especially suitable for non-native species of both flora and fauna. Continued warming of the climate will only enhance this suitability. The only way to truly "improve habitats" is to restore the lagoons to marsh, which would eliminate weed habitat entirely and provide filtration for ongoing nutrient inputs and habitat for a myriad of other native species, both aquatic and terrestrial.
- 53)Issue AQU-2, Competitive Exclusion of Aquatic Macrophytes Due to Increased Growth of Curlyleaf Pondweed, (page 3.1-9) discusses the undesired side effects of species specificity of herbicides. If an herbicide does not control all the weeds present, the weeds that it does not control gain a competitive advantage. Because

42

AQU-3

AQU-4

tricloypyr and florpyrauxifen-benzyl do not effectively control curlyleaf pondweed, which is on the increase in the Keys, the use of these herbicides will reduce milfoil, allowing curlyleaf pondweed to increase. The use of herbicides will similarly allow coontail to increase. This is, yet again, an example of the poor design of the CMT. None of the control measures to be tested, except possibly the outrageously expensive and unrealistic dredging alternative, attempts to address the source of the problem, the excessive nutrients in the system. The revised Draft EIR/EIS should analyze (1) short-term alternatives to protect the Lake, such as barriers, and (2) long-term alternatives that actually address the problem of nutrients, such as restoration.

- 54)Issue AQU-9 under Section 3.1.1.6 on page 3.1.11, states "All of the control methods could result in the release and transport of aquatic weed seed and propagules to areas outside of the Tahoe Keys where aquatic invasive weed species have not yet become established." That would not be the case if control methods such as those the Sierra Club proposed in our scoping letter were included, e.g., a barrier between the Lake and the Keys, and restoring the dead-end portions of the lagoons to marsh habitat. The adherence to "testing" various control treatments does not help protect the Lake in any manner whatsoever, in the long-term or the short-term. It only performs time-wasted steps toward granting TKPOA what it wants, to treat the lagoons with herbicides in perpetuity.
- 55)Section 3.1.2.9, Terrestrial Biology and Ecology, referred to possible effect on terrestrial biology and ecology from "the proposed west channel barrier...; the barrier is no longer an element of the CMT." (emphasis added) There are other references in the Draft EIR/EIS to this barrier, on the same page in Sections 3.1.2.8 and 3.1.2.10, and previously in Section 3.1.2.3 and Section 3.1.2.5. Section 3.1.2.12 refers to an impermeable barrier. TKPOA contracted with D&A Civil Engineering to study the proposed west channel barrier, a temporary (5-7 weeks) water-filled barrier to be installed during the methods test evaluated in the IEC/IS. The study is summarized in a Technical Memorandum "Tahoe Keys - West Channel Barrier" referenced in the IEC/IS. The Technical Memorandum presumably contains comprehensive information about characteristics of the proposed installation site, effectiveness of the barrier, and environmental impacts of the barrier. This information, which would help the public evaluate a barrier, should be made available in this environmental review process. Why was the barrier not considered as a potential solution to help protect the Lake, the mission of the Lead Agencies? Also, the West Channel Water Barrier was cited as one of the mitigation measures in the Joint TRPA Initial Environmental Checklist and CEQA Initial Study (MM-HH-10 on page 58). What was the basis for the decision to eliminate this mitigation measure from the Draft EIR/EIS? The barrier should be incorporated into this environmental review process as the best short-term solution to the increasing weed infestation throughout the Lake.

AQU-4

AQU-5

43

ALT-122

- 56)Section 3.1.2.11, Utilities, states that drinking water could be contaminated, but the IEC/IS found that the "surface water intakes are not located is[n] sufficient proximity to the Tahoe Keys lagoons to be affected." There are no references to the data and analyses supporting this conclusion about possible contamination of drinking water supplies drawn from Lake Tahoe by surface water intakes. The IEC/IS also concluded that Tahoe Keys drinking water wells would not be contaminated because rhodamine dye injected into lagoons in an earlier study was not detected in the wells. The Rhodamine WT Dye Study Report on the website (https://tahoekeysweeds.org/project-resources-maps/) did not include any results of this testing of Tahoe Keys drinking water wells, another instance of missing supporting data. An electrical failure in the Tahoe Keys drinking water system in late August 2020 required issuance of a "boil water" warning to Tahoe Keys residents. The revised Draft EIR/EIS must analyze and discuss (1) whether contamination of Tahoe Keys water supplies by herbicides would be detected if the Tahoe Keys water system failed during the CMT and (2) whether the proposed detection and mitigation of this contamination would be effective in the event of failure.
- 57)Section 3.1.2.13, Water Quality, refers to a "very extensive baseline water quality data collection effort" conducted in the spring through fall of 2019. This section should have included a reference to Appendix E, the report of this study. The omission of this obvious reference significantly inconveniences readers.

Section 3.2, Environmental Health

- 58)EH-5, Short-term Increases in Aluminum Concentrations, (page 3.2-2) states "Information on existing concentrations of aluminum were summarized from available studies. The aluminum concentrations were then compared to USEPA's acute and chronic water quality criteria for the protection of aquatic life." No references to these studies are provided; thus, the reader is not provided the information needed for corroboration of the evidence, analyses, and conclusions.
- 59)EH-6, Harmful Algal Blooms, on page 3.2-2, suggests that the plant biomass that would decay and release nutrients will be minimal because the applications would occur in "the late spring when plant biomass that would decay and release nutrients is minimal". Are there studies supporting this assumption? According to the Aquatic Macrophyte Survey Report, which surveyed the Keys during June and July of 2016, "The hydroacoustic data showed that the abundance and biovolume of plants in the Tahoe Keys in 2016 was substantial and that more than 85% of the water volume was filled with plant matter. This is an increase over last year and, in addition, point sampling data shows that the amount of curlyleaf pondweed has increased substantially from prior years." Apparently, no macrophyte surveys have been performed in the late spring; the above Report states, "Due to the short growing season in Lake Tahoe and the germination and sprouting timing of the aquatic plants of concern, only one period of data collection is considered sufficient to assess relative abundance." Apparently, that one period of data collection is June and July.

WS-10

WQ-18

44

EH-8

CYB-17

There is no evidence to support the assumption that late spring is the best time to apply herbicides to minimize the risk of HABs.

- 60)The bottom of page 3.2-3 states that "states may allow some limited activities that result in temporary and short-term changes to water quality, subject to protection of beneficial uses. These changes would not be allowed to adversely affect existing uses or alter the essential character or special uses for which Lake Tahoe was designated as an ONRW." This statement correctly paraphrases pages 5 and 6 of the APU. However, as stated above under General Comments (#15), the APU also states "if the proposed discharge will violate water quality objectives in the receiving water, no discharge will be allowed and therefore no antidegradation analysis is required." Because the discharge of herbicides would result in immediate and certain violation of the toxicity and chemical constituent water quality objectives, the use of herbicides is not allowed.
- 61)The time frame "weeks to months, not years" cited at the top of page 3.2-4 refers to USEPA antidegradation regulations. Its message: limited short-term degradation might be permitted if stringent conditions are satisfied, but long-term degradation is prohibited. Indeed, the State Water Resources Control Board and the Regional Water Boards do have discretion to determine the allowable time frames of long-

term and short-term existing water quality degradation within this guidance. Experience at many other lakes has shown that one-time use of herbicides does not control aquatic weeds in subsequent years and that annual applications of herbicides are required. "Weeks to months" of short-term degradation for an indefinite number of years after the first application obviously violates the "not years" prohibition of long-term degradation. In the context of the present project, experience has shown that the project applicants' weed control goal would require future annual applications of herbicides. Furthermore, as stated in General Comment #18, two of TKPOA's NPDES and Basin Plan Pesticide Prohibition Exemption applications have recognized that herbicide treatments must be repeated to be effective. These applications proposed up to 12 year of herbicide treatments. If the agencies contend that aquatic weed control in the Tahoe Keys lagoons would not require future annual herbicide applications, they must provide peer-reviewed evidence supporting this contention.

62)The discussion of the State regulatory framework on page 3.2-4 paraphrases the Administrative Procedures Update on Antidegradation Policy Implementation for NPDES Permitting (APU) as follows: "If approved for use, detectable concentrations of herbicide active ingredients and degradants exceeding background would be allowed within treatment areas only for a short-term period (i.e., weeks to months, not years) to maintain compliance with antidegradation requirements. In receiving waters outside of treatment areas, short-term detectable concentrations of herbicide active ingredients and degradants exceeding background concentrations are only allowable if beneficial uses are protected and maintained." This is erroneous. There CYB-17

REG-30

45

REG-31

REG-32

are no references in the APU regarding concentrations "inside treatment areas" vs concentrations "outside treatment areas." In fact, there are no references to treatment areas whatsoever, only references to receiving waters. A correct interpretation of the APU must be substituted in a revised Draft EIR/EIS.

- 63)Cyanobacteria is also discussed on page 3.2-4 repeating what was said on page 3.1.3. See previous comments 44 and 45 above. In addition, Dr. Wayne W. Carmichael has contended that (a) starting the use of herbicides sets up a condition where they become needed in the long term, and (b) the potential for cyanotoxins increases if macrophyte control is not combined with reductions of nutrients and other water quality improvement measures.
- 64)Issue EH-5, Short-term Increases in Aluminum Concentrations, (page 3.2-5) states that "high aluminum concentrations may be due to the historical use of aluminum sulfate (also known as alum)..." (emphasis added) There is known extensive use of alum during the development of the Keys in the late 1950's and 1960's. This document should have examined historical references to find out how much was used and this must be addressed in a revised Draft EIR/EIS.
- 65)Table 3.2.1, on page 3.2-6, shows the aluminum elutriate sample results collected from the Tahoe Keys West Lagoon in 2019 compared to calculated site-specific acute and chronic Water Quality Criteria for the Protection of Aquatic Life. However, the footnotes to the table indicate that three of the five samples were stored at holding temperatures exceeding QAPP guidance, and the results of two samples may be biased low because the sediment samples were diluted with site water. Nevertheless, aluminum concentrations in samples from three of the five West Lagoon stations still exceeded both chronic and acute criteria for total recoverable aluminum.
- 66)Issue EH-6, Harmful Algal Blooms (HABs) under Environmental Setting for the Proposed Project (page 3.2-6) states: "Cyanotoxins were detected at all six LFA treatment sites (all within Site 26 shown on Figure 2-4) between July and September (cyanotoxin concentrations were 0.11-18.07 μg/L anatoxin-a and 0.15-0.33 μg/L microcystin)." The discussion also states "Water samples from the Tahoe Keys were also collected by TKPOA for cyanotoxin analysis at six stations in August 2017 and 19 stations in May through September 2018 (TKPOA 2020). Cyanotoxin concentrations were 0.13-2.84 μg/L anatoxin-a and 0.12-0.23 μg/L microcystin (Otten 2017 and 2018)." These data should have been included in the appendices; they were not. This omission must be remedied in a revised Draft EIR/EIS.
- 67)The reference to "California's guidelines [for cyanotoxins]" should be clarified. The guidelines are discussed earlier in section 3.2.
- 68)Issue EH-2, Detectable Concentrations of Herbicides and Degradants in Receiving Waters, beginning on page 3.2-7, discusses the three herbicides proposed for use.

REG-32 CYB-18 CYB-18 & EH-9

46

EH-10

There are a number of issues with this section of the Draft EIR/EIS, including the following:

- a. See attached comments from <u>Beyond Pesticides</u>, which were previously incorporated in these comments by reference.
- b. There is no discussion of the inert ingredients for each of these herbicides.
- c. Near the top of page 3.2-8, the following statement is made: "Complete degradation by microbial action is within 30-60 days (WDNR 2012a). When endothall is applied to areas of dense aquatic vegetation, it rapidly kills the treated plants, and the decay of the dead vegetation results in oxygen depletion, which, in turn, results in a loss of microbial activity and longer half-lives (USDA 2009)." (emphasis added) No further discussion of these longer half-lives is provided in the document, even though the lack of microbial activity in an oxygen-depleted environment would seem to be a critical and likely scenario of much lower and longer degradation rates, and the herbicide and/or its degradants being present for many months. This is further evidence that antidegradation requirements would not be satisfied.
- 69)The "less than significant" finding on the top of page 3.2-9 for Issue EH-2 is inaccurate for the reasons stated above as well as the following:
 - a. These herbicides, upon release, violate the toxicity and chemical constituent water quality objectives. See comments under General Comment 15 above. Therefore, the release of these chemicals cannot be justified under antidegradation regulations according to the Administrative Procedures Update for the Antidegradation Policy Implementation for NPDES Permitting, which prohibits a proposed discharge if a water objective is violated.
 - b. The Basin Plan's prohibition exemption criteria for pesticides requires that the failure of all available non-chemical methods be demonstrated prior to an exemption being granted. The non-chemical methods have not been thoroughly tested in the Tahoe Keys; therefore, the finding that they have failed cannot be made.

The less than significant impact determination is incorrect and should be corrected to significant impact in a revised Draft EIR/EIS. A statement of overriding considerations must be prepared.

70)The discussion of Issue EH-4, Introduction of Toxic Substances into the Environment, beginning on page 3.2-10, is severely flawed. The toxicity water quality objective states: "All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life." And, "The survival of aquatic life in surface waters subjected to a waste discharge, or other controllable water quality factors, shall not be less than that for the same water body in areas unaffected by the waste discharge..." (emphasis added). The chronic toxicity to other organisms is not discussed in the Draft EIR/EIS and should be included in the revised Draft EIR/EIS. See the full comment letter (attached) from Beyond EH-11

EH-12

EH-13

47

Pesticides' Senior Science and Policy Analyst, Leslie Touart, Ph.D. Excerpts from the letter are as follows:

Regarding Triclopyr: "The most common breakdown product of triclopyr in mammals, as well as in soil and water, is 3,5,6-trichloro-2-pyridinol (TCP)¹ and also, of note, the highly toxic and controversial organophosphate insecticide chlorpyrifos which is banned in California.... TCP also poses an environmental hazard as it is "very mobile" in a variety of soil types and is also often more persistent than triclopyr itself."

Regarding Endothall: "Persistence (half-life) of the endothall acid (active ingredient) is expected to be <10 days in treated areas, however in EPA's exposure assessment² for direct application of Aquathol K to an impoundment with an initial

¹ U.S. EPA. Prevention, Pesticides and Toxic Substances. 1998. Reregistration eligibility decision (RED): Triclopyr. Washington, D.C.

² EPA. 2005. Environmental Fate and Ecological Risk Assessment of Endothall – Revised. EPA-HQ-OPP-2004-0370-0005.pdf.

48

EH-13

target exposure of 5 mg/L, the Estimated Exposure Concentration (EEC) at subsequent time intervals post-application was:

- \Box 4-day = 4.7 mg/L
- \Box 21-d = 3.8 mg/L
- \Box 60-day = 2.4 mgL
- \Box 90-day = 1.8 mg/L.

These concentrations would be expected to represent the upper bounds for endothall concentrations in the immediate vicinity of the weed control project endothall treatment sites. These concentrations pose a severe risk to finfish as significant reductions in survival, length, and wet weight were reported in a 28-day fathead minnow early life stage test at 2.6 mg/L for endothall acid which exceeds the relevant EEC.³"

Regarding Florpyrauxifen-benzyl (ProcellaCOR EC liquid: "A key confounder is that florpyrauxifen-benzyl is a difficult-to-test substance with maximum native solubility of ~ 15 μ g/L and only around 50 μ g/L with use of a cosolvent.⁴ Although no mortalities to aquatic animals were observed up to solubility limits in acute exposures, certain sublethal effects were recorded. In chronic exposures, the mysid (Americamysis bahia) and midge (Chironomus dilutus), toxic effects were recorded at the lowest concentrations tested (LOAEC 1.1 μ g/L and LOAEC 4 μ g/L respectively) such that NOAEC values could not be determined. Therefore, statistically significant effects below concentrations of 1 to 4 μ g/L can be expected.⁵ Albeit the maximum label rate for the PorecellaCOR EC liquid is 50 μ g/L, the maximum proposed rate for the project is listed as 3 μ g/L which would indicate a potential threat to aquatic invertebrates with similar sensitivities, such as the mysid Mysis relicta which can be found in the Tahoe Keys lagoons." EH-13

71)Page 3.2-13 states "There would be a period of months before aquatic macrophytes reestablish themselves in the niches vacated in the lagoons....Therefore, the effect of limited mortality of aquatic macrophyte individuals is expected to be a less than significant impact on macrophyte populations because only a small portion of the lagoons would be affected, and aquatic plant communities are expected to recover in these areas." No supporting data or studies are referenced. Contrary to this unsupported assertion, Johns et al (2012), who examined the response of native aquatic macrophyte communities to spring herbicide treatments of curlyleaf pondweed (Potamogeton crispus) found that "curlyleaf persisted at moderate to high frequencies over the 4 years, and no consistent changes in native macrophyte frequency of occurrence were seen." Also, the statement that it would be only a

period of months before the macrophytes come back is an admission that one herbicide treatment will not be an effective long-term solution.

- 72)Issue EH-6, Harmful Algal Blooms (HABs), (pages 3.2-14) states "Factors that influence the occurrence of cyanobacteria blooms can include excess nutrient (nitrogen and phosphorus) loadings and concentrations, slow-moving surface water, high water temperature, high intensity and duration of sunlight, water column stratification, changes in water pH, and occurrence of trace metals (USEPA 2015a; 2019). Some of the factors that influence the occurrence of blooms could be affected by the application of aquatic herbicides to control aquatic weeds in the Tahoe Keys (e.g., sunlight intensity, nutrient availability)." (emphasis added) The statement should have said almost all of these factors exist in the Keys, and the significant factors in parentheses should have included stagnant or slow-moving surface water, high temperatures, water column stratification, and changes in pH because "[b]aseline monitoring in the West Lagoon and Lake Tallac has documented periods of elevated nutrient concentrations in near-surface water samples, high water temperatures, water column stratification, and fluctuations in pH (ESA 2019)." The statement should also have mentioned "excess nutrients" based on the fact that "[a]nnual average values for TN and TP in the Tahoe Keys exceeded their relevant WQOs for each year from 2007 to 2013 (SEA 2017a). In 2016, even the minimum values recorded for TN and TP exceeded relevant WQOs for the Marina Lagoon, the Main Lagoon and Lake Tallac. Clearly, the Tahoe Keys lagoons should be considered "enriched" with nutrients." (Appendix F, page F-1) (emphasis added) This omission must be remedied in a revised Draft EIR/EIS.
- 73)Issue EH-6, Harmful Algal Blooms, (page 3.2-14 and 15) lists numerous uncertainties including "Tomasko (2020) suggested that care should be taken in terms of SAV management, so that the nutrient contents of treated SAV do not

AQU-6

49

CYB-21

CYB-22

³ EPA. 2005. Environmental Fate and Ecological Risk Assessment of Endothall – Revised. EPA-HQ-OPP-2004-0370-0005.pdf. ⁴ EPA. 2017. Florpyrauxifen-benzyl: Environmental Fate and Ecological Risk Assessment for the Section 3 New Chemical Registration. EPA-HQ-OPP-2016-0560-0011.pdf.

⁵ EPA. 2017. Florpyrauxifen-benzyl: Environmental Fate and Ecological Risk Assessment for the Section 3 New Chemical Registration. EPA-HQ-OPP-2016-0560-0011.pdf.

become available in the water column in such a manner as to be able to initiate HABs and their potential health risks." And, "Due to the unpredictable nature of HABs and consequent production of cyanotoxins from HABs, there remains uncertainty around whether and to what extent these would occur and whether they would cause unavoidable increases in the risk of exposure to cyanotoxins as a result of the release of nutrients..." Yet, this section concludes that "the risk of increased HABs is considered less than significant" because the herbicides will be released in the spring. However, no surveys have been provided to substantiate this claim, no estimates have been provided of the mass of SAV present in the late spring, and no estimates of nutrient surge from the use of herbicides have been provided. Therefore, the conclusion that the risk of increased HABs is considered less than significant is unsupported. This section includes discussion of LFA, yet this nonchemical method is known (and the Draft EIR/EIS even states this elsewhere) to kill the weeds more slowly, so that the nutrient release is slower and the risk of HABs is not as great with these methods. Based on this lack of estimation of water-

column nutrient loading after a spring herbicide treatment, the less than significant impact should be corrected to significant impact, since not enough evidence is provided to substantiate the less than significant claim. A statement of overriding considerations must be prepared.

- 74)Page 3.2.16 states "Rhodamine WT dye would be applied by TKPOA during the herbicide applications and tracked to determine the movement and dissipation of dissolved herbicide products and chemical transformation products." What concentrations of Rhodamine would be used? This information should have been provided. The LC50 of Rhodamine WT dye is >320mg/l for rainbow trout (96 hr) and 170 mg/l for daphnia magna. (MSDS, polysciences.com; https://www.polysciences.com/skin/frontend/default/polysciences/pdf/19922.pdf) In addition, the water supply contingency plan if herbicides are detected in nearby wells would shut off the wells and distribute water to all users. The feasibility of distributing water is questionable considering the number of users.
- 75)The Significant Unavoidable Impacts cited on page 3.2-17 for the Proposed Project are incorrect based on comments 69 and 73 above.
- 76)Issue EH-5, Short-term Increases in Aluminum Concentrations (page 3.2-20), state that "the potential impact of Action Alternative 2 on aquatic biological communities would be less than significant and these areas would be rapidly repopulated." No scientific basis for this conclusion is stated. Fish and other aquatic organisms cannot escape outside the turbidity curtains. There are no core samples of the sediments from which the levels of aluminum that would be released could be estimated. The conclusion of less than significant impact is entirely based on the relatively small area to be tested. However, the area proposed for dredging is 5.54 acres, which is not a small area. Relying on the statement that "these areas would be rapidly repopulated" is unacceptable. The expected mortalities of fish and other aquatic

CYB-22

50

ALT-109

EH-14

organisms are a significant impact, and the potential impact conclusion should be changed to significant.

77)EH-5b, Treatment and testing of dewatering effluent (page 3.2-20) discusses discharging dewatering effluent from suction dredging to either the sanitary sewer system or Lake Tallac. Neither of these disposal options for dredging fluids seems plausible or realistic. STPUD will most likely refuse to take the huge amounts of sediment-laden water that their treatment plant was not designed to treat. Lake Tallac receives stormwater from the surrounding city, and its capacity is likely insufficient to handle the enormous amounts of water that suction dredging produces. The scenarios of the suction dredging alternative are neither very wellthought out nor realistic, and this alternative is not worthy of serious consideration.

51

Section 3.3, Natural Environment

- 78) The assumptions of the Earth Resources analysis include the assumption that dredging may destabilize existing bulkheads and slopes. The destabilization would be mitigated by "replacement of any affected docks and bulkheads at the end of the test dredging." In addition to the costs of dredging, aluminum extraction, effluent and sediment disposal, and sediment replacement, there may be the additional cost of replacing the homeowners' private boat docks? Again, although no cost estimates have been provided in this Draft EIR/EIS, it is obvious that dredging is an outrageously expensive alternative and should be rejected for that reason alone. Taxpayers should not be expected to pay for it.
- 79)Page 3.3.1-3 states "Subject to determination by USACE, the activities under Action Alternative 2 could potentially qualify for a general permit under NWP 27 (Aquatic Habitat Restoration, Enhancement, and Establishment Activities) or NWP 35 (Maintenance Dredging)." NWP 27 is intended to permit restoring and/or enhancing aquatic habitats; an NWP 27 permit for dredging the Keys would be highly inappropriate. Restoring the lagoons to their marsh habitat is the only activity could be permitted by an NWP 27 permit; dredging out the lagoons to recreate an unnatural lagoon primarily for boat traffic cannot be permitted. AA2 dredging might qualify for an NWP 35 permit, but since the lagoons have not been dredged since they were constructed, AA2 dredging probably wouldn't qualify for an NWP 35 permit either. An individual permit from the USACE would likely be required. It is surprising that Lahontan Water Board staff, who are familiar with the activities allowed by these permits, did not notice these questionable statements about NWP permits during the Administrative Draft review of this document.
- 80)The Potential Impacts section under Issue ER-1, (page 3.3.1-6) states "Any release of this material during transport across the lagoons would deposit sediments with high aluminum concentration in the receiving waters or nearby land. An uncontained release of dredge slurry could have a potentially significant impact, but this would be mitigated by containment." Does this planned containment include a containment

ALT-110

EH-14

EH-15

REG-33

ALT-111

structure for the entire 4000' section of 6" HDPE dredge line for site 28 shown in LT-111 Figure 2-10? Such a large containment structure would be highly unrealistic. 81)Page 3.3.1-6 refers to dewatering at the defunct water treatment plant (WTP) as follows: "Dewatering at the WTP would lead to storage of up to one million gallons of dewatering effluent in an existing concrete tank of unknown integrity." (emphasis ALT-112 added) Again, Action Alternative 2 is not well thought-out or planned. The integrity of the TKWTP is unknown, the disposal of the treated effluent is uncertain, and the risks of spills from the pipes carrying the dredged slurry cannot assuredly be mitigated by containment. 52 82)Under Mitigation and Resource Protection Measures on page 3.3.1-7, expenditure of public funds spent on replacement of private boat docks that may be destabilized by ERM-7 Alternative 2 dredging would be extremely inappropriate. 83)The bottom of page 3.3.1-7 states "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." This ERM-8 sentence is very poorly worded. The volumes of possible releases of water and the corresponding height of containment barriers required to contain them have not

84)Given the above uncertainties and lack of details and estimates, the conclusion on page 3.3.1-8 that "impacts to earth resources resulting from the proposed action would be less than significant" cannot be substantiated and should be changed to significant impacts.

SIG-7

HYD-1

HYD-2

been estimated. This omission must be remedied in a revised Draft EIR/EIS.

Section 3.3.3, Hydrology

- 85)Under the assumptions listed on page 3.3.3-1, the first assumption states "There is no surface water connection between Lake Tallac and the West Lagoon except on rare occasions when a gate is lowered to relieve localized flooding upgradient from Lake Tallac." How often does this occur? Who controls the gate? How many gates are there between Lake Tallac and the lagoons? In order to substantiate this assumption, these details should have been provided in the Draft EIR/EIS and must be provided in the revised Draft EIR/EIS.
- 86)Assumption #3 on page 3.3.3-1 states "Lake Tallac drains to Pope Marsh through a gate, and during high water levels Pope Marsh overtops Pope Beach and drains into Lake Tahoe." Pope Marsh is therefore a WOUS, as already noted in these comments. Lake Tallac, hydrologically connected to Lake Tahoe through Pope Marsh, is also a WOUS. Therefore, Lake Tallac should be treated no differently than Lake Tahoe or the Tahoe Keys lagoons in this document; they are all hydrologically connected. What evidence supports the assertion that Lake Tallac is a Tier II water, instead of a Tier III water?

87)The water budget section under Hydrology (3.3.3) was very well done. This section is the most substantiated and well-supported section in this document. The rest of this Draft EIR/EIS should be as well prepared.

Section 3.3.4, Water Quality

- 88)Page 3.3.4-6 states: "The WDRs require a Nonpoint Source Water Quality Management Plan to address land-based direct sources not captured by the stormwater system." Are there fertilizer restrictions or bans in these WDRs? There should be references to the requirements of the WDRs.
- 89)Page 3.3.4-12 states "City of South Lake Tahoe 2016 baseline stormwater modeling estimated fine sediment particle (FSP) loads of 56,700 lb/yr to the West Lagoon and 162,000 lb/yr to Lake Tallac (Burke 2019). In Lake Tallac water turns a dark copper color due to dissolved organic material (e.g., tannins) originating from wetland soil." What are the nutrient loads of the 56,700 lb/yr load of FSP to the West Lagoon and the 162,000 lb/yr load of FSP to Lake Tallac? Again, the extremely important factor of ongoing nutrient loadings to the system is completely ignored in the Draft EIR/EIS. This should be corrected in the revised Draft EIR/EIS.
- 90)The discussion of dispersal of aquatic weed fragments begins on page 3.3.4-12. Mechanical harvesting, the primary weed control method used "since the 1980's" and the method approved by the Lahontan Water Board, has only exacerbated the weed problem by breaking up the weeds and allowing them to root elsewhere. Mechanical harvesting has been an unmitigated disaster, approved by the Water Board even though it is a major contributor to violations of the water quality objective for floating materials. The Draft EIR/EIS should have explained why mowing has been allowed to continue. This omission must be remedied in a revised Draft EIR/EIS.
- 91)Page 3.3.4-26 states: "The primary external sources of phosphorus in Tahoe Keys were from stormwater/irrigation and groundwater inflow." This section and the next section on nitrogen are the only sections that acknowledge that sediment, stormwater, and groundwater are sources of nutrients, but the Draft EIR/EIS does not attempt to quantify those sources in any great detail. The next sentence after the one quoted above states "The primary internal source and the overall dominant source of phosphorus was from submerged aquatic vegetation decomposition." What was the original source of the phosphorus in the submerged aquatic vegetation? The Draft EIR/EIS concludes that the original source of the phosphorus was not anthropogenic because the average TP level in the 50 Sierra Nevada lakes of the Homyak et al., 2014, study is higher than the level in the Keys. See previous comment 50 regarding this comparison. If the sources of the TP in the Keys are non-anthropogenic, then what are those sources? The discussion does not answer this question.

HYD-3

WQ-19

WQ-20

53

AWM-53

However, the next paragraph states: "Contributing sources of TP to the lagoons are both internal (e.g., aquatic plant decomposition, sediment flux) and external (e.g., stormwater/irrigation, groundwater inflow)." This implies that TP in groundwater and TP in the 56,700 lb/yr of nutrient-loaded fine sediment input to the West Lagoon and the 162,000 lb/yr of nutrient-loaded fine sediment input to Lake Tallac by the City of South Lake Tahoe's stormwater may be the source of these nutrients. However, no discussion is provided about these sources. The last sentence in this section does state "It should be noted that the TP from decomposing aquatic plants is initially from

sediments, as the nutrient pools of sediments are the primary source for all the aquatic plant species encountered, other than coontail." Yet, the Draft EIR/EIS fails to provide details about the 60 years of accumulated nutrient-enriched fine sediment (at present 56,700lb/yr) coming from stormwater, and the nutrients input through groundwater from Lake Tallac. Instead, the Draft EIR/EIS claims that the sources of the nutrients are non-anthropogenic. The only sediment data provided in Appendix E were collected on a couple of days in late July and September 2019, and the samples were only analyzed for TKN (total Kjeldahl nitrogen). Why weren't the samples analyzed for total nitrogen? The discussion of the sources of nutrient inputs to the Keys in the Draft EIR/EIS is so lacking in detail that it is extremely inadequate. This inadequacy must be remedied in a revised Draft EIR/EIS.

- 92)The pie charts on page 3.3.4-30 show zero or miniscule sediment flux of TP for both the Main Lagoon and Lake Tallac, yet 79% and 41.6% sediment flux, respectively, from SAV decomposition. Only in the one little sentence quoted above ("It should be noted that the TP from decomposing aquatic plants is initially from sediments, as the nutrient pools of sediments are the primary source for all the aquatic plant species encountered, other than coontail.") is there any admission that the source is the sediments, which, again, have accumulated 60 years of nutrient inputs from the surrounding communities.
- 93)This comment and the next also apply to the discussion of TN sources on pages 3.3.4-29 and 3.3.4-32. Page 3.3.4-35: The discussion of changes in dissolved oxygen (DO) concentrations refers to the vertical distribution of DO, particularly during the day when surface waters are higher in DO than the anoxic layer near the bottom. The discussion also mentions the numerous studies of the rapid decay of aquatic plants killed by herbicides causing increases in biological oxygen demand (BOD) and decreases in DO. This discussion further states "Despite the research on the effects of plant decay on lake deoxygenation, there are few published studies that specifically evaluate pre- and post-treatment DO measurements, and none where conditions were similar to those found in the Tahoe Keys lagoons with the same plant species and proposed aquatic herbicides." Despite the lack of relevant studies of pre- and post-treatment DO measurements, the Draft EIR/EIS concludes that the impact of herbicide treatments on DO is "less than significant impact" because the herbicides will be applied in the spring. However, data from spring-time macrophyte studies relevant to verifying that this mitigation measure would be

54

WQ-21

WQ-22

sufficient are not referenced. A survey on April 20, 2018 is mentioned later, but the results of this survey are not in the Appendices or the website resources. The area to which the herbicides would be applied is asserted to be "relatively small" and therefore the impacts will be less than significant. The areas to which would be applied is 16.7 acres, about 730,000 square feet. This is not exactly a "small area," particularly if DO concentrations drop so significantly that cyanobacteria blooms occur. Without relevant data available on how much DO levels are expected to

decrease and how much BOD is expected to increase, the impacts cannot be concluded to be less than significant.

- 94)Page 3.3.4-37 and -38, under Issues WQ-6 and WQ-7, discusses the increased risk of TP and TN releases to the water column upon decomposition of the aquatic plants after herbicide treatment and concludes, based on the same assumptions as above for DO, that the impacts would less than significant because of the proposed spring-time treatment and "small area" to be treated. In addition to the same arguments as above (no evidence or basis for impacts being reduced and the size of the area is significantly large enough to cause HABs), repeated expectations that plant biomass and water temps will be low, therefore nutrient increases in the water after decomposition and HABs will be low, is not taking into consideration climate change and expectations of precipitation coming in the form of rain instead of snow, which could significantly affect these assumptions. In general, this Draft EIR/EIS makes a great deal of assumptions that are not substantiated or supported, diminishing the confidence of these assumptions.
- 95)Page 3.3.4-53, under Suction Dredge Permitting Program, states that "the California Department of Fish and Wildlife is currently prohibited from issuing any permits for suction dredging under the Fish and Game Code. However, this project alternative is designed to test suction dredging as an environmental restoration method and there will be no attempt at mineral recovery, so the ban on suction dredging for mining does not apply." (emphasis added) To call Action Alternative 2, the dredging, disposal, and replacement project, an environmental restoration method is an insult to all environmental restoration projects. Dredging the Keys to return it to what it was after destroying the original marsh can hardly be called an "environment restoration" method. As said previously, this alternative will only produce the same type of unnatural environment that caused the problem in the first place instead of removing the problem, the habitat for the weeds. Has the California Department of Fish and Wildlife been contacted to verify the assumption that the suction dredging ban does not apply?
- 96)Issue WQ-6, on page 3.3.4-56, discusses the increases in total phosphorus concentrations and states "These sample concentrations may underestimate actual concentrations in West Lagoon sediments because some of the samples were diluted with site water during sample collection." This is first time in the numerous places in which this issue is discussed that these sampling discrepancies and errors

WQ-23

55

WQ-24

RES-15

have been mentioned. Regarding the average of the 50 Sierra Nevada lakes studied by Homyak et al (2014), see previous comments regarding the invalidity of this comparison.

97)Issue WQ-2, on page 3.3.4-56, discusses the mechanisms that could cause turbidity during suction dredging. Only one of the marina dredging projects on the

California side of Lake Tahoe between 2005 and 2017 proposed to use suction dredging, North Tahoe Marina, which has extremely sandy substrate unsuitable for clamshell dredging. The marina owner was required to discharge the water after settling to an upland location and prohibited from discharging back to the Lake. The substrates of other marinas in the Lake were shown to not be suitable for suction dredging because of the muck and fine sediment in the substrate. The other reason suction dredging was never chosen was the excessively large volumes of sedimentladen water that it would produce, the refusal of sanitary sewer systems to accept the water/sediment mixture, and the standards for treated water discharged back to the Lake. Dredging of Keys lagoons would produce much larger volumes of water. Therefore, the dredging alternative is unrealistic at best, both from a cost basis and disposal basis, as stated in previous comments.

- 98)The discussion of issue WQ-2 states "Laboratory experiments have shown that turbidity values for silt and silt-clay particles decrease substantially in 12 hours, but clay-sized particles maintained a constant high turbidity over 24 hours suggesting these particles stay in suspension for long periods (Holliday et al. 2003.)" In fact, some of the marina dredging projects on the Lake between 2005 and 2017 encountered turbidity problems that required the turbidity curtains to be maintained for as long as several weeks. The Lead Agencies have avoided requiring proactive aquatic management solutions that can be implemented to help slow or prevent the build-up of muck and sediment in the Keys, such as proper land use management, maintenance of beneficial vegetative buffers and sediment traps, installation of aeration systems, and utilization of nutrient-absorbing products. The build-up of muck and sediment has increased while the Lead Agencies ignored the problem for years. Now the Agencies propose testing what should be the last resort, herbicides, which is not in the public's best interest. Better management by the Lead Agencies would be in the public's best interest.
- 99)The discussion of issue WQ-2 further states "Performance specifications for sand or fine gravel used for substrate replacement would require testing prior to placement to ensure that the material did not contain excessive amounts of fine particles." In fact, very strict limits on the amount of "fines" allowed in the replacement sand would be required. Compliance with these limits would require numerous sieve analyses of the sand to be used for substrate replacement.
- 100) The discussion of mitigation by turbidity curtains on page 3.3.4-56 states: "Turbidity curtains that adhere to TRPA standards outlined in the BMP Handbook

WQ-25

WQ-26

56

AWM-60

§8.10 are expected to confine this temporary impact to test areas such that turbidity impacts to the West Lagoon would be less than significant." Turbidity curtains are not a panacea, as even double layers of turbidity curtains can be overwhelmed and fail during high winds or during rain events that produce high stormwater inflows. Also, once the turbidity has decreased enough to remove the turbidity curtains, the

removal itself creates turbidity that often exceeds the NTU water quality objective. Therefore, turbidity curtains alone do not mitigate the impacts of turbidity to less than significant.

- 101) Page 3.3.4-57 concludes "the improvement in water clarity in dredged areas is unlikely to last more than one or two seasons before fine sediments and turbidity are transported in from adjacent areas. The relatively small amount of fine organic sediment removed during the suction dredging test is not expected to have a noticeable long-term effect on reducing turbidity and improving water clarity in the West Lagoon as a whole. Therefore, the potential beneficial long-term effect of reducing future turbidity by removal of fine organic sediments in test areas and replacing them with coarser grained sediment would be less than significant." (emphasis added) This conclusion reaffirms our earlier comments that the dredging, disposal and replacement alternative would result eventually in the same conditions that created the problem of weeds in the first place.
- 102) Issue WQ-6, on page 3.3.4-58, cites a study by Cooke et al (2005), which suggested that "sediment removal could be effective for aquatic weed control only if the resulting water depth was below the depth limit at which the weeds could achieve sufficient light for growth and reproduction. Dredging to such depths is not proposed under Action Alternative 2. For suction dredging to be able to sustainably reduce the problem of nutrient cycling, the newly dredged bottom depths would have to exceed the deepest depth to which aquatic weeds grow in the Tahoe Keys, otherwise such an approach may only bring about a temporary reduction in aquatic weed biomass." And later, this section states "Over a longer period of time, if suction dredging was done to a depth that reduced the potential for regrowth of aquatic weeds, TP concentrations could decrease in the water column if dredging is sufficiently deep that fewer decaying plants are supported, affording less biomass for nutrient remineralization. However, this project does not propose dredging to sufficient depths to expect sustainable reductions in TP cycling and this potential benefit would not be expected." Therefore, AA2, as proposed, would not be a lasting long-term solution to the problem of weed growth.
- 103) Issue WQ-2, Sediment Disturbance and Turbidity, on pages 3.3.4-59 and -60 has a number of issues:
 - a. It refers to "silt curtains" being used to confine the turbidity from dredging and substrate replacement to the area of work. Silt curtains are an erosion control method, not a turbidity control method.

AWMM-9

57

WQ-29

ALT-114

ALT-115

- b. This section refers to "spill control and containment plans from accidental spills of dredge spoils" that include provisions for storage and processing. These plans should have been included in the Draft EIR/EIS to inform the public of the full impacts of this alternative.
- c. This section states "Treatment system designs could include settling and flocculation in batches stored in tanks for testing before discharge to the sanitary sewer system or Lake Tallac." A complete analysis of the environmental impacts of this alternative would have included the details of the treatment of the water and aluminum-laden sediment mixture.

This alternative has only been partially analyzed, suggesting that it was included only to add an additional alternative after scoping phase comments complained of the lack of alternatives. This alternative was never really taken seriously and would be prohibitively expensive. Intentionally including an infeasible and prohibitively expensive alternative just to add another alternative to an environmental document that lacks alternatives is a wasteful use of public resources and violates CEQA. An EIR must "describe a range of reasonable alternatives to the project . . . which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives." CEQA Guidelines § 15126.6(a). (emphasis added)

Section 3.3.5 Aquatic Biology and Ecology

- 104) Page 3.3.5-8 refers to a 63-fold increase in biovolume of aquatic weeds harvested from the lagoons between 1984 and 2019. Clearly, "[more than] two decades of mechanical harvesting have not controlled the spread of aquatic weeds." However, the harvesters cut the weeds several feet below the surface, creating very large numbers of weed fragments. Not all of these fragments are removed from the water, and the fragments that are not removed are spread by boats throughout the lagoons and into the Lake, where they may lodge in sediment and begin to grow. The harvesting is contributing to the spread of aquatic weeds in the Keys and around the Lake. Harvesting will continue on the regular schedule during the CMT. Harvesting the experimental sites will invalidate the comparison of control methods, and all of the harvesting will continue to contribute to the spread of the aquatic weed infestation.
- 105) Issue AQU-1 on page 3.3.5-8 refers to "short-term impact to non-target aquatic macrophytes." Death of the native aquatic plants is not a "short-term impact" death is permanent. If there are examples elsewhere that demonstrate native aquatic plants being reestablished on an herbicide-treated site instead of non-native plants recolonizing the site, then these studies should have been cited and summarized in the Draft EIR/EIS. This omission must be remedied in a revised Draft EIR/EIS.
- 106) Page 3.3.5-9 notes the presence of the following non-target macrophytes (native plants) in the West Lagoon and Lake Tallac: leafy pondweed, nitella (Nitella sp., a

AQU-7

AQU-8

QU-9

58

ALT-115

macroalga), elodea (Elodea canadensis), Richard's pondweed, American pondweed (Potamogeton nodosus) and Andean watermilfoil (Myriophyllum quitense).

Watershield (Brasenia schreberi) is also present in Lake Tallac. The discharge of herbicides, especially endothall, would potentially kill these plants and would also be an immediate violation of the toxicity water quality objective, which is not allowed under antidegradation regulations.

- 107) Issue AQU-3 on page 3.3.5-9 refers to the competitive exclusion that could increase the growth of curlyleaf pondweed. The increased growth is expected if either triclopyr or florphyrauxifen-benzyl, which selectively control Eurasian watermilfoil, are used. Use of these herbicides would be a violation of the water quality objective for release of biostimulatory substances. Endothall, being a non-selective herbicide, will kill native aquatic plants, thereby also violating the toxicity water quality objective. Therefore, these herbicides cannot be allowed.
- 108) Issue AQU-7 and 8, starting on page 3.3.5-14, describes the Keys' lagoons as the place in Lake Tahoe where nonnative warmwater fish species primarily occur because of the warmer temperatures of these waters. However, these fishes may be moving elsewhere in the Lake since "research suggests suitable habitat has increased due to warming water temperatures and the expansion of aquatic weed beds (Kamerath et al. 2008, Chandra et al. 2009, Ngai et al. 2013)." Thus, the Keys' lagoons are not only the source of weeds spreading throughout the Lake, but are also the source of nonnative predatory fish throughout the Lake. The spreading nonnative predatory fish include Largemouth Bass, which feed on native juvenile Lahontan Lake Tui Chub, a California Species of Special Concern. Even if the weeds were to miraculously disappear, the warm waters of the Keys would be a serious threat to the native fish of the Lake. Therefore, control methods that would combat this threat, such as barriers, and long-term solutions such as restoration of lagoons to marsh need to be brought forward and examined thoroughly. These alternatives, which the Sierra Club requested be included in the analysis in their scoping comments, should have been included in the analysis of alternatives and should be analyzed in a revised Draft EIR/EIS.
- 109) Page 3.3.5-17 concludes that, even though there will be mortality of non-target macrophytes (native aquatic plants), a "less than significant impact to aquatic macrophyte community composition as result of herbicide testing is expected." The conclusion that native plant communities will recover is not substantiated by any references or studies. The less than significant impact cannot be justifiably claimed when water quality objectives in the Basin Plan are violated on the 16.9 acres of lagoons where herbicides are proposed to be used.
- 110) Page 3.3.5-19 states that "LFA has had very limited testing as a aquatic weed control method." This supports the claim that the CMT cannot be granted an exemption from the Basin Plan prohibition, which requires demonstration that non-

59

AQU-9

AQU-10

AQU-11

AQU-12

AQU-13

chemical methods have been thoroughly tested and found to be ineffective before an exemption can be granted.

- 111) Issue AQU-5, Effects on the Aquatic Benthic Macroinvertebrate Community, beginning on page 3.3.5-23, states that "USEPA classifies pesticides according to their acute toxicity responses (WDOE undated)." However, the water quality objective in the Basin Plan for toxicity states "All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life." Both acute and chronic toxicity must be examined and that was not done in this Draft EIR/EIS. Therefore, the conclusions drawn, that all of these herbicides "would have no significant acute or chronic impact on fish or freshwater invertebrates" is false.
- 112) The conclusion on page 3.3.5-25, that "Implementation of Group A methods would not be expected to result in a substantial change or reduction in the diversity or distribution of the aquatic BMI community, and impacts to the aquatic benthic macroinvertebrate community would be less than significant," is false based on the above comments.
- 113) Issue AQU-8, Effects on the Suitability of Habitat for Native or Recreationally Important Game Fish Species, beginning on page 3.3.5-30, states that "the presence of nonnative warm-water fish species in Lake Tahoe and specifically, the Tahoe Keys lagoons, poses a significant threat to native fisheries. ..."While Largemouth Bass and Bluegill are considered recreational species in many locations, they are not recognized as recreationally important species by CDFW or Nevada Division of Wildlife." This is another reason why restoration of the lagoons should have been examined as an action alternative in this Draft EIR/EIS and why the Sierra Club scoping comments requested examination of restoration.
- 114) Issue AQU-1 on page 3.3.5-37, states that mechanical harvesters "contribute to the dispersal of fragments from the target aquatic weeds as well as turions from curlyleaf pondweed." Then why is this practice being continued? This section later states that "TKPOA has implemented measures to substantially reduce the number of fragments released due to harvesting operations, including skimmer boats that capture fragments post-harvesting and boat back-up stations in conjunction with seabins to limit the spread of fragments to greater Lake Tahoe." However, no data are provided to substantiate the claim that these measures "substantially reduce the number of fragments." What is this assertion based on? Installing a second bubble curtain and seabin in the channel between the West Lagoon and Lake Tahoe would provide data on the number of fragments not captured by the existing bubble curtain. Later in the Draft EIR/EIS, under AQU-4, the following statement is provided: "Although TKPOA has implemented several fragment control methods during mechanical harvesting, these methods do not

60

AQU-13

AQU-14

AQU-15

completely contain and remove fragments that can propagate new plants." Therefore, these harvesting practices are not working and, in fact, continue to contribute to the spread of weeds. Yet the Lead Agencies plan to have TKPOA continue harvesting even while other methods are being tested.

115) Issue AQU-4, page 3.3.5-39, states that "Potential habitat for colonization in Lake Tahoe has been estimated at as much as 11,000 acres based on bathymetry alone (TRPA 2014), though a number of factors such as wind and sediment type would be strongly limiting (Wittmann et al. 2015)." This is why the Sierra Club requested in our scoping comments that a barrier in the channel between the Keys and the Lake and restoration of the dead-end lagoons be analyzed as alternatives. These requests were denied because "restoration would have substantive impacts to navigation, and to the recreational and aesthetic values underlying the appeal of Tahoe Keys properties" and "restoration does not require testing." A revised Draft EIR/EIS including analyses of barriers and restoration of dead-end lagoons must be prepared.

Clearly, this Draft EIR/EIS is inadequate in numerous respects and should be completely revised, eliminating costly Action Alternative 2, which was included as "filler" for lack of other alternatives. The revised Draft EIR/EIS must include the antidegradation analysis.

Comments on Appendix F:

The modeling of nutrient loading and cycling in the Tahoe Keys lagoons concludes that (1) SAV decomposition accounts for 60% to 80% of the nutrient loadings in the Marina Lagoon and Main Lagoon and about 40% of the nutrient loadings in Lake Tallac and (2) the nutrients in the sediment annually fuel the growth of SAV and are replenished by the release of nutrients from decomposed SAV into the water. The report of the modeling also concludes "Clearly, the Tahoe Keys should be considered 'enriched' with nutrients." These conclusions do not mention the past and continuing contribution of stormwater inputs of nutrients to the creation and sustaining of the current enrichment of the lagoons. The lagoons have been receiving and accumulating stormwater inputs of nutrients (TP and TN) from neighborhoods of South Lake Tahoe in their watershed for 60 years. Tahoe Keys residences are surrounded by vibrant green lawns on the banks of the lagoons which contribute significantly to the nutrient loading.

Applying herbicides will do nothing to ameliorate the enrichment and will actually exacerbate the problem by killing the weeds quickly and releasing nutrients rapidly into the water column. The rapid release of nutrients creates a very high risk of harmful algal blooms, including deadly cyanobacteria (blue-green algae) blooms.

The report bases its conclusions about the loading of TP into the Main Lagoon and Lake Tallac from sediment on only one month of data, collected in July 2019. The report states: "In the Main Lagoon and Lake Tallac, sediment TP contents are low enough that

AQU-18

AQU-17

GEN-48

the sediments in those two locations are not expected to be a net source of TP into the water column." However, the report subsequently states: "It should also be taken into account that sediment samples were collected in July of 2019, prior to the system-wide senescence of SAV that occurs in the fall. Sediment TP values could be higher after SAV senescence than was found during the season of active SAV growth." (emphasis added) Conclusions about TP loading from sediment based on data collected when SAV growth is at its annual maximum and TP levels in the sediments are at a minimum are almost certainly incorrect.

Another aspect of nutrient loadings that Appendix F doesn't analyze and discuss thoroughly enough is the differences in loadings of TN from groundwater between the Marina lagoon (0%) and the Main Lagoon (15.9%) and Lake Tallac (21.7%). These differences can be partially attributed to the much larger area of the Lake Tallac watershed (600 acres), compared to the 68-acre Marina lagoon watershed and the 210 acre Main Lagoon, compared to the nearly 16% TN groundwater loading of TN into the Marina Lagoon, compared to the nearly 16% TN groundwater loading to the Main Lagoon, indicates that Lake Tallac and Pope Marsh (which receives overflows from Lake Tallac) are contributing TN from South Lake Tahoe stormwater to the Main Lagoon. These groundwater loadings, like the direct loadings from stormwater, have been accumulating for 60 years and have not been thoroughly discussed or examined.

Flows from Lake Tallac into the Main Lagoon through the gate under Venice Drive may also be adding nutrients to the Main Lagoon. This possible source of Main Lagoon nutrients, which entity controls and operates it, and the magnitude of flows and nutrient contributions through it are not discussed in the report.

The report also concludes that "an absence of potentially relevant information was found in terms of the effectiveness of LFA as an SAV management technique form the literature reviewed for this report." The results of LFA experiments at Lake Tahoe are especially relevant to the effectiveness of LFA in the Tahoe Keys. An LFA experiment at Ski Run Marina began in August 2018, and post-treatment monitoring data were submitted to the Lahontan Regional Water Quality Control Board in the summer of 2019. An evaluation of these especially relevant LFA treatment results would have been a useful addition to the report.

Note on reporting of statistical analyses:

Statistical analyses of nutrient limitation were performed. The results of these analyses are summarized on page F-2: "To further investigate the issue of nutrient limitation, the waters of the Marina Lagoon, the Main Lagoon and Lake Tallac were all examined by comparing concentrations of chlorophyll-a (as a potential statistically significant dependent variable) against both TN and TP, as independent variables. In all cases, the data sets failed tests for normality and/or homogeneity of variance. Consequently, non-parametric statistical analyses were performed, using both Pearson's and Spearman's tests. Where a line and equation are shown in Figures 1 to 6, there is a mathematical

63

WQ-30

relationship between a nutrient and chlorophyll-a, derived from linear regression, but only for those data sets where statistical significance (p < 0.05) was determined using

non-parametric analyses." This summary is extremely incomplete and inadequate. It does not state why testing for normality and homogeneity of variance were considered to be appropriate, which tests were performed, and the results of these tests.

Closing Remarks

Suggestion to read: <u>Standing Up for This World</u>, but Mary O'Brien. "NEPA requires that an environmental impact statement include "all reasonable alternatives to the proposed action." A companion requirement, equally as important, is that consideration of such alternatives must take place in collaboration with the public, allowing citizens to embrace NEPA's challenge. NEPA says, in effect, You have the power to help your government do its job."

Mary O'Brien is also author of <u>Making Better Environmental Decisions</u>, which "recommends a simple yet profound shift to another decision-making technique: "alternatives assessment." Instead of asking how much of hazardous activity is safe (which translates into how much damage the environment can tolerate), alternatives assessment asks how we can avoid or minimize damage while achieving society's goals. Alternatives assessment is a simple, commonsense alternative to risk assessment. It is based on the premise that it is not acceptable to damage human and nonhuman health or the environment if there are reasonable alternatives. The approach calls for taking precautionary measures even if some cause-and-effect relationships have not been fully established scientifically. The process must involve an examination of the full range of alternatives, including no action at all. Equally important, it must be democratic and include potentially affected parties. O'Brien not only makes a persuasive case for alternative assessment; she tells how to implement it. She also shows how this technique has profound implications for public health, for our stewardship of the environment, and for a truly democratic government."

The Lead Agencies need to read the above works because they have clearly gone down a path of excluding opponents of herbicides to the "inner circle" of "collaborators" (Stakeholder Committee) and have not listened to other voices that have been calling loudly for these Agencies to look to other methods besides chemicals. These voices have not only come from the Sierra Club, but from individual citizens who have contacted the Sierra Club and who have either been largely or completely ignored.

Carolyn Willette, Tahoe Area Group Chair

Anne Macquarie, Toiyabe Chapter Chair

Sean Wirth, Conservation Chair, Mother Lode Chapter

Attachment: Comments from Beyond Pesticides

References

Centers for Disease Control and Prevention, Harmful Algal Bloom (HAB)-Associated Illness <u>https://www.cdc.gov/habs/materials/factsheet-cyanobacterial-habs.html</u>

WQ-30

GEN-47

64

Durkin, P.R. (2009) Endothall, Human Health and Ecological Risk Assessment, Final Report, Syracuse Environmental Research Associates, Inc. https://www.fs.fed.us/foresthealth/pesticide/pdfs/052-16-04a_Endothall.pdf

Forlani, G., M. Pavan, M. Gramek, P. Kafarski, J. Lipok, 2008. Biochemical bases for a widespread tolerance of cyanobacteria to the phosphonate herbicide glyphosate. Plant Cell Physiol. 49:443–456

Harris, T.D. & Val H. Smith (2016) Do persistent organic pollutants stimulate cyanobacterial blooms? Inland Waters, 6:2, 124-130, DOI: <u>10.5268/IW-6.2.887</u>.

Hollister J.W. and B.J. Kreakie (2016), Associations between chlorophyll a and various microcystin health advisory concentrations. F1000research. 2016;5:151. DOI: 10.12688/f1000research.7955.2

Homyak, P.M., J.O. Sickman, and J.M. Melack, 2014. Phosphorus in sediments of highelevation lakes in the Sierra Nevada (California): implications for internal phosphorus loading. Aquatic Science 76: 511-525.

Jones, A.R, J.A. Johnson & R.M. Newman (2012) Effects of repeated, early season, herbicide treatments of curlyleaf pondweed on native macrophyte assemblages in Minnesota lakes, Lake and Reservoir Management, 28:4, 364-374, DOI: <u>10.1080/07438141.2012.747577</u>

Kopacek, J., J. Borovec, J. Hejzlar, K. Ulrich, S.A. Norton, and A. Amirbahman, 2005, Aluminum Control of Phosphorus Sorption by Lake Sediments, Environ. Sci. Technol. 2005, 39, 22, 8784–8789 https://doi.org/10.1021/es050916b

La Plante, A. 2008. Exchange between the Tahoe Keys Embayments and Lake Tahoe, California-Nevada. MS Thesis - UC Davis

65 66

Narusaka Y., M. Narusaka, H. Kobayashi, and K. Satoh. The herbicide-resistant species of the cyanobacterial D₁ protein obtained by thorough and random in vitro mutagenesis, Plant Cell Physiol, 39 (1998) 620.

Pannard, A., B.L. Rouzic, F. Binet, 2009. Response of phytoplankton community to lowdose atrazine exposure combined with phosphorus fluctuations. Arch Environ Contam. Toxicol. 57:50–59

Perez, G.L., M. Solange, L. Mir, 2011. Effects of herbicide glyphosate and glyphosatebased formulations on aquatic ecosystems. In: Kortekamp A, editor. Herbicides and environment. InTech. p. 343–368

Powell, H.A., N.W. Kerbby, and P. Rowell, Natural tolerance of cyanobacteria to the herbicide glyphosate, November 1991 <u>https://doi.org/10.1111/j.1469-8137.1991.tb00042.x</u>

Sickman, J.O., J.M. Melack, and D.W. Clow, Evidence for nutrient enrichment of highelevation lakes in the Sierra Nevada, California Limno. Oceanogr., 48(5), 2003, 1885-1892 <u>https://aslopubs.onlinelibrary.wiley.com/doi/epdf/10.4319/lo.2003.48.5.1885</u> Thum, R. and R. Newman, Occurrence and Distribution of Eurasian, Northern and Hybrid Watermilfoil in Lake Minnetonka and Christmas Lake: Genetic Analysis Phase II, January 4, 2017

https://www.minnehahacreek.org/sites/minnehahacreek.org/files/Hybrid%20Milfoil%20R eport_Final_01042017.pdf

TRPA and Lahontan Water Board, April 2018, Tahoe Keys West Lagoon Integrated Control Methods Test Joint TRPA Initial Environmental Checklist and CEQA Initial Study

USEPA (2012) Water Quality Standards Handbook, Chapter 4: Antidegradation https://www.epa.gov/sites/production/files/2014-10/documents/handbook-chapter4.pdf

USEPA, Causes of CyanoHABs, https://www.epa.gov/cyanohabs/causes-cyanohabs

Washington State Department of Ecology, July 2000, Draft Supplemental Environmental Impact Statement Assessments of Aquatic Herbicides, Publication Number 00-10-040

World Health Organization, Water-related diseases https://www.who.int/water_sanitation_health/diseases-risks/diseases/cyanobacteria/en/ Appendix A-3 Comments from Individuals / Interested Parties

Appendix A List of DEIR/DEIS Commenters

Comment Code	Commenter Name	AFFILIATION	DATE RECEIVED
	A	gencies	
A-1	Jennifer Thompson	US Army Corps of Engineers Sacramento District	July 7, 2020
A-2	Jacques Landy Coordinator	U.S. Environmental Protection Agency, Lake Tahoe Basin Division	September 3, 2020
A-3	Jason Burke Stormwater Program Coordinator	City of South Lake Tahoe	September 3, 2020
	Or	ganizations	ł
O-1 letter	Carolyn Willette, Tahoe Area Group Chair	Sierra Club	July 27, 2020
0-2	2,648 Individuals (see Appendix A)	Beyond Pesticides	August 27, 2020
email	Leslie W. Touart, Ph.D Senior Science and Policy Analyst	Beyond Pesticides	August 27, 2020
O-3 letter	Susan Gibbons, Board Chair Madonna Dunbar, Executive Director	Tahoe Water Suppliers Association (TWSA)	August 27, 2020
O-4 letter	David Blau, Chief Strategy Officer Jesse Patterson, Program Committee Chair	League to Save Lake Tahoe	September 1, 2020
O-5 letter	Joe Sherry, Board President	Tahoe Keys Property Owners Association	September 1, 2020
O-6 letter	Jan Brisco, Executive Director	Tahoe Lakefront Owners' Association	September 2, 2020
O-7 email	Nicole Cartwright, Executive Director	Tahoe Resource Conservation District	September 3, 2020
O-8 letter	434 Sierra Club members See attached list	Sierra Club	7/16/2020–8/3/2020
	Ir	ndividuals	
l-1 email	Howard Steidtmann	Sierra Club	July 16, 2020
l-2 email	Janet Carter	Sierra Club	July 16, 2020
I-3 email	Carol Garlington	Sierra Club	July 17, 2020
l-4 email	Constance Howard	Sierra Club	July 17, 2020

Comment Code	COMMENTER NAME	AFFILIATION	DATE RECEIVED
I-5 email	John Comeaux	Sierra Club	July 17, 2020
l-6 email	Laura Smith	Sierra Club	July 17, 2020
I-7 email	Myrna Nizen	Sierra Club	July 17, 2020
I-8 email	Sarah Newsome	Sierra Club	July 17, 2020
I-9 email	Shonna Ingram	Sierra Club	July 17, 2020
l-10 email	Susan Bentley	Sierra Club	July 17, 2020
I-11 email	Taylor Becker	Sierra Club	July 17, 2020
I-12 email	Theodore Desmarais	Sierra Club	July 17, 2020
I-13 letter	Madonna Dunbar	Tahoe Water Suppliers Association	July 21, 2020
I-14 email	Jeanie Murphy	Sierra Club	July 22, 2020
l-15 email	Maryon Tilley	Sierra Club	July 22, 2020
I-16 email	Maya Borhani		July 22, 2020
l-17 email	Lisa Dekker	Sierra Club	July 24, 2020
l-18 email	Kate Doyle		
l-19 email	Brian Beffort	Sierra Club	7/28/2020
l-20 email	Natalie Servantes	Sierra Club	7/28/2020

Appendix A List of DEIR/DEIS Commenters

Appendix A	List of DEIR/DEIS Commenters
------------	------------------------------

Comment Code	Commenter Name	AFFILIATION	DATE RECEIVED
I-21 email	Richard Cooper	Sierra Club	7/28/2020
l-22 email	Janet Wesse	Sierra Club	7/29/2020
I-23 email	Jennifer Aspuria	Sierra Club	7/29/2020
I-24 email	Scott Sady	Sierra Club	7/29/2020
I-25	Greg Felton		7/29/2020
I-26 email	Annise Adams	Sierra Club	7/30/2020
I-27 email	S. May	Sierra Club	7/30/2020
I-28 email	Mitchell Rittiman	Sierra Club	7/31/2020
I-29 email	Donna Walters	Sierra Club	8/2/2020
I-30 email	Harold Singer		8/3/2020
I-31 email	David VonSeggern	Sierra Club	8/5/2020
I-32 email	Dorothy Hudig	Sierra Club	8/5/2020
I-33 email	Lynn Boulton	Sierra Club	8/5/2020
I-34 email	Catherine Schmidt	Sierra Club	8/6/2020
I-35 email	Kathleen Keef	Sierra Club	8/6/2020
I-36 email	Patricia Marinelli	Sierra Club	8/6/2020
I-37 email	Teresa Bell	Sierra Club	8/6/2020

Appendix A	List of DEIR/DEIS Commenters
------------	------------------------------

Comment Code	COMMENTER NAME	AFFILIATION	DATE RECEIVED
I-38 email	Sarah Berry	Sierra Club	8/7/2020
I-39 email	Reese Sutfin	Sierra Club	8/8/2020
I-40 email	A Hernday	Sierra Club	8/9/2020
I-41 email	Alan Hern	Sierra Club	8/9/2020
I-42 email	Anthony Filippone	Sierra Club	8/9/2020
l-43 email	Carol Schneider	Sierra Club	8/9/2020
I-44 email	David Bezanson	Sierra Club	8/9/2020
I-45 email	David Lamonica	Sierra Club	8/9/2020
I-46 email	David Marancik	Sierra Club	8/9/2020
l-47 email	Doris Grinn	Sierra Club	8/9/2020
I-48 email	Elizabeth Trudell	Sierra Club	8/9/2020
I-49 email	Faith Herschler	Sierra Club	8/9/2020
I-50 email	Fritz Brunner	Sierra Club	8/9/2020
I-51 email	Gayle Dufour	Sierra Club	8/9/2020
I-52 email	Glenn Stewart	Sierra Club	8/9/2020
l-53 email	Hannah MacLaren	Sierra Club	8/9/2020

Appendix A	List of DEIR/DEIS Commenters
------------	------------------------------

Comment Code	Commenter Name	AFFILIATION	DATE RECEIVED
I-54 email	James McPherson	Sierra Club	8/9/2020
I-55 email	Jessica Fielden	Sierra Club	8/9/2020
l-56 email	Jimandellanj Smith	Sierra Club	8/9/2020
I-57 email	Joan Jacobs	Sierra Club	8/9/2020
l-58 email	Joan Smith	Sierra Club	8/9/2020
l-59 email	Judith Baker	Sierra Club	8/9/2020
I-60 email	Ka Higgins	Sierra Club	8/9/2020
I-61 email	Kathleen Aberegg	Sierra Club	8/9/2020
I-62 email	Keith Forrest	Sierra Club	8/9/2020
l-63 email	Kelly Dewing Wedel	Sierra Club	8/9/2020
I-64 email	Lainey Green	Sierra Club	8/9/2020
I-65 email	Laura Gormley	Sierra Club	8/9/2020
I-66 email	Lesley Hunt	Sierra Club	8/9/2020
I-67 email	Leslie Lihou	Sierra Club	8/9/2020
l-68 email	Leslie Rader	Sierra Club	8/9/2020
l-69 email	Lisa Reutter	Sierra Club	8/9/2020

Appendix A	List of DEIR/DEIS Commenters
------------	------------------------------

Comment Code	COMMENTER NAME	AFFILIATION	DATE RECEIVED
I-70 email	Margaret Eadington	Sierra Club	8/9/2020
I-71 email	Marijane Poulton	Sierra Club	8/9/2020
I-72 email	Marilyn Jasper	Sierra Club	8/9/2020
I-73 email	Marjorie Lutz	Sierra Club	8/9/2020
I-74 email	Marlene Massetti	Sierra Club	8/9/2020
l-75 email	Mary Alice Pisani	Sierra Club	8/9/2020
l-76 email	Mary Ames	Sierra Club	8/9/2020
l-77 email	Mary Doane	Sierra Club	8/9/2020
I-78 email	Matthew Brockhaus	Sierra Club	8/9/2020
I-79 email	Melanie Truan	Sierra Club	8/9/2020
l-80 email	Michael Cooke	Sierra Club	8/9/2020
I-81 email	Pam Nelson	Sierra Club	8/9/2020
I-82 email	Pat Tilley	Sierra Club	8/9/2020
I-83 email	Patricia Albright	Sierra Club	8/9/2020
I-84 email	Patricia Williams	Sierra Club	8/9/2020
I-85 email	Paul Maysonave	Sierra Club	8/9/2020

Appendix A	List of DEIR/DEIS Commenters
------------	------------------------------

Comment Code	COMMENTER NAME	AFFILIATION	DATE RECEIVED
I-86 email	Penelope Ward	Sierra Club	8/9/2020
I-87 email	Phoebe Diaz	Sierra Club	8/9/2020
l-88 email	Richard Angell	Sierra Club	8/9/2020
I-89 email	Richard Hillix-Di Santo	Sierra Club	8/9/2020
I-90 email	Rick Gaston	Sierra Club	8/9/2020
I-91 email	Rita A	Sierra Club	8/9/2020
I-92 email	Russ Dahler	Sierra Club	8/9/2020
I-93	Sally Maier	Sierra Club	8/9/2020
I-94 email	Sarah Mahoney	Sierra Club	8/9/2020
I-95 email	Shana Van Meter	Sierra Club	8/9/2020
I-96 email	Sharon Sullivan	Sierra Club	8/9/2020
I-97 email	Shelly Ryan	Sierra Club	8/9/2020
I-98 email	Sunny Powell	Sierra Club	8/9/2020
I-99 email	Sydney Pitcher	Sierra Club	8/9/2020
I-100 email	Tim Odetto	Sierra Club	8/9/2020
I-101 email	Vicki Bookless	Sierra Club	8/9/2020
I-102 email	Victor Kamendrowsky	Sierra Club	8/9/2020

Appendix A	List of DEIR/DEIS Commenters
------------	------------------------------

Comment Code	Commenter Name	AFFILIATION	DATE RECEIVED
I-103 email	William Dickert	Sierra Club	8/9/2020
I-104 email	Yvonne Fisher	Sierra Club	8/9/2020
I-105 email	Zena Josephs	Sierra Club	8/9/2020
I-106 email	Larry Van Sant		8/9/2020
I-107 email	Barbara Brunell	Sierra Club	8/10/2020
I-108 email	ElsaMarie Butler	Sierra Club	8/10/2020
I-109 email	Greg Rose	Sierra Club	8/10/2020
I-110 email	Gretchen Whisenand	Sierra Club	8/10/2020
I-111 email	Joan Hartmann	Sierra Club	8/10/2020
I-112 email	Karl Collins	Sierra Club	8/10/2020
I-113 email	Lea Wiggington	Sierra Club	8/10/2020
I-114 email	Sonia Noemi Cross	Sierra Club	8/10/2020
I-115 email	Stevan Leonard	Sierra Club	8/10/2020
I-116 email	Susan Mach	Sierra Club	8/10/2020
I-117 email	Carolyn Willette		8/11/2020
I-118 email	Andrew Bearer	Sierra Club	8/11/2020

Appendix A	List of DEIR/DEIS Commenters
------------	------------------------------

Comment Code	COMMENTER NAME	AFFILIATION	DATE RECEIVED
I-119 email	Catherine Atherton	Sierra Club	8/11/2020
I-120 email	John Moore		8/11/2020
I-121 email	Chip Carroon	Sierra Club	8/13/2020
l-122 email	Daniel Kulchin	Sierra Club	8/13/2020
I-123 email	Janice Graef	Sierra Club	8/13/2020
I-124 email	Julie Dunn	Sierra Club	8/13/2020
I-125 email	Beverly Nichols	Sierra Club	8/20/2020
I-126 email	Jim Boone	Sierra Club	8/20/2020
I-127 email	Kristin Waldstad	Sierra Club	8/20/2020
I-128 email	Stephanie Wozniak	Sierra Club	8/20/2020
I-129 email	Fatima Uribe	Sierra Club	8/21/2020
I-130 email	Rory Lamp	Sierra Club	8/20/2020
I-131 email	Ainslee Archibald	Sierra Club	8/21/2020
I-132 email	April Grant	Sierra Club	8/21/2020
I-133 email	Ashlee Forman	Sierra Club	8/21/2020
l-134 email	Barbara Ziegler	Sierra Club	8/21/2020

Appendix A	List of DEIR/DEIS Commenters	
/ ppondix//		

Comment Code	COMMENTER NAME	AFFILIATION	DATE RECEIVED
I-135 email	Betty Sabo	Sierra Club	8/21/2020
I-136 email	Debbie Clarkson	Sierra Club	8/21/2020
I-137 email	Denise Martini	Sierra Club	8/21/2020
I-138 email	Doug Vacek	Sierra Club	8/21/2020
I-139 email	Elizabeth Kramer	Sierra Club	8/21/2020
I-140 email	Eric Fernandez	Sierra Club	8/21/2020
I-141 email	G. Schewbel	Sierra Club	8/21/2020
I-142 email	Gary Johnson	Sierra Club	8/21/2020
I-143 email	Iris Jehle Peppard	Sierra Club	8/21/2020
I-144 email	Jeanette Miller	Sierra Club	8/21/2020
I-145 email	Karen Nielsen	Sierra Club	8/21/2020
I-146 email	Mark Wildes	Sierra Club	8/21/2020
I-147 email	Patti Babore	Sierra Club	8/21/2020
I-148 email	Rachel Jo	Sierra Club	8/21/2020
I-149 email	Sarah Behrens	Sierra Club	8/21/2020
I-150 email	William Carrico	Sierra Club	8/21/2020

Appendix A	List of DEIR/DEIS Commenters
------------	------------------------------

Comment Code	COMMENTER NAME	AFFILIATION	DATE RECEIVED
l-151 email	William Huggins	Sierra Club	8/21/2020
I-152 email	Linda Jones	Sierra Club	8/22/2020
I-153 email	"C.P."	Sierra Club	8/23/2020
I-154 email	Adrian Griffin	Sierra Club	8/23/2020
I-155 email	Anne Kallus	Sierra Club	8/23/2020
I-156 email	Christiane Brown	Sierra Club	8/23/2020
I-157 email	G. Clemson	Sierra Club	8/23/2020
I-158 email	Jane Bramley	Sierra Club	8/23/2020
I-159 email	Lisa Foley	Sierra Club	8/23/2020
I-160 email	Lisa Passmore-Quade	Sierra Club	8/23/2020
I-161 email	Lori De Sena	Sierra Club	8/23/2020
I-162 email	Louis Bubala III	Sierra Club	8/23/2020
I-163 email	Lucrecia Belancio	Sierra Club	8/23/2020
I-164 email	Mark Spohr	Sierra Club	8/23/2020
I-165 email	Nancy Cencula	Sierra Club	8/23/2020
l-166 email	Susan Potts	Sierra Club	8/23/2020

Appendix A	List of DEIR/DEIS Commenters
------------	------------------------------

Comment Code	COMMENTER NAME	AFFILIATION	DATE RECEIVED
l-167 email	Wendy Boszak	Sierra Club	8/23/2020
l-168 email	Chris Omeara-Dietrich		8/27/2020
I-169 email	John Scott		8/27/2020
I-170 email	Theo Giesy	Beyond Pesticides	8/27/2020
I-171 email	Chris Kasper	Sierra Club	8/28/2020
I-172 email	Dawn David	Sierra Club	8/28/2020
I-173 email	Jane Grey	Sierra Club	8/28/2020
I-174 email	Kirt Willard		8/28/2020
I-175 letter	Leslie Touart	Beyond Pesticides	8/28/2020
I-176 email	Nancy Dollard		8/28/2020
I-177 email	John Roukema		8/29/2020
I-178 email	Kevin Hubbard	PLM Family of Companies	8/29/2020
I-179 letter	Leslie Touart	Beyond Pesticides	8/29/2020
I-180 email	Ronald Clayton	Beyond Pesticides	8/30/2020
I-181 email	Kyle Roerink	Sierra Club	9/1/2020
l-182 email	JoEllen Rudolph	Beyond Pesticides	9/1/2020

Appendix A List of DEIR/DEIS Commenters

Comment Code	COMMENTER NAME	AFFILIATION	DATE RECEIVED
I-183 letter	Lauri Kemper		9/1/2020
l-184 email	LeeAnn Bennett		9/1/2020
l-185 email	David Berry		9/2/2020
l-186 email	Jessica Patton	Sierra Club	9/2/2020
I-187 letter	Lauri Kemper		9/2/2020
I-188 letter	Pablo Ortega		9/2/2020
l-189 email	Robert Lober		9/2/2020
l-190 email	Stephen Alastuey		9/2/2020
l-191 email	B. Lewicki		9/3/2020
I-192 letter	Elise Fett		9/3/2020
l-193 email	Carolyn Willette, Anne Macquarie, and Sean Wirth	Sierra Club	9/3/2020
l-194 email	Sue Berry		9/3/2020
l-195 email	Trish Friedman		9/3/2020
l-196 email	Grazia Caroselli	Sierra Club	9/3/2020
I-197	Walter Mirczak		9/3/2020
l-198 email	Grazia Caroselli	Sierra Club	9/3/2020
l-199 email	Steve Bridges		9/4/2020

Appendix A List of DEIR/DEIS Commenters

Comment Code	COMMENTER NAME	AFFILIATION		DATE RECEIVED
I-200 letter	Lisa DeBruyckere	Crea	tive Resource Strategies	9/7/2020
I-201 email	434 Sierra Club members: See Appendix A	Sierr	a Club	7/16/2020 - 8/3/2020
I-202 email	Kathryn Bricker Kait Krolik	Sierr	a Club	7/22/2020 8/6/2020
	Publ	ic Mee	tings	
	TRPA Governing Bo	oard Me	eting, July 22, 2020	
	Laurel Ames		Laurie Kemper	
	David Blau	Jesse Patterson		
Madonna Dunbar			Eric Ronning	9
Elise Fett			Julie Soules	3
Trish Friedman			Tobi Tyler	
	Public Webir	nar Aug	ust 11, 2020	
	David Blau		Andy Kopania	
	Madonna Dunbar		Jacques Landy	
	Elise Fett		John Moore	
Trish Friedman		Tobi Tyler		
Lauri Kemper		Kirk Wooldridge		
TRPA Advisory Planning Commission Meeting, August 12, 200				
	David Blau		Gavin Feige	r
Elise Fett			Trish Friedma	an

Dear Tahoe Regional Planning Agency,

The stagnant, backwater lagoons at the Keys should ultimately be restored to marsh, which is the only true solution to being rid of the weeds in the Keys. Removing the habitat for the weeds will save the lake without poisoning it! _____ ALT-2 Lake Tahoe is not a testing ground for experimenting with chemicals. Alternative AA1 is clearly the environmentally superior alternative.

I support Alternative AA1 of your Tahoe Keys Weeds Draft Environmental Impact Report.

The Tahoe Keys lagoons are an environmental disaster at Lake Tahoe. Proof of this are the infestations of aquatic invasive weeds now thriving there and the proposals to control these weeds with herbicides. These weeds are destroying Tahoe's legendary clarity and purity. Proposals to control them with herbicides only poisons the lake further.

I am absolutely opposed to any and all use of poisonous herbicides in the Keys and any other waters that connect to Lake Tahoe -- a Tier 3 Outstanding National Resource Water. I oppose spending tens of millions of taxpayer dollars for the convenience of boat-owners at the Tahoe Keys. I join The Sierra Club Tahoe Area Group in defending the purity of Lake Tahoe.

Sincerely,

Howard Steidtmann P.O. Box 6825 Stateline, NV 89449 hsteidtmann@charter.net (775) 790-0091

Dear Tahoe Regional Planning Agency,

Lake Tahoe is a national jewel. We must be sure to preserve its clarity and beauty. Please ban poisonous herbicides **HE-2** from use in or near the lake.

I support Alternative AA1 of your Tahoe Keys Weeds Draft Environmental Impact Report.

The Tahoe Keys lagoons are an environmental disaster at Lake Tahoe. Proof of this are the infestations of aquatic invasive weeds now thriving there and the proposals to control these weeds with herbicides. These weeds are destroying Tahoe's legendary clarity and purity. Proposals to control them with herbicides only poisons the lake further.

I am absolutely opposed to any and all use of poisonous herbicides in the Keys and any other waters that connect to Lake Tahoe -- a Tier 3 Outstanding National Resource Water. I oppose spending tens of millions of taxpayer dollars for the convenience of boat-owners at the Tahoe Keys. I join The Sierra Club Tahoe Area Group in defending the purity of Lake Tahoe.

Sincerely,

Janet Carter 370 Casa Norte Drive North Las Vegas, NV 89031 jkumar167@aol.com (775) 772-9970

From:	Carol Garlington (carol.garlington@gmail.com) Sent You a Personal Message
То:	tahoekeysweeds@trpa.org
Subject:	[EXTERNAL] No weeds or herbicides for Lake Tahoe!
Date:	Friday, July 17, 2020 12:42:40 PM

Dear Tahoe Regional Planning Agency,

Would you like your grandchildren to experience the wonder of Lake Tahoe? Would you like to continue being able to drink water and breathe air? Our decisions now will either fix the mistakes of the past or produce a planet where are children and their children will die miserable deaths.

I support Alternative AA1 of your Tahoe Keys Weeds Draft Environmental Impact Report.

The Tahoe Keys lagoons are an environmental disaster at Lake Tahoe. Proof of this are the infestations of aquatic invasive weeds now thriving there and the proposals to control these weeds with herbicides. These weeds are destroying Tahoe's legendary clarity and purity. Proposals to control them with herbicides only poisons the lake further.

I am absolutely opposed to any and all use of poisonous herbicides in the Keys and any other waters that connect to Lake Tahoe -- a Tier 3 Outstanding National Resource Water. I oppose spending tens of millions of taxpayer dollars for the convenience of boat-owners at the Tahoe Keys. I join The Sierra Club Tahoe Area Group in defending the purity of Lake Tahoe.

Sincerely,

Carol Garlington 7610 Gladstone drive Reno, NV 89506 carol.garlington@gmail.com (303) 880-0364

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Lillian Miller at Sierra Club at core.help@sierraclub.org or (415) 977-5500.

EP-1

From:	Carol Garlington (carol.garlington@gmail.com) Sent You a Personal Message
То:	tahoekeysweeds@trpa.org
Subject:	[EXTERNAL] No weeds or herbicides for Lake Tahoe!
Date:	Friday, July 17, 2020 12:42:40 PM

Dear Tahoe Regional Planning Agency,

Would you like your grandchildren to experience the wonder of Lake Tahoe? Would you like to continue being able to drink water and breathe air? Our decisions now will either fix the mistakes of the past or produce a planet where are children and their children will die miserable deaths.

I support Alternative AA1 of your Tahoe Keys Weeds Draft Environmental Impact Report.

The Tahoe Keys lagoons are an environmental disaster at Lake Tahoe. Proof of this are the infestations of aquatic invasive weeds now thriving there and the proposals to control these weeds with herbicides. These weeds are destroying Tahoe's legendary clarity and purity. Proposals to control them with herbicides only poisons the lake further.

I am absolutely opposed to any and all use of poisonous herbicides in the Keys and any other waters that connect to Lake Tahoe -- a Tier 3 Outstanding National Resource Water. I oppose spending tens of millions of taxpayer dollars for the convenience of boat-owners at the Tahoe Keys. I join The Sierra Club Tahoe Area Group in defending the purity of Lake Tahoe.

Sincerely,

Carol Garlington 7610 Gladstone drive Reno, NV 89506 carol.garlington@gmail.com (303) 880-0364

From:	John Comeaux (jpcom267@gmail.com) Sent You a Personal Message
То:	tahoekeysweeds@trpa.org
Subject:	[EXTERNAL] No weeds or herbicides for Lake Tahoe!
Date:	Friday, July 17, 2020 10:48:20 AM

Dear Tahoe Regional Planning Agency,

Lake Tahoe is a treasure that must be preserved. Please don't compound the mistake made in the 60's with another **EP-G1** today.

I support Alternative AA1 of your Tahoe Keys Weeds Draft Environmental Impact Report.

The Tahoe Keys lagoons are an environmental disaster at Lake Tahoe. Proof of this are the infestations of aquatic invasive weeds now thriving there and the proposals to control these weeds with herbicides. These weeds are destroying Tahoe's legendary clarity and purity. Proposals to control them with herbicides only poisons the lake further.

I am absolutely opposed to any and all use of poisonous herbicides in the Keys and any other waters that connect to Lake Tahoe -- a Tier 3 Outstanding National Resource Water. I oppose spending tens of millions of taxpayer dollars for the convenience of boat-owners at the Tahoe Keys. I join The Sierra Club Tahoe Area Group in defending the purity of Lake Tahoe.

Sincerely,

John Comeaux 2533 Watt Rd Carson City, NV 89706 jpcom267@gmail.com (775) 671-7805

Dear Tahoe Regional Planning Agency,

Lake Tahoe's clarity and beauty is key to tourism in our region, and having this jewel of the Sierras remain a healthy and attractive vacation option will be even more important as we move (hopefully) out of the tourism slowdown due to the coronavirus. Please consider non aquatic herbicide shortcut measures that will leach into Lake Tahoe, without truly addressing the nutrient imbalances that are feeding the infested lagoons.

I support Alternative AA1 of your Tahoe Keys Weeds Draft Environmental Impact Report.

The Tahoe Keys lagoons are an environmental disaster at Lake Tahoe. Proof of this are the infestations of aquatic invasive weeds now thriving there and the proposals to control these weeds with herbicides. These weeds are destroying Tahoe's legendary clarity and purity. Proposals to control them with herbicides only poisons the lake further.

I am absolutely opposed to any and all use of poisonous herbicides in the Keys and any other waters that connect to Lake Tahoe -- a Tier 3 Outstanding National Resource Water. I oppose spending tens of millions of taxpayer dollars for the convenience of boat-owners at the Tahoe Keys. I join The Sierra Club Tahoe Area Group in defending the purity of Lake Tahoe.

Sincerely,

Laura Smith 2225 Arcane Ave Reno, NV 89503 oboesmith.laura@gmail.com (760) 650-5759

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Lillian Miller at Sierra Club at core.help@sierraclub.org or (415) 977-5500.

AWM-54 & REC-1

Dear Tahoe Regional Planning Agency,

The environmental integrity of this national treasure is very important. We must safe guard it.



I support Alternative AA1 of your Tahoe Keys Weeds Draft Environmental Impact Report.

The Tahoe Keys lagoons are an environmental disaster at Lake Tahoe. Proof of this are the infestations of aquatic invasive weeds now thriving there and the proposals to control these weeds with herbicides. These weeds are destroying Tahoe's legendary clarity and purity. Proposals to control them with herbicides only poisons the lake further.

I am absolutely opposed to any and all use of poisonous herbicides in the Keys and any other waters that connect to Lake Tahoe -- a Tier 3 Outstanding National Resource Water. I oppose spending tens of millions of taxpayer dollars for the convenience of boat-owners at the Tahoe Keys. I join The Sierra Club Tahoe Area Group in defending the purity of Lake Tahoe.

Sincerely,

Myrna Nizen 4111 Kottler Drive Lafayette Hill, PA 19444 granny0f5@hotmail.com (845) 642-9886

Dear Tahoe Regional Planning Agency,

I propose we fill in the tahow keys and take responsibility for teh mistake of removing a crucial wetland to Lake Tahoe. A Tier III water source..

I support Alternative AA1 of your Tahoe Keys Weeds Draft Environmental Impact Report.

The Tahoe Keys lagoons are an environmental disaster at Lake Tahoe. Proof of this are the infestations of aquatic invasive weeds now thriving there and the proposals to control these weeds with herbicides. These weeds are destroying Tahoe's legendary clarity and purity. Proposals to control them with herbicides only poisons the lake further.

I am absolutely opposed to any and all use of poisonous herbicides in the Keys and any other waters that connect to Lake Tahoe -- a Tier 3 Outstanding National Resource Water. I oppose spending tens of millions of taxpayer dollars for the convenience of boat-owners at the Tahoe Keys. I join The Sierra Club Tahoe Area Group in defending the purity of Lake Tahoe.

Sincerely,

Sarah Newsome 3058 Sacramento Ave, Unit A South Lake Tahoe, CA 96150 snn1114@gmail.com (360) 929-0377

From:	Shonna Ingram (nvmade59@hotmail.com) Sent You a Personal Message
To:	tahoekeysweeds@trpa.org
Subject:	[EXTERNAL] No weeds or herbicides for Lake Tahoe!
Date:	Friday, July 17, 2020 3:42:04 PM

Dear Tahoe Regional Planning Agency,

Why does our country still allow the use of these chemicals knowing full well the consequences to all life. We need **HE-3** to have them permanently banned!

I support Alternative AA1 of your Tahoe Keys Weeds Draft Environmental Impact Report.

The Tahoe Keys lagoons are an environmental disaster at Lake Tahoe. Proof of this are the infestations of aquatic invasive weeds now thriving there and the proposals to control these weeds with herbicides. These weeds are destroying Tahoe's legendary clarity and purity. Proposals to control them with herbicides only poisons the lake further.

I am absolutely opposed to any and all use of poisonous herbicides in the Keys and any other waters that connect to Lake Tahoe -- a Tier 3 Outstanding National Resource Water. I oppose spending tens of millions of taxpayer dollars for the convenience of boat-owners at the Tahoe Keys. I join The Sierra Club Tahoe Area Group in defending the purity of Lake Tahoe.

Sincerely,

Shonna Ingram PO Box 2761 Carson City, NV 89702 nvmade59@hotmail.com (775) 304-6578

Dear Tahoe Regional Planning Agency,

Lake Tahoe is a precious natural resource that must be protected for wildlife and future generations. | EP-G1

I support Alternative AA1 of your Tahoe Keys Weeds Draft Environmental Impact Report.

The Tahoe Keys lagoons are an environmental disaster at Lake Tahoe. Proof of this are the infestations of aquatic invasive weeds now thriving there and the proposals to control these weeds with herbicides. These weeds are destroying Tahoe's legendary clarity and purity. Proposals to control them with herbicides only poisons the lake further.

I am absolutely opposed to any and all use of poisonous herbicides in the Keys and any other waters that connect to Lake Tahoe -- a Tier 3 Outstanding National Resource Water. I oppose spending tens of millions of taxpayer dollars for the convenience of boat-owners at the Tahoe Keys. I join The Sierra Club Tahoe Area Group in defending the purity of Lake Tahoe.

Sincerely,

Susanne Bentley PO Box 281169 Lamoille, NV 89828 susannebentley5@gmail.com (775) 753-7800

From:	Taylor Becker (taylor.becker@sierraclub.org) Sent You a Personal Message
To:	tahoekeysweeds@trpa.org
Subject:	[EXTERNAL] No weeds or herbicides for Lake Tahoe!
Date:	Friday, July 17, 2020 10:44:44 AM

Dear Tahoe Regional Planning Agency,

As a user of Lake Tahoe, I am greatly concerned about the herbicide use. The lagoons flow directly into Lake Tahoe and are the source of aquatic invasive weeds that are now showing up regularly around the entire lake, including the north shore. Because of continued spread of these weeds throughout the lake, I am concerned that herbicide use in the lagoons will lead to herbicide use throughout the lake ecosystem to control the weeds. People drink from Lake Tahoe, even the LPA, the closest water company to the Tahoe Keys area and draws its water directly from Lake Tahoe, is against the use of herbicides; they have even gone so far as to publicly state "LPA has no water treatment facilities to filter this contaminate from its water supply and there is no certainty the herbicide will dissipate, as this has never been proven in Lake Tahoe." I urge you to invest in the Alternative AA1 before even looking towards herbicides.

I support Alternative AA1 of your Tahoe Keys Weeds Draft Environmental Impact Report.

The Tahoe Keys lagoons are an environmental disaster at Lake Tahoe. Proof of this are the infestations of aquatic invasive weeds now thriving there and the proposals to control these weeds with herbicides. These weeds are destroying Tahoe's legendary clarity and purity. Proposals to control them with herbicides only poisons the lake further.

I am absolutely opposed to any and all use of poisonous herbicides in the Keys and any other waters that connect to Lake Tahoe -- a Tier 3 Outstanding National Resource Water. I oppose spending tens of millions of taxpayer dollars for the convenience of boat-owners at the Tahoe Keys. I join The Sierra Club Tahoe Area Group in defending the purity of Lake Tahoe.

Sincerely,

Taylor Becker 140 Wonder St Reno, NV 89502 taylor.becker@sierraclub.org (847) 890-9386

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Lillian Miller at Sierra Club at core.help@sierraclub.org or (415) 977-5500.

ALT-4

Dear Tahoe Regional Planning Agency,

No no NO !!! There will be NO pollution if the Waters !!!! No !! No more fertilizer, herbicides, pesticides or other cides !!! No

I support Alternative AA1 of your Tahoe Keys Weeds Draft Environmental Impact Report.

The Tahoe Keys lagoons are an environmental disaster at Lake Tahoe. Proof of this are the infestations of aquatic invasive weeds now thriving there and the proposals to control these weeds with herbicides. These weeds are destroying Tahoe's legendary clarity and purity. Proposals to control them with herbicides only poisons the lake further.

I am absolutely opposed to any and all use of poisonous herbicides in the Keys and any other waters that connect to Lake Tahoe -- a Tier 3 Outstanding National Resource Water. I oppose spending tens of millions of taxpayer dollars for the convenience of boat-owners at the Tahoe Keys. I join The Sierra Club Tahoe Area Group in defending the purity of Lake Tahoe.

Sincerely,

Theodore Desmarais PO Box 751782 Las Vegas, NV 89136 theodored@fastmail.fm (209) 206-8646

Regulatory oversight for the Public Water System Supervision Program (PWSSP) is provided by the staff of the Nevada Division of Environmental Protection (NDEP), Bureau of Safe Drinking Water.

It is not the purpose of this DEIR/DEIS to provide a detailed review of public drinking water law and regulation. The key regulatory requirement of concern for water systems drawing from Lake Tahoe is the "filtration exemption" that can be granted under the SDWA upon application for exemption to the SWB in California or NDEP in Nevada.

Filtration Exemption

The purity of Lake Tahoe water, a Tier III Outstanding National Resource Water (see Section 3.3.4), affords water systems drawing from the lake a unique regulatory status and opportunity in qualifying for filtration exemption under the Surface Water Treatment Rule (40 CFR Part 141, Subpart H). Filtration exemption status is rare nationwide (only 60 of roughly 160,000 public water systems nationwide hold this exemption, and six of them are in the Lake Tahoe basin). Making the situation even more unusual, most filtration-exempt system do not draw from multi-use source waters such as Lake Tahoe (which, e.g., supports such other uses as recreational boating). TWSA water systems operating under filtration exemption are:

- Incline Village General Improvement District (IVGID)
- Kingsbury General Improvement District (KGID)
- Edgewood Water Company (Edgewood)
- Zephyr Water Utility District (ZWUD)
- Glenbrook Water Cooperative (Glenbrook)
- North Tahoe Public Utility District (NTPUD)

The nearest known Lake Tahoe drinking water intake to the Tahoe Keys is at Lakeside Park Association, approximately four miles distant. The nearest intake for a water system operating under filtration exemption is a little further (Edgewood Water Company or Glenbrook General Improvement District, — about 4.1 to 4.2 miles). A comment received during scoping stated "Jameson Beach residents [have] for _ many years obtained potable and drinking water untreated and directly from Lake Tahoe, immediately next to Tahoe Keys." Multiple attempts were made to reach out to the Jameson Beach community, but were unanswered, and the location or existence of intakes could not be confirmed. If intakes exist along Jameson Road, they would be at least one mile to the west of the Tahoe Keys West Channel entrance. A map showing the locations of intakes from Lake Tahoe is not published, in order to assure infrastructure security and protection.

When a project affects interstate waters, such as Lake Tahoe, the Lahontan Water Board consults with the Nevada Division of Environmental Protection (NDEP), and with the California Department of Public Health (CDPH) in reviewing exemption requests that may affect surface drinking water intakes.

Filtration exemption is granted only when source water is sufficiently pure that systems may meet all drinking water standards with no other water treatment than disinfection. Implications of losing filtration exemption drive concerns. Filtration exemption treatment requirements as reported by the TWSA are provided in Table 3.4.2-1.

WS-1

Water Quality Parameter	SWTR ¹	SWTR + LT2ESWTR ²
Giardia	3 log removal/inactivation ³	3 log removal/inactivation
Virus	4 log removal/inactivation	4 log removal/inactivation
Cryptosporidium		2 log removal/inactivation
Turbidity	< 5 NTU	< 5 NTU
Total Coliform	<100/100 ml	<100/100 ml
Fecal Coliform	<20/100 ml	<20/100 ml

 Table 3.4.2-1
 Treatment Requirements for Filtration Avoidance.

¹ SWTR = Surface Water Treatment Rule 40 CFR Part 141, Subpart H

² LT2ESWTR = Long Term 2 Enhanced Surface Water Treatment Rule (LT2 rule/ LT2ESWTR) can be found in TWSA 2019 on p. 168 of 518, or defined at this link: http://water.epa.gov/lawsregs/rulesregs/sdwa/lt2/index.cfm

³ A log removal value (LRV) is a measure of the ability of a treatment processes to remove pathogenic microorganisms. LRVs are determined by taking the logarithm of the ratio of pathogen concentration in the influent and effluent water of a treatment process.

For a drinking water system to qualify for filtration avoidance under the Surface Water Treatment Rule (SWTR) the system cannot be the source of a waterborne disease outbreak, must meet source water quality limits for coliform and turbidity and meet coliform and total trihalomethane maximum contaminant levels (MCLs). Disinfectant residual levels and redundant disinfection capability must also be maintained. Filtration avoidance also requires that a watershed control program be implemented to minimize microbial contamination of the source water. This program must characterize the watershed's hydrology, physical features, land use, source water quality and operational capabilities. It must also identify, monitor and control manmade and naturally occurring activities that are detrimental to water quality. The watershed control program must also be able to control activities through land ownership or written agreements. (Filtration avoidance criteria are detailed in 40 CFR §141.71; TWSA 2019.)

Regional/Tahoe Regional Planning Agency (TRPA)

TRPA Code of Ordinances

The TRPA Code of Ordinances provides the regulations that facilitate implementation of the goals and policies in the TRPA Regional Plan. Regulations in the Code of Ordinances Chapter 32 establish the framework for basic services, sets forth requirements for projects to be served by paved roads and water, electrical, and wastewater treatment services, and establishes standards to implement those requirements. Section 32.4.2 addresses water supply systems.

Local

No local regulatory standards govern water systems. Drinking water standards are set and regulated at the Federal and State levels, however the Washoe County Land Development Program and Environmental Health Services Division assure compliance with the SDWA and administer water system reporting on the Nevada side of Lake Tahoe.

In the Tahoe Keys, the TKPOA Water Department operates and maintains all wells, water delivery systems, and monitoring equipment to consistently provide safe drinking water throughout the Tahoe Keys. The Water Department services all Tahoe Keys owners and renters as well as the Tahoe Keys Marina and Tahoe Keys Office Center.

Environmental Setting

Issue UT-1: Effects on Water Supply. Because the potential loss of filtration exemption is the issue of greatest concern to water systems drawing from Lake Tahoe, the most recent annual reports of the water systems operating under filtration exemption nearest to Tahoe Keys (Edgewood Water Company and Glenbrook General Improvement District) are taken as the most pertinent data characterizing the environmental setting for potential impacts of the Proposed Project and its alternatives (as reported in TWSA 2019). Tables 3.4.2-2 and 3.4.2-3 show the most recent reported turbidity and total coliform levels for the two water systems (TWSA 2019).

Potential Impacts

Issue UT-1: Effects on Water Supply. A primary concern raised by water purveyors sourcing Lake Tahoe has been the potential to affect the quality of water taken at their drinking water intakes, such that they would no longer qualify for the filtration exemption. Of the six treatment requirements listed in Table 3.4.2-1, the only one that could be affected by the Proposed Project would be turbidity. The Proposed Project has no potential to influence microbial contamination or trihalomethanes in Lake Tahoe. This analysis of potential impacts also considers the potential for herbicides or degradates to reach water intakes in detectible concentrations, such that drinking water sourced at these intakes would be rendered contaminated or unsuitable for human use.

2018-2019	Turbidity (NTU)	Total Coliform (#/100mL)
Mean	0.24	0.09
Maximum	0.66	36.40
Date Maximum	26-Oct	7-Nov
Highest Monthly Mean	0-31	n/a
Date Mean	Sep-18 Nov-18	n/a

Table 3.4.2-2 Edgewood Water Company Water Quality, 2019.

Table 3.4.2-3 Glenbrook General Improvement District Water Quality, 2019.

Turbidity **Total Coliform** 2018-2019 (NTU) (#/100mL) 0.19 2.82 Mean 0.81 28.80 Maximum Date Maximum 19-Feb 31-Jul **Highest Monthly Mean** 0.24 n/a July-18 Date Mean n/a Apr-18

The IEC/IS found that surface water intakes are not located in sufficient proximity to the Tahoe Keys lagoons to be affected. As noted above, the proposed aquatic herbicide test sites are located approximately four miles from the nearest drinking water intake on Lake Tahoe (TKPOA 2018e.). In traveling such a distance, any contaminant diffusing from the lagoons would experience a very large dilution in the water of Lake Tahoe. As noted in Sections 3.2 and 3.3.4, because the volume of Lake Tahoe is approximately 58,000 times greater than the combined volume of the Tahoe Keys lagoons, potential changes in lagoon water quality are not expected to be measurable in the greater Lake Tahoe.

WS-1

Dear Tahoe Regional Planning Agency,

No poisonous herbicides in Lake Tahoe!

I support Alternative AA1 of your Tahoe Keys Weeds Draft Environmental Impact Report.

The Tahoe Keys lagoons are an environmental disaster at Lake Tahoe. Proof of this are the infestations of aquatic invasive weeds now thriving there and the proposals to control these weeds with herbicides. These weeds are destroying Tahoe's legendary clarity and purity. Proposals to control them with herbicides only poisons the lake further.

I am absolutely opposed to any and all use of poisonous herbicides in the Keys and any other waters that connect to Lake Tahoe -- a Tier 3 Outstanding National Resource Water. I oppose spending tens of millions of taxpayer dollars for the convenience of boat-owners at the Tahoe Keys. I join The Sierra Club Tahoe Area Group in defending the purity of Lake Tahoe.

Sincerely,

Jeanie Murphy 2009 NE 103rd St seattle, WA 98125 murphyjeanie@hotmail.com (206) 523-7923

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Lillian Miller at Sierra Club at core.help@sierraclub.org or (415) 977-5500.

HE-9

Dear Tahoe Regional Planning Agency,

Herbicides and other chemical solutions should be extreme last resorts. Look at the aluminum sulfate conundrum. **HE-15** Please go with AA1 first. Thanks, Maryon Tilley

I support Alternative AA1 of your Tahoe Keys Weeds Draft Environmental Impact Report.

The Tahoe Keys lagoons are an environmental disaster at Lake Tahoe. Proof of this are the infestations of aquatic invasive weeds now thriving there and the proposals to control these weeds with herbicides. These weeds are destroying Tahoe's legendary clarity and purity. Proposals to control them with herbicides only poisons the lake further.

I am absolutely opposed to any and all use of poisonous herbicides in the Keys and any other waters that connect to Lake Tahoe -- a Tier 3 Outstanding National Resource Water. I oppose spending tens of millions of taxpayer dollars for the convenience of boat-owners at the Tahoe Keys. I join The Sierra Club Tahoe Area Group in defending the purity of Lake Tahoe.

Sincerely,

Maryon Tilley P. O. Box 1262 Zephyr Cove, NV 89448 mtilley8330@gmail.com (775) 721-2529

From:	Maya Borhani
То:	tahoekeysweeds@trpa.org
Subject:	[EXTERNAL] RE: PUblic Comments before September 3, 2020
Date:	Wednesday, July 22, 2020 4:52:23 PM

Please may it be known that I am AGAINST the suggestion to use TOXIC CHEMICALS in the Tahoe Keys of South Shore Lake Tahoe to take care of the noxious weed problem.

RATHER< I request (nay, BEG) that you please choose ALTERNATIVE ACTION 1 (AA1), as the MOST environmentally sound option, that would cause the least deleterious side effects on the lake and its inhabitants.

Thank you.

Maya Borhani 4070 N. Lake Blvd. Carnelian Bay, CA. 96140 360/298-5866

Dear Tahoe Regional Planning Agency,

Lake Tahoe is too special and unique to be threatened by the interests of boat owners. The health of the lake's natural ecosystem is of prime importance.

I support Alternative AA1 of your Tahoe Keys Weeds Draft Environmental Impact Report.

The Tahoe Keys lagoons are an environmental disaster at Lake Tahoe. Proof of this are the infestations of aquatic invasive weeds now thriving there and the proposals to control these weeds with herbicides. These weeds are destroying Tahoe's legendary clarity and purity. Proposals to control them with herbicides only poisons the lake further.

I am absolutely opposed to any and all use of poisonous herbicides in the Keys and any other waters that connect to Lake Tahoe -- a Tier 3 Outstanding National Resource Water. I oppose spending tens of millions of taxpayer dollars for the convenience of boat-owners at the Tahoe Keys. I join The Sierra Club Tahoe Area Group in defending the purity of Lake Tahoe.

Sincerely,

Lisa Dekker 42 Derrick Rd Port Angeles, WA 98362 dekkerla@gmail.com (206) 856-1636

Dear Tahoe Regional Planning Agency,

I live here at Lake Tahoe full time for decades. I think it is foolish and hasty to introduce hebicides and toxic chemicals into Lake Tahoe. Please consider other methods that will solve the problem without messing up the Lake, it's living beings, and potentially us humans.

Sincerely, Kate Doyle

I support Alternative AA1 of your Tahoe Keys Weeds Draft Environmental Impact Report.

The Tahoe Keys lagoons are an environmental disaster at Lake Tahoe. Proof of this are the infestations of aquatic invasive weeds now thriving there and the proposals to control these weeds with herbicides. These weeds are destroying Tahoe's legendary clarity and purity. Proposals to control them with herbicides only poisons the lake further.

I am absolutely opposed to any and all use of poisonous herbicides in the Keys and any other waters that connect to Lake Tahoe -- a Tier 3 Outstanding National Resource Water. I oppose spending tens of millions of taxpayer dollars for the convenience of boat-owners at the Tahoe Keys. I join The Sierra Club Tahoe Area Group in defending the purity of Lake Tahoe.

Sincerely,

Kate Doyle PO Box 7608 tahoe city, CA 96145 Equita8@gmail.com (425) 681-7811

Dear Tahoe Regional Planning Agency,

The purity, clarity and ecological health of Lake Tahoe (not to mention the region's tourist economy) are far more important than the convenience of TKPOA boat-owners. The Keys was a disaster from the day the natural wetlands were dredged to build it. It's time to heal the scars and restore the wetlands. Heal the lake, get rid of the weeds for good. It's that simple. Stop putting band aids on severed arteries.

I support Alternative AA1 of your Tahoe Keys Weeds Draft Environmental Impact Report.

The Tahoe Keys lagoons are an environmental disaster at Lake Tahoe. Proof of this are the infestations of aquatic invasive weeds now thriving there and the proposals to control these weeds with herbicides. These weeds are destroying Tahoe's legendary clarity and purity. Proposals to control them with herbicides only poisons the lake further.

I am absolutely opposed to any and all use of poisonous herbicides in the Keys and any other waters that connect to Lake Tahoe -- a Tier 3 Outstanding National Resource Water. I oppose spending tens of millions of taxpayer dollars for the convenience of boat-owners at the Tahoe Keys. I join The Sierra Club Tahoe Area Group in defending the purity of Lake Tahoe.

Sincerely,

Brian Beffort 176 Greenridge Dr. Reno, NV 89509 brian.beffort@sierraclub.org (775) 848-7783

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Lillian Miller at Sierra Club at core.help@sierraclub.org or (415) 977-5500.

RES-4

I-19

Dear Tahoe Regional Planning Agency,

The Tahoe Keys have already had a huge environmental impact on the clarity of Tahoe, to add herbicides to the mix will only make matters worse.

I support Alternative AA1 of your Tahoe Keys Weeds Draft Environmental Impact Report.

The Tahoe Keys lagoons are an environmental disaster at Lake Tahoe. Proof of this are the infestations of aquatic invasive weeds now thriving there and the proposals to control these weeds with herbicides. These weeds are destroying Tahoe's legendary clarity and purity. Proposals to control them with herbicides only poisons the lake further.

I am absolutely opposed to any and all use of poisonous herbicides in the Keys and any other waters that connect to Lake Tahoe -- a Tier 3 Outstanding National Resource Water. I oppose spending tens of millions of taxpayer dollars for the convenience of boat-owners at the Tahoe Keys. I join The Sierra Club Tahoe Area Group in defending the purity of Lake Tahoe.

Sincerely,

Natalie Servantes 1376 creek dr. Gardnerville, NV 89410 nservantes@aol.com (775) 783-4958

Dear Tahoe Regional Planning Agency,

Our family has had a Tahoe home since 1938 and I have enjoyed it since 1955. I have seen the environmental degradation over the years and also the efforts of the TRPA and Keep Tahoe Blue and other organizations to preserve the lake. I have always supported these efforts and more needs to be done. Tahoe Keys is an ongoing danger to lake quality and invasive weeds should be removed from lake access and herbicides should not be used.

HE-17

I support Alternative AA1 of your Tahoe Keys Weeds Draft Environmental Impact Report.

The Tahoe Keys lagoons are an environmental disaster at Lake Tahoe. Proof of this are the infestations of aquatic invasive weeds now thriving there and the proposals to control these weeds with herbicides. These weeds are destroying Tahoe's legendary clarity and purity. Proposals to control them with herbicides only poisons the lake further.

I am absolutely opposed to any and all use of poisonous herbicides in the Keys and any other waters that connect to Lake Tahoe -- a Tier 3 Outstanding National Resource Water. I oppose spending tens of millions of taxpayer dollars for the convenience of boat-owners at the Tahoe Keys. I join The Sierra Club Tahoe Area Group in defending the purity of Lake Tahoe.

Sincerely,

Richard Cooper 285 Flicker Cir Washoe Valley, NV 89704 tahoe7720@gmail.com (775) 790-0202

Dear Tahoe Regional Planning Agency,

Because the lake is a natural treasure and herbicides never turn out well. The keys should never have been developed the way they have been is the first place. The lake needs less unnatural activity there not more. The wealthy who live there should fund more natural approaches to this problem.

I support Alternative AA1 of your Tahoe Keys Weeds Draft Environmental Impact Report.

The Tahoe Keys lagoons are an environmental disaster at Lake Tahoe. Proof of this are the infestations of aquatic invasive weeds now thriving there and the proposals to control these weeds with herbicides. These weeds are destroying Tahoe's legendary clarity and purity. Proposals to control them with herbicides only poisons the lake further.

I am absolutely opposed to any and all use of poisonous herbicides in the Keys and any other waters that connect to Lake Tahoe -- a Tier 3 Outstanding National Resource Water. I oppose spending tens of millions of taxpayer dollars for the convenience of boat-owners at the Tahoe Keys. I join The Sierra Club Tahoe Area Group in defending the purity of Lake Tahoe.

Sincerely,

Janet Wesse 1119 Monterra Drive Minden, NV 89423 janet.wesse@gmail.com (217) 898-9461

From:	Jennifer Aspuria (jenaspuria@yahoo.com) Sent You a Personal Message
To:	tahoekeysweeds@trpa.org
Subject:	[EXTERNAL] No weeds or herbicides for Lake Tahoe!
Date:	Thursday, July 30, 2020 7:37:37 AM

Dear Tahoe Regional Planning Agency,

We should not be able to use poison to stop a man made environmental mistake. Eradication/control measures should continue be be based on manual removal and non-intrusive measures and never include the use of herbicides. Which can destroy more than just the invasive weeds that we are trying to manage. Take keys should be removed before we think to dump chemicals of any kind in a fresh water body of water with the average depth of clarity being 70?. Manual removal is best and should continue or the keys removed to protect the lake.

I support Alternative AA1 of your Tahoe Keys Weeds Draft Environmental Impact Report.

The Tahoe Keys lagoons are an environmental disaster at Lake Tahoe. Proof of this are the infestations of aquatic invasive weeds now thriving there and the proposals to control these weeds with herbicides. These weeds are destroying Tahoe's legendary clarity and purity. Proposals to control them with herbicides only poisons the lake further.

I am absolutely opposed to any and all use of poisonous herbicides in the Keys and any other waters that connect to Lake Tahoe -- a Tier 3 Outstanding National Resource Water. I oppose spending tens of millions of taxpayer dollars for the convenience of boat-owners at the Tahoe Keys. I join The Sierra Club Tahoe Area Group in defending the purity of Lake Tahoe.

Sincerely,

Jennifer Aspuria 2623 Chris Ave South Lake Tahoe, CA 96150 jenaspuria@yahoo.com (916) 914-3874

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Lillian Miller at Sierra Club at core.help@sierraclub.org or (415) 977-5500.

HE-10

Dear Tahoe Regional Planning Agency,

I grew up in Tahoe. Watched this development go in and since have seen satellite pictures of south shore. All you have to do is look at the satellite pics and the debris and dirt plumes coming out of the keys and there can be no doubt that this was a colossally bad decision for the lake as a whole. Now our only option is mitigation

I support Alternative AA1 of your Tahoe Keys Weeds Draft Environmental Impact Report.

The Tahoe Keys lagoons are an environmental disaster at Lake Tahoe. Proof of this are the infestations of aquatic invasive weeds now thriving there and the proposals to control these weeds with herbicides. These weeds are destroying Tahoe's legendary clarity and purity. Proposals to control them with herbicides only poisons the lake further.

I am absolutely opposed to any and all use of poisonous herbicides in the Keys and any other waters that connect to Lake Tahoe -- a Tier 3 Outstanding National Resource Water. I oppose spending tens of millions of taxpayer dollars for the convenience of boat-owners at the Tahoe Keys. I join The Sierra Club Tahoe Area Group in defending the purity of Lake Tahoe.

Sincerely,

Scott Sady 2070 Bonneville Avenue Reno, NV 89503 scottsady@tahoelight.com (775) 848-5166

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Lillian Miller at Sierra Club at core.help@sierraclub.org or (415) 977-5500.

MI-26

From:	Greg Felton
То:	tahoekeysweeds@trpa.org
Subject:	[EXTERNAL] We need a sense of urgency!
Date:	Wednesday, July 29, 2020 7:46:23 PM

PLEASE avoid analysis paralysis.

The whole time this issue has been studied, the weeds have ruthlessly expanded their domain. You are clearly aware that the Keys are fully infested. It's hard for any boat to move about without hooking then spreading strings of Eurasian Milfoil. Something MUST be done aggressively and soon there. Beyond the Keys, I think the common beliefs are that "The water is generally deep and cold which encourage growth", "It's not bad yet", and "We'll be able to quickly address the few outbreaks." These thoughts are all wildly optimistic. Last weekend, I raced a sailboat from the Keys to Cave Rock, the UC Davis Research Buoy off of Sugarpine Point, Edgewood, and back. I was stunned by the number of strains of Milfoil out in the middle of the Lake, still green and apparently capable of rooting and reproducing.

I know work is currently underway to make the bubble curtain operational again. I know UV and tarps show promise. I know herbicides have been discussed but many are reluctant to pursue what they fear is drastic action. Whichever solution, or combination of them, you believe is best MUST be implemented soon. This is much like Covid. The problem is spreading far faster than we've been willing to admit and our actions so far have been ineffective Band Aids. The longer we wait, the worse this problem will get. Let's immediately address at least the Keys as they are the center of this cancer which is spreading.

Again, please avoid analysis paralysis. The fact that comments are being collected for so many months is evidence by itself that we're not moving with the necessary sense of urgency.

Be bold. Contain and address the problem before you have no chance of winning the battle.

Greg Felton 775 588 3121 URG-1

Dear Tahoe Regional Planning Agency,

Tahoe should not be polluted with chemicals. Two environmental wrongs don?t make a right. I want clean drinking **HE-6** water for me and all the animals who rely on runoff

I support Alternative AA1 of your Tahoe Keys Weeds Draft Environmental Impact Report.

The Tahoe Keys lagoons are an environmental disaster at Lake Tahoe. Proof of this are the infestations of aquatic invasive weeds now thriving there and the proposals to control these weeds with herbicides. These weeds are destroying Tahoe's legendary clarity and purity. Proposals to control them with herbicides only poisons the lake further.

I am absolutely opposed to any and all use of poisonous herbicides in the Keys and any other waters that connect to Lake Tahoe -- a Tier 3 Outstanding National Resource Water. I oppose spending tens of millions of taxpayer dollars for the convenience of boat-owners at the Tahoe Keys. I join The Sierra Club Tahoe Area Group in defending the purity of Lake Tahoe.

Sincerely,

Annise Adams 6951 Eastside ct Orangevale, CA 95662 annise3@gmail.com (916) 402-8717

From:	S May (samm427@gmail.com) Sent You a Personal Message
To:	tahoekeysweeds@trpa.org
Subject:	[EXTERNAL] No weeds or herbicides for Lake Tahoe!
Date:	Thursday, July 30, 2020 7:06:31 AM

Dear Tahoe Regional Planning Agency,

We love our lake and would hate for these herbicides to be the next major mistake made. Building the keys was the worse decision be the proper studies weren't done and the herbicides seems to be the same, we have no idea what the results will be! How about finding a way to live and deal with the invasive species that are thriving be of a past mistake instead of making Another major mistake!!

I support Alternative AA1 of your Tahoe Keys Weeds Draft Environmental Impact Report.

The Tahoe Keys lagoons are an environmental disaster at Lake Tahoe. Proof of this are the infestations of aquatic invasive weeds now thriving there and the proposals to control these weeds with herbicides. These weeds are destroying Tahoe's legendary clarity and purity. Proposals to control them with herbicides only poisons the lake further.

I am absolutely opposed to any and all use of poisonous herbicides in the Keys and any other waters that connect to Lake Tahoe -- a Tier 3 Outstanding National Resource Water. I oppose spending tens of millions of taxpayer dollars for the convenience of boat-owners at the Tahoe Keys. I join The Sierra Club Tahoe Area Group in defending the purity of Lake Tahoe.

Sincerely,

S May 2987 Nevada South lake tahoe , CA 96150 samm427@gmail.com (530) 314-3533

From:	Mitchell Rittiman (mitch ritt@yahoo.com) Sent You a Personal Message
To:	tahoekeysweeds@trpa.org
Subject:	[EXTERNAL] No weeds or herbicides for Lake Tahoe!
Date:	Friday, July 31, 2020 8:28:31 AM

Dear Tahoe Regional Planning Agency,

As stated above, wetlands provide one of the most important ecosystems for Lake Tahoe. They help naturally filter nutrients before entering the lake. (This helps keep it clear.) Residents/business owners should consider it lucky they even have a boat/home in the keys. Live with the environment and find a natural way to remove the invasive plants. Stop being lazy to make a dollar. However, the creation of a well developed plan to remove the invasive plants using safe methods must be created. Dream big. I would suggest making keys HOA and businesses fund the removal. To my knowledge they hire a few people to do removal every year. Why not spend a larger amount of money to get rid of the plants for good in one year and save money over time. Stop mitigating and expecting results.

I support Alternative AA1 of your Tahoe Keys Weeds Draft Environmental Impact Report.

The Tahoe Keys lagoons are an environmental disaster at Lake Tahoe. Proof of this are the infestations of aquatic invasive weeds now thriving there and the proposals to control these weeds with herbicides. These weeds are destroying Tahoe's legendary clarity and purity. Proposals to control them with herbicides only poisons the lake further.

I am absolutely opposed to any and all use of poisonous herbicides in the Keys and any other waters that connect to Lake Tahoe -- a Tier 3 Outstanding National Resource Water. I oppose spending tens of millions of taxpayer dollars for the convenience of boat-owners at the Tahoe Keys. I join The Sierra Club Tahoe Area Group in defending the purity of Lake Tahoe.

Sincerely,

Mitchell Rittiman 1088 Reno Ave. South Lake Tahoe, CA 96150 mitch_ritt@yahoo.com (408) 568-7129

Dear Tahoe Regional Planning Agency,

Herbicides are poison. I don't understand why we would even consider putting them in Lake Tahoe. | HE-7

I support Alternative AA1 of your Tahoe Keys Weeds Draft Environmental Impact Report.

The Tahoe Keys lagoons are an environmental disaster at Lake Tahoe. Proof of this are the infestations of aquatic invasive weeds now thriving there and the proposals to control these weeds with herbicides. These weeds are destroying Tahoe's legendary clarity and purity. Proposals to control them with herbicides only poisons the lake further.

I am absolutely opposed to any and all use of poisonous herbicides in the Keys and any other waters that connect to Lake Tahoe -- a Tier 3 Outstanding National Resource Water. I oppose spending tens of millions of taxpayer dollars for the convenience of boat-owners at the Tahoe Keys. I join The Sierra Club Tahoe Area Group in defending the purity of Lake Tahoe.

Sincerely,

Donna Walters 5425 Toombs St Fair Oaks, CA 95628 donnawalters542@gmail.com (916) 261-1500

From:	Harold.s10°er
To:	tahoekeysweeds@trpa_org: Russell Norman (Guest)
Subject:	(EXTERNAL) Comments on TKPOA Draft EIR/EIS
Date:	Thursday, September 3, 2020 3:44:49 PM
Attachments:	TKPOA_Draft_EIREIS_comments 9 3 2020_pelf
	TKPOA-Draft-EIR-EIS-Comments.doc

Please accept the attached comment letter.

Harold Singer PO Box 7493 South Lake Tahoe, CA 96158

Mr. Mike Plaziak Executive Officer CA Regional Water Quality Control Board Lahontan Region 2501 Lake Tahoe Blvd. South Lake Tahoe, CA 96150

Ms. Joanne Marchetta Executive Director Tahoe Regional Planning Agency 128 Market Street Stateline, NV 89401

Sent via email: tahoekeysweeds@trpa.org russell.norman@waterboards.ca.gov

RE: Comments on Draft EIR/EIS Tahoe Keys Lagoon Aquatic Weed Test

I want to acknowledge the progress made by the Tahoe Keys Property Homeowners Association (TKPOA) and the agencies to address the aquatic plant problem. The recent project proposal by TKPOA includes many elements that would make significant progress in gaining traction on the problem. This letter includes my comments on the draft EIR/EIS and on future actions to consider permits and other approvals needed to allow implementation.

Anti Degradation Analysis

The Draft EIR/EIS does not include any significant discussion regarding how the project will meet the criteria for allowing degradation, even short term, associated with portions of the proposed project. In contrast, the draft EIR/EIS includes significant discussion regarding how the project will comply with other environmental standards. This is a major deficiency in the draft EIR/EIS.

Pesticide Use Prohibition

The draft EIR/EIS does not provide any information to justify granting an exemption to the prohibition. It does provide justification to support denying the exemption in that it describes other technologies that have been shown to be effective in significantly reducing the aquatic plant population in other areas of Lake Tahoe and proposes to utilize these methods in the Tahoe Keys on a pilot scale. Therefore, the criteria to demonstrate that no other reasonable method to address the problem is not met.

AA-10

REG-12

Mr. Plaziak and Ms. Marchetta -2-

Furthermore, there is no reason to pilot herbicide use at this time as many references in the draft EIR/EIS indicate that herbicides are effective in reducing aquatic plant populations. There is no justifiable reason to allow a herbicide pilot program to proceed at this time. If, in the future, it can be demonstrated that no reasonable means of reducing the aquatic plant population other than herbicide use exists, then pilot projects to determine the optimum herbicide type, application levels and mitigation measures might be warranted.

The EIR/EIS fails to disclose or analyze the non-active ingredients in the herbicides proposed for use. Without this information, it is impossible to determine and disclose the complete suite of possible environmental effect of use of herbicides.

Project Success Goals

The draft EIR/EIS sets forth a project success standard of 75% reduction of biovolumes of aquatic plants. The agencies should not accept this standard for a number of reasons and all reference to it should be removed from the draft EIR/EIS.

First, it appears this standard was established by TKPOA as being equivalent to what it believes it could achieve with an initial herbicide application. Precise numerical equivalency should not be a standard to judge feasibility of various technologies in relation to a decision to allow herbicide use, as put forward by TKPOA. Rather, one should consider the effectiveness of various technologies over time and in combination to achieve the desired result of significantly reducing the biovolumes to manageable levels. Just because one method achieves a desired result in a few weeks and others take longer to achieve the same result should not be the only determining factor. Therefore, TKOA must implement Group B methods at all sites, regardless of initial outcomes, in order to get a complete analysis of what is possible employing numerous technologies over time.

Second, the biovolumes remaining after treatment will vary depending on the starting point. As an example, if one starts with 100 units and achieves a 75% reduction, there will be 25 units remaining. However, if one starts with 75 units and achieves a 67% reduction, there will also be 25 units remaining. It is the remaining amount of aquatic plants that will be subject to ongoing maintenance. In this example, a lower percent reduction will achieve the same biovolume result.

From an ongoing management perspective, the same biovolume would exist so what is so magic about the 75% standard put forward by TKPOA, It would seem that this standard is being set in order to diminish the value of other technologies in an effort to prove that herbicide use it the only way to meet the goal of significant aquatic plant reduction in order to get to a level that could be maintained.

TKPOA Commitment

I applaud TKPOA for making progress in aquatic plant management on a number of fronts. It has successfully passed an assessment of its members to fund many of these efforts. It has significantly improved its harvesting methods and equipment to limit the release of plant

AWM-33a

AWM-33a

HE-134

Mr. Plaziak and Ms. Marchetta -3fragments. It has dedicated very capable staff to oversee this aquatic plant management effort. However, there are a few items that need to be highlighted. 1. It is my understanding that the TKPOA assessment included specific language that prevented the expenditure of certain funds if herbicide use was not permitted. TKPOA should confirm or refute this belief. The agencies should not let the threat of no project cloud its decision as to whether or not to allow herbicide use at this stage in the project. 2. There does not appear to be a commitment to continue these efforts in the pilot plots after the initial three years if positive results are achieved. Will TKPOA just allow these areas to return to pre-project conditions, which will happen due to the proximity of aquatic plants in untreated areas adjacent to the pilot plots? It may take a year of more after the results of the AWM-33a pilot projects are developed before a more full-scale project is implemented. 3. The premise for this entire project is that if TKPOA is allowed to use a technology to significant reduce aquatic plant biovolumes, it will maintain these levels. However, there does not appear to be an evaluation of what such an effort would cost nor any financial commitment for this effort. This is different from the cost of implementation of a project to reduce aguatic plant levels to those that can be managed effectively. This long-term commitment should be fully evaluated and be made a condition of any approval as it should be considered an essential project element. TKPOA should be required to demonstrate its ability to perform this perpetual maintenance effort. 4. The no project alternative appears to preclude the expanded use of LFA and UV light over pre-project conditions or use of any other technology. The draft EIR/EIS makes reference to an existing LFA project and limited experimentation in 2019 and 2020 using UV light. Additionally, there is an environmental document currently in circulation that analyzes these and other technologies on a Lake-wide basis which is the pre curser to general or sitespecific approvals to allow these technologies to be used. This includes the evaluation of allowing mats on acreage greater than five acres, a constraint frequently referenced in the draft EIR/EIS. Given the status of this other draft environmental document, it is possible that the proposed pilot projects and possibly others with the exception of the herbicide pilot projects, could be permitted even if the draft EIR/EIS which is the subject of this letter was delayed or not approved. Thank you for the opportunity to provide comments on this project and the draft EIR/EIS.

Sincerely,

Hardd Singe

Harold Singer

Dear Tahoe Regional Planning Agency,

I totally oppose the use of herbicides in Lake Tahoe and adjacent properties. Furthermore, the herbicide solution for Tahoe Keys invasive weeds strikes me as a bandaid on a boil, needing to be repeated in the future. This community must support an alternative treatment, no matter the cost.

I support Alternative AA1 of your Tahoe Keys Weeds Draft Environmental Impact Report.

The Tahoe Keys lagoons are an environmental disaster at Lake Tahoe. Proof of this are the infestations of aquatic invasive weeds now thriving there and the proposals to control these weeds with herbicides. These weeds are destroying Tahoe's legendary clarity and purity. Proposals to control them with herbicides only poisons the lake further.

I am absolutely opposed to any and all use of poisonous herbicides in the Keys and any other waters that connect to Lake Tahoe -- a Tier 3 Outstanding National Resource Water. I oppose spending tens of millions of taxpayer dollars for the convenience of boat-owners at the Tahoe Keys. I join The Sierra Club Tahoe Area Group in defending the purity of Lake Tahoe.

Sincerely,

David VonSeggern 2585 Sunline Dr. Reno, NV 89523 vonseg1@sbcglobal.net (775) 303-8461

Dear Tahoe Regional Planning Agency,

As a senior life scientist and biomedical researcher, I really appreciate the value of pro-active actions. They save money, time and irreplaceable life. Be pro-active. Take a stand that is worthwhile and do it now.

I support Alternative AA1 of your Tahoe Keys Weeds Draft Environmental Impact Report.

The Tahoe Keys lagoons are an environmental disaster at Lake Tahoe. Proof of this are the infestations of aquatic invasive weeds now thriving there and the proposals to control these weeds with herbicides. These weeds are destroying Tahoe's legendary clarity and purity. Proposals to control them with herbicides only poisons the lake further.

I am absolutely opposed to any and all use of poisonous herbicides in the Keys and any other waters that connect to Lake Tahoe -- a Tier 3 Outstanding National Resource Water. I oppose spending tens of millions of taxpayer dollars for the convenience of boat-owners at the Tahoe Keys. I join The Sierra Club Tahoe Area Group in defending the purity of Lake Tahoe.

Sincerely,

Dorothy Hudig 15 Hastings Dr Reno, NV 89503 hudig@sbcglobal.net (775) 323-4835

Dear Tahoe Regional Planning Agency,

Please, no herbicides in Lake Tahoe!

HE-25

I support Alternative AA1 of your Tahoe Keys Weeds Draft Environmental Impact Report.

The Tahoe Keys lagoons are an environmental disaster at Lake Tahoe. Proof of this are the infestations of aquatic invasive weeds now thriving there and the proposals to control these weeds with herbicides. These weeds are destroying Tahoe's legendary clarity and purity. Proposals to control them with herbicides only poisons the lake further.

I am absolutely opposed to any and all use of poisonous herbicides in the Keys and any other waters that connect to Lake Tahoe -- a Tier 3 Outstanding National Resource Water. I oppose spending tens of millions of taxpayer dollars for the convenience of boat-owners at the Tahoe Keys. I join The Sierra Club Tahoe Area Group in defending the purity of Lake Tahoe.

Sincerely,

Lynn Boulton PO Box 234 Lee Vining, CA 93541 amazinglynn@yahoo.com (760) 914-9016

Dear Tahoe Regional Planning Agency,

Please take the first step toward healing the damage done by the Keys development, and ban herbicide use in and **HE-19** around Lake Tahoe.

I support Alternative AA1 of your Tahoe Keys Weeds Draft Environmental Impact Report.

The Tahoe Keys lagoons are an environmental disaster at Lake Tahoe. Proof of this are the infestations of aquatic invasive weeds now thriving there and the proposals to control these weeds with herbicides. These weeds are destroying Tahoe's legendary clarity and purity. Proposals to control them with herbicides only poisons the lake further.

I am absolutely opposed to any and all use of poisonous herbicides in the Keys and any other waters that connect to Lake Tahoe -- a Tier 3 Outstanding National Resource Water. I oppose spending tens of millions of taxpayer dollars for the convenience of boat-owners at the Tahoe Keys. I join The Sierra Club Tahoe Area Group in defending the purity of Lake Tahoe.

Sincerely,

Catherine Schmidt 1340 Wesley Drive Reno , NV 89503 cathsch120@gmail.com (775) 323-0000

Dear Tahoe Regional Planning Agency,

The EPA prohibits the use of aquatic herbicides in Lake Tahoe for good reason and this rule should not be tampered with. Development has already caused enormous harm to the Lake Tahoe ecosystem and to lake clarity, lets not further confound things by adding herbicides!

I support Alternative AA1 of your Tahoe Keys Weeds Draft Environmental Impact Report.

The Tahoe Keys lagoons are an environmental disaster at Lake Tahoe. Proof of this are the infestations of aquatic invasive weeds now thriving there and the proposals to control these weeds with herbicides. These weeds are destroying Tahoe's legendary clarity and purity. Proposals to control them with herbicides only poisons the lake further.

I am absolutely opposed to any and all use of poisonous herbicides in the Keys and any other waters that connect to Lake Tahoe -- a Tier 3 Outstanding National Resource Water. I oppose spending tens of millions of taxpayer dollars for the convenience of boat-owners at the Tahoe Keys. I join The Sierra Club Tahoe Area Group in defending the purity of Lake Tahoe.

Sincerely,

Kathleen Keef 14185 Powder River Dr Reno, NV 89511 kkeef2@gmail.com (775) 853-4432

Dear Tahoe Regional Planning Agency,

We need to keep Tahoe safe for people and fish.

GEN-2

I support Alternative AA1 of your Tahoe Keys Weeds Draft Environmental Impact Report.

The Tahoe Keys lagoons are an environmental disaster at Lake Tahoe. Proof of this are the infestations of aquatic invasive weeds now thriving there and the proposals to control these weeds with herbicides. These weeds are destroying Tahoe's legendary clarity and purity. Proposals to control them with herbicides only poisons the lake further.

I am absolutely opposed to any and all use of poisonous herbicides in the Keys and any other waters that connect to Lake Tahoe -- a Tier 3 Outstanding National Resource Water. I oppose spending tens of millions of taxpayer dollars for the convenience of boat-owners at the Tahoe Keys. I join The Sierra Club Tahoe Area Group in defending the purity of Lake Tahoe.

Sincerely,

Patricia Marinelli 2140 woodhaven ln sparks, NV 89434 pcm7788@gmail.com (775) 233-4732

Dear Tahoe Regional Planning Agency,

Lake Tahoe is a scenic and ecological treasure. Protect our treasure - don't poison it.

HE-26

I support Alternative AA1 of your Tahoe Keys Weeds Draft Environmental Impact Report.

The Tahoe Keys lagoons are an environmental disaster at Lake Tahoe. Proof of this are the infestations of aquatic invasive weeds now thriving there and the proposals to control these weeds with herbicides. These weeds are destroying Tahoe's legendary clarity and purity. Proposals to control them with herbicides only poisons the lake further.

I am absolutely opposed to any and all use of poisonous herbicides in the Keys and any other waters that connect to Lake Tahoe -- a Tier 3 Outstanding National Resource Water. I oppose spending tens of millions of taxpayer dollars for the convenience of boat-owners at the Tahoe Keys. I join The Sierra Club Tahoe Area Group in defending the purity of Lake Tahoe.

Sincerely,

Teresa Bell 1944 Grey Eagle St. Henderson, NV 89074 tbell100@yahoo.com (702) 269-0564

Dear Tahoe Regional Planning Agency,

The health of the area and lake is more important than a convenience to boaters.

I support Alternative AA1 of your Tahoe Keys Weeds Draft Environmental Impact Report.

The Tahoe Keys lagoons are an environmental disaster at Lake Tahoe. Proof of this are the infestations of aquatic invasive weeds now thriving there and the proposals to control these weeds with herbicides. These weeds are destroying Tahoe's legendary clarity and purity. Proposals to control them with herbicides only poisons the lake further.

I am absolutely opposed to any and all use of poisonous herbicides in the Keys and any other waters that connect to Lake Tahoe -- a Tier 3 Outstanding National Resource Water. I oppose spending tens of millions of taxpayer dollars for the convenience of boat-owners at the Tahoe Keys. I join The Sierra Club Tahoe Area Group in defending the purity of Lake Tahoe.

Sincerely,

Sarah Berry 762 Hazel Drive South Lake Tahoe, CA 96150 luvnit_24@yahoo.com (414) 758-5844

From:	Reese A Sutfin
To:	tahoekeysweeds@trpa.org
Subject:	[EXTERNAL] Stunned
Date:	Saturday, August 8, 2020 8:23:51 AM

Stunned that anyone still considers putting chemicals into an ecosystem as a plausible idea. Naive compromises to short term solutions is how we end up in these situations to begin with. The proposal lacks insight based in the <u>substantive</u> fact that no one truly knows what the long term impacts will be.

This whole agenda is rooted in previous ideas of the same nature.

People and money are going to do what they want to do. It is ridiculous to even take the time to address this, it won't play out the way intended, regardless of the science.

Add insult to injury.

Thanks for the opportunity to comment.

Best regards,

Reese Sutfin King's Beach

Reese Sutfin

Dear Tahoe Regional Planning Agency,

No toxins... That hurts all !!! Our water is too precious!!! HE-27

I support Alternative AA1 of your Tahoe Keys Weeds Draft Environmental Impact Report.

The Tahoe Keys lagoons are an environmental disaster at Lake Tahoe. Proof of this are the infestations of aquatic invasive weeds now thriving there and the proposals to control these weeds with herbicides. These weeds are destroying Tahoe's legendary clarity and purity. Proposals to control them with herbicides only poisons the lake further.

I am absolutely opposed to any and all use of poisonous herbicides in the Keys and any other waters that connect to Lake Tahoe -- a Tier 3 Outstanding National Resource Water. I oppose spending tens of millions of taxpayer dollars for the convenience of boat-owners at the Tahoe Keys. I join The Sierra Club Tahoe Area Group in defending the purity of Lake Tahoe.

Sincerely,

A Hernday 5851 Monte verde Santa rosa, CA 95409 ahernday@sonic.net (707) 539-6865

Dear Tahoe Regional Planning Agency,

My family and I have enjoyed Lake Tahoe for years and have observed the human impact on the lake. The Tahoe Keys probably wouldn?t be built today, but it?s here now and every effort should be taken to mitigate its presence. Using chemical herbicides should not be used!

I support Alternative AA1 of your Tahoe Keys Weeds Draft Environmental Impact Report.

The Tahoe Keys lagoons are an environmental disaster at Lake Tahoe. Proof of this are the infestations of aquatic invasive weeds now thriving there and the proposals to control these weeds with herbicides. These weeds are destroying Tahoe's legendary clarity and purity. Proposals to control them with herbicides only poisons the lake further.

I am absolutely opposed to any and all use of poisonous herbicides in the Keys and any other waters that connect to Lake Tahoe -- a Tier 3 Outstanding National Resource Water. I oppose spending tens of millions of taxpayer dollars for the convenience of boat-owners at the Tahoe Keys. I join The Sierra Club Tahoe Area Group in defending the purity of Lake Tahoe.

Sincerely,

Alan Hern 1802 Pine street Martinez, CA 94553 ahern93@gmail.com (925) 381-1825

Dear Tahoe Regional Planning Agency,

No toxic chemicals should be used to maintain ?weeds? in Lake Tahoe! The weeds invading the lake are the developers and the people who decided to build and live on or around the lake. Remove them and let the lake be as beautiful as it once was.

I support Alternative AA1 of your Tahoe Keys Weeds Draft Environmental Impact Report.

The Tahoe Keys lagoons are an environmental disaster at Lake Tahoe. Proof of this are the infestations of aquatic invasive weeds now thriving there and the proposals to control these weeds with herbicides. These weeds are destroying Tahoe's legendary clarity and purity. Proposals to control them with herbicides only poisons the lake further.

I am absolutely opposed to any and all use of poisonous herbicides in the Keys and any other waters that connect to Lake Tahoe -- a Tier 3 Outstanding National Resource Water. I oppose spending tens of millions of taxpayer dollars for the convenience of boat-owners at the Tahoe Keys. I join The Sierra Club Tahoe Area Group in defending the purity of Lake Tahoe.

Sincerely,

Anthony Filippone 6294 Via Regla San Diego , CA 92122 apony2@yahoo.com (619) 823-1479

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Lillian Miller at Sierra Club at core.help@sierraclub.org or (415) 977-5500.

HE-50

Dear Tahoe Regional Planning Agency,

It is important to use non-her i ideal means to remove the contaminating growth in order to preserve the beauty and clarity of Lake Tahoe.

I support Alternative AA1 of your Tahoe Keys Weeds Draft Environmental Impact Report.

The Tahoe Keys lagoons are an environmental disaster at Lake Tahoe. Proof of this are the infestations of aquatic invasive weeds now thriving there and the proposals to control these weeds with herbicides. These weeds are destroying Tahoe's legendary clarity and purity. Proposals to control them with herbicides only poisons the lake further.

I am absolutely opposed to any and all use of poisonous herbicides in the Keys and any other waters that connect to Lake Tahoe -- a Tier 3 Outstanding National Resource Water. I oppose spending tens of millions of taxpayer dollars for the convenience of boat-owners at the Tahoe Keys. I join The Sierra Club Tahoe Area Group in defending the purity of Lake Tahoe.

Sincerely,

Carol Schneider 690 Mariposa Ave Apt 206 Oakland , CA 94610 caschneider1@yahoo.com (650) 576-3244

From:	david bezanson (bezanpsy3506@hotmail.com) Sent You a Personal Message
To:	tahoekeysweeds@trpa.org
Subject:	[EXTERNAL] No weeds or herbicides for Lake Tahoe!
Date:	Sunday, August 9, 2020 4:47:53 PM

Dear Tahoe Regional Planning Agency,

The environment is loaded with herbicides, which are toxic to all species including humans. There are effective organic ways of attenuating proliferation of unwanted botanical species.

I support Alternative AA1 of your Tahoe Keys Weeds Draft Environmental Impact Report.

The Tahoe Keys lagoons are an environmental disaster at Lake Tahoe. Proof of this are the infestations of aquatic invasive weeds now thriving there and the proposals to control these weeds with herbicides. These weeds are destroying Tahoe's legendary clarity and purity. Proposals to control them with herbicides only poisons the lake further.

I am absolutely opposed to any and all use of poisonous herbicides in the Keys and any other waters that connect to Lake Tahoe -- a Tier 3 Outstanding National Resource Water. I oppose spending tens of millions of taxpayer dollars for the convenience of boat-owners at the Tahoe Keys. I join The Sierra Club Tahoe Area Group in defending the purity of Lake Tahoe.

Sincerely,

david bezanson 41 GRANDVIEW ST. UNIT SANTA CRUZ, CA 95060 bezanpsy3506@hotmail.com (831) 636-4439

From:	David Lamonica (busyinsandiego@usa.net) Sent You a Personal Message
To:	tahoekeysweeds@trpa.org
Subject:	[EXTERNAL] No weeds or herbicides for Lake Tahoe!
Date:	Sunday, August 9, 2020 1:41:56 PM

Dear Tahoe Regional Planning Agency,

It would seem obvious to this voter that the prohibition against use of herbicides in / around Lake Tahoe is a "no brainer" Hervicides eventually harm animals (fish, fowl, etc). Look at Roundup. The company is putting a \$9 or \$10 billion fund together to pay claims of injuty to humans caused by a herbicide. Say no to herbicide use in / around the lake.

I support Alternative AA1 of your Tahoe Keys Weeds Draft Environmental Impact Report.

The Tahoe Keys lagoons are an environmental disaster at Lake Tahoe. Proof of this are the infestations of aquatic invasive weeds now thriving there and the proposals to control these weeds with herbicides. These weeds are destroying Tahoe's legendary clarity and purity. Proposals to control them with herbicides only poisons the lake further.

I am absolutely opposed to any and all use of poisonous herbicides in the Keys and any other waters that connect to Lake Tahoe -- a Tier 3 Outstanding National Resource Water. I oppose spending tens of millions of taxpayer dollars for the convenience of boat-owners at the Tahoe Keys. I join The Sierra Club Tahoe Area Group in defending the purity of Lake Tahoe.

Sincerely,

David Lamonica 4344 Glencoe Ave #4 Marina Del Rey, CA 90292 busyinsandiego@usa.net (619) 778-6900

Dear Tahoe Regional Planning Agency,

I ma a frequent year round visitor to Lake Tahoe, and have many friends who live in North Lake Tahoe. I am opposed to using toxins to clear out a man made "lagoon". Aquatic herbicides have never been used in Lake Tahoe or the Keys, because the EPA prohibits their use in Tahoe, which is classified as a Tier 3, Outstanding National Resource Water.

I support Alternative AA1 of your Tahoe Keys Weeds Draft Environmental Impact Report.

The Tahoe Keys lagoons are an environmental disaster at Lake Tahoe. Proof of this are the infestations of aquatic invasive weeds now thriving there and the proposals to control these weeds with herbicides. These weeds are destroying Tahoe's legendary clarity and purity. Proposals to control them with herbicides only poisons the lake further.

I am absolutely opposed to any and all use of poisonous herbicides in the Keys and any other waters that connect to Lake Tahoe -- a Tier 3 Outstanding National Resource Water. I oppose spending tens of millions of taxpayer dollars for the convenience of boat-owners at the Tahoe Keys. I join The Sierra Club Tahoe Area Group in defending the purity of Lake Tahoe.

Sincerely,

David Marancik 2300 Shibley Ave San Jose, CA 95125 ddm2005@sbcglobal.net (408) 887-3326

From:	Doris Grinn (dpgrinn@gmail.com) Sent You a Personal Message
То:	tahoekeysweeds@trpa.org
Subject:	[EXTERNAL] No weeds or herbicides for Lake Tahoe!
Date:	Sunday, August 9, 2020 11:22:48 AM

Dear Tahoe Regional Planning Agency,

Building a subdivision on the water, especially on Lake Tahoe- one of the last clean bodies of water in California- is going to increase the contamination of Lake Tahoe, period. With leaking or breaking sewer pipes, petroleum and oil run-off from driveways during rain storms, and from leaking boat motors, going into the lake. The Increase of aquatic weeds us usually an environmental response to filter out these added toxins. The Subdivision sees the weeds as a nusance, and so wants to use MORE TOXINS, like Herbicides to kill off the weeds. It is just throwing more toxicity into the water to solve a aquatic weed problem that the subdivision created with its increased water pollution. And the herbicides (and many chemicals) that EPA says are safe, FREQUENTLY are discovered to have many toxic ?unintended consequences?, 20 yrs later. Such as glyphosate/Round Up. Aquatic herbicides are NOT A SOLUTION , they are another problem.

I support Alternative AA1 of your Tahoe Keys Weeds Draft Environmental Impact Report.

The Tahoe Keys lagoons are an environmental disaster at Lake Tahoe. Proof of this are the infestations of aquatic invasive weeds now thriving there and the proposals to control these weeds with herbicides. These weeds are destroying Tahoe's legendary clarity and purity. Proposals to control them with herbicides only poisons the lake further.

I am absolutely opposed to any and all use of poisonous herbicides in the Keys and any other waters that connect to Lake Tahoe -- a Tier 3 Outstanding National Resource Water. I oppose spending tens of millions of taxpayer dollars for the convenience of boat-owners at the Tahoe Keys. I join The Sierra Club Tahoe Area Group in defending the purity of Lake Tahoe.

Sincerely,

Doris Grinn 16980 Pinto Rd Sonora, CA 95370 dpgrinn@gmail.com (209) 459-0642

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Lillian Miller at Sierra Club at core.help@sierraclub.org or (415) 977-5500.

HE-31

Dear Tahoe Regional Planning Agency,

The impact of invasive species in the Great Lakes is a stark examples of the danger of interfering with key ecosystem, especially one as small as Lake Tahoe.

I support Alternative AA1 of your Tahoe Keys Weeds Draft Environmental Impact Report.

The Tahoe Keys lagoons are an environmental disaster at Lake Tahoe. Proof of this are the infestations of aquatic invasive weeds now thriving there and the proposals to control these weeds with herbicides. These weeds are destroying Tahoe's legendary clarity and purity. Proposals to control them with herbicides only poisons the lake further.

I am absolutely opposed to any and all use of poisonous herbicides in the Keys and any other waters that connect to Lake Tahoe -- a Tier 3 Outstanding National Resource Water. I oppose spending tens of millions of taxpayer dollars for the convenience of boat-owners at the Tahoe Keys. I join The Sierra Club Tahoe Area Group in defending the purity of Lake Tahoe.

Sincerely,

Elizabeth Trudell 1605 Christina Driive Los Altos, CA 94024 ltrudell@netbox.com (650) 961-5363

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Lillian Miller at Sierra Club at core.help@sierraclub.org or (415) 977-5500.

AQU-19

Dear Tahoe Regional Planning Agency,

If we want Lake Tahoe to remain pristine we should not allow companies to use herbicides to degrade its purity. **HE-32**

I support Alternative AA1 of your Tahoe Keys Weeds Draft Environmental Impact Report.

The Tahoe Keys lagoons are an environmental disaster at Lake Tahoe. Proof of this are the infestations of aquatic invasive weeds now thriving there and the proposals to control these weeds with herbicides. These weeds are destroying Tahoe's legendary clarity and purity. Proposals to control them with herbicides only poisons the lake further.

I am absolutely opposed to any and all use of poisonous herbicides in the Keys and any other waters that connect to Lake Tahoe -- a Tier 3 Outstanding National Resource Water. I oppose spending tens of millions of taxpayer dollars for the convenience of boat-owners at the Tahoe Keys. I join The Sierra Club Tahoe Area Group in defending the purity of Lake Tahoe.

Sincerely,

Faith Herschler 10347 West Briar Oaks Drive, Unit D Stanton, CA 90680 fherschler@sbcglobal.net (714) 821-4067

Dear Tahoe Regional Planning Agency,

As a frequent visitor to the Tahoe area, I don?t want to see this detrimental action taken. **HE-32**

I support Alternative AA1 of your Tahoe Keys Weeds Draft Environmental Impact Report.

The Tahoe Keys lagoons are an environmental disaster at Lake Tahoe. Proof of this are the infestations of aquatic invasive weeds now thriving there and the proposals to control these weeds with herbicides. These weeds are destroying Tahoe's legendary clarity and purity. Proposals to control them with herbicides only poisons the lake further.

I am absolutely opposed to any and all use of poisonous herbicides in the Keys and any other waters that connect to Lake Tahoe -- a Tier 3 Outstanding National Resource Water. I oppose spending tens of millions of taxpayer dollars for the convenience of boat-owners at the Tahoe Keys. I join The Sierra Club Tahoe Area Group in defending the purity of Lake Tahoe.

Sincerely,

Fritz Brunner 248 Santa Fe Drive Walnut Creek, CA 94598 dr.fritzmb@gmail.com (925) 817-8902

Dear Tahoe Regional Planning Agency,

All non-chemical methods to rid the water of these weeds must be used to preserve Lake Tahoe. Herbicides are poison.

I support Alternative AA1 of your Tahoe Keys Weeds Draft Environmental Impact Report.

The Tahoe Keys lagoons are an environmental disaster at Lake Tahoe. Proof of this are the infestations of aquatic invasive weeds now thriving there and the proposals to control these weeds with herbicides. These weeds are destroying Tahoe's legendary clarity and purity. Proposals to control them with herbicides only poisons the lake further.

I am absolutely opposed to any and all use of poisonous herbicides in the Keys and any other waters that connect to Lake Tahoe -- a Tier 3 Outstanding National Resource Water. I oppose spending tens of millions of taxpayer dollars for the convenience of boat-owners at the Tahoe Keys. I join The Sierra Club Tahoe Area Group in defending the purity of Lake Tahoe.

Sincerely,

Gayle Dufour 4725 San Sebastian Dr Woodland Hills, CA 91364 gkdufour@gmail.com (818) 222-4725

Dear Tahoe Regional Planning Agency,

As a Professor Emeritus of Zoology and Environmental Science and a California native, I have long followed the saga of Lake Tahoe's environmental problems. I have always advocated for keeping the lake, and the famous clarity of its waters, as pristine as possible. The proposed use of herbicides at Tahoe Keys is contrary to the longterm maintenance of the lake's clarity and ecology.

I support Alternative AA1 of your Tahoe Keys Weeds Draft Environmental Impact Report.

The Tahoe Keys lagoons are an environmental disaster at Lake Tahoe. Proof of this are the infestations of aquatic invasive weeds now thriving there and the proposals to control these weeds with herbicides. These weeds are destroying Tahoe's legendary clarity and purity. Proposals to control them with herbicides only poisons the lake further.

I am absolutely opposed to any and all use of poisonous herbicides in the Keys and any other waters that connect to Lake Tahoe -- a Tier 3 Outstanding National Resource Water. I oppose spending tens of millions of taxpayer dollars for the convenience of boat-owners at the Tahoe Keys. I join The Sierra Club Tahoe Area Group in defending the purity of Lake Tahoe.

Sincerely,

Glenn Stewart 4524 Briney Point Street La Verne, CA 91750 grstewart@cpp.edu (909) 593-6756

From:	Hannah MacLaren (hannahmacl@aol.com) Sent You a Personal Message
To:	tahoekeysweeds@trpa.org
Subject:	[EXTERNAL] No weeds or herbicides for Lake Tahoe!
Date:	Sunday, August 9, 2020 5:09:27 PM

Dear Tahoe Regional Planning Agency,

While I am not a resident of the Lake Tahoe area, my niece and her family and my cousin are, and when I visit them, I truly appreciate the purity and beauty of this special lake. To that end, preserving its uniqueness is of utmost concern to me.

There are non-toxic solutions to the weed problem and these must be utilized. Full Stop.

I support Alternative AA1 of your Tahoe Keys Weeds Draft Environmental Impact Report.

The Tahoe Keys lagoons are an environmental disaster at Lake Tahoe. Proof of this are the infestations of aquatic invasive weeds now thriving there and the proposals to control these weeds with herbicides. These weeds are destroying Tahoe's legendary clarity and purity. Proposals to control them with herbicides only poisons the lake further.

I am absolutely opposed to any and all use of poisonous herbicides in the Keys and any other waters that connect to Lake Tahoe -- a Tier 3 Outstanding National Resource Water. I oppose spending tens of millions of taxpayer dollars for the convenience of boat-owners at the Tahoe Keys. I join The Sierra Club Tahoe Area Group in defending the purity of Lake Tahoe.

Sincerely,

Hannah MacLaren 694 Royce Street Altadena, CA 91001 hannahmacl@aol.com (626) 791-9795

Dear Tahoe Regional Planning Agency,

This is a matter of beauty and dollar bills. Using a cheaper way of weed control (herbicides) will result in a loss of clarity in the lake that will result in a great loss of money for the businesses around the lake that rely on tourist dollars.

I support Alternative AA1 of your Tahoe Keys Weeds Draft Environmental Impact Report.

The Tahoe Keys lagoons are an environmental disaster at Lake Tahoe. Proof of this are the infestations of aquatic invasive weeds now thriving there and the proposals to control these weeds with herbicides. These weeds are destroying Tahoe's legendary clarity and purity. Proposals to control them with herbicides only poisons the lake further.

I am absolutely opposed to any and all use of poisonous herbicides in the Keys and any other waters that connect to Lake Tahoe -- a Tier 3 Outstanding National Resource Water. I oppose spending tens of millions of taxpayer dollars for the convenience of boat-owners at the Tahoe Keys. I join The Sierra Club Tahoe Area Group in defending the purity of Lake Tahoe.

Sincerely,

James Mc Pherson 1831 Nobili Ave Santa Clara, CA 95051 jmack444@aol.com (408) 931-6063

Dear Tahoe Regional Planning Agency,

This is a major body of water in the watershed and should be kept uncontaminated.

HE-54

I support Alternative AA1 of your Tahoe Keys Weeds Draft Environmental Impact Report.

The Tahoe Keys lagoons are an environmental disaster at Lake Tahoe. Proof of this are the infestations of aquatic invasive weeds now thriving there and the proposals to control these weeds with herbicides. These weeds are destroying Tahoe's legendary clarity and purity. Proposals to control them with herbicides only poisons the lake further.

I am absolutely opposed to any and all use of poisonous herbicides in the Keys and any other waters that connect to Lake Tahoe -- a Tier 3 Outstanding National Resource Water. I oppose spending tens of millions of taxpayer dollars for the convenience of boat-owners at the Tahoe Keys. I join The Sierra Club Tahoe Area Group in defending the purity of Lake Tahoe.

Sincerely,

JESSICA FIELDEN 6620 Woodland Pl Oakland, CA 94611 jesigata@yahoo.com (510) 658-6455

Dear Tahoe Regional Planning Agency,

The Tahoe Keys is a huge human blunder. If it is allowed to continue it will mean the complete devastation of a national treasure. We have enough environmental problems already. Do away with the Tahoe Keys.

I support Alternative AA1 of your Tahoe Keys Weeds Draft Environmental Impact Report.

The Tahoe Keys lagoons are an environmental disaster at Lake Tahoe. Proof of this are the infestations of aquatic invasive weeds now thriving there and the proposals to control these weeds with herbicides. These weeds are destroying Tahoe's legendary clarity and purity. Proposals to control them with herbicides only poisons the lake further.

I am absolutely opposed to any and all use of poisonous herbicides in the Keys and any other waters that connect to Lake Tahoe -- a Tier 3 Outstanding National Resource Water. I oppose spending tens of millions of taxpayer dollars for the convenience of boat-owners at the Tahoe Keys. I join The Sierra Club Tahoe Area Group in defending the purity of Lake Tahoe.

Sincerely,

jimandellenj smith 37427 19th st east Palmdale, CA 93550 solosmith@mac.com (661) 947-6547

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Lillian Miller at Sierra Club at core.help@sierraclub.org or (415) 977-5500.

GEN-3

Dear Tahoe Regional Planning Agency,

Lake Tahoe is a sparkling jewel. Always a reward for the drive drive through the mountains any time of the year. It matters to me and to my family because we come here to enjoy all it has to offer and to marvel at it's clarity. My nephew, now 50, first saw Lake Tahoe at age 12 and kept failing at windsurfing because he kept exclaiming 'I can see all the way down!' and fallling off. We need Lake Tahoe to keep sparkling.

I support Alternative AA1 of your Tahoe Keys Weeds Draft Environmental Impact Report.

The Tahoe Keys lagoons are an environmental disaster at Lake Tahoe. Proof of this are the infestations of aquatic invasive weeds now thriving there and the proposals to control these weeds with herbicides. These weeds are destroying Tahoe's legendary clarity and purity. Proposals to control them with herbicides only poisons the lake further.

I am absolutely opposed to any and all use of poisonous herbicides in the Keys and any other waters that connect to Lake Tahoe -- a Tier 3 Outstanding National Resource Water. I oppose spending tens of millions of taxpayer dollars for the convenience of boat-owners at the Tahoe Keys. I join The Sierra Club Tahoe Area Group in defending the purity of Lake Tahoe.

Sincerely,

Joan Jacobs 1388 Gough Street San Francisco, CA 94109 jrjacobs47@hotmail.com (614) 975-8627

Dear Tahoe Regional Planning Agency,

Our natural environment is the space in which we grow. To prosper as humanity, that space must be protected from pollution and degradation. Our governmental agencies are charged with the responsibility to make our hopes and aspirations a reality in our communities. Protecting Lake Tahoe and those who depend on it for their lives and livelihoods by keeping it clean and clear. Herbicides must be controlled.

I support Alternative AA1 of your Tahoe Keys Weeds Draft Environmental Impact Report.

The Tahoe Keys lagoons are an environmental disaster at Lake Tahoe. Proof of this are the infestations of aquatic invasive weeds now thriving there and the proposals to control these weeds with herbicides. These weeds are destroying Tahoe's legendary clarity and purity. Proposals to control them with herbicides only poisons the lake further.

I am absolutely opposed to any and all use of poisonous herbicides in the Keys and any other waters that connect to Lake Tahoe -- a Tier 3 Outstanding National Resource Water. I oppose spending tens of millions of taxpayer dollars for the convenience of boat-owners at the Tahoe Keys. I join The Sierra Club Tahoe Area Group in defending the purity of Lake Tahoe.

Sincerely,

Joan Smith 108 Eliseo Drive Greenbrae, CA 94904 joanesq93@gmail.com (415) 234-5678

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Lillian Miller at Sierra Club at core.help@sierraclub.org or (415) 977-5500.

HE-38

Dear Tahoe Regional Planning Agency,

I grew up spending summers at Lake Tahoe because a relative had a cabin on the lake. Now it is just our favorite place to visit with the children or grandchildren growing up camping or staying in hotels.. Lake Tahoe is for everyone not just those relative few who live in the Tahoe Keys who want to use herbicides that will ruin the ecology of the Lake for all. Do not allow this to happen.

HE-39

I support Alternative AA1 of your Tahoe Keys Weeds Draft Environmental Impact Report.

The Tahoe Keys lagoons are an environmental disaster at Lake Tahoe. Proof of this are the infestations of aquatic invasive weeds now thriving there and the proposals to control these weeds with herbicides. These weeds are destroying Tahoe's legendary clarity and purity. Proposals to control them with herbicides only poisons the lake further.

I am absolutely opposed to any and all use of poisonous herbicides in the Keys and any other waters that connect to Lake Tahoe -- a Tier 3 Outstanding National Resource Water. I oppose spending tens of millions of taxpayer dollars for the convenience of boat-owners at the Tahoe Keys. I join The Sierra Club Tahoe Area Group in defending the purity of Lake Tahoe.

Sincerely,

Judith Baker 1455 Laguna St. San Francisco, CA 94115 judith_baker@att.net (415) 518-4052

Dear Tahoe Regional Planning Agency,

Please try to avoid ruining Lake Tahoe with herbicides until you exhaust every means to rectify the situation. Thank you

I support Alternative AA1 of your Tahoe Keys Weeds Draft Environmental Impact Report.

The Tahoe Keys lagoons are an environmental disaster at Lake Tahoe. Proof of this are the infestations of aquatic invasive weeds now thriving there and the proposals to control these weeds with herbicides. These weeds are destroying Tahoe's legendary clarity and purity. Proposals to control them with herbicides only poisons the lake further.

I am absolutely opposed to any and all use of poisonous herbicides in the Keys and any other waters that connect to Lake Tahoe -- a Tier 3 Outstanding National Resource Water. I oppose spending tens of millions of taxpayer dollars for the convenience of boat-owners at the Tahoe Keys. I join The Sierra Club Tahoe Area Group in defending the purity of Lake Tahoe.

Sincerely,

Ka Higgins 14281 Prospect Avenue Tustin, CA 92780 karenh456@hotmail.com (714) 393-9352

From:	Kathleen Aberegg (kaaemail2@gmail.com) Sent You a Personal Message
To:	tahoekeysweeds@trpa.org
Subject:	[EXTERNAL] No weeds or herbicides for Lake Tahoe!
Date:	Saturday, August 8, 2020 1:21:40 PM

Dear Tahoe Regional Planning Agency,

Please do not put chemicals into the lake, making the problem worst than it is. Please find an alternative long-term **HE-42** solution.

I support Alternative AA1 of your Tahoe Keys Weeds Draft Environmental Impact Report.

The Tahoe Keys lagoons are an environmental disaster at Lake Tahoe. Proof of this are the infestations of aquatic invasive weeds now thriving there and the proposals to control these weeds with herbicides. These weeds are destroying Tahoe's legendary clarity and purity. Proposals to control them with herbicides only poisons the lake further.

I am absolutely opposed to any and all use of poisonous herbicides in the Keys and any other waters that connect to Lake Tahoe -- a Tier 3 Outstanding National Resource Water. I oppose spending tens of millions of taxpayer dollars for the convenience of boat-owners at the Tahoe Keys. I join The Sierra Club Tahoe Area Group in defending the purity of Lake Tahoe.

Sincerely,

Kathleen Aberegg 1034 Emerald Bay Road #226 South Lake Tahoe, CA 96150 kaaemail2@gmail.com (415) 370-4924

Dear Tahoe Regional Planning Agency,

We must perfect ways to protect what goes into Lake Tahoe A closed system needs special attention especially if it has allot of activity around it. We must keep this beautiful Pearl pristine for our future.

I support Alternative AA1 of your Tahoe Keys Weeds Draft Environmental Impact Report.

The Tahoe Keys lagoons are an environmental disaster at Lake Tahoe. Proof of this are the infestations of aquatic invasive weeds now thriving there and the proposals to control these weeds with herbicides. These weeds are destroying Tahoe's legendary clarity and purity. Proposals to control them with herbicides only poisons the lake further.

I am absolutely opposed to any and all use of poisonous herbicides in the Keys and any other waters that connect to Lake Tahoe -- a Tier 3 Outstanding National Resource Water. I oppose spending tens of millions of taxpayer dollars for the convenience of boat-owners at the Tahoe Keys. I join The Sierra Club Tahoe Area Group in defending the purity of Lake Tahoe.

Sincerely,

Keith Forrest 23411 Stagecoach Rd Volcano, CA 95689 forrest@volcano.net (209) 296-4095

Kelly Dewing Wedel (wedelathome@verizon.net) Sent You a Personal Message
tahoekeysweeds@trpa.org
[EXTERNAL] No weeds or herbicides for Lake Tahoe!
Sunday, August 9, 2020 10:58:46 AM

Dear Tahoe Regional Planning Agency,

Pesticides are dangerous. Stop the spread of invasive weeds in Lake Tahoe without the use of dangerous pesticides! They are other safer ways to take care of these invasive weeds. Look at the studies of the long term harm pesticides can do to our environment, in water and on land. Make the right choices for future generations.

I support Alternative AA1 of your Tahoe Keys Weeds Draft Environmental Impact Report.

The Tahoe Keys lagoons are an environmental disaster at Lake Tahoe. Proof of this are the infestations of aquatic invasive weeds now thriving there and the proposals to control these weeds with herbicides. These weeds are destroying Tahoe's legendary clarity and purity. Proposals to control them with herbicides only poisons the lake further.

I am absolutely opposed to any and all use of poisonous herbicides in the Keys and any other waters that connect to Lake Tahoe -- a Tier 3 Outstanding National Resource Water. I oppose spending tens of millions of taxpayer dollars for the convenience of boat-owners at the Tahoe Keys. I join The Sierra Club Tahoe Area Group in defending the purity of Lake Tahoe.

Sincerely,

Kelly Dewing Wedel 22414 Redbeam Ave Torrance, CA 90505 wedelathome@verizon.net (310) 540-5741

Dear Tahoe Regional Planning Agency,

As a homeowner in Tahoe Keys I have a personal interest in only using environmentally safe agents to control the invasive weeds that have been an ongoing problem since we built our house in 1978

I support Alternative AA1 of your Tahoe Keys Weeds Draft Environmental Impact Report.

The Tahoe Keys lagoons are an environmental disaster at Lake Tahoe. Proof of this are the infestations of aquatic invasive weeds now thriving there and the proposals to control these weeds with herbicides. These weeds are destroying Tahoe's legendary clarity and purity. Proposals to control them with herbicides only poisons the lake further.

I am absolutely opposed to any and all use of poisonous herbicides in the Keys and any other waters that connect to Lake Tahoe -- a Tier 3 Outstanding National Resource Water. I oppose spending tens of millions of taxpayer dollars for the convenience of boat-owners at the Tahoe Keys. I join The Sierra Club Tahoe Area Group in defending the purity of Lake Tahoe.

Sincerely,

Lainey Green PO Box 800 Shingle Springs , CA 95682 laineyis@comcast.net (530) 409-8259

Dear Tahoe Regional Planning Agency,

So important to keep as much toxic herbs as possible in such a rare pristine environment. **HE-45**

I support Alternative AA1 of your Tahoe Keys Weeds Draft Environmental Impact Report.

The Tahoe Keys lagoons are an environmental disaster at Lake Tahoe. Proof of this are the infestations of aquatic invasive weeds now thriving there and the proposals to control these weeds with herbicides. These weeds are destroying Tahoe's legendary clarity and purity. Proposals to control them with herbicides only poisons the lake further.

I am absolutely opposed to any and all use of poisonous herbicides in the Keys and any other waters that connect to Lake Tahoe -- a Tier 3 Outstanding National Resource Water. I oppose spending tens of millions of taxpayer dollars for the convenience of boat-owners at the Tahoe Keys. I join The Sierra Club Tahoe Area Group in defending the purity of Lake Tahoe.

Sincerely,

LAURA GORMLEY 10935 Fulton Wells Ave Santa Fe Springs , CA 90670 lauragormley@aol.com (213) 841-0089

Dear Tahoe Regional Planning Agency,

Lake Tahoe has long been an environmental jewel and a great revenue generator. Its clear water depends on not introducing pollutants. Tahoe Keys should try everything else first before resorting to herbicides that could affect water clarity and almost certainly will affect water quality for the aquatic creatures that live in it. Plus humans who swim in it.

I support Alternative AA1 of your Tahoe Keys Weeds Draft Environmental Impact Report.

The Tahoe Keys lagoons are an environmental disaster at Lake Tahoe. Proof of this are the infestations of aquatic invasive weeds now thriving there and the proposals to control these weeds with herbicides. These weeds are destroying Tahoe's legendary clarity and purity. Proposals to control them with herbicides only poisons the lake further.

I am absolutely opposed to any and all use of poisonous herbicides in the Keys and any other waters that connect to Lake Tahoe -- a Tier 3 Outstanding National Resource Water. I oppose spending tens of millions of taxpayer dollars for the convenience of boat-owners at the Tahoe Keys. I join The Sierra Club Tahoe Area Group in defending the purity of Lake Tahoe.

Sincerely,

Lesley Hunt 236 Warwick Dr. Walnut Creek, CA 94598 ldhunt@astound.net (925) 999-4444

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Lillian Miller at Sierra Club at core.help@sierraclub.org or (415) 977-5500.

HE-46

Dear Tahoe Regional Planning Agency,

I have recreated near beautiful Lake Tahoe. Applying herbicide to mitigate the weed problem in Lake Tahoe neglects to address the hydrological alteration that destroyed the wetland when Tahoe Key was built. Although the EPA approved the herbicide to be used, some herbicides approved by EPA have been revealed to be toxic. The herbicide application will have to be continued and reapplied; herbicides are not a cure and will escape into the main part of Lake Tahoe. Please investigate less damaging solutions to invasive plants?Perhaps altering the hydrology to mimic more natural wetlands.

I support Alternative AA1 of your Tahoe Keys Weeds Draft Environmental Impact Report.

The Tahoe Keys lagoons are an environmental disaster at Lake Tahoe. Proof of this are the infestations of aquatic invasive weeds now thriving there and the proposals to control these weeds with herbicides. These weeds are destroying Tahoe's legendary clarity and purity. Proposals to control them with herbicides only poisons the lake further.

I am absolutely opposed to any and all use of poisonous herbicides in the Keys and any other waters that connect to Lake Tahoe -- a Tier 3 Outstanding National Resource Water. I oppose spending tens of millions of taxpayer dollars for the convenience of boat-owners at the Tahoe Keys. I join The Sierra Club Tahoe Area Group in defending the purity of Lake Tahoe.

Sincerely,

Leslie Lihou 2436 Edgewater Dr. Santa Rosa, CA 95407 leslielihou@hotmail.com (707) 843-4344

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Lillian Miller at Sierra Club at core.help@sierraclub.org or (415) 977-5500.

HE-56

Dear Tahoe Regional Planning Agency,

I am the mother of a one year old baby, and I am terrified for her future if we do not take immediate and drastic action to protect the environment. Many plant species live within lakes and help to store carbon, which combats global warming.

I support Alternative AA1 of your Tahoe Keys Weeds Draft Environmental Impact Report.

The Tahoe Keys lagoons are an environmental disaster at Lake Tahoe. Proof of this are the infestations of aquatic invasive weeds now thriving there and the proposals to control these weeds with herbicides. These weeds are destroying Tahoe's legendary clarity and purity. Proposals to control them with herbicides only poisons the lake further.

I am absolutely opposed to any and all use of poisonous herbicides in the Keys and any other waters that connect to Lake Tahoe -- a Tier 3 Outstanding National Resource Water. I oppose spending tens of millions of taxpayer dollars for the convenience of boat-owners at the Tahoe Keys. I join The Sierra Club Tahoe Area Group in defending the purity of Lake Tahoe.

Sincerely,

Leslie Rader 10214 Quill Ave Sunland, CA 91040 lesliewolfhard@gmail.com (747) 258-2259

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Lillian Miller at Sierra Club at core.help@sierraclub.org or (415) 977-5500.

GHG-1

Dear Tahoe Regional Planning Agency,

I have visited and loved Lake Tahoe for many years. It is a jewel in the crown of our nation. Each one of us is a steward of this precious jewel. Please do not shine a portion of this jewel only to crush the rest. There are solutions, yes, they may take longer but ultimately we all love and care for this beautiful lake and want to enjoy it today and long into the future. Think wisely, take careful action that protects the lake for our children's children. Thank you.

I support Alternative AA1 of your Tahoe Keys Weeds Draft Environmental Impact Report.

The Tahoe Keys lagoons are an environmental disaster at Lake Tahoe. Proof of this are the infestations of aquatic invasive weeds now thriving there and the proposals to control these weeds with herbicides. These weeds are destroying Tahoe's legendary clarity and purity. Proposals to control them with herbicides only poisons the lake further.

I am absolutely opposed to any and all use of poisonous herbicides in the Keys and any other waters that connect to Lake Tahoe -- a Tier 3 Outstanding National Resource Water. I oppose spending tens of millions of taxpayer dollars for the convenience of boat-owners at the Tahoe Keys. I join The Sierra Club Tahoe Area Group in defending the purity of Lake Tahoe.

Sincerely,

Lisa Reutter 1037 Channing Way Berkeley, CA 94710 visiondream54@gmail.com (510) 684-3427

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Lillian Miller at Sierra Club at core.help@sierraclub.org or (415) 977-5500.

GEN-1

From:	Margaret Eadington
То:	tahoekeysweeds@trpa.org
Subject:	[EXTERNAL] Opposition to "Proposed Project"; Support for Alternative AA1 for Tahoe Keys
Date:	Friday, August 7, 2020 5:04:07 PM

RE: Draft Environmental Impact Statement and Environmental Report titled "Tahoe Keys Lagoons Aquatic Weed Control Methods Test"; Opposition to "Proposed Project"; Support for Alternative AA1 for Tahoe Keys

Hello,

I've lived at Lake Tahoe since 1976. It is well recognized the problem caused by the loss of the upper Truckee River wetlands due to construction of the Keys Marina was a huge mistake. Since then, over the last half a century there has been a huge increase of knowledge and public understanding regarding how to protect and preserve our beautiful jewel. Along with this continually growing body of knowledge (thank you Tahoe Environmental Research Center and Dr. Goldman) there has also been an enormous investment of state and federal public tax dollars to help preserve the clarity of Lake Tahoe based on this research and knowledge.

Additionally, we who love the lake and live here have all made personal sacrifices by accepting limitations of development rights on our property, paying additional taxes to build a sewer systems, accepting a reduced number of buoys and living under a bistate regulatory authority tasked to protect and preserve the lake.

After all these years of study and research and massive public and private investments in the lake's clarity I have to strongly object to the "Proposed Project" in the DEIS/DEIR to use herbicides to control the weeds in the Keys lagoons. Our lake is worth seeking new and creative non-chemical ways to eliminate the weed infestation. This proposal goes against the historical commitment made long ago by Governors Laxault and Reagan to create new solutions to protect and preserve one of our nations most treasured resources. We're steering off the course they set with this proposal.

Please support AA1.

Sincerely, Margaret Eadington Crystal Bay, NV HE-48

From:	Marijane Poulton (marijanep@hotmail.com) Sent You a Personal Message
To:	tahoekeysweeds@trpa.org
Subject:	[EXTERNAL] No weeds or herbicides for Lake Tahoe!
Date:	Sunday, August 9, 2020 6:50:36 PM

Dear Tahoe Regional Planning Agency,

I grew up in El Dorado County in the 60's and 70's. We traveled to the Tahoe area for high school athletic competitions, and it was always a favorite destination (except for the ski team, where South Tahoe always dominated). The fabled blue of the Lake, due to the clarity and purity of the water, was always a thrill to see in person. Tahoe Keys was, even at the time, having trouble with water quality. The development was too crowded to keep pollutants out of the water, mostly a sewage issue back then. I'm sure this has contributed to the growth of weeds in the canals over the decades. Please don't pollute the entire lake with herbicides, as there is no way to control where the chemicals end up. Manual elimination will be costly and take a long time, but this technique should have been used all along. The residents of this exclusive housing development should either contribute funding or labor to the cause.

I support Alternative AA1 of your Tahoe Keys Weeds Draft Environmental Impact Report.

The Tahoe Keys lagoons are an environmental disaster at Lake Tahoe. Proof of this are the infestations of aquatic invasive weeds now thriving there and the proposals to control these weeds with herbicides. These weeds are destroying Tahoe's legendary clarity and purity. Proposals to control them with herbicides only poisons the lake further.

I am absolutely opposed to any and all use of poisonous herbicides in the Keys and any other waters that connect to Lake Tahoe -- a Tier 3 Outstanding National Resource Water. I oppose spending tens of millions of taxpayer dollars for the convenience of boat-owners at the Tahoe Keys. I join The Sierra Club Tahoe Area Group in defending the purity of Lake Tahoe.

Sincerely,

Marijane Poulton PO BOX 649 Trinidad, CA 95570 marijanep@hotmail.com (707) 677-9001

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Lillian Miller at Sierra Club at core.help@sierraclub.org or (415) 977-5500.

HE-49

From:	Marilyn Jasper (mjasper2@gmail.com) Sent You a Personal Message
To:	tahoekeysweeds@trpa.org
Subject:	[EXTERNAL] No weeds or herbicides for Lake Tahoe!
Date:	Sunday, August 9, 2020 5:26:08 PM

Dear Tahoe Regional Planning Agency,

It appears Tahoe Keys (TK) may have created or exacerbated the invasive aquatic weed problems. As long as TK activities continue with negative impacts to Lake Tahoe (landscaping applications of chemicals, boating, etc.), eradication(s) either via herbicide or manual harvesting will not be permanent, and both can have serious collateral damage. Different herbicides and/or harvesting operations may have to be continually conducted, each with its own residual impacts.

The top concern, or highest priority, should always be Lake Tahoe's water quality, not residential landscaping or boating quality. In addition to what has been suggested by the Sierra Club Tahoe Area Group, a strict mandatory boat inspection or a complete ban on boats from Tahoe Keys entering the lake (physical barrier) should be considered until the infestation is completely resolved.

I support Alternative AA1 of your Tahoe Keys Weeds Draft Environmental Impact Report.

The Tahoe Keys lagoons are an environmental disaster at Lake Tahoe. Proof of this are the infestations of aquatic invasive weeds now thriving there and the proposals to control these weeds with herbicides. These weeds are destroying Tahoe's legendary clarity and purity. Proposals to control them with herbicides only poisons the lake further.

I am absolutely opposed to any and all use of poisonous herbicides in the Keys and any other waters that connect to Lake Tahoe -- a Tier 3 Outstanding National Resource Water. I oppose spending tens of millions of taxpayer dollars for the convenience of boat-owners at the Tahoe Keys. I join The Sierra Club Tahoe Area Group in defending the purity of Lake Tahoe.

Sincerely,

Marilyn Jasper 3921 Dawn Dr Loomis, CA 95650 mjasper2@gmail.com (916) 774-4433

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Lillian Miller at Sierra Club at core.help@sierraclub.org or (415) 977-5500.

AWM-5

Dear Tahoe Regional Planning Agency,

Lake Tahoe is the one pure, clean large lake in the country that is left. Weeds will choke it, pesticides will kill it. Don't let that happen!!! Keep Tahoe clean. Keep our earth living. It's the only one we have or will ever have. Marjorie Lutz 94533

I support Alternative AA1 of your Tahoe Keys Weeds Draft Environmental Impact Report.

The Tahoe Keys lagoons are an environmental disaster at Lake Tahoe. Proof of this are the infestations of aquatic invasive weeds now thriving there and the proposals to control these weeds with herbicides. These weeds are destroying Tahoe's legendary clarity and purity. Proposals to control them with herbicides only poisons the lake further.

I am absolutely opposed to any and all use of poisonous herbicides in the Keys and any other waters that connect to Lake Tahoe -- a Tier 3 Outstanding National Resource Water. I oppose spending tens of millions of taxpayer dollars for the convenience of boat-owners at the Tahoe Keys. I join The Sierra Club Tahoe Area Group in defending the purity of Lake Tahoe.

Sincerely,

Marjorie Lutz 2866 Sunburst Dr Fairfield, CA 94533 marjlutz@gmail.com (707) 419-4825

Dear Tahoe Regional Planning Agency,

We must preserve the beauty and integrity of Lake Tahoe. Please stop the use of toxic chemicals before its too late. Non-toxic methods must be used and restoration of the natural wetlands needs to be restored to protect Lake Tahoe one of the most majestic of our lakes.

I support Alternative AA1 of your Tahoe Keys Weeds Draft Environmental Impact Report.

The Tahoe Keys lagoons are an environmental disaster at Lake Tahoe. Proof of this are the infestations of aquatic invasive weeds now thriving there and the proposals to control these weeds with herbicides. These weeds are destroying Tahoe's legendary clarity and purity. Proposals to control them with herbicides only poisons the lake further.

I am absolutely opposed to any and all use of poisonous herbicides in the Keys and any other waters that connect to Lake Tahoe -- a Tier 3 Outstanding National Resource Water. I oppose spending tens of millions of taxpayer dollars for the convenience of boat-owners at the Tahoe Keys. I join The Sierra Club Tahoe Area Group in defending the purity of Lake Tahoe.

Sincerely,

Marlene Massetti 7893 Barn Hollow Court Dublin, CA 94568 none@sbcglobal.net (510) 415-4342

From:	MARY ALICE PISANI (mapisani46@gmail.com) Sent You a Personal Message
To:	tahoekeysweeds@trpa.org
Subject:	[EXTERNAL] No weeds or herbicides for Lake Tahoe!
Date:	Friday, August 7, 2020 10:09:50 PM

Dear Tahoe Regional Planning Agency,

I visit Lake Tahoe frequently to hike and enjoy the lake and do not want herbicides to be used to control weeds which will threaten the lake's purity. Instead, efforts should be undertaken to restore the wetlands that cleansed the lake naturally before development of the Tahoe Keys. Please continue manual removal of weeds instead.

I support Alternative AA1 of your Tahoe Keys Weeds Draft Environmental Impact Report.

The Tahoe Keys lagoons are an environmental disaster at Lake Tahoe. Proof of this are the infestations of aquatic invasive weeds now thriving there and the proposals to control these weeds with herbicides. These weeds are destroying Tahoe's legendary clarity and purity. Proposals to control them with herbicides only poisons the lake further.

I am absolutely opposed to any and all use of poisonous herbicides in the Keys and any other waters that connect to Lake Tahoe -- a Tier 3 Outstanding National Resource Water. I oppose spending tens of millions of taxpayer dollars for the convenience of boat-owners at the Tahoe Keys. I join The Sierra Club Tahoe Area Group in defending the purity of Lake Tahoe.

Sincerely,

MARY ALICE PISANI 3699 Cashill Blvd Reno, NV 89509 mapisani46@gmail.com (775) 750-5367

Dear Tahoe Regional Planning Agency,

I have wanted to visit lake Tahoe ever since hearing stories of its stunning clear blue color during my childhood in distant Virginia. Now that I live in California, I plan to visit as soon as the COVID pandemic is over. When I finally get there, I don't want the lake, so famous for its clarity and purity, to be tainted with herbicides.

I, therefore, urge the Regional Planning Agency and the Water Quality Board to proceed with weed cleanup in the Tahoe Keys development by approving removal of the weeds physically from the lagoons -- and not by approving the use of herbicides.

I support Alternative AA1 of your Tahoe Keys Weeds Draft Environmental Impact Report.

The Tahoe Keys lagoons are an environmental disaster at Lake Tahoe. Proof of this are the infestations of aquatic invasive weeds now thriving there and the proposals to control these weeds with herbicides. These weeds are destroying Tahoe's legendary clarity and purity. Proposals to control them with herbicides only poisons the lake further.

I am absolutely opposed to any and all use of poisonous herbicides in the Keys and any other waters that connect to Lake Tahoe -- a Tier 3 Outstanding National Resource Water. I oppose spending tens of millions of taxpayer dollars for the convenience of boat-owners at the Tahoe Keys. I join The Sierra Club Tahoe Area Group in defending the purity of Lake Tahoe.

Sincerely,

Mary Ames 30657 Sky Terrace Drive Temecula, CA 92592 amesink@earthlink.net (951) 506-0274

Dear Tahoe Regional Planning Agency,

Tahoe is the jewel in the crown of the Sierras. Poison applications do not belong there ever.

HE-60

I support Alternative AA1 of your Tahoe Keys Weeds Draft Environmental Impact Report.

The Tahoe Keys lagoons are an environmental disaster at Lake Tahoe. Proof of this are the infestations of aquatic invasive weeds now thriving there and the proposals to control these weeds with herbicides. These weeds are destroying Tahoe's legendary clarity and purity. Proposals to control them with herbicides only poisons the lake further.

I am absolutely opposed to any and all use of poisonous herbicides in the Keys and any other waters that connect to Lake Tahoe -- a Tier 3 Outstanding National Resource Water. I oppose spending tens of millions of taxpayer dollars for the convenience of boat-owners at the Tahoe Keys. I join The Sierra Club Tahoe Area Group in defending the purity of Lake Tahoe.

Sincerely,

Mary Doane 1306 Amesti Road Watsonville, CA 95076 murry@cruzio.com (831) 724-1597

From:	Matthew Brockhaus (mdbrockhaus+lists@gmail.com) Sent You a Personal Message
То:	tahoekeysweeds@trpa.org
Subject:	[EXTERNAL] No weeds or herbicides for Lake Tahoe!
Date:	Friday, August 14, 2020 3:37:19 PM

Dear Tahoe Regional Planning Agency,

Please do not allow harmful chemicals to pollute this beautiful, pristine lake. It is an amazing oasis, and should be protected and preserved. Not polluted like one more neglected waterway.

I support Alternative AA1 of your Tahoe Keys Weeds Draft Environmental Impact Report.

The Tahoe Keys lagoons are an environmental disaster at Lake Tahoe. Proof of this are the infestations of aquatic invasive weeds now thriving there and the proposals to control these weeds with herbicides. These weeds are destroying Tahoe's legendary clarity and purity. Proposals to control them with herbicides only poisons the lake further.

I am absolutely opposed to any and all use of poisonous herbicides in the Keys and any other waters that connect to Lake Tahoe -- a Tier 3 Outstanding National Resource Water. I oppose spending tens of millions of taxpayer dollars for the convenience of boat-owners at the Tahoe Keys. I join The Sierra Club Tahoe Area Group in defending the purity of Lake Tahoe.

Sincerely,

Matthew Brockhaus 58 Miramonte Drive Moraga, CA 94556 mdbrockhaus+lists@gmail.com (513) 505-2053

Dear Tahoe Regional Planning Agency,

As a professional ecologist, I know that sustainable solutions are always available. Let?s do the right thing for Lake **GEN-49** Tahoe and help preserve its unique and valuable ecosystem.

I support Alternative AA1 of your Tahoe Keys Weeds Draft Environmental Impact Report.

The Tahoe Keys lagoons are an environmental disaster at Lake Tahoe. Proof of this are the infestations of aquatic invasive weeds now thriving there and the proposals to control these weeds with herbicides. These weeds are destroying Tahoe's legendary clarity and purity. Proposals to control them with herbicides only poisons the lake further.

I am absolutely opposed to any and all use of poisonous herbicides in the Keys and any other waters that connect to Lake Tahoe -- a Tier 3 Outstanding National Resource Water. I oppose spending tens of millions of taxpayer dollars for the convenience of boat-owners at the Tahoe Keys. I join The Sierra Club Tahoe Area Group in defending the purity of Lake Tahoe.

Sincerely,

Melanie Truan 2402 Amapola Dr Davis, CA 95616 mltruan@ucdavis.edu (530) 867-3610

Dear Tahoe Regional Planning Agency,

Keep Tahoe Blue herbicides near one of Americas most iconic lakes just makes no sense!

HE-61

I support Alternative AA1 of your Tahoe Keys Weeds Draft Environmental Impact Report.

The Tahoe Keys lagoons are an environmental disaster at Lake Tahoe. Proof of this are the infestations of aquatic invasive weeds now thriving there and the proposals to control these weeds with herbicides. These weeds are destroying Tahoe's legendary clarity and purity. Proposals to control them with herbicides only poisons the lake further.

I am absolutely opposed to any and all use of poisonous herbicides in the Keys and any other waters that connect to Lake Tahoe -- a Tier 3 Outstanding National Resource Water. I oppose spending tens of millions of taxpayer dollars for the convenience of boat-owners at the Tahoe Keys. I join The Sierra Club Tahoe Area Group in defending the purity of Lake Tahoe.

Sincerely,

Michael Cooke 221 Locust Ave,, San rafael SAN RAFAEL, CA 94901 mike@ohwmedia.com (415) 497-4524

Dear Tahoe Regional Planning Agency,

It's difficult to find any water that is not contaminated. Groundwater, treated water, surface, marine waters, all have pollutants. Please do not contaminate the crown jewel of lakes, Tahoe. Economically, ecologically and morally, this act would fail.

I support Alternative AA1 of your Tahoe Keys Weeds Draft Environmental Impact Report.

The Tahoe Keys lagoons are an environmental disaster at Lake Tahoe. Proof of this are the infestations of aquatic invasive weeds now thriving there and the proposals to control these weeds with herbicides. These weeds are destroying Tahoe's legendary clarity and purity. Proposals to control them with herbicides only poisons the lake further.

I am absolutely opposed to any and all use of poisonous herbicides in the Keys and any other waters that connect to Lake Tahoe -- a Tier 3 Outstanding National Resource Water. I oppose spending tens of millions of taxpayer dollars for the convenience of boat-owners at the Tahoe Keys. I join The Sierra Club Tahoe Area Group in defending the purity of Lake Tahoe.

Sincerely,

Pam Nelson 38723 Highway 79 Warner Springs, CA 92086 pamela05n@yahoo.com (951) 767-2324

From:	Pat Tilley (ftilley2@comcast.net) Sent You a Personal Message
То:	tahoekeysweeds@trpa.org
Subject:	[EXTERNAL] No weeds or herbicides for Lake Tahoe!
Date:	Sunday, August 9, 2020 5:24:53 PM

Dear Tahoe Regional Planning Agency,

The beauty of Lake Tahoe has been part of my life since the late 1940s. My parents lived at SLT in the 60s and 70s when the Keyes were being developed and fought against the plan due to the degradation of the Marsh and the population impact.

I believe it is necessary to restore the Marsh as much as possible and preserve the clarity of the lake by eliminating fertilizer use in the Keyes, closing most of the lagoons to boats, and aggressively pursuing the non-herbicidal methods of weed control to kill the invasive weeds. I recognize these suggestions create other challenges--what to do with the boats now "parked at home', for example, but "the greater good" for Lake Tahoe is paramount. Aquatic herbicides were banned for good reasons years ago and those reasons still exist. The CAUSE of the **HE-63** problem of invasive weeds needs to be fixed and the function of the Marsh needs to be restored to help save the beauty of a national treasure.

I support Alternative AA1 of your Tahoe Keys Weeds Draft Environmental Impact Report.

The Tahoe Keys lagoons are an environmental disaster at Lake Tahoe. Proof of this are the infestations of aquatic invasive weeds now thriving there and the proposals to control these weeds with herbicides. These weeds are destroying Tahoe's legendary clarity and purity. Proposals to control them with herbicides only poisons the lake further.

I am absolutely opposed to any and all use of poisonous herbicides in the Keys and any other waters that connect to Lake Tahoe -- a Tier 3 Outstanding National Resource Water. I oppose spending tens of millions of taxpayer dollars for the convenience of boat-owners at the Tahoe Keys. I join The Sierra Club Tahoe Area Group in defending the purity of Lake Tahoe.

Sincerely,

Pat Tillev 29850 Sherwood Road Fort Bragg, CA 95437 ftilley2@comcast.net (707) 964-0690

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Lillian Miller at Sierra Club at core.help@sierraclub.org or (415) 977-5500.

I-82

From:	Patricia Albright (jessiewhitewolf@gmail.com) Sent You a Personal Message
To:	tahoekeysweeds@trpa.org
Subject:	[EXTERNAL] No weeds or herbicides for Lake Tahoe!
Date:	Sunday, August 9, 2020 1:44:03 PM

Dear Tahoe Regional Planning Agency,

Because Tahoe is one of the world's most beautiful and valuable places. The Keys should never have been built in the first place. They were told that by scientists back then. The only wetlands in the lake, a natural filtration system and GREED won. They built this multi million dollar houses and now they want to further damage her. STOP IT. STOP IT RIGHT NOW!!!!!!

GEN-9

I support Alternative AA1 of your Tahoe Keys Weeds Draft Environmental Impact Report.

The Tahoe Keys lagoons are an environmental disaster at Lake Tahoe. Proof of this are the infestations of aquatic invasive weeds now thriving there and the proposals to control these weeds with herbicides. These weeds are destroying Tahoe's legendary clarity and purity. Proposals to control them with herbicides only poisons the lake further.

I am absolutely opposed to any and all use of poisonous herbicides in the Keys and any other waters that connect to Lake Tahoe -- a Tier 3 Outstanding National Resource Water. I oppose spending tens of millions of taxpayer dollars for the convenience of boat-owners at the Tahoe Keys. I join The Sierra Club Tahoe Area Group in defending the purity of Lake Tahoe.

Sincerely,

Patricia Albright 1200 Blue Ridge Dr Boulder Creek, CA 95006 jessiewhitewolf@gmail.com (619) 932-1258

Dear Tahoe Regional Planning Agency,

We must keep the Lake pure for future generations, as well as our own. Environmentally sound measures must be done to keep it that way. Take the long term approach, which guarantees success!

I support Alternative AA1 of your Tahoe Keys Weeds Draft Environmental Impact Report.

The Tahoe Keys lagoons are an environmental disaster at Lake Tahoe. Proof of this are the infestations of aquatic invasive weeds now thriving there and the proposals to control these weeds with herbicides. These weeds are destroying Tahoe's legendary clarity and purity. Proposals to control them with herbicides only poisons the lake further.

I am absolutely opposed to any and all use of poisonous herbicides in the Keys and any other waters that connect to Lake Tahoe -- a Tier 3 Outstanding National Resource Water. I oppose spending tens of millions of taxpayer dollars for the convenience of boat-owners at the Tahoe Keys. I join The Sierra Club Tahoe Area Group in defending the purity of Lake Tahoe.

Sincerely,

Patricia Williams P.O. Box 893 Rio Vista, CA 94571 patlou1931@gmail.com (707) 374-2848

Dear Tahoe Regional Planning Agency,

Lake Tahoe, a former residence of mine, is one of the most bodies of water we have...Please do not use ANY PESTICIDES in and around the Lake..Man created this problem by over developing the area...maybe it could be 'mined' for fertilizer?..thank you.

Paul Maysonave (we spent many summer vacations at the lake)

I support Alternative AA1 of your Tahoe Keys Weeds Draft Environmental Impact Report.

The Tahoe Keys lagoons are an environmental disaster at Lake Tahoe. Proof of this are the infestations of aquatic invasive weeds now thriving there and the proposals to control these weeds with herbicides. These weeds are destroying Tahoe's legendary clarity and purity. Proposals to control them with herbicides only poisons the lake further.

I am absolutely opposed to any and all use of poisonous herbicides in the Keys and any other waters that connect to Lake Tahoe -- a Tier 3 Outstanding National Resource Water. I oppose spending tens of millions of taxpayer dollars for the convenience of boat-owners at the Tahoe Keys. I join The Sierra Club Tahoe Area Group in defending the purity of Lake Tahoe.

Sincerely,

Paul Maysonave 242 Del Rio Paseo Sonoma, CA 95476 sonomaman@sbcglobal.net (707) 953-6308

Dear Tahoe Regional Planning Agency,

Don't make matters worse by allowing toxic and polluting herbicides.

HE-65

I support Alternative AA1 of your Tahoe Keys Weeds Draft Environmental Impact Report.

The Tahoe Keys lagoons are an environmental disaster at Lake Tahoe. Proof of this are the infestations of aquatic invasive weeds now thriving there and the proposals to control these weeds with herbicides. These weeds are destroying Tahoe's legendary clarity and purity. Proposals to control them with herbicides only poisons the lake further.

I am absolutely opposed to any and all use of poisonous herbicides in the Keys and any other waters that connect to Lake Tahoe -- a Tier 3 Outstanding National Resource Water. I oppose spending tens of millions of taxpayer dollars for the convenience of boat-owners at the Tahoe Keys. I join The Sierra Club Tahoe Area Group in defending the purity of Lake Tahoe.

Sincerely,

Penelope Ward 1401 Bonnell Drive Topanga, CA 90290 penelope.ward@verizon.net (310) 455-3215

Dear Tahoe Regional Planning Agency,

If we protect this lake, we would be protecting our own selves from more toxins. It will be one less thing that is toxic in our part of the Earth. We would be ensuring a beautiful and pure treasure that we and our children could partake of. Please, love yourselves and each other enough to say no to harmful toxins going in the lake.

I support Alternative AA1 of your Tahoe Keys Weeds Draft Environmental Impact Report.

The Tahoe Keys lagoons are an environmental disaster at Lake Tahoe. Proof of this are the infestations of aquatic invasive weeds now thriving there and the proposals to control these weeds with herbicides. These weeds are destroying Tahoe's legendary clarity and purity. Proposals to control them with herbicides only poisons the lake further.

I am absolutely opposed to any and all use of poisonous herbicides in the Keys and any other waters that connect to Lake Tahoe -- a Tier 3 Outstanding National Resource Water. I oppose spending tens of millions of taxpayer dollars for the convenience of boat-owners at the Tahoe Keys. I join The Sierra Club Tahoe Area Group in defending the purity of Lake Tahoe.

Sincerely,

Phoebe Diaz 12228 Monte Vista Ave Chino, CA 91710 phoebe.diba@yahoo.com (626) 383-7074

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Lillian Miller at Sierra Club at core.help@sierraclub.org or (415) 977-5500.

HE-66

Dear Tahoe Regional Planning Agency,

Lake Tahoe is the jewel of the Sierra. Can't we leave it alone without wrecking it with herbicides and weeds?

I support Alternative AA1 of your Tahoe Keys Weeds Draft Environmental Impact Report.

The Tahoe Keys lagoons are an environmental disaster at Lake Tahoe. Proof of this are the infestations of aquatic invasive weeds now thriving there and the proposals to control these weeds with herbicides. These weeds are destroying Tahoe's legendary clarity and purity. Proposals to control them with herbicides only poisons the lake further.

I am absolutely opposed to any and all use of poisonous herbicides in the Keys and any other waters that connect to Lake Tahoe -- a Tier 3 Outstanding National Resource Water. I oppose spending tens of millions of taxpayer dollars for the convenience of boat-owners at the Tahoe Keys. I join The Sierra Club Tahoe Area Group in defending the purity of Lake Tahoe.

Sincerely,

richard angell 12217 cascade way nevada city, CA 95959 barry@angells.org (530) 477-8103

From:	Richard Hillix-Di Santo (rmd6449@yahoo.com) Sent You a Personal Message
То:	tahoekeysweeds@trpa.org
Subject:	[EXTERNAL] No weeds or herbicides for Lake Tahoe!
Date:	Sunday, August 9, 2020 3:45:53 PM

Dear Tahoe Regional Planning Agency,

This matters to me because I spent my 1986 honeymoon, and many subsequent summers, in Lake Tahoe. The clarity and beauty of the Lake are natural wonders that need to be preserved for future generations. Using herbicides, which contradicts the Tahoe Keys Weeds Draft Environmental Impact Report recommendation of Alternative AA1, lacks commonsense and a sense of our stewardship of Lake Tahoe.

I support Alternative AA1 of your Tahoe Keys Weeds Draft Environmental Impact Report.

The Tahoe Keys lagoons are an environmental disaster at Lake Tahoe. Proof of this are the infestations of aquatic invasive weeds now thriving there and the proposals to control these weeds with herbicides. These weeds are destroying Tahoe's legendary clarity and purity. Proposals to control them with herbicides only poisons the lake further.

I am absolutely opposed to any and all use of poisonous herbicides in the Keys and any other waters that connect to Lake Tahoe -- a Tier 3 Outstanding National Resource Water. I oppose spending tens of millions of taxpayer dollars for the convenience of boat-owners at the Tahoe Keys. I join The Sierra Club Tahoe Area Group in defending the purity of Lake Tahoe.

Sincerely,

Richard Hillix-Di Santo 3814 Lake Circle Drive Fallbrook, CA 92028 rmd6449@yahoo.com (760) 518-8350

Dear Tahoe Regional Planning Agency,

Along with many Californians and international visitors, I visit Lake Tahoe several times each year and treasure the natural ecosystem we have preserved. We should continue to preserve natural, non-chemical approaches to addressing problems rather than this proposed solution using herbicides.

I support Alternative AA1 of your Tahoe Keys Weeds Draft Environmental Impact Report.

The Tahoe Keys lagoons are an environmental disaster at Lake Tahoe. Proof of this are the infestations of aquatic invasive weeds now thriving there and the proposals to control these weeds with herbicides. These weeds are destroying Tahoe's legendary clarity and purity. Proposals to control them with herbicides only poisons the lake further.

I am absolutely opposed to any and all use of poisonous herbicides in the Keys and any other waters that connect to Lake Tahoe -- a Tier 3 Outstanding National Resource Water. I oppose spending tens of millions of taxpayer dollars for the convenience of boat-owners at the Tahoe Keys. I join The Sierra Club Tahoe Area Group in defending the purity of Lake Tahoe.

Sincerely,

Rick Gaston 2939 Millsbrae Ave Oakland, CA 94605 rgaston5@yahoo.com (510) 455-0827

Dear Tahoe Regional Planning Agency,

As a lifelong coastal, rural northern Californian and one of your 39,000,000 employers? I trust that we agree? Lake **GEN-11** Tahoe remains a unique ecosystem.

I support Alternative AA1 and the Sierra Club Tahoe Area Group in defending the purity of Lake Tahoe.

With every good intention.

I support Alternative AA1 of your Tahoe Keys Weeds Draft Environmental Impact Report.

The Tahoe Keys lagoons are an environmental disaster at Lake Tahoe. Proof of this are the infestations of aquatic invasive weeds now thriving there and the proposals to control these weeds with herbicides. These weeds are destroying Tahoe's legendary clarity and purity. Proposals to control them with herbicides only poisons the lake further.

I am absolutely opposed to any and all use of poisonous herbicides in the Keys and any other waters that connect to Lake Tahoe -- a Tier 3 Outstanding National Resource Water. I oppose spending tens of millions of taxpayer dollars for the convenience of boat-owners at the Tahoe Keys. I join The Sierra Club Tahoe Area Group in defending the purity of Lake Tahoe.

Sincerely,

Rita A 1461 M Arcata, CA 95521 ritaepa@gmail.com (555) 555-5555

Dear Tahoe Regional Planning Agency,

I live in the keys and want a different method other than Herbicides.

HE-72

I support Alternative AA1 of your Tahoe Keys Weeds Draft Environmental Impact Report.

The Tahoe Keys lagoons are an environmental disaster at Lake Tahoe. Proof of this are the infestations of aquatic invasive weeds now thriving there and the proposals to control these weeds with herbicides. These weeds are destroying Tahoe's legendary clarity and purity. Proposals to control them with herbicides only poisons the lake further.

I am absolutely opposed to any and all use of poisonous herbicides in the Keys and any other waters that connect to Lake Tahoe -- a Tier 3 Outstanding National Resource Water. I oppose spending tens of millions of taxpayer dollars for the convenience of boat-owners at the Tahoe Keys. I join The Sierra Club Tahoe Area Group in defending the purity of Lake Tahoe.

Sincerely,

Russ Dahler 1944 Venice Dr. So Lake Tahoe, CA 96150 russdahl557@hotmail.com (559) 732-1505

Dear Tahoe Regional Planning Agency,

Lake Tahoe is one of California's natural treasures with its clear and pure waters. It is a place of refuge to enjoy nature and enjoy wildlife. It is not the place to use poisonous herbicides to kill aquatic weeds. All non-chemical methods must be exhausted before poisoning Lake Tahoe with herbicides. A critical step would be to restore the natural wetlands that never should have been destroyed in the first place.

I support Alternative AA1 of your Tahoe Keys Weeds Draft Environmental Impact Report.

The Tahoe Keys lagoons are an environmental disaster at Lake Tahoe. Proof of this are the infestations of aquatic invasive weeds now thriving there and the proposals to control these weeds with herbicides. These weeds are destroying Tahoe's legendary clarity and purity. Proposals to control them with herbicides only poisons the lake further.

I am absolutely opposed to any and all use of poisonous herbicides in the Keys and any other waters that connect to Lake Tahoe -- a Tier 3 Outstanding National Resource Water. I oppose spending tens of millions of taxpayer dollars for the convenience of boat-owners at the Tahoe Keys. I join The Sierra Club Tahoe Area Group in defending the purity of Lake Tahoe.

Sincerely,

Sally Maier 2519 8th St Livermore, CA 94550 tsally2@comcast.net (925) 455-5509

Dear Tahoe Regional Planning Agency,

It is our responsibility to take care of our national treasure- Lake Tahoe. While perhaps unknown at the time, the Tahoe Keys was an irresponsible development in the first place. That they now have invasive weeds is no surprisewhen you interfere with nature, it yields poor results. Tahoe Keys must do better. Their private community that so loves our shared treasure must take care of it properly. Herbicides are toxic, cancer causing, and deadly to native species as well. This must be avoided at all cost. No herbicides!!

Thank you,

Sarah Mahoney

I support Alternative AA1 of your Tahoe Keys Weeds Draft Environmental Impact Report.

The Tahoe Keys lagoons are an environmental disaster at Lake Tahoe. Proof of this are the infestations of aquatic invasive weeds now thriving there and the proposals to control these weeds with herbicides. These weeds are destroying Tahoe's legendary clarity and purity. Proposals to control them with herbicides only poisons the lake further.

I am absolutely opposed to any and all use of poisonous herbicides in the Keys and any other waters that connect to Lake Tahoe -- a Tier 3 Outstanding National Resource Water. I oppose spending tens of millions of taxpayer dollars for the convenience of boat-owners at the Tahoe Keys. I join The Sierra Club Tahoe Area Group in defending the purity of Lake Tahoe.

Sincerely,

Sarah Mahoney 440 Squaw Peak Rd Olympic Valley, CA 96146 sarahm@me.com (802) 777-4457

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Lillian Miller at Sierra Club at core.help@sierraclub.org or (415) 977-5500.

HE-74

Dear Tahoe Regional Planning Agency,

Instead of using chemicals, even more natural options to kill weeds, restore the Tahoe lake wetlands by removing invasive development. -Chickasaw tribe citizen

I support Alternative AA1 of your Tahoe Keys Weeds Draft Environmental Impact Report.

The Tahoe Keys lagoons are an environmental disaster at Lake Tahoe. Proof of this are the infestations of aquatic invasive weeds now thriving there and the proposals to control these weeds with herbicides. These weeds are destroying Tahoe's legendary clarity and purity. Proposals to control them with herbicides only poisons the lake further.

I am absolutely opposed to any and all use of poisonous herbicides in the Keys and any other waters that connect to Lake Tahoe -- a Tier 3 Outstanding National Resource Water. I oppose spending tens of millions of taxpayer dollars for the convenience of boat-owners at the Tahoe Keys. I join The Sierra Club Tahoe Area Group in defending the purity of Lake Tahoe.

Sincerely,

Shana Van Meter PO Box 16904 Irvine, CA 92623 shanarvm@hotmail.com (949) 294-1361

Dear Tahoe Regional Planning Agency,

There are other proven non toxic way to remove the weeds

| HE-76

I support Alternative AA1 of your Tahoe Keys Weeds Draft Environmental Impact Report.

The Tahoe Keys lagoons are an environmental disaster at Lake Tahoe. Proof of this are the infestations of aquatic invasive weeds now thriving there and the proposals to control these weeds with herbicides. These weeds are destroying Tahoe's legendary clarity and purity. Proposals to control them with herbicides only poisons the lake further.

I am absolutely opposed to any and all use of poisonous herbicides in the Keys and any other waters that connect to Lake Tahoe -- a Tier 3 Outstanding National Resource Water. I oppose spending tens of millions of taxpayer dollars for the convenience of boat-owners at the Tahoe Keys. I join The Sierra Club Tahoe Area Group in defending the purity of Lake Tahoe.

Sincerely,

Sharon Sullivan 1150 W 2nd Street Reno, NV 89503 tahoeshazza@gmail.com (530) 721-3522

Dear Tahoe Regional Planning Agency,

Lake Tahoe is a state and national treasure. Of course there is a way to take care of this problem without throwing poison into the lake, which will save its beauty for the people who live there and those who come after them. Please get creative in solving the weed problem. Set an example of positive creativity and not the standard poisons which, as we all know, won't just poison the weeds. Man's don't HAVE to be destructive as some people say, but rather can be creatively proactive and insightful.

Thank you.

I support Alternative AA1 of your Tahoe Keys Weeds Draft Environmental Impact Report.

The Tahoe Keys lagoons are an environmental disaster at Lake Tahoe. Proof of this are the infestations of aquatic invasive weeds now thriving there and the proposals to control these weeds with herbicides. These weeds are destroying Tahoe's legendary clarity and purity. Proposals to control them with herbicides only poisons the lake further.

I am absolutely opposed to any and all use of poisonous herbicides in the Keys and any other waters that connect to Lake Tahoe -- a Tier 3 Outstanding National Resource Water. I oppose spending tens of millions of taxpayer dollars for the convenience of boat-owners at the Tahoe Keys. I join The Sierra Club Tahoe Area Group in defending the purity of Lake Tahoe.

Sincerely,

Shelly Ryan P.O. Box 543 Middletown, CA 95461 seryan47@hotmail.com (925) 331-7380

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Lillian Miller at Sierra Club at core.help@sierraclub.org or (415) 977-5500.

HE-89

Dear Tahoe Regional Planning Agency,

Don't poison Tahoe with herbicides.

HE-78

I support Alternative AA1 of your Tahoe Keys Weeds Draft Environmental Impact Report.

The Tahoe Keys lagoons are an environmental disaster at Lake Tahoe. Proof of this are the infestations of aquatic invasive weeds now thriving there and the proposals to control these weeds with herbicides. These weeds are destroying Tahoe's legendary clarity and purity. Proposals to control them with herbicides only poisons the lake further.

I am absolutely opposed to any and all use of poisonous herbicides in the Keys and any other waters that connect to Lake Tahoe -- a Tier 3 Outstanding National Resource Water. I oppose spending tens of millions of taxpayer dollars for the convenience of boat-owners at the Tahoe Keys. I join The Sierra Club Tahoe Area Group in defending the purity of Lake Tahoe.

Sincerely,

Sunny Powell 225 apple lane Rohnert Park, CA 94928 sunnyhrt@gmail.com (707) 588-8160

Dear Tahoe Regional Planning Agency,

I've said it many times and I'll say it again. We need to do everything we can to protect the health of our one and only planet in our communities before it's too late. Already, much of this world has been destroyed due to reckless human activity and chemicals. For goodness sake, why don't we show appreciation for our beautiful treasures of the earth like Lake Tahoe and try hard to protect it instead of doing business as usual with dangerous development, privatization and chemicals.

I support Alternative AA1 of your Tahoe Keys Weeds Draft Environmental Impact Report.

The Tahoe Keys lagoons are an environmental disaster at Lake Tahoe. Proof of this are the infestations of aquatic invasive weeds now thriving there and the proposals to control these weeds with herbicides. These weeds are destroying Tahoe's legendary clarity and purity. Proposals to control them with herbicides only poisons the lake further.

I am absolutely opposed to any and all use of poisonous herbicides in the Keys and any other waters that connect to Lake Tahoe -- a Tier 3 Outstanding National Resource Water. I oppose spending tens of millions of taxpayer dollars for the convenience of boat-owners at the Tahoe Keys. I join The Sierra Club Tahoe Area Group in defending the purity of Lake Tahoe.

Sincerely,

Sydney Pitcher 1434 La CORTA Circle Lemon Grove , CA 91945 syditude@gmail.com (619) 462-0566

Dear Tahoe Regional Planning Agency,

I love Lake Tahoe and it?s clean, beautiful water. Please do not use herbicides to kill naturally growing weeds. There is an environmentally friendly way to get rid of these weeds that protects everyone, and is safe for all. Please do the right thing, NO Herbicides!

I support Alternative AA1 of your Tahoe Keys Weeds Draft Environmental Impact Report.

The Tahoe Keys lagoons are an environmental disaster at Lake Tahoe. Proof of this are the infestations of aquatic invasive weeds now thriving there and the proposals to control these weeds with herbicides. These weeds are destroying Tahoe's legendary clarity and purity. Proposals to control them with herbicides only poisons the lake further.

I am absolutely opposed to any and all use of poisonous herbicides in the Keys and any other waters that connect to Lake Tahoe -- a Tier 3 Outstanding National Resource Water. I oppose spending tens of millions of taxpayer dollars for the convenience of boat-owners at the Tahoe Keys. I join The Sierra Club Tahoe Area Group in defending the purity of Lake Tahoe.

Sincerely,

Tim Odetto 560 Rohnert Park Expy W Rohnert Park, CA 94928 odettotim@gmail.com (415) 505-6984

Dear Tahoe Regional Planning Agency,

Please do not use herbicides in or near our beautiful Lake Tahoe.

HE-81

I support Alternative AA1 of your Tahoe Keys Weeds Draft Environmental Impact Report.

The Tahoe Keys lagoons are an environmental disaster at Lake Tahoe. Proof of this are the infestations of aquatic invasive weeds now thriving there and the proposals to control these weeds with herbicides. These weeds are destroying Tahoe's legendary clarity and purity. Proposals to control them with herbicides only poisons the lake further.

I am absolutely opposed to any and all use of poisonous herbicides in the Keys and any other waters that connect to Lake Tahoe -- a Tier 3 Outstanding National Resource Water. I oppose spending tens of millions of taxpayer dollars for the convenience of boat-owners at the Tahoe Keys. I join The Sierra Club Tahoe Area Group in defending the purity of Lake Tahoe.

Sincerely,

Vicki Bookless 890 Del Rio Ave. San Luis Obispo, CA 93405 vickib2004@charter.net (805) 543-8973

Dear Tahoe Regional Planning Agency,

Unintended consequences could be disastrous. Exercise prudence! | GEN-13

I support Alternative AA1 of your Tahoe Keys Weeds Draft Environmental Impact Report.

The Tahoe Keys lagoons are an environmental disaster at Lake Tahoe. Proof of this are the infestations of aquatic invasive weeds now thriving there and the proposals to control these weeds with herbicides. These weeds are destroying Tahoe's legendary clarity and purity. Proposals to control them with herbicides only poisons the lake further.

I am absolutely opposed to any and all use of poisonous herbicides in the Keys and any other waters that connect to Lake Tahoe -- a Tier 3 Outstanding National Resource Water. I oppose spending tens of millions of taxpayer dollars for the convenience of boat-owners at the Tahoe Keys. I join The Sierra Club Tahoe Area Group in defending the purity of Lake Tahoe.

Sincerely,

Victor Kamendrowsky 203 Hoffman Avenue San Francisco, CA 94114 vkamendrowsky@gmail.com (415) 826-8670

Dear Tahoe Regional Planning Agency,

I favor control of weeds via the herbicide program presented by TKPOA. Yes I live in the Tahoe Keys and I see 1st hand the impact of these invasive species. We have spent heavily to study and analyze. The time for execution is here

I support Alternative AA1 of your Tahoe Keys Weeds Draft Environmental Impact Report.

The Tahoe Keys lagoons are an environmental disaster at Lake Tahoe. Proof of this are the infestations of aquatic invasive weeds now thriving there and the proposals to control these weeds with herbicides. These weeds are destroying Tahoe's legendary clarity and purity. Proposals to control them with herbicides only poisons the lake further.

I am absolutely opposed to any and all use of poisonous herbicides in the Keys and any other waters that connect to Lake Tahoe -- a Tier 3 Outstanding National Resource Water. I oppose spending tens of millions of taxpayer dollars for the convenience of boat-owners at the Tahoe Keys. I join The Sierra Club Tahoe Area Group in defending the purity of Lake Tahoe.

Sincerely,

William Dickert P.O. Box 8903 South Lake Tahoe, CA 96158 bill@williamdickert.com (530) 721-0945

Dear Tahoe Regional Planning Agency,

I love Lake Tahoe! Please do all in your power to keep the lake clean and prevent toxic herbicides from destroying the fragile ecosystem. Natural and safe methods are the preferable way to keep Lake Tahoe clean and her beauty to live on for generations to come.

I support Alternative AA1 of your Tahoe Keys Weeds Draft Environmental Impact Report.

The Tahoe Keys lagoons are an environmental disaster at Lake Tahoe. Proof of this are the infestations of aquatic invasive weeds now thriving there and the proposals to control these weeds with herbicides. These weeds are destroying Tahoe's legendary clarity and purity. Proposals to control them with herbicides only poisons the lake further.

I am absolutely opposed to any and all use of poisonous herbicides in the Keys and any other waters that connect to Lake Tahoe -- a Tier 3 Outstanding National Resource Water. I oppose spending tens of millions of taxpayer dollars for the convenience of boat-owners at the Tahoe Keys. I join The Sierra Club Tahoe Area Group in defending the purity of Lake Tahoe.

Sincerely,

Yvonne Fisher 8707 Falmouth Avenue Playa del Rey, CA 90293 daisy2929@msn.com (310) 502-8498

Dear Tahoe Regional Planning Agency,

I first went to vacation at Lake Tahoe when I was 16. The water was crystal clear. I'm now 74, and I want to keep it that way. The natural beauty of Lake Tahoe should take priority over the convenience of developers.

I support Alternative AA1 of your Tahoe Keys Weeds Draft Environmental Impact Report.

The Tahoe Keys lagoons are an environmental disaster at Lake Tahoe. Proof of this are the infestations of aquatic invasive weeds now thriving there and the proposals to control these weeds with herbicides. These weeds are destroying Tahoe's legendary clarity and purity. Proposals to control them with herbicides only poisons the lake further.

I am absolutely opposed to any and all use of poisonous herbicides in the Keys and any other waters that connect to Lake Tahoe -- a Tier 3 Outstanding National Resource Water. I oppose spending tens of millions of taxpayer dollars for the convenience of boat-owners at the Tahoe Keys. I join The Sierra Club Tahoe Area Group in defending the purity of Lake Tahoe.

Sincerely,

Zina Josephs 2454 23rd Street Santa Monica, CA 90405 zinajosephs@aol.com (310) 450-2258

From:	skylizard29@yahoo.com
То:	tahoekeysweeds@trpa.org
Subject:	[EXTERNAL] Long term solution needed
Date:	Thursday, August 13, 2020 11:04:54 AM

Please consider a permanent, long term solution to the invasive weed problem in the keys. Herbicide is not a sustainable answer. Restoring the keys to a pre-devopment wetland condition is. Thank you, Larry Van Sant, South Lake Tahoe

Dear Tahoe Regional Planning Agency,

Herbicides end up killing much more than originally desired to kill. Not a good thing for Tahoe! | HE-51

I support Alternative AA1 of your Tahoe Keys Weeds Draft Environmental Impact Report.

The Tahoe Keys lagoons are an environmental disaster at Lake Tahoe. Proof of this are the infestations of aquatic invasive weeds now thriving there and the proposals to control these weeds with herbicides. These weeds are destroying Tahoe's legendary clarity and purity. Proposals to control them with herbicides only poisons the lake further.

I am absolutely opposed to any and all use of poisonous herbicides in the Keys and any other waters that connect to Lake Tahoe -- a Tier 3 Outstanding National Resource Water. I oppose spending tens of millions of taxpayer dollars for the convenience of boat-owners at the Tahoe Keys. I join The Sierra Club Tahoe Area Group in defending the purity of Lake Tahoe.

Sincerely,

Barbara Brunell 2291 Yellowstone Drive Martinez, CA 94553 barbbCLS@aol.com (925) 687-3516

Dear Tahoe Regional Planning Agency,

If this can be stopped, it sets precedent for more preventative actions such as this.

ALT-11

I support Alternative AA1 of your Tahoe Keys Weeds Draft Environmental Impact Report.

The Tahoe Keys lagoons are an environmental disaster at Lake Tahoe. Proof of this are the infestations of aquatic invasive weeds now thriving there and the proposals to control these weeds with herbicides. These weeds are destroying Tahoe's legendary clarity and purity. Proposals to control them with herbicides only poisons the lake further.

I am absolutely opposed to any and all use of poisonous herbicides in the Keys and any other waters that connect to Lake Tahoe -- a Tier 3 Outstanding National Resource Water. I oppose spending tens of millions of taxpayer dollars for the convenience of boat-owners at the Tahoe Keys. I join The Sierra Club Tahoe Area Group in defending the purity of Lake Tahoe.

Sincerely,

ElsaMarie Butler 200 NE High School RD Bainbridge Island, WA 98110 elsamariebutler@aol.com (206) 842-9559

Dear Tahoe Regional Planning Agency,

I grew up at Lake Tahoe and have always opposed the Tahoe Keys development. I don't like the idea of adding herbicides to try to solve the problem they have created. The Keys management should be held responsible and required to used non toxic methods to clean the water that they are using.

I support Alternative AA1 of your Tahoe Keys Weeds Draft Environmental Impact Report.

The Tahoe Keys lagoons are an environmental disaster at Lake Tahoe. Proof of this are the infestations of aquatic invasive weeds now thriving there and the proposals to control these weeds with herbicides. These weeds are destroying Tahoe's legendary clarity and purity. Proposals to control them with herbicides only poisons the lake further.

I am absolutely opposed to any and all use of poisonous herbicides in the Keys and any other waters that connect to Lake Tahoe -- a Tier 3 Outstanding National Resource Water. I oppose spending tens of millions of taxpayer dollars for the convenience of boat-owners at the Tahoe Keys. I join The Sierra Club Tahoe Area Group in defending the purity of Lake Tahoe.

Sincerely,

Greg Rose 1872 E. Napa St. Sonoma, CA 95476 sonomagreg@comcast.net (707) 938-0911

Dear Tahoe Regional Planning Agency,

Don't ruin Lake Tahoe! Herbicides will unbalance its ecosystem and poison beneficial creatures. | HE-36

I support Alternative AA1 of your Tahoe Keys Weeds Draft Environmental Impact Report.

The Tahoe Keys lagoons are an environmental disaster at Lake Tahoe. Proof of this are the infestations of aquatic invasive weeds now thriving there and the proposals to control these weeds with herbicides. These weeds are destroying Tahoe's legendary clarity and purity. Proposals to control them with herbicides only poisons the lake further.

I am absolutely opposed to any and all use of poisonous herbicides in the Keys and any other waters that connect to Lake Tahoe -- a Tier 3 Outstanding National Resource Water. I oppose spending tens of millions of taxpayer dollars for the convenience of boat-owners at the Tahoe Keys. I join The Sierra Club Tahoe Area Group in defending the purity of Lake Tahoe.

Sincerely,

Gretchen Whisenand 1949 Belmont Ct Santa Rosa, CA 95404 gmwhisen@gmail.com (707) 978-2664

Dear Tahoe Regional Planning Agency,

There is no reason to poison the Lake! This water must stay free of contaminants. So many "cures" for different **HE-55** things used in the Lake have had worse collateral damage.

I support Alternative AA1 of your Tahoe Keys Weeds Draft Environmental Impact Report.

The Tahoe Keys lagoons are an environmental disaster at Lake Tahoe. Proof of this are the infestations of aquatic invasive weeds now thriving there and the proposals to control these weeds with herbicides. These weeds are destroying Tahoe's legendary clarity and purity. Proposals to control them with herbicides only poisons the lake further.

I am absolutely opposed to any and all use of poisonous herbicides in the Keys and any other waters that connect to Lake Tahoe -- a Tier 3 Outstanding National Resource Water. I oppose spending tens of millions of taxpayer dollars for the convenience of boat-owners at the Tahoe Keys. I join The Sierra Club Tahoe Area Group in defending the purity of Lake Tahoe.

Sincerely,

Jo Hartmann 10550 Golden Pine Road Truckee, CA 96161 joa1943@yahoo.com (530) 913-7276

Dear Tahoe Regional Planning Agency,

I've been swimming in Lake Tahoe since high school in 1974. With many more people wanting to live and recreate in the Tahoe Basin, the efforts to preserve water quality must match the impact of the residents and visitors. Toxic chemicals for the convenience of homeowners who unfortunately built on marsh land is a step in the wrong direction.

If toxic chemicals are the only solution, then the development needs to be reassessed and redesigned.

I support Alternative AA1 of your Tahoe Keys Weeds Draft Environmental Impact Report.

The Tahoe Keys lagoons are an environmental disaster at Lake Tahoe. Proof of this are the infestations of aquatic invasive weeds now thriving there and the proposals to control these weeds with herbicides. These weeds are destroying Tahoe's legendary clarity and purity. Proposals to control them with herbicides only poisons the lake further.

I am absolutely opposed to any and all use of poisonous herbicides in the Keys and any other waters that connect to Lake Tahoe -- a Tier 3 Outstanding National Resource Water. I oppose spending tens of millions of taxpayer dollars for the convenience of boat-owners at the Tahoe Keys. I join The Sierra Club Tahoe Area Group in defending the purity of Lake Tahoe.

Sincerely,

Karl Collins 1640 BEAR ROCK RD PLACERVILLE, CA 95667 karl95667@gmail.com (281) 216-9380

Dear Tahoe Regional Planning Agency,

I've visited Lake Tahoe a number of times and to have such a place be ruined and tarnished would be truly heartbreaking. Waiting to act will make correcting the problem even more difficult as the weeds spread and so being swift in the attempt to stop it is critical.

I support Alternative AA1 of your Tahoe Keys Weeds Draft Environmental Impact Report.

The Tahoe Keys lagoons are an environmental disaster at Lake Tahoe. Proof of this are the infestations of aquatic invasive weeds now thriving there and the proposals to control these weeds with herbicides. These weeds are destroying Tahoe's legendary clarity and purity. Proposals to control them with herbicides only poisons the lake further.

I am absolutely opposed to any and all use of poisonous herbicides in the Keys and any other waters that connect to Lake Tahoe -- a Tier 3 Outstanding National Resource Water. I oppose spending tens of millions of taxpayer dollars for the convenience of boat-owners at the Tahoe Keys. I join The Sierra Club Tahoe Area Group in defending the purity of Lake Tahoe.

Sincerely,

Lea Wigington 15535 Sherri Ln Apple Valley, CA 92307 leawigington@yahoo.com (760) 552-1235

Dear Tahoe Regional Planning Agency,

It is time to tell the rich that they cannot do whatever they want-putting our lives and environment in danger-because they have the money. Nature belongs to The People, not the rich. We The People need to put the rich in their place. Enough already!!

I support Alternative AA1 of your Tahoe Keys Weeds Draft Environmental Impact Report.

The Tahoe Keys lagoons are an environmental disaster at Lake Tahoe. Proof of this are the infestations of aquatic invasive weeds now thriving there and the proposals to control these weeds with herbicides. These weeds are destroying Tahoe's legendary clarity and purity. Proposals to control them with herbicides only poisons the lake further.

I am absolutely opposed to any and all use of poisonous herbicides in the Keys and any other waters that connect to Lake Tahoe -- a Tier 3 Outstanding National Resource Water. I oppose spending tens of millions of taxpayer dollars for the convenience of boat-owners at the Tahoe Keys. I join The Sierra Club Tahoe Area Group in defending the purity of Lake Tahoe.

Sincerely,

Sonia Noemi Cross PO Box 919 Paradise, CA 95967 Moirai347@Outlook.com (916) 990-8401

Dear Tahoe Regional Planning Agency,

I spend up to a month at Lake Tahoe every year. I've supported the efforts to keep Tahoe blue. We need to look at every impact on the lake and take the path that is most ecological. If there are non-toxic ways to deal with an issue, then those are the methods that should be used, even if that means it's a more difficult way to go. After failing to look even 50 years into the future, we have to think in terms of maintaining the best condition of the lake for thousands of years into the future.

I support Alternative AA1 of your Tahoe Keys Weeds Draft Environmental Impact Report.

The Tahoe Keys lagoons are an environmental disaster at Lake Tahoe. Proof of this are the infestations of aquatic invasive weeds now thriving there and the proposals to control these weeds with herbicides. These weeds are destroying Tahoe's legendary clarity and purity. Proposals to control them with herbicides only poisons the lake further.

I am absolutely opposed to any and all use of poisonous herbicides in the Keys and any other waters that connect to Lake Tahoe -- a Tier 3 Outstanding National Resource Water. I oppose spending tens of millions of taxpayer dollars for the convenience of boat-owners at the Tahoe Keys. I join The Sierra Club Tahoe Area Group in defending the purity of Lake Tahoe.

Sincerely,

Stevan Leonard 119 Wilkes Circle Santa Cruz, CA 95060 ngc1432@yahoo.com (831) 706-1114

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Lillian Miller at Sierra Club at core.help@sierraclub.org or (415) 977-5500.

HE-77

Dear Tahoe Regional Planning Agency,

Tahoe shore residents ought to pay an extra tax in order to regularly control invasive plant/animal species in a NONTOXIC manner. No herbicides or pesticides in beautiful Lake Tahoe!

I support Alternative AA1 of your Tahoe Keys Weeds Draft Environmental Impact Report.

The Tahoe Keys lagoons are an environmental disaster at Lake Tahoe. Proof of this are the infestations of aquatic invasive weeds now thriving there and the proposals to control these weeds with herbicides. These weeds are destroying Tahoe's legendary clarity and purity. Proposals to control them with herbicides only poisons the lake further.

I am absolutely opposed to any and all use of poisonous herbicides in the Keys and any other waters that connect to Lake Tahoe -- a Tier 3 Outstanding National Resource Water. I oppose spending tens of millions of taxpayer dollars for the convenience of boat-owners at the Tahoe Keys. I join The Sierra Club Tahoe Area Group in defending the purity of Lake Tahoe.

Sincerely,

Susan Mach 1328 n Erin Ave Upand, CA 91786 susan.mach@gmail.com (909) 949-7555



Date: July 27, 2020

Patty Kouyoumdjian, Executive Officer Mike Plaziak, Assistant Executive Officer Russell Norman, P.E. Lahontan Regional Water Quality Control Board 2501 Lake Tahoe Blvd. South Lake Tahoe, CA 96150

Joanne Marchetta, Executive Director Dennis Zabaglo, Aquatic Resources Program Manager Tahoe Regional Planning Agency 128 Market Street Stateline, NV 89449

Subject: Tahoe Keys Lagoons Aquatic Weed Control Methods Test Draft EIR/EIS

While the Tahoe Area Sierra Club continues to review the Tahoe Keys Lagoons Aquatic Weed Control Methods Test Draft Environmental Impact Report/Environmental Impact Statement (DEIR/DEIS), we are writing to urge the Lahontan Regional Water Quality Control Board (Lahontan) and the Tahoe Regional Planning Agency (TRPA) (Lead Agencies) to delay the comment deadline of September 3, 2020, due to the lack of antidegradation analysis in the DEIR/DEIS. The antidegradation analysis is a critical element of the Proposed Project to use aquatic herbicides in Lake Tahoe for the first time. During the scoping phase of this project, stakeholders were assured that it would be part of the DEIR/DEIS.

Lake Tahoe and the Tahoe Keys lagoons are designated as Tier 3 Waters, or "Outstanding National Resource Waters" (ONRW) meaning its high water quality must be protected and maintained according to State and Federal anti-degradation regulations. In fact, the DEIR/DEIS states that Project effectiveness will be evaluated based on performance criteria as specified, in part, on antidegradation requirements (pg. 1-9). The importance of the antidegradation analysis cannot be understated and, as such, it is discussed in the DEIR/DEIS sixty times. Therefore, without the antidegradation analysis to review, the DEIR/DEIS is incomplete. PP-2

Due to the absence of the analysis in the DEIR/DEIS, we request that the deadline for the DEIR/DEIS comments be delayed to 60 days from the date of the release of the antidegradation analysis, which we have been told would be "later this summer."

Thank you for your consideration of this important request. If you have any questions about this request, please feel free to contact me. The favor of a reply is requested.

Curryn Willette

Carolyn Willette, Tahoe Area Group Chair Email: <u>tahoegroupsierraclub@gmail.com</u> Tahoe Area Group P.O. Box 16939 South Lake Tahoe, CA, 96151 PP-2

From:	Andrew Bearer (andrew.bearer@gmail.com) Sent You a Personal Message
To:	tahoekeysweeds@trpa.org
Subject:	[EXTERNAL] No weeds or herbicides for Lake Tahoe!
Date:	Tuesday, August 11, 2020 9:41:43 AM

Dear Tahoe Regional Planning Agency,

The pristine nature of this natural environmental region is far too valuable in terms of recreational and aesthetical value to the American People and the international community of tourists that provide a significant economic boost to the local and California state economy to be jeopardized and sacrificed for a reason as petty as avoiding the relatively minuscule cost of environmentally sound physical weed extraction labor. Simply put, our state?s natural treasures that provide us personal and community-wide economic, recreational, and spiritual value are not comparable to the avoidance of petty costs to maintain artificial development landscaping at the will of the extreme minority of property owners and property managers who chose to live and invest in this community that should be privileged stewards of this immaculate and highly treasured locale that we love and cherish for its pristine natural environmental quality above all.

I support Alternative AA1 of your Tahoe Keys Weeds Draft Environmental Impact Report.

The Tahoe Keys lagoons are an environmental disaster at Lake Tahoe. Proof of this are the infestations of aquatic invasive weeds now thriving there and the proposals to control these weeds with herbicides. These weeds are destroying Tahoe's legendary clarity and purity. Proposals to control them with herbicides only poisons the lake further.

I am absolutely opposed to any and all use of poisonous herbicides in the Keys and any other waters that connect to Lake Tahoe -- a Tier 3 Outstanding National Resource Water. I oppose spending tens of millions of taxpayer dollars for the convenience of boat-owners at the Tahoe Keys. I join The Sierra Club Tahoe Area Group in defending the purity of Lake Tahoe.

Sincerely,

Andrew Bearer 26600 Sunflower Ct. Calabasas, CA 91302 andrew.bearer@gmail.com (818) 825-8441

From:	Catherine Atherton (c.atherton@sjc.oxon.org) Sent You a Personal Message
То:	tahoekeysweeds@trpa.org
Subject:	[EXTERNAL] No weeds or herbicides for Lake Tahoe!
Date:	Tuesday, August 11, 2020 10:17:36 AM

Dear Tahoe Regional Planning Agency,

I spend a wonderful few days at Lake Tahoe near the start of a cross-country trip. It's a glorious place and its pristine beauty must be protected.

I support Alternative AA1 of your Tahoe Keys Weeds Draft Environmental Impact Report.

The Tahoe Keys lagoons are an environmental disaster at Lake Tahoe. Proof of this are the infestations of aquatic invasive weeds now thriving there and the proposals to control these weeds with herbicides. These weeds are destroying Tahoe's legendary clarity and purity. Proposals to control them with herbicides only poisons the lake further.

I am absolutely opposed to any and all use of poisonous herbicides in the Keys and any other waters that connect to Lake Tahoe -- a Tier 3 Outstanding National Resource Water. I oppose spending tens of millions of taxpayer dollars for the convenience of boat-owners at the Tahoe Keys. I join The Sierra Club Tahoe Area Group in defending the purity of Lake Tahoe.

Sincerely,

Catherine Atherton 1161 Amherst Ave Los Angeles, CA 90049 c.atherton@sjc.oxon.org (310) 206-8562

Dear Tahoe Regional Planning Agency,

I think the chemical impact on Lake Tahoe water is dangerous and will impact clarity of the lake. Physical removal is the best option.

I support Alternative AA1 of your Tahoe Keys Weeds Draft Environmental Impact Report.

The Tahoe Keys lagoons are an environmental disaster at Lake Tahoe. Proof of this are the infestations of aquatic invasive weeds now thriving there and the proposals to control these weeds with herbicides. These weeds are destroying Tahoe's legendary clarity and purity. Proposals to control them with herbicides only poisons the lake further.

I am absolutely opposed to any and all use of poisonous herbicides in the Keys and any other waters that connect to Lake Tahoe -- a Tier 3 Outstanding National Resource Water. I oppose spending tens of millions of taxpayer dollars for the convenience of boat-owners at the Tahoe Keys. I join The Sierra Club Tahoe Area Group in defending the purity of Lake Tahoe.

Sincerely,

Chip Carroon 11125 Geurts Ln Stagecoach, NV 89429 ccarroon@netzero.net (775) 629-9054

Dear Tahoe Regional Planning Agency,

There?s better options than poisoning our lake. Please look at alternatives

ALT-10

I support Alternative AA1 of your Tahoe Keys Weeds Draft Environmental Impact Report.

The Tahoe Keys lagoons are an environmental disaster at Lake Tahoe. Proof of this are the infestations of aquatic invasive weeds now thriving there and the proposals to control these weeds with herbicides. These weeds are destroying Tahoe's legendary clarity and purity. Proposals to control them with herbicides only poisons the lake further.

I am absolutely opposed to any and all use of poisonous herbicides in the Keys and any other waters that connect to Lake Tahoe -- a Tier 3 Outstanding National Resource Water. I oppose spending tens of millions of taxpayer dollars for the convenience of boat-owners at the Tahoe Keys. I join The Sierra Club Tahoe Area Group in defending the purity of Lake Tahoe.

Sincerely,

Daniel Kulchin 2523 Chris ave South lake tahoe, CA 95560 dankulchin@yahoo.com (530) 307-1886

Dear Tahoe Regional Planning Agency,

If there are alternative solutions to using herbicides to destroy the destructive plants, then those non-herbicidal remedies should be utilized first before even considering the use of herbicides. My opinion is that the home owner association should include in their dues an allotment for this weed abatement and to use non-herbicidal remedies.

I support Alternative AA1 of your Tahoe Keys Weeds Draft Environmental Impact Report.

The Tahoe Keys lagoons are an environmental disaster at Lake Tahoe. Proof of this are the infestations of aquatic invasive weeds now thriving there and the proposals to control these weeds with herbicides. These weeds are destroying Tahoe's legendary clarity and purity. Proposals to control them with herbicides only poisons the lake further.

I am absolutely opposed to any and all use of poisonous herbicides in the Keys and any other waters that connect to Lake Tahoe -- a Tier 3 Outstanding National Resource Water. I oppose spending tens of millions of taxpayer dollars for the convenience of boat-owners at the Tahoe Keys. I join The Sierra Club Tahoe Area Group in defending the purity of Lake Tahoe.

Sincerely,

Janice Graef 5370 Fenton Way Granite Bay, CA 95746 jan.mom.54@gmail.com (909) 455-4161

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Lillian Miller at Sierra Club at core.help@sierraclub.org or (415) 977-5500.

HE-85

I-123

Dear Tahoe Regional Planning Agency,

The environment needs to be protected from humans by humans! We're the ones responsible for the pollution and the damage to the ecosystems. We MUST not allow those who would pollute and destroy to have a free reign. Pass commonsense regulations to control those who cannot control themselves!

I support Alternative AA1 of your Tahoe Keys Weeds Draft Environmental Impact Report.

The Tahoe Keys lagoons are an environmental disaster at Lake Tahoe. Proof of this are the infestations of aquatic invasive weeds now thriving there and the proposals to control these weeds with herbicides. These weeds are destroying Tahoe's legendary clarity and purity. Proposals to control them with herbicides only poisons the lake further.

I am absolutely opposed to any and all use of poisonous herbicides in the Keys and any other waters that connect to Lake Tahoe -- a Tier 3 Outstanding National Resource Water. I oppose spending tens of millions of taxpayer dollars for the convenience of boat-owners at the Tahoe Keys. I join The Sierra Club Tahoe Area Group in defending the purity of Lake Tahoe.

Sincerely,

Julie Dunn 9150 Carmelita Ave Atascadero, CA 93422 julesdunn@yahoo.com (805) 712-7870

Dear Tahoe Regional Planning Agency,

I love Lake Tahoe. I lived there after High School and before college, in Las Vegas. I've skied on almost every mountain there. Its beauty is unmatched and should be protected at all costs. Please take the necessary measures to ensure Lake Tahoe's waters remain pristine and unpolluted. Thank you.

I support Alternative AA1 of your Tahoe Keys Weeds Draft Environmental Impact Report.

The Tahoe Keys lagoons are an environmental disaster at Lake Tahoe. Proof of this are the infestations of aquatic invasive weeds now thriving there and the proposals to control these weeds with herbicides. These weeds are destroying Tahoe's legendary clarity and purity. Proposals to control them with herbicides only poisons the lake further.

I am absolutely opposed to any and all use of poisonous herbicides in the Keys and any other waters that connect to Lake Tahoe -- a Tier 3 Outstanding National Resource Water. I oppose spending tens of millions of taxpayer dollars for the convenience of boat-owners at the Tahoe Keys. I join The Sierra Club Tahoe Area Group in defending the purity of Lake Tahoe.

Sincerely,

Beverly Nichols 932 Boulder Mesa Dr Unit 101 Las Vegas, NV 89128 beverlynichols58@yahoo.com (702) 743-5308

Dear Tahoe Regional Planning Agency,

All non-chemical methods must be exhausted before poisoning Lake Tahoe with herbicides.

ALT-24

I support Alternative AA1 of your Tahoe Keys Weeds Draft Environmental Impact Report.

The Tahoe Keys lagoons are an environmental disaster at Lake Tahoe. Proof of this are the infestations of aquatic invasive weeds now thriving there and the proposals to control these weeds with herbicides. These weeds are destroying Tahoe's legendary clarity and purity. Proposals to control them with herbicides only poisons the lake further.

I am absolutely opposed to any and all use of poisonous herbicides in the Keys and any other waters that connect to Lake Tahoe -- a Tier 3 Outstanding National Resource Water. I oppose spending tens of millions of taxpayer dollars for the convenience of boat-owners at the Tahoe Keys. I join The Sierra Club Tahoe Area Group in defending the purity of Lake Tahoe.

Sincerely,

Jim Boone 3112 Ivory Coast Dr. Las Vegas, NV 89117 jlboone@aol.com (702) 228-9999

From:	Kristin Walstad (walstak@gmail.com) Sent You a Personal Message
То:	tahoekeysweeds@trpa.org
Subject:	[EXTERNAL] No weeds or herbicides for Lake Tahoe!
Date:	Thursday, August 20, 2020 10:13:56 PM

Dear Tahoe Regional Planning Agency,

Tahoe keys should have never been allowed to be built in the first place. I strongly support restoring natural wetlands.

I support Alternative AA1 of your Tahoe Keys Weeds Draft Environmental Impact Report.

The Tahoe Keys lagoons are an environmental disaster at Lake Tahoe. Proof of this are the infestations of aquatic invasive weeds now thriving there and the proposals to control these weeds with herbicides. These weeds are destroying Tahoe's legendary clarity and purity. Proposals to control them with herbicides only poisons the lake further.

I am absolutely opposed to any and all use of poisonous herbicides in the Keys and any other waters that connect to Lake Tahoe -- a Tier 3 Outstanding National Resource Water. I oppose spending tens of millions of taxpayer dollars for the convenience of boat-owners at the Tahoe Keys. I join The Sierra Club Tahoe Area Group in defending the purity of Lake Tahoe.

Sincerely,

Kristin Walstad PO box 6003 Tahoe city, CA 96145 walstak@gmail.com (269) 492-8435

From:	Stephanie Wozniak (teppyann@gmail.com) Sent You a Personal Message
То:	tahoekeysweeds@trpa.org
Subject:	[EXTERNAL] No weeds or herbicides for Lake Tahoe!
Date:	Sunday, August 23, 2020 10:13:44 PM

Dear Tahoe Regional Planning Agency,

Everyone down stream from Tahoe and depending on the Truckee River Watershed (Reno, Sparks, Tahoe Regional Industrial Center, Fernley, Pyramid Lake...) will be poisoned too and that means all the way out to Fallon and their agriculture and the Stillwater Wetlands. The water in the Lahonton Reservoir at Silver Springs will be affected too because it is partially filled with water from the Truckee River. The Fernley Canal carries this Truckee River water so I say call for volunteers and let us restore the natural wetlands of Tahoe!

I support Alternative AA1 of your Tahoe Keys Weeds Draft Environmental Impact Report.

The Tahoe Keys lagoons are an environmental disaster at Lake Tahoe. Proof of this are the infestations of aquatic invasive weeds now thriving there and the proposals to control these weeds with herbicides. These weeds are destroying Tahoe's legendary clarity and purity. Proposals to control them with herbicides only poisons the lake further.

I am absolutely opposed to any and all use of poisonous herbicides in the Keys and any other waters that connect to Lake Tahoe -- a Tier 3 Outstanding National Resource Water. I oppose spending tens of millions of taxpayer dollars for the convenience of boat-owners at the Tahoe Keys. I join The Sierra Club Tahoe Area Group in defending the purity of Lake Tahoe.

Sincerely,

Stephanie Wozniak P.O. Box 26 Silver Springs, NV 89429 teppyann@gmail.com (530) 448-6631

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Lillian Miller at Sierra Club at core.help@sierraclub.org or (415) 977-5500.

RES-8

From:	Fatima Uribe (fatimauribe522@hotmail.com) Sent You a Personal Message
To:	tahoekeysweeds@trpa.org
Subject:	[EXTERNAL] No weeds or herbicides for Lake Tahoe!
Date:	Thursday, August 20, 2020 10:35:12 PM

Dear Tahoe Regional Planning Agency,

Tahoe is a beautiful peace of heaven on earth and most be protected.

GEN-26

I support Alternative AA1 of your Tahoe Keys Weeds Draft Environmental Impact Report.

The Tahoe Keys lagoons are an environmental disaster at Lake Tahoe. Proof of this are the infestations of aquatic invasive weeds now thriving there and the proposals to control these weeds with herbicides. These weeds are destroying Tahoe's legendary clarity and purity. Proposals to control them with herbicides only poisons the lake further.

I am absolutely opposed to any and all use of poisonous herbicides in the Keys and any other waters that connect to Lake Tahoe -- a Tier 3 Outstanding National Resource Water. I oppose spending tens of millions of taxpayer dollars for the convenience of boat-owners at the Tahoe Keys. I join The Sierra Club Tahoe Area Group in defending the purity of Lake Tahoe.

Sincerely,

Fatima Uribe 1805 rand Ave Carson City , NV 89706 fatimauribe522@hotmail.com (775) 230-2128

From:	Rory Lamp (rlamp1437@gmail.com) Sent You a Personal Message
То:	tahoekeysweeds@trpa.org
Subject:	[EXTERNAL] No weeds or herbicides for Lake Tahoe!
Date:	Friday, August 21, 2020 3:39:52 PM

Dear Tahoe Regional Planning Agency,

Chemical treatments for weeds are often not successful in the long term. The best solution to treat this problem would be to return that area to a natural wetland and remove the open waterways in the Keys subdivision. this would eliminate the habitat for the introduced weeds and provide better sediment protection for the lake from the Upper Truckee River.

RES-7

I support Alternative AA1 of your Tahoe Keys Weeds Draft Environmental Impact Report.

The Tahoe Keys lagoons are an environmental disaster at Lake Tahoe. Proof of this are the infestations of aquatic invasive weeds now thriving there and the proposals to control these weeds with herbicides. These weeds are destroying Tahoe's legendary clarity and purity. Proposals to control them with herbicides only poisons the lake further.

I am absolutely opposed to any and all use of poisonous herbicides in the Keys and any other waters that connect to Lake Tahoe -- a Tier 3 Outstanding National Resource Water. I oppose spending tens of millions of taxpayer dollars for the convenience of boat-owners at the Tahoe Keys. I join The Sierra Club Tahoe Area Group in defending the purity of Lake Tahoe.

Sincerely,

Rory Lamp 1730 McKinley Drive Reno, NV 89509 rlamp1437@gmail.com (775) 397-5548

Dear Tahoe Regional Planning Agency,

I've only had the opportunity to visit Lake Tahoe once, but it had a big impact on me! It's a beautiful place and my **GEN-18** friends who live in the area report they're lucky to live there.

I support Alternative AA1 of your Tahoe Keys Weeds Draft Environmental Impact Report.

The Tahoe Keys lagoons are an environmental disaster at Lake Tahoe. Proof of this are the infestations of aquatic invasive weeds now thriving there and the proposals to control these weeds with herbicides. These weeds are destroying Tahoe's legendary clarity and purity. Proposals to control them with herbicides only poisons the lake further.

I am absolutely opposed to any and all use of poisonous herbicides in the Keys and any other waters that connect to Lake Tahoe -- a Tier 3 Outstanding National Resource Water. I oppose spending tens of millions of taxpayer dollars for the convenience of boat-owners at the Tahoe Keys. I join The Sierra Club Tahoe Area Group in defending the purity of Lake Tahoe.

Sincerely,

Ainslee Archibald 1985 Verbania Dr Las Vegas, NV 89134 ainsleearchibald@gmail.com (504) 376-4922

Dear Tahoe Regional Planning Agency,

I've only had the opportunity to visit Lake Tahoe once, but it had a big impact on me! It's a beautiful place and my **GEN-18** friends who live in the area report they're lucky to live there.

I support Alternative AA1 of your Tahoe Keys Weeds Draft Environmental Impact Report.

The Tahoe Keys lagoons are an environmental disaster at Lake Tahoe. Proof of this are the infestations of aquatic invasive weeds now thriving there and the proposals to control these weeds with herbicides. These weeds are destroying Tahoe's legendary clarity and purity. Proposals to control them with herbicides only poisons the lake further.

I am absolutely opposed to any and all use of poisonous herbicides in the Keys and any other waters that connect to Lake Tahoe -- a Tier 3 Outstanding National Resource Water. I oppose spending tens of millions of taxpayer dollars for the convenience of boat-owners at the Tahoe Keys. I join The Sierra Club Tahoe Area Group in defending the purity of Lake Tahoe.

Sincerely,

Ainslee Archibald 1985 Verbania Dr Las Vegas, NV 89134 ainsleearchibald@gmail.com (504) 376-4922

Dear Tahoe Regional Planning Agency,

I live in Sparks. As much as I would love to be able to afford a house in Tahoe, it is not worth jeopardizing the natural beauty and preservation of Tahoe. I would rather drive or pay for a hotel then see Tahoe poisoned! I realize with less houses available, the more expensive the current houses will be. Supply and demand. However, Tahoe is so special because of its beauty and uniqueness. Don?t poison our lake. Keep Tahoe blue and beautiful. And less populated if possible!

I support Alternative AA1 of your Tahoe Keys Weeds Draft Environmental Impact Report.

The Tahoe Keys lagoons are an environmental disaster at Lake Tahoe. Proof of this are the infestations of aquatic invasive weeds now thriving there and the proposals to control these weeds with herbicides. These weeds are destroying Tahoe's legendary clarity and purity. Proposals to control them with herbicides only poisons the lake further.

I am absolutely opposed to any and all use of poisonous herbicides in the Keys and any other waters that connect to Lake Tahoe -- a Tier 3 Outstanding National Resource Water. I oppose spending tens of millions of taxpayer dollars for the convenience of boat-owners at the Tahoe Keys. I join The Sierra Club Tahoe Area Group in defending the purity of Lake Tahoe.

Sincerely,

April Grant 1182 fuggles dr. Sparks, NV 89441 april.grant09@gmail.com (301) 221-9954

Dear Tahoe Regional Planning Agency,

Dear TRPA and LWQB,

You must chose the option moving forward that will protect Lake Tahoe In the long term. Someday, these housing developments will have come and gone, and what will be left is what you decided to protect. Will it be the beautiful Lake Tahoe with it?s clear pristine waters? Or will it be a noxious, invasive species, sediment from construction filled lake that could have been saved? Each choice you make will have lasting impacts. Please, on behalf of the lake, those who depend on and love it, and for the sake of doing the right thing, do not consider using toxic herbicides. There is a reason they are banned. Please consider generations to come. Thank you.

I support Alternative AA1 of your Tahoe Keys Weeds Draft Environmental Impact Report.

The Tahoe Keys lagoons are an environmental disaster at Lake Tahoe. Proof of this are the infestations of aquatic invasive weeds now thriving there and the proposals to control these weeds with herbicides. These weeds are destroying Tahoe's legendary clarity and purity. Proposals to control them with herbicides only poisons the lake further.

I am absolutely opposed to any and all use of poisonous herbicides in the Keys and any other waters that connect to Lake Tahoe -- a Tier 3 Outstanding National Resource Water. I oppose spending tens of millions of taxpayer dollars for the convenience of boat-owners at the Tahoe Keys. I join The Sierra Club Tahoe Area Group in defending the purity of Lake Tahoe.

Sincerely,

Ashlee Forman 120 Martin Street Reno , NV 89509 aforman@nevada.unr.edu (702) 439-0071

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Lillian Miller at Sierra Club at core.help@sierraclub.org or (415) 977-5500.

HE-103

Dear Tahoe Regional Planning Agency,

The use of herbicides anywhere near Lake Tahoe is the stupidest idea ever! Adding poison to the lake will only further degrade what life exists there. If the Keys boat owners are having issues related to weeds, perhaps they need to unite and find some solid science to plain human manpower to rid themselves of the problem. Adding herbicides to the list of pollutants boaters are already putting into Tahoe via their boat engines and unreported spills, only adds to the potential demise of the lake we love so well. You can and should make more responsible choices than this.

I support Alternative AA1 of your Tahoe Keys Weeds Draft Environmental Impact Report.

The Tahoe Keys lagoons are an environmental disaster at Lake Tahoe. Proof of this are the infestations of aquatic invasive weeds now thriving there and the proposals to control these weeds with herbicides. These weeds are destroying Tahoe's legendary clarity and purity. Proposals to control them with herbicides only poisons the lake further.

I am absolutely opposed to any and all use of poisonous herbicides in the Keys and any other waters that connect to Lake Tahoe -- a Tier 3 Outstanding National Resource Water. I oppose spending tens of millions of taxpayer dollars for the convenience of boat-owners at the Tahoe Keys. I join The Sierra Club Tahoe Area Group in defending the purity of Lake Tahoe.

Sincerely,

Barbara Ziegler 1843 Clydesdale Drive Carson City , NV 89703 babsincc@aol.com (775) 815-8971

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Lillian Miller at Sierra Club at core.help@sierraclub.org or (415) 977-5500.

HE-104

Dear Tahoe Regional Planning Agency,

I am a 60 year-old 47 year resident of Nevada. Using herbicides in or around Lake Tahoe is not an environmental nor economical way to address the weeds that the destruction of a natural wetland in 1959 to build the 1,500-home housing development and marina, the Tahoe Keys caused.

This will just increase the destruction of the Lake.

I support Alternative AA1 of your Tahoe Keys Weeds Draft Environmental Impact Report.

The Tahoe Keys lagoons are an environmental disaster at Lake Tahoe. Proof of this are the infestations of aquatic invasive weeds now thriving there and the proposals to control these weeds with herbicides. These weeds are destroying Tahoe's legendary clarity and purity. Proposals to control them with herbicides only poisons the lake further.

I am absolutely opposed to any and all use of poisonous herbicides in the Keys and any other waters that connect to Lake Tahoe -- a Tier 3 Outstanding National Resource Water. I oppose spending tens of millions of taxpayer dollars for the convenience of boat-owners at the Tahoe Keys. I join The Sierra Club Tahoe Area Group in defending the purity of Lake Tahoe.

Sincerely,

Betty Sabo 3137 Palmdesert Way Las Vegas, NV 89120 canton1019@hotmail.com (702) 898-8303

Dear Tahoe Regional Planning Agency,

Once you start using herbicides it never stops. When i still lived in Sonoma County i watched them use herbicides to try and get rid of ludwidgia in the Laguna de Santa Rosa. It never got all of it so it always grew back.

I saw recently either on TV news or online that there are new ways of combating invasive water plants with ultraviolet light treatment. You should research that.

I support Alternative AA1 of your Tahoe Keys Weeds Draft Environmental Impact Report.

The Tahoe Keys lagoons are an environmental disaster at Lake Tahoe. Proof of this are the infestations of aquatic invasive weeds now thriving there and the proposals to control these weeds with herbicides. These weeds are destroying Tahoe's legendary clarity and purity. Proposals to control them with herbicides only poisons the lake further.

I am absolutely opposed to any and all use of poisonous herbicides in the Keys and any other waters that connect to Lake Tahoe -- a Tier 3 Outstanding National Resource Water. I oppose spending tens of millions of taxpayer dollars for the convenience of boat-owners at the Tahoe Keys. I join The Sierra Club Tahoe Area Group in defending the purity of Lake Tahoe.

Sincerely,

Debbie Clarkson 1201 Ian Ct Sparks, NV 89434 kiwi9855@sbcglobal.net (707) 477-9876

Dear Tahoe Regional Planning Agency,

We must do all we can before Lake Tahoe becomes a note in geography books and a sad lesson in history books! | GEN-21

I support Alternative AA1 of your Tahoe Keys Weeds Draft Environmental Impact Report.

The Tahoe Keys lagoons are an environmental disaster at Lake Tahoe. Proof of this are the infestations of aquatic invasive weeds now thriving there and the proposals to control these weeds with herbicides. These weeds are destroying Tahoe's legendary clarity and purity. Proposals to control them with herbicides only poisons the lake further.

I am absolutely opposed to any and all use of poisonous herbicides in the Keys and any other waters that connect to Lake Tahoe -- a Tier 3 Outstanding National Resource Water. I oppose spending tens of millions of taxpayer dollars for the convenience of boat-owners at the Tahoe Keys. I join The Sierra Club Tahoe Area Group in defending the purity of Lake Tahoe.

Sincerely,

Denise Martini 10215 Renae Nicole Ct Las Vegas, NV 89183 martini287@aol.com (702) 837-4946

From:	Doug Vacek (sdrdv@yahoo.com) Sent You a Personal Message
То:	tahoekeysweeds@trpa.org
Subject:	[EXTERNAL] No weeds or herbicides for Lake Tahoe!
Date:	Friday, August 21, 2020 1:41:10 AM

Dear Tahoe Regional Planning Agency,

Lake Tahoe is a national jewel that needs to be protected!

GEN-22

I support Alternative AA1 of your Tahoe Keys Weeds Draft Environmental Impact Report.

The Tahoe Keys lagoons are an environmental disaster at Lake Tahoe. Proof of this are the infestations of aquatic invasive weeds now thriving there and the proposals to control these weeds with herbicides. These weeds are destroying Tahoe's legendary clarity and purity. Proposals to control them with herbicides only poisons the lake further.

I am absolutely opposed to any and all use of poisonous herbicides in the Keys and any other waters that connect to Lake Tahoe -- a Tier 3 Outstanding National Resource Water. I oppose spending tens of millions of taxpayer dollars for the convenience of boat-owners at the Tahoe Keys. I join The Sierra Club Tahoe Area Group in defending the purity of Lake Tahoe.

Sincerely,

Doug Vacek 2865 Scottsdale Rd Reno, NV 89512 sdrdv@yahoo.com (775) 674-6333

Dear Tahoe Regional Planning Agency,

As long as I can remember there have been bumper stickers to SAVE LAKE TAHOE. Why should that attitude change now?

I support Alternative AA1 of your Tahoe Keys Weeds Draft Environmental Impact Report.

The Tahoe Keys lagoons are an environmental disaster at Lake Tahoe. Proof of this are the infestations of aquatic invasive weeds now thriving there and the proposals to control these weeds with herbicides. These weeds are destroying Tahoe's legendary clarity and purity. Proposals to control them with herbicides only poisons the lake further.

I am absolutely opposed to any and all use of poisonous herbicides in the Keys and any other waters that connect to Lake Tahoe -- a Tier 3 Outstanding National Resource Water. I oppose spending tens of millions of taxpayer dollars for the convenience of boat-owners at the Tahoe Keys. I join The Sierra Club Tahoe Area Group in defending the purity of Lake Tahoe.

Sincerely,

elizabeth kramer 2944 mt hope dr las vegas, NV 89156 kramerscove@yahoo.com (707) 501-9560

From:	Eric Fernandez (fernandez.eric10611@gmail.com) Sent You a Personal Message
То:	tahoekeysweeds@trpa.org
Subject:	[EXTERNAL] No weeds or herbicides for Lake Tahoe!
Date:	Monday, August 24, 2020 2:27:17 PM

Dear Tahoe Regional Planning Agency,

Please keep Tahoe blue and beautiful!

GEN-24

I support Alternative AA1 of your Tahoe Keys Weeds Draft Environmental Impact Report.

The Tahoe Keys lagoons are an environmental disaster at Lake Tahoe. Proof of this are the infestations of aquatic invasive weeds now thriving there and the proposals to control these weeds with herbicides. These weeds are destroying Tahoe's legendary clarity and purity. Proposals to control them with herbicides only poisons the lake further.

I am absolutely opposed to any and all use of poisonous herbicides in the Keys and any other waters that connect to Lake Tahoe -- a Tier 3 Outstanding National Resource Water. I oppose spending tens of millions of taxpayer dollars for the convenience of boat-owners at the Tahoe Keys. I join The Sierra Club Tahoe Area Group in defending the purity of Lake Tahoe.

Sincerely,

Eric Fernandez 5432 Jacob Peace Ave Las Vegas, NV 89139 fernandez.eric10611@gmail.com (775) 722-2038

From:	<u>G Schwebel (georgeschwebel@gmail.com) Sent You a Personal Message</u>
To:	tahoekeysweeds@trpa.org
Subject:	[EXTERNAL] No weeds or herbicides for Lake Tahoe!
Date:	Friday, August 21, 2020 12:24:17 AM

Dear Tahoe Regional Planning Agency,

Nothing is more beautiful or deserving of being protected than Lake Tahoe.

I support Alternative AA1 of your Tahoe Keys Weeds Draft Environmental Impact Report.

The Tahoe Keys lagoons are an environmental disaster at Lake Tahoe. Proof of this are the infestations of aquatic invasive weeds now thriving there and the proposals to control these weeds with herbicides. These weeds are destroying Tahoe's legendary clarity and purity. Proposals to control them with herbicides only poisons the lake further.

I am absolutely opposed to any and all use of poisonous herbicides in the Keys and any other waters that connect to Lake Tahoe -- a Tier 3 Outstanding National Resource Water. I oppose spending tens of millions of taxpayer dollars for the convenience of boat-owners at the Tahoe Keys. I join The Sierra Club Tahoe Area Group in defending the purity of Lake Tahoe.

Sincerely,

G Schwebel 10960 Terra Azul Pl Las Vegas, NV 89138 georgeschwebel@gmail.com (702) 375-3678

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Lillian Miller at Sierra Club at core.help@sierraclub.org or (415) 977-5500.

GEN-27

Dear Tahoe Regional Planning Agency,

Lake Tahoe is true bistate Jewel that deserves the utmost care to prevent unnecessary substances that could be dangerous or harmful to the aquatic life and other animals that use the Lake.

I support Alternative AA1 of your Tahoe Keys Weeds Draft Environmental Impact Report.

The Tahoe Keys lagoons are an environmental disaster at Lake Tahoe. Proof of this are the infestations of aquatic invasive weeds now thriving there and the proposals to control these weeds with herbicides. These weeds are destroying Tahoe's legendary clarity and purity. Proposals to control them with herbicides only poisons the lake further.

I am absolutely opposed to any and all use of poisonous herbicides in the Keys and any other waters that connect to Lake Tahoe -- a Tier 3 Outstanding National Resource Water. I oppose spending tens of millions of taxpayer dollars for the convenience of boat-owners at the Tahoe Keys. I join The Sierra Club Tahoe Area Group in defending the purity of Lake Tahoe.

Sincerely,

GARY JOHNSON 792 7TH ST house Elko, NV 89801 maxout@frontier.com (775) 401-1446

Dear Tahoe Regional Planning Agency,

If you enjoy Lake Tahoe RESPECT it! You are destroying a beautiful part of the lake. Stop!

GEN-G1

I support Alternative AA1 of your Tahoe Keys Weeds Draft Environmental Impact Report.

The Tahoe Keys lagoons are an environmental disaster at Lake Tahoe. Proof of this are the infestations of aquatic invasive weeds now thriving there and the proposals to control these weeds with herbicides. These weeds are destroying Tahoe's legendary clarity and purity. Proposals to control them with herbicides only poisons the lake further.

I am absolutely opposed to any and all use of poisonous herbicides in the Keys and any other waters that connect to Lake Tahoe -- a Tier 3 Outstanding National Resource Water. I oppose spending tens of millions of taxpayer dollars for the convenience of boat-owners at the Tahoe Keys. I join The Sierra Club Tahoe Area Group in defending the purity of Lake Tahoe.

Sincerely,

Iris Jehle-Peppard 90 Zircon Drive Reno, NV 89521 ipeppard@csumb.edu (775) 450-5489

Dear Tahoe Regional Planning Agency,

I grew up in the Reno Tahoe area. The lake has always been an awe inspiring place, so pristine and beautiful. We need to do whatever we can to keep it that way.

I support Alternative AA1 of your Tahoe Keys Weeds Draft Environmental Impact Report.

The Tahoe Keys lagoons are an environmental disaster at Lake Tahoe. Proof of this are the infestations of aquatic invasive weeds now thriving there and the proposals to control these weeds with herbicides. These weeds are destroying Tahoe's legendary clarity and purity. Proposals to control them with herbicides only poisons the lake further.

I am absolutely opposed to any and all use of poisonous herbicides in the Keys and any other waters that connect to Lake Tahoe -- a Tier 3 Outstanding National Resource Water. I oppose spending tens of millions of taxpayer dollars for the convenience of boat-owners at the Tahoe Keys. I join The Sierra Club Tahoe Area Group in defending the purity of Lake Tahoe.

Sincerely,

Jeanette Miller 6152 Candlewood ct Las vegas, NV 89108 jeanettemiller66@hotmail.com (702) 929-7497

From:	Karen Nielsen (kandid@aya.yale.edu) Sent You a Personal Message
To:	tahoekeysweeds@trpa.org
Subject:	[EXTERNAL] No weeds or herbicides for Lake Tahoe!
Date:	Thursday, August 20, 2020 10:40:54 PM

Dear Tahoe Regional Planning Agency,

I grew up spending summers at Tahoe and I want to continue to go there and appreciate this beautiful place. It?s **GEN-31** unconscionable to gamble on a quick fix to please a few.

I support Alternative AA1 of your Tahoe Keys Weeds Draft Environmental Impact Report.

The Tahoe Keys lagoons are an environmental disaster at Lake Tahoe. Proof of this are the infestations of aquatic invasive weeds now thriving there and the proposals to control these weeds with herbicides. These weeds are destroying Tahoe's legendary clarity and purity. Proposals to control them with herbicides only poisons the lake further.

I am absolutely opposed to any and all use of poisonous herbicides in the Keys and any other waters that connect to Lake Tahoe -- a Tier 3 Outstanding National Resource Water. I oppose spending tens of millions of taxpayer dollars for the convenience of boat-owners at the Tahoe Keys. I join The Sierra Club Tahoe Area Group in defending the purity of Lake Tahoe.

Sincerely,

Karen Nielsen 3810 Patricia Lane Reno, NV 89512 kandid@aya.yale.edu (775) 555-1212

From:	Mark Wildes (wildesma@aol.com) Sent You a Personal Message
То:	tahoekeysweeds@trpa.org
Subject:	[EXTERNAL] No weeds or herbicides for Lake Tahoe!
Date:	Friday, August 21, 2020 8:25:13 AM

Dear Tahoe Regional Planning Agency,

My God! Its all about the money. Hard to look at that picture of 1500 homes spewing waste and garbage into our last beautiful lake. Amazing. What creeps allowed this to happen?

I support Alternative AA1 of your Tahoe Keys Weeds Draft Environmental Impact Report.

The Tahoe Keys lagoons are an environmental disaster at Lake Tahoe. Proof of this are the infestations of aquatic invasive weeds now thriving there and the proposals to control these weeds with herbicides. These weeds are destroying Tahoe's legendary clarity and purity. Proposals to control them with herbicides only poisons the lake further.

I am absolutely opposed to any and all use of poisonous herbicides in the Keys and any other waters that connect to Lake Tahoe -- a Tier 3 Outstanding National Resource Water. I oppose spending tens of millions of taxpayer dollars for the convenience of boat-owners at the Tahoe Keys. I join The Sierra Club Tahoe Area Group in defending the purity of Lake Tahoe.

Sincerely,

Mark Wildes 12406 Tudor Arch Drive Las Vegas, NV 89138 wildesma@aol.com (702) 800-5054

Dear Tahoe Regional Planning Agency,

Please protect and preserve our great outdoors. During this time many of us seek peace and refuge in our **EP-8** environment, please maintain for generations to come.

I support Alternative AA1 of your Tahoe Keys Weeds Draft Environmental Impact Report.

The Tahoe Keys lagoons are an environmental disaster at Lake Tahoe. Proof of this are the infestations of aquatic invasive weeds now thriving there and the proposals to control these weeds with herbicides. These weeds are destroying Tahoe's legendary clarity and purity. Proposals to control them with herbicides only poisons the lake further.

I am absolutely opposed to any and all use of poisonous herbicides in the Keys and any other waters that connect to Lake Tahoe -- a Tier 3 Outstanding National Resource Water. I oppose spending tens of millions of taxpayer dollars for the convenience of boat-owners at the Tahoe Keys. I join The Sierra Club Tahoe Area Group in defending the purity of Lake Tahoe.

Sincerely,

Patti Babore 2835 Evening Rock St Las Vegas, NV 89135 patrizia4@cox.net (702) 255-3683

From:	Rachel Jo (rachluvzslurpees@gmail.com) Sent You a Personal Message
То:	tahoekeysweeds@trpa.org
Subject:	[EXTERNAL] No weeds or herbicides for Lake Tahoe!
Date:	Friday, August 21, 2020 10:11:50 AM

Dear Tahoe Regional Planning Agency,

We all need to take care of Lake Tahoe, keep it beautiful, and keep us safe. I have a ten month old that I want to be able to swim in the lake and enjoy the area as she grows, something I will not feel can happen if we are not concerned about what we are allowing to wash into the water.

I support Alternative AA1 of your Tahoe Keys Weeds Draft Environmental Impact Report.

The Tahoe Keys lagoons are an environmental disaster at Lake Tahoe. Proof of this are the infestations of aquatic invasive weeds now thriving there and the proposals to control these weeds with herbicides. These weeds are destroying Tahoe's legendary clarity and purity. Proposals to control them with herbicides only poisons the lake further.

I am absolutely opposed to any and all use of poisonous herbicides in the Keys and any other waters that connect to Lake Tahoe -- a Tier 3 Outstanding National Resource Water. I oppose spending tens of millions of taxpayer dollars for the convenience of boat-owners at the Tahoe Keys. I join The Sierra Club Tahoe Area Group in defending the purity of Lake Tahoe.

Sincerely,

Rachel Jo 2160 Hunter Glen Court Reno, NV 89523 rachluvzslurpees@gmail.com (702) 528-0216

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Lillian Miller at Sierra Club at core.help@sierraclub.org or (415) 977-5500.

GEN-33

From:	Sarah Behrens (jsbehrens99@yahoo.com) Sent You a Personal Message
To:	tahoekeysweeds@trpa.org
Subject:	[EXTERNAL] No weeds or herbicides for Lake Tahoe!
Date:	Saturday, August 22, 2020 7:04:18 AM

Dear Tahoe Regional Planning Agency,

I moved to the Lake Tahoe region 6 years ago to experience the amazing environment here. I love this lake and the surrounding mountains and communities. Please avoid poisoning Lake Tahoe at all costs.

I support Alternative AA1 of your Tahoe Keys Weeds Draft Environmental Impact Report.

The Tahoe Keys lagoons are an environmental disaster at Lake Tahoe. Proof of this are the infestations of aquatic invasive weeds now thriving there and the proposals to control these weeds with herbicides. These weeds are destroying Tahoe's legendary clarity and purity. Proposals to control them with herbicides only poisons the lake further.

I am absolutely opposed to any and all use of poisonous herbicides in the Keys and any other waters that connect to Lake Tahoe -- a Tier 3 Outstanding National Resource Water. I oppose spending tens of millions of taxpayer dollars for the convenience of boat-owners at the Tahoe Keys. I join The Sierra Club Tahoe Area Group in defending the purity of Lake Tahoe.

Sincerely,

Sarah Behrens 2739 Waterfield Drive Sparks, NV 89434 jsbehrens99@yahoo.com (785) 410-5699

From:	William Carrico (billynvus@yahoo.com) Sent You a Personal Message
То:	tahoekeysweeds@trpa.org
Subject:	[EXTERNAL] No weeds or herbicides for Lake Tahoe!
Date:	Thursday, August 20, 2020 10:38:23 PM

Dear Tahoe Regional Planning Agency,

I can count the grade 3, natural resources I know of on one finger. Tahoe. Whatever you envision of it cannot begin to bring back what it once was. Each successive effort to correct one mistake further degraded this once pure environment. Stop in the name of Heaven, stop degrading this glimpse of heaven.

I support Alternative AA1 of your Tahoe Keys Weeds Draft Environmental Impact Report.

The Tahoe Keys lagoons are an environmental disaster at Lake Tahoe. Proof of this are the infestations of aquatic invasive weeds now thriving there and the proposals to control these weeds with herbicides. These weeds are destroying Tahoe's legendary clarity and purity. Proposals to control them with herbicides only poisons the lake further.

I am absolutely opposed to any and all use of poisonous herbicides in the Keys and any other waters that connect to Lake Tahoe -- a Tier 3 Outstanding National Resource Water. I oppose spending tens of millions of taxpayer dollars for the convenience of boat-owners at the Tahoe Keys. I join The Sierra Club Tahoe Area Group in defending the purity of Lake Tahoe.

Sincerely,

William Carrico 5448 Desert Spring Rd. Las Vegas, NV 89149 billynvus@yahoo.com (702) 682-6702

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Lillian Miller at Sierra Club at core.help@sierraclub.org or (415) 977-5500.

GEN-35

From:	William Huggins (feerlessw@cox.net) Sent You a Personal Message
То:	tahoekeysweeds@trpa.org
Subject:	[EXTERNAL] No weeds or herbicides for Lake Tahoe!
Date:	Friday, August 21, 2020 11:31:16 AM

Dear Tahoe Regional Planning Agency,

Keep Tahoe pristine and wild!

GEN-25

I support Alternative AA1 of your Tahoe Keys Weeds Draft Environmental Impact Report.

The Tahoe Keys lagoons are an environmental disaster at Lake Tahoe. Proof of this are the infestations of aquatic invasive weeds now thriving there and the proposals to control these weeds with herbicides. These weeds are destroying Tahoe's legendary clarity and purity. Proposals to control them with herbicides only poisons the lake further.

I am absolutely opposed to any and all use of poisonous herbicides in the Keys and any other waters that connect to Lake Tahoe -- a Tier 3 Outstanding National Resource Water. I oppose spending tens of millions of taxpayer dollars for the convenience of boat-owners at the Tahoe Keys. I join The Sierra Club Tahoe Area Group in defending the purity of Lake Tahoe.

Sincerely,

William Huggins 430 Salzburg Ave Las Vegas, NV 89183 feerlessw@cox.net (702) 860-1764

Dear Tahoe Regional Planning Agency,

Follow the science! The mysis schrimp were introduced in the lake with good intentions and now are a BIG problem! Some say the herbicides are safe,....really not known and too big a chance to take! Repair the damage done to nature!

I support Alternative AA1 of your Tahoe Keys Weeds Draft Environmental Impact Report.

The Tahoe Keys lagoons are an environmental disaster at Lake Tahoe. Proof of this are the infestations of aquatic invasive weeds now thriving there and the proposals to control these weeds with herbicides. These weeds are destroying Tahoe's legendary clarity and purity. Proposals to control them with herbicides only poisons the lake further.

I am absolutely opposed to any and all use of poisonous herbicides in the Keys and any other waters that connect to Lake Tahoe -- a Tier 3 Outstanding National Resource Water. I oppose spending tens of millions of taxpayer dollars for the convenience of boat-owners at the Tahoe Keys. I join The Sierra Club Tahoe Area Group in defending the purity of Lake Tahoe.

Sincerely,

C P 7005 N Lake Bl TV, CA 96148 cepsc@juno.com (530) 546-4593

Dear Tahoe Regional Planning Agency,

I am absolutely opposed to any and all use of poisonous herbicides in the Keys and any other waters that connect to Lake Tahoe -- a Tier 3 Outstanding National Resource Water. I oppose spending tens of millions of taxpayer dollars for the convenience of boat-owners at the Tahoe Keys. I join The Sierra Club Tahoe Area Group in defending the purity of Lake Tahoe.

I support Alternative AA1 of your Tahoe Keys Weeds Draft Environmental Impact Report.

The Tahoe Keys lagoons are an environmental disaster at Lake Tahoe. Proof of this are the infestations of aquatic invasive weeds now thriving there and the proposals to control these weeds with herbicides. These weeds are destroying Tahoe's legendary clarity and purity. Proposals to control them with herbicides only poisons the lake further.

I am absolutely opposed to any and all use of poisonous herbicides in the Keys and any other waters that connect to Lake Tahoe -- a Tier 3 Outstanding National Resource Water. I oppose spending tens of millions of taxpayer dollars for the convenience of boat-owners at the Tahoe Keys. I join The Sierra Club Tahoe Area Group in defending the purity of Lake Tahoe.

Sincerely,

Linda Jones 5735 Eldora Ave Las Vegas, NV 89146 starlight4848@aol.com (702) 365-9181

Dear Tahoe Regional Planning Agency,

Lake Tahoe is a wonderful place for enjoyment by all Californians. Alas, development of the Tahoe Keys has serious harmed the lake by destroying the wetlands that filtered inflow from the creeks on the south side.

Treating invasive weeds in the Keys with herbicides will make a bad situation worse. I urge you to adopt Alternative AA1 in your Tahoe Keys DEIR. This will help reduce the harm done to the lake by development and preserve the lake's unique values for the enjoyment of all visitors and residents.

I support Alternative AA1 of your Tahoe Keys Weeds Draft Environmental Impact Report.

The Tahoe Keys lagoons are an environmental disaster at Lake Tahoe. Proof of this are the infestations of aquatic invasive weeds now thriving there and the proposals to control these weeds with herbicides. These weeds are destroying Tahoe's legendary clarity and purity. Proposals to control them with herbicides only poisons the lake further.

I am absolutely opposed to any and all use of poisonous herbicides in the Keys and any other waters that connect to Lake Tahoe -- a Tier 3 Outstanding National Resource Water. I oppose spending tens of millions of taxpayer dollars for the convenience of boat-owners at the Tahoe Keys. I join The Sierra Club Tahoe Area Group in defending the purity of Lake Tahoe.

Sincerely,

Adrian Griffin 1307 37th Street Sacramento, CA 95816 adriangriffin@surewest.net (916) 633-9432

From:	Anne Kallus (akallus@hotmail.com) Sent You a Personal Message
То:	tahoekeysweeds@trpa.org
Subject:	[EXTERNAL] No weeds or herbicides for Lake Tahoe!
Date:	Monday, August 31, 2020 11:59:48 PM

Dear Tahoe Regional Planning Agency,

I grew up near the Lake and now my kids live here. I'm so proud of it and I've heard about the Herbicide issues on NPR. Very concerned!

I support Alternative AA1 of your Tahoe Keys Weeds Draft Environmental Impact Report.

The Tahoe Keys lagoons are an environmental disaster at Lake Tahoe. Proof of this are the infestations of aquatic invasive weeds now thriving there and the proposals to control these weeds with herbicides. These weeds are destroying Tahoe's legendary clarity and purity. Proposals to control them with herbicides only poisons the lake further.

I am absolutely opposed to any and all use of poisonous herbicides in the Keys and any other waters that connect to Lake Tahoe -- a Tier 3 Outstanding National Resource Water. I oppose spending tens of millions of taxpayer dollars for the convenience of boat-owners at the Tahoe Keys. I join The Sierra Club Tahoe Area Group in defending the purity of Lake Tahoe.

Sincerely,

Anne Kallus 11898 Brookstone Dr Truckee, CA 96161 akallus@hotmail.com (415) 578-0035

From:	Christiane Brown (christianebrown@sbcglobal.net) Sent You a Personal Message
То:	tahoekeysweeds@trpa.org
Subject:	[EXTERNAL] No weeds or herbicides for Lake Tahoe!
Date:	Tuesday, September 1, 2020 12:24:53 PM

Dear Tahoe Regional Planning Agency,

The efforts by so many to preserve the clarity of Lake Tahoe will be undermined by poisoning Lake Tahoe with herbicides! Please be responsible and work to find a safe, non-chemical method. We know it is possible if we work together! Thank You.

I support Alternative AA1 of your Tahoe Keys Weeds Draft Environmental Impact Report.

The Tahoe Keys lagoons are an environmental disaster at Lake Tahoe. Proof of this are the infestations of aquatic invasive weeds now thriving there and the proposals to control these weeds with herbicides. These weeds are destroying Tahoe's legendary clarity and purity. Proposals to control them with herbicides only poisons the lake further.

I am absolutely opposed to any and all use of poisonous herbicides in the Keys and any other waters that connect to Lake Tahoe -- a Tier 3 Outstanding National Resource Water. I oppose spending tens of millions of taxpayer dollars for the convenience of boat-owners at the Tahoe Keys. I join The Sierra Club Tahoe Area Group in defending the purity of Lake Tahoe.

Sincerely,

Christiane Brown 1710 Shadow Park Reno, NV 89523 christianebrown@sbcglobal.net (775) 530-9463

From:	<u>g ciemson (ciemzonell@gmail.com) Sent You a Personal Messa</u>
То:	tahoekeysweeds@trpa.org
Subject:	[EXTERNAL] No weeds or herbicides for Lake Tahoe!
Date:	Friday, August 21, 2020 7:24:25 AM
Date:	Friday, August 21, 2020 7:24:25 AM

Dear Tahoe Regional Planning Agency,

New ethics are needed vs the myopia of applying willy-nilly poorly understood pesticides and herbicides, creating longterm harms, while companies walk away from the places and peoples and ecosystems they have disrupted with massive profits. There are HOLISTIC ways to deal with all the "problems", methods that actually cost less in the long run if all the ignored "collateral damage" costs are considered. Our "modern" culture has for too long ignored healthy longterm thinking in favor of short term myopic fixes and profits.

I support Alternative AA1 of your Tahoe Keys Weeds Draft Environmental Impact Report.

The Tahoe Keys lagoons are an environmental disaster at Lake Tahoe. Proof of this are the infestations of aquatic invasive weeds now thriving there and the proposals to control these weeds with herbicides. These weeds are destroying Tahoe's legendary clarity and purity. Proposals to control them with herbicides only poisons the lake further.

I am absolutely opposed to any and all use of poisonous herbicides in the Keys and any other waters that connect to Lake Tahoe -- a Tier 3 Outstanding National Resource Water. I oppose spending tens of millions of taxpayer dollars for the convenience of boat-owners at the Tahoe Keys. I join The Sierra Club Tahoe Area Group in defending the purity of Lake Tahoe.

Sincerely,

g clemson 10151 Dorrell Ln Unit 3074 Las Vegas, NV 89166 clemzone11@gmail.com (702) 487-6978

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Lillian Miller at Sierra Club at core.help@sierraclub.org or (415) 977-5500.

HE-108

Dear Tahoe Regional Planning Agency,

Herbicides are never the answer!! We need to stop using poisons and find alternative ways to control invasive weeds.

I support Alternative AA1 of your Tahoe Keys Weeds Draft Environmental Impact Report.

The Tahoe Keys lagoons are an environmental disaster at Lake Tahoe. Proof of this are the infestations of aquatic invasive weeds now thriving there and the proposals to control these weeds with herbicides. These weeds are destroying Tahoe's legendary clarity and purity. Proposals to control them with herbicides only poisons the lake further.

I am absolutely opposed to any and all use of poisonous herbicides in the Keys and any other waters that connect to Lake Tahoe -- a Tier 3 Outstanding National Resource Water. I oppose spending tens of millions of taxpayer dollars for the convenience of boat-owners at the Tahoe Keys. I join The Sierra Club Tahoe Area Group in defending the purity of Lake Tahoe.

Sincerely,

Jane Bramley 4552 Cobra Drive Sparks, NV 89436 jbramley57@gmail.com (408) 805-0052

Dear Tahoe Regional Planning Agency,

I live at Lake Tahoe and do not want herbicides in my drinking water.

HE-110

I support Alternative AA1 of your Tahoe Keys Weeds Draft Environmental Impact Report.

The Tahoe Keys lagoons are an environmental disaster at Lake Tahoe. Proof of this are the infestations of aquatic invasive weeds now thriving there and the proposals to control these weeds with herbicides. These weeds are destroying Tahoe's legendary clarity and purity. Proposals to control them with herbicides only poisons the lake further.

I am absolutely opposed to any and all use of poisonous herbicides in the Keys and any other waters that connect to Lake Tahoe -- a Tier 3 Outstanding National Resource Water. I oppose spending tens of millions of taxpayer dollars for the convenience of boat-owners at the Tahoe Keys. I join The Sierra Club Tahoe Area Group in defending the purity of Lake Tahoe.

Sincerely,

Lisa Foley P.O. Box 786 Zephyr cove , NV 89448 lisafoley@ymail.com (775) 580-7773

From:	Lisa Passmore-Quade (Ipquade@sbcglobal.net) Sent You a Personal Message
To:	tahoekeysweeds@trpa.org
Subject:	[EXTERNAL] No weeds or herbicides for Lake Tahoe!
Date:	Saturday, August 22, 2020 11:39:17 AM

Dear Tahoe Regional Planning Agency,

We must do all we can to save Tahoe! No herbicides@

HE-111

I support Alternative AA1 of your Tahoe Keys Weeds Draft Environmental Impact Report.

The Tahoe Keys lagoons are an environmental disaster at Lake Tahoe. Proof of this are the infestations of aquatic invasive weeds now thriving there and the proposals to control these weeds with herbicides. These weeds are destroying Tahoe's legendary clarity and purity. Proposals to control them with herbicides only poisons the lake further.

I am absolutely opposed to any and all use of poisonous herbicides in the Keys and any other waters that connect to Lake Tahoe -- a Tier 3 Outstanding National Resource Water. I oppose spending tens of millions of taxpayer dollars for the convenience of boat-owners at the Tahoe Keys. I join The Sierra Club Tahoe Area Group in defending the purity of Lake Tahoe.

Sincerely,

Lisa Passmore-Quade 1309 S. Sutro Terrace Carson City, NV 89706 lpquade@sbcglobal.net (775) 461-0301

Dear Tahoe Regional Planning Agency,

Throwing poisons at/in/on an already toxic situation in Lake Tahoe will only degrade the quality and safety of our beautiful lake even further. It is WE the humans who need to change our destructive attitudes and behaviors in order to save Lake Tahoe, and life on earth.

I support Alternative AA1 of your Tahoe Keys Weeds Draft Environmental Impact Report.

The Tahoe Keys lagoons are an environmental disaster at Lake Tahoe. Proof of this are the infestations of aquatic invasive weeds now thriving there and the proposals to control these weeds with herbicides. These weeds are destroying Tahoe's legendary clarity and purity. Proposals to control them with herbicides only poisons the lake further.

I am absolutely opposed to any and all use of poisonous herbicides in the Keys and any other waters that connect to Lake Tahoe -- a Tier 3 Outstanding National Resource Water. I oppose spending tens of millions of taxpayer dollars for the convenience of boat-owners at the Tahoe Keys. I join The Sierra Club Tahoe Area Group in defending the purity of Lake Tahoe.

Sincerely,

Lori De Sena 1331 Brooke Way Gardnerville , NV 89410 loridesena@gmail.com (775) 781-0088

Dear Tahoe Regional Planning Agency,

We love this lake and don?t want to see it damaged with herbicides or dredging.

HE-113

I support Alternative AA1 of your Tahoe Keys Weeds Draft Environmental Impact Report.

The Tahoe Keys lagoons are an environmental disaster at Lake Tahoe. Proof of this are the infestations of aquatic invasive weeds now thriving there and the proposals to control these weeds with herbicides. These weeds are destroying Tahoe's legendary clarity and purity. Proposals to control them with herbicides only poisons the lake further.

I am absolutely opposed to any and all use of poisonous herbicides in the Keys and any other waters that connect to Lake Tahoe -- a Tier 3 Outstanding National Resource Water. I oppose spending tens of millions of taxpayer dollars for the convenience of boat-owners at the Tahoe Keys. I join The Sierra Club Tahoe Area Group in defending the purity of Lake Tahoe.

Sincerely,

Louis III Bubala 2040 Brenda Way Washoe Valley, NV 89704 Ibubala@gmail.com (775) 223-7641

From:	Lucrecia Belancio (lucrecianature@gmail.com) Sent You a Personal Message
То:	tahoekeysweeds@trpa.org
Subject:	[EXTERNAL] No weeds or herbicides for Lake Tahoe!
Date:	Tuesday, August 18, 2020 8:32:38 PM

Dear Tahoe Regional Planning Agency,

My son was born in South Lake Tahoe.I love the lake.Now I reside in Reno but the lake has a special place in my heart.

I usually come to hike in the mountains around it, and snowshoe in the winter. Eveytime I look at the lake it gives me peace and happiness. It heals my soul, and gives me strength to keep going. The purity of its waters must be kept. Just to benefit a few , please refrain for using herbicides.

Every time we change Nature ,we are destroying the way things work. When man intervene in the natural process of Mother Nature,we will have to dealt

with the consequences.

Thanks for taking your time to read my deep concerns about this matter.

Sincerely,

Mrs. Lucrecia Belancio

I support Alternative AA1 of your Tahoe Keys Weeds Draft Environmental Impact Report.

The Tahoe Keys lagoons are an environmental disaster at Lake Tahoe. Proof of this are the infestations of aquatic invasive weeds now thriving there and the proposals to control these weeds with herbicides. These weeds are destroying Tahoe's legendary clarity and purity. Proposals to control them with herbicides only poisons the lake further.

I am absolutely opposed to any and all use of poisonous herbicides in the Keys and any other waters that connect to Lake Tahoe -- a Tier 3 Outstanding National Resource Water. I oppose spending tens of millions of taxpayer dollars for the convenience of boat-owners at the Tahoe Keys. I join The Sierra Club Tahoe Area Group in defending the purity of Lake Tahoe.

Sincerely,

Lucrecia Belancio 9900 Wilbur May Pkwy # 1204 Reno , NV 89521 lucrecianature@gmail.com (775) 410-1085

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Lillian Miller at Sierra Club at core.help@sierraclub.org or (415) 977-5500.

HE-114

Dear Tahoe Regional Planning Agency,

Let the Keys re-wild to the original marsh!

HE-115

I support Alternative AA1 of your Tahoe Keys Weeds Draft Environmental Impact Report.

The Tahoe Keys lagoons are an environmental disaster at Lake Tahoe. Proof of this are the infestations of aquatic invasive weeds now thriving there and the proposals to control these weeds with herbicides. These weeds are destroying Tahoe's legendary clarity and purity. Proposals to control them with herbicides only poisons the lake further.

I am absolutely opposed to any and all use of poisonous herbicides in the Keys and any other waters that connect to Lake Tahoe -- a Tier 3 Outstanding National Resource Water. I oppose spending tens of millions of taxpayer dollars for the convenience of boat-owners at the Tahoe Keys. I join The Sierra Club Tahoe Area Group in defending the purity of Lake Tahoe.

Sincerely,

Mark Spohr PO Box 6984 Tahoe City, CA 96145 mhspohr@gmail.com (530) 583-9324

Dear Tahoe Regional Planning Agency,

Lk. Tahoe is UNIQUE. We must do everything possible to preserve it's purity and clarity and protect the natural balance of it's wetlands' purifying actions. Please deny the use of herbicides to control weeds in Tahoe.

I support Alternative AA1 of your Tahoe Keys Weeds Draft Environmental Impact Report.

The Tahoe Keys lagoons are an environmental disaster at Lake Tahoe. Proof of this are the infestations of aquatic invasive weeds now thriving there and the proposals to control these weeds with herbicides. These weeds are destroying Tahoe's legendary clarity and purity. Proposals to control them with herbicides only poisons the lake further.

I am absolutely opposed to any and all use of poisonous herbicides in the Keys and any other waters that connect to Lake Tahoe -- a Tier 3 Outstanding National Resource Water. I oppose spending tens of millions of taxpayer dollars for the convenience of boat-owners at the Tahoe Keys. I join The Sierra Club Tahoe Area Group in defending the purity of Lake Tahoe.

Sincerely,

Nancy Cencula 9145 Cordoba Blvd Jedediah Smith Redwoods SP, NV 89441 ncencula@yahoo.com (775) 425-3176

Dear Tahoe Regional Planning Agency,

Though I live in Carson City I recreate all over the Sierra's and am particularly fond of Lake Tahoe. The Lake needs to be preserved and protected and the plan to use herbicides will do just the opposite. They should not be allowed anywhere near Lake Tahoe. There are ways to stop the spread of invasive weeds that do not require using harmful herbicides and these methods need to be used instead.

I support Alternative AA1 of your Tahoe Keys Weeds Draft Environmental Impact Report.

The Tahoe Keys lagoons are an environmental disaster at Lake Tahoe. Proof of this are the infestations of aquatic invasive weeds now thriving there and the proposals to control these weeds with herbicides. These weeds are destroying Tahoe's legendary clarity and purity. Proposals to control them with herbicides only poisons the lake further.

I am absolutely opposed to any and all use of poisonous herbicides in the Keys and any other waters that connect to Lake Tahoe -- a Tier 3 Outstanding National Resource Water. I oppose spending tens of millions of taxpayer dollars for the convenience of boat-owners at the Tahoe Keys. I join The Sierra Club Tahoe Area Group in defending the purity of Lake Tahoe.

Sincerely,

Susan Potts 2090 W. College Parkway #45 Carson City, NV 89703 sconcolor@yahoo.com (775) 350-3266

Dear Tahoe Regional Planning Agency,

We can see what happens when wetlands are invaded by humans and can't function properly. Lesson learned. However, Lake Tahoe is a national treasure and we must be good stewards and not mess it up yet again. Poison is poison.

I support Alternative AA1 of your Tahoe Keys Weeds Draft Environmental Impact Report.

The Tahoe Keys lagoons are an environmental disaster at Lake Tahoe. Proof of this are the infestations of aquatic invasive weeds now thriving there and the proposals to control these weeds with herbicides. These weeds are destroying Tahoe's legendary clarity and purity. Proposals to control them with herbicides only poisons the lake further.

I am absolutely opposed to any and all use of poisonous herbicides in the Keys and any other waters that connect to Lake Tahoe -- a Tier 3 Outstanding National Resource Water. I oppose spending tens of millions of taxpayer dollars for the convenience of boat-owners at the Tahoe Keys. I join The Sierra Club Tahoe Area Group in defending the purity of Lake Tahoe.

Sincerely,

Wendy Boszak 7424 Deveron Dr. RENO, NV 89506 wbosz@aol.com (775) 971-9682

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Lillian Miller at Sierra Club at core.help@sierraclub.org or (415) 977-5500.

HE-117

From:	chris.omearadietrich@everyactioncustom.com on behalf of Chris OMeara Dietrich
То:	tahoekeysweeds@trpa.org
Subject:	[EXTERNAL] Protect Lake Tahoe from Toxic Weed Killers
Date:	Thursday, August 27, 2020 2:18:45 PM

Dear Tahoe Regional Planning Agency and Lahontan Regional Water Quality Control Board,

I agree with the draft EIR/EIS authors that the Action Alternative 1: Testing of Non-Herbicidal Methods Only is the environmentally best choice and I ask that the Tahoe Regional Planning Agency/Lahontan Regional Water Quality Control Board (TRPA/LRWQCB) choose this alternative for the proposed weed control test program.

While the limited herbicide spot-treatment usage as part of the Proposed Project poses substantial localized risks to human health and

environment, a full-scale herbicide use throughout the Tahoe Keys lagoons would be seriously detrimental to the Keys and potentially to the broader Lake Tahoe.

The underlying problem of nutrient flow into the Tahoe Keys from residential and landscape fertilizer use and vehicular (auto and boat) exhaust emissions contributes to the weed problem in the Keys and Lake Tahoe in general. I strongly urge TRPA/LRWQCB to expand efforts limiting nutrient flowing into Lake Tahoe.

Humans created this problem and without severe limitation, aggravate aquatic weed proliferation in the Tahoe Keys lagoons continue unabated and will continue to hinder weed control efforts.

AWM-32

My hope is that local cooperation and non-herbicidal methods can and will achieve healthy waters again.

Sincerely, Chris OMeara Dietrich 2827 Broken Oak Ct San Jose, CA 95148-2202 chris.omearadietrich@yahoo.com

From:	flybar89@everyactioncustom.com on behalf of John Scott
To:	tahoekeysweeds@trpa.org
Subject:	[EXTERNAL] Protect Lake Tahoe from Toxic Weed Killers
Date:	Thursday, August 27, 2020 1:31:59 PM

Dear Tahoe Regional Planning Agency and Lahontan Regional Water Quality Control Board,

I am writing to agree with the draft EIR/EIS authors that the Action Alternative 1: Testing of Non-Herbicidal Methods Only is the environmentally best choice and ask that the Tahoe Regional Planning Agency/Lahontan Regional Water Quality Control Board (TRPA/LRWQCB) choose this alternative for the proposed weed control test program.

Better living thru chemistry? Definitely not in this case!

Lake Tahoe is treasured for its scenic and ecological values not just by residents of California and Nevada, but by many others. The Washoe Tribe considers the lake to be a sacred life-sustaining water, the center of the world. The lake is designated an "Outstanding National Resource Water" under the Clean Water Act and is recognized nationally and globally as a natural resource of special significance.

The herbicides chosen for consideration in this program pose risks of potential health and environmental harm not fully assessed in the EIR/EIS, and the non-herbicidal methods alone may prove sufficiently effective for the weed control sought. The Proposed Project, Action Alternatives, and the No Action Alternative all could have potentially significant effects to water quality issues (water temperature, turbidity, dispersal of aquatic fragments, changes in pH, dissolved oxygen, total phosphorus, and total nitrogen concentrations) and aquatic community stability (species diversity, species dominance, seasonal succession). The limited herbicide spot-treatment usage as part of the Proposed Project poses substantial localized risks to human health and environment. A full-scale herbicide use throughout the Tahoe Keys lagoons would be seriously detrimental to the Keys and potentially to the broader Lake Tahoe. The Action Alternative 1: Testing of Non-Herbicidal Methods Only would have the least potential for any serious and unwanted effects. Action Alternative 1 is the environmentally best choice and will likely demonstrate the effectiveness of non-herbicidal methods in controlling the aquatic weed problem. TRPA/LRWQCB should select this alternative for the proposed weed control test program.

Separate from the weed test control program, nutrient inputs into the Tahoe Keys from residential and landscape fertilizer use and vehicular (auto and boat) exhaust emissions contribute to the eutrophication and weed problem in the Keys and Lake Tahoe in general. TRPA/LRWQCB should continue and expand existing efforts limiting nutrient inputs that aggravate aquatic weed proliferation in the Tahoe Keys lagoons and will continue to hinder weed control efforts.

Please see comments submitted by Beyond Pesticides, which I support. Thank you for your consideration of these

ALT-56

comments.

Sincerely,

Sincerely, John Scott 811 Cramer Ave Lexington, KY 40502-1413 flybar89@gmail.com

From:	tedslioness@everyactioncustom.com on behalf of Theo Giesy
To:	tahoekeysweeds@trpa.org
Subject:	[EXTERNAL] Protect Lake Tahoe from Toxic Weed Killers
Date:	Thursday, August 27, 2020 6:25:13 PM

Dear Tahoe Regional Planning Agency and Lahontan Regional Water Quality Control Board,

I am writing to agree with the draft EIR/EIS authors that the Action Alternative 1: Testing of Non-Herbicidal Methods Only is the environmentally best choice and ask that the Tahoe Regional Planning Agency/Lahontan Regional Water Quality Control Board (TRPA/LRWQCB) choose this alternative for the proposed weed control test program.

Lake Tahoe is treasured for its scenic and ecological values not just by residents of California and Nevada, but by many others. The Washoe Tribe considers the lake to be a sacred life-sustaining water, the center of the world. The lake is designated an "Outstanding National Resource Water" under the Clean Water Act and is recognized nationally and globally as a natural resource of special significance.

The herbicides chosen for consideration in this program pose risks of potential health and environmental harm not fully assessed in the EIR/EIS, and the non-herbicidal methods alone may prove sufficiently effective for the weed control sought. The Proposed Project, Action Alternatives, and the No Action Alternative all could have potentially significant effects to water quality issues (water temperature, turbidity, dispersal of aquatic fragments, changes in pH, dissolved oxygen, total phosphorus, and total nitrogen concentrations) and aquatic community stability (species diversity, species dominance, seasonal succession). The limited herbicide spot-treatment usage as part of the Proposed Project poses substantial localized risks to human health and environment. A full-scale herbicide use throughout the Tahoe Keys lagoons would be seriously detrimental to the Keys and potentially to the broader Lake Tahoe. The Action Alternative 1: Testing of Non-Herbicidal Methods Only would have the least potential for any serious and unwanted effects. Action Alternative 1 is the environmentally best choice and will likely demonstrate the effectiveness of non-herbicidal methods in controlling the aquatic weed problem. TRPA/LRWQCB should select this alternative for the proposed weed control test program.

Separate from the weed test control program, nutrient inputs into the Tahoe Keys from residential and landscape fertilizer use and vehicular (auto and boat) exhaust emissions contribute to the eutrophication and weed problem in the Keys and Lake Tahoe in general. TRPA/LRWQCB should continue and expand existing efforts limiting nutrient inputs that aggravate aquatic weed proliferation in the Tahoe Keys lagoons and will continue to hinder weed control efforts.

The earth is rebelling against human contamination all over and in many ways. We must choose the least harmful methods of achieving our goals. In this case that would be Action Alternative 1.

Please see comments submitted by Beyond Pesticides, which I support. Thank you for your consideration of these comments.

Sincerely,

Sincerely, Theo Giesy 4706 Chestnut Fork Rd Gloucester, VA 23061-3948 tedslioness@yahoo.com ALT-64

Dear Tahoe Regional Planning Agency,

Lake Tahoe is an invaluable and irreplaceable ecosystem. This jewel of the Sierra must be protected in the most thoughtful measures possible! Please think about the long term effects of each action and make the right decision.

I support Alternative AA1 of your Tahoe Keys Weeds Draft Environmental Impact Report.

The Tahoe Keys lagoons are an environmental disaster at Lake Tahoe. Proof of this are the infestations of aquatic invasive weeds now thriving there and the proposals to control these weeds with herbicides. These weeds are destroying Tahoe's legendary clarity and purity. Proposals to control them with herbicides only poisons the lake further.

I am absolutely opposed to any and all use of poisonous herbicides in the Keys and any other waters that connect to Lake Tahoe -- a Tier 3 Outstanding National Resource Water. I oppose spending tens of millions of taxpayer dollars for the convenience of boat-owners at the Tahoe Keys. I join The Sierra Club Tahoe Area Group in defending the purity of Lake Tahoe.

Sincerely,

Chris Kasper 1465 Clough Rd Reno, NV 89509 chrisakasper@gmail.com (781) 264-7872

From:	Dawn David (dawnd@hotmail.com) Sent You a Personal Message
То:	tahoekeysweeds@trpa.org
Subject:	[EXTERNAL] No weeds or herbicides for Lake Tahoe!
Date:	Tuesday, September 1, 2020 3:35:52 PM

Dear Tahoe Regional Planning Agency,

Lake Tahoe is one of the most beautiful lakes around. We don?t want anything to impact or ruin it.

GEN-39

I support Alternative AA1 of your Tahoe Keys Weeds Draft Environmental Impact Report.

The Tahoe Keys lagoons are an environmental disaster at Lake Tahoe. Proof of this are the infestations of aquatic invasive weeds now thriving there and the proposals to control these weeds with herbicides. These weeds are destroying Tahoe's legendary clarity and purity. Proposals to control them with herbicides only poisons the lake further.

I am absolutely opposed to any and all use of poisonous herbicides in the Keys and any other waters that connect to Lake Tahoe -- a Tier 3 Outstanding National Resource Water. I oppose spending tens of millions of taxpayer dollars for the convenience of boat-owners at the Tahoe Keys. I join The Sierra Club Tahoe Area Group in defending the purity of Lake Tahoe.

Sincerely,

Dawn David 2371 Brookedge Dr. Placerville, CA 95667 dawnd@hotmail.com (530) 621-1822

From:	Jane Grey (janepezua@gmail.com) Sent You a Personal Message
То:	tahoekeysweeds@trpa.org
Subject:	[EXTERNAL] No weeds or herbicides for Lake Tahoe!
Date:	Tuesday, September 1, 2020 2:44:15 PM

Dear Tahoe Regional Planning Agency,

The beauty of the Lake depends on its health. We need to reduce chemical contamination, run off, and invasive species to keep Tahoe blue! This protects the Lake and everything that depends on it, including wildlife, locals, and tourists.

I support Alternative AA1 of your Tahoe Keys Weeds Draft Environmental Impact Report.

The Tahoe Keys lagoons are an environmental disaster at Lake Tahoe. Proof of this are the infestations of aquatic invasive weeds now thriving there and the proposals to control these weeds with herbicides. These weeds are destroying Tahoe's legendary clarity and purity. Proposals to control them with herbicides only poisons the lake further.

I am absolutely opposed to any and all use of poisonous herbicides in the Keys and any other waters that connect to Lake Tahoe -- a Tier 3 Outstanding National Resource Water. I oppose spending tens of millions of taxpayer dollars for the convenience of boat-owners at the Tahoe Keys. I join The Sierra Club Tahoe Area Group in defending the purity of Lake Tahoe.

Sincerely,

Jane Grey 1909 B Street South Lake Tahoe , CA 96150 janepezua@gmail.com (434) 531-6439

From:	<u>kirt willard</u>
То:	tahoekeysweeds@trpa.org
Subject:	[EXTERNAL] submit comments for draft environmental impact report
Date:	Friday, August 28, 2020 6:18:44 PM

Thank you for taking time to collect comments

Back in the 1980's the tahoe keys approach to the weeds was that it was something we could manage.

After millions spent on harvesting, bottom barriers, bubble curtains, sea bins, diffusers etc we are now of 95% impacted with no relief in sight.

AWM-33b

This is the future of lake tahoe if we don't take steps to manage the weed problem now.

I'm all for studying methods side by side to determine what will be most effective in removing the weeds and still be affordable

kirt willard 2243 White Sands Dr South Lake Tahoe, CA 96150

From:	Nancy Dollard
То:	TahoeKeysWeeds@trpa.org
Subject:	[EXTERNAL] Tahoe Key Weeds Choose AA1 NON Herbicidal Method
Date:	Friday, August 28, 2020 8:41:05 PM

To the Tahoe Keys Weeds Project:

Please choose "Action Alternative 1" (AA1) at this would test only NON-herbicidal methods of aquatic weed control.	ALT-58
It is SO important to PROTECT Aquatic Ecosystems and NOT use any chemical herbicides!!! In addition, the Lead Agencies should begin addressing the long-term problem by RESTORING	RES-9
MOST of the lagoons to MARSH HABITAT.	
It always bothers me that HUMANS CREATE a problem-DESTROYING parts of the Marsh, which	HE-136
FILTERS NEEDED WATER for the Lake,	
and then SOME humans want to use DANGEROUS and DEADLY HERBICIDES to KILL the weeds	
which WILL harm the marsh!	
ENOUGH!	
Since the FEDERAL government AND CALIFORNIA have designated Lake Tahoe as a Tier 3	
"Outstanding National Resource Water". The Clean Water Act requires that the water quality of	
Tier 3 waters must be maintained and protected without exception, meaning that Tier 3 waters must	
not be allowed to be degraded. As such, any degradation, such as the use of herbicides, requires an	
Anti-Degradation Analysis that meets both Federal and California regulations. The FAILURE of	
ALL NON-chemical methods must be demonstrated prior to authorizing the use of herbicides.	REG-13
TKPOA has NOT sufficiently tested NON-herbicidal treatment methods, and it certainly has not met this	
prohibition exemption requirement of demonstrating the ineffectiveness of non-herbicide treatment	
methods, but instead continues pursuing herbicide use.	
Returning the keys lagoons to a healthy functioning wetland would solve the weed problem by	
eliminating the weed's habitat. It would eliminate the need for herbicides. The wetland would filter	
nutrients and pollution from Tahoe, immediately improving the water quality and clarity of our	
cherished Lake Tahoe. Done well, it could enhance the Tahoe Basin's health, beauty and quality of life,	
while preserving property values.	
So, FOLLOW THE LAW and CHOOSE AA1 and ONLY consider NON-herbicidal methods of	I
acquatic weed control.	

It's time for some of the humans who CREATED this problem, (along w/global warming that contributes to the warming of the lagoons),

to be solved in an ENVIRONMENTALLY-friendly way.

Thank you for PROTECTING the MARSH with-OUT chemicals! Sincerely,

Nancy Dollard 11255 Cottingham Cir., NW Uniontown, OH 44685

From:	John Roukema
То:	tahoekeysweeds@trpa.org
Subject:	[EXTERNAL] Comments on Draft EIR/EIS Tahoe Keys Lagoons Aquatic Weed Control Methods Test
Date:	Saturday, August 29, 2020 1:03:18 PM

Thank you for the opportunity to comment on the draft EIR/EIS. After reviewing the document, the findings that the project and action alternatives pose no significant unavoidable effects after mitigation.

The finding that the Action Alternative 1 is the environmentally preferred alternative appears to be an emotional judgement call. Section 5.7 states, "As shown in Table 5-1, both the Proposed Project and Action Alternative 2 would have potentially significant unavoidable impacts on recreational boating." This is the only unavoidable impact stated and is inconsistent with Table 5-1 which states, "No significant unavoidable effects; no mitigation required" to recreational boating."

The proposed project which tests all the methods in which there are no significant unavoidable effects after mitigation will provide most useful data in a timely manner should be the environmentally preferred alternative. This approach will best support an informed decision for future actions. Eliminating the testing one potentially viable alternative for controlling the invasive weeds is not an environmentally sound approach to this collaborative effort.

Thank you again for the opportunity to comment on this draft report.

John and Linda Roukema

ALT-55

From:	Kevin Hubbard
То:	TahoeKeysWeeds
Subject:	[EXTERNAL] Comments about the Tahoe Keys CMT Draft EIS/EIR
Date:	Saturday, August 29, 2020 8:11:47 AM

I have participated in the online webinar and am in full support of the testing that was outlined. I believe the Chemical Alternatives/Herbicides will be our best option. Our home is at 537 Alpine Drive, SLT and is one of the proposed areas where the Herbicide would be used and we are in full support.

ALT-23

Please email or call me if you have any further questions.

BTW - When clicking on the link to TahoeKeysWeeds@trpa.org in this email provides another URL as email address instead of the correct one. Please fix and resend so you can get the feedback that you are asking for.

Thanks, Kevin Hubbard Vice President PLM Family of Companies (PLM Lender Services, Inc. – DRE 01125529 NMLS 322482) (PLM Loan Processing Center, Inc. – DRE 01858761 NMLS 945371) (PLM Loan Management Services, Inc.) Phone 408-370-4030 ext. 210 Toll-Free 800-829-1585 ext. 210 Fax 408-370-5484 www.plmweb.com

Dear Tahoe Regional Planning Agency and Lahontan Regional Water Quality Control Board,

I am writing to agree with the draft EIR/EIS authors that the Action Alternative 1:

*** Testing of Non-Herbicidal Methods Only is the environmentally best choice and ask that the Tahoe Regional Planning Agency/Lahontan Regional Water Quality Control Board (TRPA/LRWQCB) choose this alternative for the proposed weed control test program.

Lake Tahoe is treasured for its scenic and ecological values not just by residents of California and Nevada, but by many others. The Washoe Tribe considers the lake to be a sacred life-sustaining water, the center of the world. The lake is designated an "Outstanding National Resource Water" under the Clean Water Act and is recognized nationally and globally as a natural resource of special significance.

The herbicides chosen for consideration in this program pose risks of potential health and environmental harm not fully assessed in the EIR/EIS, and the non-herbicidal methods alone may prove sufficiently effective for the weed control sought. The Proposed Project, Action Alternatives, and the No Action Alternative all could have potentially significant effects to water quality issues (water temperature, turbidity, dispersal of aquatic fragments, changes in pH, dissolved oxygen, total phosphorus, and total nitrogen concentrations) and aquatic community stability (species diversity, species dominance, seasonal succession).

* The limited herbicide spot-treatment usage as part of the Proposed Project poses substantial localized risks to human health and environment.

* A full-scale herbicide use throughout the Tahoe Keys lagoons would be seriously detrimental to the Keys and potentially to the broader Lake Tahoe.

* The Action Alternative 1: Testing of Non-Herbicidal Methods Only would have the least potential for any serious and unwanted effects.

* Action Alternative 1 is the environmentally best choice and will likely demonstrate the effectiveness of nonherbicidal methods in controlling the aquatic weed problem. TRPA/LRWQCB should select this alternative for the proposed weed control test program.

Separate from the weed test control program, nutrient inputs into the Tahoe Keys from residential and landscape fertilizer use and vehicular (auto and boat) exhaust emissions contribute to the eutrophication and weed problem in the Keys and Lake Tahoe in general. TRPA/LRWQCB should continue and expand existing efforts limiting nutrient inputs that aggravate aquatic weed proliferation in the Tahoe Keys lagoons and will continue to hinder weed control efforts.

Please see comments submitted by Beyond Pesticides, which I support.

Sincerely,

Sincerely, Ronald Clayton 10860 Old US Highway 70 Cove City, NC 28523-9514 se-larvae@hotmail.com HE-138

ALT-61

Dear Tahoe Regional Planning Agency,

The proposed action is not effective or responsible mitigation. There are better alternatives. As a resident of Nevada, I share in the benefits of the water. But I also feel a duty to share in the responsible management.

I support Alternative AA1 of your Tahoe Keys Weeds Draft Environmental Impact Report.

The Tahoe Keys lagoons are an environmental disaster at Lake Tahoe. Proof of this are the infestations of aquatic invasive weeds now thriving there and the proposals to control these weeds with herbicides. These weeds are destroying Tahoe's legendary clarity and purity. Proposals to control them with herbicides only poisons the lake further.

I am absolutely opposed to any and all use of poisonous herbicides in the Keys and any other waters that connect to Lake Tahoe -- a Tier 3 Outstanding National Resource Water. I oppose spending tens of millions of taxpayer dollars for the convenience of boat-owners at the Tahoe Keys. I join The Sierra Club Tahoe Area Group in defending the purity of Lake Tahoe.

Sincerely,

Kyle Roerink 1630 Hoyt Street Reno, NV 89509 kyleroerink@icloud.com (702) 324-9662

From:	jobee949@everyactioncustom.com on behalf of JoEllen Rudolph
To:	tahoekeysweeds@trpa.org
Subject:	[EXTERNAL] Protect Lake Tahoe from Toxic Weed Killers
Date:	Tuesday, September 1, 2020 2:06:40 PM

Dear Tahoe Regional Planning Agency and Lahontan Regional Water Quality Control Board,

I am writing to agree with the draft EIR/EIS authors that the Action Alternative 1: Testing of Non-Herbicidal Methods Only is the environmentally best choice and ask that the Tahoe Regional Planning Agency/Lahontan Regional Water Quality Control Board (TRPA/LRWQCB) choose this alternative for the proposed weed control test program.

Lake Tahoe is treasured for its scenic and ecological values not just by residents of California and Nevada, but by many others. The Washoe Tribe considers the lake to be a sacred life-sustaining water, the center of the world. The lake is designated an "Outstanding National Resource Water" under the Clean Water Act and is recognized nationally and globally as a natural resource of special significance.

I HAVE FRIENDS WHO HAVE VISITED THERE AND SAID THE LAKE IS ABSOLUTELY BEAUTIFUL. IT NEEDS TO BE PROTECTED FROM POLLUTION. THIS IS NECESSARY ESPECIALLY SINCE THAT PART OF THE COUNTRY IS SO SCARCE OF WATER RECREATION RESOURCES AND THAT PURE LARGE BODIES OF WATER ARE NECESSARY FOR WILDLIFE SURVIVAL PARTICULARLY DURING MIGRATION TO WILDLIFE NESTING AREAS IN THE ARCTIC.

The herbicides chosen for consideration in this program pose risks of potential health and environmental harm not fully assessed in the EIR/EIS, and the non-herbicidal methods alone may prove sufficiently effective for the weed control sought. The Proposed Project, Action Alternatives, and the No Action Alternative all could have potentially significant effects to water quality issues (water temperature, turbidity, dispersal of aquatic fragments, changes in pH, dissolved oxygen, total phosphorus, and total nitrogen concentrations) and aquatic community stability (species diversity, species dominance, seasonal succession). The limited herbicide spot-treatment usage as part of the Proposed Project poses substantial localized risks to human health and environment. A full-scale herbicide use throughout the Tahoe Keys lagoons would be seriously detrimental to the Keys and potentially to the broader Lake Tahoe. The Action Alternative 1: Testing of Non-Herbicidal Methods Only would have the least potential for any serious and unwanted effects. Action Alternative 1 is the environmentally best choice and will likely demonstrate the effectiveness of non-herbicidal methods in controlling the aquatic weed problem. TRPA/LRWQCB should select this alternative for the proposed weed control test program.

Separate from the weed test control program, nutrient inputs into the Tahoe Keys from residential and landscape fertilizer use and vehicular (auto and boat) exhaust emissions contribute to the eutrophication and weed problem in the Keys and Lake Tahoe in general. TRPA/LRWQCB should continue and expand existing efforts limiting nutrient inputs that aggravate aquatic weed proliferation in the Tahoe Keys lagoons and will continue to hinder weed control efforts.

Please see comments submitted by Beyond Pesticides, which I support. Thank you for your consideration of these comments.

Sincerely,

Sincerely, JoEllen Rudolph 9799 Townline Rd Petoskey, MI 49770-9106 jobee949@charter.net **REC-3**

From:	Lauri Kemper (via Google Docs)
Τα:	<u>ta hoekeysweeds@trpa.org</u>
Cc:	Russell Norman (Guest): Dennis Zabaglo (Guest)
Subject:	[EXTERNAL] Comments on tahoe keys aquatic weeds control methods test project deir/deis
Date:	Wednesday, September 2, 2020 6:33:17 PM
Attachments:	Comments on keys deirdeis.docx

П	hi lahontan and trpa staff	
	here are my comments.	
	lauri kemper	
5		
Google LLC, 160	eate and edit documents online. 0 Amphitheatre Parkway, Mountain View, CA 94043, USA ed this email because lauri.osgoodcreek@gmail.com shared a	П

September 2, 2020

Mike Plaziak, Acting Executive Officer Russell Norman, Water Resource Control Engineer Lahontan Water Board 2052 Lake Tahoe Boulevard South Lake Tahoe, CA 9615

Joanne Marchetta, Executive Director Dennis Zabaglo Tahoe Regional Planning Agency

Via Email

COMMENTS ON DRAFT EIR/EIS FOR TAHOE KEYS LAGOONS AQUATIC WEED CONTROL METHODS TEST PROJECT

Thank you for the opportunity to comment on the Draft EIR/EIS for the Tahoe Keys Lagoons Weed Control Methods Test Project. I appreciate the effort that went into the design and evaluation of the Test Project. I support carrying out a statistically robust evaluation of control methods prior to implementing a new and improved long term plan to manage aquatic weeds at the Tahoe Keys with the hope of reducing the impact of aquatic invasive species on the rest of Lake Tahoe waters. Current regulations and the need to protect Lake Tahoe from pollution, degradation or the introduction of new and toxic substances require that a thorough test of non- chemical methods is required prior to testing herbicides as a control method. I recognize that the proposed project evaluated in the Draft EIR/EIS is based upon an application by the project proponent, Tahoe Keys

Property Owners' Association (TKPOA), and that TKPOA wishes to use herbicides, and has proposed including them in this test. However, a short delay to further evaluate non-chemical methods is needed before proceeding with herbicides. Also, the evaluation of the impact and mitigation from the proposed use of herbicides described in the Draft EIR/EIS is inadequate and insufficient.

HE-144

MI-25

ALT-73

Please consider my comments and suggestions and revise the environmental document.

1. Since the Lahontan Water Board Basin Plan prohibition exemption process requires a finding regarding adequate testing and use of non-chemical methods prior to authorizing herbicide use, I support development of a revised or new project alternative that begins with the implementation and evaluation of non-chemical methods, first, before considering whether the use of herbicides are needed. In this alternative, UV treatment and laminar flow would be tested (Group A non-chemical methods) for one to two years, followed by the Group B methods in Year 2 or 3. Evaluation of efficacy would follow. Lahontan Water Board would make determination if the Basin Plan criteria has been met to authorize herbicide use and if exemption granted, a permit for herbicide use would be issued for herbicide test to occur. Herbicides as evaluated in the draft EIR/EIS would be administered as outlined. An ' If, then' alternative or a phased alternative should be described in a revised draft EIR/EIS.

- 2. Add to all alternatives a test of restoration. I recognize the argument that restoration need not be tested. However, demonstrating the benefits of restoration and providing homeowners an example of 'what could be' would assist in a future discussion and decision-making regarding long term management of the Tahoe Keys. Without this type of test of restoration, homeowners may not feel secure in supporting a future restoration plan without seeing first-hand what it would look like and how it can be integrated into the overall development. Since a few areas of the Tahoe Keys lagoons have been identified as possible major contributors of aquatic weeds due to being stagnant, shallow, and warmer, consider a test that fills and restores one to three of these areas using coarse clean sand and native sod to restore small areas to meadow. Identify areas based on their frequent lack of navigability or desire of adjacent property owners to modify lagoon areas that are unsightly, odorous, and algae/weed-ridden.
- The current project proposal alternative includes testing with UV light alone, laminar flow aeration alone, herbicides alone, and herbicides with UV and laminar flow aeration. It seems beneficial to all test plots in Alternative 1 and the project proposal to include laminar flow aeration to mitigate adverse effects from nutrient releases that may cause increased algal blooms.
- The proposed project will cause significant environmental impacts because the chemical 4. composition of waters in the Tahoe Keys will be altered by the introduction of herbicides and its carrier ingredients (which are not identified or evaluated in the document and can sometimes be more harmful than the herbicides themselves). Since Lake Tahoe and the Tahoe Keys do not contain these chemicals, their addition to the water crosses the threshold for significance since the lake is an outstanding national resource water and discharge of herbicides will alter the water's quality and persist for several weeks or months. Also, the Lahontan Basin Plan contains water quality standards that will be exceeded, including the non-degradation standard. The toxicity water quality objective in the Lahontan Basin Plan states "All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life." Herbicides are toxic and the discharge of herbicides as proposed will kill aquatic plants. The target endothall treatment rate of 5 mg/L and maximum concentrations that may be expected for several weeks in the Tahoe Keys test plots and adjacent lagoons exceed the Maximum Contaminant Level (MCL) for endothall in drinking water established by EPA of 0.1 mg/L (and these surface waters are protected as sources of drinking water). These are all significant environmental impacts. The draft EIR/EIS must identify these impacts as significant.
- 5. The proposed project will cause significant environmental impacts due to adversely affecting non-target species of aquatic plants, and potentially, indirectly, altering nutrient cycling, causing increased algal blooms including nuisance and harmful blue green algae.

ALT-74

RES-12

REG-15

- 6. Additionally, the proposed project may impact drinking water supplies. Herbicides maybe drawn into nearby groundwaters from supply wells located in the Tahoe Keys. This isan unavoidable significant environmental impact that cannot be mitigated by theproposed mitigation measure of providing bottled water to residents. Table ES-1, under the Mitigation column for EH-3b, Protection of Drinking Water Supplies, states: "contingency plans include shutting off the wells and distributing water to all users until residues are no longer detected in the samples." If degradation of groundwater occurs, a significant environmental impact will have resulted and won't be addressed or resolved by providing replacement water. The groundwater will be impacted whether it is pumped and supplied to humans or not. The draft EIR/EIS must identify this as a significant and unavoidable impact. The proposed mitigation measure does nothing to reduce or mitigate the lowered water quality in the groundwater. CEQA requires a Statement of Overriding Consideration to allow the project to go forward acknowledging the temporary loss of drinking water supply.
- 7. The Proposed Project's use of herbicides requires compliance with the State's Antidegradation Policy, State Water Resources Control Board Resolution 68-16. Since the analysis required to meet this policy requires consideration of alternatives along with the evaluation of the feasibility and efficacy of mitigation measures, it is prudent to include this analysis within the context of the environmental document. There is no reason to have it be a stand-alone document. In fact, when the analysis is done independent of the environmental document, new alternatives and/or new mitigation measures often result. Then, the Lead Agency or Responsible Agency must create an addendum or supplemental environmental document or a new environmental document. This analysis should be included in the draft EIR/EIS and would bolster and improve the alternatives analysis.
- 8. State Water Board Resolution 68-16 states (in part): "2. Any activity which produces or may produce a waste or increased volume or concentration of waste and which discharges or proposes to 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 highest water quality consistent with the maximum benefit to the people of the State will be maintained." The proposed project does not appear to be able to meet these requirements. Discharging herbicides in concentrations above drinking water standards to sources of drinking water does cause water pollution and nuisance. Discharging herbicides that result in aquatic plant die off and decomposition resulting in increased nutrient levels that cause algal blooms, including toxic blue green algae would also be considered a nuisance impacting recreational use of the Tahoe Keys. The draft EIR/EIS must address part (b) and identify ways to limit changes in water quality and maintain the highest water quality consistent with maximum benefit to

AA-12

WS-8

REG-34

the people of the State. Controlling weeds without the use of introduced herbicides or other chemicals would maintain the highest water quality and eliminate the concerns of potentially impacting water supplies for drinking water purposes. I understand that the policy provides for limited degradation and alteration of water quality when the impact occurs over a short term period, which USEPA has defined as weeks and months, not years. Some herbicides may persist longer than months in the water column or within the groundwater because of the low temperatures in the surface water and the lack of carbon and bacteria found in the ground and groundwaters of the area. Our local conditions in both surface and ground waters slow the decomposition and break down of herbicides, so the estimates provided in the draft EIR/EIS may not be accurate.

- 9. Page 1-3 " Pope Marsh comprises a non-WOUS area to the west and south of the Tahoe Keys" Pope Marsh is a Water of the United States (WOUS). Wetlands meeting the federal definition of a wetland such as Pope Marsh constitute Waters of the United States.
- 10. The second paragraph of section 2.3 (page 2-9) states: "Barriers in place to prevent herbicide movement toward the West Channel would be briefly pushed below the surface just enough to enable the passage of shallow-bottom boats used for mechanical harvesting and fragment control. The boat motors would be turned off during passage to prevent any damage to the barrier from propellers." Lowering of the barriers even temporarily as proposed would allow herbicide-contaminated waters to contaminate and degrade waters on the other side of the barrier, allowing dispersion of herbicides to areas not intended to receive herbicides and potentially causing significant environmental impacts to a larger area. This allowance would render the barrier mitigation measure ineffective. Why are weed harvesters being used in the test area? Their use would complicate comparison of test plots and their efficacies. How will the effects/benefits of the test plots of difference methods be able to be discerned separate from the effects of harvesting?
- 11. Page 3.2.16 states "Rhodamine WT dye would be applied by TKPOA during the herbicide applications and tracked to determine the movement and dissipation of dissolved herbicide products and chemical transformation products." What concentrations of Rhodamine would be used? This information should have been provided. Depending upon the concentrations of Rhodamine, alterations in color of the water may occur. These impacts can cause nuisance in a location that is known for its exquisite color. Potential impacts of color and also potential impacts of toxicity must be identified. Appropriate mitigation might include a limit on the volume used to ensure color or other toxic impacts do not occur.
- 12. Alternative 2 evaluating dredging and clean fill inadequately describes environmental impacts of increasing turbidity and mobilizing aluminum from the sediments. Mitigation measures for disposal of dewatering fluids are inadequate. It is unlikely STPUD has the interest or capacity in collecting, treating and disposing of the quantity of fluid identified in the draft EIR/EIS.

AWM-3

9

HE-145

ALT-75

REG-34

- 13. "Issue LN-2: Conflicts with Land Use Plans, Policies, or Regulations. Conflicts with a land use plan, policy or regulation adopted for the purpose of avoiding or mitigating an environmental effect, could affect compliance. Potential conflicts evaluated include the environmentally mitigating policies and regulations listed in the TRPA Code of Ordinances, the Plan Area Statement (PAS) for Tahoe Keys (PAS-102), and the City of South Lake Tahoe General Plan... No conflicts with land use plans, policies or regulations would occur, and no mitigation is required." What about conflicts with federal antidegradation policy including Lake Tahoe's status as an Outstanding National Resource Water, the California State Water Resources Control Board Resolution 68-16, and the Lahontan Water Board's Basin Plan waste discharge prohibitions and water quality standards?
- 14. "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...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 **WS-9** to remove herbicides and other chemicals to treat the potable water before distribution." This seems inconsistent and contradictory. Because of dilution, no impact from herbicides on drinking water supplies will occur. However, we have a plan to mitigate if impacts occur. It appears there is a potentially significant environmental impact from the proposed project and it should be identified that way. Perhaps the impacts only occur if there is a spill or improper application. This is still a potentially significant impact and should be disclosed that way in the draft EIR/EIS.
- 15. Beginning page 2-9, the draft EIR/EIS identifies the dynamic and varied nature (the heterogeneity) of the Tahoe Keys lagoons and then proposes three test plots for each method in order to be representative of the various different areas of the lagoons. The table lists the test plots, but no information is provided describing how and whether each test plot meets a particular description. Section 2.3.2 describes how a survey will be completed at the beginning of Year 1 prior to starting tests to assess areas for plant growth and tackle areas with highest plant growth and potentially adjust test plot area boundaries without increasing overall testing areas. This is not acceptable because choices made in the field may adversely impact the test results and how different methods will compare to one another. In order to compare, for example, a UV test plot to an herbicide test plot, you would want to compare test plots of similar conditions. The draft EIR/EIS does not provide sufficient information or description of each test plot area to determine whether there is an appropriate number of test plots and whether they

REG-16

AWM-41

cover similar characteristics prior to testing. Some of these characteristics include water temperature, existing plant growth or biovolume or biomass, sediment characteristics, depth, and other substrate or structures. It also seems that to adequately evaluate efficacy and to compare between control methods amongst comparable sites and conditions, a greater number of test plots are needed. What type of analysis was performed to decide the appropriate number of test plots?

ALT-76

PP-8

16. The Pre-Project Biological Monitoring Plan should be included in the draft EIR/EIS for public review as well as for peer review.

TRPA Article VII(a)(3) states that the EIS shall "study, develop and describe appropriate alternatives to recommended courses of action for any project which involves unresolved conflicts concerning alternative uses of available resources." I urge you to include additional alternatives and additional options within each alternative, along with a detailed anti-degradation analysis.

Please recirculate a revised draft EIR/EIS.

Thank you for reviewing and responding to my comments. I look forward to reviewing a new and improved environmental document.

Lauri Kemper, P.E. 2052 Kickapoo Street South Lake Tahoe, CA 96150

lauri.osgoodcreek@gmail.com

TRPA,

I really believe that testing non-chemical methods is a smart way to go and I would be very interested in the results. This testing could provide effective alternatives to herbicide applications for use in other lakes. What I want to know is this, once the invasive aquatic plants have been killed off, will they be removed via dredging? It may be a bit early in the process, but I was curious and wanted to know how the weedy debris and sediment was going to be disposed off? Thank you for this opportunity to provide input.

Sincerely,

Lee Ann Bennett

AWM-34

From:	<u>D Berry</u>
То:	tahoekeysweeds@trpa.org
Subject:	[EXTERNAL] Comments about the Tahoe Keys CMT Draft EIS/EIR
Date:	Wednesday, September 2, 2020 3:58:46 PM

Herbicides should not be added to the drinking water supply of thousands or residents of Lake Tahoe. Many other solutions are available and no cost savings is worth poisoning the lake. David Berry PO Box 1732 Kings Beach California.

Dear Tahoe Regional Planning Agency,

My mom grew up in Reno, and she's told me about how beautiful Lake Tahoe is. I haven't had the chance to see it yet, and if the ecosystem is disrupted by toxic chemicals, I'll never get to see it the way that my mom did. Lake Tahoe is an important resource, culturally and environmentally. Polluting it is not the way to remove invasive species; it would just replace one problem with another.

GEN-41

I'm also a law student, focusing on environmental issues. I know the law, and it does not support the use of herbicides in a federally designated "Outstanding Natural Resource".

I support Alternative AA1 of your Tahoe Keys Weeds Draft Environmental Impact Report.

The Tahoe Keys lagoons are an environmental disaster at Lake Tahoe. Proof of this are the infestations of aquatic invasive weeds now thriving there and the proposals to control these weeds with herbicides. These weeds are destroying Tahoe's legendary clarity and purity. Proposals to control them with herbicides only poisons the lake further.

I am absolutely opposed to any and all use of poisonous herbicides in the Keys and any other waters that connect to Lake Tahoe -- a Tier 3 Outstanding National Resource Water. I oppose spending tens of millions of taxpayer dollars for the convenience of boat-owners at the Tahoe Keys. I join The Sierra Club Tahoe Area Group in defending the purity of Lake Tahoe.

Sincerely,

Jessica Patton 7119 S Durango Dr. Unit 105 Las Vegas, NV 89113 pattoj3@gmail.com (208) 440-3312

From:	Lauri Kemper (via Google Docs)
То:	tahoekeysweeds@trpa.org
Cc:	Russell Norman (Guest); Dennis Zabaglo (Guest)
Subject:	[EXTERNAL] Comments on tahoe keys aquatic weeds control methods test project deir/deis
Date:	Wednesday, September 2, 2020 6:33:17 PM
Attachments:	Comments on keys deirdeis.docx

?	hi lahontan and trpa staff	
	here are my comments.	
	lauri kemper	
Google Docs: C	reate and edit documents online.	

September 2, 2020

Mike Plaziak, Acting Executive Officer Russell Norman, Water Resource Control Engineer Lahontan Water Board 2052 Lake Tahoe Boulevard South Lake Tahoe, CA 96150

Joanne Marchetta, Executive Director Dennis Zabaglo Tahoe Regional Planning Agency

Via Email

COMMENTS ON DRAFT EIR/EIS FOR TAHOE KEYS LAGOONS AQUATIC WEED CONTROL METHODS TEST PROJECT

Thank you for the opportunity to comment on the Draft EIR/EIS for the Tahoe Keys Lagoons Weed Control Methods Test Project. I appreciate the effort that went into the design and evaluation of the Test Project. I support carrying out a statistically robust evaluation of control methods prior to implementing a new and improved long term plan to manage aquatic weeds at the Tahoe Keys with the hope of reducing the impact of aquatic invasive species on the rest of Lake Tahoe waters. Current regulations and the need to protect Lake Tahoe from pollution, degradation or the introduction of new and toxic substances require that a thorough test of non-chemical methods is required prior to testing herbicides as a control method. I recognize that the proposed project evaluated in the Draft EIR/EIS is based upon an application by the project proponent, Tahoe Keys Property Owners' Association (TKPOA), and that TKPOA wishes to use herbicides, and has proposed including them in this test. However, a short delay to further evaluate non-chemical methods is needed before proceeding with herbicides. Also, the evaluation of the impact and mitigation from the proposed use of herbicides described in the Draft EIR/EIS is inadequate and insufficient. Please consider my comments and suggestions and revise the environmental document.

 Since the Lahontan Water Board Basin Plan prohibition exemption process requires a finding regarding adequate testing and use of non-chemical methods prior to authorizing herbicide use, I support development of a revised or new project alternative that begins with the implementation and evaluation of non-chemical methods, first, before considering whether the use of herbicides are needed. In this alternative, UV treatment and laminar flow would be tested (Group A non-chemical methods) for one to two years, followed by the Group B methods in Year 2 or 3. Evaluation of efficacy would follow. Lahontan Water Board would make determination if the Basin Plan criteria has been met to authorize herbicide use and if exemption granted, a permit for herbicide use would be issued for herbicide test to occur. Herbicides as evaluated in the draft EIR/EIS would be ALT-72

ALT-73

administered as outlined. An 'If, then' alternative or a phased alternative should be described in a revised draft EIR/EIS.

- 2. Add to all alternatives a test of restoration. I recognize the argument that restoration need not be tested. However, demonstrating the benefits of restoration and providing homeowners an example of 'what could be' would assist in a future discussion and decision-making regarding long term management of the Tahoe Keys. Without this type of test of restoration, homeowners may not feel secure in supporting a future restoration plan without seeing first-hand what it would look like and how it can be integrated into the overall development. Since a few areas of the Tahoe Keys lagoons have been identified as possible major contributors of aquatic weeds due to being stagnant, shallow, and warmer, consider a test that fills and restores one to three of these areas using coarse clean sand and native sod to restore small areas to meadow. Identify areas based on their frequent lack of navigability or desire of adjacent property owners to modify lagoon areas that are unsightly, odorous, and algae/weed-ridden.
- 3. The current project proposal alternative includes testing with UV light alone, laminar flow aeration alone, herbicides alone, and herbicides with UV and laminar flow aeration. It seems beneficial to all test plots in Alternative 1 and the project proposal to include laminar flow aeration to mitigate adverse effects from nutrient releases that may cause increased algal blooms.
- 4. The proposed project will cause significant environmental impacts because the chemical composition of waters in the Tahoe Keys will be altered by the introduction of herbicides and its carrier ingredients (which are not identified or evaluated in the document and can sometimes be more harmful than the herbicides themselves). Since Lake Tahoe and the Tahoe Keys do not contain these chemicals, their addition to the water crosses the threshold for significance since the lake is an outstanding national resource water and discharge of herbicides will alter the water's quality and persist for several weeks or months. Also, the Lahontan Basin Plan contains water quality standards that will be exceeded, including the non-degradation standard. The toxicity water quality objective in the Lahontan Basin Plan states "All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life." Herbicides are toxic and the discharge of herbicides as proposed will kill aquatic plants. The target endothall treatment rate of 5 mg/L and maximum concentrations that may be expected for several weeks in the Tahoe Keys test plots and adjacent lagoons exceed the Maximum Contaminant Level (MCL) for endothall in drinking water established by EPA of 0.1 mg/L (and these surface waters are protected as sources of drinking water). These are all significant environmental impacts. The draft EIR/EIS must identify these impacts as significant.
- 5. The proposed project will cause significant environmental impacts due to adversely affecting non-target species of aquatic plants, and potentially, indirectly, altering nutrient

ALT-73 (cont)

ALT-74

cycling, causing increased algal blooms including nuisance and harmful blue green algae.

- 6. Additionally, the proposed project may impact drinking water supplies. Herbicides may be drawn into nearby groundwaters from supply wells located in the Tahoe Keys. This is an unavoidable significant environmental impact that cannot be mitigated by the proposed mitigation measure of providing bottled water to residents. Table ES-1, under the Mitigation column for EH-3b, Protection of Drinking Water Supplies, states: "contingency plans include shutting off the wells and distributing water to all users until residues are no longer detected in the samples." If degradation of groundwater occurs, a significant environmental impact will have resulted and won't be addressed or resolved by providing replacement water. The groundwater will be impacted whether it is pumped and supplied to humans or not. The draft EIR/EIS must identify this as a significant and unavoidable impact. The proposed mitigation measure does nothing to reduce or mitigate the lowered water quality in the groundwater. CEQA requires a Statement of Overriding Consideration to allow the project to go forward acknowledging the temporary loss of drinking water supply.
- 7. The Proposed Project's use of herbicides requires compliance with the State's Antidegradation Policy, State Water Resources Control Board Resolution 68-16. Since the analysis required to meet this policy requires consideration of alternatives along with the evaluation of the feasibility and efficacy of mitigation measures, it is prudent to include this analysis within the context of the environmental document. There is no reason to have it be a stand-alone document. In fact, when the analysis is done independent of the environmental document, new alternatives and/or new mitigation measures often result. Then, the Lead Agency or Responsible Agency must create an addendum or supplemental environmental document or a new environmental document. This analysis should be included in the draft EIR/EIS and would bolster and improve the alternatives analysis.
- 8. State Water Board Resolution 68-16 states (in part): "2. Any activity which produces or may produce a waste or increased volume or concentration of waste and which discharges or proposes to 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 highest water quality consistent with the maximum benefit to the people of the State will be maintained." The proposed project does not appear to be able to meet these requirements. Discharging herbicides in concentrations above drinking water standards to sources of drinking water does cause water pollution and nuisance. Discharging herbicides that result in aquatic plant die off and decomposition resulting in increased nutrient levels that cause algal blooms, including toxic blue green algae would also be considered a nuisance impacting recreational use of the Tahoe Keys. The draft EIR/EIS must address part (b) and identify ways to limit changes in water quality and maintain the highest water quality consistent with maximum benefit to

the people of the State. Controlling weeds without the use of introduced herbicides or other chemicals would maintain the highest water quality and eliminate the concerns of potentially impacting water supplies for drinking water purposes. I understand that the policy provides for limited degradation and alteration of water quality when the impact occurs over a short term period, which USEPA has defined as weeks and months, not years. Some herbicides may persist longer than months in the water column or within the groundwater because of the low temperatures in the surface water and the lack of carbon and bacteria found in the ground and groundwaters of the area. Our local conditions in both surface and ground waters slow the decomposition and break down of herbicides, so the estimates provided in the draft EIR/EIS may not be accurate.

- Page 1-3 " Pope Marsh comprises a non-WOUS area to the west and south of the Tahoe Keys" Pope Marsh is a Water of the United States (WOUS). Wetlands meeting the federal definition of a wetland such as Pope Marsh constitute Waters of the United States.
- 10. The second paragraph of section 2.3 (page 2-9) states: "Barriers in place to prevent herbicide movement toward the West Channel would be briefly pushed below the surface just enough to enable the passage of shallow-bottom boats used for mechanical harvesting and fragment control. The boat motors would be turned off during passage to prevent any damage to the barrier from propellers." Lowering of the barriers even temporarily as proposed would allow herbicide-contaminated waters to contaminate and degrade waters on the other side of the barrier, allowing dispersion of herbicides to areas not intended to receive herbicides and potentially causing significant environmental impacts to a larger area. This allowance would render the barrier mitigation measure ineffective. Why are weed harvesters being used in the test area? Their use would complicate comparison of test plots and their efficacies. How will the effects/benefits of the test plots of difference methods be able to be discerned separate from the effects of harvesting?
- 11. Page 3.2.16 states "Rhodamine WT dye would be applied by TKPOA during the herbicide applications and tracked to determine the movement and dissipation of dissolved herbicide products and chemical transformation products." What concentrations of Rhodamine would be used? This information should have been provided. Depending upon the concentrations of Rhodamine, alterations in color of the water may occur. These impacts can cause nuisance in a location that is known for its exquisite color. Potential impacts of color and also potential impacts of toxicity must be identified. Appropriate mitigation might include a limit on the volume used to ensure color or other toxic impacts do not occur.
- 12. Alternative 2 evaluating dredging and clean fill inadequately describes environmental impacts of increasing turbidity and mobilizing aluminum from the sediments. Mitigation measures for disposal of dewatering fluids are inadequate. It is unlikely STPUD has the

ALT-75

interest or capacity in collecting, treating and disposing of the quantity of fluid identified in the draft EIR/EIS.

- 13. "Issue LN-2: Conflicts with Land Use Plans, Policies, or Regulations. Conflicts with a land use plan, policy or regulation adopted for the purpose of avoiding or mitigating an environmental effect, could affect compliance. Potential conflicts evaluated include the environmentally mitigating policies and regulations listed in the TRPA Code of Ordinances, the Plan Area Statement (PAS) for Tahoe Keys (PAS-102), and the City of South Lake Tahoe General Plan... No conflicts with land use plans, policies or regulations would occur, and no mitigation is required." What about conflicts with federal antidegradation policy including Lake Tahoe's status as an Outstanding National Resource Water, the California State Water Resources Control Board Resolution 68-16, and the Lahontan Water Board's Basin Plan waste discharge prohibitions and water quality standards?
- 14. "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...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." This seems inconsistent and contradictory. Because of dilution, no impact from herbicides on drinking water supplies will occur. However, we have a plan to mitigate if impacts occur. It appears there is a potentially significant environmental impact from the proposed project and it should be identified that way. Perhaps the impacts only occur if there is a spill or improper application. This is still a potentially significant impact and should be disclosed that way in the draft EIR/EIS.
- 15. Beginning page 2-9, the draft EIR/EIS identifies the dynamic and varied nature (the heterogeneity) of the Tahoe Keys lagoons and then proposes three test plots for each method in order to be representative of the various different areas of the lagoons. The table lists the test plots, but no information is provided describing how and whether each test plot meets a particular description. Section 2.3.2 describes how a survey will be completed at the beginning of Year 1 prior to starting tests to assess areas for plant growth and tackle areas with highest plant growth and potentially adjust test plot area boundaries without increasing overall testing areas. This is not acceptable because choices made in the field may adversely impact the test results and how different methods will compare to one another. In order to compare, for example, a UV test plot to an herbicide test plot, you would want to compare test plots of similar conditions. The draft EIR/EIS does not provide sufficient information or description of each test plot area to determine whether there is an appropriate number of test plots and whether they

ALT-75

REG-16

WS-9

AWM-41

cover similar characteristics prior to testing. Some of these characteristics include water temperature, existing plant growth or biovolume or biomass, sediment characteristics, depth, and other substrate or structures. It also seems that to adequately evaluate efficacy and to compare between control methods amongst comparable sites and conditions, a greater number of test plots are needed. What type of analysis was performed to decide the appropriate number of test plots?

16. The Pre-Project Biological Monitoring Plan should be included in the draft EIR/EIS for public review as well as for peer review.

TRPA Article VII(a)(3) states that the EIS shall "study, develop and describe appropriate alternatives to recommended courses of action for any project which involves unresolved conflicts concerning alternative uses of available resources." I urge you to include additional alternatives and additional options within each alternative, along with a detailed anti-degradation analysis. Please recirculate a revised draft EIR/EIS.

Thank you for reviewing and responding to my comments. I look forward to reviewing a new and improved environmental document.

Lauri Kemper, P.E. 2052 Kickapoo Street South Lake Tahoe, CA 96150

lauri.osgoodcreek@gmail.com

TER-2

AWM-41

(cont)

From:	Tenzin, (Pablo) Ortega
То:	TahoeKeysWeeds@trpa.org
Subject:	[EXTERNAL] Comments about the Tahoe Keys CMT Draft EIS/EIR
Date:	Wednesday, September 2, 2020 5:15:13 PM

This is an EXTERNAL email. Do not click links or open attachments unless you validate the sender and know the content is safe.

To whom it may concern,

I support option one.

All none chemical options should be tested first. And if the non chemical methods are shown to not be capable of controlling the weeds then a new discussion should be started to plan for mitigations on the limited use of chemicals

Every effort should be made to never use chemicals in lake Tahoe!!! Thank you for your time, Pablo Ortega Incline Village

This is an **EXTERNAL** email. Do not click links or open attachments unless you validate the sender and know the content is safe.

TRPA,

I am writing to express my concern of the use of aquatic herbicides in Lake Tahoe, including and specifically in the Tahoe Keys. Testing all non-chemical methods adequately, with the proper amount of time and large areas (at least 10% the size of the over 170 acres of the Keys) needs to be done before resorting to any testing of aquatic herbicides that are proven do not work as a one time solution when the major sources of nutrients have not been eliminated and resolved.

TRPA is responsible primarily for the health of Lake Tahoe and they need to ensure the most natural and innovative methods are used for resolving the issues with the weeds. They cannot ignore that aquatic herbicides have been proven to cause weeds to mutate, get stronger, and will have to be applied more often and in higher doses as time goes by unless they get the source of the problem resolved. Oxygen, circulation and temperature of the water must be resolved first. Existing and future nutrients must be reduced no matter what else is done, and especially before they try the aquatic herbicides! A good start would be to replace all public and private grass in the keys with Astroturf.

In conclusion, I am in support of ES.3.3 Action Alternative 1: Testing of Non-Herbicide Methods Only

Respectfully submitted,

Robert Lober 434 Gonowabie Road Crystal Bay, NV 89402

775-843-7908

HE-137

ALT-60

9/2

I encourage you to adopt Action Alternative 1 (AA1) to test non-herbicidal methods of aquatic weed control. The DEIS/DEIR identifies this as the environmentally superior alternative.

ALT-65

Unless otherwise indicated, quotations herein are from the "Benthic Macroinvertebrate (BMI) 2016 Sampling Report for the Tahoe Keys Lagoons."

"'Until the 1980's, the Tahoe Keys lagoons have had an increasing problem with the growth of aquatic plants, also referred to as aquatic macrophytes, to the extent that the growth of these plants are significantly impacting the aquatic ecosystem, private and commercial boating, other recreation, and the aesthetics of the Tahoe Keys.' (1.0 Introduction, page 3, paragraph 2)."

The highest objective is to protect Lake Tahoe's world-famous clarity, majestic color, and purity.

I lived in South Lake Tahoe from 1963 to 1970, moved from South Tahoe in 1970, returned intermittently until 1973, lived there from 1973 to 1978, and visit the area periodically since then. In the 1970's the Tahoe Keys lagoons had become an opaque, viscous composite containing different particles and forms of contamination and debris including chunks of mossy styrofoam, boards and wood fragments, occasional decomposing waterfowl, plastic bags, and chemicals and substances that were introduced into the watershed.

In the 1970's I observed aquatic plants in the lagoons, but the unclear water affected visibility. I cannot say with certainty how extensive the aquatic plant growth was then. I was more familiar with aquatic vegetation upstream from Tahoe Keys, in the Upper Truckee River, Trout Creek, tributaries, and in Taylor Creek. In the early 1960's there was one or two species of aquatic plants, and little moss, at the elevation where the Upper Truckee River and Trout Creek flow through the meadows. In-stream vegetation reduced in the springtime when snowmelt increased the stream flow. Aquatic vegetation increased towards the end of summer when water flow was reduced and water temperature increased in shallow areas. Road runoff, leakage from the water treatment plant effluent piping system, and other impurities in the late 1960's probably increased some species of aquatic vegetation.

Until 1967, the Upper Truckee River meadow, upstream from Highway 50, and the Upper Truckee - Trout Creek marsh that flows into Lake Tahoe, flooded annually. Springtime floods renewed the landscape by washing away the litter and scars of the previous year. As floods receded, the land was restored into a natural, beautiful, unblemished condition. Unfortunately, the litter that was washed away got buried or snagged in stream beds, or was washed into Lake Tahoe. When the floods receded, chunks of soiled styrofoam and other debris drifted from the Tahoe Keys into the marshland on the eastern side of the Upper Truckee River. I believe the last annual flood was in 1967, before upstream water control was built.

In the 1960's the Upper Truckee River adjacent to Tahoe Keys was dredged and channeled into a straight canal. This alteration in the stream bed reduced the sediment-filtering capacity and ecosystem of the remaining wetland.

The Upper Truckee Marsh Restoration project will significantly improve the pollution filtering ability of the wetland:

"The marsh is a popular recreation area and home to more than more than 600 acres of wetlands that serve as a natural filter for pollutants that damage the lake's famed clarity. ... The restored river and floodplain will improve lake clarity, support dozens of fish and wildlife species, and combat climate change by capturing and storing carbon and nutrients that fuel algal blooms in the lake. The wetter marsh will also be more resilient to droughts, extreme events, and other impacts of climate change." ... 'While it is not possible to undo all the mistakes of the past, this project is the best, single opportunity to remedy one of the largest,' said Geoffrey Schladow, Ph.D,. Director of the UC Davis-Tahoe Environmental Research Center. 'By restoring the marsh and its floodplain we are enabling the

GEN-42

Tahoe ecosystem to heal itself long into the future,' he added." (South Tahoe <u>Now.com</u>, "\$11.5M project to restore the Upper Truckee Marsh now underway," 04/28/2020).

After 1967, an increase of aquatic vegetation, including more algae than I had previously seen, occurred simultaneously with increased development. Aerial insecticide spraying may have been a contributing factor, as terrestrial and aquatic insects were diminished from chemicals that were introduced to the air, land, and water. Previously sparse aquatic vegetation growths, in niches and bends along the streambeds, grew into thick mats. Previously bright, clear, sandy stream beds acquired a brownish glaze, and the water an unclear tint. The trout population declined sharply, and was not replenished until cleanups and habitat restoration occurred.

Cleanup initiatives, occurring since the 1980's, significantly improves the appearance and appeal of the lagoons. However, water quality remains an issue. "'The study of environmental conditions using living - organisms as indicators, or biomonitoring, is a valuable tool for ecologists.' 'BMI (benthic macroinvertebrates) act as an element of water quality monitoring. The taxonomic identification of a BMI community reflects conditions and changes in water quality as the species found in freshwater ponds, lakes, and streams are often extremely sensitive to changes in pollution (Azrina et. Al 2006)." (2.1. Background, paragraphs 1 - 2, page 4).

Certain aquatic invertebrates are pollution-intolerant, and some species are pollution-tolerant. Several invertebrate species were tested in the Report. There are more pollution-tolerant species in the lagoons than pollution-intolerant species:

"The results from the 2016 sampling indicate that the organisms in the Tahoe Keys lagoons are representative of a more tolerant community, meaning that the individuals can withstand higher levels of pollution. Without having sufficient previous data to compare to the current results, it is not possible to make conclusions about the health of the system over time. However, the current presence of tolerant species and complete lack of intolerant species suggest that the ecosystem is relatively unhealthy and would benefit from altered plant control practices and more robust restoration efforts.' ... '...With implementation and the anticipated reduction of invasive plant biomass within the Tahoe Keys lagoons, there should be a noticeable improvement in many of the parameters being measured including shifting BMI indicator values.' (5.0 Conclusion, paragraph 2 - 3)"

Aquatic Insects that were tested in the Benthic Macroinvertebrate 2016 Sampling Report (3.0 Results, Table 1. Identified taxa at each site, page 9) are as follows:

- ** Ephemeroptera (3 families of Mayflies): Very intolerant of pollution.
- ** Trichoptera (5 families of Caddisflies): Some species are sensitive of pollution. Some species have moderate tolerance.
- ** Diptera (29 families of Flies): Some are very sensitive, some are moderately tolerant, and some are very tolerant of pollution.
- ** Megaloptera (1 family of Alderflies): High pollution tolerance.
- ** Odonata:
 - Dragonflies: Sensitive to pollution.
 - Damselflies: Moderate tolerance to pollution.
- ** Acari (2 families of Water Mites): Moderate pollution tolerance.

"'Circulation in the Tahoe Keys lagoons decreases with distance from the channels, to the point where the most removed coves experience very low rates of circulation.' (2.2. Site Information, paragraph 4)." Canals with low-flow and no-flow water become stagnant.

Restoring to marsh some or all of the stagnant lagoons would provide habitat for birds and other wildlife and could be done in a way to increase property values, beauty and quality of life.

There is nutrient buildup from heavily fertilized lawns in the Tahoe Keys, the numerous stormwater outfalls into the lagoons, and nutrient recycling from dead and dying weeds. Herbicides or not, weeds will continue to flourish under these conditions until the conditions supporting the infestations are removed.

GEN-42 RES-11

AWM-37

GEN-42

GEN-42

The Keys lagoons are hydrologically connected to Lake Tahoe, which is designated by the EPA to be a Tier 3, Outstanding National Resource Water (ONRW), referring to the adoption of the ONRW language in 40 CFR 131.12. This means its high quality water must be protected and maintained according to State and Federal anti-degradation regulations. In addition, Lahontan's own Basin Plan requires that failure of all non-chemical methods must be demonstrated prior to authorizing the use of herbicides. TKPOA has not sufficiently tested non-herbicidal treatment methods, and it has not met this prohibition requirement of demonstrating the ineffectiveness of non-herbicide treatment methods.	REG-14
*. The TRPA and Lahontan Water Quality Board have not yet provided an Anti-Degradation Analysis promised in the Notice of Preparation.	AA-11
* Experience in other lakes throughout the country indicates that aquatic herbicides require repeated applications because the herbicides fail to completely kill the weeds, particularly their seeds and roots. Thus, herbicide application would be required in perpetuity and inevitably lead to herbicide use around the lake with no time limits established.	
*. The Lead Agencies assert that the aquatic herbicides are safe because they have been approved by the EPA. However, the EPA has asserted that Roundup and other pesticides are safe. I think most people would not want Roundup poured into Lake Tahoe. Ongoing TV commercials offer legal assistance to cancer victims who have used Roundup, talcum powder, various medications, and other "approved" substances and materials.	HE-142
*. The lack of realistic alternatives is contrary to the intent of both National Environmental Policy Act and the California Environmental Policy Act.	ALT-65
*. The Proposed Project does not fully explore the full range of options, only aquatic herbicides and a few non-chemical methods. If we want to rid Lake Tahoe of weeds, we must expand our options.	AWM-37
*. Although the Proposed Project emphasizes reducing the height of invasive weeds by about 3 feet from the surface to provide weed-free navigation for boat travel, the Ski Run Marina experiment with Laminate Flow Aeration (described in "Workshop on Tahoe Keys Lagoons Water Quality and Nutrient Sources, March 4, 2020" webinar, video 1/4) appears to be effective in creating decomposition of organic matter which plants use for food. However, combining Aeration with herbicides suggests that Laminar Flow Aeration alone is insufficient to remove weeds. Bottom Barrier canal-bed blankets barriers to sunlight (2016 Bottom Barrier Monitoring Report) are effective for plants underneath them. Plants continued to grow outside the barrier edges and in sediment that was disturbed by passing boats and settled on top of the barriers.	AWM-37
*. Dredging the organic material and sediments, proposed by AA2, is not a realistic option because aluminum sulfate was dumped in the lagoons to settle the suspended sediments when the lagoons were built. Aluminum sulfate is extremely toxic to fish and other organisms in Lake Tahoe. Therefore, both the Proposed Project and AA2 propose control methods that would release toxic substances into lake water and should be opposed.	ALT-65
Pollution-tolerant organisms accumulate in low-flow areas. Lagoons that are situated closer to channel currents have some resistance to stagnation and may at times attract pollution-intolerant species that drift over from the marsh, but they lack the pollution-filtering function and hydrology of the wetlands.	
Returning the Keys lagoons to a healthy functioning wetland would solve the weed problem (by eliminating the weed's habitat, as even admitted to in the DEIS/DEIR). It would eliminate the need for herbicides. The wetland would filter nutrients and pollution from Tahoe, immediately improving the water quality and clarity of our cherished Lake Tahoe. Done well, it could enhance the Tahoe Basin's health, beauty, and quality of life, while preserving property values.	AWM-37

In the short term, the Lead Agencies should consider protecting Lake Tahoe by installing a physical barrier, adjustable for snowmelt and stormwater events, between the Keys and the Lake. The barrier would remain in place until the weed infestation is completely removed.

In addition to reducing the growth and spread of the weeds through non-chemical methods, the long-term problem should be addressed by restoring some or all of the lagoons to marsh habitat.

Thank you for the opportunity to express my views.

Sincerely,

Stephen Alastuey

AWM-37

RES-11

From:	<u>B Lewicki</u>
To:	TahoeKeysWeeds@trpa.org
Subject:	[EXTERNAL] Comments about the Tahoe Keys CMT Draft EIS/EIR
Date:	Thursday, September 3, 2020 11:39:07 AM

This is an **EXTERNAL** email. Do not click links or open attachments unless you validate the sender and know the content is safe.

Testing all non-chemical methods adequately, with the proper amount of time and large areas (at least 10% the size of the over 170 acres of the Keys) needs to be done before resorting to any testing of aquatic herbicides that are proven do not work as a one time solution when the major sources of nutrients have not been eliminated and resolved.

AWM-31

From: Elise Fett <<u>elise@elisefett.com</u>>
Sent: Thursday, September 3, 2020 5:01 PM
To: Dennis Zabaglo (Guest) <<u>dzabaglo@trpa.org</u>>; Russell Norman (Guest)
<<u>russell.norman@waterboards.ca.gov</u>>
Cc: tahoekeysweeds@trpa.org; jmarchetta@trpa.org
Subject: [EXTERNAL] Comments on TKL aquatic weeds control methods TEST EIR and Appendix

Hello All,

I am writing today to provide comments on the Test EIR for the Tahoe Keys Lagoon weed remediation plans. I am in very much in support of ES.3.3 Action Alternative 1: Testing of Non-Herbicide Methods Only. If there is a sense of urgency then I would also support Action Alternative 2: Dredge and Replace Substrate in areas where there are no structural pilings or obstructions to be implemented in conjunction with Action Alternative 1.

ES.1

In the executive summary and in every presentation, it is stated by TRPA that multiple non-chemical methods have been used for the past 10 years to try and eradicate weeds. It is not pointed out that all trials of these methods were small scale and short periods of time that didn't allow adequate testing. It was also not mentioned that none of the methods were tried in combination.

The summary also mentions a concerted effort by the TKPOA to manage the infestation. It is not brought up that the Tahoe Keys development was required to have a circulation and filtration system installed when the development was approved. Nor does it mention that the system was shut down over 30 years ago because they over used Bromine. Native and non-native weeds became an issue in just five years. Lars Anderson, as their specialist, was primary familiar with aquatic herbicides and unfortunately did not address the source of the problem and suggest eliminating the lawns and associated nutrients, nor getting the 160 plus storm water inlets that drain into the Keys filtered.

See the pictures and video below that were taken just two days ago of a very small sample of the extremely lush lawns that are being overwatered increasing the filtration of the associated nutrients from the lawns through the sand below, also running off into the street drain inlets plus directly draining into the lagoon from the edges of the lawns and swales.

In addition, the harvesting Lars Anderson supported caused fragments that also multiplied weeds. The HOA didn't fix the water circulation part of the system or increase it as would be logical after the required filtration system was shut down. Therefore, it appears misleading to tell the public that the HOA has put out a "concerted effort" when they could have done so much more in the last 30 years.

ES .2

TRPA as the primary permitting agency must be providing thorough and accurate information for the planning and decision making process. The success of the aeration system at Ski Run Marina for reducing on average over 20 inches of nutrients/muck in just one year is not mentioned in this document. It was thankfully mentioned by Dennis Zabaglo at the last webinar. This and all the items mentioned above should be provided so that it is clear that the non-chemical methods have not been tested in the Keys thoroughly and that there has not been a significant effort to reduce the flow of nutrients into the keys lagoons by eliminating lawns and associated nutrients. Accepting comments from a "specialist" who says that the nutrients coming from stormwater runoff and directly from yards is insignificant without

AWM-47

ALT-84

requesting much clearer thorough and adequate testing is irresponsible. It could be insignificant compared to the huge mass of nutrient that sits at the bottom because of 30 years of mismanagement, however it still needs to be addressed and TRPA could allow homeowners to use fake grass only in the Keys area in order to eliminate this source, but allow the homeowners to have the look of grass.

ES .3.2

It is stated that the aquatic herbicides will be tested once, however obviously it's being tested in order to see if it should be approved as part of a long-term management program, otherwise it would need to be tested. The mutation of weeds, becoming stronger, is not being mentioned. There is no need to test aquatic herbicide when they have already been used for years and proven to only have long-term negative effects. See the articles from Big Bear Lake, which is a high-altitude lake, where weeds are so strong and thick after 20 years they have caused people to drowned. Also refer to the articles from Minnesota where after 30 years of use I have resorted now to diver assisted hand pulling etc. * See attached articles - Failures 1a, 1c & 1d, and Page 6 of Alternatives 4b

ES .3.3

As stated, this was identified as a environmentally superior alternative and therefore for Lake Tahoe there should be no question that at minimum this should be chosen and implemented ASAP!

ES 3.4

If faster results want to be achieved then this would be a good addition in areas where there is not a concern of undermining piles and a sustainable long-term solution.

ES .3.5

This appears to be a waste of time and money to even discuss since the lack of action on the Keys part has already proven this is not an alternative!

What should been done in place of this alternative is to take care of eliminating the sources of nutrients such as directly from the lawns and storm drains along with using aeration to deteriorate the existing muck from the bottom from years of simply harvesting. Again, TRPA should require that all of the lawn areas are replaced with artificial turf. Although not allowed in the rest of the basin, and this part of the basin it is a great win-win solution.

ES .4.1

Yes the primary issues are:

Reducing the source of nutrients in order to reduce infestation of non-native and native weeds plus algae blooms that cause cyanotoxins and the associated BMAA.

The need for improved water quality and protecting biology and ecology and all inhabitants of Lake Tahoe and especially the Keys.

What is not mentioned here is the issue that the management at the Keys in the past and currently is not reliable and that there needs to be oversight and assistance. For example, the extremely small aeration system, only 6 acres which is less than 3% of the Keys' area, was supposed to be run 24 hours a day 365 days a year and it was turned off during the winter. Then they did not determine that the compressor wasn't working until after April. Another example is the bubble curtain that again was not tested and working for the first part of the summer.

ALT-85

ES .4.2 Yes alternative one is the environmentally superior alternative and therefore should be the choice for a tier 3 lake that is as precious as Lake Tahoe.	
ES.4.4 It is incorrect to say that the proposed project that includes testing of aquatic herbicide's would have no significant irreversible or retrievable effects. The potential for cyanobacteria blooms that cause the neurotoxin BMAA to go airborne and the start of causing weeds to mutate and become stronger must be addressed.	ALT-85
*See attached articles - Adverse Effects #11 and Letter Links 1-5	J
ES.4.6 aquatic herbicide do result in increased nutrients and should be addressed	AWM-48
ES.4.7 Potential for cyanobacteria blooms and having it go airborne plus the mutation of weeds to become stronger is Significant and should be addressed.	CYB-11
ES.5.1 For the TRPA, who is primarily responsible for the health of Lake Tahoe to say the proposed project that includes the testing of aquatic herbicide is "consistent with the overall goals of for the TRPA. Please Remind and educate yourselves on all the non-chemical items that have not been done yet or properly. Be responsible for the health of Lake Tahoe and require the reduction of nutrients and the use of non- chemical methods immediately. Please required lawns to be implemented from the keys and replaced with fake grass.	AWM-48

Again, I strongly support the ES.3.3 Action Alternative 1: Testing of Non-Herbicide Methods Only.

Thank you for your time and consideration.

Elise Fett

Elise Fett & Associates, Ltd. Architecture and Engineering Nevada California Hawaii

PO Box 5989 Incline Village, NV 89450

Office: (775) 833-3388 Fax: (775) 833-2388

www.elisefett.com

Patty Kouyoumdjian, Executive Officer Mike Plaziak, Assistant Executive Officer Russell Norman, P.E. Lahontan Regional Water Quality Control Board 2501 Lake Tahoe Blvd. South Lake Tahoe, CA 96150

Joanne Marchetta, Executive Director Dennis Zabaglo, Aquatic Resources Program Manager Tahoe Regional Planning Agency 128 Market Street Stateline, NV 89449 Subject: Sierra Club Comments on the Tahoe Keys Lagoons Aquatic Weed Control Methods Test Draft EIR/EIS

This letter submits the comments of the Tahoe Area Group, the Toiyabe Chapter, and the Mother Lode Chapter of the Sierra Club on the Draft Environmental Impact Report/Environmental Impact Statement (Draft EIR/EIS) for the Tahoe Keys Lagoons Aquatic Weed Control Methods Test. The Sierra Club opposes the Proposed Project to use aquatic herbicides in the Tahoe Keys.

The Tahoe Area Group has more than 900 members in Nevada and California. Sierra Club Groups are subdivisions of Chapters. Group members in Nevada are members of the Toiyabe Chapter (more than 6,200 members); Group members in California are members of the Mother Lode Chapter (more than 17,400 members). Tahoe Area Group members have engaged on issues related to the health of Lake Tahoe for many years and are intensely interested in the outcome of this process for our current and future members as well as for the health of our precious national treasure, Lake Tahoe. Protection of the health of Lake Tahoe is also a high-priority issue for the Toiyabe and Mother Lode Chapters as well as members across the country.

The Tahoe Keys is a case study showing how NOT to develop land in a fragile subalpine ecosystem on a world-renowned scenic lake. We are certain that such a development destroying a wetland would not be permitted today. The Tahoe Keys is a private residential development of more than 1500 homes and a marina. It was constructed in the 1960s by dredging Lake Tahoe's largest wetland, the Upper Truckee

Marsh, to create lagoons. The homes and infrastructure were subsequently constructed atop the piled-up dredge spoils. Construction of the Keys destroyed the function and hydrology of the marsh, which filtered and purified the inflow from the largest tributary to the Lake. The legacy of this 60-year-old development is the 172 acres of largely stagnant artificial Keys "lagoons". An aquatic weed infestation covers ninety percent of the lagoons' surface, causes harmful algal blooms, and impedes navigation in the lagoons. Boats entering the Lake from the lagoons transport weed fragments throughout the Lake, spreading the infestation and endangering the Lake's ecology and its famed clarity. Infestations have occurred at numerous locations around the Lake. **ALT-86**

1

I-192

GEN-43

And now, because of the explosive weed growth at the Keys over the past several decades and its inevitable spread to many locations in Lake Tahoe, millions of dollars are being spent and will be spent in the future to prevent and remove weed infestations along shorelines and in marinas around the Lake. Because the Lead Agencies have avoided requiring proactive aquatic management solutions that could have been implemented to help slow or prevent the build-up of muck and nutrient-laden sediment in the Keys, such as proper land use management, maintenance of beneficial vegetative buffers and sediment traps, and installation of aeration systems, they are now resorting to the all-too common use of herbicides. The Lead Agencies make no attempt with this Draft EIR/EIS to <u>solve</u> the problem, but instead only try to manage it. Including herbicides in this test will only lead to its perpetual use. The Lead Agencies' past avoidance of the problem also now means that the public is being asked to pay for their past avoidance of the problem. The time to act on solving this problem and saving the lake from the Keys is now.

In 2018, the Tahoe Keys Property Owners Association (TKPOA) applied to the Lahontan Regional Water Quality Control Board (Lahontan) and the Tahoe Regional Planning Agency (TRPA) (the Lead Agencies) for permission to use herbicides, never before used in Lake Tahoe, to control weeds in the Tahoe Keys lagoons. The Lead Agencies determined that an EIR/EIS was required, released the Notice of Preparation (NOP) for the EIR/EIS on June 17, 2019, and published the Draft EIR/EIS on July 6, 2020. The Proposed Project proposes to test the use of herbicides in the lagoons to control the invasive weeds Eurasian milfoil, Curlyleaf Pondweed, and coontail, and also test non-chemical control methods. The Draft EIR/EIS includes two other action alternatives: Action Alternative 1, which proposes removing the sediment from the bottom of the lagoons by dredging and replacing it with coarser sand and gravel. The Draft EIR/EIS identified Action Alternative 1 as the environmentally superior alternative. The Sierra Club is proposing an enhanced Action Alternative 1, described later in these comments, and strongly encourages you to adopt the enhanced alternative.

The required No Action Alternative, which would continue the present ineffective management, was not supported by public scoping comments. The Proposed Project will only test <u>managing</u> the weeds so that boating from the Keys can continue, not

eliminate the grave threat to Lake Tahoe. The Proposed Project will lead to perpetual herbicide use for weed management everywhere around Lake Tahoe. Long-term holistic approaches must be implemented that would eliminate the source of the problem, the unnatural habitat created in the 1960s by destroying the Upper Truckee River freshwater marsh. Amazingly enough, the Draft EIR/EIS asserts that only the No Action Alternative has "significant and unavoidable" impacts, even though the mere presence of herbicides in Lake Tahoe and connected waters is a significant and unavoidable impact of the Proposed Project. This assertion is just one of the many examples of the bias toward the Proposed Project exhibited by the authors of the Draft EIR/EIS.

GEN-43

REG-18

ALT-86

2

Table of Contents

General Comments	
Specific Comments	
Executive Summary	20
Section 1.0 Introduction and Statement of Purpose and Need	25
Section 2.0 Project Description and Alternatives	26
Section 3.0 Affected Environment and Environmental Consequences	34
Section 3.1 Approaches to Environmental Analysis	34
Section 3.2, Environmental Health	45
Section 3.3, Natural Environment	52
Appendix F Comments	62
Closing Remarks	64

General Comments

By this comment letter, the Sierra Club objects to approval of the project, and objects to issuance and/or certification of a Final Environmental Impact Report/Environmental Impact Statement (EIR/EIS) for the project. The Draft EIR/EIS for the project is so inadequate that it has precluded meaningful analysis of the proposed project, environmental impacts, and alternatives. The agencies must prepare a revised Draft EIR/EIS and circulate same for public and decision-maker review, and for public comment. Furthermore, a response to these comments must be a substantive response to each of these comments and not merely a statement such as "comment noted."

1. The Antidegradation Analysis has been unlawfully deferred and segmented from the EIR/EIS process instead of being integrated with the EIR/EIS process

The Draft EIR/EIS recites (at p. 1-13),

A complete Antidegradation Analysis (AA) will be required for the Proposed Project consistent with State and Federal antidegradation policies, following the Administrative Procedures Update on Antidegradation Policy on Antidegradation Policy implementation for National Pollutant Discharge

Elimination System (NPDES) Permitting (State Water Board 1990), the Water Quality Control Plan for the Lahontan Region (Basin Plan) and policy originating from the process developed to allow for exemptions to the Basin Plan prohibition on use of aquatic pesticides and herbicides. The AA will include an evaluation of whether the project has any unreasonable effects on beneficial uses, such as long-term water quality degradation, exceedance of Basin Plan water quality objectives, and impacts to non-target native species. Consistent with State and Federal antidegradation policies and State Water Board Resolution 68-16 Statement of Policy with Respect to Maintaining High Quality in California, the AA will also address balancing potential degradation with social economic effects of the Proposed Project and alternative approaches to aquatic weed control at the Tahoe Keys lagoons test areas. **PP-10**

PP-9

The Antidegradation Analysis is apparently scheduled to be completed in November. The agencies have refused to extend the comment period on the Draft EIR/EIS so that public reviewers and commenters, and decision-makers, would have the benefit of the critical information to be provided by the Antidegradation Analysis. Depriving the public of the Antidegradation Analysis during the review period for the Draft EIR/S is astonishing. In addition to being astonishing, this deprivation violates CEQA. The CEQA Guidelines are codified at 14 Cal. Code Regs § 15000 et seq. The second sentence in CEQA Guidelines § 15124(d)(1)(C) requires, "To the fullest extent possible, the lead agency should integrate CEQA review with these related environmental review and consultation requirements." CEQA's policy is to conduct integrated review. Banning Ranch Conservancy v, City of Newport Beach (2017) 2 Cal.5th 918, 939, 942. Moreover, "Lead agencies in particular must take a comprehensive view in an EIR." Banning Ranch Conservancy, 2 Cal. 5th 918, 939, citing CEQA, Public Resources Code § 21002.1(d.)

CEQA Guidelines § 15378(c) provides,

The term 'project' refers to the activity which is being approved and which may be subject to several discretionary approvals by government agencies. The term 'project' does not mean each separate governmental approval.

CEQA prohibits the segmentation, or piecemealing, of environmental analysis. The agencies have failed to proceed in the manner required by CEQA because of the deferral and segmentation of the Antidegradation Analysis from the Draft EIR/EIS document and process.

NEPA also requires concurrent preparation and integration of other environmental impact analyses with a Draft EIS. The NEPA Regulations are codified at 40 C.F.R. § 1500 et seq. NEPA Regulation § 1501.7(b)(6) requires that an agency,

Identify other environmental review and consultation requirements so the lead and cooperating agencies may prepare other required analyses and studies

4

concurrently with, and integrated with, the environmental impact statement as provided in <u>§ 1502.25</u>.

NEPA Regulation § 1502.15(a) requires,

To the fullest extent possible, agencies shall prepare draft environmental impact statements concurrently with and integrated with environmental impact analyses and related surveys and studies required by the Fish and Wildlife Coordination Act (<u>16 U.S.C. 661 et seq.</u>), the National Historic Preservation Act of 1966 (<u>16 U.S.C. 470 et seq.</u>), the Endangered Species Act of 1973 (<u>16 U.S.C. 1531 et seq.</u>), and other environmental review laws and executive orders.

Comprehensive, honest, and accurate analysis is essential to the future of a beautiful and beloved national treasure – Lake Tahoe. The Draft EIR/EIS admits, "The spread of aquatic invasive species (AIS) is threatening Lake Tahoe's

Also REG-19

AA-15

ecosystem, water quality, iconic clarity, and \$5 billion recreation-based economy." Also (Executive Summary, p. ES-1.) Use of aquatic herbicides as a treatment method **HE-147** would be "a method that has never been utilized in Lake Tahoe before-.." (Id.) The agencies are failing to proceed in the manner required by CEQA, and NEPA, **AA-15** because they have deferred and separated the Antidegradation Analysis from the Draft EIR/EIS analysis and process. The public has been unlawfully precluded from having the Antidegradation Analysis to review along with the public's review of the Draft EIR/EIS. The decision-makers have blinded themselves to the informed public review and comment on the Draft EIR/EIS that should be but is not informed by the missing Antidegradation Analysis. 2. The absence of the Antidegradation Analysis renders the Draft EIR/EIS so inadequate that meaningful public review and comment has been precluded, requiring recirculation under both CEQA and NEPA. CEQA Guidelines § 15088.5(a)(4) requires recirculation when, The draft EIR was so fundamentally and basically inadequate and conclusory in nature that meaningful public review and comment were precluded. NEPA Regulation § 1502.9(a) requires, Draft environmental impact statements shall be prepared in accordance with the scope decided upon in the scoping process. The draft statement must fulfill and satisfy to the fullest extent possible the requirements established for AA-116 final statements in section 102(2)(C) of the Act. If a draft statement is so inadequate as to preclude meaningful analysis, the agency shall prepare and circulate a revised draft of the appropriate portion. The agency shall make every effort to disclose and discuss at appropriate points in the draft 5 statement all major points of view on the environmental impacts of the alternatives including the proposed action. The absence of the Antidegradation Analysis renders the Draft EIR/EIS so inadequate as to preclude meaningful analysis, review, and comment by the public, and meaningful analysis and review by the decision-makers. Consequently, revision and recirculation are required by both the CEQA Guidelines, and the NEPA Regulations. Recirculation of a revised Draft EIR/EIS must take place after the Antidegradation Analysis is available for public review. 3. The discharge of herbicides would violate the Basin Plan. The Lahontan Basin Plan requires demonstration that all non-chemical measures available failed to address the target plants prior to granting an exemption to the **REG-20** Basin Plan's discharge prohibition of herbicides. The Exemption Criteria for Control Aquatic Invasive Species (AIS) and Other Harmful Species in the Adopted Basin

Plan Amendment includes exemption criterion 1, which states:

"Demonstration that non-chemical measures were evaluated and found inappropriate/ineffective to achieve the project goals. (Alternatives to pesticide use must be thoroughly evaluated and implemented when feasible (as defined in CEQA Guideline 14364: "Feasible" means capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, legal, social, and technological factors.))" (emphasis added)

TKPOA has not complied with this criterion, as shown in Appendix C (TKPOA's application), because they have not thoroughly tested the ultra-violet light (UV) treatment and Laminar Flow Aeration (LFA) methods at the Keys. Therefore, granting a discharge prohibition exemption for the release of herbicides by the Lahontan Water Board would violate the Basin Plan.

The revised Draft EIR/EIS must justify the project's piloting herbicide use when the effectiveness of non-chemical is still being evaluated. If non-chemical methods haven't been fully evaluated, how can the criterion that other non-chemical methods have not addressed the problem effectively be satisfied?

4. The agencies have failed to proceed in the manner required by law because the Draft EIR/EIS unlawfully includes a finding of no significant impact.

As set forth in more detail below in General and Specific Comments, the use of herbicides is a significant and unavoidable impact that cannot be mitigated because its mere initial presence alone violates the toxicity, biostimulatory substances, and chemical constituent water quality objectives in the Basin Plan. Consequently, the findings in the Draft EIR/EIS, of no significant impact (p. ES-8; Chapter 5.), are the opposite of full environmental disclosure. The findings are false.

Under NEPA, "If the district judge finds that the agency did not make a reasonably adequate compilation of relevant information and that the EIS sets forth statements that are materially false or inaccurate, he may properly find that the EIS does not satisfy the requirements of NEPA, in that it cannot provide the basis for an informed evaluation or a reasoned decision." Sierra Club v. U.S. Army Corps of Engineers (2d Cir. 1983) 701 F.2d 1011, 1030. NEPA serves as an "environmental full disclosure law." Silva v. Lynn (1st Cir. 1973) 482 F2d 1282, 1284.

A primary goal of CEQA is "transparency in environmental decision-making." Save Tara v. City of West Hollywood (2008) 45 Cal.4th 116, 136. "CEQA requires full environmental disclosure." Communities for a Better Environment v. City of Richmond (2010) 184 Cal.App.4th 70, 88.

The findings that there are no significant and unavoidable impacts that cannot be mitigated are not supported by substantial evidence. That violates CEQA Guidelines § 15091(b.) Because there are significant and unavoidable impacts that cannot be mitigated, the project cannot be lawfully approved without findings of overriding concern. CEQA Guideline § 15092(b.) A statement of overriding considerations, supported by substantial evidence, would be required if the project is approved. CEQA Guidelines §15093.

REG-21

6

REG-20

5.	The Draft EIR/EIS fails to include the required range of reasonable alternatives	
	The agencies have failed to proceed in the manner required by CEQA and NEPA because the Draft EIR/EIS fails to include the required range of reasonable alternatives. The Draft EIR/EIS admits the elimination of a number of alternatives from consideration in section 2.7. Alternatives eliminated include isolating Tahoe Keys Lagoons from Lake Tahoe, filling Tahoe Keys Lagoons, and Tahoe Keys Wetland Restoration. (Draft EIR/EIS, section 2.7, at pp. 2-39-2-41.)	
	The Draft EIR/EIS admits the Tahoe Keys Lagoons have "caused several adverse effects to cold water ecosystems, impaired navigation, created potential health and safety risks, impaired fishing and aesthetic quality, and led to increased predation of native fish species by invasive fish species, (p. ES-2.) "The accumulation of nutrient-rich organic sediment in the lagoons as a result of aquatic weed growth and die-off contributes to elevated water column nutrients and can contribute to the occurrence of harmful algal blooms (HAB), which can lead to the presence of cyanotoxins." (Id.)	ALT-87
	It is necessary to include alternatives that would actually address the health and safety risks and other environmental impacts such as isolating or filling Tahoe Keys Lagoons in a revised and recirculated Draft EIR/EIS. That would allow public reviewers and decision-makers to actually focus on the trade-offs involved among a reasonable range of alternatives to effectively address, "The abundant growth of non-native and undesired native aquatic plants ("aquatic weeds") in the Tahoe Keys Lagoons" (DraftEIR/EIS p. ES-2.)	

The Lahontan Basin Plan requires demonstration that all non-chemical measures available failed to address the target plants prior to granting an exemption to the Plan's prohibition of herbicides. The Draft EIR/EIS fails as an environmental full disclosure document. The Draft EIR/EIS refers to the prohibition but fails to inform the reader of the criteria for seeking an exemption; one of which is demonstrating that non-chemical methods have not been effective. (Draft EIR/EIS, pp. ES-3, 1-8, 1-13, 3.2-4.) Technologies such as LFA and UV light have not been fully tested in Tahoe Keys as required by the Basin Plan.

"Evaluation of project alternatives and mitigation measures is 'the core of an EIR."" Banning Ranch Conservancy v. City of Newport Beach (2017) 2 Cal.5th 918, 937. An EIR must "describe a range of reasonable alternatives to the project . . . which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives." CEQA Guidelines § 15126.6(a). "[T]he discussion of alternatives shall focus on alternatives to the project or its location which are capable of avoiding or substantially lessening any significant effects of the project, even if these alternatives would impede to some degree the attainment of the project objectives, or would be more costly." § 15126.6(b).

7

REG-22

ALT-88

When the project would have significant adverse environmental effects, agencies are "required to consider project alternatives that might eliminate or reduce the project's significant adverse environmental effects." Friends of the Eel River v. Sonoma County Water Agency (2003) 108 Cal.App.4th 859, 873.

Pursuant to NEPA Regulation § 1502.14, "This [alternatives] section is the heart of the environmental impact statement." The alternatives section should "sharply" define the issues and provide a clear basis for choice among options by the decision-maker and the public. Id. reasonable alternatives must be included even if they are not within the jurisdiction of the lead agency. NEPA § 1502.14(c.) Moreover, "an alternative may be reasonable, and therefore required by NEPA to be discussed in the EIS, even though it requires legislative action to put it into effect." Kilroy v. Ruckelshaus (9th Cir. 1984) 738 F.2d 1448, 1454.

So, what the Draft EIR/EIS presently consists of is a proposed project that is unlawful because herbicides are prohibited by the Basin Plan; the Antidegradation Analysis is missing; and the criteria for seeking and obtaining an exemption to the prohibition have not been met or even disclosed in the Draft. On the other hand, alternatives that are lawful have been eliminated from consideration in the Draft EIR/EIS. This works to skew the process in favor of the herbicide alternative and against reasonable, lawful alternatives under existing policies and plans.

Revision and recirculation of the Draft EIR/EIS are required by the absence of the required range of reasonable alternatives. CEQA Guideline § 15088.5(a)(3) requires

recirculation when "A feasible project alternative or mitigation measure considerably different from others previously analyzed would clearly lessen the significant environmental impacts of the project, but the project's proponents decline to adopt it."

6. The discussion of the impacts in the Draft EIR/EIS is inadequate to serve as the informational document required by CEQA and NEPA

CEQA Guideline §15262(a) specifies required contents of an EIR, including in pertinent part,

The Significant Environmental Effects of the Proposed Project. An EIR shall identify and focus on the significant effects of the proposed project on the environment... Direct and indirect significant effects of the project on the environment shall be clearly identified and described, giving due consideration to both the short-term and long-term effects. The discussion should include relevant specifics of the area, the resources involved, physical changes, alterations to ecological systems, and changes induced in population distribution, population concentration, the human use of the land (including commercial and residential development), health and safety problems caused by the physical changes, and other aspects of the resource base such as water, historical resources, scenic quality, and public services...

ALT-88

8

REG-23

	The discussion of the impacts in the Draft EIR/S is inadequate to serve as the informational document required by CEQA. See Sierra Club v. County of Fresno (2018) 6 Cal.5 th 502, 515-522. The information provided is inadequate with respect to determining whether an exemption to the herbicide prohibition is desirable or even lawful; assessing the public health and safety impacts of herbicide use and of the increased risk of harmful algal blooms; the impacts on water quality and fish and wildlife; and other issues. The missing Antidegradation Analysis is an example of the inadequacy of the Draft EIR/EIS to serve as the full disclosure informational document required by CEQA.		REG-23
	NEPA imposes a procedural requirement on federal agencies to "take [] a 'hard look' at the potential environmental consequences of the proposed action." Northern Plains Resource Council, Inc. v. Surface Transp. Bd. (9 th Cir. 2011) 668 F.3d 1067, 1075. Just as the information provided by the Draft EIR/EIS is inadequate under CEQA; it is likewise inadequate under NEPA. Instead of taking a hard look at the environmental consequences of the proposed action; the agencies have obscured any look at the environmental consequences by steaming full speed ahead without the Antidegradation Analysis.		
7.	The Draft EIR/EIS is inadequate because of the absence of accurate economic information to allow informed comparison of alternatives		
	9	9	REG-24
	Accurate economic information is required by NEPA. In Natural Resources Defense Council v. U.S. Forest Service (9th Cir. 2005) 421 F.3d 797, 811, the Ninth Circuit held that "[i]naccurate economic information may defeat the purpose of an EIS by 'impairing the agency's consideration of the adverse environmental effects' and by 'skewing the public's evaluation' of the proposed agency action." Accurate economic analysis is required "to allow an informed comparison of the alternatives considered in the EIS." 421 F.3d at 813.		
	The Draft EIR/EIS, however, fails to provide the required accurate economic analysis to allow an informed comparison of alternatives.		
8.	The Draft EIR/EIS substitutes argument, speculation, and unsubstantiated opinion for substantial evidence		
	CEQA Guidelines § 15384(b) defines "substantial evidence" as including "facts, reasonable assumptions predicated upon facts, and expert opinion supported by facts." "Argument, speculation, unsubstantiated opinion or narrative, evidence which is clearly erroneous or inaccurate, does not constitute substantial evidence." (§ 15384(a.)		GEN-44
	As shown in more detail below in the General and Specific Comments, the Draft EIR/EIS is generally lacking in substantive supporting documentation and references to support the assertions and conclusions. That is true, for example, with respect to the findings of no significant impacts anywhere with the exception of the no action alternative.		

Again, the Draft EIR/EIS for the project is so inadequate that it has precluded meaningful analysis of the proposed project, environmental impacts, and alternatives. The agencies must prepare a revised Draft EIR/EIS and circulate same for public and decision-maker review, and for public comment.

9. The Draft EIR/EIS does not address the source of the problem: these artificial lagoons, which were dredged out of the Upper Truckee River marsh, beginning over 60 years ago, were destined to become highly eutrophic and susceptible to invasion by weeds. This destiny is due to both the nutrient-rich marsh from which the lagoons were dredged, plus the 60 years of accumulated stormwater inputs from the Tahoe Keys and other surrounding neighborhoods with their fertilizer-enriched, verdant green lawns. Maintaining this environmental disaster at the south end of one of the world's deepest and clearest oligotrophic lakes without anticipating these systemic, built-in causes is tantamount to negligence.

A eutrophic system of lagoons connected to Lake Tahoe will always be in conflict with the rest of the Lake, which was a perfect example of an oligotrophic lake. With increased warming due to climate change, the problem will only worsen if it is not addressed head-on with holistic solutions. Knee-jerk band aids like the Proposed Project, whose goal is saving a few boat-owners' ability to boat to the Lake from their

backyard, will not suffice. The best way to protect the Lake in the short term until the real solution, restoring the dead-end lagoons to nutrient-filtering marsh, is implemented and completed, is to install a barrier between the Lagoons and the Lake. The suggestion was offered more than three times by the Sierra Club and by community members to include an analysis of this suggestion in the Draft EIR/EIS was ignored.

Our scoping comments requested that the Agencies document and analyze the source of the problem – the unnatural environment that was created by destroying the marsh. Nutrients have accumulated for decades in this unnatural environment and perpetual treatment of the nutrient-stimulated weed growth will be required. The Agencies ignored this request. In fact, the Draft EIR/EIS conveys the illusion that using herbicides only once will miraculously solve the problem. The numerous studies of lakes elsewhere in the United States that have initiated aquatic herbicide use have had to continue its use on a regular basis. The Draft EIR/EIS does not include any examples of lakes treated with herbicides that have successfully reduced weeds significantly from one treatment.

10. Lake Tahoe has been designated as a Tier III Outstanding National Resource Water (ONRW). The high water quality of Tier III ONRWs is protected and maintained by antidegradation regulations. Any proposal or action to degrade the high water quality, for example by discharging chemical substances into Lake Tahoe, requires an antidegradation analysis as well as a National Pollutant Discharge Elimination System (NPDES) permit. "Any action" includes CEQA/NEPA actions. The antidegradation analysis should have been included in the Draft EIR/EIS, and in fact

10 AWM-49

GEN-44

AA-17

Lead Agency staffs stated during the scoping phase workshops that the analysis would be included. The Sierra Club has requested that the Lead Agencies extend the comment deadline to 60 days from the release of the antidegradation analysis. The Agencies have not responded to our letter and have recently stated that the antidegradation analysis would not be completed until months after the comment deadline.

The State Water Resources Control Board has issued an Administrative Procedures Update for the Antidegradation Policy Implementation for NPDES Permitting (APU). The APU states (page 3) "When a discharge is included in a project requiring CEQA documentation, the antidegradation analysis should be integrated in the environmental review process. If the Regional Board is not the lead agency on a project requiring an antidegradation finding, the Regional Board should ensure that the lead agency includes the antidegradation information in the EIR." (emphasis added) The EPA requires States to develop an antidegradation policy, States/Tribes also are required to identify their implementation method. In so doing, the State/Tribe establishes how and when the policy will be applied and what

criteria will be used in its decision-making." (emphasis added) The APU is the State's antidegradation implementation method and therefore must be followed.

In addition, Appendix I-5 to the APU, which is EPA's Guidance on Implementing the Antidegradation Provision of 40 CFR 131.12, states the following:

"Actions covered by antidegradation provisions include, but are not limited to the following: ... Other Actions... 3. Other "major Federal action" (pursuant to NEPA and the Endangered Species Act). (emphasis added)

For Tier III waters, no degradation of water quality is allowed other than short-term, temporary changes. How can a conclusion be made that the Antidegradation Policy allows for short-term degradation if an antidegradation analysis has not been provided? Therefore, the antidegradation analysis must be included in a revised Draft EIR/EIS.

- 11. The Lead Agencies' prioritization of recreational boating over the health of Lake Tahoe is contrary to these Agencies' purposes and missions. The Lead Agencies are also prioritizing the interests of Tahoe Keys homeowners over the interests of other communities in the Lake Tahoe Basin and the interests of visitors from around the country and world. This is contrary to the requirements of an antidegradation analysis.
- 12. Some potential non-chemical control measures are not evaluated in this Draft EIR/EIS. Floating Treatment Wetlands, included in the list of resources in https://www.keysweedsmanagement.org/resources-1, have been studied, but were found to be "too obtrusive for use in the Main and Marina lagoons of the Tahoe Keys, where there is heavy boat traffic and docks." The agencies are clearly

AA-17

REC-4

AA-18

AWM-50

prioritizing recreation over reducing the nutrients, the source of the problem. This control measure should have been analyzed in the Draft EIR/EIS.

13. The Proposed Project's use of herbicides requires compliance with the State's Antidegradation Policy, State Water Resources Control Board Resolution 68-16, which states (in part): "2. Any activity which produces or may produce a waste or increased volume or concentration of waste and which discharges or proposes to 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 highest water quality consistent with the <u>maximum benefit to the people of the State</u> will be maintained." (emphasis added). We contend that neither (a) nor (b) can be assured; and that therefore the discharge of herbicides would violate the State's antidegradation policy. First, the use of herbicides increases the likelihood of harmful algal blooms, including deadly cyanobacteria, to an unavoidably significant level (Harris et al, 2016). Therefore, requirement (a) of the resolution is not satisfied. Second, the use of herbicides must maintain the highest water quality consistent

with the maximum benefit to the people of the State. The previous general comment pointed out that the sole beneficiaries of herbicide use would be Tahoe Keys homeowners. Therefore, the use of herbicides is not consistent with the maximum benefit to the people of the State and must not be allowed.

14. The APU also requires a finding that "specifies that water quality degradation is permissible when balanced against benefit to the public..." And "If the Regional Board finds that lowering of water quality is consistent with the conditions established in the State policy [which it does not as pointed out in the previous comment] and the federal regulation, the finding should indicate: 1) The pollutants that will lower water quality; 2) The socioeconomic and public benefits that result from lowered water quality; and 3) The beneficial uses that will be affected." (emphasis added) Again, use of herbicides would benefit only Tahoe Keys homeowners, a very small group. The maximum benefit to the maximum number of people in the State would be realized from (a) installation of a barrier in the channel between the lagoons and Lake to provide short-term protection to the Lake, and (b) restoration of the dead-end lagoon portions of the Keys to nutrient-filtering wetland marsh. Eliminate the habitat for the weeds and you eliminate both the weeds and need for herbicides. Restoring the canals to wetland would immediately improve the water quality and clarity by filtering nutrients, sediments and pollution from the surrounding neighborhood of the Keys. The homeowners would keep their houses and only lose their ability to boat to the Lake from their backyards. We believe this is not too large a price to pay to save Lake Tahoe from the Keys. The Keys' homeowners could instead either launch their boats from the Tahoe Keys Marina or one of the other south shore marinas.

AWM-50

AA-19

REG-25

15. Under the Antidegradation Policy, degradation is allowed (assuming the requirements are met), but water quality standards and objectives may not be exceeded. Since the discharge of herbicides would cause an immediate exceedance of the water quality objective for toxicity by killing native plants, as well as cause a violation of the biostimulatory substances and chemical constituents water quality objectives, the proposed discharge of herbicides is not allowable. In addition, while the application of an herbicide may be of short duration, the degradation of beneficial uses may be long term by killing native vegetation and creating a condition whereby biostimulatory substances are released from the release of nutrients to the water column.

The APU also states "A Regional Board may decide that an antidegradation finding is not required because the proposed discharge is prohibited under either the State or federal policies. For example, if the proposed discharge will violate water quality objectives in the receiving water, no discharge will be allowed and therefore no antidegradation analysis is required." (emphasis added) This statement

applies to the Proposed Project's discharge of herbicides, since a discharge would result in immediate and certain violation of the following water quality objectives:

- a. The toxicity water quality objective in Lahontan's Basin Plan would be immediately violated by the discharge of herbicides. The toxicity water quality objective states "All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life." And, "The survival of aquatic life in surface waters subjected to a waste discharge, or other controllable water quality factors, shall not be less than that for the same water body in areas unaffected by the waste discharge ... " (emphasis added). The phrase "all waters" includes the treatment zone where herbicides would be applied even though the December, 2011, Basin Plan Adopted Amendment suggests that the receiving water refers to the water outside the treatment area. Also, the Draft EIR/EIS claims that the herbicides are not toxic because their LC50's (concentration at which 50 percent of test organisms exhibit a lethal response) are within acceptable limits, but the herbicides are toxic substances synthesized to kill aquatic plants, including native aquatic plants. There are also chronic toxicity effects on organisms trapped within the treatment zone that have not been considered or discussed anywhere in this Draft EIR/EIS. Therefore, the toxicity water quality objective is violated immediately by discharges and such discharges must not be allowed.
- b. The Chemical Constituents water quality objective, which states "Waters designated as MUN shall not contain concentrations of chemical constituents in excess of the maximum contaminant level (MCL) or secondary maximum contaminant level (SMCL) based upon drinking water standards specified in the following provisions of Title 22 of the California Code of Regulations,

which are incorporated by reference into this plan: Table 64431-A of Section 64431 (Inorganic Chemicals), Table 64431-B of Section 64431 (Fluoride), Table 64444-A of Section 64444 (Organic Chemicals), Table 64449A of Section 64449 (Secondary Maximum Contaminant Levels-Consumer Acceptance Limits), and Table 64449-B of Section 64449 (Secondary Maximum Contaminant Levels Ranges). This incorporation-by-reference is prospective including future changes to the incorporated provisions as the changes take effect." Since the beneficial uses for the waters of Lake Tahoe include MUN (Municipal and Domestic Supply), this water quality objective would be violated immediately by discharge of aquatic herbicides. The target endothall treatment rate of 5 mg/L and maximum concentrations that may be expected for several weeks in the Tahoe Keys test plots and adjacent lagoons exceed the Maximum Contaminant Level (MCL) for endothall in drinking water established by EPA of 0.1 mg/L. This will pose a significant risk to drinking water drawn from Lake Tahoe or the Tahoe Keys Water

Company's wells. (See Specific Comment 56 below.) Therefore, discharges of herbicides must not be allowed.

- c. The biostimulatory substances water quality objective state: "Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect the water for beneficial uses." Chapter 3 of the Basin Plan also states "The concentrations of biostimulatory substances shall not be altered in an amount that could produce an increase in aquatic biomass to the extent that such increases in aquatic biomass are discernible at the 10 percent significance level." The use of herbicides would cause a rapid increase in the nutrient concentration in the water column, and consequently, an increase in harmful algal blooms (HABs) including cyanobacteria. Therefore, the application of herbicides would violate the biostimulatory substances water quality objective.
- 16. Lahontan's Basin Plan requires demonstration that all available non-chemical control methods have not effectively controlled the target plants prior to granting an exemption to the Plan's prohibition. During the scoping phase, the Sierra Club's comments stated that the Proposed Project's testing of herbicides was premature and in violation of the Basin Plan. The Draft EIR/EIS mentions the prohibition exemption required by the Basin Plan and even refers to "exemption criteria under which an exemption can be granted", but does not include a list of these criteria, one of which is demonstrating that all available non-chemical methods have not been effective.

TKPOA cannot fully satisfy this criterion because the newer technologies, such as laminar flow aeration (LFA) and ultraviolet light (UV), have not been fully tested in the Keys, as required in the Basin Plan. TKPOA's primary method of managing the weeds has been mechanical harvesting (mowing), which removes the top several

REG-25

14

REG-26

feet of weeds to facilitate boating. Mowing has exacerbated the problem by releasing fragments that then take root and grow elsewhere. TKPOA has not thoroughly evaluated and tested other non-herbicidal treatment methods, such as those that would be tested under Action Alternative 1, and has certainly not met the prohibition exemption requirement of demonstrating the ineffectiveness of non-herbicide treatment methods before an exemption can be granted. TKPOA's application (Appendix C) attempts to provide rationale and justification for the use of herbicides in stating that the use of bottom barrier, hand pulling and/or diver-assisted suction removal, dredging (in other areas of the lake), and mechanical rotovating (harvesting) have failed over the course of the last 30 years. An adequate and extensive demonstration of the failure of non-chemical methods has not been done especially since LFA and UV light, newer technologies used very successful results elsewhere, have not been thoroughly tested in the Tahoe Keys.

- 17. Action Alternative 1 is clearly the environmentally superior alternative. In fact, the Draft EIR/EIS correctly states this in 3 places (pgs. ES-6, ES-8, 5-19). Therefore, the Sierra Club advocates that the Lead Agencies choose this Action Alternative 1. This alternative, however, does not go far enough. There should be an enhanced Action Alternative 1 that tests the non-herbicidal methods in greater areas than those proposed.
- 18. The use of herbicides in Tahoe Keys cannot reasonably be expected to be a onetime event, as there is no documented evidence that a one-time use of aquatic herbicides effectively reduces invasive aquatic weeds. The Draft EIR/EIS does not provide any supporting evidence for the assertion that a one-time use of herbicides will be effective for longer than a few months. In fact, TKPOA's application dated July 25, 2018 requested exemption for 12 years of herbicide treatment. For reasons that are not disclosed, Appendix C of the Draft EIR/EIS contains a different application, dated July 12, 2018, which does not discuss any long-term herbicide use. However, the July 25, 2018 application proposes to apply aquatic herbicides to the Lagoons for up to ten years after the initial two years of project implementation, with protocols based on lessons learned during the initial two years. This application also contains information about several environmental impacts of weed control in the Lagoons, information that would contribute significantly to assessing impacts but which is not readily available to the public. The request for an exemption for up to 12 years of herbicide use shows that TKPOA strongly doubted that a one-time application would suffice. Our comments point out that experience elsewhere suggests that indefinite repeated applications would almost certainly be required, and the project proponents concur.

An application filed in January 2017 and an Amended Supplemental application filed in July 2017 proposed that a water-filled barrier be installed in the channel connecting the Lagoons to Lake Tahoe to prevent pollution of the Lake by herbicides and decay products. The potential environmental impacts of the barrier are **HE-148**

ALT-90

REG-26



discussed in the IEC/IS and noted in section 3.1.2 of the Draft EIR/EIS. The barrier would remain for at least 14 days after herbicide application and until pollutants could not be detected within 500 feet of the West Channel. The CMT proposal does not include installation of a barrier and does not justify this omission. Installation of a barrier to prevent pollution of the Lake from the indefinite repeated applications of herbicides would be even more essential. Making the 2017 applications and the July 25, 2018 application available to the public would significantly promote public understanding of the environmental impacts of herbicide use and the analysis of these impacts in the revised DEIR/EIS.

TKPOA has recognized the need for repeated herbicide treatments to be effective in two of their NPDES and Basin Plan Pesticide Prohibition Exemption applications. However, the Draft EIR/EIS asserts that a one-time use of herbicides and

subsequent non-chemical spot treatments will so effectively reduce the weeds that further herbicide applications will not be needed. If the Lead Agencies continue to assert that a one-time herbicide application and follow-up spot treatments will be effective, the Revised Draft EIR/EIS should provide evidence that similar infestations have been effectively treated by a single application of herbicides. Repeated use of herbicides does not meet the definition of "temporary and short-term changes in the water quality."

- 19. Competitive exclusion and impacts from potentially increased growth of curlyleaf pondweed would be a smaller problem with non-chemical methods because of the targeted nature of the herbicides proposed and non-targeted nature of the non-chemical methods. Also, harmful algal blooms (HABs) and deadly cyanobacteria (blue-green algae) would be less likely to occur with non-chemical methods, since herbicides cause a faster die-off of submerged aquatic vegetation (SAV) and higher rates of nutrient release to the water column, increasing the likelihood of HABs and cyanobacteria. In addition, the prevalence of cyanobacteria is increased by the use of persistent organic pollutants, such as herbicides (Harris et al, 2016).
- 20. There are numerous findings of no significant impact in the Draft EIR/EIS lacking adequate justification or substantiation by analyses and references, which violates CEQA Guidelines. (See General Comment 4, last paragraph, above.) An example of this is the finding of no significant impact of the risk of HABs, including deadly cyanobacteria (blue-green algae), from the use of herbicides is not a significant impact, even though the likelihood of HABs and cyanobacteria increases with the use of herbicides. HABs have been a significant issue in the Keys in recent years.
- 21. There is no discussion in the Draft EIR/EIS of the herbicides' inert (other) ingredients or the herbicides' adjuvants, materials added to a pesticide formulation prior to application. Very little information is generally available on an herbicide's other ingredients, because the identity of the other ingredients is often regarded as proprietary information. This lack of information often makes pesticide risk

ALT-90

16

HE-149

CYB-12

AQU-1

CYB-13

HE-150

assessments incomplete. "While EPA encourages expanded inert statements on product labels that specifically identify the inert ingredients, doing so is not a requirement." (Durkin, <u>SERATR-052-16-04a, 2009</u>) When information on other ingredients is disclosed, the toxicity information is often limited. The Human Health and Risk Assessment of Endothall by Durkin (2009) states: "The very limited acute inhalation data on endothall (Section 3.1.13) suggests that the formulations may be more toxic than technical grade endothall with respect to inhalation exposure." Moreover, EPA changed the term from "inert" ingredients to "other" ingredients in recognition of the potential toxicity of these ingredients. This Draft EIR/EIS does not mention inert ingredients or adjuvants once. Therefore, the environmental analysis of the impacts of the herbicides to be used is woefully inadequate.

- 22. Except for the water budget section, the Draft EIR/EIS generally lacks substantive supporting documentation and references to support the assertions and conclusions, particularly with regard to the findings of no significant impacts of any of the action alternatives. See numerous examples in Specific Comments below and General Comment 8 above regarding CEQA Guidelines "substantive evidence."
- 23. The discussion of the Control Methods Test (CMT) experimental plan and analysis of the results in section 2.3 is very incomplete. The topics discussed inadequately or not at all include: (1) the instruments used to measure the results of treatments and their ability to measure the results accurately in diverse lagoon conditions; (2) the principal advantages of the selected set of experimental sites and the selection's avoidance of major deficiencies; (3) the principal advantages of the tentative assignment of treatments to the experimental sites; (4) the limitations on modifications of the experimental plan by plant survey results; (5) the heterogeneity of the experimental sites with respect to numerous factors and the potential confusing of comparisons of treatments by heterogeneity; (6) the apparent invalidation of comparisons between treatments by mechanical harvesting of test sites during the CMT, a potentially serious problem; (7) the limitations of comparisons of treatments replicated only three times.
- 24. The dredging, removal and replacement alternative, Action Alternative 2, was proposed because scoping comments urged the Agencies to investigate it. Dredging would have an extremely serious environmental impact. The sediments that would be removed by dredging contain aluminum, which is toxic to fish and other aquatic organisms. Large quantities of aluminum sulfate were poured into the lagoons in the 1960's to settle the suspended sediments created by the initial dredging yet only 5 samples were taken in the West Lagoon to characterize the level of toxicity that could occur during a dredging operation. The reported aluminum concentrations of all but one of these samples are suspect because of the pH of 4 samples was "outside the range for model inputs" and holding temperature of three of the samples exceeded recommended temperatures. The Draft EIR/EIS does not specify adequate mitigation that would reduce the impacts of this toxicity to less than

SIG-6

17

HE-150

ALT-91

ALT-92

significant levels. The environmental impacts of Alternative 2 are so serious that it must be rejected.

- 25. The costs of dredging are not discussed, analyzed, or estimated in the Draft EIR/EIS. Although we have asserted that Alternative 2 is not a viable alternative for environmental reasons, commenting on this omission is necessary. Including cost estimates in environmental documents is essential to transparent decisions by Agencies. Evidence from other lakes shows that dredging is the most expensive method of managing aquatic weeds. The additional costs of removing aluminum from the dredged sediments would no doubt increase costs so much that dredging would be economically infeasible.
- 26. The costs of all this are heavily weighted toward the benefit of a few (Keys' property owners) over the benefit of the many, yet the many (taxpayers) are being asked to pay for this proposal just so that the Keys' owners can boat to the Lake from their backyards. This is a shameful waste of taxpayer's money who would likely be much more willing to pay for protecting the Lake with a barrier and restoring the lagoons to marsh than using toxic herbicides or expensive dredging operations.
- 27. Scoping comments are part of the public record and must be available to the public. The comment matrix in the Scoping Comment Report is potentially helpful, but also quite confusing. All the comments on the Draft EIR/EIS will be part of the public record and must also be made available to the public.
- 28. The unnatural ecosystem of the Keys has detrimental effects on the ecology of the Lake from the dispersion of aquatic weeds and adverse impacts on the health of native fish and benthic macroinvertebrates. The Keys' habitat today is suitable only for boating and invasive weeds. Even the fish present in the Keys are nonnative and are not considered recreational game fish by the California and Nevada wildlife agencies. Also, with 1500 homes on the banks of the lagoons, there is a significant likelihood that other invasive species that could spread to Lake Tahoe will be introduced into the lagoons. Aquarium species have been introduced into the lagoons in the past. Restoring at least the dead-end lagoons to marsh is the only effective long-term solution.
- 29. The Draft EIR/EIS does not discuss or analyze the potential for hybridization of Eurasian milfoil which is more prevalent where aquatic herbicides have been used. (Thum et al. 2017) There are multiple, genetically-distinct types (genotypes) of hybrids of invasive Eurasian milfoil and native watermilfoil, and a genetic study should have been done to investigate hybridization potential at the Keys.
- 30. See attached comments, herein incorporated by reference, from <u>Beyond Pesticides</u> regarding the specific herbicides proposed for use in the Draft EIR/EIS.

ALT-92

CST-3

18

CST-4

PP-11

RES-14

AQU-2

31. The stakeholder process has been severely flawed. The "inner circle" of stakeholders only had one member, the Water Suppliers Association, that were very concerned about herbicides. All other groups selected for the inner circle of stakeholders were pro-herbicides, including the League to Save Lake Tahoe. Also, because of the pandemic, public participation has been limited and the ability to speak up at webinars was extremely limited and controlled. Only two public webinars were held, the first one only three days following the release of the Draft EIR/EIS and the second that did not allow the public to speak at all. Also, there were no follow-up discussions allowed and both email questions and questions asked during the webinars went unanswered.

19

PP-12

Specific Comments

- 1) The executive summary, page ES-7, states: "CEQA requires a statement of issues to be resolved and areas of controversy." Taking that to mean that issues and areas of controversy need to be discussed in the Draft EIR/EIS so that they can be resolved, the list of 12 issues to be resolved includes several that are not discussed or discussed only cursorily. These are:
 - a. The antidegradation analysis, which the Lead Agencies have stated will not be published until months after the Draft EIR/EIS comment deadline.
 - b. The "need for long-term aquatic weed control and prevention of further dispersal of fragments into Lake Tahoe" is <u>only</u> discussed in terms of the no action alternative, which (as far as we know) was not supported by any scoping comments. (The agencies have not made the scoping letters public.) The Draft EIR/EIS completely ignores two key elements of the Sierra Club's scoping comments relevant to long-term management: (i) 60 years of accumulated nutrient-rich stormwater inputs that are feeding the explosion of aquatic weeds, and (ii) the need to analyze removing the habitat for the weeds by restoring the lagoons to marsh, a lower cost long-term solution.
 - c. The Draft EIR/EIS cites the "long-term costs of aquatic weeds management, and of inaction to control weeds." However, the Draft EIR/EIS does not look at costs at all. It only looks at costs in relation to the environmental impacts of no action, which was not supported by any scoping comments. The Draft EIR/EIS does not look at the estimated costs of each alternative in any manner whatsoever, though knowledge of the estimated costs is essential for informed evaluation of the alternatives as stated above in the General Comments.
- 2) Table ES-1, under the Mitigation column for EH-2, Detectable Concentrations of Herbicides and Degradants in Receiving Waters, states: "Detectable concentrations of discharged herbicides and their degradants would be controlled as a temporary condition allowable only for weeks to months."
 - a. Any detectable concentration (i.e., the very act of discharge) violates the Toxicity and Chemical Constituents water quality objectives and therefore is a

AWM-51

AA-20

REG-27

significant and unavoidable impact that requires a statement of overriding considerations.

- b. Inert or adjuvant ingredients were not discussed or evaluated, as previously mentioned in the General Comments; their environmental impacts must be analyzed.
- 3) Table ES-1, under the Mitigation column for EH-2, states: "A spill prevention and response plan would be implemented by a QAL holder to minimize and contain any spills during herbicide mixing and application, submitted for review as required by permitting agencies, and implemented at the work site."
 - a. A spill prevention and response plan does not mitigate the presence of aquatic herbicides which violates the Toxicity and Chemical Constituent water quality objectives.
 - b. Such a plan should have been provided as part of this Draft EIR/EIS. If "Measures to Prevent Spills and Spill Containment in Event of Spill" in the TKPOA application, Appendix C, is the final Spill Prevention and Response Plan (SPRP), it is wholly inadequate. If it is not, then a final SPRP should have been included in this Draft EIR/EIS and must be included in a revised Draft EIR/EIS. As stated in General Comment above, the discussion of the impacts in the Draft EIR/EIS is inadequate to serve as the informational document required by CEQA. See Sierra Club v. County of Fresno (2018) 6 Cal.5th 502, 515-522. The information provided is inadequate with respect to assessing the public health and safety impacts of herbicide use.
- 4) Table ES-1, under the Mitigation column for EH-3b, Protection of Drinking Water Supplies, states: "contingency plans include shutting off the wells and distributing water to all users until residues are no longer detected in the samples." This is a completely unacceptable mitigation measure and certainly is not mitigation that would reduce this significant impact to less than significant. All mitigation must be feasible and fully enforceable, and all feasible mitigation must be imposed by lead agencies. (CEQA Guidelines, § 15041.) This mitigation measure is infeasible and unenforceable because of the sheer numbers of people that could be affected. Also, this does not address the affects on the skin from showering in water tainted with herbicides. "If any suggested mitigation is found to be infeasible, the lead agency must explain why and support that determination with substantial evidence, presented in their findings and a statement of overriding considerations. (CEQA Guidelines, §§ 15091 and 15093.)" (AEP, CEQA Portal) In addition, the impact to drinking water supplies would be a violation of the chemical constituents water quality objective and, therefore, herbicides must not be allowed.
- 5) Table ES-1, under the Mitigation column for EH-3c, states: "Sampling would be conducted at all three TKPOA well water intakes." Who would do this sampling, TKPOA? The monitoring and sampling must be administered by an independent contractor and those details should have been disclosed in the Draft EIR/EIS.

REG-27

ERM-2

20

UTM-2

WQM-4

- 6) Table ES-1, under the Mitigation column for EH-3d, states: "the LWB would be notified within 24 hours" if herbicide residue is detected within 500 feet of the West Channel. Notification is not mitigation. What do the authors of this Draft expect the Lahontan Water Board could or would do to mitigate this impact? This section also states that "contingency plans would include shutting off wells and distributing bottled drinking water until residues are no longer detected in the samples." As noted in comment #4, this is an inadequate mitigation measure and does not satisfactorily reduce the significant impact to less than significant.
- 7) Table ES-1, under the Mitigation column for EH-3g, states: Double turbidity curtain barriers would be installed outside West Lagoon areas where herbicides testing sites are located..." Turbidity curtains notoriously fail to completely prevent mixing with waters outside the curtains, particularly if there are stormwater outlets behind the curtains. Stormwater inflows typically exert high enough pressure on the curtains to overwhelm them. Also, turbidity curtains are kept in place by weights on their lower edges. These weights will change position and disturb sediments full of aluminum sulfate, a consequence of large quantities of alum having been added to the lagoons during construction to settle the sediments. Estimates of the quantities of alum and the aluminum sulfate content of the sediments are not discussed in this Draft. Aluminum is extremely toxic to aquatic organisms. Therefore, the turbidity curtain mitigation would create other impacts; these impacts are not acknowledged and their mitigation is not discussed.
- 8) Table ES-1, under the Mitigation column for EH-5a, Short Term Increases in Aluminum Concentrations, states: "Best management practices to minimize sediment disturbance would be followed. Turbidity would be monitored to ensure that sediment disturbance and the consequent potential for mobilization of aluminum into the water column is minimized. BMPs also would be used to prevent accidental releases of sediment to the lagoons during dredge spoils transport and handling." The BMPs discussed later in the document are inadequate; the turbidity curtains do not mitigate the impacts because, as previously stated, the curtains themselves cause sediment disturbances sufficient to mobilize aluminum into the water column.
- 9) Table ES-1, under the Mitigation column for EH-5c, states: "Containment plans would assure adequate storage and safe handling of dredge spoils during processing. The plans would minimize the risk of dredged sediment containing aluminum from being released outside of approved discharge locations." The containment plans cited later in the Draft EIR/EIS are inadequate as they lack specificity and analysis; e.g., the containment structure, the old treatment plant, to be used is decades old and no analysis of its structural integrity has been performed.
- 10) Table ES-1, under the Mitigation column for EH-6b, Harmful Algal Blooms (HABs), states: "Aeration technologies such as LFA would be implemented at each herbicide

HERM-2

21

AWMM-5

ERM-3

ERM-4

CYNM-1

test site immediately after target aquatic weeds die back from the herbicide application. Aeration during plant decomposition would improve aerobic microbial degradation of herbicide active ingredients and reduce the risk of HABs by breaking up thermal stratification, reducing near-surface water temperature, and stabilizing pH conditions." This mitigation is inadequate because it does not address the rapid addition of nutrients from the dead weeds to the water column. This pulse of nutrients will promote the rapid development of HABs, including deadly

cyanobacteria. The use of non-chemical methods would reduce this risk because non-chemical methods cause less rapid dieback.

- 11)Table ES-1, under the Impact Issues column for ER-1, Suction Dredging and Dredge Materials Disposal, states: "Effects could also occur if spills of dredged sediment (consisting of organic silt and fine sand, plant roots and other organic matter, and lagoon water) occur during transported by pipeline to the location of the old Tahoe Keys Water Treatment Plant for handling, dewatering, or during transport for ultimate disposal." This is the only impact identified in the Earth Resources section (except for destabilizing the private boat docks). The structural integrity of the "old Tahoe Keys Water Treatment Plant" has not been evaluated and concentrations of aluminum in the sediment have not been disclosed or analyzed. These additional impacts must be analyzed and discussed to disclose the full impacts of this alternative.
- 12)Table ES-1, under the Mitigation column for ER, states: "Any bulkheads or docks removed or destabilized by dredging would be fully mitigated by replacing them in kind, and any slopes that are destabilized would be mitigated by slope restabilization after the dredging test is completed." Would taxpayers pay for the rebuilding of these private docks and the re-stabilization of slopes? The estimated costs of these treatments and the anticipated sources of funding must be disclosed.
- 13) Table ES-1, under the Mitigation column for WQ-2, Sediment Disturbance and Turbidity, states: "Silt curtains would be used to confine water quality impacts within test sites during dredging and substrate replacement." Silt curtains are an erosion control BMP, not a dredging BMP. The authors probably meant turbidity curtains; this mistake and others suggest that the authors are not well informed. And again,
 (a) the very act of placing and removing the turbidity curtains creates sediment disturbance and turbidity, and (b) inflows from stormwater outlets behind the curtains will likely overwhelm the curtains; these two impacts are not discussed.
- 14)Table ES-1, under the Mitigation column for WQ-2, states: "Spill control and containment plans would be used to control accidental spills of dredge spoils, and would include provisions for adequate storage for safe handling of dredge spoils during processing. No discharge of dewatering effluent would be allowed until monitoring has demonstrated that treatment systems reduced turbidity sufficiently to meet standards, as required by contract performance specifications. Treatment

CYNM-1

22

ALT-95

ERM-5

AWMM-6

ERM-6

system designs could include settling and flocculation in batches stored in tanks for testing before discharge to the sanitary sewer system or Lake Tallac." (emphasis added) The type of flocculant that would be used and its risks are not disclosed. The sanitary sewer system is designed to treat sewage, not to receive millions of gallons of sediment-laden water. No sanitary sewer system in the Lake Tahoe Basin has accepted suction dredging disposal wastes in the last 15 years; therefore, this is not

a viable mitigation strategy. Whether Lake Tallac has sufficient capacity to receive the treated water, considering that it also receives stormwater from the surrounding City of South Lake Tahoe, is not discussed and must be discussed in order to understand the feasibility of this alternative and its full environmental impacts.

- 15)Table ES-1, under the Mitigation column for WQ-3, Dispersal of Aquatic Weed Fragments (during herbicide, UV, LFA, and suction dredging), states: "Performance specifications for sand or gravel used for substrate replacement would require that the material not contain excessive amounts of organic matter that could increase amounts of floating materials." This mitigation strategy is not even relevant to the aquatic weeds fragment dispersal impact cited under Impact Issues in Issue WQ-3. This is additional evidence that the document was not thoroughly reviewed before publication.
- 16)Table ES-1, under the Mitigation column for WQ-6, Increases in Total Phosphorus Concentrations, states: "The overall reduction in aquatic weed biomass from testing control methods is generally expected to reduce TP release from macrophytes at test sites....This timing is expected to minimize the biomass of decaying vegetation, mitigating the effects of nutrient release that could occur from dieback of mature plants." The total phosphorus (TP) in the water column may be reduced in the fall because the biomass that had taken up phosphorus in the sediment would be smaller and therefore the release of TP into the water column during fall die-off would be smaller. However, the Proposed Project does nothing to reduce the total TP in the sediment and water column and does nothing to reduce the accumulation of TP in the system during the last 60 years. In fact, the 60 years of accumulation of nutrient inputs from stormwater and groundwater is not addressed anywhere in the Draft EIR/EIS. LFA has achieved promising reductions in the amount of nutrients in the sediment and must be fully tested in an enhanced Alternative 1. Alternatively, recreating marsh would bury the entire unnatural system, and the marsh would then take up the nutrient inputs to the system from stormwater. Recreating marsh would be a cheaper and more environmentally advantageous alternative.
- 17)Table ES-1, under the Mitigation column for WQ-7, Increases in Lagoon Water Total Nitrogen Concentrations, states: "This timing is expected to minimize the biomass of decaying vegetation, mitigating the effects of oxygen depletion and nutrient release that could occur from dieback of mature plants." Early season herbicide treatment doesn't mitigate the amount of total nitrogen (TN) in the lagoon system. The TN in the unnatural ecosystem (water column and sediments) is taken up by the plants

ERM-6

23

AWMM-7

WQM-5

WQM-6

from sediments, so the only thing that targeting the immature plants does is produce less dead biomass. If that dead biomass is not removed, the TN stays the same. Removing mature plants from the system entirely could reduce the TN in the system or using the non-chemical LFA approach has shown promise to reduce nutrients, but herbicides will do nothing to reduce nutrients in the system.

18)Table ES-1, under the Mitigation column for UT-1, Effects on Water Supply, states: "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." (emphasis added) Who will determine whether implementation is necessary? Determination by TKPOA, which strongly favors the use of herbicides, would not inspire public confidence and would not guarantee timely and reliable mitigation.

Section 1.0 Introduction and Statement of Purpose and Need

- 19)The Draft EIR/EIS states on page 1-3: "Pope Marsh comprises a non-WOUS area to the west and south of the Tahoe Keys." This is incorrect. Pope Marsh is a hydrologically connected wetland to Lake Tahoe, and therefore is a jurisdictional wetland and water of the US (WOUS).
- 20) The first paragraph on page 1-4 describing the Tahoe Keys does not mention that it is a private resort development whose facilities are available only to homeowners and guests of homeowners. This information is important to place the issue in context.
- 21)The Sierra Club objects to the stated goal of the Proposed Project on page 1-9 of the Draft EIR/EIS, the "long-term management of the target aquatic weeds." This goal is flawed for many reasons:
 - a. It does not address the sources of the problem. As discussed above, the Proposed Project does nothing to reduce the six decades of accumulated nutrient inputs from stormwater and over-fertilized lawns that have fed the growth of these weeds. Nothing is being done to reduce the nutrient inputs from fertilizers poured on the numerous vibrant green lawns adjacent to the lagoons everywhere in the development. Instead, the Proposed Project would only test curbing the growth of weeds by adding toxic chemicals to the lagoons.
 - b. One of the bullet points under this goal is to "reduce the potential for target aquatic weed re-infestation after initial treatment." However, this cannot be achieved without drastically reducing the nutrient inputs which have fueled the flourishing growth of weeds. The potential for target aquatic weed re-infestation might be reduced by continued herbicide use, which has been required at other lakes where herbicide use has been initiated, but the Draft EIR/EIS dishonestly purports that a one-time use of herbicides will effectively reduce the weeds without further applications. As stated repeatedly in these

WQM-6

24

AWMM-8

WET-2

GEN-45

GEN-46

comments, the Sierra Club is opposed to all herbicide use in Lake Tahoe and connected waters.

25

- c. Why should the public be asked to pay for <u>managing</u> an unnatural system so that a small number of property owners, most of whom are second homeowners, can continue to boat into Lake Tahoe from their backyards? That the public would be asked to pay to sustain this privilege in this time of pandemic and economic collapse is obscene.
- d. The long-term goal should be to fix the problem, not to exacerbate it by using toxic chemicals to manage it in perpetuity.

Section 2.0 Project Description and Alternative

- 22)The discussion on page 2-5 regarding the feasibility criterion for selecting alternatives states "The CEQA Guidelines and the TRPA both define feasible as "Capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, legal, social, and technological factors." (State CEQA Guidelines Section 15364). In determining which alternatives are potentially feasible, this DEIR/DEIS focuses on consideration of technical and economic feasibility/practicality; the potential to violate federal, regional or State statutes or regulations; and whether an alternative balances relevant economic, environmental, social, and technological factors." Yet, no cost estimates are disclosed in the Draft EIR/EIS, the dredging alternative (AA2) was added after scoping comments complained about the lack of alternatives (even though AA2 is clearly the most costly alternative), and the Sierra Club's scoping requests for study of a barrier and restoration (much cheaper alternatives) were dismissed.
- 23)In this same section on page 2-6, under "a.," there appears to be a leftover agency comment on the Administrative Draft that inadvertently was not removed: "The only discussion on infeasibility of an alternative that I see in this chapter relates to dry dredging. How was Lahontan's antidegradation analysis and water quality objectives used to consider the "infeasibility" of an alternative? Many of our approved permits and the underlying discharge associated with them have the potential to exceed a water quality objective (that is why we include effluent limitations in the permit). I don't think we exclude those as being infeasible. I'm supposing that alternatives that were certain to create long term degradation and violation of objectives were not discussed. This may or may not need to be rewritten. I would first like to understand how our Basin Plan was used to determine infeasibility." Was this agency person's question ever answered? The question of whether the discharge of herbicides is infeasible because either it violates the antidegradation analysis or water quality objectives (as it does – see previous comments), is a good question, and this Draft EIR/EIS clearly fails to answer it. The response to these comments and the revised Draft EIR/EIS must also answer it.

ALT-117

ED-4

REG-28

GEN-46

24)The second paragraph of section 2.3 (page 2-9) states: "Barriers in place to prevent herbicide movement toward the West Channel would be briefly pushed below the

surface just enough to enable the passage of shallow-bottom boats used for mechanical harvesting and fragment control. The boat motors would be turned off during passage to prevent any damage to the barrier from propellers." This proposed lowering of the turbidity curtains would immediately cause mixing of the waters inside and outside the curtains and thus completely nullify this supposed mitigation measure. The Draft EIR/EIS fails to address this very likely release of herbicides to the surrounding waters. The response to these comments and the revised Draft EIR/EIS must also address this issue.

25)The discussion of the experimental plan and analysis of the results of the CMT, in section 2.3 is very incomplete. This comment and the next three comments present the evidence supporting that assertion. The second paragraph of section 2.3 (page 2-9) states: "Mechanical harvesting would continue to be performed at all sites (both test and control sites) during the testing period. As a baseline condition of the test project, harvesting would be conducted when and as needed following the existing harvesting protocol implemented by TKPOA."

Harvesting the control sites following the existing harvesting protocol is indeed the "treatment" to be applied to control sites. Routine mechanical harvesting of the experimental sites is not the appropriate baseline. The measures of treatments' effects on test sites are the treatments' percentage reductions of vegetation biovolume. These biovolume reductions are the data used in the statistical analysis of the CMT results. If test sites are mechanically harvested before the after-treatment biovolumes have been measured, the "treatments" whose effects on the sites are measured would be the effects of the experimental treatments for varying time periods plus harvesting.

Experimental treatments plus harvesting are not the treatments to be compared by the CMT. There appears to be no possibility of distinguishing the effects of the experimental treatments on the after-treatment biovolumes from the effects of harvesting. Because the effects cannot be distinguished, all the comparisons of experimental treatments involving the test sites that have been harvested would be invalidated. Leaving the experimental sites unharvested until the after-treatment biovolumes have been measured is also the appropriate baseline because TKPOA has proposed the CMT to test alternatives to mechanical harvesting.

If the project designers believe that mechanical harvesting of test sites will not invalidate comparisons between test sites, they must provide detailed justifications in the Final EIR/EIS. The phrase "harvesting would be conducted when and as needed" implies that test sites would be harvested to ensure that homeowners with docks in the test sites would be able to use their boats during the test.

26

HE-151

Inconvenience to these homeowners is not a sufficient justification for invalidating the comparisons of the CMT.

- 26)Section 2.3.1.2 discusses "Location and Size of Test Plots, Including Controls." The experimental sites are characterized by seven factors (section 2.3.1.2) which may significantly affect a site's responses to treatment. The seven factors are: water depths, water clarity, nutrient inputs, water circulation, shoreline conditions (e.g. bulkheads vs rocky or irregular shores), density and sizes of docks, and effects of wind and weather. Numerical or categorical values of several of these factors may be available for sites, but it is doubtful that values of some factors, for example effects of wind and weather, are available. Information about the magnitudes of the factors' effects on treatment responses is likely to be limited or unavailable. Consider the effects of the differences between the factor values of sites receiving the same treatment on the estimation of the variability of the responses to that treatment. The differences of factor values may significantly affect those sites' responses to the treatment and consequently affect the estimation of variability between sites. Next, consider the effects of the differences between the factor values of the sets of sites receiving different treatments on the comparison of the treatments. The differences between the factor values of the sets of sites likewise may significantly affect and confuse the comparisons of the treatments. If the number of replications of each treatment were much larger than three, then claiming that (1) the effects of heterogeneity on the variability of sites' responses within treatments are similar across treatments and (2) heterogeneity does not significantly affect comparisons of the treatments might be plausible. These assertions are not plausible for three replications. The data analysis plan should acknowledge the potential effects of heterogeneity on the estimations of variability and comparisons of treatments. There may be factors whose potential effects on estimations and comparisons are obvious, even if unquantifiable. The effects of these factors should
- 27)Section 2.3.2 states: "Detailed hydroacoustic and aquatic macrophyte ... survey results [in the test sites] would provide information on the species mix and biovolumes of macrophytes, and would be used to decide (1) final test site locations and boundaries to minimize effects on non-target species, and (2) which of the proposed herbicides to apply at each herbicide test site to best match the target species present." Best matching the target species present would increase herbicide and herbicide+UV treatments, and bias all the comparisons involving these treatments. The experimental plan should include detailed discussion of whether significant improvements in the test can be expected from this use of the survey results. The difficulties of making detailed adjustments in the application of herbicides, the varied locations of non-target species within the sites, and the dispersion of herbicides might defeat attempted minimization of effects on non-target species. The requirement that each herbicide be applied to three herbicide sites and

be noted in the interpretations of results.

ALT-119

27

ALT-118

three herbicide+UV sites may strongly constrain attempts to best match the target species.

- 28)Section 2.3.2.2 states: "Testing three replicates for each treatment would allow statistical comparisons of data (e.g., Analysis of Variance "ANOVA") both among treatment sites and with non-treated "control" sites. The replications would provide data on variability among those sites treated with the same herbicide, as well as in comparison to other herbicide treatments, non-herbicide weed control methods, and control sites." Though these statements are rather imprecise, they correctly note the importance of replication of each treatment on several test sites. In general, the greater the number of replications, the greater the confidence in the results. Detecting differences between treatments large enough to be of practical significance for weed control is one of the primary objectives of the CMT. The greater the number of replications, the higher the probability that such differences will be detected if in fact they exist. Three is a small number of replications, especially considering the heterogeneity of the sets of test sites where treatments will be replicated. (The comment on Section 2.3.1.2 is a detailed discussion of the effects of heterogeneity.) The Overview of the Test Program should discuss the limitations on project resources and the reasoning which justified the choice of three replications.
- 29)The Proposed Project would apply aeration only to herbicide and herbicide+UV sites, and not to UV sites. Action Alternative 1 would not apply aeration to UV sites. Applying aeration to UV test sites would mitigate some environmental impacts of controlling aquatic weeds with UV light. According to the Draft EIR/EIS, aeration would (1) counteract the oxygen demand and water quality impacts from decomposing vegetation and (2) help eliminate anoxic conditions at test sites that can cause the release of phosphorus from the sediments to the water column where it can stimulate algal blooms. The Proposed Project and Action Alternative 1 should be modified to apply aeration to UV sites. Aeration should be applied to the nine UV sites in the enhanced Action Alternative 1.
- 30)Action Alternative 1 (AA1) treats only three sites with UV light. AA1 should be enhanced to treat nine sites with UV light - the 3 UV sites and the 6 herbicide+UV sites where the Proposed Project (PP) applies UV light. Treating nine sites and a greater variety of sites would estimate the effectiveness of UV treatment with a narrower confidence interval. Treating the nine sites where the PP applies UV light would be feasible. The specifications and planned use of the UV treatment equipment needed to perform all the UV treatments of the PP are discussed in section 2.3.3.
- 31)Section 2.3.2.3 describes the herbicides proposed for use in the CMT. See the following comments as well as Beyond Pesticides comments, which are incorporated by reference in these comments:

ALT-96

ALT-120

ALT-97

ALT-98

ALT-99

29

- a. Endothall (e.g., Aquathol K liquid) <u>Washington State Department of Ecology</u>, July 2000, states that "Sites that have never been exposed to endothall products may degrade Aquathol®, Aquathol® K and Hydrothol® more slowly than sites that have had a previous exposure history. This is because it normally takes several weeks for bacteria capable of using endothall as their sole carbon source to develop out of their lag-phase and rapidly degrade applied endothall."
- b. Triclopyr (e.g.. Renovate liquid or granular)
 Californian's for Alternatives to Toxics states: "Commercial triclopyr products are typically composed of 40-50% of the triclopyr acid or salt, and 50-60% of inert ingredients or surfactants. Many of these additives have shown to be significantly more toxic to both humans and animals than triclopyr itself. One of these compounds ethylenediamine tetraacetic acid (EDTA) has been shown to cause birth defects, cleft palate, and abnormal skeletons in test animals. EDTA has also been shown to be 10-fold more toxic to fish than the Garlon formulation alone. Another inert, triethylamine is extremely toxic to the eyes, skin and respiratory system. At least one commercially available triclopyr products contains kerosene, which has been linked to severe gastrointestinal, respiratory and nervous system toxicity."
- c. Florpyrauxifen-benzyl (e.g., Procella ED liquid) is not approved for use in California.
- 32)Table 2-3, Proposed Test Herbicide Application Treatment Site Details, does not actually provide the quantities of each of the herbicides proposed for use; it only lists the application rate in parts per million. The actual volumes of herbicides, depending on the estimated volume of water to be treated, should be provided for full disclosure and complete analysis of impacts. Also, the application rates in Table 2-3 are the maximum allowable rates that the USEPA allows according to Table 2-2. No rationale or justification is provided for this maximum dose allowed by regulation.
- 33)Herbicide Containment is discussed beginning on page 2-17. Regarding Double Turbidity Curtains, the Draft states: "A 2016 rhodamine dye study tested the performance of double turbidity curtains at two dead-end lagoon locations in the southwestern area of the Tahoe Keys West Lagoon (Anderson 2016). In that study, the curtains retained 98 percent to 99 percent of the injected dye for at least 12 to 14 days of monitoring, and similar curtains would be deployed for the CMT." However, the dye was injected at the two dead-end lagoon sites on July 22 and 25, 2016, when stormwater inflows were minimal to non-existent. The Proposed Project, on the other hand, would be applying herbicides in late spring when snowmelt and

stormwater inflows are much more likely to overwhelm the turbidity curtains and cause release of the herbicides outside the curtains. The much greater magnitudes of late spring inflows and the potential herbicide releases outside the curtain that ALT-100

ALT-99

30

may result are not discussed in the Draft EIR/EIS and must be addressed in the revised Draft EIR/EIS..

- 34)The discussion of Monitoring and Reporting Programs on page 2-18 states that an Aquatic Pesticide Application Plan (APAP) will be implemented to "prevent accidental spills, contain herbicides within the treatment area, monitor concentrations and movement of the aquatic herbicide chemicals and degradates after application, and alert the public and water purveyors should aquatic herbicides move beyond the treatment areas into areas of the lagoons or Lake Tahoe beyond planned containment." The risk of accidental spills remains too high even with the best plan to prevent them. An APAP will only minimize the risk of a spill, not prevent the occurrence of spills. Therefore, this mitigation measure does not mitigate the risk to less than significant, though the risk is asserted be less than significant later in the document.
- 35)Section 2.3.3 states "The ultraviolet light system was designed to treat rooted aquatic weeds so this control method would not be tested in areas where floating coontail are dominant or co-dominant, based on macrophyte surveys, and the final selection of test sites and determination of site boundaries would include this consideration." This assertion does not appear to be consistent with the results of the Aquatic Invasive Plant Control Pilot Project at the Lakeside Marina and Beach. The ultraviolet light system used in that project appears to have treated coontail successfully. Figure 9 of the report shows that coontail "treated with UV-C light in LSM and LSB treatment areas" lost turgor pressure and collapsed to the lake bottom as rapidly as Eurasian watermilfoil did and more rapidly than curlyleaf pondweed did. Are ultraviolet light systems that can treat floating weeds in the Tahoe Keys feasible? If they are not feasible, for what reasons are they infeasible?
- 36)Chapter 2 implies, but does not state precisely, that treatments' percentage reductions of biovolume (BV) of vegetation on a test site:

((preBV - postBV)/preBV)*100

are the measures of treatment effect used in comparisons of treatments. A precise definition should be stated.

37)The measurement instrumentation and its capabilities should be precisely and completely described. Instrumentation should be capable of measuring the biovolume in the entire cross-sections of the lagoons, including vegetation on the sides, if any, and on dock pilings and buoys. Inaccurate measurements of the

biovolumes on the sides, dock pilings, and buoys would confound comparisons of treatments.

38)Section 2.5 discusses Action Alternative 2, the Dredge and Replace Substrate alternative. The water quality impacts of the aluminum inevitably released into the

ALT-101

REGM-1

ALT-102

ALT-103

ALT-105a

31

water column during this alternative cannot be satisfactorily mitigated to less than significant levels. The following deficiencies in this section include:

- a. The itemized cost estimates for every task in this alternative removal, treatment, disposal and replacement should have been included.
- b. A "sheetpile cutoff wall" is proposed in Section 2.5.1. When this wall is removed, aluminum in the sediments will be released into the water and cause high levels of toxicity to aquatic organisms. This impact is not mentioned, and the sheetpile wall is not discussed further in the document.
- c. The Draft EIR/EIS does not contain any information about the amount of aluminum sulfate that was poured into the Keys lagoons after construction and the concentration of aluminum in the sediments. The IEC/IS states (p 41) that there were discharges of alum as late as 1998. This information should have been examined thoroughly before selecting AA2 as one of the alternatives to be fully evaluated in the DEIR/EIS.
- d. The discussion of facility needed for dredging support states: "Review of the site vicinity indicated that the mothballed Tahoe Keys Water Treatment Plant (TKWTP) located on the south side of Lake Tallac would be the most suitable location for dredge processing and dewatering." The structural integrity of the "mothballed" TKWTP is questionable, but there is no discussion of this potential problem. Also, there is no discussion of whether the TKWTP has the capacity to treat the huge volume of sediment-laden water that dredging would generate.
- e. The discussion of facilities also states: "the existing plant has a low berm around it, which may contain leakage, and probably could be increased to a height of three to four feet or reinforced with a liner to prevent outflow of any dewatering leaks." (emphasis added) What is the volume enclosed by the existing berm that is available for containing outflows, and what is the volume needed to contain the "leakage"? Instead of speculating about these issues, this section should have detailed fully the risks and costs of this proposed use of the TKWTP. The TKWTP is adjacent to and just south of Lake Tallac, a jurisdictional WOUS. Therefore, leaks from the TKWTP and potential failure of the berm would result in waste discharges to Lake Tallac and waters connected to it.
- f. Page 2.31 also states: "An anionic polymer would likely be employed to remove aluminum from dewatering effluent, which would chelate (bond to) the aluminum and settle out of solution." No information about this additive is provided in the Draft EIR/EIS or the appendices.
- g. Wastewater treatment plants are not designed to accept the large volume of water that would result from the dredging. Therefore, treatment by the TKWTP is most likely not possible, and the treated water, no doubt contaminated by the polymer and aluminum not captured by the polymer, will be released to Lake Tallac, which would violate water quality objectives in the

ALT-105g

32

ALT-105a

ALT-105b

ALT-105c

ALT-105d

ALT-105e

ALT-105f

Basin Plan. There is no discussion of the potential concentrations of aluminum and the polymer and their impacts on Lake Tallac.h. An estimated 36 million gallons of water/sediment is proposed to be treated

- through a series of Baker tanks to separate the sediment and aluminum from the water. Discussion of where these tanks would be placed and the impacts of their placement is absent. This is a highly unrealistic proposal for which no cost estimates or feasibility assessments are provided.
- i. We estimate that one thousand truckloads (285 + 715) of replacement sand for the dredged areas would be needed. It is extremely unlikely that 715 truckloads of treated sediment can be reused, as this section suggests. The treated sediment would almost certainly not satisfy the very low turbidity requirements that sand for any replacement projects, such as beach replacement projects, must satisfy. This is another unrealistic and costprohibitive aspect of this alternative, again showing that this alternative was merely proposed to add an alternative to the Draft EIR/EIS.

These numerous deficiencies in the analysis show that insufficient information has been provided to justify the conclusion that all the significant impacts of AA2 can be mitigated to less than significant. Therefore, AA2 should be eliminated from consideration.

- 39)Section 2.7 is called "Aquatic Weed Control Methods Eliminated from Group A Consideration." Why is this section not called "Aquatic Weed Control Methods Eliminated from Alternative Selection"? Group A is the herbicides, UV and LFA part of the Proposed Project. The eliminated weed control methods, such as barriers and wetland restoration, were suggested during the scoping phase as alternative methods for protecting Lake Tahoe. Since protecting Lake Tahoe should be the Lead Agencies number one concern, these alternative methods should have been included in the analyses of this Draft EIR/EIS.
 - a. Page 2-40 begins with "Isolate Tahoe Keys from Lake Tahoe." This suggestion should <u>not</u> have been dismissed. In fact, TKPOA has even considered a barrier, as discussed on pages 3.1-18, -19, and -20, 3.3.1-5, 3.4-15 (See also General Comment #18). There is no explanation of why this Group A control method was eliminated from consideration. A barrier, permanent or temporary, between the Keys' Lagoons and the Lake would be the most expedient and effective mechanism to protect the Lake. Yet, this alternative was dismissed for the sake of prioritizing recreational boating over the health of Lake Tahoe. Also, the West Channel Water Barrier was cited as

33

one of the mitigation measures in the Joint TRPA Initial Environmental Checklist and CEQA Initial Study (MM-HH-10 on page 58). What was the basis for the decision to eliminate this mitigation measure from the Draft EIR/EIS?

b. Page 2-41 discusses "Tahoe Keys Wetland Restoration," which was dismissed because "restoration would have substantive impacts to navigation,

ALT-105i

ALT-105a

ALT-105h

SIG-8

and to the recreational and aesthetic values underlying the appeal of Tahoe Keys properties, and thus to property values within the Keys." The paragraph continues with the following statement: "Wetland restoration options could be considered in a future environmental evaluation of long-term aquatic invasive species management of the Tahoe Keys. However, the purpose of the CMT is to test alternative methods of target aquatic weed control, and by definition aquatic weeds would not occur where their habitat has been eliminated, whether by filling or replacing the habitat that favors weeds with a natural wetland. Therefore, restoration alternatives do not require testing and were not carried forward for further evaluation in this DEIR/DEIS." Yet, the Lead Agencies have not justified the project's piloting herbicide use when the effectiveness of non-chemical is still being evaluated. (See General Comment #3) The Lead Agencies have declined to include a feasible project alternative that would clearly lessen the significant environmental impacts of the project. The Lead Agencies have not complied with CEQA on the basis of prioritizing recreational boating over the environmental fate and health of Lake Tahoe.

As previously stated in the General Comments, CEQA Guidelines state "[T]he discussion of alternatives shall focus on alternatives to the project or its location which are capable of avoiding or substantially lessening any significant effects of the project, even if these alternatives would impede to some degree the attainment of the project objectives, or would be more costly." § 15126.6(b). (emphasis added) Therefore, revision and recirculation of the Draft EIR/S are required by the absence of the required range of reasonable alternatives. CEQA Guideline § 15088.5(a)(3) requires recirculation when "A feasible project alternative or mitigation measure considerably different from others previously analyzed would clearly lessen the significant environmental impacts of the project, but the project's proponents decline to adopt it."

Section 3.0 Affected Environment and Environmental Consequences

Section 3.1 Approaches to Environmental Analysis

40)Issue EH-2, Detectable Concentrations of Herbicides and Degradants in Receiving Waters, (page 3.1-2) states: "State and federal antidegradation policies and the Basin Plan require that, in receiving waters outside herbicide treatment areas and in all areas after treatment events, detectable concentrations of introduced chemicals

are only allowable if beneficial uses are protected and maintained." That is not actually what the State and Federal antidegradation policies and Basin Plan say. The authors of this document have interpreted the policies and Basin Plan incorrectly, and the above statement should either be deleted or revised to correctly interpret antidegradation policies, which are cited below.

a. The Federal Antidegradation policy states in CFR 131.12(a)(3) is: "Where high quality waters constitute an outstanding National resource, such as

ALT-106

ALT-107

ALT-121 & CST-2

34

REG-29

waters of National and State parks and wildlife refuges and waters of exceptional recreational or ecological significance, that water quality shall be maintained and protected."

- b. EPA's guidelines on this state the following (Water Quality Standards Handbook, Chapter 4): "Outstanding National Resource Waters (ONRWs) are provided the highest level of protection under the antidegradation policy. The policy provides for protection of water quality in high-quality waters that constitute an ONRW by prohibiting the lowering of water quality. ONRWs are often regarded as highest quality waters of the United States: That is clearly the thrust of 131.12(a)(3). However, ONRW designation also offers special protection for waters of "exceptional ecological significance." These are water bodies that are important, unique, or sensitive ecologically, but whose water quality, as measured by the traditional parameters such as dissolved oxygen or pH, may not be particularly high or whose characteristics cannot be adequately described by these parameters (such as wetlands). The regulation requires water quality to be maintained and protected in ONRWs. EPA interprets this provision to mean no new or increased discharges to ONRWs and no new or increased discharge to tributaries to ONRWs that would result in lower water quality in the ONRWs. The only exception to this prohibition, as discussed in the preamble to the Water Quality Standards Regulation (48 F.R. 51402), permits States to allow some limited activities that result in temporary and short-term changes in the water quality of ONRW. Such activities must not permanently degrade water quality or result in water quality lower than that necessary to protect the existing uses in the ONRW." (emphasis added) The Sierra Club contends that the use of herbicides in Tahoe Keys cannot reasonably be expected to be a onetime event as there is no documented evidence that a one-time use of aquatic herbicides is effective in reducing invasive aquatic weeds, and repeated use of herbicides does not meet the definition of "temporary and short-term changes in the water quality."
- c. The State antidegradation policy states: "Whenever the existing quality of water is better than the quality established in policies as of the date on which such policies become effective, such existing high quality will be maintained until it has been demonstrated to the State that any change will be consistent with the maximum benefit to the people of the State, will not unreasonably

affect present and anticipated beneficial use of such water, and will not result in water quality less than that prescribed in the policies. Any activity which produces or may produce a waste or increased volume or concentration of waste and which discharges or proposes to 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 highest water quality consistent with maximum benefit to the people of the State will be maintained." REG-29

35

- d. The State Water Resources Control Board's guidelines on implementation state: "Regional Board staff shall not recommend that the activity be permitted unless all of the following conditions are met: ...(b) The reduction in water quality is consistent with maximum public benefit. (c) The reduction in water quality will not unreasonably affect actual or potential beneficial uses.
 (d) Water quality will not fall below water quality objectives prescribed in the Basin Plan." (emphasis added) Clearly, conditions (b), (c), and (d) cannot be satisfied. Therefore, the Water Board must recommend against herbicide use.
- e. The Basin Plan states (page 3-2): "On October 28, 1968, the State Water Resources Control Board adopted Resolution No. 68-16, "Statement of Policy with Respect to Maintaining High Quality of Waters in California," establishing an antidegradation policy for the protection of water quality. This policy requires continued maintenance of existing high quality waters. Whenever the existing quality of water is better that the quality of water established in this Basin Plan as objectives (both narrative and numerical), such existing quality shall be maintained unless appropriate findings are made under the policy." It also states: "Section 114 of the federal Clean Water Act also indicates the need to "preserve the fragile ecology of Lake Tahoe.""

Therefore, the policies and plans say nothing relevant to allowing detectable levels of chemicals outside treatment areas and after treatment within treatment areas if beneficial uses are protected and maintained. TRPA is certainly not complying with the Clean Water Act mandate to preserve Lake Tahoe by publishing a DEIS that would permit testing of herbicides in the Keys and prioritizing private boat recreation over the health of Lake Tahoe.

41)Issue EH-4, Introduction of Toxic Substances into the Environment, on page 3.1-2 states: "Basin Plan water quality objectives state that all waters shall be maintained free of toxic substances in concentrations that are toxic to, or produce detrimental physiological responses to, human, plant, animal, or aquatic life." Yet, this objective is omitted from the later discussion of each method's impacts on water quality objectives and other objectives, for example dissolved oxygen, are included. The

response to comments must acknowledge this omission, and the revised Draft EIR/EIS must include discussion of this water quality objective.

42)Issue EH-4 also states: "Application of aquatic herbicides can be expected to cause some mortality of non-target native aquatic plants within treatment areas, but the herbicides proposed for testing in Tahoe Keys lagoons would have no significant acute or chronic impact on people, fish, or freshwater invertebrates when used at recommended rates." The Draft EIR/EIS does not contain any data or references supporting this statement. "Some mortality of non-target native aquatic plants" is a violation of the toxicity water quality objective that would not occur with non-chemical methods. REG-29

WQ-13

EH-6

36

- 43)Issue EH-5, Short-term Increases in Aluminum Concentration, page 3.1-2, states: "To enable calculation of site-specific criteria for toxicity to aquatic life, surficial sediment samples were collected from the Tahoe Keys lagoons in 2019. Elutriate tests were conducted to mimic conditions that could occur in overlying water during dredging. Samples of overlying water were also collected and analyzed for dissolved organic carbon, hardness, and pH. Aluminum freshwater acute criteria (Criterion Maximum Concentrations or CMC) calculated for the lagoons ranged from 610 to 2,400 μ g/L. Short-term exposure to total recoverable aluminum concentrations above these acute criteria could cause harm to aquatic life." There are no references to the calculation of the criteria; even the location of the results of the elutriate tests is missing. The results show that the aluminum concentrations measured by elutriate tests exceeded both chronic and acute criteria for four of the eight Marina Lagoon stations and five of the eight Main Lagoon stations. The highest exceedance was 2000% of the corresponding criterion. How can these exceedances possibly be considered "short-term"?
- 44) Issue EH-6, Harmful Algal Blooms (HABs), on page 3.1-3, states "The conditions that cause cyanobacteria to produce cyanotoxins are not well understood..." Yet, it is abundantly clear from a simple search of "conditions that cause cyanobacteria" that the answer is "calm, nutrient-rich waters." (World Health Organization) The <u>Center for Disease Control</u> states "They usually multiply and bloom when the water is warm, stagnant, and rich in nutrients (phosphorus and nitrogen) from sources such as fertilizer runoff or septic tank overflows." And the <u>EPA</u> states "There is widespread agreement within the scientific community that the incidence of HABs is increasing both in the U.S. and worldwide. This recent increase in the occurrence of HABs has been attributed to increasing anthropogenic activities and their interaction with factors known to contribute to the growth of cyanobacterial blooms. Point sources ... and non-point sources (... roads and stormwater), may be high in nitrogen and phosphorus and can promote or cause excessive fertilization (eutrophication) of both flowing and non-flowing waters." (emphasis added) Yet, this Draft EIR/EIS does not address the nutrient inputs to the lagoons and the

37

CYB-14

accumulation of those inputs over 60 years of those inputs, but instead focuses on the cycling of nutrients into the water column from SAV decay. (see additional comments on Appendix F). The Draft EIR/EIS also ignores mentioning several cyanobacteria-related risks from herbicide use, such as:

- a. cyanobacteria become resistant to herbicides where their use is prevalent (Narusaka et al. 1998).
- b. Cyanobacteria have a higher tolerance to herbicides than other phytoplankton, therefore their abundance will increase with herbicide use (Powell et al. 1991, Forlani et al. 2008, Perez et al. 2011, Pannard et al 2009),
- c. Cyanobacteria's use of nutrients bound to herbicides to stimulate their growth (Bai et al. 2014), and

EH-7

- d. The presence of herbicides in elevated water temperatures increases cyanobacteria growth, Berard et al (1999).
- 45)Issue EH-6, Harmful Algal Blooms (HABs), on page 3.1-3, also states "Caution levels for human and animal health are triggered by visual indicators, cyanobacteria cell density greater than 4,000 cells/mL, and cyanotoxin levels of 0.8 μg/L for total microcystins, and 1 μg/L for anatoxin-a or cylindrospermopsin. Warnings are posted if cyanotoxin concentrations reach 6 μg/L for total microcystins, 20 μg/L for anatoxin-a, or 4 μg/L for cylindrospermopsin. Danger warnings are posted if cyanotoxin concentrations reach 20 μg/L for total microcystins, 90 μg/L for anatoxin-a, or 17 μg/L for cylindrospermopsin." This statement raises the following questions and concerns:
 - a. Is there routine testing for these toxins at the Keys? How many people at the Keys have been affected by exposure? If no health statistics have been gathered at the Keys, why haven't they been? This information would be critical to understanding the increased risks of HABs and cyanobacteria due to the initiation of herbicide use.
 - b. The list of additional Project Resources on the Tahoe Keys website (www.tahoekeysweeds.org) includes Cyanobacteria Test Results, namely concentrations of microcystin and anatoxin-a., The cyanobacteria water quality data collected in 2019 and displayed in Appendix E are concentrations of phycocyanin pigment, not concentrations of toxins. (Hollister, et al., 2016) The relationship of phycocyanin measurements to microcystin concentrations is not discussed in Appendix E. Health advisories are always issued for toxins like microcystin, not for related concentrations of pigments. The phycocyanin measurements, apparently difficult to relate to cyanobacteria concentrations, are not interpreted in the Draft EIR/EIS at all. The Revised Draft EIR/EIS should rectify this omission. What do the phycocyanin measurements in Appendix E signify in terms of cyanotoxin levels?
 - 38
 - c. Signs warning of "Harmful Algae" are posted at many locations in the Keys and appear to be posted at least all summer for the last several summers. When warning signs are always present, people tend to ignore them, which is very likely the case in the Keys.
- 46)HABs and cyanobacteria are a major concern at the Keys and the Draft EIR/EIS does not adequately examine all the risks posed by the use of herbicides as stated in the previous comment. Stagnant, warm, nutrient-rich waters, like the waters of the Keys lagoons, promote the growth of cyanobacteria and the production of cyanotoxins. The CMT would not test any methods for abating these conditions. The application of herbicides, which kill the plants quickly, releases nutrients to the water column much more rapidly than slower-acting non-chemical methods release them. The LFA method may partially abate this condition, but the LFA method should be fully tested first, prior to the overly risky method of herbicide application. The

CYB-15

CYB-14

CYB-16

proposed mitigation, applying the herbicides in the spring, is an insufficient mitigation measure, particularly because it appears that the volumes of macrophytes present in the spring have not been measured. There are no assurances that this mitigation measure will reduce the risk to less than significant if there are no estimates of the volumes of macrophytes that will die off and release nutrients. Therefore, herbicide use creates a potential for rapid release of nutrients and a dangerous and unmitigated risk of HABs, including deadly cyanobacteria, a violation of the Basin Plan's water quality objective for biostimulatory substances. Even short-term degradation is not allowed if that degradation violates any water quality objectives.

- 47)Section 3.1.1.5 states: "Testing the efficacy of aquatic weed control methods in improving water quality of the lagoons is a goal of the project." The lagoons do not presently satisfy water quality standards. Experience elsewhere shows that perpetual herbicide treatment of the lagoons would be required to control invasive weeds. Perpetual herbicide treatment would only worsen the below-standard water quality by adding toxic chemicals. The efficacy of the non-chemical methods must be tested first, as required by the Basin Plan.
- 48)Section 3.1.1.5 compares the volume of Lake Tahoe to the volume of the Keys. This comparison is repeated in the Draft EIR/EIS several more times. The significance of these comparisons of volumes is not discussed. The exchange rate between the lake and lagoons is not mentioned anywhere in the document, but the references to the differences in volumes either imply complete mixing occurs or that the affected area for herbicides, 16.9 acres, is relatively small. In either case, repeated mention of the two volumes has no apparent purpose. Page 3.3.5-15 mentions the "lack of mixing between the lagoons and greater Lake Tahoe." LaPlante's Masters Thesis (2008) found that the range of mean residence times for the West Lagoon is 2 to 7 days. However, these mean residence times were determined only for the 1/3 of the West Lagoon area immediately inside the channel connecting the West Lagoon to

the Lake. Thus, there is minimal to no mixing between the Lake and the dead-end sections of lagoons.

49)Issues WQ-6 and 7 on page 3.1-8 refer, respectively, to the increased total phosphorus and nitrogen concentrations in the water column from the decaying aquatic plants during and after weed control treatments, but "lead to lower concentrations from aquatic dieback in the fall. Long term, a reduction in nitrogen [and phosphorus] release from decaying plants would be accomplished where dense aquatic weed beds are successfully treated." Water column concentrations may be reduced, but this statement is misleading at best because no nutrients are actually being removed from the system as a whole by the use of herbicides. The nutrients are taken up from the sediments by the plants during the growth cycle and partially released to the water column upon decay; the decaying plant tissues settle back into the sediment and return their remaining nutrients to the sediment. The conclusion that the use of herbicides will reduce the nutrient concentrations in the system is

WQ-14

39

CYB-16

AWM-52

false. Laminar flow aeration might very well reduce the nutrients, but herbicides will not.

- 50)The assertion that nutrient levels in the Keys are no different than those in other lakes in the Sierra Nevada is misleading at best (statement made during workshop on August 11, 2020 and cited in this Draft EIR/EIS in reference to the Homyak et al, 2014, study of 50 lakes in the Sierra Nevada). Appendix F even begins by stating "Annual average values for TN and TP in the Tahoe Keys exceeded their relevant WQOs for each year from 2007 to 2013 (SEA 2017a). In 2016, even the minimum values recorded for TN and TP exceeded relevant WQOs for the Marina Lagoon, the Main Lagoon and Lake Tallac. Clearly, the Tahoe Keys lagoons should be considered "enriched" with nutrients." If, indeed, it was truly the case that anthropogenic sources are not enriching the Tahoe Keys (as stated in numerous places throughout the Draft EIR/EIS, then what source are enriching the Keys and why is this not disclosed? The assertion that nutrient levels in the Keys are no different than other Sierra lakes is a specious argument that is further refuted by the following:
 - a. The few (8 total, including 3 duplicates) sediment samples taken in late July and September of 2019 (as shown in Appendix E and F) were taken at the height of, and after, plants have been absorbing nutrients from the sediment. The lakes in Homyak's study, if they have macrophyte problems at all, do not have huge macrophyte problems comparable to the problem in the Keys. Therefore, there is no similar uptake of nutrients by macrophytes in the 50 Sierra lakes.
 - b. Appendix E and F do not explain how the sediments were sampled and how that sampling method compares with the meticulous sampling method of Homyak et al., 2014. For instance, the Homyak study took cores that were 30

40

cm deep and generally found gradually declining P levels with depth (approximately 1200 mg/kg down to 800 mg/kg in Emerald Lake). Appendix E and F do not discuss any methods or sampling details, such as depth of the cores taken, which makes comparisons with the Homyak study, and conclusions based on those comparisons, very problematic.

c. Appendix E describes several sampling difficulties, such as "For some samples aquatic weeds were caught in the jaws of the sampler preventing complete closure, resulting in additional water that entered the Ponar and washed out some of the sediment in the grab.... In those samples the water was homogenized together with the sediment, which increased the water content in the sediment and may have diluted concentrations of nutrients." Also, the holding temperatures of all but one of the samples exceeded 6°C, the holding temperature recommended by QAPP guidance (noted as HTe in a footnote to Table 15). Therefore, the sampling results are highly suspect, and drawing any conclusions based on comparisons with the Homyak study is highly misleading and inappropriate.

WQ-15

between P and metal oxides, in particular Al." Well-oxygenated sediments are not the case in the Keys. e. Homyak's study looked primarily at phosphorus, yet Appendix F states "nitrogen is the more ecologically relevant nutrient (i.e., limiting to algal productivity) in the Main Lagoon." (Even though the Draft EIR/EIS states the Keys are co-limited with P and N.) Furthermore, the only sediment data provided in Appendix E were from a couple of days in late July and September of 2019 and the nitrogen sampled is only for TKN (total kieldahl nitrogen). Why wasn't total nitrogen sampled? WQ-16 f. Appendix F concludes "The sediment TP contents found in the three lagoons do not appear to be particularly enriched from anthropogenic sources" based on the comparison with the Homyak study's results, yet the Homyak study concluded that the P levels in these lakes was from atmospheric sources. g. A study entitled Evidence for nutrient enrichment of high-elevation lakes in the Sierra Nevada, California (Sickman et al. 2003) states "lakes throughout the Sierra Nevada are experiencing measurable eutrophication in response to the atmospheric deposition of nutrients." h. Another key difference is that the Keys are co-limited by phosphorus and nitrogen, according to the Draft EIR/EIS, whereas the lakes in the Homyak study are phosphorus limited. 51)Other key points with regard to nutrients in the Keys and the lack of full examination and disclosure in the Draft EIR/EIS include: 41 a. Appendix F, referring to the Chang paper, insinuates that excess nitrogen in the Keys is from atmospheric sources. The atmosphere is not the source; nitrogen is input by stormwater from lawns and streets in the Keys' neighborhood, the stormwater from the City of South Lake Tahoe, by groundwater from Lake Tallac's nitrogen-rich waters, and by sediment inputs from the City of South Lake Tahoe's stormwater that is discharged into Lake Tallac. Inputs from these sources were not analyzed in the Draft EIR/EIS. **WQ-17** b. The only place in the Draft EIR/EIS that addresses sediment nutrient levels, and then only in a speculative way, is on pages 3.3.4-45 and 46, and the only sediment sampling done was a few days in 2019. c. In a study titled Aluminum Control of Phosphorus Sorption by Lake Sediments (Kopacek et al. 2005): "Hypolimnetic P release occurs under reducing conditions that cause reductive dissolution of ferric hydroxide [Fe(OH)₃]. This

d. Homyak's study stated: "lake sediments behaved as P sinks, likely owing to well-oxygenated waters that limit reducing environments and to interactions

hypolimnetic P release may be naturally low or artificially reduced by sediment with naturally high or artificially elevated concentrations of aluminum hydroxide [Al(OH)₃]. We present field and laboratory data for a common extraction analysis of sediments from 43 lakes differing in trophic status, pH regime, climate, and P loading. The results indicate that a simple sequential extraction of sediment may be a useful predictor of sediment's ability to release P. Sequential extractions of sediment P, Al, and Fe by water (H₂O), bicarbonate-dithionite (BD), and NaOH (at 25 °C) showed that negligible amounts of P would be released from lake sediments during hypolimnetic anoxia if either (1) the molar Al_{NaOH~25}:Fe_{BD} ratio is >3 or (2) the molar Al_{NaOH~25}:P_(H2O+BD) ratio is >25. These ratios can be used as operational targets for estimation of sediment P release potential and Al dosing of P-rich sediment to prevent hypolimnetic P release under anoxic conditions." Due to the high aluminum and anoxic sediment layer at the Keys, one would expect that the release of P is lower than where aluminum levels are lower or closer to background levels of aluminum.

- d. Homyak's study also stated "Aluminum too can limit increases in lake water P concentrations under reducing environments, and at relatively high Al concentrations, P released from the reduction of Fe can be bound to Al-hydroxides (Kopacek et al. 2001, 2005)." Were there any studies at the Keys that looked at sediment and water column phosphorus levels in relation to (i) the high aluminum content in the sediment at the Keys from alum being poured into the Keys and (ii) the anoxic environment prevalent at the Keys? This relationship between aluminum and P under the conditions present at the Keys should have been further examined before including AA2 in the Draft EIR/EIS. Failure to examine the relationship is an example of the lack of seriousness with which the Lead Agencies undertook this alternative.
- e. The product "<u>Phoslock</u>" was mentioned during one of the public meeting webinars though not cited anywhere in the Draft EIR/EIS or appendices. Pesticide regulations in the following states prohibit shipping Phoslock to

Connecticut, Massachusetts, New Hampshire, New York, Maine, Rhode Island, and Vermont. If Phoslock were to be used to remove phosphorus, this product should have been disclosed in the environmental document.

- 52)Section 3.1.1.6, Aquatic Biology and Ecology, states (page 3.1-8) that aquatic weed control will improve the habitat. The Keys are an unnatural habitat suitable mainly for invasive weeds (and boats) and a few highly tolerant species, both native and non-native. Non-chemical aquatic weed control methods may improve water quality in the Keys and reduce weeds if the nutrients that nourish their growth are reduced. But the habitat will remain a stagnant lagoon system that is especially suitable for non-native species of both flora and fauna. Continued warming of the climate will only enhance this suitability. The only way to truly "improve habitats" is to restore the lagoons to marsh, which would eliminate weed habitat entirely and provide filtration for ongoing nutrient inputs and habitat for a myriad of other native species, both aquatic and terrestrial.
- 53)Issue AQU-2, Competitive Exclusion of Aquatic Macrophytes Due to Increased Growth of Curlyleaf Pondweed, (page 3.1-9) discusses the undesired side effects of species specificity of herbicides. If an herbicide does not control all the weeds present, the weeds that it does not control gain a competitive advantage. Because

42

AQU-3

AQU-4

tricloypyr and florpyrauxifen-benzyl do not effectively control curlyleaf pondweed, which is on the increase in the Keys, the use of these herbicides will reduce milfoil, allowing curlyleaf pondweed to increase. The use of herbicides will similarly allow coontail to increase. This is, yet again, an example of the poor design of the CMT. None of the control measures to be tested, except possibly the outrageously expensive and unrealistic dredging alternative, attempts to address the source of the problem, the excessive nutrients in the system. The revised Draft EIR/EIS should analyze (1) short-term alternatives to protect the Lake, such as barriers, and (2) long-term alternatives that actually address the problem of nutrients, such as restoration.

- 54)Issue AQU-9 under Section 3.1.1.6 on page 3.1.11, states "All of the control methods could result in the release and transport of aquatic weed seed and propagules to areas outside of the Tahoe Keys where aquatic invasive weed species have not yet become established." That would not be the case if control methods such as those the Sierra Club proposed in our scoping letter were included, e.g., a barrier between the Lake and the Keys, and restoring the dead-end portions of the lagoons to marsh habitat. The adherence to "testing" various control treatments does not help protect the Lake in any manner whatsoever, in the long-term or the short-term. It only performs time-wasted steps toward granting TKPOA what it wants, to treat the lagoons with herbicides in perpetuity.
- 55)Section 3.1.2.9, Terrestrial Biology and Ecology, referred to possible effect on terrestrial biology and ecology from "the proposed west channel barrier...; the barrier is no longer an element of the CMT." (emphasis added) There are other references in the Draft EIR/EIS to this barrier, on the same page in Sections 3.1.2.8 and 3.1.2.10, and previously in Section 3.1.2.3 and Section 3.1.2.5. Section 3.1.2.12 refers to an impermeable barrier. TKPOA contracted with D&A Civil Engineering to study the proposed west channel barrier, a temporary (5-7 weeks) water-filled barrier to be installed during the methods test evaluated in the IEC/IS. The study is summarized in a Technical Memorandum "Tahoe Keys - West Channel Barrier" referenced in the IEC/IS. The Technical Memorandum presumably contains comprehensive information about characteristics of the proposed installation site, effectiveness of the barrier, and environmental impacts of the barrier. This information, which would help the public evaluate a barrier, should be made available in this environmental review process. Why was the barrier not considered as a potential solution to help protect the Lake, the mission of the Lead Agencies? Also, the West Channel Water Barrier was cited as one of the mitigation measures in the Joint TRPA Initial Environmental Checklist and CEQA Initial Study (MM-HH-10 on page 58). What was the basis for the decision to eliminate this mitigation measure from the Draft EIR/EIS? The barrier should be incorporated into this environmental review process as the best short-term solution to the increasing weed infestation throughout the Lake.

AQU-4

AQU-5

43

- 56)Section 3.1.2.11, Utilities, states that drinking water could be contaminated, but the IEC/IS found that the "surface water intakes are not located is[n] sufficient proximity to the Tahoe Keys lagoons to be affected." There are no references to the data and analyses supporting this conclusion about possible contamination of drinking water supplies drawn from Lake Tahoe by surface water intakes. The IEC/IS also concluded that Tahoe Keys drinking water wells would not be contaminated because rhodamine dye injected into lagoons in an earlier study was not detected in the wells. The Rhodamine WT Dye Study Report on the website (https://tahoekeysweeds.org/project-resources-maps/) did not include any results of this testing of Tahoe Keys drinking water wells, another instance of missing supporting data. An electrical failure in the Tahoe Keys drinking water system in late August 2020 required issuance of a "boil water" warning to Tahoe Keys residents. The revised Draft EIR/EIS must analyze and discuss (1) whether contamination of Tahoe Keys water supplies by herbicides would be detected if the Tahoe Keys water system failed during the CMT and (2) whether the proposed detection and mitigation of this contamination would be effective in the event of failure.
- 57)Section 3.1.2.13, Water Quality, refers to a "very extensive baseline water quality data collection effort" conducted in the spring through fall of 2019. This section should have included a reference to Appendix E, the report of this study. The omission of this obvious reference significantly inconveniences readers.

Section 3.2, Environmental Health

- 58)EH-5, Short-term Increases in Aluminum Concentrations, (page 3.2-2) states "Information on existing concentrations of aluminum were summarized from available studies. The aluminum concentrations were then compared to USEPA's acute and chronic water quality criteria for the protection of aquatic life." No references to these studies are provided; thus, the reader is not provided the information needed for corroboration of the evidence, analyses, and conclusions.
- 59)EH-6, Harmful Algal Blooms, on page 3.2-2, suggests that the plant biomass that would decay and release nutrients will be minimal because the applications would occur in "the late spring when plant biomass that would decay and release nutrients is minimal". Are there studies supporting this assumption? According to the Aquatic Macrophyte Survey Report, which surveyed the Keys during June and July of 2016, "The hydroacoustic data showed that the abundance and biovolume of plants in the Tahoe Keys in 2016 was substantial and that more than 85% of the water volume was filled with plant matter. This is an increase over last year and, in addition, point sampling data shows that the amount of curlyleaf pondweed has increased substantially from prior years." Apparently, no macrophyte surveys have been performed in the late spring; the above Report states, "Due to the short growing season in Lake Tahoe and the germination and sprouting timing of the aquatic plants of concern, only one period of data collection is considered sufficient to assess relative abundance." Apparently, that one period of data collection is June and July.

WS-10

WQ-18

44

EH-8

CYB-17

There is no evidence to support the assumption that late spring is the best time to apply herbicides to minimize the risk of HABs.

- 60)The bottom of page 3.2-3 states that "states may allow some limited activities that result in temporary and short-term changes to water quality, subject to protection of beneficial uses. These changes would not be allowed to adversely affect existing uses or alter the essential character or special uses for which Lake Tahoe was designated as an ONRW." This statement correctly paraphrases pages 5 and 6 of the APU. However, as stated above under General Comments (#15), the APU also states "if the proposed discharge will violate water quality objectives in the receiving water, no discharge will be allowed and therefore no antidegradation analysis is required." Because the discharge of herbicides would result in immediate and certain violation of the toxicity and chemical constituent water quality objectives, the use of herbicides is not allowed.
- 61)The time frame "weeks to months, not years" cited at the top of page 3.2-4 refers to USEPA antidegradation regulations. Its message: limited short-term degradation might be permitted if stringent conditions are satisfied, but long-term degradation is prohibited. Indeed, the State Water Resources Control Board and the Regional Water Boards do have discretion to determine the allowable time frames of long-

term and short-term existing water quality degradation within this guidance. Experience at many other lakes has shown that one-time use of herbicides does not control aquatic weeds in subsequent years and that annual applications of herbicides are required. "Weeks to months" of short-term degradation for an indefinite number of years after the first application obviously violates the "not years" prohibition of long-term degradation. In the context of the present project, experience has shown that the project applicants' weed control goal would require future annual applications of herbicides. Furthermore, as stated in General Comment #18, two of TKPOA's NPDES and Basin Plan Pesticide Prohibition Exemption applications have recognized that herbicide treatments must be repeated to be effective. These applications proposed up to 12 year of herbicide treatments. If the agencies contend that aquatic weed control in the Tahoe Keys lagoons would not require future annual herbicide applications, they must provide peer-reviewed evidence supporting this contention.

62)The discussion of the State regulatory framework on page 3.2-4 paraphrases the Administrative Procedures Update on Antidegradation Policy Implementation for NPDES Permitting (APU) as follows: "If approved for use, detectable concentrations of herbicide active ingredients and degradants exceeding background would be allowed within treatment areas only for a short-term period (i.e., weeks to months, not years) to maintain compliance with antidegradation requirements. In receiving waters outside of treatment areas, short-term detectable concentrations of herbicide active ingredients and degradants exceeding background concentrations are only allowable if beneficial uses are protected and maintained." This is erroneous. There CYB-17

REG-30

45

REG-31

REG-32

are no references in the APU regarding concentrations "inside treatment areas" vs concentrations "outside treatment areas." In fact, there are no references to treatment areas whatsoever, only references to receiving waters. A correct interpretation of the APU must be substituted in a revised Draft EIR/EIS.

- 63)Cyanobacteria is also discussed on page 3.2-4 repeating what was said on page 3.1.3. See previous comments 44 and 45 above. In addition, Dr. Wayne W. Carmichael has contended that (a) starting the use of herbicides sets up a condition where they become needed in the long term, and (b) the potential for cyanotoxins increases if macrophyte control is not combined with reductions of nutrients and other water quality improvement measures.
- 64)Issue EH-5, Short-term Increases in Aluminum Concentrations, (page 3.2-5) states that "high aluminum concentrations may be due to the historical use of aluminum sulfate (also known as alum)..." (emphasis added) There is known extensive use of alum during the development of the Keys in the late 1950's and 1960's. This document should have examined historical references to find out how much was used and this must be addressed in a revised Draft EIR/EIS.
- 65)Table 3.2.1, on page 3.2-6, shows the aluminum elutriate sample results collected from the Tahoe Keys West Lagoon in 2019 compared to calculated site-specific acute and chronic Water Quality Criteria for the Protection of Aquatic Life. However, the footnotes to the table indicate that three of the five samples were stored at holding temperatures exceeding QAPP guidance, and the results of two samples may be biased low because the sediment samples were diluted with site water. Nevertheless, aluminum concentrations in samples from three of the five West Lagoon stations still exceeded both chronic and acute criteria for total recoverable aluminum.
- 66)Issue EH-6, Harmful Algal Blooms (HABs) under Environmental Setting for the Proposed Project (page 3.2-6) states: "Cyanotoxins were detected at all six LFA treatment sites (all within Site 26 shown on Figure 2-4) between July and September (cyanotoxin concentrations were 0.11-18.07 μg/L anatoxin-a and 0.15-0.33 μg/L microcystin)." The discussion also states "Water samples from the Tahoe Keys were also collected by TKPOA for cyanotoxin analysis at six stations in August 2017 and 19 stations in May through September 2018 (TKPOA 2020). Cyanotoxin concentrations were 0.13-2.84 μg/L anatoxin-a and 0.12-0.23 μg/L microcystin (Otten 2017 and 2018)." These data should have been included in the appendices; they were not. This omission must be remedied in a revised Draft EIR/EIS.
- 67)The reference to "California's guidelines [for cyanotoxins]" should be clarified. The guidelines are discussed earlier in section 3.2.
- 68)Issue EH-2, Detectable Concentrations of Herbicides and Degradants in Receiving Waters, beginning on page 3.2-7, discusses the three herbicides proposed for use.

REG-32 CYB-18 CYB-18 & EH-9

46

EH-10

There are a number of issues with this section of the Draft EIR/EIS, including the following:

- a. See attached comments from <u>Beyond Pesticides</u>, which were previously incorporated in these comments by reference.
- b. There is no discussion of the inert ingredients for each of these herbicides.
- c. Near the top of page 3.2-8, the following statement is made: "Complete degradation by microbial action is within 30-60 days (WDNR 2012a). When endothall is applied to areas of dense aquatic vegetation, it rapidly kills the treated plants, and the decay of the dead vegetation results in oxygen depletion, which, in turn, results in a loss of microbial activity and longer half-lives (USDA 2009)." (emphasis added) No further discussion of these longer half-lives is provided in the document, even though the lack of microbial activity in an oxygen-depleted environment would seem to be a critical and likely scenario of much lower and longer degradation rates, and the herbicide and/or its degradants being present for many months. This is further evidence that antidegradation requirements would not be satisfied.
- 69)The "less than significant" finding on the top of page 3.2-9 for Issue EH-2 is inaccurate for the reasons stated above as well as the following:
 - a. These herbicides, upon release, violate the toxicity and chemical constituent water quality objectives. See comments under General Comment 15 above. Therefore, the release of these chemicals cannot be justified under antidegradation regulations according to the Administrative Procedures Update for the Antidegradation Policy Implementation for NPDES Permitting, which prohibits a proposed discharge if a water objective is violated.
 - b. The Basin Plan's prohibition exemption criteria for pesticides requires that the failure of all available non-chemical methods be demonstrated prior to an exemption being granted. The non-chemical methods have not been thoroughly tested in the Tahoe Keys; therefore, the finding that they have failed cannot be made.

The less than significant impact determination is incorrect and should be corrected to significant impact in a revised Draft EIR/EIS. A statement of overriding considerations must be prepared.

70)The discussion of Issue EH-4, Introduction of Toxic Substances into the Environment, beginning on page 3.2-10, is severely flawed. The toxicity water quality objective states: "All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life." And, "The survival of aquatic life in surface waters subjected to a waste discharge, or other controllable water quality factors, shall not be less than that for the same water body in areas unaffected by the waste discharge..." (emphasis added). The chronic toxicity to other organisms is not discussed in the Draft EIR/EIS and should be included in the revised Draft EIR/EIS. See the full comment letter (attached) from Beyond EH-11

EH-12

EH-13

47

Pesticides' Senior Science and Policy Analyst, Leslie Touart, Ph.D. Excerpts from the letter are as follows:

Regarding Triclopyr: "The most common breakdown product of triclopyr in mammals, as well as in soil and water, is 3,5,6-trichloro-2-pyridinol (TCP)¹ and also, of note, the highly toxic and controversial organophosphate insecticide chlorpyrifos which is banned in California.... TCP also poses an environmental hazard as it is "very mobile" in a variety of soil types and is also often more persistent than triclopyr itself."

Regarding Endothall: "Persistence (half-life) of the endothall acid (active ingredient) is expected to be <10 days in treated areas, however in EPA's exposure assessment² for direct application of Aquathol K to an impoundment with an initial

¹ U.S. EPA. Prevention, Pesticides and Toxic Substances. 1998. Reregistration eligibility decision (RED): Triclopyr. Washington, D.C.

² EPA. 2005. Environmental Fate and Ecological Risk Assessment of Endothall – Revised. EPA-HQ-OPP-2004-0370-0005.pdf.

48

EH-13

target exposure of 5 mg/L, the Estimated Exposure Concentration (EEC) at subsequent time intervals post-application was:

- \Box 4-day = 4.7 mg/L
- \Box 21-d = 3.8 mg/L
- \Box 60-day = 2.4 mgL
- \Box 90-day = 1.8 mg/L.

These concentrations would be expected to represent the upper bounds for endothall concentrations in the immediate vicinity of the weed control project endothall treatment sites. These concentrations pose a severe risk to finfish as significant reductions in survival, length, and wet weight were reported in a 28-day fathead minnow early life stage test at 2.6 mg/L for endothall acid which exceeds the relevant EEC.³"

Regarding Florpyrauxifen-benzyl (ProcellaCOR EC liquid: "A key confounder is that florpyrauxifen-benzyl is a difficult-to-test substance with maximum native solubility of ~ 15 μ g/L and only around 50 μ g/L with use of a cosolvent.⁴ Although no mortalities to aquatic animals were observed up to solubility limits in acute exposures, certain sublethal effects were recorded. In chronic exposures, the mysid (Americamysis bahia) and midge (Chironomus dilutus), toxic effects were recorded at the lowest concentrations tested (LOAEC 1.1 μ g/L and LOAEC 4 μ g/L respectively) such that NOAEC values could not be determined. Therefore, statistically significant effects below concentrations of 1 to 4 μ g/L can be expected.⁵ Albeit the maximum label rate for the PorecellaCOR EC liquid is 50 μ g/L, the maximum proposed rate for the project is listed as 3 μ g/L which would indicate a potential threat to aquatic invertebrates with similar sensitivities, such as the mysid Mysis relicta which can be found in the Tahoe Keys lagoons." EH-13

71)Page 3.2-13 states "There would be a period of months before aquatic macrophytes reestablish themselves in the niches vacated in the lagoons....Therefore, the effect of limited mortality of aquatic macrophyte individuals is expected to be a less than significant impact on macrophyte populations because only a small portion of the lagoons would be affected, and aquatic plant communities are expected to recover in these areas." No supporting data or studies are referenced. Contrary to this unsupported assertion, Johns et al (2012), who examined the response of native aquatic macrophyte communities to spring herbicide treatments of curlyleaf pondweed (Potamogeton crispus) found that "curlyleaf persisted at moderate to high frequencies over the 4 years, and no consistent changes in native macrophyte frequency of occurrence were seen." Also, the statement that it would be only a

period of months before the macrophytes come back is an admission that one herbicide treatment will not be an effective long-term solution.

- 72)Issue EH-6, Harmful Algal Blooms (HABs), (pages 3.2-14) states "Factors that influence the occurrence of cyanobacteria blooms can include excess nutrient (nitrogen and phosphorus) loadings and concentrations, slow-moving surface water, high water temperature, high intensity and duration of sunlight, water column stratification, changes in water pH, and occurrence of trace metals (USEPA 2015a; 2019). Some of the factors that influence the occurrence of blooms could be affected by the application of aquatic herbicides to control aquatic weeds in the Tahoe Keys (e.g., sunlight intensity, nutrient availability)." (emphasis added) The statement should have said almost all of these factors exist in the Keys, and the significant factors in parentheses should have included stagnant or slow-moving surface water, high temperatures, water column stratification, and changes in pH because "[b]aseline monitoring in the West Lagoon and Lake Tallac has documented periods of elevated nutrient concentrations in near-surface water samples, high water temperatures, water column stratification, and fluctuations in pH (ESA 2019)." The statement should also have mentioned "excess nutrients" based on the fact that "[a]nnual average values for TN and TP in the Tahoe Keys exceeded their relevant WQOs for each year from 2007 to 2013 (SEA 2017a). In 2016, even the minimum values recorded for TN and TP exceeded relevant WQOs for the Marina Lagoon, the Main Lagoon and Lake Tallac. Clearly, the Tahoe Keys lagoons should be considered "enriched" with nutrients." (Appendix F, page F-1) (emphasis added) This omission must be remedied in a revised Draft EIR/EIS.
- 73)Issue EH-6, Harmful Algal Blooms, (page 3.2-14 and 15) lists numerous uncertainties including "Tomasko (2020) suggested that care should be taken in terms of SAV management, so that the nutrient contents of treated SAV do not

AQU-6

49

CYB-21

CYB-22

³ EPA. 2005. Environmental Fate and Ecological Risk Assessment of Endothall – Revised. EPA-HQ-OPP-2004-0370-0005.pdf. ⁴ EPA. 2017. Florpyrauxifen-benzyl: Environmental Fate and Ecological Risk Assessment for the Section 3 New Chemical Registration. EPA-HQ-OPP-2016-0560-0011.pdf.

⁵ EPA. 2017. Florpyrauxifen-benzyl: Environmental Fate and Ecological Risk Assessment for the Section 3 New Chemical Registration. EPA-HQ-OPP-2016-0560-0011.pdf.

become available in the water column in such a manner as to be able to initiate HABs and their potential health risks." And, "Due to the unpredictable nature of HABs and consequent production of cyanotoxins from HABs, there remains uncertainty around whether and to what extent these would occur and whether they would cause unavoidable increases in the risk of exposure to cyanotoxins as a result of the release of nutrients..." Yet, this section concludes that "the risk of increased HABs is considered less than significant" because the herbicides will be released in the spring. However, no surveys have been provided to substantiate this claim, no estimates have been provided of the mass of SAV present in the late spring, and no estimates of nutrient surge from the use of herbicides have been provided. Therefore, the conclusion that the risk of increased HABs is considered less than significant is unsupported. This section includes discussion of LFA, yet this nonchemical method is known (and the Draft EIR/EIS even states this elsewhere) to kill the weeds more slowly, so that the nutrient release is slower and the risk of HABs is not as great with these methods. Based on this lack of estimation of water-

column nutrient loading after a spring herbicide treatment, the less than significant impact should be corrected to significant impact, since not enough evidence is provided to substantiate the less than significant claim. A statement of overriding considerations must be prepared.

- 74)Page 3.2.16 states "Rhodamine WT dye would be applied by TKPOA during the herbicide applications and tracked to determine the movement and dissipation of dissolved herbicide products and chemical transformation products." What concentrations of Rhodamine would be used? This information should have been provided. The LC50 of Rhodamine WT dye is >320mg/l for rainbow trout (96 hr) and 170 mg/l for daphnia magna. (MSDS, polysciences.com; https://www.polysciences.com/skin/frontend/default/polysciences/pdf/19922.pdf) In addition, the water supply contingency plan if herbicides are detected in nearby wells would shut off the wells and distribute water to all users. The feasibility of distributing water is questionable considering the number of users.
- 75)The Significant Unavoidable Impacts cited on page 3.2-17 for the Proposed Project are incorrect based on comments 69 and 73 above.
- 76)Issue EH-5, Short-term Increases in Aluminum Concentrations (page 3.2-20), state that "the potential impact of Action Alternative 2 on aquatic biological communities would be less than significant and these areas would be rapidly repopulated." No scientific basis for this conclusion is stated. Fish and other aquatic organisms cannot escape outside the turbidity curtains. There are no core samples of the sediments from which the levels of aluminum that would be released could be estimated. The conclusion of less than significant impact is entirely based on the relatively small area to be tested. However, the area proposed for dredging is 5.54 acres, which is not a small area. Relying on the statement that "these areas would be rapidly repopulated" is unacceptable. The expected mortalities of fish and other aquatic

CYB-22

50

ALT-109

EH-14

organisms are a significant impact, and the potential impact conclusion should be changed to significant.

77)EH-5b, Treatment and testing of dewatering effluent (page 3.2-20) discusses discharging dewatering effluent from suction dredging to either the sanitary sewer system or Lake Tallac. Neither of these disposal options for dredging fluids seems plausible or realistic. STPUD will most likely refuse to take the huge amounts of sediment-laden water that their treatment plant was not designed to treat. Lake Tallac receives stormwater from the surrounding city, and its capacity is likely insufficient to handle the enormous amounts of water that suction dredging produces. The scenarios of the suction dredging alternative are neither very wellthought out nor realistic, and this alternative is not worthy of serious consideration.

51

Section 3.3, Natural Environment

- 78) The assumptions of the Earth Resources analysis include the assumption that dredging may destabilize existing bulkheads and slopes. The destabilization would be mitigated by "replacement of any affected docks and bulkheads at the end of the test dredging." In addition to the costs of dredging, aluminum extraction, effluent and sediment disposal, and sediment replacement, there may be the additional cost of replacing the homeowners' private boat docks? Again, although no cost estimates have been provided in this Draft EIR/EIS, it is obvious that dredging is an outrageously expensive alternative and should be rejected for that reason alone. Taxpayers should not be expected to pay for it.
- 79)Page 3.3.1-3 states "Subject to determination by USACE, the activities under Action Alternative 2 could potentially qualify for a general permit under NWP 27 (Aquatic Habitat Restoration, Enhancement, and Establishment Activities) or NWP 35 (Maintenance Dredging)." NWP 27 is intended to permit restoring and/or enhancing aquatic habitats; an NWP 27 permit for dredging the Keys would be highly inappropriate. Restoring the lagoons to their marsh habitat is the only activity could be permitted by an NWP 27 permit; dredging out the lagoons to recreate an unnatural lagoon primarily for boat traffic cannot be permitted. AA2 dredging might qualify for an NWP 35 permit, but since the lagoons have not been dredged since they were constructed, AA2 dredging probably wouldn't qualify for an NWP 35 permit either. An individual permit from the USACE would likely be required. It is surprising that Lahontan Water Board staff, who are familiar with the activities allowed by these permits, did not notice these questionable statements about NWP permits during the Administrative Draft review of this document.
- 80)The Potential Impacts section under Issue ER-1, (page 3.3.1-6) states "Any release of this material during transport across the lagoons would deposit sediments with high aluminum concentration in the receiving waters or nearby land. An uncontained release of dredge slurry could have a potentially significant impact, but this would be mitigated by containment." Does this planned containment include a containment

ALT-110

EH-14

EH-15

REG-33

structure for the entire 4000' section of 6" HDPE dredge line for site 28 shown in LT-111 Figure 2-10? Such a large containment structure would be highly unrealistic. 81)Page 3.3.1-6 refers to dewatering at the defunct water treatment plant (WTP) as follows: "Dewatering at the WTP would lead to storage of up to one million gallons of dewatering effluent in an existing concrete tank of unknown integrity." (emphasis ALT-112 added) Again, Action Alternative 2 is not well thought-out or planned. The integrity of the TKWTP is unknown, the disposal of the treated effluent is uncertain, and the risks of spills from the pipes carrying the dredged slurry cannot assuredly be mitigated by containment. 52 82)Under Mitigation and Resource Protection Measures on page 3.3.1-7, expenditure of public funds spent on replacement of private boat docks that may be destabilized by ERM-7 Alternative 2 dredging would be extremely inappropriate. 83)The bottom of page 3.3.1-7 states "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." This ERM-8 sentence is very poorly worded. The volumes of possible releases of water and the corresponding height of containment barriers required to contain them have not

84)Given the above uncertainties and lack of details and estimates, the conclusion on page 3.3.1-8 that "impacts to earth resources resulting from the proposed action would be less than significant" cannot be substantiated and should be changed to significant impacts.

SIG-7

HYD-1

HYD-2

been estimated. This omission must be remedied in a revised Draft EIR/EIS.

Section 3.3.3, Hydrology

- 85)Under the assumptions listed on page 3.3.3-1, the first assumption states "There is no surface water connection between Lake Tallac and the West Lagoon except on rare occasions when a gate is lowered to relieve localized flooding upgradient from Lake Tallac." How often does this occur? Who controls the gate? How many gates are there between Lake Tallac and the lagoons? In order to substantiate this assumption, these details should have been provided in the Draft EIR/EIS and must be provided in the revised Draft EIR/EIS.
- 86)Assumption #3 on page 3.3.3-1 states "Lake Tallac drains to Pope Marsh through a gate, and during high water levels Pope Marsh overtops Pope Beach and drains into Lake Tahoe." Pope Marsh is therefore a WOUS, as already noted in these comments. Lake Tallac, hydrologically connected to Lake Tahoe through Pope Marsh, is also a WOUS. Therefore, Lake Tallac should be treated no differently than Lake Tahoe or the Tahoe Keys lagoons in this document; they are all hydrologically connected. What evidence supports the assertion that Lake Tallac is a Tier II water, instead of a Tier III water?

87)The water budget section under Hydrology (3.3.3) was very well done. This section is the most substantiated and well-supported section in this document. The rest of this Draft EIR/EIS should be as well prepared.

Section 3.3.4, Water Quality

- 88)Page 3.3.4-6 states: "The WDRs require a Nonpoint Source Water Quality Management Plan to address land-based direct sources not captured by the stormwater system." Are there fertilizer restrictions or bans in these WDRs? There should be references to the requirements of the WDRs.
- 89)Page 3.3.4-12 states "City of South Lake Tahoe 2016 baseline stormwater modeling estimated fine sediment particle (FSP) loads of 56,700 lb/yr to the West Lagoon and 162,000 lb/yr to Lake Tallac (Burke 2019). In Lake Tallac water turns a dark copper color due to dissolved organic material (e.g., tannins) originating from wetland soil." What are the nutrient loads of the 56,700 lb/yr load of FSP to the West Lagoon and the 162,000 lb/yr load of FSP to Lake Tallac? Again, the extremely important factor of ongoing nutrient loadings to the system is completely ignored in the Draft EIR/EIS. This should be corrected in the revised Draft EIR/EIS.
- 90)The discussion of dispersal of aquatic weed fragments begins on page 3.3.4-12. Mechanical harvesting, the primary weed control method used "since the 1980's" and the method approved by the Lahontan Water Board, has only exacerbated the weed problem by breaking up the weeds and allowing them to root elsewhere. Mechanical harvesting has been an unmitigated disaster, approved by the Water Board even though it is a major contributor to violations of the water quality objective for floating materials. The Draft EIR/EIS should have explained why mowing has been allowed to continue. This omission must be remedied in a revised Draft EIR/EIS.
- 91)Page 3.3.4-26 states: "The primary external sources of phosphorus in Tahoe Keys were from stormwater/irrigation and groundwater inflow." This section and the next section on nitrogen are the only sections that acknowledge that sediment, stormwater, and groundwater are sources of nutrients, but the Draft EIR/EIS does not attempt to quantify those sources in any great detail. The next sentence after the one quoted above states "The primary internal source and the overall dominant source of phosphorus was from submerged aquatic vegetation decomposition." What was the original source of the phosphorus in the submerged aquatic vegetation? The Draft EIR/EIS concludes that the original source of the phosphorus was not anthropogenic because the average TP level in the 50 Sierra Nevada lakes of the Homyak et al., 2014, study is higher than the level in the Keys. See previous comment 50 regarding this comparison. If the sources of the TP in the Keys are non-anthropogenic, then what are those sources? The discussion does not answer this question.

HYD-3

WQ-19

WQ-20

53

AWM-53

However, the next paragraph states: "Contributing sources of TP to the lagoons are both internal (e.g., aquatic plant decomposition, sediment flux) and external (e.g., stormwater/irrigation, groundwater inflow)." This implies that TP in groundwater and TP in the 56,700 lb/yr of nutrient-loaded fine sediment input to the West Lagoon and the 162,000 lb/yr of nutrient-loaded fine sediment input to Lake Tallac by the City of South Lake Tahoe's stormwater may be the source of these nutrients. However, no discussion is provided about these sources. The last sentence in this section does state "It should be noted that the TP from decomposing aquatic plants is initially from

sediments, as the nutrient pools of sediments are the primary source for all the aquatic plant species encountered, other than coontail." Yet, the Draft EIR/EIS fails to provide details about the 60 years of accumulated nutrient-enriched fine sediment (at present 56,700lb/yr) coming from stormwater, and the nutrients input through groundwater from Lake Tallac. Instead, the Draft EIR/EIS claims that the sources of the nutrients are non-anthropogenic. The only sediment data provided in Appendix E were collected on a couple of days in late July and September 2019, and the samples were only analyzed for TKN (total Kjeldahl nitrogen). Why weren't the samples analyzed for total nitrogen? The discussion of the sources of nutrient inputs to the Keys in the Draft EIR/EIS is so lacking in detail that it is extremely inadequate. This inadequacy must be remedied in a revised Draft EIR/EIS.

- 92)The pie charts on page 3.3.4-30 show zero or miniscule sediment flux of TP for both the Main Lagoon and Lake Tallac, yet 79% and 41.6% sediment flux, respectively, from SAV decomposition. Only in the one little sentence quoted above ("It should be noted that the TP from decomposing aquatic plants is initially from sediments, as the nutrient pools of sediments are the primary source for all the aquatic plant species encountered, other than coontail.") is there any admission that the source is the sediments, which, again, have accumulated 60 years of nutrient inputs from the surrounding communities.
- 93)This comment and the next also apply to the discussion of TN sources on pages 3.3.4-29 and 3.3.4-32. Page 3.3.4-35: The discussion of changes in dissolved oxygen (DO) concentrations refers to the vertical distribution of DO, particularly during the day when surface waters are higher in DO than the anoxic layer near the bottom. The discussion also mentions the numerous studies of the rapid decay of aquatic plants killed by herbicides causing increases in biological oxygen demand (BOD) and decreases in DO. This discussion further states "Despite the research on the effects of plant decay on lake deoxygenation, there are few published studies that specifically evaluate pre- and post-treatment DO measurements, and none where conditions were similar to those found in the Tahoe Keys lagoons with the same plant species and proposed aquatic herbicides." Despite the lack of relevant studies of pre- and post-treatment DO measurements, the Draft EIR/EIS concludes that the impact of herbicide treatments on DO is "less than significant impact" because the herbicides will be applied in the spring. However, data from spring-time macrophyte studies relevant to verifying that this mitigation measure would be

54

WQ-21

WQ-22

sufficient are not referenced. A survey on April 20, 2018 is mentioned later, but the results of this survey are not in the Appendices or the website resources. The area to which the herbicides would be applied is asserted to be "relatively small" and therefore the impacts will be less than significant. The areas to which would be applied is 16.7 acres, about 730,000 square feet. This is not exactly a "small area," particularly if DO concentrations drop so significantly that cyanobacteria blooms occur. Without relevant data available on how much DO levels are expected to

decrease and how much BOD is expected to increase, the impacts cannot be concluded to be less than significant.

- 94)Page 3.3.4-37 and -38, under Issues WQ-6 and WQ-7, discusses the increased risk of TP and TN releases to the water column upon decomposition of the aquatic plants after herbicide treatment and concludes, based on the same assumptions as above for DO, that the impacts would less than significant because of the proposed spring-time treatment and "small area" to be treated. In addition to the same arguments as above (no evidence or basis for impacts being reduced and the size of the area is significantly large enough to cause HABs), repeated expectations that plant biomass and water temps will be low, therefore nutrient increases in the water after decomposition and HABs will be low, is not taking into consideration climate change and expectations of precipitation coming in the form of rain instead of snow, which could significantly affect these assumptions. In general, this Draft EIR/EIS makes a great deal of assumptions that are not substantiated or supported, diminishing the confidence of these assumptions.
- 95)Page 3.3.4-53, under Suction Dredge Permitting Program, states that "the California Department of Fish and Wildlife is currently prohibited from issuing any permits for suction dredging under the Fish and Game Code. However, this project alternative is designed to test suction dredging as an environmental restoration method and there will be no attempt at mineral recovery, so the ban on suction dredging for mining does not apply." (emphasis added) To call Action Alternative 2, the dredging, disposal, and replacement project, an environmental restoration method is an insult to all environmental restoration projects. Dredging the Keys to return it to what it was after destroying the original marsh can hardly be called an "environment restoration" method. As said previously, this alternative will only produce the same type of unnatural environment that caused the problem in the first place instead of removing the problem, the habitat for the weeds. Has the California Department of Fish and Wildlife been contacted to verify the assumption that the suction dredging ban does not apply?
- 96)Issue WQ-6, on page 3.3.4-56, discusses the increases in total phosphorus concentrations and states "These sample concentrations may underestimate actual concentrations in West Lagoon sediments because some of the samples were diluted with site water during sample collection." This is first time in the numerous places in which this issue is discussed that these sampling discrepancies and errors

WQ-23

55

WQ-24

RES-15

have been mentioned. Regarding the average of the 50 Sierra Nevada lakes studied by Homyak et al (2014), see previous comments regarding the invalidity of this comparison.

97)Issue WQ-2, on page 3.3.4-56, discusses the mechanisms that could cause turbidity during suction dredging. Only one of the marina dredging projects on the

California side of Lake Tahoe between 2005 and 2017 proposed to use suction dredging, North Tahoe Marina, which has extremely sandy substrate unsuitable for clamshell dredging. The marina owner was required to discharge the water after settling to an upland location and prohibited from discharging back to the Lake. The substrates of other marinas in the Lake were shown to not be suitable for suction dredging because of the muck and fine sediment in the substrate. The other reason suction dredging was never chosen was the excessively large volumes of sedimentladen water that it would produce, the refusal of sanitary sewer systems to accept the water/sediment mixture, and the standards for treated water discharged back to the Lake. Dredging of Keys lagoons would produce much larger volumes of water. Therefore, the dredging alternative is unrealistic at best, both from a cost basis and disposal basis, as stated in previous comments.

- 98)The discussion of issue WQ-2 states "Laboratory experiments have shown that turbidity values for silt and silt-clay particles decrease substantially in 12 hours, but clay-sized particles maintained a constant high turbidity over 24 hours suggesting these particles stay in suspension for long periods (Holliday et al. 2003.)" In fact, some of the marina dredging projects on the Lake between 2005 and 2017 encountered turbidity problems that required the turbidity curtains to be maintained for as long as several weeks. The Lead Agencies have avoided requiring proactive aquatic management solutions that can be implemented to help slow or prevent the build-up of muck and sediment in the Keys, such as proper land use management, maintenance of beneficial vegetative buffers and sediment traps, installation of aeration systems, and utilization of nutrient-absorbing products. The build-up of muck and sediment has increased while the Lead Agencies ignored the problem for years. Now the Agencies propose testing what should be the last resort, herbicides, which is not in the public's best interest. Better management by the Lead Agencies would be in the public's best interest.
- 99)The discussion of issue WQ-2 further states "Performance specifications for sand or fine gravel used for substrate replacement would require testing prior to placement to ensure that the material did not contain excessive amounts of fine particles." In fact, very strict limits on the amount of "fines" allowed in the replacement sand would be required. Compliance with these limits would require numerous sieve analyses of the sand to be used for substrate replacement.
- 100) The discussion of mitigation by turbidity curtains on page 3.3.4-56 states: "Turbidity curtains that adhere to TRPA standards outlined in the BMP Handbook

WQ-25

WQ-26

56

AWM-60

§8.10 are expected to confine this temporary impact to test areas such that turbidity impacts to the West Lagoon would be less than significant." Turbidity curtains are not a panacea, as even double layers of turbidity curtains can be overwhelmed and fail during high winds or during rain events that produce high stormwater inflows. Also, once the turbidity has decreased enough to remove the turbidity curtains, the

removal itself creates turbidity that often exceeds the NTU water quality objective. Therefore, turbidity curtains alone do not mitigate the impacts of turbidity to less than significant.

- 101) Page 3.3.4-57 concludes "the improvement in water clarity in dredged areas is unlikely to last more than one or two seasons before fine sediments and turbidity are transported in from adjacent areas. The relatively small amount of fine organic sediment removed during the suction dredging test is not expected to have a noticeable long-term effect on reducing turbidity and improving water clarity in the West Lagoon as a whole. Therefore, the potential beneficial long-term effect of reducing future turbidity by removal of fine organic sediments in test areas and replacing them with coarser grained sediment would be less than significant." (emphasis added) This conclusion reaffirms our earlier comments that the dredging, disposal and replacement alternative would result eventually in the same conditions that created the problem of weeds in the first place.
- 102) Issue WQ-6, on page 3.3.4-58, cites a study by Cooke et al (2005), which suggested that "sediment removal could be effective for aquatic weed control only if the resulting water depth was below the depth limit at which the weeds could achieve sufficient light for growth and reproduction. Dredging to such depths is not proposed under Action Alternative 2. For suction dredging to be able to sustainably reduce the problem of nutrient cycling, the newly dredged bottom depths would have to exceed the deepest depth to which aquatic weeds grow in the Tahoe Keys, otherwise such an approach may only bring about a temporary reduction in aquatic weed biomass." And later, this section states "Over a longer period of time, if suction dredging was done to a depth that reduced the potential for regrowth of aquatic weeds, TP concentrations could decrease in the water column if dredging is sufficiently deep that fewer decaying plants are supported, affording less biomass for nutrient remineralization. However, this project does not propose dredging to sufficient depths to expect sustainable reductions in TP cycling and this potential benefit would not be expected." Therefore, AA2, as proposed, would not be a lasting long-term solution to the problem of weed growth.
- 103) Issue WQ-2, Sediment Disturbance and Turbidity, on pages 3.3.4-59 and -60 has a number of issues:
 - a. It refers to "silt curtains" being used to confine the turbidity from dredging and substrate replacement to the area of work. Silt curtains are an erosion control method, not a turbidity control method.

AWMM-9

57

WQ-29

ALT-114

- b. This section refers to "spill control and containment plans from accidental spills of dredge spoils" that include provisions for storage and processing. These plans should have been included in the Draft EIR/EIS to inform the public of the full impacts of this alternative.
- c. This section states "Treatment system designs could include settling and flocculation in batches stored in tanks for testing before discharge to the sanitary sewer system or Lake Tallac." A complete analysis of the environmental impacts of this alternative would have included the details of the treatment of the water and aluminum-laden sediment mixture.

This alternative has only been partially analyzed, suggesting that it was included only to add an additional alternative after scoping phase comments complained of the lack of alternatives. This alternative was never really taken seriously and would be prohibitively expensive. Intentionally including an infeasible and prohibitively expensive alternative just to add another alternative to an environmental document that lacks alternatives is a wasteful use of public resources and violates CEQA. An EIR must "describe a range of reasonable alternatives to the project . . . which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives." CEQA Guidelines § 15126.6(a). (emphasis added)

Section 3.3.5 Aquatic Biology and Ecology

- 104) Page 3.3.5-8 refers to a 63-fold increase in biovolume of aquatic weeds harvested from the lagoons between 1984 and 2019. Clearly, "[more than] two decades of mechanical harvesting have not controlled the spread of aquatic weeds." However, the harvesters cut the weeds several feet below the surface, creating very large numbers of weed fragments. Not all of these fragments are removed from the water, and the fragments that are not removed are spread by boats throughout the lagoons and into the Lake, where they may lodge in sediment and begin to grow. The harvesting is contributing to the spread of aquatic weeds in the Keys and around the Lake. Harvesting will continue on the regular schedule during the CMT. Harvesting the experimental sites will invalidate the comparison of control methods, and all of the harvesting will continue to contribute to the spread of the aquatic weed infestation.
- 105) Issue AQU-1 on page 3.3.5-8 refers to "short-term impact to non-target aquatic macrophytes." Death of the native aquatic plants is not a "short-term impact" death is permanent. If there are examples elsewhere that demonstrate native aquatic plants being reestablished on an herbicide-treated site instead of non-native plants recolonizing the site, then these studies should have been cited and summarized in the Draft EIR/EIS. This omission must be remedied in a revised Draft EIR/EIS.
- 106) Page 3.3.5-9 notes the presence of the following non-target macrophytes (native plants) in the West Lagoon and Lake Tallac: leafy pondweed, nitella (Nitella sp., a

AQU-7

AQU-8

QU-9

58

macroalga), elodea (Elodea canadensis), Richard's pondweed, American pondweed (Potamogeton nodosus) and Andean watermilfoil (Myriophyllum quitense).

Watershield (Brasenia schreberi) is also present in Lake Tallac. The discharge of herbicides, especially endothall, would potentially kill these plants and would also be an immediate violation of the toxicity water quality objective, which is not allowed under antidegradation regulations.

- 107) Issue AQU-3 on page 3.3.5-9 refers to the competitive exclusion that could increase the growth of curlyleaf pondweed. The increased growth is expected if either triclopyr or florphyrauxifen-benzyl, which selectively control Eurasian watermilfoil, are used. Use of these herbicides would be a violation of the water quality objective for release of biostimulatory substances. Endothall, being a non-selective herbicide, will kill native aquatic plants, thereby also violating the toxicity water quality objective. Therefore, these herbicides cannot be allowed.
- 108) Issue AQU-7 and 8, starting on page 3.3.5-14, describes the Keys' lagoons as the place in Lake Tahoe where nonnative warmwater fish species primarily occur because of the warmer temperatures of these waters. However, these fishes may be moving elsewhere in the Lake since "research suggests suitable habitat has increased due to warming water temperatures and the expansion of aquatic weed beds (Kamerath et al. 2008, Chandra et al. 2009, Ngai et al. 2013)." Thus, the Keys' lagoons are not only the source of weeds spreading throughout the Lake, but are also the source of nonnative predatory fish throughout the Lake. The spreading nonnative predatory fish include Largemouth Bass, which feed on native juvenile Lahontan Lake Tui Chub, a California Species of Special Concern. Even if the weeds were to miraculously disappear, the warm waters of the Keys would be a serious threat to the native fish of the Lake. Therefore, control methods that would combat this threat, such as barriers, and long-term solutions such as restoration of lagoons to marsh need to be brought forward and examined thoroughly. These alternatives, which the Sierra Club requested be included in the analysis in their scoping comments, should have been included in the analysis of alternatives and should be analyzed in a revised Draft EIR/EIS.
- 109) Page 3.3.5-17 concludes that, even though there will be mortality of non-target macrophytes (native aquatic plants), a "less than significant impact to aquatic macrophyte community composition as result of herbicide testing is expected." The conclusion that native plant communities will recover is not substantiated by any references or studies. The less than significant impact cannot be justifiably claimed when water quality objectives in the Basin Plan are violated on the 16.9 acres of lagoons where herbicides are proposed to be used.
- 110) Page 3.3.5-19 states that "LFA has had very limited testing as a aquatic weed control method." This supports the claim that the CMT cannot be granted an exemption from the Basin Plan prohibition, which requires demonstration that non-

59

AQU-9

AQU-10

AQU-11

AQU-12

AQU-13

chemical methods have been thoroughly tested and found to be ineffective before an exemption can be granted.

- 111) Issue AQU-5, Effects on the Aquatic Benthic Macroinvertebrate Community, beginning on page 3.3.5-23, states that "USEPA classifies pesticides according to their acute toxicity responses (WDOE undated)." However, the water quality objective in the Basin Plan for toxicity states "All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life." Both acute and chronic toxicity must be examined and that was not done in this Draft EIR/EIS. Therefore, the conclusions drawn, that all of these herbicides "would have no significant acute or chronic impact on fish or freshwater invertebrates" is false.
- 112) The conclusion on page 3.3.5-25, that "Implementation of Group A methods would not be expected to result in a substantial change or reduction in the diversity or distribution of the aquatic BMI community, and impacts to the aquatic benthic macroinvertebrate community would be less than significant," is false based on the above comments.
- 113) Issue AQU-8, Effects on the Suitability of Habitat for Native or Recreationally Important Game Fish Species, beginning on page 3.3.5-30, states that "the presence of nonnative warm-water fish species in Lake Tahoe and specifically, the Tahoe Keys lagoons, poses a significant threat to native fisheries. ..."While Largemouth Bass and Bluegill are considered recreational species in many locations, they are not recognized as recreationally important species by CDFW or Nevada Division of Wildlife." This is another reason why restoration of the lagoons should have been examined as an action alternative in this Draft EIR/EIS and why the Sierra Club scoping comments requested examination of restoration.
- 114) Issue AQU-1 on page 3.3.5-37, states that mechanical harvesters "contribute to the dispersal of fragments from the target aquatic weeds as well as turions from curlyleaf pondweed." Then why is this practice being continued? This section later states that "TKPOA has implemented measures to substantially reduce the number of fragments released due to harvesting operations, including skimmer boats that capture fragments post-harvesting and boat back-up stations in conjunction with seabins to limit the spread of fragments to greater Lake Tahoe." However, no data are provided to substantiate the claim that these measures "substantially reduce the number of fragments." What is this assertion based on? Installing a second bubble curtain and seabin in the channel between the West Lagoon and Lake Tahoe would provide data on the number of fragments not captured by the existing bubble curtain. Later in the Draft EIR/EIS, under AQU-4, the following statement is provided: "Although TKPOA has implemented several fragment control methods during mechanical harvesting, these methods do not

60

AQU-13

AQU-14

AQU-15

completely contain and remove fragments that can propagate new plants." Therefore, these harvesting practices are not working and, in fact, continue to contribute to the spread of weeds. Yet the Lead Agencies plan to have TKPOA continue harvesting even while other methods are being tested.

115) Issue AQU-4, page 3.3.5-39, states that "Potential habitat for colonization in Lake Tahoe has been estimated at as much as 11,000 acres based on bathymetry alone (TRPA 2014), though a number of factors such as wind and sediment type would be strongly limiting (Wittmann et al. 2015)." This is why the Sierra Club requested in our scoping comments that a barrier in the channel between the Keys and the Lake and restoration of the dead-end lagoons be analyzed as alternatives. These requests were denied because "restoration would have substantive impacts to navigation, and to the recreational and aesthetic values underlying the appeal of Tahoe Keys properties" and "restoration does not require testing." A revised Draft EIR/EIS including analyses of barriers and restoration of dead-end lagoons must be prepared.

Clearly, this Draft EIR/EIS is inadequate in numerous respects and should be completely revised, eliminating costly Action Alternative 2, which was included as "filler" for lack of other alternatives. The revised Draft EIR/EIS must include the antidegradation analysis.

Comments on Appendix F:

The modeling of nutrient loading and cycling in the Tahoe Keys lagoons concludes that (1) SAV decomposition accounts for 60% to 80% of the nutrient loadings in the Marina Lagoon and Main Lagoon and about 40% of the nutrient loadings in Lake Tallac and (2) the nutrients in the sediment annually fuel the growth of SAV and are replenished by the release of nutrients from decomposed SAV into the water. The report of the modeling also concludes "Clearly, the Tahoe Keys should be considered 'enriched' with nutrients." These conclusions do not mention the past and continuing contribution of stormwater inputs of nutrients to the creation and sustaining of the current enrichment of the lagoons. The lagoons have been receiving and accumulating stormwater inputs of nutrients (TP and TN) from neighborhoods of South Lake Tahoe in their watershed for 60 years. Tahoe Keys residences are surrounded by vibrant green lawns on the banks of the lagoons which contribute significantly to the nutrient loading.

Applying herbicides will do nothing to ameliorate the enrichment and will actually exacerbate the problem by killing the weeds quickly and releasing nutrients rapidly into the water column. The rapid release of nutrients creates a very high risk of harmful algal blooms, including deadly cyanobacteria (blue-green algae) blooms.

The report bases its conclusions about the loading of TP into the Main Lagoon and Lake Tallac from sediment on only one month of data, collected in July 2019. The report states: "In the Main Lagoon and Lake Tallac, sediment TP contents are low enough that

AQU-18

AQU-17

GEN-48

WQ-31

the sediments in those two locations are not expected to be a net source of TP into the water column." However, the report subsequently states: "It should also be taken into account that sediment samples were collected in July of 2019, prior to the system-wide senescence of SAV that occurs in the fall. Sediment TP values could be higher after SAV senescence than was found during the season of active SAV growth." (emphasis added) Conclusions about TP loading from sediment based on data collected when SAV growth is at its annual maximum and TP levels in the sediments are at a minimum are almost certainly incorrect.

Another aspect of nutrient loadings that Appendix F doesn't analyze and discuss thoroughly enough is the differences in loadings of TN from groundwater between the Marina lagoon (0%) and the Main Lagoon (15.9%) and Lake Tallac (21.7%). These differences can be partially attributed to the much larger area of the Lake Tallac watershed (600 acres), compared to the 68-acre Marina lagoon watershed and the 210 acre Main Lagoon, compared to the nearly 16% TN groundwater loading of TN into the Marina Lagoon, compared to the nearly 16% TN groundwater loading to the Main Lagoon, indicates that Lake Tallac and Pope Marsh (which receives overflows from Lake Tallac) are contributing TN from South Lake Tahoe stormwater to the Main Lagoon. These groundwater loadings, like the direct loadings from stormwater, have been accumulating for 60 years and have not been thoroughly discussed or examined.

Flows from Lake Tallac into the Main Lagoon through the gate under Venice Drive may also be adding nutrients to the Main Lagoon. This possible source of Main Lagoon nutrients, which entity controls and operates it, and the magnitude of flows and nutrient contributions through it are not discussed in the report.

The report also concludes that "an absence of potentially relevant information was found in terms of the effectiveness of LFA as an SAV management technique form the literature reviewed for this report." The results of LFA experiments at Lake Tahoe are especially relevant to the effectiveness of LFA in the Tahoe Keys. An LFA experiment at Ski Run Marina began in August 2018, and post-treatment monitoring data were submitted to the Lahontan Regional Water Quality Control Board in the summer of 2019. An evaluation of these especially relevant LFA treatment results would have been a useful addition to the report.

Note on reporting of statistical analyses:

Statistical analyses of nutrient limitation were performed. The results of these analyses are summarized on page F-2: "To further investigate the issue of nutrient limitation, the waters of the Marina Lagoon, the Main Lagoon and Lake Tallac were all examined by comparing concentrations of chlorophyll-a (as a potential statistically significant dependent variable) against both TN and TP, as independent variables. In all cases, the data sets failed tests for normality and/or homogeneity of variance. Consequently, non-parametric statistical analyses were performed, using both Pearson's and Spearman's tests. Where a line and equation are shown in Figures 1 to 6, there is a mathematical

63

WQ-30

relationship between a nutrient and chlorophyll-a, derived from linear regression, but only for those data sets where statistical significance (p < 0.05) was determined using

non-parametric analyses." This summary is extremely incomplete and inadequate. It does not state why testing for normality and homogeneity of variance were considered to be appropriate, which tests were performed, and the results of these tests.

Closing Remarks

Suggestion to read: <u>Standing Up for This World</u>, but Mary O'Brien. "NEPA requires that an environmental impact statement include "all reasonable alternatives to the proposed action." A companion requirement, equally as important, is that consideration of such alternatives must take place in collaboration with the public, allowing citizens to embrace NEPA's challenge. NEPA says, in effect, You have the power to help your government do its job."

Mary O'Brien is also author of <u>Making Better Environmental Decisions</u>, which "recommends a simple yet profound shift to another decision-making technique: "alternatives assessment." Instead of asking how much of hazardous activity is safe (which translates into how much damage the environment can tolerate), alternatives assessment asks how we can avoid or minimize damage while achieving society's goals. Alternatives assessment is a simple, commonsense alternative to risk assessment. It is based on the premise that it is not acceptable to damage human and nonhuman health or the environment if there are reasonable alternatives. The approach calls for taking precautionary measures even if some cause-and-effect relationships have not been fully established scientifically. The process must involve an examination of the full range of alternatives, including no action at all. Equally important, it must be democratic and include potentially affected parties. O'Brien not only makes a persuasive case for alternative assessment; she tells how to implement it. She also shows how this technique has profound implications for public health, for our stewardship of the environment, and for a truly democratic government."

The Lead Agencies need to read the above works because they have clearly gone down a path of excluding opponents of herbicides to the "inner circle" of "collaborators" (Stakeholder Committee) and have not listened to other voices that have been calling loudly for these Agencies to look to other methods besides chemicals. These voices have not only come from the Sierra Club, but from individual citizens who have contacted the Sierra Club and who have either been largely or completely ignored.

Carolyn Willette, Tahoe Area Group Chair

Anne Macquarie, Toiyabe Chapter Chair

Sean Wirth, Conservation Chair, Mother Lode Chapter

Attachment: Comments from Beyond Pesticides

References

Centers for Disease Control and Prevention, Harmful Algal Bloom (HAB)-Associated Illness <u>https://www.cdc.gov/habs/materials/factsheet-cyanobacterial-habs.html</u>

WQ-30

GEN-47

64

Durkin, P.R. (2009) Endothall, Human Health and Ecological Risk Assessment, Final Report, Syracuse Environmental Research Associates, Inc. <u>https://www.fs.fed.us/foresthealth/pesticide/pdfs/052-16-04a_Endothall.pdf</u>

Forlani, G., M. Pavan, M. Gramek, P. Kafarski, J. Lipok, 2008. Biochemical bases for a widespread tolerance of cyanobacteria to the phosphonate herbicide glyphosate. Plant Cell Physiol. 49:443–456

Harris, T.D. & Val H. Smith (2016) Do persistent organic pollutants stimulate cyanobacterial blooms? Inland Waters, 6:2, 124-130, DOI: <u>10.5268/IW-6.2.887</u>.

Hollister J.W. and B.J. Kreakie (2016), Associations between chlorophyll a and various microcystin health advisory concentrations. F1000research. 2016;5:151. DOI: 10.12688/f1000research.7955.2

Homyak, P.M., J.O. Sickman, and J.M. Melack, 2014. Phosphorus in sediments of highelevation lakes in the Sierra Nevada (California): implications for internal phosphorus loading. Aquatic Science 76: 511-525.

Jones, A.R, J.A. Johnson & R.M. Newman (2012) Effects of repeated, early season, herbicide treatments of curlyleaf pondweed on native macrophyte assemblages in Minnesota lakes, Lake and Reservoir Management, 28:4, 364-374, DOI: <u>10.1080/07438141.2012.747577</u>

Kopacek, J., J. Borovec, J. Hejzlar, K. Ulrich, S.A. Norton, and A. Amirbahman, 2005, Aluminum Control of Phosphorus Sorption by Lake Sediments, Environ. Sci. Technol. 2005, 39, 22, 8784–8789 https://doi.org/10.1021/es050916b

La Plante, A. 2008. Exchange between the Tahoe Keys Embayments and Lake Tahoe, California-Nevada. MS Thesis - UC Davis

65 66

Narusaka Y., M. Narusaka, H. Kobayashi, and K. Satoh. The herbicide-resistant species of the cyanobacterial D₁ protein obtained by thorough and random in vitro mutagenesis, Plant Cell Physiol, 39 (1998) 620.

Pannard, A., B.L. Rouzic, F. Binet, 2009. Response of phytoplankton community to lowdose atrazine exposure combined with phosphorus fluctuations. Arch Environ Contam. Toxicol. 57:50–59

Perez, G.L., M. Solange, L. Mir, 2011. Effects of herbicide glyphosate and glyphosatebased formulations on aquatic ecosystems. In: Kortekamp A, editor. Herbicides and environment. InTech. p. 343–368

Powell, H.A., N.W. Kerbby, and P. Rowell, Natural tolerance of cyanobacteria to the herbicide glyphosate, November 1991 <u>https://doi.org/10.1111/j.1469-8137.1991.tb00042.x</u>

Sickman, J.O., J.M. Melack, and D.W. Clow, Evidence for nutrient enrichment of highelevation lakes in the Sierra Nevada, California Limno. Oceanogr., 48(5), 2003, 1885-1892 <u>https://aslopubs.onlinelibrary.wiley.com/doi/epdf/10.4319/lo.2003.48.5.1885</u> Thum, R. and R. Newman, Occurrence and Distribution of Eurasian, Northern and Hybrid Watermilfoil in Lake Minnetonka and Christmas Lake: Genetic Analysis Phase II, January 4, 2017

https://www.minnehahacreek.org/sites/minnehahacreek.org/files/Hybrid%20Milfoil%20R eport_Final_01042017.pdf

TRPA and Lahontan Water Board, April 2018, Tahoe Keys West Lagoon Integrated Control Methods Test Joint TRPA Initial Environmental Checklist and CEQA Initial Study

USEPA (2012) Water Quality Standards Handbook, Chapter 4: Antidegradation https://www.epa.gov/sites/production/files/2014-10/documents/handbook-chapter4.pdf

USEPA, Causes of CyanoHABs, https://www.epa.gov/cyanohabs/causes-cyanohabs

Washington State Department of Ecology, July 2000, Draft Supplemental Environmental Impact Statement Assessments of Aquatic Herbicides, Publication Number 00-10-040

World Health Organization, Water-related diseases https://www.who.int/water_sanitation_health/diseases-risks/diseases/cyanobacteria/en/

From:	Sue Berry
То:	tahoekeysweeds@trpa.org
Subject:	[EXTERNAL] No herbicides in Tahoe
Date:	Thursday, September 3, 2020 9:58:02 AM

Applying aquatic herbicides will not address the cause of the problem.

The Keys' lagoons are hydrologically connected to Lake Tahoe, which is designated by the EPA to be a Tier 3, Outstanding National Resource Water	
Herbicide application would be required in perpetuity and inevitably lead to herbicide use throughout the lake.	HE-141
Don't want Roundup poured into Lake Tahoe; it is a carcinogen.	
The Proposed Project and AA2 propose control methods that would release toxic substances into lake water and should be strongly opposed.	ALT-63

09/03/2020

(From Email) I am against using herbicides in the Tahoe Keys because of its impact on cyanobacteria and the neurotoxins that it will release. I am also concerned about the ALS cluster at Lake Tahoe and its connection to the cyanobacteria blooms in the Keys. I have reached out to Dr. Jim Haney who is willing to send his team out here to conduct aerosolized studies of the cyano toxins and to Dr. Elijah Stommel who is willing to help us set up an epidemiological study. I urge all of you to support these studies before you allow the Tahoe Keys to pour herbicides into the lagoons.

(Attached Word file)

Thank you for the opportunity to review your draft EIR proposal of 7/6/20 regarding aquatic weed abatement in Lake Tahoe.

The application of herbicides would result in the poisoning of Lake Tahoe, either as a test project or as a regular application. It is unnecessary to use toxic herbicides when you have effective nontoxic solutions already in place. The Laminar Flow Aeration(LFA), UV light and the elimination of nutrient sources will solve the weed and cyanobacteria problems if given enough time to do so. The nontoxic solutions will be so much more effective in solving decades of invasive weed infestations than to dump herbicides into lagoons full of fertilizer, Round Up and cyanobacteria. Turning to herbicides to solve weed problems so that boat owners can have access to Lake Tahoe is downright foolish and bad environmental policy.

In my opinion your agencies should be committed to preserving the integrity of Lake Tahoe's Tier 3 Waters with long term nontoxic methods ONLY. It is a shame that you are exploring the use of herbicides in the Tahoe Keys lagoons when the homeowners continue to use fertilizer and weed killer on their lawns. This has only exacerbated the weed problems in their lagoons. No matter what method you choose to stop the weed infestations, if they don't stop fertilizing their lawns you will never get a grip on solving the problem. The nutrient overload from the fertilizer and weed killer enhances the growth of aquatic weeds and cyanobacteria bloom problems. It is the Regional Board's own policy to reduce fertilizer use in the Tahoe Basin. Why is this not your first priority? In addition, your weed harvester does a brilliant job of further spreading weed fragments all over the lagoons and Lake Tahoe by chopping the weeds into smaller pieces so that they can easily regrow in the lagoons and other parts of Lake Tahoe like Ski Run Marina. Why are you spending money on the EIR drafts, meetings, webinars and getting everyone in a tizzy when you still allow fertilizer and weed killer on their lawns and your mechanical harvester is only making the weed infestation worse. Unless you issue a pull-out-your-lawn order and refrain from using this particular weed harvester, you cannot begin to solve the weed and cyanobacteria problems.

For starters, although you have told the homeowners to switch to a different type of fertilizer, one with less Phosphorus, you have NEVER banned fertilizer and weed killer in the Keys, which is something that should have been done long ago. This is basic common sense.

Over the last six decades, the Keys have set out to enjoy Lake Tahoe with their boats and instead destroyed the lake with their weed infested lagoons and somehow you can't figure out that the first order of business is to ban fertilizer and stop using a harvester that further spreads the weeds? Before you embark on this EIR plan and waste even more money, you must first ban fertilizer at Lake Tahoe and

CYB-8

HE-146

AWM-42

AWM-43

retire this weed harvester and then find one that does not disperse weed fragments. Page 55 of the EIR talks about "abundant nutrient availability". Isn't "abundant nutrient availability" at least in part the result of homeowners fertilizing their lawns and those nutrients ending up in the lagoons? Why can't you point that out in your EIR? Lake Tahoe is no place for green lawns, ever. You should be doing everything in your power to stop the weeds. Instead you have created the perfect environment for them to grow.

Looking at your EIR I am convinced that you are tired of the weed problem and want the easy way out with herbicides. Your job is to save Lake Tahoe's water quality from the over application of nutrients and chemicals and not let these homeowners do whatever they want. Given enough time, these weeds will destroy the entire lake.

For so many reasons we are in a state of crisis with the weeds and the blooms but no one, save for a few of us, is yelling, "FIRE"! The idea of using poison on an already imbalanced ecosystem destroyed from years of bad decisions and bad design is beyond imagination. And yet none of you see that adding herbicides will only make matters worse. I say that because you have produced an EIR that is proherbicide and missing an antidegradation analysis. Although that you claim that the herbicide application will be short term degradation, the long-term effects of killing native species and breaking open the cell walls of the cyanobacteria to cause more extensive and more potent blooms will be a longterm issue. The native species may not grow back and the cyanobacteria will become even more toxic, exceeding the water quality standards for Tier 3 waters. Under the Antidegradation Policy degradation is allowed, assuming the requirements are met, but water quality standards and objectives may not be exceeded. Since the discharge of herbicides exceedance of a water quality objective for toxicity(killing native plants) and the creation of biostimulatory substances this is not allowable. Also, while the application of an herbicide may be of short duration, the degradation of beneficial uses, including killing native vegetation and the effects of biostimulatory substances may be long term. Page 237 in the EIR states, "It is likely that perhaps 60 percent of the Total Nitrogen would transition into the water column during decomposition". It cannot be concluded that a future permit will comply with the Antidegradation Policy for "short term" effects when such an analysis has not been completed nor distributed within the public comment period as it should have been.

In addition, the elevated water temperature of the lagoons will affect the toxicity of the herbicides and make it more potent, thereby creating more long-term hazards that your EIR has not explored. But given = that you did not include the antidegradation analysis in your EIR as it should have been, we won't be able to get the data that we need before the end of the public comment period. It would have been **AA-14** more prudent to delay the draft EIR until the antidegradation analysis could be included. You decided to handicap the public and exclude the data so that we would not have accurate information in a timely manner.

Contained within your EIR is the one sentence that says it all. It says that applying herbicides does not solve the problems of the seeds, turions and weed particles embedded in the muck at the bottom of the lagoons. What's the point of using herbicides when the weeds will grow right back? It's pointless to use herbicides if this is the case. You need to look at this from an environmental standpoint and not as a boat owner because this is not a sustainable solution. Your EIR even admits that herbicides will not kill the seeds, turions and weed fragments thereby implying that you will have to perpetually add

AWM-43

HE-146

AA-13

CYB-9

REG-17

AWM-43

HE-146

herbicides. The "test" that you propose is ridiculously deceitful because it opens the doors to continually poison the lake. What kind of solution is that?

If you want to solve the weed problems you will need to get to the real cause and that is something your EIR does not address. The layout and design of the Keys is the true cause of the weed problems because of the shallowness of the lagoons and the lack of circulation. Besides returning the Keys to the marsh that it was originally or filling in the lagoons there is no easy answer. The boaters seem to care that only some of the weeds are removed so that their boats can get through the channel. Why remove 75% when you should really remove 100% of them? If you leave 25% of them then they will grow back which means perpetual poisoning, right? What would it take to create non-toxic solutions that effectively clean up the lagoons, get rid of the weeds and cyano blooms and restore the waterways to healthy state? The way that I see it is that you need to scratch this current EIR and start over with another that addresses how to fix this problem once and for all. What you have on the table right now is a complete sham and a disservice to the people of Lake Tahoe.

Part II

Over the past five years I have sent all of you documents outlining the true dangers of cyanobacteria blooms as well as the outcome of adding herbicides to waterbodies full of fertilizer and cyanobacteria. For some reason you have chosen to ignore this information and then shockingly went on to produce and EIR draft that makes everyone wonder where your allegiance truly is with respect to the health and wellness of Lake Tahoe. The documents that I sent you should have piqued your curiosity and made you want to investigate. Instead you ignored what I sent you and so did the scientists that you hired to write the draft EIR.

One of the great tragedies of Lake Tahoe is the fact that the Tahoe Keys were built in the first place. Their poorly designed lagoons, docks and lawn fertilizer use have fostered a scourge of invasive weeds and cyanobacteria blooms which have spread to other parts of the lake, the Truckee River and Pyramid Lake. Without proper guidance and oversight, the Tahoe Keys will soon render Lake Tahoe unfit for anyone to enjoy. Their continued use of fertilizer on their lawns and a sloppy weed harvester that sprays weed particles all over the lagoons and into Lake Tahoe will undo any progress that we make in weed control. They cannot be trusted to not fertilize so eliminating their lawns is the first step towards stopping the nutrient flow into the lagoons. Although this will help, it does not solve the problem of what to do with the current nitrogen and phosphorus overload. If we allow the Tahoe Keys to proceed with their environmentally irresponsible plan of wanting to use herbicides to solve their weed problems, we will have nothing but enormous cyanobacteria blooms because of the existing fertilizer overload and excess nutrients from the weed die-off. Jim Good wanting to "sprinkle" another chemical into the lagoons to get rid of the excess phosphorus to prevent cyanobacteria blooms is not a solution, given the enormous extent of the water column imbalance.

Without a doubt, the next great tragedy will be if TRPA and Lahontan agree to give the TK a permit to destroy Lake Tahoe even further. A permit to allow them to pour herbicides onto their weeds as a "test" will exacerbate an already horrific situation. You even agree on page 151 that the potential exists for the blooms to get worse during the control herbicide test! This will degrade the water even further and somehow that is ok?

CYB-8

AWM-43

REG-17

AWM-43

So many agencies have volunteered time, money and manpower to help keep the weeds in check for a group of homeowners who cannot figure out how to honor nature and restore their lagoons and water ways to a healthy state. These homeowners have sucked the life force out of the lake in exchange for the privilege of being able to have their boats in their backyard lagoons. Without regard for anyone else's enjoyment of Lake Tahoe, the Tahoe Keys have degraded the water, land, marshes and ecosystem of Lake Tahoe. Every time a boat exits the channels, weed particles are brought into the lake, further spreading the invasive weeds, bubble curtain or not. At this point the Tahoe Keys need to concede their "fight" against the weeds and hand over the responsibility to a group/agency who can truly solve this problem in a nontoxic manner. Left to their own devices it is obvious that the Tahoe Keys are on a downward spiral and incapable of protecting Lake Tahoe from fertilizer, invasive weeds and cyanobacteria blooms.

The lack of foresight, planning and proper research on the part of the Tahoe Keys is exactly how most of the US has responded to its invasive weed and cyanobacteria problems, by doing the next best LAZY thing: pouring herbicides into their water bodies. Instead of approaching the situation from a wholistic standpoint and taking the time to understand what the real problems are and how everything in the ecosystem is interconnected, the Tahoe Keys have gone the easy route with the false idea that herbicides will correct the huge imbalance brought on by the invasive weeds, when in fact their infrastructure layout is the real issue. They even admit on page 151 that "the factors that influence the occurrence of cyanobacteria blooms can include excess nutrient(nitrogen and phosphorous) loadings and concentrations, slow-moving surface water, high water temperature, high intensity and duration of sunlight, water column stratification, changes in water pH and occurrence of trace minerals". This describes exactly what is going on in the Keys lagoons. We have the perfect recipe for cyanobacteria blooms and invasive weeds, a by-product of bad planning, bad design and ignorance of nature. Short of filling in the lagoons, the only way to fix this huge environmental disaster is with nontoxic long-term solutions such as LFA and UV light which are currently being tested and combining this with other proven non-toxic methods. The success of LFA at the Ski Run Marina and the UV light at Lakeside should convince you that given time, these methods will help clean up the invasive weeds in the Tahoe Keys. Their "weed committee" needs to do an about face on the herbicide permit and promote these two nontoxic methods 24/7 365 days a year for the next three years in their lagoons. Stop wasting time. Get this handled without herbicides! Although certain nontoxic methods such as bottom mats and hand harvesting are currently being used to deal with the weeds, a wholistic framework would benefit them immensely. By restoring what is missing in their lagoons, compensating for the lack of oxygen with LFA and by not permitting their residents to continue to use fertilizer on their lawns, the Tahoe Keys can eventually restore their lagoons. Unfortunately, their EIR draft reflects the Tahoe Keys lack of understanding of the ecosystem of Lake Tahoe. Despite their graphs and analyses, their draft EIR falls short of giving the stakeholders an honest and complete investigation of the issues and components in this complex and fragile ecosystem that is Lake Tahoe.

Producing a draft EIR reflective of the Tahoe Keys mindset fails the citizens of South Lake Tahoe and everyone else who lives at the lake because it fails to acknowledge that cyanobacteria is a crucial co-key element, not some tertiary issue. Cyanobacteria deserves a more thorough investigation by your scientists in how it affects the local community by causing motorneuron diseases. Understanding and acknowledging that herbicides cause the cyanobacteria cells to explode, thereby further releasing their toxins into the water and air would have been an accurate assessment had you included that in your

AWM-43

CYB-9

draft EIR. Because your EIR promotes herbicides, it gives the false impression that herbicides are the answer when in fact it is the opposite. Herbicides will be the death of Lake Tahoe. They will speed up the destruction that the weeds and cyanobacteria have started and will keep all of us imprisoned in the never-ending cycle of poisoning the lake. You all know what has happened to other lakes that tried this approach, right? Given that Lake Tahoe is a Tier 3 waterbody, herbicides should never even be considered, even for a moment, and especially for a group of homeowners whose lakeside boating privileges take precedence over public safety and is the real reason that we are in this mess in the first place.

What is really disconcerting in your EIR draft is the absolute lack of comprehensive research into the cyanobacteria blooms and how they directly affect the local community. In your EIR on page 151 you state that cyanotoxins can occur in the absence of a bloom. This could explain why so many people are sick and have died from motorneuron diseases. In Dr. James Haney's video he speaks about this exact thing. Kate Langley did her thesis on low productivity lakes, like Lake Tahoe, and how cyanobacteria toxins are aerosolized. If that is the case with Lake Tahoe then we have much to worry about. Only testing the lagoons when there are visible blooms does not capture the extent of the toxicity of cyanobacteria in the lagoons. If people are getting sick from cyanobacteria that is not visible then we should conduct studies to find out the extent of the toxins and the degree to which they are aerosolized. Dr. James Haney and his team have offered to come out and set up studies. Dr. Elijah Stommel has offered to help us do an epidemiological study. We need their help. This is their area of expertise. Ignoring this information is no longer an option because the numerous cyanobacteria blooms and the consequences of the BMAA neurotoxin have neither been tested nor researched.

In the 2013 research paper by Dunlop, Cox, Banack and Rodgers they discuss how the BMAA neurotoxin can be misincorporated into human neuroproteins in place of L-serine thus causing neurodegeneration-ALS. In the 2017 paper written by Jim Haney, Elijah Stommel and others, they discuss the high incidence of ALS in the small lakeside community of Enfield, NH with a population under 5,000 in which they found that ALS was 10-25 times the expected average of 1 per 50,000 residents. Between 1990-2007, with the majority between 1998-2007 they diagnosed 278 cases of ALS.

If I know of 11 people who have died of ALS and Parkinson's at Lake Tahoe, then how many are there once an accurate count is done? I am going to guess hundreds and if that doesn't spell cluster to you then we are on the wrong page. You have not done an epidemiological assessment to study the impact of this toxin on the community nor has there been an investigation into the deaths of its citizens from motorneuron diseases caused by these blooms. In short, there has been a complete and total refusal to address this issue. I say this because I have sent numerous documents to all of you over the last five years and not one of them was mentioned or referred to in your draft or appendix. Is that because you don't think cyanobacteria is an issue or because you don't want to accept how deadly the blooms really are?

If we delve into the information that should have been included in your EIR we will see how your team has short-changed the citizens of Lake Tahoe because you have failed to examine the lethality of cyanobacteria blooms and who they have affected. The people who have died at Lake Tahoe from motorneuron diseases deserve to have this information publicly shared with the community. Not one of you, between any of the agencies at the lake, has taken this to heart and spread the truth about how CYB-8

HE-146

cyanobacteria destroys lives. The signs posted around the lagoons don't even mention the lethality of the neurotoxins of cyanobacteria!

Epidemiological statistics show one death per 50,000 residents. But I know of eleven people, one of whom was my boyfriend and another was my professor, who lived at Lake Tahoe and who have since died of ALS, a devastating and fatal motor neuron disease. When my boyfriend became ill and I was researching how he could have gotten sick, I ended up contacting Brain Chemistry Labs in Jackson Hole, Wyoming for answers. I spoke to Sandra Banack, one of the scientists, and when I told her about the Keys lagoons full of cyanobacteria blooms and the deaths she told me that it is not possible to have this many people who have died in this small a community unless there is a cluster. If we did a real count of who has died and who is currently ill we would find a cluster and the blooms in the Keys are in fact ground zero.

It is interesting to see how the human side of this environmental disaster has been ignored, especially since the dangers of cyanobacteria have become a well-known focal point for the last twenty years in global scientific communities. In the last ten years there has been a rush to connect the cyanobacteria blooms with with motor neuron diseases, especially since the ground- breaking discovery in Guam by Dr. Paul Allan Cox, an ethnobotantist, and the work of Dr. James Haney in aerosolized studies of how cyanobacteria neurotoxins are airborne. But here in Tahoe, no one thought to connect the dots, that is, until I made the connection for you. No one figured out that living in or near the Tahoe Keys could be the death of you! None of this information was in your draft EIR. Nor was there a count of how many people in the Keys, South Lake Tahoe and the rest of the lake have died from motorneuron diseases or are currently ill. Nor was there a count of how many dogs that have died from swimming in the dogs over the years either. Just another prime example of the Tahoe Keys blatant disregard for accurate and honest research!

What's even further disconcerting is how many times this connection between cyanobacteria blooms and motorneuron diseases was mentioned in community meetings over the last five years? So many that it blows my mind and yet you exclude this data in your EIR? I emailed you even more documents about cyanobacteria last summer after the June meeting and you still did not include that information in your EIR. What's the point of giving you valid scientific information when you do nothing with it? If that's the situation then responding to this EIR is a complete waste of time because you are not going to take my information or anyone else's seriously. People's lives are at stake and yet you ignore proven data and research.

Having the privilege of a boat in their backyard is obviously more important than coming clean about the fatality of the cyanobacteria blooms in in their lagoons. Once the community understands the correlation between cyanobacteria blooms and motorneuron diseases it will become the BIGGEST issue you will have to confront because no one is going to stand by and let these selfish and ignorant homeowners use their cyanobacteria blooms to end the lives of the citizens of Lake Tahoe. Like I said, living in and near the Tahoe Keys may be the death of you, especially since the information has been well published in the scientific community. Not addressing this in your EIR is shameful.

If you issue the Tahoe Keys a permit you will be just as irresponsible as the Keys, because you, as scientists, should know better than to pour herbicides into lagoons full of cyanobacteria. Herbicides cause cyanobacteria to release their toxins. Any scientist worth their weight knows this so I am wondering which "scientist" you consulted? Not Dr. Wayne Carmichael or Dr. Paul Allan Cox, two world

CYB-8

renown experts in cyanobacteria research whom I referred to you on many occasions. Not them, right? Because they would have told you flat out how toxic cyanobacteria becomes when it is exacerbated by herbicides. Giving the Keys a permit for herbicides is a one-way ticket to hell for Lake Tahoe and its citizens. And your draft EIR, with its flawed, inaccurate and omissive research, just paves the way for this to happen.

What is Missing From Your Draft EIR:

~An Antidegradation Analysis

~A comprehensive study of the cyanobacteria in the Tahoe Keys lagoons, including tests for ALL of the toxins, especially BMAA	
~An aerosolized study of the cyanobacteria toxins	CYB-10
\sim A comprehensive study of all of the people who have died at Lake Tahoe area from motorneuron diseases.	
~A comprehensive study and count of all of the dogs that have died from swimming in the lagoons.	
 A comprehensive study of the amount of fertilizer and Round Up in the lagoons and the origination points. 	AWM-44
~A comprehensive study of the interaction between cyanobacteria, fertilizer and Round Up.	1
$^{\sim}$ A comprehensive study of the potential interaction between cyanobacteria and the proposed herbicides.	CYB-10
~A complete list of all of the chemicals used on their lawns and property over the last 60 years and how they react with cyanobacteria.	
I am supporting Action Alternative A. I am also endorsing the above-mentioned studies before any]

further action is taken on the part of the Keys to put toxic chemicals into Lake Tahoe.

CYB-8

Tahoe Keys Weeds
PM

To Whom It May Concern:

I have been coming up to Lake Tahoe for years and have enjoyed swimming in its beautiful clear waters in the summer and have enjoyed skiing in the winter. I was shocked to learn how a group of homeowners have applied for a permit to put herbicides into their

lagoons in the Tahoe Keys. Apparently this invasive weed issue has existed for decades and although there are long-term nontoxic methods available such as Laminar Flow Aeration(LFA), UV light and a few other nontoxic methods, the Tahoe Keys has decided to also fight the weeds with herbicides.

I find that strategy disheartening as apparently, from my reading all the available documents, Lake Tahoe is a Tier 3 Water Body in which herbicides are prohibited. Getting an exemption to the Basin Plan to pour herbicides into lagoons full of invasive weeds and cyanobacteria is a clear violation of the Clean Water Act.

I do not endorse a plan to use herbicides and am voting for Action Alternative#1, which will use only nontoxic methods to address the invasive weeds. This is very important to me, as a nature-enthusiast and avid Lake Tahoe swimmer and paddleboarder.

I understand that the homeowners have permanently altered and destroyed the Upper Truckee Marsh when they built out the Tahoe Keys, and it is my hope that the residential area may one day be returned to a semblance of its original state of marshland and healthy waterways with nontoxic long-term methods.

Cordially,

Grazia Caroselli Evolve Productions 4181 Mildred Avenue L.A., CA. 90066 C: 310.717.7566 grazia2u@gmail.com **HE-133**

ALT-54

From:	WALTER MIRCZAK
То:	tahoekeysweeds@trpa.org
Subject:	[EXTERNAL] Draft EIR/EIS for the Tahoe Keys Lagoons Aquatic Weed Control Methods Test
Date:	Thursday, September 3, 2020 5:01:29 PM

Dredging Tahoe's largest natural wetland to build 1,500 homes and associated canals in the 1960s (now known as the Tahoe Keys) was an ecological disaster, something that would never be approved today. This project destroyed the lake's natural filtering system (a healthy wetland) and replaced it with artificial canals that are now rife with invasive aquatic weeds (Eurasian milfoil and curly leaf pondweed) and dangerous algae blooms. The Keys' unnaturally warm water encourages the growth of harmful algae, including deadly cyanobacteria and other non-native species.

The Tahoe Regional Planning Agency and the Lahontan Regional Water Quality Control Board are moving forward with a proposal by the Tahoe Keys Property Owners Association to treat the Keys' invasive weeds with aquatic herbicides. I am concerned that non-chemical methods have not been fully tested and shown ineffective as required by the Water Board before resorting to herbicides. Chemical herbicides have never been allowed in Lake Tahoe before because the Environmental Protection Agency classifies Tahoe as a Tier-3 Outstanding Natural Resource Water that cannot be degraded.

AWM-36

I am concerned that continued use of dangerous chemicals will be necessary in perpetuity to keep the weeds under control, all for a treatment that will never work. There is no basis for asserting the herbicide use during this "test" would be a onetime event. Every lake in the country where herbicides have been used have had to continue their use once started to keep the invasive weeds down to a manageable level. **RES-10**

I would prefer returning the lagoons (i.e., the stagnant, dead-end canals) to a healthy, functioning wetland. Eliminating the habitat for the weeds and eliminates both the weeds and need for herbicides. Restoring the canals to wetland would immediately improve the water quality and clarity by filtering nutrients, sediments, and pollution from the surrounding neighborhood of the Keys. Done well, it could enhance the health, beauty, and quality of life at the Keys while saving tens of millions of taxpayer dollars. Natural wetland habitat (and perhaps some boardwalks or hiking trails) in that location would restore wildlife habitat and natural beauty, while enhancing quality of life and opportunities for outdoor recreation.

Nature has proven that if we put the pieces back, natural systems will return. A wetland habitat would begin filtering and purifying the waters that feed Lake Tahoe. If we really want to Keep Tahoe Blue, it's time to restore the canals and lagoons at the Keys.

Sincerely,

Walter Mirczak

Tahoe Vista Ca

From:	Steve Bridges
То:	TahoeKeysWeeds@trpa.org
Subject:	[EXTERNAL] Public Comment Tahoe Keys Lagoons Aquatic Weed Control Methods Test EIR/EIS
Date:	Friday, September 4, 2020 8:38:38 AM

9/3/20

My problem with the EIR EIS is it appears authors have simply taken and accepted herbicide manufacturers' specs and data as fact when reviewing safety claims regarding possible unhealthy effects on drinking water and water wells. This information is probably biased in favor of the herbicide manufacturers and should not be blindly relied upon. Remember MTBE was supposed to be safe per the manufacturer specs and was found to be otherwise. Steve Bridges 2031 Venice S. Lake Tahoe

HE-140

From:	Lisa DeBruyckere
To:	tahoekeysweeds@trpa.org
Subject:	[EXTERNAL] Public comment on technical adequacy, range of alternatives, impacts, and use of herbicides to achieve goals of Lake Tahoe Action Agenda
Date:	Monday, September 7, 2020 1:42:48 PM
Attachments:	image001.png

To whom it may concern,

These comments are in response to the proposed Lake-wide Control of Aquatic Invasive Plants (AIP) Project to achieve the goals and targets for aquatic invasive plant control described in the Lake Tahoe Action Agenda. These goals include a) limiting the spread of existing AIP I the region by minimizing threats to native species and extirpating existing AIP populations when possible and b) abating the harmful ecological, economical, social, and public impacts of AIP.

As described in the project document, any impacts requiring mitigation would be temporary and associated with active control implementation. The appropriate mitigation measures have been described in Table S-1 in the document.

The range of alternatives described in the document include baseline conditions (No Action Alternative) as well as direct and indirect methods for AIP removal and control. In addition, adequate pre-treatment, treatment, and post-treatment monitoring and evaluation components are included to assess the efficacy of actions and monitor any detrimental effects to the environment. Importantly, additional resource protection measures have been identified to minimize effects to native fish and wildlife and their habitats.

A thorough analysis has been conducted of the potential effects of the alternatives, including a review of special status and protected plant and animal species within the scope of the project – and any initial as well as cumulative effects.

The project document does an excellent job of documenting the detrimental effects of aquatic invasive species re: the ecological function of Lake Tahoe, including water quality and habitat critical for native species, compared to the short-term effects of herbicide applications. In addition, the document does an excellent job of describing the numerous other types of control activities that have been attempted in the past to reduce and control AIP in Lake Tahoe. The document is proficient in setting the stage for considering herbicides as a potential effective action alternative, in combination with other physical and mechanical methods of control.

I-200

AWM-35

ALT-62

signature_171829856

Creative Resource Strategies, LLC 6159 Rosemeadow Lane NE Salem, OR 97317 Office (503) 371-5939 | Mobile (503) 704-2884 www.createstrat.com

From:	Kait krolik (kait.krolik@sierraclub.org) Sent You a Personal Message
То:	tahoekeysweeds@trpa.org
Subject:	[EXTERNAL] No weeds or herbicides for Lake Tahoe!
Date:	Thursday, August 6, 2020 1:35:57 PM

Dear Tahoe Regional Planning Agency,

Don't poison Lake Tahoe!

HE-12

I support Alternative AA1 of your Tahoe Keys Weeds Draft Environmental Impact Report.

The Tahoe Keys lagoons are an environmental disaster at Lake Tahoe. Proof of this are the infestations of aquatic invasive weeds now thriving there and the proposals to control these weeds with herbicides. These weeds are destroying Tahoe's legendary clarity and purity. Proposals to control them with herbicides only poisons the lake further.

I am absolutely opposed to any and all use of poisonous herbicides in the Keys and any other waters that connect to Lake Tahoe -- a Tier 3 Outstanding National Resource Water. I oppose spending tens of millions of taxpayer dollars for the convenience of boat-owners at the Tahoe Keys. I join The Sierra Club Tahoe Area Group in defending the purity of Lake Tahoe.

Sincerely,

Kait krolik 6264 Port Astoria Court Las Vegas, NV 89122 kait.krolik@sierraclub.org (585) 978-1482

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Lillian Miller at Sierra Club at core.help@sierraclub.org or (415) 977-5500.

Dear Tahoe Regional Planning Agency,

Don't poison the lake.

| HE-12

I support Alternative AA1 of your Tahoe Keys Weeds Draft Environmental Impact Report.

The Tahoe Keys lagoons are an environmental disaster at Lake Tahoe. Proof of this are the infestations of aquatic invasive weeds now thriving there and the proposals to control these weeds with herbicides. These weeds are destroying Tahoe's legendary clarity and purity. Proposals to control them with herbicides only poisons the lake further.

I am absolutely opposed to any and all use of poisonous herbicides in the Keys and any other waters that connect to Lake Tahoe -- a Tier 3 Outstanding National Resource Water. I oppose spending tens of millions of taxpayer dollars for the convenience of boat-owners at the Tahoe Keys. I join The Sierra Club Tahoe Area Group in defending the purity of Lake Tahoe.

Sincerely,

kathryn bricker p.o. box 1334 zephyr cove, NV 89448 brickerkathryn@hotmail.com (775) 291-7332

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Lillian Miller at Sierra Club at core.help@sierraclub.org or (415) 977-5500.

Appendix A-4 Public Meetings and Workshops

Jesse Patterson, League to Save Lake Tahoe said aquatic invasive species is the number one threat to the Lake's unique and fragile ecology. Where we are is the draft environmental document and where we need to go sooner than later is a long term management plan for the largest infestation at Lake Tahoe. Around 2013, the League identified that to address aquatic invasive species, the Tahoe Keys would need to be addressed. They were fortunate to have formed a very strong partnership with the Tahoe Keys Property Owners Association and many others at that time to start working through the process. It started with him presenting to the Keys for the first time ever and then it moved on to several good partnerships with citizen science programs and the League committing funding and technical assistance to solve this issue. One of those items was the bubble curtain protecting the west channel. What they've found through all those iterations of working groups and collaborative processes, is that more tools are needed in the tool box. They believe that this combined methods test with a wide stakeholder engagement, public and private investments, excellent facilitation, and extensive outreach opportunities gets us to that point where we're moving forward. This draft environmental review was well written and easy to understand despite all its technical information, science backing, and everything else involved. Its science based and pragmatic approach to this exploratory and innovative solution for the Tahoe Keys is ambitious but achievable.

He thanked both lead agencies; Lahontan Regional Water Quality Control Board and TRPA for taking this on. To the Tahoe Keys Property Owners Association for their patience, diligence, and being adaptable. Lastly, to all the stakeholders who have been on this journey.

Moving forward, we need to keep our eyes on the prize. It took more than seven years to get to this point and feels that Lake Tahoe doesn't have another seven years to figure out what to do to address this infestation. The Lake remains at risk until there's something done in the Tahoe Keys despite all the efforts to date. Testing as many methods in isolation or combination is one great way to do it.

This draft environmental document pointed out that all potentially significant impacts from the proposed project can be mitigated leaving no significant impact. They'll continue to read the anti-degradation analysis from Lahontan and the rest of the document.

<u>Trish Friedman</u> asked what kinds of cyanobacteria toxins have been found in the Tahoe Keys; What is going on with the fertilizer use by the Tahoe Keys residents and has there been any testing done in the air in regard to the algae blooms.

Mr. Yeates said staff will respond to Ms. Friedman's questions separately. This is a public hearing to accept comments on the draft environmental document.

<u>Tobi Tyler</u>, Sierra Club said they have some initial comments while they're still reviewing the draft environmental document.

First, the anti-degradation analysis is not included in the draft. Though, inclusion of this analysis was promised during the scoping phase of this project. Since the anti-degradation analysis is essential to allowing herbicide use in Lake Tahoe for the first time, and since it's mentioned in the draft at least 60 times, they assert that the public comment period should be 60 days from the release of the anti-degradation analysis instead of 60 days from the release of the draft Environmental Impact Statement/Environmental Impact Report.

Second, they haven't been able to find any discussion of the cost of action Alternative Two, the dredging

AWM-21

AWM-21

GEN-17

CYB-2

AA-5

ALT-20

option, it's quite clear from the description that this alternative will be extremely expensive. It would meet one of the Sierra Club's goals for complete removal of the weeds and their seeds from the lagoons, but are the lead agencies expecting the public to pay for expensive dredging, disposal, and replacement so Tahoe Keys property owners can continue boating from their back yards. The result of dredging and replacement will be unnatural lagoons in which the process of fine sediment deposition and weed infestation will resume all over again. This option doesn't solve the problem and the risk of aluminum toxicity to aquatic life are too high. Restoring lagoons to a marsh and completely removing the habitat for weeds would be a cheaper alternative and the public would be more likely to support restoration.

Third, Action Alternative One, the non-chemical treatments alternative is clearly the environmentally superior alternative and is identified as such in the draft document. They remain opposed to the proposed project as herbicide use in Lake Tahoe and the Tahoe Keys doesn't solve anything. It would open the door to more use and should never be used in Outstanding National Resource Waters. They support action Alternative One but even this alternative to test only non-chemical methods doesn't protect the Lake from the infestation that continues to threaten it. The staff report on page two cites a critical issue for the need to act quickly on the environmental threat of the spread of aquatic weeds. A physical barrier must be placed at the entrance to the Lake to close off the Tahoe Keys until the environmental threat is completely removed or until the lagoons are restored to marshes. Why aren't physical barriers included in the draft document as one of the alternatives for protecting the Lake?

This public process during the Covid pandemic doesn't adequately satisfy the needs of all citizens of who would like to comment. Some citizens don't have computers needed for virtual participation. The process is too highly controlled and doesn't allow any of the spontaneity for public meetings. Now, one has to not only prepare and submit their comments the day before the meeting, you have to preregister for the meeting ahead of time. There's also no option to reply to comments during the meeting. The technology doesn't always work for everyone who tries to participate. For instance, raising one's hand doesn't always guarantee an opportunity to speak. The opportunities for public participation do not adequately satisfy the California Environmental Quality Act and the National Environmental Policy Act requirements. Lake Tahoe deserves careful high quality management and real solutions, not band aids like the proposed project. Lake Tahoe is not a chemical testing ground and applying a band aid to a severed artery is not a solution. The health of Lake Tahoe comes first. Allowing the use of aquatic herbicides without due exploration of alternatives such as the restoration, barriers, and thoroughly testing non-chemical methods first would be dereliction of our duties to protect this national treasure.

<u>Elise Fett</u> said the bubble curtain is not currently working. The compressor blew out and there's one on order. It was mentioned earlier that this is becoming a lake problem. It's a collaborative and it seems that we need the collaborative to help maintain these tests, including the laminar aeration tests. It turns out that the bubble curtain was not running throughout the winter. CLEAN-FLO installed the system and has been clear that these tests have been very successful at not just tests, but this system has been used for ten years successfully to eliminate nutrients, but it has to be ran 24/7 year round. The system was shut down at the Tahoe Keys for the winter and was supposed to be turned on in April but wasn't because of the compressor. It had to be ran all year long, so it was as successful as Ski run Marina where it eliminated over 20 inches of nutrients. It does this by increasing the natural enzymes which bring the nutrients up and then the microbes digest the nutrients and then eliminates the nutrients. That resolves the source of the problem that has been pointed out over and over again. Mr. Good said they wanted to use aeration, if you were to use the testing of aquatic herbicides anyway, then shouldn't it be installed now and start trying to reduce the source of the problems which are the nutrients at the base. The system eliminated four feet of

ALT-20

ALT-20

PP-4

HE-94

AWM-16

muck from Lake St. Catherine in Vermont in 2014 after four years of testing. It takes time but has to be done properly. We need large scale non-chemical methods to be running permanently and a collaborative that does these tests the way that they need to be done to show that they work.

David Blau, Board Member and Program Chair for the League to Save Lake Tahoe said they've been a key player in the stakeholder group for several years. They helped fund and design the bubble curtain as a containment method along with the laminar flow aeration technology experiments. He has 36 years' experience preparing National Environmental Policy Act and California Environmental Quality Act documents and resource management plans. He's read the entire environmental document and said this document has many strong points. It's very comprehensive, it meets the requirement of full disclosure which is required by law and was happy to see the no action alternative treated as a distinct alternative all the way through the environmental impact chapter. This is rarely done, usually the no action is one or two pages that dismisses if we don't implement the action, we don't achieve the project objectives. The way this has been done; it's been taken through the entire environmental analysis. It makes a case for the urgency to solve the problem and protect lake ecology. The no action alternative ended up with the most significant impacts. The conclusion by the authors as pointed out by Mr. Good, was less than significant in environmental health, water quality, and aquatic biology.

Their one concern is the labeling of action Alternative One, the non-chemical alternative as the "Environmental superior alternative." This is required by law, but it doesn't mean you have to go with it, rather it only needs to be identified. Their concern is that the logic was based on one criterion that the proposed project has barriers that would block off about half the boaters in the Tahoe Keys for possibly three plus months of the first year of testing. To block off those boaters in the spring of year one for three months in return they get years and years of cleaner channels, seems like a small sacrifice. They asked for all to take another hard look at the designation of the environmental superior alternative. It has nothing to do with environmental health, water quality, or aquatic biology. It's only based on recreation boater obstruction in the Tahoe Keys.

They don't favor one tool over any other at this time. They feel it's essential that all the tools in the tool kit be tested that are in category A and B to get a true picture of the pros and cons of each tool. They can't afford to waste possibly three years looking at an alternative that doesn't come anywhere near reducing the biomass by 75 percent. That wasn't mentioned in the presentation but is one of the four primary goals of the project. They're asking to test all the tools and find a solution and a mix of tools that meets the objective of reducing the biomass by 75 percent.

Julie Soules said the environmentally superior alternative would be the way to go. The idea that the chemicals are safe is something that seems largely unproven. If you look back over history, years and years of things we thought were safe end up having long term unintended consequences. If there's an option to clean and control the weed situation without introducing chemicals, that has to be the first choice. She grew up in Lake Tahoe and appreciated the quality of the water and remembers drinking it all the time when swimming. Future children shouldn't be fearful of doing that because we've introduced new chemicals and unsafe items into the water system. The weeds to be dealt with but if there's an option that doesn't involve introducing foreign chemicals, it should be pursued first. Unless that fails, why introduce foreign chemicals into the Lake.

Eric Ronning said he also grew up in Lake Tahoe and 40 years ago he would dive down and drink the lake HE-96

AWM-16

ALT-21

ALT-25

water. Prior to testing any aquatic herbicides that can potentially cause more nutrients and mutation of weeds that could make them stronger and more difficult to eliminate, take the time to test all the nonchemical methods properly. This needs to be done on a large enough scale with enough time to see results before introducing chemicals. No Round Up for Lake Tahoe and let's try the natural method first.

Laurie Kemper, 35 year resident of Lake Tahoe who worked for the Lahontan Regional Water Quality Control Board for 33 years. She's speaking as private citizen today. She commended staff and the experts that put this document together. We know that eradication is not possible, rather it's a long term **AWM-22** management strategy. It's important that we take the time now to evaluate the methods to determine what's possible and achievable with the non-chemical methods. It's also important for the Governing Board to understand that the Lahontan Basin Plan requires that non-chemical methods be done first and REG-4 evaluated prior to the Lahontan Water Board making a decision to allow pesticides or herbicides to be used at Lake Tahoe.

This draft environmental document could be used to do a longer term test and evaluation program where the non-chemical methods are tested first and done very well to see if we can meet the 75 **AWM-22** percent. If not, then make a decision to try herbicides. Don't tie a decision to test herbicides ahead of knowing what's possible with all these creative ideas that are explored in the draft document. Decisions and permitting can be done conditionally and can be done over a series of decisions. She said herbicides could be considered as a possibility after the other options have been thoroughly HE-97 evaluated. The environmental impacts may be considered less than significant; a violation of the non-degradation standard that's in place at Lake Tahoe because of the Outstanding National REG-4 Resource Water designation, the allowance of herbicides would violate that standard and that would be considered a significant impact. Under the California Environmental Quality Act there can be a statement of overriding consideration that would allow that to happen looking at the benefits over the impacts. It's not genuine to say there are no significant impacts when you're talking about **HE-97** adding a foreign substance to Lake Tahoe that's never been done. Just the existence of that herbicide violates that objective to keep the Lake with levels of pesticides that are non-detectable.

Laurel Ames said we need to know how much better we can do with the non-chemical methods. The Sierra **HE-98** Club is opposed to using herbicides in Lake Tahoe and tributaries which are considered by the Environmental Protection Agency to be part of Lake Tahoe. If 75 percent of the weeds are removed, that leaves 25 percent of the weeds. These weeds just grow and grow, it means that Lahontan and TRPA will **HE-98** have to deal with weeds for the rest of time unless they close it off from the Lake. Once they close it off Also from the Lake, it's not a tributary anymore. They believe that a barrier that prevents the waters in the **AWM-18** Tahoe Keys and their weeds and the poisons will not be discharged to the Lake. That includes the groundwater. She hopes that there will be a re-jigger and a reset while the agencies proceed to work on the project and solutions with greater emphasis than they have to date.

Madonna Dunbar, Tahoe Water Suppliers Association said they were a member of the stakeholder working group and have been involved for many years on the development of the project plan being presented. They've come a long ways over the past few years and recognized everyone's collaborative spirit. They've PP-5 shared ideas, concepts, and possible solutions and are moving forward from a much larger project with the potential use of herbicides that was presented a few years ago. The Tahoe Water Suppliers Association board subcommittee has been meeting and they'll be going back to the full board with final written comments for submittal. At this time, the Tahoe Water Suppliers board continues to support the testing of **ALT-26** the non-chemical methods. They are fully in support of Alternative Action A,1 for the laminar flow aeration

HE-96

and ultraviolet light testing. This has been their position for a long time. She'll go back to their board to see if their position has changed as a full board. The reason why they still support the non-chemical path is that even a one-time herbicide test into Lake Tahoe as a tier three Outstanding National Resource Water with **HE-99** six filtration exempt water systems out of 60 in the country, isn't appropriate at this time. As mentioned by Ms. Kemper, this is a great opportunity for us to test the larger scale non-chemical methods to see how well those can work. Also, there is a plan B option of the diver assisted suction that should be checked on a larger scale that's being used successfully in quite a few places. It removes that plants physically with the roots and are reducing the biomass of the plants. If there aren't good results after they run quality controlled consistent tests over a couple of seasons, then let's have this discussion again. Alternative A,1 **AWM-17** has been identified as the environmentally superior alternative that they would support. They are talking about how they would support Alternative Action two, dredging and replacing substrates is one way to address the growth conditions of the weeds. However, it is an artificial enhancement, it may promote more weed growth and the restoration wetlands ecosystems services may be more applicable in water quality mitigation than a riffraff substrate replacement. They appreciated the shift in development from past years, but this is now about enhancing the water quality in the Tahoe Keys section of Lake Tahoe. They'll be submitting additional written comments.

Tahoe Keys Control Methods Test DEIR/DEIS Public Workshop: COMMENTS AND QUESTIONS August 11, 2020

David Blau 10:11 AM

We are happy to see that the Proposed Project has less than significant impacts to env. health, water quality, & aquatic biology. The League feels strongly that ALL tools need to be tested during the 3-yr controlled testing period. That is what the testing program is for!

We are very skeptical that Action Alter 1 which features just UV and Laminar Flow Aeration in Category A can come anywhere close to meeting the project goal of reducing the plant biomass by 75%. We risk losing three years.

David Blau 10:22 AM

Happy to see the full treatment of the "No Action Alternative", which makes a compelling case **ALT-14** for action and minimal delay. We cannot afford to waste three years on tools that won't solve the problem. UV doesn't kill roots & turions; LFA is probably best for spot treatment.

David Blau 10:25 AM

When will the Anti-Degradation Analysis be released so that we have the full picture? It needs to be done in concert with the Draft and Final EIS/R.

Anonymous Attendee 10:27 AM

why does the plan only include a 75% reduction of weeds? It is just to improve boating or how does that improve the weed issue?

Sudeep Chandra 10:46 AM

Any idea of how much nutrient storage (e.g. Phosphorus) is within the sediments and at what scale of time (days, weeks, months) the nutrient is stored or released?

Kirk Wooldridge 10:51 AM

Since the Keys lagoons are considered as Tier 3 and require attendent protection (i.e.from invasive species impacts on water quality and native ecosystems), why wouldn't Lahontan and TRPA support the use well-proven and scale-feasible current technologies to manage the invasive plant populatons: integrated use of EPA/Cal EPA approved aquatic herbicides?
 Is the risk of relying solely on un-proven, non-herbicide methods (UV light; bottom barriers) fully vetted? How were these risks quantified?

3. The assumption that herbicdie residue levels will result from "maximum label rates" distorts the estimates and modeling of actual dissipation (degradation, dilution). This premise ignores the fact that target weed suscecptibility is variable, and is driven by active ingredient concentration AND contact time. The proposed rates account for this differential susceptibility based on published laboratory, mesocosm and field data. Why can't the Water Board specifiy rates consistent with the proposed project?

David Blau 10:52 AM

For future presentations, I respectfully request that you spend less time on data collection and more time on the comparison of the Proposed Project and the two primary alternatives. That's what the decision is all about.

Lauri Kemper 10:56 AM

Why is there not an alternative that uses non chemical methods first, and after monitoring and assessment on meeting success criteria, and only if that criteria is not met, then a test using herbicides is assessed (this would be a new alternative). Could the document as written be used in this if, then manner? Use non chemical method first and only consider the combined chemical/no chemical methods later.

Jacques Landy 10:56 AM

Is a list of all the chemical degradates of the herbicides under consideration available in the environmental document or elsewhere? Please specify where this list can be obtained.

Elise Fett 11:02 AM

Both Jim & Dennis mentioned aeration. Why don't we install a quality aeration system now, such as the the Clean Flo system and run it 24/7, 365? This was done the Ski Run Marina where it reduced he nutrient loading/muck by a average of over 20" in one year by increasing oxygen, reducing loading and muck sedimet. In addition, the ammonia has been shown to crash and then the weeds die when these systems are used. It will also have a benefit of deepening the channels so that the oxygen can be placed lower and therefore cover a larger area plus the water will get colder.

Tobi Tyler 11:02 AM

Russel didn't answer the question about the APU.

Tobi Tyler 11:12 AM

The Draft EIR/EIS did not address inert ingredients and adjuvants.

ALT-16

HE-90

HE-91

Madonna Dunbar 11:13 AM

Herbicides and all methods rely on repeat action. When will we see details on the Group B support methods, tails beyond the response flow chart

Lauri Kemper 11:13 AM

Russell - I'd like the list of chemical degradants too - what Jack asked for.

Lauri Kemper 11:22 AM

Are the results and success of non chemical methods used in the tahoe keys summarized in the EIR?

HE-93

Tobi Tyler 11:27 AM

Several people have raised the fact that TKPOA has not fulfilled the prohibition exemption criteria of demonstrating the failure of non-chemical methods and the agencies have yet to respond to this. I think a response is warranted.

Andy Kopania 11:27 AM

Previous actions and tests by the Keys are described in the application document submitted by the Keys, which should be available on the Lahontan and Keys Weeds Management websites.

Questions and Comments submitted via email:

According to the draft EIR " the size of the area's infestation and its high recreational use by boaters pose a substantial risk of spreading weeds to other areas of the lake and spurring new infestations. " Why does the plan NOT include installing a barrier To separate the keys from the lake until the problem is solved? It absolutely should. Anything less is a travesty. -Carolyn Wilette

Test sites will be mowed when and as needed on established schedules. Both the treatments and mowing will reduce the biovolumes of weeds. Reductions in biovolumes due to treatments are the essential data for comparing treatments. How can these reductions in biovolume possibly be measured accurately if sites are mowed?

Herbicide test sites will be aerated after treatment to test potential control benefits; UV light sites will not be aerated. Why won't UV light sites be aerated?

Coontail is a floating weed. UV light treatment of coontail in the Keys is asserted to be infeasible. UV light treatment of coontail at a Lake Tahoe marina reduced coontail significantly.

Why is UV light treatment of coontail in the Keys not feasible? ______AWM-15 -John Moore

X-The Administrative Procedures Update for the Antidegradation Policy Implementation for NPDES Permitting (APU) (page 3) states "When a discharge is included in a project requiring CEQA documentation, **the antidegradation analysis should be integrated in the environmental review process**." (emphasis added)

In addition, Appendix I-5 to the APU, which is EPA's Guidance on Implementing the Antidegradation Provision of 40 CFR 131.12, states the following: "Actions covered by antidegradation provisions include, but are not limited to the following: ... Other Actions... 3. Other "major Federal action" (pursuant to **NEPA** and the Endangered Species Act)." (emphasis added)

AA-2

Therefore, the antidegradation analysis must be presented with the Draft EIR/EIS and was not and has still not been released. In light of this, <u>does the Water Board and TRPA plan on</u> extending the comment deadline?

Thanks

-Tobi

I do have one other question if it's not too late. Several people have raised the fact that TKPOA has not fulfilled the prohibition exemption criteria of demonstrating the failure of non-chemical methods and the agencies have yet to respond to this. I think a response is warranted. Thanks

Tobi

TAHOE REGIONAL PLANNING AGENCY ADVISORY PLANNING COMMISSION

GoToWebinar

August 12, 2020

Meeting Minutes

I. CALL TO ORDER AND DETERMINATION OF QUORUM

Chair Mr. Ferry called the meeting to order at 9:30 a.m.

Members present: Mr. Alling, Mr. Booth, Mr. Buelna, Mr. Callicrate, Ms. Carr, Mr. Drew, Mr. Ferry, Mr. Grego, Mr. Guevin, Mr. Hill, Mr. Letton, Mr. Plemel, Mr. Hitchcock for Ms. Roverud, Ms. Stahler, Mr. Teshara, Mr. Smokey, Mr. Young

Members absent: Mr. Drake

II. APPROVAL OF AGENDA

Mr. Ferry deemed the agenda approved as posted.

III. PUBLIC INTEREST COMMENTS

None.

IV. DISPOSITION OF MINUTES

Mr. Young moved approval of the July 8, 2020 minutes as presented.Ms. Carr seconded the motion.Mr. Drew abstained.Motion carried.

V. PUBLIC HEARINGS

A. Tahoe Keys Target Aquatic Weed Control Methods Test – Draft Joint TRPA Environmental Impact Statement and CEQA Environmental Impact Report, TRPA File# EIPC 2018-0011, Tahoe Keys, City of South Lake Tahoe, CA, Project Number 510-101-00

TRPA team members Ms. Caringer, presented on some of the background and context of the project, Mr. Zabaglo, discussed the aquatic invasive species program, the proposed project and alternatives, Mr. Norman, Lahontan Regional Water Quality Control Board presented on the regulatory framework, and Mr. Good, Environmental Science Associates presented on the technical work he provided for this document.

Ms. Caringer said part of the Environmental Improvement Program is to monitor, control, and eradicate the aquatic invasive species currently found in the Lake. Aquatic invasive weeds that are not native to Lake Tahoe are not only an unsightly nuisance to beach goers and people recreating, but they also degrade Lake Tahoe's water quality, clarity, and disrupt the natural ecosystem. The weeds proliferate and are persistent making them hard to eradicate. Public and private partners have joined together over the past decade to control the spread of the invasive weeds in the Lake by collaborating across different jurisdictions, engaging with scientists, prioritizing control areas, and trying new and innovated ways to remove weeds. Lake Tahoe scientists and natural resource managers have ranked the Tahoe Keys Lagoons as the top priority location for weed control because of the infestation size and boat use that can spread weed fragments to other areas of the Lake and spur new infestations. Despite the concerted efforts by the Tahoe Keys Property Owners Association to control the infestation, that population of weeds continues to grow.

Over the past few years, the homeowners and the Environmental Improvement Program partners including TRPA, the League to Save Lake Tahoe, and the Tahoe Resource Conservation District have worked together to determine where to start to solve such a daunting challenge. The infestation covers 172 acres of waterways and doesn't allow for an expedient or easy solution. The infestation is within the private residential area but is a major public recreation access point to Lake Tahoe. Solving the weed issue garners an interest from stakeholder's region wide. This is a lake wide problem, not just a Tahoe Keys problem.

The Tahoe Keys Property Owners have tried many methods of weed control over the past 40 years and engaged with experts to try and find solutions. In 2018, after years of research, TKPOA asked TRPA and the Lahontan Regional Water Quality Control Board if they could expand their toolbox to consider aquatic herbicides. While aquatic herbicides are used in many other parts of the country, they haven't been permitted as a control method in Lake Tahoe. While some believe it's the only solution to significantly knock back and gain control of the infestation in the Tahoe Keys, others would prefer it be the last option or never introduced. They agreed that before the agencies could make a determination on using herbicides there would need to be a comprehensive analysis of the potential environmental impacts. They also agreed to initiate a broad stakeholder engagement process.

Over the past few years, they've formed several stakeholder committees and what's resulted is a lot of good information sharing and discussion of different viewpoints. Through this process they've found that stakeholders want to work together to solve one the Lake's most pressing environmental challenges. People wanted to learn more about the different options before a full long term treatment strategy is developed. The stakeholder committee helped shape the current proposed project used to conduct a test of a variety of different control methods in the Tahoe Keys. This testing program would occur over three years with two additional years of project monitoring. It would allow TKPOA and resource managers to study, analyze, and compare the options in the unique environment of the Tahoe Keys. Both herbicide and non-herbicide options are on the table prior to developing, evaluating, and implementing a future large scale project in the Tahoe Keys.

The document provides the environmental analysis of the potential environmental effects of conducting that test project. It doesn't provide a project recommendation but rather provides the analysis that will be a tool to aid the lead agencies in the decision making process. The 60-day comment period is open until September 3, 2020. This document is a result of an intensive

scientific study over the last year. Staff is asking for input on the adequacy, completeness, and conclusions of that analysis. If a control methods test is approved, data from that test will inform the longer term strategy and another environmental analysis will be needed to analyze the environmental effects of that full scale project.

Mr. Zabaglo said they've been implementing aquatic invasive species weed control projects in the Lake for several years now with a lot of success. With that success, they've learned that multiple methods are needed. The Tahoe Keys is a huge challenge and number one priority. It's 30 times larger than any project they've attempted to date. Every marina around the Lake can fit within a small portion of the Tahoe Keys. The conditions are difficult with the size and the loose organic "muck" layer that resides at the bottom that cause poor visibility that makes other successful methods more difficult to employ. A test approach was shaped in this collaborative setting with the stakeholders and includes the examination of new tools.

The testing of herbicides has been proposed by the Tahoe Keys Property Owners Association but also included in this test is innovative methods such as ultraviolet light and laminar flow aeration. While ultraviolet light and laminar flow aeration have shown some exciting results in other locations, their use has been very limited in small scales. This approach aims to test all these methods in standalone applications and in combination.

A massive data collection effort resulted in over one million data points that allowed them to understand the existing conditions that are necessary to analyze the potential impacts of the test project. In addition, a nutrient cycling model was built with this information to understand how nutrients are moving through the system.

Multiple workshops were held last summer obtaining feedback during the scoping period. They received over 300 comments with a broad support for a test approach. There were numerous comments that suggested physical modification should be considered as well as support for and against herbicide use. The boat back up station at the Tahoe Keys Property Owners Association west side continues to be used and is complemented by the bubble curtain and sea bins to prevent fragments from leaving the Tahoe Keys.

Slide five represents the proposed project by the Tahoe Keys Property Owners Association and was refined by that stakeholder input. The test project would be implemented over a three year time frame and is intended to test the initial treatment methods that are likely to achieve extensive weed reduction in a one-time application in that first year. It would then be followed up with maintenance and spot treatment methods in years two and three.

The initial treatments in year one is referred to as Group A methods that include specific aquatic herbicides, ultraviolet light, and the laminar flow aeration. Group B methods are intended to be follow up or spot treatment methods that can handle plots of weeds after the initial treatment. That includes some of the more traditional methods with bottom barriers where feasible and suction and hand pulling. The ultraviolet light can also be used in this application.

Those alternatives include using only non-herbicidal methods such as the ultraviolet light, laminar flow aeration, and a dredging alternative that would remove the substrate at the bottom of the channels. Lastly, there's the no project alternative which is status quo. The goal of this test is to

understand what methods are likely to reduce weed infestations and bring them to manageable levels, reducing the chance of re-infestation, and improved beneficial use of the Tahoe Keys such as water quality and recreation.

The control methods test would be implemented in 21 locations. They were selected to ensure that the test accounts for the inherent variability within the Tahoe Keys and to have that triplicate testing of methods to ensure a scientifically rigorous design. In total, the test area would be little over 41 acres.

In response to comments received, the non-herbicide alternative would be similar to the proposed project but removing the herbicide component. It would include the use of ultraviolet light and laminar flow aeration as the primary control (Group A) methods. The ultraviolet light uses a specific wave length that when plants are exposed, cell walls in the DNA of the weeds are damaged and result in the dying of leaves and stems. Laminar flow aeration which is being piloted at the Ski Run Marina with some promising results and then at a larger scale currently happening within the Tahoe Keys. It's intended to provide a consistent oxygen level from the surface through the upper layers of sediment. The sediment is often lower in oxygen levels, so if that can be increased, it is expected to break down that "muck" layer and result in fewer plants in the affected area.

The second alternative would use dredging as a primary means of control and would rely on excavation of the bottom substrate to remove the plants, roots, turions, and the organic "muck" layer. It could then be replaced with a more core substrate that may be less suitable for plant growth. The team brought in a Geo-technical expert to help craft this alternative because of the number of comments received during the scoping period.

During scoping they received several comments on the no project alternative and strong suggestions that they take a hard look at what that would mean to the rest of the Lake. The team conducted a detailed analysis that's not typically done for a no project alternative. In this scenario, the Tahoe Keys Property Owners Association would continue with harvesting, fragment collection, and other activities allowed within their existing approvals. The test would not take place, nothing would be learned, and would increase the time to address the long term solution to treating these weeds in the Tahoe Keys.

Mr. Norman, Lahontan Regional Water Quality Control Board said following board consideration of the Final EIR/EIS by both TRPA and the Lahontan Water Board, permits will then have to be issued by both agencies to implement the project. Lahontan is the Federal Water Quality Permitting lead and will also be subject to the California water quality requirements and permitting. Methods proposed that do not involve chemical discharges could be permitted with existing permitting mechanisms that the Tahoe Keys Property Owners Association have. These would be under the Lahontan's water discharge requirements that they're operating under now along with the Clean Water Act 404 and 401 permits.

It is the discharge of chemical substances that create some challenges and leads to more time to evaluate the project and get it permitted, specifically, aquatic herbicide discharges. The other factor that leads to the time required to evaluate and permit this project is Lake Tahoe's Outstanding National Resource Waters status for its outstanding ecological and recreational value. The regulatory agencies consider the Tahoe Keys Lagoons to also be an ONRW since they're connected to Lake Tahoe.

Those factors lead to the enhancement of permitting the environmental review requirements and as noted the chemical discharge brings in the federal water quality permitting in the form of a National Pollutant Discharge Elimination System (NPDES) permit requirement. Also, the Lahontan Basin Plan has a prohibition on the use of aquatic pesticides, so a prohibition exemption is required to jump that hurdle in terms of the permitting. Both the Lahontan Base Plan exemption and the NPDES permitting require an anti-degradation analysis. The policies and provisions state and federal anti-degradation provides the highest level of protection for ONRW's.

The requirements still have to be met to present a basin plan prohibition exemption for the discharge of aquatic pesticides including the California Environmental Quality Act analysis they're doing now. This CEQA has been triggered by the proposed discharge of aquatic herbicides. The applicant has to comply with the anti-degradation policies and will need to demonstrate the minimum discharge of chemical substances for an effective treatment, describe why non-chemicals measures have not effectively addressed the target weeds, and provide a peer reviewed, pre project biological monitoring, reporting, and mitigation program. These are just a few of the key requirements.

The anti-degradation policies require for ONRW's that there be no long term degradation of baseline water quality, but short term degradation is allowed within the aquatic herbicide application treatment areas. The current guidance for what constitutes short term degradation to baseline water quality is that degradation in baseline water quality is in weeks to months and not years. That will be a discretionary point of decision for the boards as to whether they feel the degradation predicted from the aquatic herbicide discharges are short or long term. That duration has been informed by the environmental review. In addition, a written anti-degradation analysis will accompany the basin plan exemption resolution and draft NPDES permit which will be available later this year or in January 2021. It will go through a similar public process with a 30 to 45 day public comment period. They'll possibly do a workshop with the Lahontan board on this. The draft NPDES permit and the other permitting documents would be adopted following approval of the Final EIR/EIS.

Mr. Good, Environmental Science Associates said like an environmental impact statement project, they've evaluated potential environmental effects for a broad range of resources from air quality to recreation and transportation. On this project, all the activities are proposed to be in lagoon waters. His presentation will focus on how they evaluated effects in the aquatic environment including water quality.

There were five steps in the approach to evaluating the water quality effects: First, they considered which water quality constituents could be affected by the project activities. Second, they put a lot of effort into looking at the existing baseline conditions. Third, they defined 13 specific potential water quality and environmental health issues that are evaluated in the EIS/EIR. For each of those 13 issues, they evaluated both direct and indirect effects. There's a lot of information available for public review that shows their work in detail on all these evaluations. There were five PhD specialists in different areas of aquatic science working on this project.

They started with a list of dozens of water quality standards that come from the TRPA thresholds and from the Basin Plan water quality objectives. For example, they say radioactivity couldn't possibly be affected by this project. They boiled it down to a list of ten constituents that could be affected by the proposed activities.

They collected data nearly every day for six months in the lagoons and that included characterizing all the physical, chemical, and biological components of these lagoon ecosystems. It was important to gain a thorough understanding of how the lagoon ecosystems function to better assess what the effects might be of the proposed activities.

These baseline data collection activities are described in Appendix E. They included continuous 15 minute data collections of water temperature, dissolved oxygen, and pH at 13 different stations throughout the three lagoons both near the surface and the bottom. There's a lot of variability of water quality in the lagoons so it's important to characterize both how the water quality is during the daytime when photosynthesis is active with big beds of aquatic weeds and then again at night when the photosynthesis shuts down. It's also important to characterize the difference between water quality near the surface and bottom particularly during periods of stratification which can be different and have an effect on other water quality characteristics. They had a rain gauge running around the clock during that period and were also monitoring the water level in Piezometers that were installed around the perimeter of the lagoons. Twice a month, they measured the depth to ground water in the wells and conducted water quality profile measurements to look at conditions at one foot intervals from the surface to the bottom. That is important for documenting the amount of water circulation or stratification that was happening which has a large bearing on other water quality components. Once per month, they collected water samples in the lagoons and had a laboratory analysis done for nutrients and chlorophyll. Several times during that six month period they collected ground water samples for lab analysis for nutrients and measured turbidity in the lagoons. In June and October, they did the fish and macroinvertebrates surveys. July was the one-time sediment sampling and when the TRC conducted the terrestrial biology and wetland delineation surveys.

The issues around water quality are in two different sections: Section 3.2, Environmental Health that has a lot to do with beneficial use protection. These included whether the workers applying herbicides would have health issues related to the herbicides. They also addressed the persistence or how long the herbicides might be present in the lagoon waters after application. They considered whether drinking water supplies were protected and looked at the toxicity to non-target plant species and animals. They looked at aluminum toxicity because of the aluminum that's present in the sediments of the lagoons and also considered whether the proposed activities might increase the occurrence of harmful algal blooms.

Water quality, Section 334 of the EIS identified seven different issues that are all related to whether there would be compliance with the water quality standards for these specific water quality constituents that had the greatest potential to be affected by the project.

The fourth step in evaluating direct and indirect water quality effects is starting with a description of the methods and assumptions for each one of those 13 issues which are summarized at the beginning of those environmental health and water quality sections. They focused on protecting the lagoon receiving waters because the water quality standards apply in

the lagoons as well. They can't rely on any dilution in the body of water in Lake Tahoe. If the standards are met within the lagoons, it will be pretty safe that the water quality would be protected in the main body of Lake Tahoe. The evaluations boiled down to three key questions: How long would herbicide chemicals be detectable? Would the water quality standards be met? and would beneficial uses be protected?

How long would herbicide chemicals be detectable? They started with the aquatic pesticide application plan that was prepared by the Tahoe Keys Property Owners Association in 2018. They eliminated penoxsulam from the list of herbicides that were proposed because it requires multiple applications to be effective and it has by far the longest persistence in the water. Second, they considered the application rates that TKPOA had proposed based on their mesocosm study and literature review. It was decided to conservatively base their evaluations on the maximum allowable application rates. They also needed to research the lowest attainable laboratory reporting limits. Through analysis of these herbicide chemicals they determined that one part per billion is the lowest reliable reporting limit. Using those maximum application rates, and assuming no dilution they came up with ranges of persistence for each of the herbicides. It was from 6 to 36 days for Florpyrauxifen-benzyl and up to less than 120 days for Triclopyr. It will be up to the Lahontan Water Board to make a determination on how these estimated persistence periods fit with the anti-degradation requirement that those herbicides cannot be detectable for more than weeks to months and not years.

Would water quality standards be met? The 2019 baseline survey showed that the water quality standards are not met even before this project for at least six of the water quality constituents. The question is would these water quality conditions get any worse for water quality compliance from any of the activities of the control methods tests or the alternatives. There were several considerations on their work to answer these questions. They looked at the timing and the extent of the activities. Second, they looked at protective measures that were built into how each of those weed control activities would be performed. Third, they considered whether real time monitoring of water quality could be used during implementation of these activities to adjust the methods or pace of the work to assure that water quality standards are met. They also prescribed additional mitigation measures to get a greater safety factor that water quality standards would be met. They considered literature including monitoring information from other similar projects. All of these considerations went into developing their expectations for what the extent and the duration of effects could be.

For turbidity they expect short term increases would occur during bottom barrier removal. Under the dredging alternative it would be during suction dredging or discharge of the dewatering effluent. The turbidity could be minimized or controlled by using turbidity curtains at the dredging sites and implementing spill control and treatment of dewatering effluent. Turbidity monitoring can be conducted in real time to adjust those activities as needed to meet turbidity standards.

For dissolved oxygen they found no concerns for direct oxygen demand from the herbicide products. As far as the oxygen demand from decomposing plants, those effects could be minimized by treating the plants when they're small so there's less biomass that's decaying. Second, by deploying aeration during decomposition of the plants which was one of the

mitigation measures that was added in. For pH there was also no concerns for direct pH changes from herbicides primarily because small quantities of products are applied compared to the volume of water at the test sites.

With phosphorus and nitrogen there was an in depth evaluation that was based on the nutrient loading and cycling model that can be found in Appendix F. Some of the key findings were that most of the nitrogen and phosphorus in the lagoons is not in the water, it's in the plant tissue.

Plant decay becomes the biggest nitrogen and phosphorous source in the main lagoon. It's a different situation in Lake Tallac where there's a much larger watershed area with stormwater runoff and more ground water input. Together those external sources are greater than the internal sources from weed decay in Lake Tallac. They've found that the algal productivity is correlated in the main lagoon to the concentrations of nitrogen and phosphorus in the water. However, that was not the case in Lake Tallac because the tannins in the water inhibit algal growth. In terms of the concern of an algal response to weed control is probably more important in the main lagoon than it is in Lake Tallac. There are ways to minimize this temporary increase during the weeks of plant decay. It's important to treat those plants when they're small to minimize the volume of plant decay. Another mitigation measure is applying Phoslock to inactivate phosphorus. Phoslock is a bentonite clay product and contains a rare earth mineral called lanthanum that binds with phosphorous. The Phoslock will bind to the phosphorous molecules as it moves down the water column. The phosphorous then remains bound in the sediment where it's not available for algae blooms for aquatic plant growth.

Would beneficial uses be protected? In terms of impacts to human health from herbicides, product registration and safety data sheets showed that there's no potential to exceed drinking water standards. There's also no acute risk or chronic exposure to workers applying the chemicals. Also, the containment and protective measures and the monitoring and contingency plans in the aquatic pesticide application plan provide a safety factor that they believe will protect people. In terms of the potential or increased harmful algal bloom occurrences at these test sites during the nutrient release from decomposing plants; the aeration system would create circulation so the water wouldn't be as stagnant and warm, therefore, it would be less conducive to algal blooms. The phosphorous activation (Phoslock) would effectively starve the algae of an essential nutrient. Since 2017, the Tahoe Keys Property Owners Association has undertaken a testing and public notice program. If during the course of test there was cyanobacteria identified, it would be sampled and depending on the level of those toxins, warning signs and other public notices would be issued.

Potential impacts to non-target aquatic life from the herbicides was informed by product registration and safety data sheet information. There are also the 2019 baseline surveys on what aquatic life is present. The US Environmental Protection Agency risk assessment methods were used for this part of the evaluation. One of the most important protections is to conduct pretreatment surveys and that adjustments can be made to the treatment area boundaries to protect non-target plants. They would expect there would be some loss of non-target plants but the overall impacts to those plant communities would be negligible.

There are some other potential impacts to non-target aquatic life. Some plants and invertebrates would be burned by ultraviolet light or buried by bottom barriers. They do expect

at the community level those impacts to be minimal. Fish and other mobile organisms would swim or crawl away as soon as they sense the activities in the test sites. Deoxygenation during plant decomposition would be managed by aeration. The potential for aluminum toxicity to fish would be managed by controlling sediment disturbance by ongoing real time turbidity monitoring. The rapid recolonization and long term benefits to native plant and animal communities from aquatic weed control would be tested in more than 20 percent of the lagoon areas. They expect that it would create a net benefit for this area of beneficial uses of the nontarget aquatic ecosystem.

Mr. Zabaglo said the anti-degradation analysis is a component required by the California Environmental Quality Act and the Lahontan Regional Water Quality Control Board if any aquatic herbicides are to be used. It was originally forecasted to release this document concurrently with the draft document. Because the anti-degradation analysis requires technical information that is presented in the draft documents, it will be released later in the process. The anti-degradation analysis summarizes the information in the draft document so a regulatory determination can be made about the duration of impacts. It requires review by the State Board and the Environmental Protection Agency which will occur over the upcoming months. There will be a separate comment period for this.

Mr. Good and a team of scientist conducted an independent analysis that looked at several natural resource areas. What's being reported by them is if a control methods test can be implemented with careful protective measures, impacts are expected to be less than significant. Some of those protective measures identified in the analysis is that regardless of the methods approved, treating the weeds at the right time is critical. The treatment needs to occur early in the growing season when the biomass of those plants is low and use aeration which would help prevent oxygen depletion and excessive nutrient release and potentially the formation of harmful algal blooms. Real time monitoring should also occur in order to make adjustments during implementation to ensure standards are being met. Pretreatment surveys would be completed to avoid non-target plant communities and having appropriate test sites. What they're trying to understand in this analysis of this test, is can all those proposed tests or methods be tested. They would like input on whether those potential impacts have been addressed adequately, are the protective measures sufficient, and is the range of alternatives reasonable?

The DEIR/DEIS can be found at <u>www.trpa.org/document/projects-plans/</u>. The 60-day comment period ends on September 3, 2020. Comments can be made via email to <u>www.TahoeKeysWeeds@trpa.org</u> or mailed to or mailed to Dennis Zabaglo, Aquatic Resources Manager, P.O. Box 5310, Stateline, NV 89449.

The anti-degradation piece will be available later this year and the final document response to comments will also be towards the end of the year. The possible board certification from the Lahontan Regional Water Quality Control Board and TRPA's Governing Board will be in the Spring of 2021 with potential implementation of a test project in the Spring of 2021.

Presentation can be found at: Agenda-Item-No.-V.A-Tahoe-Keys.pdf

Commission Comments & Questions

Mr. Hill asked if there's a better time of year to apply the ultraviolet light and herbicide treatments. If it is during the summer, how is that coordinated with the boating activities in the lagoons.

Mr. Good, Environmental Science Associates said herbicide treatment needs to occur in the Spring around late May to early June to hit those weeds when they're small. That's so there is a limited number of dead weeds that are decaying and creating issues potentially with nutrient release and oxygen demand. For the ultraviolet light treatments there is two to three cycles of treatment that could be used. There would be a spring, summer, and potentially a fall treatment. The laminar flow aeration would be started in the Spring and run continuously through the three year test period.

Ms. Caringer said the test areas would be isolated from any boat traffic during the treatment period.

Mr. Good, Environmental Science Associates said there are some things that would interfere with boat navigation. There would be several double curtains and turbidity barriers that would interfere with boat navigation during that period when the herbicides were detectable in the water. That prevents migration of the chemicals into the large area of the main lagoon which connects to Lake Tahoe. If the dredging alternative were selected there would be barriers, turbidity curtains that would be used at each of the test sites to control how far the turbidity effect would reach during dredging.

Mr. Letton said most of his primary questions were answered because he was curious about the reference to the aquatic vegetation when it's in a small size or life stage and the timing of the different treatments. He asked if they've considered lake elevation changes. Also, what about the hydrology and the inputs to the Tahoe Keys and their lagoons in terms of the incoming feeder streams? If we do receive higher than expected flows as we move towards treatments, what is the contingencies, and would it effect the efficacy of those treatments and containment?

Mr. Good, Environmental Science Associates said the driver for the main lagoon water levels is that connection to Lake Tahoe. Another reason to do herbicide applications in the Spring is that there is a net flow of water coming from Lake Tahoe into the lagoons which keeps the water backed up at the test sites and limits the migration of the chemicals. The proposed test sites are at the east end of the Lake so that they would not be in the path of the in flow coming from that stream. The locations and adjustments to sites is something that could influence the timing of when applications would happen. You want to hit the plants when they're are small but also want to have favorable hydrology.

Mr. Grego said he's concerned about the public health impacts. For example, if you were to dilute the herbicides by 10,000, would it be safe to drink?

Mr. Good, Environmental Science Associates said he doesn't have the calculations at this time, but the answer is yes. If you look at the approved label rates for each of these herbicide products, those are rates that if they entered a drinking water supply there wouldn't be a concern for human health. There's information in the environmental document on the modes of action for these chemicals. They are designed to target functions that are specific to the plant kingdom and not the animal kingdom. If they attack a function of plants that humans and other animals don't have then they won't have that kind of effect at any concentration.

Mr. Callicrate thanked everyone for an exceptional presentation and appreciated all the aspects being discussed. This is an exciting move forward for all of the work that's been done over the past decade plus. There's been a lot of talk about the herbicides and is heartened to hear that the after effects aren't going to be as pronounced as some have expressed. He's been in the area for 35 years and this has been an on going issue with the invasive species. Tackling the Tahoe Keys is probably most important. He feels as the Washoe County representative that we can move forward cautiously.

Mr. Young said he doesn't have any issues with moving forward but sees an opportunity to do more studies. There's been a lot of work done to what they think is going to happen but let's do it and over the next several years make sure that we're studying what is happening.

Public Comments & Questions

David Blau, Board member and Program Chair, League to Save Lake Tahoe said they've been a key player in the stakeholder group. They helped design and fund the bubble curtain and the laminar flow aeration technology. He has just under 40 years' experience leading and preparing environmental impact statements and environmental impact reports. The draft document is very thorough and comprehensive. They appreciated the no action alternative which is often dismissed readily in an EIS/EIR. These authors took it all the way through as a distinct alternative. It has the greatest significant adverse impact of any alternative to do nothing and continue the status quo. The League's mission is to protect the Lake ecology. This makes a compelling case for action and not delaying.

The proposed project concludes that there's less than significant impacts to environmental health, water quality, and aquatic biology. They do have questions about Action Alternative One, the nonchemical alternative being the environmental superior alternative. The rationale is basically to test the herbicides using turbidity curtains and blocking boats from the Tahoe Keys for about three to four months in the Spring of year one. They feel that it's a small price to pay for a Tahoe Keys boater when they are going to have years and years of cleaner channels to navigate. However, they are not thrilled about herbicide use and have never endorsed it but do want to see all tools tested. They don't feel Alternative Action One has enough tools in the tool box. The Group A tools are laminar flow and ultraviolet light. As shown, ultraviolet light is done from a barge down the center of channels. There's 900 piers and docks in the Tahoe Keys and the ultraviolet light cannot get under those with the ultraviolet light and it doesn't kill the roots or the turions. Laminar flow will probably be best as a spot treatment. They're questioning whether Action Alternative One is robust enough to solve the problem as we cannot afford to lose three years.

The objective in the document is to reduce the plant biomass by 75 percent. The risk is that they waste three years if all the tools aren't tested.

<u>Elise Fett</u> thanked Mr. Zabaglo about mentioning the encouraging results that the laminar flow aeration is having at Ski Run Marina. While being used in a portion of the Tahoe Keys, but that's only less than six acres which is less than 3.5 percent of the Keys. The laminar flow aeration has been an option that she's presented to staff since 2017. This is something that can run all year long, but it didn't run in the Tahoe Keys last winter. We could have been using some of these tools more aggressively over the past 40 years. This is the first time to try something in large scale and suggested trying the non-herbicide alternatives in the proper scale first before trying the chemical

ALT-124

ALT-125

method. There's scientific knowledge in Minnesota about aquatic weeds mutating and getting stronger when they are subjected to aquatic herbicides.

<u>Gavin Feiger</u>, League to Save Lake Tahoe said the Tahoe Keys are ground zero for aquatic invasive species and there's almost 100 acres of infestation that has spread outside of the Keys into the Lake. The tools we have know have not proven sufficient for the complexity of the infestation. The League did pay for the laminar flow aeration and bubble curtain. This proposal isn't for a full scale project, the League isn't supportive of going all in on herbicides or any of these methods without doing a test. This is a three year test. The first year would have a few months of herbicides followed by 2.5 years of non-chemical methods. They've seen herbicides that have been effective and also not effective in other places but haven't seen degraded water quality due to herbicides in other places. There's no time to delay or spend time on unproven methods. They supported this test and the phasing proposed. They are not supporting the use of herbicides before seeing the anti-degradation analysis but based on the environmental review, they are supportive of this test project.

ALT-126

AWM-61

CYB-23

Trish Friedman I am very much against the use of herbicides. It's inappropriate to put them anywhere near Lake Tahoe. Why fertilizer hasn't been banned in the Tahoe Keys which is contributing to the weed growth in addition to the harvester that's spreading thousands of fragments of weeds in the lagoons and Lake Tahoe. Cyanobacteria was left out of the environmental document and is an important part of this. It's not a good idea to add herbicides to cyanobacteria blooms. She said there is information missing on cyanobacteria from the environmental document. There needs to be a comprehensive study of cyanobacteria in the lagoons, including tests for all of the toxins and beta-Methylamino-L-alanine (BMAA). A comprehensive study of the aerosolized toxin BMAA from the cyanobacteria blooms are airborne. A comprehensive epidemiological of all the people who have died in the Lake Tahoe area from motor neurone diseases. She called the public health department and they have no record of these deaths. There should be a comprehensive study of the dogs and animals that have died from swimming in the lagoons, a study of the amount of fertilizer and Round Up in the lagoons, and a study of all the potential interactions between cyanobacteria fertilizer and Round Up in the lagoons. As well as the interaction with herbicides, and a list of all the chemicals in the lagoons that the homeowners have used on their properties over the past six years and how they react with cyanobacteria. People have died from Parkinson's and ALS at this Lake and no one is paying attention. Paul Alan Cox, Ph.D., Brain Chemistry Labs in Jackson Hole, Wyoming made a definitive connection between cyanobacteria blooms and motor neurone diseases. Jim Haney, Department of Biological Sciences at the University of New Hampshire has captured these aerosolized BMAA toxins around these blooms. This needs to be studied before anyone thinks about using herbicides in Lake Tahoe. She's the one who introduced Brian Kling, CLEAN FLO for the laminar flow aeration four years ago. You need to give him more time, it's taken 40 years for these weeds to grow and may take another three to five years to get that laminar flow aeration working.

Commission Comments & Questions

Mr. Guevin asked if there was any evaluation at what could happen if all these quantities of chemicals were to spill. What is the danger of using and storing these in larger quantities?

Mr. Good, Environmental Science Associates said there's more information in the aquatic pesticide

12

application plan that's available on <u>www.TahoeKeysWeeds@trpa.org</u>. It provides more detail about the requirements for herbicide appliers and their requirements for licensing, storing of products, etc.

Mr. Ferry asked if mutation and plant adaptations will be reviewed if they decide to move forward with herbicides.

Mr. Good, Environmental Science Associates said the experience in other places has been from repeated applications of herbicides over the years. This project contemplates a single application. In this method test there's not going to be an opportunity for a resistance to be built up through a mutation because it's only going to be a one time treatment. If the proposed project is approved, permitted, and performed and the herbicide products are determined to be acceptable and considered for a long term project to address the entire Tahoe Keys area, then that becomes more of a question because then you're going back for more of a full scale treatment.

B. Proposed amendments for TRPA Code of Ordinances Chapter 61, Section 61.3. Vegetation Management and Forest Health

TRPA team member Ms. McIntyre provided the presentation.

Ms. McIntyre said the code update is focusing on facilitating increased pace and scale of vegetation management while promoting forest health, community safety, resilient landscapes, and protecting the environment. The majority of code amendments to date have been to clarify the language and make this section of the code more user friendly.

Section 61.3 covers a few different areas including protections for old growth, stream environment zones, wildlife habitat, sensitive plant species, and historical resource protection. The recommended areas for amendment and code language have been developed collaboratively through conversations with partner agencies primarily through the Tahoe Fire and Fuels Team, including the Forest Service, Nevada Division of Forestry, California Tahoe Conservancy, and Lahontan Regional Water Quality Control Board. These amendments are focused on updating the code language to reflect current practices, streamlining where possible, and are mostly clerical edits.

The first recommended area of amendments focuses on the historical and cultural resource protection. These are minor edits for streamlining and clarifying language. Slide eight summarizes recommended changes.

The next area of recommended amendments included standardizing various references throughout 61.3. For example, if you look at the subsections that refer to old growth tree removal, the current code language varies between referencing cut versus felled, treated, or removed. Through conversations with the partners it was more appropriate to standardize throughout all those subsections as felled, treated, or removed. In terms of removal of old growth for ecosystem management goals, it currently references "qualified interdisciplinary team" but they feel that it would be more appropriate if it referenced a "qualified forester" as that is the person that will be on the ground with the localized expertise to make those decisions. Summary of changes can be found on slide 11.

The third area for potential amendments focuses on tree cutting within stream environment zones. Currently the Code of Ordinances allows for just "over snow" activity. Again, through conversation with partners, they feel it's appropriate to open that up to not only just over snow but also frozen ground operations with frozen soil. This language was in consultation with the Forest Service and the Lahontan Regional Water Quality Board. Operations over frozen ground with certain criteria are more stable than snow and less environmentally impactful. Summary of changes can be found on slide 14.

The last area of potential amendments is innovative technologies and equipment used in stream environment zones. Currently tree cutting within stream environment zones involving innovative technologies need to be piloted and proven environmentally safe and approved by TRPA every time a partner does it. Again, through collaborative conversations it was important that once an innovative technology is properly demonstrated to TRPA, piloted, and proven environmentally safe that it should become a viable option for all partners in the Basin or permittee's going forward. Summary of changes can be found on slide 17.

Presentation can be found at: Agenda-Item-No.-V.B-Forest-Health-Code-Amendments.pdf

Commission Comments & Questions

Mr. Young asked what TRPA considers a "Qualified Forester." He asked for further information on the statement about the qualified forester replacing the qualified interdisciplinary team. Was there an issue with having more than one person addressing those issues? He's concerned if it's appropriate to have just one person on that particular issue.

Ms. McIntyre said TRPA has a definition for a qualified forester. As written, it encompasses both qualifications that are needed for the State of Nevada and California because they differ. To her knowledge, when decisions are made by the qualified interdisciplinary team, it is generally being made by a qualified forester. It's the qualified forester making decisions around old growth removal for ecosystem management goals.

Mr. Grego asked are the stream environment zones and tree removal being referenced in today's presentation the same as the sloped areas where there is a lot of tree accumulation on the West Shore.

Ms. McIntyre said yes, these code amendments will apply Basin wide and apply to areas of stream environment zones on the West Shore on slopes that are less than 30 percent. The question may be more about the potential code change to allow mechanized equipment on 30 to 50 percent slopes. That analysis is separate and still underway.

Mr. Letton asked what has changed since the Code of Ordinances was originally written and comparing that to the condition that we have on the ground now to determine that there was a need to update this.

Ms. McIntyre said the majority of this stems from the Multi-Jurisdictional Committee that came together to look at how we ensure that regulation in the Basin is not hindering or adding to

potential wildfire risk after the Angora Fire. They worked with the Tahoe Fire and Fuels Team to understand what the implementors and other regulatory agencies needed. That then helped them to identify those areas where regulation can be clarified or streamlined to not only protect the environment but also ensure we're not getting in the way of treatments for fire risk mitigation or environmental protection.

Mr. Letton said there's been a lot that's been learned over the decades and particularly in the recent decades about the role that stream environment or riparian zones play in fire ecology and behavior. We've learned that those zones historically burn with some level of frequency. As a result, mitigated the abundance of fuel loading. We either turn fire to those zones or go in there and manage them appropriately so we can have the type of ecological function we're looking for and help with the overall objective of different fuel treatments across the landscapes. He supported the proposed code changes. He also asked who TRPA staff coordinated with at Lahontan and if they discussed whether or not this particular code change would then require Lahontan to make modifications to their timber waiver.

Ms. McIntyre said she worked closely with Doug Cushman, Adam Henriques, and Jim Carolan. Mr. Carolan used to sit on the regulations working group.

Mr. Letton said the objective is to increase the pace and scale of projects and Lahontan wants to do their part to ensure that their permitting helps facilitate that.

Mr. Hill said regarding the frozen ground work, was the intent to do work within the stream environment zones or was it aimed at using these areas as crossings to get to other parts of the forest treatments.

Ms. McIntyre said the frozen ground amendment would be to do work in the stream environment zones. Currently, tree removal is allowed in stream environment zones over snow. This amendment would allow tree removal over snow and frozen ground with frozen soil conditions.

Mr. Hill asked what the process was to approve the innovative technologies.

Ms. McIntyre said for example, the Heavenly stream environment zone pilot project is a good example where they had years of monitoring data that they needed to present to TRPA and the Lahontan Regional Water Quality Board to show that the technology wouldn't have long term or adverse environmental impacts. She can provide further detail on the process offline.

Mr. Marshall said what they're trying to do is not to have to go through that long intense process again when another proponent wants to use the same technology. So, it will be permitted the first time if it's allowable with all the bells and whistles. Then the next time, they can allow other people to utilize that technology.

Ms. Carr said there are numerous things she likes about these code changes and appreciated staff addressing these. She referred to page 24 of the staff packet in regard to vehicle restrictions where it discusses that Regional Waterboard granting an exemption from the prohibition. That would only apply on the California side, what about a process in Nevada? There is a variance committee in Nevada's Forestry law and wonders if that has a parallel? Also, if we're also talking

about prohibitions on discharges within a stream environment zone which to her indicates that we might need input from Forestry under the variance committee, but we also may need input from the Nevada Division of Environmental Protection on potential permitting for either temporary discharge permits or a working in a waterways permit. That may be comparable to what is being stated about the Regional Waterboard.

Ms. McIntyre said the inclusion of the Regional Waterboard stating it as "or" means that it can apply but it doesn't apply everywhere. Where the Regional Waterboard has granted an exemption then that applies.

Ms. Carr said the statute that should be reviewed for that is the Nevada Revised Statute 528.053. It also talks about needing variances when you're doing work near a water body within 50 feet. It sounds like those exemptions in the Regional Waterboard process are probably similar to the variance committee requirements. She would like to see these proposed code amendments move forward today and suggested that the language be refined to have a recognition of comparable processes in both states before it goes to the Governing Board.

Mr. Marshall said staff can make the reference broader to encompass both the California and Nevada sides of the Basin.

Ms. Carr said it's also important to recognize that water protection permitting is to be required in these processes as well.

Ms. Carr referred to page 25, new section (ix), innovative technology. It appears that there would be a similar need to wordsmith that based on requirements and prohibitions deemed necessary by the Regional Waterboard and/or a Nevada entity. The second item is on page 25, section (viii). She asked staff to review the new language: "A narrative for implementing corrective actions show monitoring determine such corrective action is necessary." It appears that there may be words missing in this statement.

Mr. Marshall said there's a missing "and" in between determine and such.

Ms. Carr referred to page 32 of the staff packet, Historic and Cultural Resource Protection. Her understanding is the first part looks like it's talking about historic resources located within the project area shall be flagged and avoided. This is the existing language and looks like things that we know about in Section A. The eliminated Section B seems to be about things that we discover along the way. It appears that it's handling two different things with the first being items we already know about when we start the project and then B is how to react to items we didn't know about. What is the difference between the intent of those two paragraphs?

Ms. McIntyre said the deletion for number two is essentially covered in Chapter 67. The idea was that did it need to be included here if they're trying to eliminate redundancy and have it be user friendly. It's whether we need to include that reference if those are already stipulations that someone would have to meet if they were doing historic resource protection.

Ms. Carr said as long as the proponent knows that Chapter 67 rules over anything else.

Public Comments & Questions

None.

Commission Comments & Questions

Steve Teshara said he's been tracking these proposed code amendments through TRPA's process and suggested that the Advisory Planning Commission address Ms. Carr's comments today and keep this process moving forward. There's been a lot of work put into this and would like to see her concerns addressed today without having to bring this back next month.

Mr. Marshall said the first motion can be made with the understanding that the findings will also be made for an amended language that includes: 1) Making Section 61.3.3.C.1 and the corresponding Subsection (ix) apply to waivers or exemptions authorized by the appropriate state entities of Nevada and California; 2) Add the word "and" on page 25, Subsection (viii).

Ms. Carr made a motion to recommend approval of the Required Findings, as described in Attachment B, including a Finding of No Significant Effect, for adoption of the Code of Ordinance amendments as described in the staff summary and amended with suggested changes to Section 61.3.3.C.1, Subsections (viii) and (ix) as summarized by Mr. Marshall above.

Mr. Grego seconded the motion.

Ayes: Mr. Alling, Mr. Booth, Mr. Buelna, Mr. Callicrate, Ms. Carr, Mr. Drew, Mr. Ferry, Mr. Grego, Mr. Guevin, Mr. Hill, Mr. Letton, Mr. Plemel, Mr. Hitchcock for Ms. Roverud, Ms. Stahler, Mr. Teshara, Mr. Smokey, Mr. Young

Absent: Mr. Drake Motion carried.

Ms. Carr made a motion to recommend adoption of the Ordinance 2020 -___, amending Ordinance 87-9, to amend the Code of Ordinances as shown in Attachment A will additional amendments to be determined in Section 61.3.3.C.1 and Section 61.3.3.C.1.c.ix to either add referential language to the State of Nevada's processes or amend as such to indicate the applicability basin wide and not just to the Regional Waterboard.

Mr. Guevin seconded the motion.

Ayes: Mr. Alling, Mr. Booth, Mr. Buelna, Mr. Callicrate, Ms. Carr, Mr. Drew, Mr. Ferry, Mr. Grego, Mr. Guevin, Mr. Hill, Mr. Letton, Mr. Plemel, Mr. Hitchcock for Ms. Roverud, Ms. Stahler, Mr. Teshara, Mr. Smokey, Mr. Young

Absent: Mr. Drake Motion carried.

C. Draft State Route 89 Recreation Corridor Management Plan

TRPA team member Mr. Middlebrook provided the presentation.

Mr. Middlebrook said the State Route 89 Corridor is home to many recreation opportunities for visitors, residents, and cultural sites that offer a variety of activities along the Camp Richardson corridor, Emerald Bay, Washoe Tribe, and resident's in the Meeks and Rubicon Bay neighborhood We're all too familiar with the typical scene of an average summer day through Emerald Bay and this corridor with cars parking often times partially on the highway and parking in no parking zones on dirt which leads to erosion and fine sediment harming the lakes clarity.

This corridor plan is following the corridor planning framework that was first developed for the State Route 28 corridor which has had so much success. Through the Bi-State Consultation on Transportation over the past two years a corridor planning memorandum of understanding was signed by the Basin partners in order to memorialize this process and move forward. They are now working on the State Route 89 Corridor plan in addition to that the Main Street Management Plan, the Resort Triangle Plan, and the US 50 East Corridor Plan which are all in various stages of progress.

The corridor plans fit in the implementation vehicle of the Regional Transportation Plan. The recommendations outlined in the State Route 89 Corridor Plan will be built into TRPA's Regional Transportation Plan. This corridor plan is a joint project among many partners and individual agencies and partners will be taking their own actions in order to integrate recommendations from this corridor plan into their own planning process. For example, the Tahoe Transportation District is adding the recommendations of the transit into their short and long range transit plans, the Forest Service is implementing these recommendations and looking at how they do their concessionaire permits, forest plan, etc.

Visitation and demand for recreation in this corridor has exceeded infrastructure and it's impacting transportation systems, the visitor experience, and the environment.

There's been an extensive amount of outreach for this corridor plan over the past 2.5 years. In 2018, they completed 15 days of data collection, there's been dozens of meetings with agencies, businesses, nonprofits, homeowner associations, and homeowners throughout the corridor. They did an online survey with 1,300 responses. There were two in person open houses and two of three webinars have been done. The webinars have had over 325 viewers, the email list has over 950 contacts, and today is the ninth presentation on the draft plan since it was released last month.

The vision for the corridor overall is to preserve an icon by increasing the travel choices for those who want to reach the destination. It's all about balance, they need to balance infrastructure and operations, natural and cultural resources, environmental quality, and anticipated visitor experience. It's also about interconnected strategies. That's the success they've seen through the corridor planning framework. It's not just talking about a transit route to Emerald Bay, or a parking reservation system, this is a combination of all of these working throughout the corridor so when they are layered on and connect them there are multiple benefits, more bang for your buck, and achieve the changes wanted. You cannot add a transit route and not restrict parking and expect that transit route to offset traffic and congestion.

To do this, they've started at the base of the recommendations by developing a transit framework. That framework is the basis on how they can plan in the future for moving people

ADVISORY PLANNING COMMISSION August 12, 2020

around in different modes. As part of this transit framework, they tested four different alternatives. The auto dominant alternative is today's visitation. The majority of people are arriving to the corridor by vehicle and then it goes to the envisioned car free future. This is where anyone visiting a recreation site within the corridor would arrive by either transit or by bike. They tested two scenarios in between which were the plan ahead visitors that has around a 50/50 split between modes and the savvy visitor who is more of a transit and bike mode. They looked and evaluated three transit routes that would connect the corridor to both north and south shore. When they tested those alternatives, they looked at existing visitation patterns for an average summer day based on 2018 visitation. The results varied widely between the four options (slide 12). In the auto dominant scenario that shows that while you could theoretically move that amount of people through, there would have to be a large number of parking lots within the corridor and that doesn't achieve the goals of reducing congestion, traffic, and preserving the environment. On the other hand, looking at the envisioned transit only car free option, while this would greatly achieve the environmental goals and reduce auto dependency, if you look at the 2045 projected buildout, there would need to be a bus going by a stop every two to three minutes and a fleet with spares of 124 buses which is not feasible in terms of financing and operations for running a system. If there's a bus every two to three minutes, is that really better than a car? If you look at the second one from the left on slide 12, it had a 50/50 split of mode share provided balanced between some feasibility and achieving the goals. Taking a step back, they still needed to look at what else needs to be done to move visitors around this corridor more efficiently.

Muir Woods was one of many case studies looked at around the country. When they implemented their transit and parking reservation system, they were able to reduce their average peak visitation demand by 45 percent. Majority of people are in Emerald Bay between 11:00 am and 2:00 pm during a summer day. Through parking management strategies and transit, you can shift those visitors over time. The assumption made for this planning purpose is that they were able to reduce the peak demand for Emerald Bay by 35 percent. They realized that they won't get everyone to that average because more people still want to go to Emerald Bay during the day and not necessarily early day or late evening. They recognize the reality of what people want from their visitor experience but also use the tools to spread that visitation out to reduce the demand on that transportation system at peak times.

To build the framework of the corridor starting with the first phase of the transit framework would be a pilot service from the existing Taylor Creek Sno-Park to Emerald Bay. This would be a fleet size of three with spares. The Tahoe Transportation District already has two buses that can serve this route, leaving one spare to be purchased. The projected fleet cost doesn't include any infrastructure needs such as an expanded yard for TTD to store the buses. Not included in the infrastructure cost is to have these buses be electric or alternative fuel in the future. This is similar to what is operated for the East Shore Express and would result in 7,500 fewer cars in Emerald Bay every summer month. With the interconnected strategies this is not as simple as just starting a bus route. They need to ensure that they do their parking management strategies with real time information. It would also utilize the Taylor Creek parking lot with the potential to expand and realize the Washoe Tribe's goal of having a cultural center at that location.

The second phase starts to build out those transit connections more to the North and South shores and getting people on alternate modes of transit before they get to the corridor. The idea of the water taxi would ideally be a public private partnership. Camp Richardson and Homewood

Marinas have both expressed interest in operating and expanding their water taxi services to the West Shore. With this expanded transit they are adding a route that leaves from Sugar Pine Point to Emerald Bay. You're talking about moving 29 percent of people by transit down to 66 percent auto mode share and 25,400 fewer cars in the corridor every summer month.

The final phase is expanding transit availability and implementing more of those infrastructure projects that help with the efficiency and at full build out it could reduce auto use by almost 60 percent within the corridor or 37,400 fewer cars in the corridor every summer month. While they do focus on the transit model with those summer months when they know that transit is going to be operating, the plan does accommodate and plan for the shoulder and off seasons including winter with back country skiing access and the availability of parking. Also, years such as 2014/2015 when there was not a lot of snow, there are still visitor's that still go to this corridor to go to the beach and Emerald Bay. As they move forward in the future especially under climate change, they'll see a longer seasonal demand for summer and non-winter activities through this corridor.

Layering on top of the transit framework is a set of overall corridor recommendations that again help everything work. Those include completion of the Tahoe Trail which is the paved path around the Lake. The transit includes restricting roadside parking throughout the corridor. One of the biggest challenges is that the parking spills over onto the highway. They've also explored congestion management solutions through Jameson Beach. There's also consideration of the winter and off season access. They understand that anything that they recommend needs to come with a conversation around increased operational resources and ensuring that the management approach is coordinated amongst the partnership. The success for State Route 28 planning process and continued success in implementation is that they've had that core collaborative team in place throughout.

They've been looking at this corridor in five segments: Pope to Baldwin; Emerald Bay; Rubicon; Meeks Bay; and Sugar Pine Point. They all have unique land use, recreation, and travel patterns. While the recommendations zoom in based on each of these segments, they understand that all of them need to communicate across the entire corridor and to the neighboring corridors to the north and south.

In the Pope to Baldwin segment it is all about managing congestion. On a busy summer day, the traffic can extend from this corridor all the way into town. They're looking at addressing those causes through an adaptive management context. It's about connecting those parking areas through the Forest Service historic sites, so people don't have to turn on and off the highway. It's about increasing the ability of people to enter Pope Beach and Camp Richardson more smoothly and quickly and expanding bicycle and pedestrian facilities.

During the corridor planning process, they focused on Jameson Beach road intersection which data and stakeholders indicated as a major cause of congestion. There was a pedestrian beacon installed by Caltrans several years ago that had mixed results. One of the challenges was that it didn't have the pedestrian stand and waiting for cars to go through for long enough periods of time. They went with a uniformed officer and held traffic and pedestrians for different time periods and found that the longer that they held pedestrians that more traffic flow could get through. They also looked at if those land uses were moved from the mountain side to the lake

ADVISORY PLANNING COMMISSION August 12, 2020

side; if the ice cream shop, the bike shop, and the coffee shop were moved to the lake side along with relocating road side parking, crossings at that intersection could potentially be reduced by up to 90 percent.

Their recommendations following the adaptive management approach for this intersection would be to locate the crossing to the western side of the intersection. Those coming in and out of Camp Richardson from the South Shore would have a free turn while pedestrians are crossing and it would increase traffic flow. The recommendations would also include restricting road side parking and relocating those land uses. If they don't meet the reduction targets, then they'll examine putting in possibly a standard signal.

Through Emerald Bay they want to continue the parking restrictions and highlighting the need to get people on transit. There are roadway improvements that are needed through this corridor to ensure more winter access and that transit buses and vehicles have a place to turn around. This is still a state highway and they can't restrict any vehicle traffic coming through the area. There will also be people who still want to drive to Emerald Bay, take a picture and move on. Those aren't the type of people that will jump on transit.

The Rubicon segment is primarily privately owned with no public lake access through this segment. The main recommendations through here are public safety improvements such as more turn outs for emergency vehicles and the Tahoe Trail.

For the Meeks Bay segment, they recognize that there is a separate process happening for Meeks Bay restoration project. They've been in discussion and collaboration with that project to ensure that their recommendations work. They are looking at recreation speed limits that can be turned on during busy times of the year. They are also looking at emergency response and where the Tahoe Trail would meet up where it currently ends at Meeks Bay. The biggest improvement for Sugar Pine is for potential expansion of the parking lot at Sugar Pine Campground to provide a formal park and ride and transit turn around for the Tahoe Truckee Area Regional Transportation (TART) system. Currently, TART's west shore route ends at Sugar Pine and turns around through the Sugar Pine Campground kiosk driveway. The facilities aren't conducive to it so there needs to be a new mobility hub. They've also identified this location for a new pier to connect in with that water transit and serve as an access point for public safety, watercraft, and other vessels.

The Tahoe Trail on the west shore will be a Class 1 trail around Lake Tahoe. TRPA will be moving forward as a partnership with a feasibility study for this Tahoe Trail this year with the Forest Service, California State Parks, El Dorado County, and the Tahoe Transportation District through the next planning phase. Then it will be finding champions for implementation throughout the corridor.

At the end of the corridor planning process when this plan is complete, they will asking the partner agencies to sign on to a memorandum of understanding that recognizes that they acknowledge this plan, are committed to working together to implement, and it will also outline more detailed roles and responsibilities.

Out of this, there will be 37,400 fewer cars in the corridor every month that will make an amazing difference for the visitor experience, the quality of life for resident's and commuter's, for the

environment, and is exciting to see how all the partners can come together and work towards a comprehensive solution for such a large and complex section of the Basin. The draft plan is available at: www.trpa.org/SR-89. They'll be making presentations this month to the boards of partner agencies. The final public webinar will be on September 22, 2020, 5:00-7:30 pm. The information to register can be found on the TRPA website. If you are a homeowner, a homeowners association, group or club within that corridor and would like a presentation, please email <u>dmiddlebrook@trpa.org</u>. The final corridor plan will be available the week of September 14-18.

Presentation can be found at: Agenda-Item-No.-V.C-SR89.pdf

Commission Comments & Questions

Mr. Teshara said it was mentioned during the presentation but hasn't seen it in the document about the importance of having the corridor partners sign a memorandum of understanding. One of the keys to success of the State Route 28 corridor was the ability to get some 13 agencies and organizations to sign onto the MOU. If an agency changes leadership, they are still committed to the process in the long term.

Mr. Middlebrook said it's mentioned towards the end of the draft document and also includes the State Route 28 MOU in the Appendix as a template for the State Route 89 MOU. They're already working on that document so it will be ready for the final plan.

Mr. Teshara said there is a lot of information and recommendations in the plan that all come with a significant price tag. This is why he's a proponent of the ONE TAHOE transportation funding initiative because we have to generate our own source of revenue rather than traditionally relying on the federal or state governments. He appreciated that as the plan has evolved there's been more recognition of the importance of the corridor from an emergency services standpoint and that there's some considerations incorporated in the plan. The Tahoe Truckee Airport District which has a boundary that comes down quite a ways on the west shore, at least to the northern part of this corridor. For example, they have funds available to build a helicopter pad landing zone like the one at the Tahoe City Golf Course to help facilitate evacuations for accidents, etc. This plan has come a long way and is going to need funding and collaboration over the long term.

Mr. Guevin said it's addressing a big concern for fire and emergency services. He looks forward to helping implement the plan. He asked if there was funding and what the construction timeline is for the pier.

Mr. Middlebrook said those were new projects that were identified. Currently, the plan is recommending a pier at Sugar Pine and Emerald Bay. Right now, there's a pier at Emerald Bay but has fixed pillars and doesn't adjust with the Lake level and unless the Lake is high, large boats cannot dock there. California State Parks has put both of those projects in their planning for funding.

Mr. Guevin said there's some money that's been available that they're working with Nevada agencies and the Forest Service on to identify the locations for these piers. It's ongoing and is

important along with what Mr. Teshara mentioned about the helicopter landing zones that will make a difference for fire rescue, evacuations, etc. He asked for contact information on the group who is working on the pier because the time is now to identify and secure that funding for the future.

Mr. Middlebrook said he'll provide Mr. Guevin with the contact information.

Mr. Ferry asked Mr. Middlebrook to speak about the Request for Proposal that TRPA is putting out for the Lake Trail.

Mr. Middlebrook said TRPA and the Forest Service were able to work through a contract in order to obtain some money from the Forest Service related to the Lake Tahoe Restoration Act for this corridor. That money will be used to conduct a feasibility study for the Tahoe Trail. It will look for potential alignments and serve as a high level planning document to get closer to an environmental analysis. They've been starting to have discussions with El Dorado County, California State Parks, and the Forest Service about serving on the steering committee to develop that plan and identify whether it's El Dorado County, the Forest Service, or California State Parks who would be the best implementor for different parts of the trail. They're working on the final RFP and it should be out sometime this month.

Public Comments & Questions

None.

Commission Comments & Questions

Mr. Guevin asked if they considered elevating the intersection where the ice cream parlor and other businesses are.

Mr. Middlebrook said they discussed options. Based on the design constraints and the historical nature of that corridor, to make a pedestrian overpass ADA accessible, it would have been a very large structure and would also need to include fencing along the highway. With the underpass, it was similar with scope, size, and engineering. With being able to move those land uses, they hope to be able to meet those congestion targets. If they do all those recommendations and still don't have the amount of pedestrian crossing reduced as planned, then other options would still be on the table for discussion.

VI. REPORTS

A. Executive Director

Mr. Hester said on August 19th, the Housing and Community Revitalization Work Group will meet. It's been established under the provisions of the charter for the Advisory Planning Commission. It has the seven local government representatives from APC, four Governing Board members, and ten stakeholders.

1) Quarterly Report: April – June 2020

No further report.

2) Upcoming Topics

Mr. Hester said currently, there's the City of South Lake Tahoe Area Plan Amendment for the September APC meeting.

B. General Counsel

Mr. Marshall said he filed the response to the open meeting complaint. Please contact him if you're interested in seeing the response. Also, the litigation in the Garmong cell tower case continues on.

C. APC Members

Mr. Buelna said Crystal Jacobsen has been appointed as the Placer County Advisory Planning Commission representative and he will continue as the alternate.

Mr. Guevin said the usage of the public and private lands around the Lake have greatly increased. They've seen a lot more visitation and many new comers to Lake Tahoe. They've been seeing human caused issues such as fire pits being left unattended. There are two working groups that have been established with the Forest Service Lake Tahoe Basin and the El Dorado National Forest to do outreach and public education for people coming into the Basin and our forests. They've been seeing a lot of trash and an increase of people on the Lake. He suggested additional signage regarding trash, etc. for the vacation home rentals as we continue to address some of these issues.

Mr. Letton said the Lahontan Regional Water Quality Control Board's Executive Officer, Patty Kouyoumdjian is retiring as of August 21, 2020. The Assistant Executive Officer Mike Plaziak will be the acting Executive Officer until their Board recruits and hires a new executive officer. Mr. Letton will continue to be the Advisory Planning Commission representative.

Mr. Hitchcock said the City of South Lake Tahoe recently received a grant from the California Tahoe Conservancy to begin work on the 56-acre master plan project. The City and El Dorado County will have a kick off meeting in the near future. The California Tahoe Conservancy awarded a request for proposal to Meea Kang who developed a housing project in the north shore and the St. Joseph Community Land Trust to develop the 10-acre parcel located behind their office on Tata Lane. They are also working with the St. Joseph Community Land Trust on a couple of moderate income housing projects on the river side lots near Lakeview Commons.

Mr. Teshara said the Tahoe Transportation District's board will meet on Friday, August 14, 9:30 am, via a Zoom webinar. There'll be continuing discussions on the ONE TAHOE transportation funding initiative. They'll also be receiving an update on the value pricing pilot program that they have up along the front of what used to be the Ponderosa Ranch. That pilot program which has variable costs depending on the time of day a person parks is off to a good start and could be a model that we might employ at some point on the State Route 89 corridor.

Mr. Smokey said their environmental office is working on some items that will affect their current projects in the Meeks Meadow area and Meeks Bay. It will hopefully give them better access to work on those projects. The Washoe Tribe does have representatives involved in the State Route 89 corridor plan.

Ms. Carr said Nevada Division of Environmental Protection received their annual federal grant for the Nevada 319 Nonpoint Source Grant Program project. They're currently working on a request for projects for the \$1,000,000 that they have to grant out to others. That application process is now open in addition to the pre-application processes that are available if anyone needs to discuss a potential project with them.

VII. PUBLIC COMMENT

None.

VIII. ADJOURNMENT Mr. Teshara moved to adjourn.

Chair Mr. Ferry adjourned the meeting at 12:37 p.m.

Respectfully Submitted,

Maija Ambler

Marja Ambler Clerk to the Board

The above meeting was taped in its entirety. Anyone wishing to listen to the tapes of the above mentioned meeting may call for an appointment at (775) 588-4547. In addition, written documents submitted at the meeting are available for review