



**TWSA BOARD MEETING PACKET
for 12/7/2022**

Refer to RED page numbers in the TOP left corner.

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Board Business (possible action)	15-28



TWSA Board Meeting - Quarter 4
Wed, Dec 7, 2022 1:00 PM - 4:00 PM (PST)

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AGENDA

- A. Introductions**
- B. Public Comment** Conducted in accordance with Nevada Revised Statute (NRS) Chapter 214.020 and limited to a maximum of 3 minutes in duration.
- C. Presentations: none scheduled**
- D. Approval of Agenda** for the Dec. 7, 2022 TWSA Board Meeting
- E. Approval of Minutes** for the Sept. 7, 2022 TWSA Board Meeting
- F. Reports**
 - a. **Staff Reports**
 - b. **Budget** - see enclosed information for current expense details.
Open Gov. link for current budget and expenses: <https://bit.ly/3wxURUA>
 - c. **TWSA Chair Report**
- G. General Business** (for possible action):
 - a. TKPOA Control Methods Test – Verbal Update
 - b. Tahoe Water for Fire Suppression Partnership – Verbal Update
 - c. DRINK TAHOE TAP® in reusable aluminum water bottles; co-branding opportunity with City of South Lake Tahoe and Mananalu Water.
- H. Purveyor Updates**
- I. Public Comment**
- J. Adjournment**

Lahontan / TRPA - TKPOA Control Methods Test

Final project and environmental documents: <https://tahoekeysweeds.org>

2023 TWSA Board Meetings

First Wednesdays, quarterly, held from 1 to 4 pm; virtual until further notice.

Meeting dates:

- **March 1, 2023**
- **June 7, 2023**
- **September 6, 2023**
- **December 6, 2023**

TWSA Board of Directors

Suzi Gibbons (Chair)

Andrew Hickman

Tom White; Richard Robilliard (alt.)

Patrick McKay; Mike McKee (alt.)

Cameron McKay

Brad Underwood

Mitch Dion (Vice-Chair); Brandon Garden (alt.)

Nakia Foskett

Kim Boyd; Tony Laliotis (alt.)

Shelly Thomsen (non-voting)

North Tahoe Public Utility District

Round Hill General Improvement District

Douglas County Systems

Edgewood Water Company

Glenbrook Water Cooperative

Incline Village General Improvement District

Kingsbury General Improvement District

Lakeside Park Association

Tahoe City Public Utility District

South Tahoe Public Utility District

For more information, please contact: Madonna Dunbar, TWSA Executive Director
1220 Sweetwater Road, Incline Village, Nevada 89451
(775) 832-1212 office / (775) 354-5086 cell /email: mod@ivgid.org

Certification of posting of agenda : Online posting and email delivery of notice provided one week ahead of meeting. Public comment is allowed and the public is welcome to make their public comment either via e-mail (please send your comments to mod@ivgid.org by 5 p.m. on Tuesday, December 6, 2022 or via telephone (775-354-5086) on the day of the meeting. By, Madonna Dunbar, Executive Director, TWSA.

Notes: Items on the agenda may be taken out of order; combined with other items; removed from the agenda; moved to the agenda of another meeting; moved to or from the Consent Calendar section; or may be voted on in a block. Items with a specific time designation will not be heard prior to the stated time, but may be heard later. Members of the public who are disabled and require special accommodations or assistance at the meeting are requested to call IVGID at 832-1212 at least 24 hours prior to the meeting.

TWSA agenda packets are available at the TWSA website www.TahoeH2O.org
or the TWSA office at 1220 Sweetwater Road, Incline Village, Nevada 89451.

TWSA Board Meeting
Wednesday, September 7, 2022 – 1:00 pm to 2:30 pm

Minutes

(red = action)

A. Introductions

No guests were present.

B. Public Comment

No public comments were given.

C. Presentations

Shelly Thomsen presented Lesson Learned from Caldor Fire. Key points from the presentation included updating emergency response plans to include organizational charts, staffing plans, communication plans, and operation contingency plans. Finish defensible space improvements around utility infrastructure pump stations and tanks. Creating multiple strategies for different fire types, instantaneous similar to Angora Fire in 2007 that starts within the district, and slow approach like the Caldor Fire that started at a distance and moved toward the district.

Roll Call of Members in Attendance

Suzi Gibbons (NTPUD), Mitch Dion (KGID), Tony Laliotis (TCPUD), Tom White (Douglas County), Andrew Hickman (RHGID), Brad B. Underwood (IVGID), Nakia Foskett (LPA), Shelly Thomsen (STPUD).

Regulators: Reggie Lang (NDEP)

TWSA Staff in attendance: Madonna Dunbar and Sarah Vidra

D. Approval of Agenda for the September 7, 2022, TWSA Board Meeting

Motion to approve the agenda, made by Mitch Dion, second by Andrew Hickman, all in favor; motion carried.

E. Approval of Minutes for the June 1, 2022, TWSA Board Meeting

Motion to approve the minutes from June 1, 2022, made by Andrew Hickman, second by Tony Laliotis, all in favor; motion carried.

F. Reports

a. Staff Reports (Annual Report Publication; TKPOA CMT decision; Spring Events)

Staff highlighted several activities from the quarter; a full activity report is available in the Board Packet.

- Tahoe Summit with STPUD and the Fire Partnership booth (NTPUD & TCPUD)
- The water stations were used regionally at three music festivals at Harveys Tahoe, IVGID 4th of July events, and music at the beach Tahoe City and Kings Beach.
- Annual Report request and production for July 1, 2021, to June 30, 2022.

b. Current Budget

TWSA account summary is provided in the board packet.

Link to OpenGov: <https://tinyurl.com/29z7bb65>

- i FY 22-23 current operating balance \$159K.
- ii The current reserve budget is \$171K

c. TWSA Chair Report

G. General Business (for possible action):

a. TKPOA Control Methods Test – Verbal Update (Sarah)

Staff provided the board with an overview of the TKPOA CMT project. All information was provided by the TKPOA E-Blasts (<https://www.keysweedsmanagement.org/cmt-weekly-e-blasts>). Highlights include:

- First-time use of Herbicide as a treatment methodology,
- Herbicide Laboratory reporting limits for Non-Detect
 - Endothall - 5ppb
 - Triclopyr - 1ppb
- Turbidity curtain breach due to wind wave action, causing Rhodamine dye and Herbicide detection outside of treatment sites.
 - All readings below receiving water limitations
 - All results near the West Channel and Lake Tahoe at Non-Detect
- use of the contingency monitoring program
- Herbicide degradation rates for Triclopyr are slower than predicted, causing a delay in turbidity curtain removal and subsequent extension of boating restrictions.
- Turbidity Curtain Removal requirement of two consecutive non-detect results
- Harmful Algae Blooms, and the decision to forgo mechanical treatment due to cost.
- \$1.2 Million over the proposed year 1 CMT budget.

b. Tahoe Water for Fire Suppression Partnership – Verbal Update (Shelly)

The group will be meeting to review and prioritize projects for Lake Tahoe Restoration Act funding for FY23. The FY22 funding came out to \$2.1M for the top five projects for NTPUD, TCPUD, IVGID, and STPUD received LTRA grants this year.

c. 2023 meeting dates (approve or modify)

Mitch Dion motioned to accept dates as provided, second by Andrew Hickman, all in favor, motion carried. The meeting dates for 2023 will be:

- **March 1, 2023**
- **June 7, 2023**
- **September 6, 2023**
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-

H. Purveyor Updates

STPUD- Three board seats are up for election in November. Lots of staff changeovers from retirements. STPUD staff is looking into federal and state funding for projects.

KGID- NDEP conducted the onsite sanitary survey. Thanked staff for the information on the TKPOA CMT as it became available. There are concerns that materials for 2023 projects will be

difficult to come by. KGID is monitoring the CA Water Quality Control Board process on microplastic testing protocol development.

RHGID- RHGID held its annual BBQ with many participants. In October, the SCADA system will be updated to a cloud-based system to get access remotely. The chlorine analyzer and controller will be updated. Water quality testing starts in September, and additional herbicide testing will take place.

TCPUD- West Lake Tahoe Regional Membrane Filtration Plant construction is moving forward at the intake and treatment facility sites. A financial master plan is being finalized, as well as a 15-year snapshot of future infrastructure projects to rehabilitate the two newer systems to TCPUD, Tahoe Cedars and Madden Creek. The project is currently estimated at \$40M and will include water mains, hydrants, meters, and a west shore storage augmentation plan (tanks and pipes between Tahoma and Timberland). TCPUD will be upgrading their meters to AMI, and the first phase is 15% of the connections done by district staff. The second and third phases will be bid for the remainder of the project.

IVGID- IVGID has completed its sanitary survey with NDEP. IVGID completed the 2022 water main project. The district is working on the design of the Crystal Peak Water Main Project for 2023, a project funded in part by the 2022 LTRA grant. IVGID is in the bidding process for a Utilities Master Plan for the water and wastewater systems. There are open staff positions in both the Pipeline and Treatment departments. IVGID has two trustees up for election in November.

LPA- Lakeside is fully staffed. The projects planned for 2022 have been pushed to 2023. The LPA intake line has been drifting and is under less than three feet of the lake bottom.

Douglas County- The County enacted stage 3 drought restrictions on the Uppaway System on August 18, 2022; the community is on a groundwater well system, and the restrictions will be through the remainder of the year. The Cave Rock/Skyland treatment plant has been approved to be online. There have been setbacks with the backwash system. The plant should be fully operational by the end of September 2022. Phase 3 of the waterline replacement is moving forward with 40 meters in, and the goal is 61 meters by the end of the summer. The county is starting a pipeline project in front of the Cave Rock Treatment Plant, and there will be a lane closure on Highway 50 through the middle of October. The Cave Rock Intake Project will start in November, with divers installing a supplemental submersible pump.

NTPUD- The Carnelian Bay to Watson Creek Water Main Project has started. The 2022 LTRA grant partially funded the project. The project is to install a 12-inch waterline and an intertie with Fulton Water Company. NTPUD has two board members up for election in November.

NDEP- Sanitary Surveys have been completed for all Lake Systems, with Cave Rock/Skyland scheduled for later in September.

I. Public Comment

No public comments were given.

J. Adjournment

Motion to adjourn made by Mitch Dion, second by Tony Laliotis, all in favor; motion carried.

Meeting adjourned at 3:04 pm.

**INCLINE VILLAGE GENERAL IMPROVEMENT DISTRICT
STATEMENT OF OPERATING SOURCES AND USES**

TAHOE WATER SUPPLIERS ASSOCIATION

CURRENT YEAR TO BUDGET COMPARISON

For Period Ending 11/30/2022

GL Account Number	GL Account Description	Current Month Budget	Current Month Actual	Month Budget Variance	Current YTD Budget	Current YTD Actual	YTD Budget Variance	Total Budget	Remaining Budget
OPERATING SOURCES									
200-28-990-4417	Service & User Fees	0	0	0	160,000	0	-160,000	160,000	-160,000
	Sales and Fees	0	0	0	160,000	0	-160,000	160,000	-160,000
	Fines and Penalties	0	0	0	0	0	0	0	0
	TOTAL OPERATING SOURCES	0	0	0	160,000	0	-160,000	160,000	-160,000
OPERATING USES									
200-28-990-5010	Regular Earnings	2,990	0	2,990	15,247	14,849	398	36,373	21,524
200-28-990-5020	Other Earnings	840	0	840	840	0	840	840	840
	Salaries and Wages	3,830	0	3,830	16,087	14,849	1,238	37,213	22,364
200-28-990-5050	Taxes	305	0	305	1,281	1,236	45	2,963	1,727
200-28-990-5100	Retirement Fringe Ben	662	0	662	2,781	2,831	-50	6,434	3,603
200-28-990-5200	Medical Fringe Ben	991	0	991	4,954	2,919	2,035	12,883	9,964
200-28-990-5250	Dental Fringe Ben	79	0	79	393	230	163	966	736
200-28-990-5300	Vision Fringe Ben	9	0	9	46	27	18	112	85
200-28-990-5400	Life Ins Fringe Ben	7	0	7	31	10	21	72	62
200-28-990-5500	Disability Fringe Ben	19	0	19	79	88	-9	183	95
200-28-990-5600	Unemployment Fringe Ben	60	0	60	251	250	1	581	331
200-28-990-5700	Work Comp Fringe Ben	96	0	96	402	393	9	930	537
	Employee Fringe	2,227	0	2,227	10,217	7,984	2,233	25,123	17,139
	Total Personnel Cost	6,057	0	6,057	26,304	22,834	3,470	62,336	39,503
	Professional Services	0	0	0	0	0	0	0	0
200-28-990-7010	Advertising - Paid	1,042	63	979	5,208	1,500	3,708	12,500	11,000
200-28-990-7405	Office Supplies	133	0	133	667	0	667	1,600	1,600
200-28-990-7415	Operating	3,550	500	3,050	17,750	24,015	-6,265	42,600	18,585
200-28-990-7460	Postage	0	0	0	0	0	0	200	200
200-28-990-7470	Printing & Publishing	892	0	892	4,458	249	4,210	10,700	10,451
200-28-990-7685	Travel & Conferences	167	0	167	833	5	828	2,000	1,995
	Services and Supplies	5,783	563	5,221	28,917	25,769	3,148	69,600	43,831
	Insurance	0	0	0	0	0	0	0	0
200-28-990-7840	Telephone	0	0	0	50	48	2	200	152
	Utilities	0	0	0	50	48	2	200	152
	Cost of Goods Sold	0	0	0	0	0	0	0	0
	Central Services Cost	0	0	0	0	0	0	0	0
	Defensible Space	0	0	0	0	0	0	0	0
	TOTAL OPERATING USES	11,841	563	11,278	55,271	48,650	6,620	132,136	83,486
	OPERATING SOURCES(USES)	-11,841	-563	11,278	104,730	-48,650	-153,380	27,864	-76,514

INCLINE VILLAGE GENERAL IMPROVEMENT DIST
G/L TRANSACTION DETAIL

From Date: 07/01/2022
To Date: 11/14/2022
From Account: 200-28-990
To Account:
Exclude Accounts With No Activity
Run Date: 11/14/2022
User: mod

G/L#	EFFECTIVE DATE	DESCRIPTION	STP	SOURCE	DEPOSIT	DEBIT	CREDIT	BALANCE
200-28-990-7010		Advertising - Paid				Balance	Forward	0
	07/07/2022	Tahoe In Depth - Summer 2022, Issue 22, Gold Underwriting Level	SYS	AP		500		500
	08/01/2022	Side Banners	SYS	AP		63		563
	08/22/2022	Program Ad	SYS	AP		750		1,313
	09/01/2022	Side Banners	SYS	AP		63		1,375
	10/01/2022	Side Banners	SYS	AP		63		1,438
	11/01/2022	Side Banners	SYS	AP		63		1,500
		TOTAL				1,500	0	1,500
200-28-990-7415		Operating				Balance	Forward	0
	07/01/2022	Hats	SYS	AP		2,250		2,250
	07/25/2022	Acct 4244 - July 2022 In-Store Chg	SYS	AP		51		2,301
	07/26/2022	Drink Tahoe Tap water bottles (ref purch req 12300004) Raleys' Klean Kanteen	SYS	AP		10,446		12,747
	07/27/2022	4IMPRINT, INC,550 custom metal bottles	AJ	GL		4,139		16,886
	07/27/2022	SP GREEN PAPER PRD,Paper cups for water stations	AJ	GL		145		17,031
	07/27/2022	AMZN MKTP US WS6AS2BE3,Equipment Calibration, donation for the venue.	AJ	GL		120		17,151
	08/09/2022	Mutt Mitt Dog Bag Dispensers - 12 units at 50% off	SYS	AP		2,093		19,243
	08/25/2022	MITTEN DOG BAG 2000/CS 2PLY partial of 40 cases	SYS	AP		1,932		21,176
	08/31/2022	MITTEN DOG BAG 2000/CS 2PLY balance of 40 cases	SYS	AP		1,340		22,515
	09/07/2022	Water fill station grant program Tahoe Yacht Harbor out	SYS	AP		1,000		23,515
	11/05/2022	Water Fill Station Grant Program - 1 station installed at Cool Mess Ice Cream	SYS	AP		500		24,015
		TOTAL				24,015	0	24,015
200-28-990-7470		Printing & Publishing				Balance	Forward	0
	07/01/2022	CNB12777-01 PW Shipping fees 07/01/22-07/31/22	SYS	AP		62		62
	08/03/2022	CNB12777-01 PW Shipping fees 08/01/22-08/31/22	SYS	AP		62		124
	09/01/2022	CNB12777-01 PW Shipping fees 09/01/22-09/30/22	SYS	AP		62		187
	10/01/2022	CNB12777-01 PW Shipping fees 10/01/22-10/31/22	SYS	AP		62		249
		TOTAL				249	0	249
200-28-990-7685		Travel & Conferences				Balance	Forward	0
	07/27/2022	GOTOCOM GOTOMEETING,toll free number for video calls	AJ	GL		5		5
		TOTAL				5	0	5
200-28-990-7840		Telephone				Balance	Forward	0
	09/27/2022	1st QTR Stipend 7/1/2022 - 9/30/2022	SYS	AP		48		48
		TOTAL				48	0	48
		GRAND TOTAL				48,951	301	48,650

TWSA Staff Report Q 3 2022

TWSA / Water Quality / Water Efficiency:

The City of South Lake Tahoe has enacted a single-use water bottle ban to become effecting 2023-24. TWSA staff has been engaging with SLT staff for support on implementation.

<https://www.kolotv.com/2022/10/04/south-lake-tahoe-bans-single-use-plastic-water-bottles/>

<https://www.tahodailytribune.com/news/south-lake-tahoe-bans-single-use-plastic-water-bottles/>

Expanded TWSA messaging on Drink Tahoe Tap and dog waste collection are being further developed in the Take Care partnership workgroup for use on the Take Care and TWSA outreach platforms.

Aquatic Invasive Species (AIS):

Staff continues to monitor the progress of the TKPOA CMT. A draft report had been issued.

<https://tahoekeysweeds.org/wp-content/uploads/2022/10/CMT-Interim-Report-09-30-2022-FINALv5.pdf>

Outreach:

Waste Not / TWSA staff provided support for International Coastal Cleanup/Great Sierra Cleanup Day on 9/17/22. 28 volunteers participated.

Staff provided outreach / booth at the:

Incline Community Picnic	10/8/22	500 attendees
Incline Puppy Plunge	10/15/22	200 attendees
Incline Trail of Treats	10/28/22	1000 attendees
Outdoor Media Summit	10/31/22	100 attendees
IVGID Benefits fair	11/1/22	100 attendees

200 pouches and stickers were provided to the Boys and Girls Club, South Lake Tahoe golf tournament

Lakewide Microplastics Research Partnerships:

The most comprehensive characterization of microplastics in the Lake Tahoe Basin to date is occurring. Two TWSA Nevada members are participating with raw water samples for micro plastics analysis by TERC researchers. TWSA's sponsored Manta Trawl been used in lake wide sampling for more than a year now. The draft report is available upon request.

Raley's / Drink Tahoe Tap Collaboration

The TWSA has procured more Drink Tahoe Tap bottles from Raley's. The Raley's stores produced, funded and stocked custom 11,000 bottles for this campaign. Bottles are in in 116 Raley's stores to support the Drink Tahoe Tap campaign. Extensive details are provided in earlier Board reports. Staff is remaining in contact w/ Raley's to see where the campaign goes...

In 2022, Raley's and Tahoe Fund are collaborating with Pixlbank on a social media & photography crowd-source platform in 2022.

<https://www.ilovetahoe.org/drink-tahoe-tap>



Water Bottle Refill Stations:

Grants: The TWSA/Tahoe Fund Water Bottle Filling Station Grant Program has become active again with

easing of COVID restrictions for businesses. To date, 18 grants have been issued (\$11,500) with several applications active. New signage has been developed for the refill stations.

<https://www.yourtahoeplace.com/news/twsa-water-bottle-refill-station-grant-program>

Find a Fill Station: fill station locations are presently logged on the TAP APP: <https://findtap.com>

Tahoe Citizen Science App: <https://citizensciencetahoe.org/home>

TERC'S 2022 Tahoe Citizen Science App is now active with a DRINK TAHOE TAP refill station feature.

Mobile Water Stations:

10 units are prepared for summer event needs; 2 new units were built spring 2022. We are estimating 100,000+ contacts from water station uses at the scheduled 2022 events.

In April/May, 2022, water stations were deployed for:

- Tahoe Truckee Earth Day (logo on poster)
- South Lake Tahoe Earth Day (logo on poster)
- Washoe Tribe Earth Day
- TRPA VIP site visits
- Strawberry Music Festival
- Incline Teddy Bear Picnic

In June 2022, water stations were deployed for:

- Feather River Flow Down
- Truckee River Day
- Tahoe City Wine and Food Classic
- Lake Tahoe Half Marathon
- High Sierra Music Festival
- July 4 Incline Beaches
- Music on the Beach (KB) (logo on banner)
- Commons Beach Concers (TC) (logo on banner)
- Douglas Court (IV) Firewise Block Party



In July/August, water stations are booked for:

- Lake Tahoe Shakespeare Festival (free ¼ page ad in program) + (logo on banner)
- Lake Tahoe American Century Celebrity Golf Classic (free ¼ page ad in program)
- Lake Tahoe Bluegrass and Beyond Concert
- Lake Tahoe Bass Camp Concert
- Lake Tahoe Reggae Festival
- Washoe Arts and Cultural Festival
- Lake Tahoe Summit
- Tahoe HeartBeat Festival
- Lake Tahoe Farmer Market (SLT)

In September/October, water stations were booked for:

- Lake Tahoe FireFest
- Tahoe Forest Stewardship Day
- 29th Annual Golf Classic at Edgewood
- 10th annual Hangtown Music Festival
- Washoe County Sheriff Office Incline Community Picnic



Water bottles were distributed for the Tahoe Forum presenters: Sir Richard Branson and Guy Harvey.

Water pouches were distributed for the volunteers of the 29th Annual Golf Classic to Benefit Boys and Girls Club of Lake Tahoe.

A Take Care Tahoe focus group is addressing ways to increase compliance with dog owners on picking up dog waste to protect the watershed.

Administration (TWSA)

- Staff facilitated the Sept. 7 board meeting.
- Staff continues to monitor the monthly TRPA Shorezone Project Review Committee Project Application Meetings.
- Staff attended the Tahoe Destination Stewardship Plan Public Workshop, Incline Village on 10/26/22.
- Staff attended the Clean Up the Lake Fundraiser on 10/6/22.
- DRINK TAHOE TAP®; and I DRINK TAHOE TAP®; trademarks are valid to 2026.
- We continue to collaborate with the Tahoe Environmental Research Center (TERC) and Sierra Watershed Education Partnership (SWEPP) to support regional peer student on-line education efforts.
- A DRINK TAHOE TAP® ad is running year-round in the Tahoe.com regional print publication and website.
- Staff has been monitoring the efforts of Clean Up the Lake as they conduct the 72 mile lake-wide cleanup. Staff has not acted on the Board approved \$5000 match fundraiser yet with the organization; but both directors still anticipate a collaborative effort in 2022.
- Staff attends the Nearshore Aquatic Weeds Working Group (NAAWG) quarterly.
- TWSA Watershed Control Program Annual Report is posted at:
[https://www.yourtahoeplace.com/uploads/pdf-public-works/CORRECTED_-_2021_TWSA_ANNUAL_REPORT_\(12_13_2021\)_\(_smaller\)_only_1_map.pdf](https://www.yourtahoeplace.com/uploads/pdf-public-works/CORRECTED_-_2021_TWSA_ANNUAL_REPORT_(12_13_2021)_(_smaller)_only_1_map.pdf)
 Staff has begun production of the 2023 Report with publishing date in mid-December.

Micro-Plastics Reduction Education Project

The microplastics reduction education project highlights include a new Exhibition at the TERC Center in Incline Village, Nevada. <https://tahoe.ucdavis.edu/microplastics>

A second exhibit was installed by TWSA and other partners, for permanent installation at the Sand Harbor Visitor Center in June 2022.

This project was a collaborative effort by researchers and regional educators. Extensive micro plastics research has been conducted in marine research; however, the research of its impacts on freshwater ecosystems is limited.

Tahoe Water Suppliers Association worked with working with the Tahoe Environmental Research Center (TERC – UC Davis), Desert Research



Institute (DRI), Clean Up the Lake (CUTL), the League to Save Lake Tahoe, Raley's stores, Sierra Watershed Education Partnerships (SWEP) and others, to lead research and education efforts at Lake Tahoe in this emerging field. Several projects remain ongoing after the grant period.

<https://www.epa.gov/newsreleases/us-epa-awards-nearly-100000-address-microplastic-pollution-lake-tahoe>
<https://www.trpa.org/wp-content/uploads/Researchers-studying-impact-of-microplastics.pdf>

Lakewide Microplastics Research Partnerships:

The most comprehensive characterization of microplastics in the Lake Tahoe Basin to date is occurring. Two TWSA Nevada members are participating with raw water samples for micro plastics analysis by TERC researchers. TWSA's sponsored Manta Trawl been used by TERC in lake wide sampling for more than a year now. TERC's final micro plastics report is in the works for December 2022.

Recent publicity:

<https://ucscsciencenotes.com/feature/lake-tahoos-pristine-legacy-threatened-by-microplastics/>

<https://www.sierranevadaally.org/2021/08/07/researchers-look-for-sinks-of-microplastics-pollution-in-lake-tahoe>

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The Raley's stores produced, funded and stocked custom 11,000 bottles for this campaign. Bottles are in in Raley's stores to support the Drink Tahoe Tap campaign. Extensive details are provided in earlier Board reports.

Staff is remaining in contact w/ Raley's to see where the campaign goes...

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A Take Care Tahoe focus group on DRINK TAHOE TAP is meeting to develop collateral for short term rental and lodging outreach. Staff and partners have been meeting with the Hyatt in Incline Village to discuss a pilot project to remove plastic packaged water from the rooms; and replacement with custom aluminum options.

TWSA Staff Memo

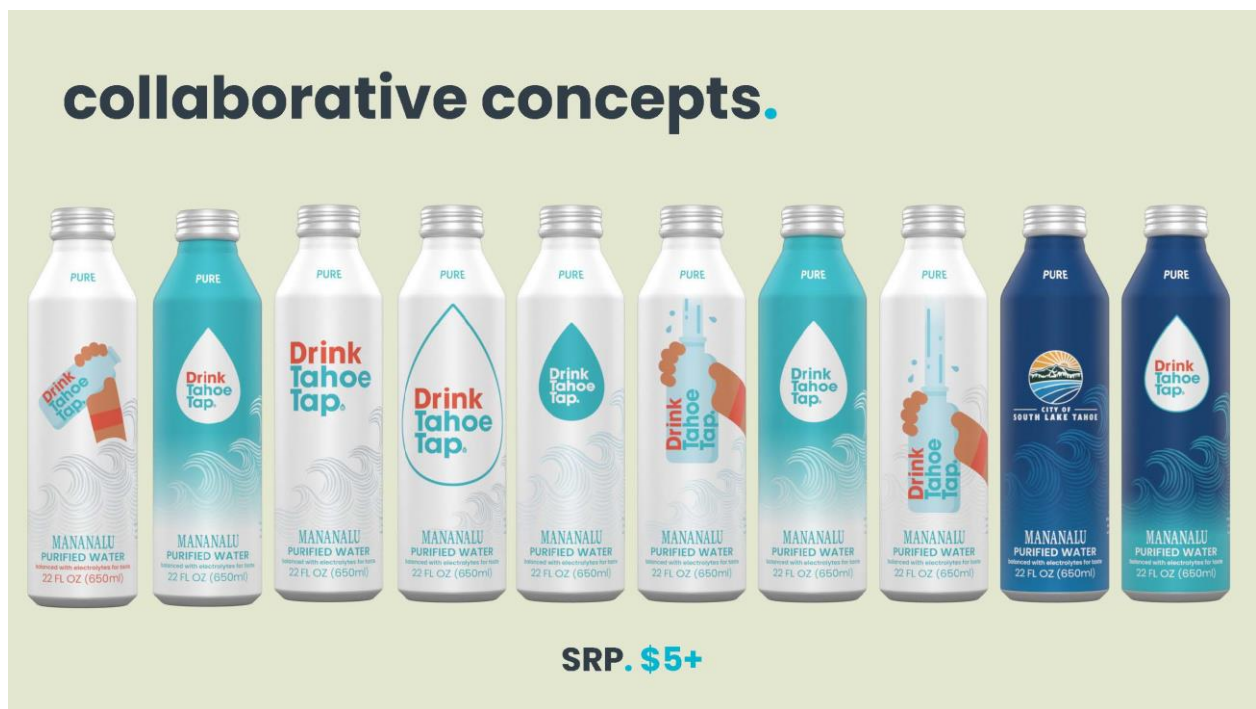
TO: TWSA Board

FROM: Madonna Dunbar, TWSA Executive Director & IVGID Resource Conservationist

SUBJECT: DRINK TAHOE TAP® in reusable aluminum water bottles; co-branding opportunity with City of South Lake Tahoe and Mananalú Water.

DATE: November 28, 2022

Staff Recommendation is to appropriate \$50,000 from the TWSA Reserve (currently at appx. \$171,000) for approximately 1/3 cost (deposit) on production of ~ 100,000 custom units of a 22 oz. refillable screw-top aluminum water bottle. Total production costs are estimated at \$175,000 for this project. The estimated cost per bottle is \$1.75 per unit; including production (\$1.49 per unit) and distribution (estimated additional 18% or \$.26 per unit). TWSA proposed cost share is \$.50 per unit.



This project offers the ability to expand DRINK TAHOE TAP® into a much broader reach in the South Tahoe market.

The South Lake Tahoe community has amplified their commitment to eliminating single use plastic water bottles, through approval on 10/4/22 by the City Council of Ordinance 2022-1166 Amending 4.175 (Polystyrene and Plastic Food Packaging Regulations) of the South Lake Tahoe City Code to Establish a Municipal Use and Commercial Ban on Single-Use Plastic Water Bottles.

The ban on water bottles will be tiered. All civic uses (the City and those who do business with them at events and buildings) will no longer allow bottles under one gallon in size starting on Earth Day 2023 (April 22), and the retail ban will start one year later on Earth Day 2024. Phase 1 is a single-use plastic water bottle ban for city facilities and permitted, temporary activities and special events; effective April 22, 2023.

Mananalau Water's leadership position on sustainability with 'Drink One, Remove One.' (to remove from the ocean, one plastic bottle for every bottle of Mananalau sold) and use of a refillable 22oz aluminum bottle makes them an ideal partner for the Drink Tahoe Tap initiative. (see pros and cons table below)

In response to the need for 'packaged water' for the April 22, 2023 phase 1 deadline - beyond selling an empty water bottle for refilling ; the City of South Lake Tahoe is interested in purchasing a large allotment (appx. 100,000 units) of lower cost, pre-filled, aluminum refillable bottles by the non-profit company Mananalau Water. This pilot project's distribution model is still being developed, however it would be a mix of free or subsidized sales so there is some potential for cost recovery.

<https://www.mananalau.com/>

Pros	Cons
Supports the City of SLT initiative with a high quality, refillable and recyclable replacement for single use plastic bottles for 4/2023 deadline.	Not directly marketing to have people 'refill' as first choice. But we have opportunity to push refilling on the package. Add language such as: "While the initial water contained in this bottle is not from Tahoe, we encourage you to refill continually with Tahoe Tap while visiting in the Tahoe Basin."
100,000 customer reached at SLT events in 2023	
Drink Tahoe Tap is the primary marketing on the front label.	Message is confusing with 'other water' in the aluminum bottle. Tahoe Tap is not in the bottle (yet).
Joining an established national campaign with sales directly linked with action to remove plastic waste with every purchase. Social media, television and print marketing are developed and active. Celebrity Endorsement by Jason Mamoa (AquaMan; Dune; SlumberLand; Game of Thrones).	
Investments in marketing, messaging, research, product production and distribution has already been committed by Mananalau.	Investment needed in improving access to refill stations via a dedicated "Tahoe Tap" refill app.
TWSA cost per unit is comparable to the stickers we distribute = \$.50 appx per unit. Our investment is 1/3 cost per unit of each bottle.	TWSA could use reserve to fund other ways to promote message: more water station grants,

	watershed protection projects, etc. Most projects are beyond the scale of existing TWSA budget.
Direct competition to plastic bottled water.	
100,000 plastic bottles removed from oceans via Buy One Remove One program.	

Background:

In October 2022, the City of South Lake Tahoe Council modified their existing single-use plastic reduction ordinance (link) to include a ban on the distribution and sale of single use plastic water bottles within the city limits. The ban will prohibit the sale of single-use plastic water bottles less than one gallon, with an exception for emergencies as designated by the City Manager.

Chapter 4.175 POLYSTYRENE AND PLASTIC FOOD PACKAGING REGULATIONS

Resolution: https://legistarweb-production.s3.amazonaws.com/uploads/attachment/pdf/1584124/Item_5_-_Executive_Summary.pdf

City of SLT Staff Report (Oct. 4 2022): https://legistarweb-production.s3.amazonaws.com/uploads/attachment/pdf/1570990/Staff_Report_-_Second_Reading.pdf

The Ordinance timeline includes 2 phases:

Phase 1 is a single-use plastic water bottle ban for city facilities and permitted, temporary activities and special events; effective April 22, 2023. Phase 2 of the ban will expand the moratorium for plastic water bottle sales citywide on April 22, 2024, allowing businesses additional time to prepare for this shift.

In response to the need for alternatives to packaged water, TWSA Staff has been working closely with Sara Letton, the City’s Sustainability Coordinator. The City plans to install water bottle refill stations at strategic locations throughout the community over the next couple of years. Mapping or app driven resources will be developed to expand users’ ease of finding refill stations. The City is committing to building a small fleet of mobile water stations (similar to the TWSA design) for use at events. Staff from both TWSA and the City are working with local partners on outreach and education initiatives to drive behavior change toward refilling with tap water.

This proposal is for the reusable aluminum bottles to be custom branded with DRINK TAHOE TAP® for distribution only in the Tahoe Basin. Labelling would include DRINK TAHOE TAP® prominently on the front with ‘Refill with Tahoe Tap’ messaging and possibly a QR code for more information/fill location directions on the bottle. Mananalu Water messaging is also included. The bottles are filled with 3x filtered water; currently packaged in Montana. The aluminum bottles are manufactured by Ball Corporation with a 69% recycled aluminum

content. Production requires about a 90 day window. The City of SLT will be making a decision on production by the end of December 2022, which requires action on branding by the TWSA board prior to this date.

There is the potential for offering these containers *directly filled with Tahoe Tap* in the future. This would be a long-term goal in the range of 2 to 4 years, and would require establishing a local water fill/packaging production facility (possibly with a local brewery). Doing so would provide an opportunity by TWSA to control the entire product but would require significant production investment and a production partner.

As stated above, Mananalau Water funds plastics removal from ocean ecosystems through RePurpose Global with its sales revenue (on a 1:1 basis). A unique aspect of the co-branding partnership is that there may be opportunity to have funds from bottle sales directed towards Tahoe projects.

TWSA currently spends approximately \$25,000-\$30,000 annually to purchase free refillable plastic water pouches/metal bottles and stickers. These items range in cost from \$2 (plastic pouch) to \$7 (low cost metal) to \$15 (Klean Kanteen Custom) per unit, with sticker costs averaging \$0.50 per unit. This is the same price point as the Mananalau water at \$.50 per unit.

It needs to be stated that our current TWSA bottle sales are filled with air not water. Filling the bottles with water fulfills a consumer need with the purchase (even though it is not Tahoe Tap - they are actually getting product to use immediately). For reference: the Tahoe Tap (empty) bottle sales with Raley's have been slow; we cannot compare to this proposal since they are sold at a much higher price point.

A scope of work and presentation deck on Mananalau Water are detailed in the following attachments.

Costs of distribution, freight and storage are not included but would be handled primarily by City of South Lake Tahoe.

MANANALU

Statement of Work

Client: South Lake Tahoe (SLT)

Project: South Lake Tahoe / Mananalu Collaborative 22oz Bottle

Purpose of Project: Produce 97,500 units of 22oz collaborative bottles for South Lake Tahoe Drink Tahoe Tap initiative.

Mananalu Contacts:

Josh Elliott

Director of Partnerships

jelliott@mananalu.com

Matt Mize

Accounting Manager

mmize@mananalu.com

Overview

Mananalu agrees to produce a collaborative bottle for the city of SLT. Mananalu can begin production once the authorized SLT signs this statement of work and processes the deposit listed below.

Per Unit Cost - \$1.49 per unit – excludes set-up, storage, and freight.

*Production Timeline - 90 days. Next production is scheduled for **November/December/January, 2022.***

Distribution, Freight, and Storage - Distribution, Freight, and Storage cost are dependent on distribution partner fees and storage capacity.

Bottle Production Cost Detail

Units	Cases (12pk)	Pallets	Cost/Unit	Total
97,500	8,125	90	\$1.49	\$145,275

*The cost per unit does not include set-up fee, storage, and freight.

Example Invoice Detail

Item	Units	Cost/Unit	Total
Co-branded Bottles	97,500	\$1.49	\$145,275
Set-Up Fee	1	\$2,900	\$2,900

*Freight and storage will be invoiced separately

Deposit, Payment Schedule, Terms

Item	Units/Pallets	Amount Due	Due Date	Terms
Deposit	N/A	\$51,325	TBD	

Please send questions and/or requests for changes to Josh Elliott, Director of Partnerships - jelliott@mananalu.com.



CITY OF
SOUTH LAKE TAHOE

aloha.



welcome to
our world.



**founded by
Jason Momoa.**

**in partnership
with Ball
Corporation.**



**we are
a water
company.**

but, that's not why we exist.

MANANALU

MANANALU[®]

(mah - nah - nah - loo)

**We are on a mission
to eliminate single-use
plastic water bottles.**

MANANALU

the problem with plastic.



Only 9% of plastic gets recycled.

18 Billion pounds of plastic flow into the oceans every year.

By 2050 there will be more plastic than fish in the ocean by weight.



why aluminum.

75% of all aluminum ever produced is still in circulation today.

Aluminum is infinitely recyclable, unlike plastic.

Mananalu bottles are made with 69% recycled aluminum.

A recycled aluminum container is back on the shelves within 60 days.

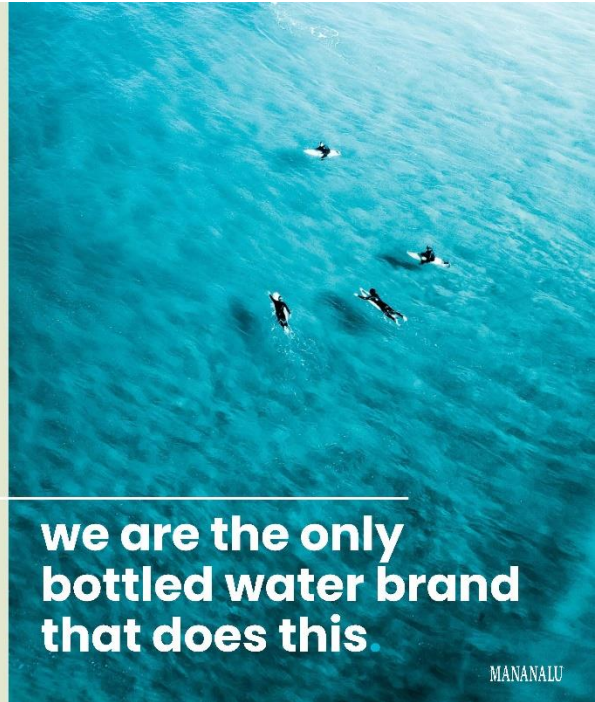
MANANALU

more than just an alternative to plastic.

we remove plastic.



For every bottle of Mananalu that is sold or donated, **we remove the equivalent of one plastic bottle** from ocean-going waste.



we are the only bottled water brand that does this.

MANANALU

drink one, remove one.

what does that really mean?



We work with **rePurpose Global** to actively remove plastic from ocean going waste.



Each bottle you drink removes the equivalent of 1 plastic bottle.



Plastic removal in coastal areas funds job creation in places like Bekasi, Indonesia.



The plastic is **removed, recycled, and repurposed...** never incinerated or added to landfill.



about rePurpose.
rePurpose Global is the world's leading Plastic Action Platform dedicated to reducing waste, reviving lives, and restoring nature's balance. They help people and companies calculate, reduce, and offset their plastic footprint, while empowering grassroots innovators on the cutting edge of solving for our planet's future.

Project Laut Yang Tenang (Waste 4 Change)



MANANALU

the value of drink one, remove one.



+\$0.42
For the resealable & recyclable aluminum bottle.

sustainable product.

Consumers are willing to spend more for a sustainable product.

+\$0.24
For our **Drink One, Remove One** promise.

action.

They are willing spend even more for action.

Source: Paul R. Hindsley and O. Ashton Morgan

MANANALU

how we stack up.



Infinitely Recyclable

Resealable

Removes Plastic

	Mananalu aluminum bottle	other aluminum bottle	pop-top aluminum can	plastic cap aluminum bottle	plastic bottle
Infinitely Recyclable	✓	✓	✓	✓ ✗	✗
Resealable	✓	✓	✗	✓	✓
Removes Plastic	✓	✗	✗	✗	✗

MANANALU

pure water in an aluminum bottle.



22oz Aluminum Bottle
Refillable, Resealable & Recyclable.



16oz Aluminum Bottle
Resealable & Recyclable.



the bottle.

- Infinitely recyclable aluminum.
- Twist-off resealable aluminum cap.
- Fast chilling and stays cold longer.
- BPA-free liner.

the water.

- Triple-filtered purified still water.
- Balanced with electrolytes for great taste.
- Locally and responsibly sourced in the USA.

the certifications.

- We are a Plastic Negative company.
- We are a Climate Neutral company.
- 1% for the Planet Member.
- Pending B-Corp Certification.



MANANALU

flavored water in an aluminum bottle.



Tahitian Lime Aluminum Bottle
Resealable & Recyclable.



Lilikoi Passion Aluminum Bottle
Resealable & Recyclable.



Pink Grapefruit Aluminum Bottle
Resealable & Recyclable.



the bottle.

- Infinitely recyclable aluminum.
- Twist-off resealable aluminum cap.
- Fast chilling and stays cold longer.
- BPA-free liner.

the water.

- Triple-filtered purified still water.
- Natural flavor essence
- Balanced with electrolytes for great taste.
- Locally and responsibly sourced in the USA.

the certifications.

- We are a Plastic Negative company.
- We are a Climate Neutral company.
- 1% for the Planet Member.
- Pending B-Corp Certification.



MANANALU

“

We can no longer wait. It's time to stop pointing at the problem, and get on with the solution. Single-use plastic is bad for people and bad for the planet. It's time to switch to aluminum.

Jason Momoa
Founder of Mananalu



mahalo.

Contacts:

Liz Doliber | VP Sales
ldoliber@mananalu.com
925.683.2866

Josh Elliott | Partnerships
jelliott@mananalu.com
828.406.7131

Adam Gehl | Retail Sales
agehl@mananalu.com
262.221.0782



collaborative concepts.



SRP. \$5+



Media excerpts on the bottled ban are below:

<https://www.tahodailytribune.com/news/south-lake-tahoe-bans-single-use-plastic-water-bottles/>

“Through the course of ongoing studies, the University of California Davis’s Tahoe Environmental Resource Center recently found plastic in almost every sample taken from

beaches around the Lake. Because no wastewater is discharged to Lake Tahoe, most of the microplastic waste appears to be coming from plastic litter, especially plastic bottles and bags.

Visitors and businesses can contribute to the stewardship of Lake Tahoe by drinking local tap water or purchasing more sustainable single-use options. The Tahoe Water Suppliers Association, a consortium of local municipal water agencies, and TERC, developed the 'Drink Tahoe Tap' campaign to encourage people to embrace the award-winning tap water and ditch the single use plastic water bottles. Even Raley's, one of the area supermarkets, has been a committed partner displaying 'Drink Tahoe Tap' water bottles in the front of their stores.

"We aim to find ways to support an already roust 'Drink Tahoe Tap' marketing campaign and look forward to working with our business community to help them embrace this opportunity to participate in the stewardship of Lake Tahoe," said Sara Letton, the city's sustainability coordinator. "The community really stepped up to overwhelmingly support this at the first City Council presentation, but we also heard loud and clear from our business community that they are looking for some support as the ban is implemented. Introducing visitors to South Lake Tahoe's award-winning tap water is one of the many excellent experiences the City hopes to provide its residents and guests."

For more information, contact Letton at sletton@cityofslt.us or 530-542-6175.

Other media coverage on the bottle ban:

<https://www.waternewsnetwork.com/south-lake-tahoe-leads-the-way-as-city-council-approves-water-bottle-ban/>

<https://www.watereducation.org/aquafornia-news/south-lake-tahoe-bans-single-use-plastic-water-bottles>

<https://carsonnow.org/story/09/22/2022/south-lake-tahoe-leads-way-city-council-approves-water-bottle-ban>

<https://www.kolotv.com/2022/10/04/south-lake-tahoe-bans-single-use-plastic-water-bottles/>

Nevada Bottled Water: https://dph.nv.gov/Reg/BH20/Bottled_Water_Home

Statutes: Bottled Water Program; State of Nevada - Nevada Administrative Code, Chapter 445A to NAC 445A.590: <http://www.leg.state.nv.us/nac/nac-445a.html>

Federal Regulations: U.S. Food and Drug Administration - 21 CFR 129 Processing and Bottling of Bottled Drinking Water

<http://www.accessdata.fda.gov/scripts/cdrh/cfdocs/cfCFR/CFRSearch.cfm?CFRPart=129>

California: Bottled and Hauled Water: https://mywaterquality.ca.gov/safe_to_drink/bottled_hauled_water/

<https://www.cdph.ca.gov/Programs/CEH/DFDCS/Pages/FDBPrograms/FoodSafetyProgram/Water.aspx>