The Anderson thistle is just one of many wildflowers brought on by Tahoe's big winter. Page 24.

AHOE IN DEPTH

Protecting, Enjoying & Exploring the Lake Tahoe Basin Summer 2019 Issue #15

New plan affects structures, buoys along Tahoe's shoreline

By Tiffany Good Tahoe Regional Planning Agency

The Tahoe Regional Planning Agency Governing Board approved a new Shoreline Plan for Lake Tahoe in October 2018. The plan requires lakefront property owners, homeowners' associations, and marinas to register all existing boat moorings, including buoys, boatlifts, and boat slips. The plan also allows lakefront property owners to apply for new shorezone structures and for the modification and expansion of existing structures.

New shoreline programs

The Shoreline Plan creates programs needed to ensure shoreline structures and boating activity do not harm the environment, scenery, or recreation experiences at Lake Tahoe.

The cost of these programs will be paid through new shoreline fees that TRPA and its partners worked to fairly apportion to various shoreline users and structures. These include mooring fees, an

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STUDNING The 'Impossible Trail' opens on Lake Tahoe's popular East Shore

Photo: Mike Okimoto

The new Tahoe East Shore Trail from Incline Village to Sand Harbor is ready to enjoy this summer.

By Jessica Weaver

Special to Tahoe In Depth

Human nature seems to dictate that when something seems impossible, people will find a way to make it happen. That is the case for the Tahoe East Shore Trail — the impossible trail that is now complete and ready to be enjoyed.

The 3-mile trail, starting along the

mountainside before transitioning under the highway to follow the rugged, rocky shoreline between Incline Village to Sand Harbor, is an engineering marvel and could be considered one of the world's most beautiful trails. Environmental sensitivities and steep terrain made its construction difficult, but the contractor used creative methods and new technologies to improve lake clarity while building this segment of what eventually will be a shared-use path that circumnavigates Lake Tahoe.

While lauded for its beauty, the East Shore Trail is also a major safety improvement project. Roughly 2.6 million vehicles travel the narrow, 11-mile stretch of two-lane state Route 28 between Incline Village and Spooner Summit

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Tahoe In Depth PO Box 5310 Stateline, NV 89449



Protecting, Enjoying & Exploring the Lake Tahoe Basin

We're making progress on many fronts

As we wrap up another big winter at Lake Tahoe, summer fever is taking hold. So many new projects are coming online that using the word renaissance to describe what's happening at our high elevation hamlet is not an overstatement. Progress is underway to improve our environment, economy, and overall quality of life. As you flip through this issue of Tahoe In Depth, you'll see highlights



of impressive projects like the new "impossible trail" that connects Incline Village to Sand Harbor. You'll also read about the "epic collaboration" underway to protect the lake from invasive weeds and other harmful species.

Don't miss reading about Lisa Maloff, the "Angel of Tahoe," on pages 12 and 13. Her story continues to inspire us all and we're eternally grateful for the generosity she's shown the Tahoe community.

Having grown up on the East Coast, as a young kid I

often wondered why in Ocean City, Maryland, there was a sign that points to Sacramento, some 3,073 miles away. Read about it on page 5. One of Tahoe's main arteries, U.S. Highway 50, has quite a story that connects the country. And in the Stateline area on the South Shore, Highway 50 is getting a makeover that has the potential to transform the area into a walkable, bikeable main street corridor.

Please enjoy the upcoming Tahoe summer and thank you for your continued support of Tahoe In Depth.

— Julie Regan executive editor

Tahoe In Depth

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Managing Editor: Sarah Underhill

Design/Copy Editor: Jim Sloan

Contributors: Rebecca Bryson, David Bunker, Andrea Buxton, Kimberly Caringer, Nicole Cartwright, Tiffany Good, Jennifer Hebert, Adam Jensen, Travis Johnson, Tom Lotshaw, Joanna McWilliams, Devin Middlebrook, Shay Navarro, Jean Norman, Jessica Weaver, and Dennis Zabaglo.

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After fleeing Ukraine during World War II, Lisa Maloff built a new life at Lake Tahoe. Now she's giving back to the community she's called home for 60 years.



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Development impact fees, common in many areas of the country, help fund crucial Environmental Improvement Projects at Lake Tahoe and help local communities pay for bike paths, bus shelters, stormwater treatment, and street sweepers.



Boating at Tahoe

New rules about boat noise and no-wake zones aim to cut down conflicts and protect the lake, swimmers, and non-motorized boats.



A lake in peril

Lake Panguipulli near Patagonia is becoming increasingly popular, and the pressure it faces is similar to what Lake Tahoe faced in the 1950s and '60s. Experts from Tahoe went to Chile to see if they could help.



Battling weeds with light

Ultraviolet-C lights have proven to be an effective tool for controlling submerged aquatic invasive plants, a new study shows.

Tallac site gives visitors a stroll back in time

Historic area offers a rich experience — and a quiet respite from a busy Tahoe summer

By Jean Norman

USDA FOREST SERVICE

Lake Tahoe is a busy place in the summertime, but visitors to the Tallac Historic Site on the South Shore often feel like they've suddenly stepped back into a time when the world was less hectic and more relaxing.

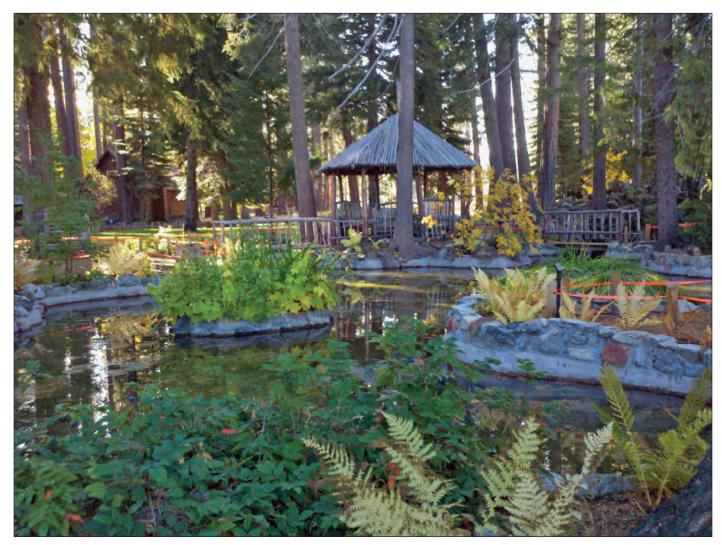
The historic site consists of nearly 20 structures, including the summer homes of several old-time families, nestled among groves of Jeffrey pine along the shoreline of Tahoe between Camp Richardson and the Taylor Creek Visitor Center.

Managed by the USDA Forest Service Lake Tahoe Basin Management Unit (LTBMU), the site has a rich human history. The various cultures that define the area's history is interpreted from the early days of the native Washoe to the days when notable families, including the Baldwins, Tevises, Popes, and Hellers, frequented their summer homes between the late 1800s to the 1960s. The buildings, programs, demonstrations, and voluteers help visitors learn about the lifestyles of Tahoe's rich and famous.

Elias J. "Lucky" Baldwin was an early owner of the property, which originally stretched from Taylor Creek to the south Upper Truckee River in the early 1900s. Parcels of land were sold to prominent families like the Tevises and the Popes. The elaborate summer homes they built saw many famous people, including silent-film actor Rudolph Valentino, famous boxers, and artists.

The front doors faced the water because guests and family arrived by steamboat, not auto. Servants catered to the families' daily needs and lived in small cabins on the estate. These wealthy families and guests enjoyed polo races, guided horseback riding into the Sierra Nevada, golf, croquet, gambling, live music, dancing, and eating extravagant multi-course meals.

Today, the historic Pope House is furnished with original and reproduction pieces that depict the 1920s era. The servants' outbuildings are similarly "dressed" for the time and include quarters for the butler, governess, cook, seamstress, chief gardener, and others on the Pope Estate. One can look through these outbuildings and screened doors to better understand what their lives must



Photos: Jude Markward, Tahoe Heritage Foundation The arboretum area is nestled in the trees between Camp Richardson and the Taylor Creek Visitor Center.

have been like. Working for the Tevis and Pope families was considered a great job by most servants' standards.

Dextra Baldwin (the granddaughter of "Lucky" Baldwin) built her summer home in a more rustic style on the Baldwin Estate. These days, the Forest Service uses most of this space as a museum with period-appropriate pieces that depict the 1920s.

One can also view a 13-minute historic slideshow to better understand the early years and families of Tahoe. There is also a gift shop, Washoe Room with traditional baskets and Native American artifacts, and a welcoming volunteer docent to assist visitors with questions.

The Tallac Historic Site offers a getaway from the hustle and bustle of the busy summer season. Listen to a chatty Stellar's jay or the nearby waves on Lake Tahoe's



Volunteers give demonstrations of old-time crafts such as blacksmithing.

East Shore trail offers views and safety

Shoulder parking on state Route 28 eliminated as trail provides easy access to Sand Harbor area

Continued from page 1

annually. According to the Nevada Department of Transportation (NDOT), from April 2006 to March 2013 Highways 28 and 50 on the East Shore of the lake had a crash rate of 1.33 per 1 million miles driven, well above the statewide rate of .96 for similar roads. Fatalities also rose, bucking the statewide trend in which fatalities dropped 50 percent in the same period.

During the planning stages for the East Shore Trail, Nevada Highway Patrol Sergeant Randy Jackson noted that the best option for reducing those crashes and fatalities was to "manage the SR 28 corridor for safe driving and access to the lake. It's what Tahoe visitors and residents deserve."

With the completion of this new section, all shoulder parking along the highway is eliminated and replaced with public transportation and 91 new parking spots at the northern trailhead in Incline Village. Removing shoulder parking also eliminates the safety hazard of pedestrians walking down the highway with coolers, and dogs jumping over guardrails to find their favorite cove, boulder, or beach.

"Our goal is to keep everyone on Nevada's transportation system safe and connected," said NDOT Public Information Officer Meg Ragonese. "This path helps do that by providing parking and safer, more direct access for pedestrians, bicyclists, and others to visit Lake Tahoe. The path helps remove potentially dangerous parking alongside State Route 28 for a safer drive on the highway."

Engineers also focused on building environmental improvements into the project, including 6 miles of stormwater improvements that will help maintain Lake Tahoe's famed water quality. To address steep sections of the shoreline where traditional trail-building techniques could not be used, Granite Construction installed micro-pile support system bridges that were secured into the bedrock by a series of 8-inch rods. There are six bridges on the 3-mile trail. Five are made with reinforced fiberglass decks, making them strong enough to hold a truck and allowing for thinner profile bridge design. The longest of the bridges measures 810-feet, making it the longest



Holly Racich and Sheri Marshall pause while on the 3-mile Tahoe East Shore Trail outside of Incline Village. Both donated to the trail project.

bridge at Lake Tahoe.

The 3-mile trail is a significant step in the multi-agency effort to reduce reliance on motor vehicles and enhance pedestrian and bicyclist safety along the lake's longest uninterrupted stretch of undeveloped shoreline. It is also expected to have a dramatic improvement on recreation access, giving people a new way to safely reach the East Shore.

The family-friendly East Shore Trail features 16 stunning vista points along the paved route, each showcasing an interpretive panel helping trail users learn something interesting about local ecology, animals, and history. A pedestrian and bicycle tunnel was built at Hidden Beach to eliminate dangerous highway crossings and reduce highway congestion.

The project required extensive collaboration among 13 public and private agencies. NDOT was the lead agency, supported by the Tahoe Transportation District, the Federal Highway Administration, the Incline Village General Improvement District, the Nevada Department of Public Safety-Highway Patrol, the Nevada Division of State Lands, the Nevada Division of "The path helps remove potentially dangerous parking alongside state Route 28 for a safer drive on the highway." Meg Ragonese

Nevada Department of Transportation

State Parks, the Tahoe Regional Planning Agency, the USDA Forest Service-Lake Tahoe Basin Management Unit, the Washoe Tribe of Nevada and California, and the three Nevada-side counties that govern Lake Tahoe – Carson City, Douglas, and Washoe.

Funding for the trail came from federal, state, and local sources, with over \$1 million in private donations raised by the nonprofit Tahoe Fund. Their work was critical to the project's success as it helped secure \$12.5 million in Federal Land Access Program grant dollars. Donors are recognized along the trail at vista points, benches, and on trout- and bear-shaped plaques. All donations of \$100 or more are recognized on a donor wall.

"We are so grateful to the more than 500 donors who contributed to this project," said Tahoe Fund CEO Amy Berry.

"With the support of our donors and the extraordinary work of our public agency partners, we have made the impossible possible for current and future generations to enjoy all that Lake Tahoe has to offer."

Benches, bear, and trout-shaped plaques are still available through the Tahoe Fund for anyone interested in leaving their legacy along the trail. For more information about how you can donate, visit tahoefund.org.

The agencies, governments, and groups involved in the trail are now planning the next 8 miles of trail from Sand Harbor to Spooner Summit.

Jessica Weaver works with the nonprofit Tahoe Fund and is a resident of Kings Beach, California.

Remaking Highway 50

Lake Tahoe project would realign 1 mile of the 'Backbone of America' through Stateline

By Tom Lotshaw

Special to Tahoe In Depth

U.S. Highway 50, the five-lane road through South Lake Tahoe and Stateline, is one of America's longest roads. It spans 12 states and runs more than 3,000 miles from Sacramento to Ocean City, Maryland.

Time magazine dubbed Highway 50 the "Backbone of America" in the 1990s. News anchor Tom Brokaw visited communities along the route for a 2010 special report, sharing stories from a cross-section of America as people tried to recover from the Great Recession.

From Sacramento, the highway runs east through the Gold Rush town of Placerville, climbs the Sierra Nevada to Lake Tahoe, heads down to Nevada's capital, Carson City, and then passes through a vast expanse of Basin and Range desert where it is known as the "Loneliest Road in America."

It traverses the Rocky Mountains in Colorado, reaching 11,300 feet at its highest point, and passes through farms and towns on the Great Plains. It runs through Missouri and the Ozarks, crosses the Mississippi and Ohio rivers before passing through Appalachia, the Blue Ridge Mountains, and Washington, D.C., to cross Chesapeake Bay and reach its end in the Atlantic beach town of Ocean City.

Makeover proposed

There are hundreds of communities and natural attractions along the highway, which at least one travel writer has called the best way to drive across the country's center. Tahoe is certainly the largest, deepest, and clearest mountain lake along the route, and one of its most popular outdoor recreation areas.

Proponents of the U.S. 50 South Shore Community Revitalization Project that the Tahoe Transportation District (TTD) and TRPA approved last year are working on a major makeover for a small stretch of the 3,000-mile highway in South Lake Tahoe and Stateline.

The estimated \$120 million project will include affordable housing and realign about 1 mile of the highway to run behind the casino core and Heavenly Village, improving traffic flow for people driving through the area. But the project



The \$120 million Highway 50 project will create a two-lane 'main street' through Stateline.



A sign at the beginning of westbound U.S. 50 in Ocean City, Maryland (left), includes the mileage for Sacramento (3,073 miles) and illustrates why the highway is called "The Backbone of America." A similar sign for eastbound U.S. 50 outside Sacramento displays the mileage to Ocean City.

"This is a project of regional significance, and it is anything but just a road project because of all those elements."

Carl Hasty, executive director

Tahoe Transportation District.

is more about community revitalization than a simple road realignment, supporters say.

It will turn the old highway alignment into a two-lane "main street" through the Stateline area in California and Nevada, creating the first major community hub at Tahoe that's not on a major highway.

A new 'main street'

TRPA, TTD, local governments, and the public are working to determine exactly how that main street will look and function. Plans to date call for better pedestrian and bike infrastructure throughout the area, better transit services, landscaping, streetscape amenities, and a new pedestrian bridge to Van Sickle Bi-State Park. The main street will be under local control so it can be closed for events and activities, unlike the federal highway.

The project is planning safety improvements and community amenities such as parks, sidewalks, and lighting for the adjacent Rocky Point neighborhood. The neighborhood has long been plagued by cut-through traffic from motorists trying to beat congestion on Highway 50 using its residential roads.

Affordable housing planned

The project will also build 109 affordable housing units for local workers. The housing units will be new and deed restricted affordable replacing significantly more than the 76 aging housing units that must be acquired and razed for the project to proceed. "This is a project of regional significance, and it is anything but just a road project because of all those elements," said Carl Hasty, executive director of TTD.

The goal is to build upon past redevelopment in the Stateline area, which over the last two decades has seen the installation of a gondola to carry skiers and sightseers up to Heavenly Mountain Resort and millions of dollars of investment that has gradually turned a stretch of dilapidated shops and motels along the highway into Tahoe's densest hotel and commercial center.

What's next?

For the next two years, partners will work on finalizing the project design and completing the Main Street Management Plan and Rocky Point Neighborhood Plan, Hasty said.

The replacement housing must be built before any road improvements are started, putting road construction at least five years out.

But the project promises to eventually be one of the most comprehensive community revitalization projects Lake Tahoe has ever seen. And it's the first major chance in decades for the public and businesses to re-envision how South Lake Tahoe and Stateline live and interact with their major highway thoroughfare, Hasty said.

Carol Chaplin, director of the Lake Tahoe Visitor's Authority, wants the project not only to improve traffic, transit, pedestrian infrastructure, and housing on the South Shore, but also make it easier for people to get out of their cars and enjoy all Tahoe is famous for.

The project can do this, she said, by creating a core area where people can walk out of their hotel room, go to the lake, go to the mountains, go shopping, dine, take a walk or bike ride, find entertainment, or hop on a bus, and never have to drive their car.

"Tahoe's the place with the pretty big blue lake. And this is the project that will help people get down to see it, experience it, and hang out without having to use their car," Chaplin said.

Tom Lotshaw is the former public information officer for the Tahoe Regional Planning Agency.

TRPA honors 4 with Lake Spirit awards

Citizens, volunteers, and scientists recognized for work at the lake

By Adam Jensen

TAHOE REGIONAL PLANNING AGENCY

Protecting Lake Tahoe is no easy task. It takes real dedication from real people to get the work done to maintain and improve the Region's unique natural environment.

Considering this dedication, the Tahoe Regional Planning Agency has again honored four people who share a commitment to protecting Lake Tahoe with Lake Spirit Awards.

Awards are given to people from both the North and South Shores who are either citizens or agency representatives or environmental scientists.

This year's winners are:

South Shore citizen: Helen Henry Smith

Helen Henry Smith had the unique experience of spending her first 14 summers at Emerald Bay's Vikingsholm as the guest of owner Lora Josephine Knight.

"As an only child, she fondly remembers walks and conversations with the owner and distinctly recalls the building and landscape details that make Vikingsholm so special," wrote Heidi Doyle, executive director of the Sierra State Parks Foundation, in nominating Smith.

Following those magical summers, Smith has spent much of her life working to help preserve the iconic Lake Tahoe castle while forming the Vikingsholm Project Council.

"Through this leadership, over \$2 million has been acquired to perform significant restoration projects over the years," Doyle said. "She has made it her life mission to coordinate the needs of Vikingsholm with State Parks for project completion. This was not always an easy task, but she persevered by soliciting the help of outside resources and remaining heavily involved with the actual work. Although Smith is no longer able to spend the entire summer at Vikingsholm, she remains steadfast to its preservation and future."

North Shore citizens: Ben and Evan Anderson

Presidents of the Truckee High School Envirolution Club, Ben and Evan Anderson are dedicated to the environment beyond their years and have more service hours than people twice their ages, said Melissa "Missy" Mohler, executive director of Sierra Watershed Education Partnerships.

The Andersons have consistently



Photo: Tahoe Regional Planning Agency

Ben and Evan Anderson (left) pose with Marilee Movius (second from right) and Jay Howard (far right) after receiving their Lake Spirit Awards from TRPA Executive Director Joanne Marchetta (third from right) and TRPA Governing Board Chair Bill Yeates. Not pictured: winner Helen Henry Smith.

attended watershed service days, Truckee River Days, beach and other community clean-up days, volunteered at booths for environmental outreach, assisted at science fairs, created public environmental outreach, and written letters to local papers and businesses asking for commitments to the

environment, among other activities. "Most importantly, Ben and Evan have

consistently shown up, walked the talk and put in countless hours toward every aspect of our local environment ... the wildlife, water quality and conservation, waste management practices, watershed protection, protection of native species, energy conservation, climate change education, and environmental advocacy," Mohler said in nominating the Andersons.

South Shore agency representative or environmental scientist: Marilee Movius

League to Save Lake Tahoe Community Engagement Manager Marilee Movius fosters a more informed community through her work, where she manages the League's volunteer program, cultivates local partnerships, and organizes community events.

Movius was especially effective at organizing more than 500 volunteers for beach clean-ups last July.

"Volunteers picked up 1,473 pounds of trash, including 8,121 cigarette butts and thousands of pieces of plastic," wrote Liz Lawton, environmental program manager for Liberty Utilities, in nominating Movius.

"The event was covered by 26 media outlets from Tahoe, the northern California region, and northern and southern Nevada. It is great to see the biggest turnout yet for this event last year and the awareness grow that we need to reduce use and pack out what we pack in."

"Marilee has a great skill at getting even the biggest skeptic excited about environmental issues around Lake Tahoe," Lawton said. "She lives her environmental stewardship in all her activities."

North Shore agency representative or environmental scientist: Jay Howard

Jay Howard's work at Lake Tahoe dates to the beginning of the Lake Tahoe

Environmental Improvement Program, when he was selected in 2000 as Nevada State Parks' first staff position for the program.

He's led or provided crucial assistance in numerous projects at Lake Tahoe, everything from trail construction and beach restoration to campground upgrades and construction of Van Sickle Bi-State Park.

"Jay has a strong personal commitment to the protection of the fragile environment in the basin," wrote Mark Kimbrough in nominating Howard.

"He understands the importance and necessity for proper planning and studies to establish priority needs for the EIP in the basin.

"He personally initiated several planning efforts in the park to gather the science necessary for implementation. The net results for Jay's work will be seen for years to come in the basin."

Adam Jensen is the environmental education specialist at TRPA.

League and homeowners fight unwanted weeds

Work at Glenbrook and Tahoe Keys helps control aquatic invasive species

By Joanna L. McWilliams

League to Save Lake Tahoe

Some of the blue waters of Lake Tahoe are in danger of turning green from aquatic invasive plants such as Eurasian watermilfoil and curlyleaf pondweed. These invaders thrive in shallow nearshore waters and can take hold if temperatures continue to rise and no immediate action is taken.

In 1995, an infestation was discovered in Emerald Bay, and it took many years to refine the necessary tools to control it. The plants spread and infested a staggering 6 acres. Though ultimately a success story, it took four years to control the invader, and the effort cost hundreds of thousands of dollars.

Today a new, collaborative approach to addressing aquatic invasive species in Lake Tahoe is being spearheaded by the League to Save Lake Tahoe (www. keeptahoeblue.org). The League is partnering with concerned homeowners' associations around the lake to train, empower, monitor, and control infestations with innovative methods before costs balloon and large areas are impacted.

Glenbrook Bay

One example of the success of this partnership can be seen in the weedfree waters of Glenbrook Bay, located in Nevada on the East Shore of Lake Tahoe.

Back in 2015, Hillary Marble attended a League Eyes on the Lake training. There she learned how to identify and report sightings of native and non-native aquatic plants in Lake Tahoe. She began reporting sightings of aquatic invasive plants while out kayaking on Lake Tahoe.

Soon thereafter, Marble was enjoying a day on the lake in her kayak with friends when she spotted a party crasher — Eurasian watermilfoil. It was growing in the shallow waters of Glenbrook Bay. She immediately reported it to the League.

"It was an intended day of pleasure. I was out with Glenbrookers, friends new and old, kayaking on the lake when we found the aquatic invasive species," Marble said.

League experts followed up to conduct a more detailed survey of the entire shoreline at Glenbrook Bay and determine the extent of the infestation. They found that the influx of Eurasian



Photo: League to Save Lake Tahoe

Two aquatic invasive species experts from the League to Save Lake Tahoe conduct a survey of the shoreline at Glenbrook Bay.

watermilfoil was contained within a quarter acre of the southern portion of the bay.

Acting in partnership with the Glenbrook Homeowners Association (GHOA) and individual property owners along the shoreline, the League devised a plan to eradicate the infestation in coordination with other AIS program organizations. The League hosted a series of Eyes on the Lake Trainings at the GHOA so that homeowners — those most likely to care and spot invasives could learn how to become a part of the solution.

Claire Huntington McCloud, who summers with her family at Glenbrook, attended one of the League's Eyes on the Lake trainings and helped remove the invasive plants near her home.

"If you give residents the tools to see the invasives and be proactive, then you can control the weeds at a tiny fraction of the cost of what you would have to do elsewhere to fix the problem," she explained.

League experts and volunteers did frequent surveys of the infestation and learned that it was discovered early and could easily be controlled. Removal efforts by the League, Eyes on the Lake volunteers, and experts were successful. Today, Glenbrook Bay is free from aquatic invasive species.

Not only that, but many members of the GHOA community are now

empowered to identify the most common aquatic plant invaders threatening Lake Tahoe, complete simple surveys while out enjoying the water, and report what they find. With these community members patrolling the shoreline, there is less chance intruders will take hold again in the future.

Tahoe Keys

Another example of a successful partnership is the one between the League and the Tahoe Keys Property Owners Association (TKPOA). The warm, protected waters of the Tahoe Keys lagoons on the South Shore are ground zero for aquatic invasive plants, and the 172 acres of waterways are over 90 percent full of these invaders.

"The League has been working closely with the Keys since 2013 to address this aquatic invasive weed situation, and without TKPOA's participation, initiative, and investment, a lot of these tests and projects would not be happening. It's been a great group to work with because we have a common goal of trying to address these weeds," said Jesse Patterson, chief strategy officer for the League.

Current control methods are inadequate to address the size and complexity of the infestation. The League worked to find and test innovative solutions to stop these

Continued on page 14

Searching for solutions to invasive weeds in the Keys

By Dennis Zabaglo Tahoe Regional Planning Agency

Agencies and stakeholders are embarking on a collaborative process to find solutions to one of Lake Tahoe's largest aquatic invasive species problems.

The Tahoe Keys residential development at the South Shore includes more than 170 acres of waterways and lagoons that connect to Lake Tahoe. For several decades, those waterways have been choked with invasive aquatic plants — Eurasian watermilfoil and curlyleaf pondweed. Because of the size and complexity of the infestation, few tools are available to treat the problem at a manageable level.

The Keys lagoons' weeds threaten all of Lake Tahoe. Recognizing that something must be done to address the threat, experts are evaluating new control technologies. Stakeholders have committed to work together to find a comprehensive solution.

Representatives from the Tahoe Regional Planning Agency, Lahontan Regional Water Quality Control Board. Tahoe Resource Conservation District, Tahoe Water Suppliers Association, League to Save Lake Tahoe, and Tahoe Keys Property Owners Association are collaborating in an open and transparent process to delve into the hard questions and ensure that all potential impacts are analyzed. Whether to consider the use of aquatic herbicides is part of the discussion and analysis. Rigorous tests of other methods using the best available science are planned before any possible herbicide consideration by local governing bodies.

A public engagement period will start this summer to gain input on the environmental review and to help guide solutions for the Tahoe Keys' invasive weeds problems.

Meanwhile, testing new technologies to control the weeds is underway, including the use of UV-C light (see story on page 20) and other projects like the League to Save Lake Tahoe's work also featured on this page.

To stay up to date on the process and learn about public input opportunities, visit tahoekeysweeds.org.

Dennis Zabaglo is the aquatic resources program manager for TRPA.

Group takes aim at addressing housing crunch

Program hopes to increase options for Tahoe workers by partnering with second homeowners



Who benefits from the TaHoCo program

- A property owner who only visits South Shore 1–2 times per year and could use a local resident and member of the workforce to ensure the property is well looked after.
- A property owner who only visits South Shore during one season (for instance, winter or summer) and could make the property available during the alternate season for a business lease.
- A property owner who wants to rent their residential property but is on the waitlist for a VHR permit.
- A VHR owner, who would like a more stable, reliable client base for part or all of the year.
- A South Shore local property owner who has a spare room, vacant suite, a granny unit or accessory dwelling unit in their home and would like to make some extra income.

By Rebecca Bryson Tahoe Home Connection

The housing shortage in Lake Tahoe has reached a critical point. Many of Tahoe's local workers, including nurses, teachers, police officers, and service workers, cannot find local housing. The number of available units is limited and rents are high, forcing many Tahoe workers to find housing outside the basin.

A workforce commuting long distances not only compromises the health of Lake Tahoe, it's left many employers struggling to fill positions. Services such as transit have been reduced, and local businesses' costs have increased due to poor worker retention.

Tahoe is limited in its ability to build new, affordable housing. Construction is costly and restricted, buildable lots are hard to find, and the construction season is shortened by the weather and building regulations.

The problem is laced with an underlying irony: while workers struggle to find affordable housing, over half of the homes in South Lake Tahoe sit empty most of the year. Of the roughly 27,000 homes in South Lake Tahoe, approximately 15,500 are used only seasonally, recreationally, or occasionally by the owners or by friends and family.

Is there a way to make use of these underutilized homes in a way that works for both second homeowners and potential renters (and even local employers)? Other mountain resort destinations have successfully partnered with second homeowners to lease their homes on a part-time, seasonal, or even full-time basis through flexible leases, discount property management services, master leases with local employers, and other incentives. This is the goal of a new program called Tahoe Home Connection.

What is Tahoe Home Connection?

Tahoe Home Connection (TaHoCo) is designed to unlock some of Tahoe's existing housing by encouraging second homeowners to rent their properties on a short-term, seasonal, or year-round basis. Created by the citizen-led group Progress for Tahoe and in partnership with the City of South Lake Tahoe, El Dorado County, the El Dorado Community Fund, and several realtors and property managers, TaHoCo is based on successful programs in Summit County, Colorado, and

Tahoe Homeowner - Your Input is Needed!

South Lake Tahoe is in the middle of a housing crisis and it is impacting local businesses, tourism services, the community, and our recreational environment. Being part of a small community gives us the opportunity to work together when problems arise. Your home could be part of the solution! As the owner of a second home on the South Shore, we'd like your input.



Image: Tahoe Home Connection

The nonprofit Tahoe Home Connection is reaching out to second homeowners with this postcard and through other means to find unoccupied homes that might help ease South Lake Tahoe's housing crunch.

Whistler, British Columbia.

TaHoCo matches homeowners with pre-vetted employees of local businesses or directly with employers through a master lease or similar option. In a master lease, the home is rented directly to the employers. By connecting employers to homeowners who use their homes rarely or seasonally, TaHoCo provides homeowners with a streamlined, low-risk option to earn income from their vacant properties while also bringing more rental housing into the market quickly and at a lower cost.

TaHoCo has developed a package of benefits for homeowners including:

- Reduced property management fees;
- Vetting of renters;
- Flexible, negotiated rental agreements that allow owners to enjoy their home on select holidays or free stays in another property in exchange for renting a house through the program year-round;
- Education on current rental rates; and
 Resources for updating their home in preparation for rental.

Who benefits from TaHoCo?

TaHoCo's goal is to increase the supply of desirable, high quality, local housing for Tahoe's growing workforce and create a thriving, vibrant, well-rounded community. It aims to quickly bring 20–30 homes into the market this year at little or no cost to the taxpayer. The program is an excellent value for the money involved.

The program benefits the community in other ways. Homeowners will benefit from the rental income while contributing to our community in a meaningful way.

Employers will spend less time finding (and training) new employees because employees will be able to more easily find and retain housing.

The property managers participating in the program incorporate the homeowners into their normal processes, and thus benefit from receiving new business while also assisting the community by providing a valuable service.

Finally, this program will benefit the community at large by helping ensure that there is more, better housing available for local workers.

How to get involved

South Shore property owners who have an unoccupied home, condominium, suite, or bedroom and want to consider renting it to a working professional on a part-time, seasonal, or full-time basis should contact TaHoCo or visit tahoehomeconnection. com for more information. With so much demand for housing, a rental arrangement for part of a season or longer term can make a valuable difference.

Rebecca Bryson is on the Progress for Tahoe Steering Committee and is one of the founders of Tahoe Home Connection.

Liberty Utilities addressing wildfire risk

Mitigation plan tackles vegetation management and infrastructure improvements

By Travis Johnson Liberty Utilities

Catastrophic wildfires have become all too common in California. As we saw last year in Paradise, a single spark can quickly turn into a fire capable of wiping out an entire community.

That spark can come from a cigarette butt, a camp fire, a lightning strike, or even electric infrastructure. It is impossible to predict when or where a wildfire may start, but a changing climate, dry forests, and high wind conditions have most of the Golden State on high alert. Drought and bark beetle infestation have devastated portions of the local forest, killing trees and providing an ideal fuel for wildfires.

Liberty Utilities, aware of the fire risk in the Lake Tahoe Basin and the surrounding forests in its service territory, recently implemented a 78-page wildfire mitigation plan to address local factors that put the region at risk.

Here are some steps Liberty Utilities is taking to address these concerns:

Vegetation management

Liberty Utilities' crews inspect trees and vegetation in the vicinity of its power lines throughout the year. Any trees or branches that grow too close to power lines are trimmed or removed to mitigate any wildfire risk.

Vegetation management crews canvas the service area on a three-year rotation. Most tree and vegetation management work is done from May through October, but work continues through the winter months and can include the daunting task of removing vegetation debris after storms.

Liberty Utilities has an aggressive tree-trimming clearance standard. Crews prune branches and vegetation back to a minimum of 12 feet from the power lines to ensure adequate clearance over the three-year maintenance cycle. Hazard trees — which are often dead, diseased, or structurally unsound — are identified for removal. These trees can be far away from the power line, but have the potential to fall into the power line. When trees need to be removed, Liberty Utilities and its contractors follow a notification process so that property owners are aware of the work prior to its completion.

Tree trimming and removal services



Photo: Liberty Utilities

A worker prepares to remove a tree threatening power lines.

performed by Liberty Utilities are done at no cost to the property owner. Limbs, slash, and brush are chipped and hauled or broadcasted on-site. The remaining wood is left with the property owner.

Liberty Utilities also has an emergency program to immediately remove trees that are an imminent threat to infrastructure. Throughout the Lake Tahoe Region, Liberty Utilities has increased its vegetation management program investment from \$2.5 million to \$4 million annually to ensure all trees and vegetation near power lines are trimmed or removed within the appropriate timeframe.

An aggressive vegetation management program is crucial in the Lake Tahoe region; many areas have been designated a "Very High Fire Hazard Severity Zone" by CAL FIRE, meaning the region is especially vulnerable to wildfire.

If you have any questions about

Liberty Utilities' vegetation management program or would like to report a tree or vegetation you feel may be a hazard, call 530-546-1787 or email CATree@ libertyutilities.com.

De-energization

An electric utility can turn off power in areas where weather conditions create a high fire risk. This practice of deenergization is becoming more frequent and is supported by the California Public Utility Commission (CPUC) as a safety best practice.

"Liberty Utilities has only de-energized once thus far — last November a couple of days before Thanksgiving," said Jeff Mathews, manager of engineering and planning. "The idea of turning off peoples' power on purpose goes against everything that we in the electric utility industry have ever been taught. That being said, we recognize that it is necessary and appropriate at times in order to reduce a fire risk."

Liberty Utilities will deploy weather stations throughout the service area and collaborate with the National Weather Service in Reno and local fire officials to monitor local weather conditions. Specific weather conditions that could trigger a de-energization event are humidity or extreme wind gusts.

"It is likely that we will be employing de-energization more often during the dry months this summer and going forward to further mitigate fire risk," said Kurt Althof, communications manager for Liberty Utilities. "We are encouraging all of our customers to ensure their contact information, such as phone numbers and emails, are up to date on their account so that we can provide customers with as much warning as possible prior to a planned de-energization event."

Infrastructure hardening

Infrastructure hardening is an ongoing system improvement and replacement process aimed at lowering the potential for fires sparked by electric infrastructure. These improvements will require several years to implement, and will include some of the following projects:

- Replacing conductors (wires) with covered conductors. Covered conductors encase the wires in layers of insulation to protect them when energized. Although bare wires have traditionally been used in California as a reliable, cost-effective solution, it's safer to replace bare conductors with covered conductors in high fire risk areas.
- Pole load testing and replacement as needed. Liberty Utilities is accelerating the testing and replacement of poles throughout the region to better prevent failing poles that pose safety, reliability, and fire risks.
- Fuse replacements. Conventional fuses, when operated, expel hot particles and gases that can start fires. To mitigate that risk, Liberty Utilities proposes to replace conventional fuses with current-limiting fuses on much of its system over the coming years. Current-limiting fuses expel



Lake clarity improves

Lake Tahoe's clarity improved dramatically in 2018 to 70.9 feet, a 10.5-foot increase over the 2017 value.

The UC Davis Tahoe Environmental Research Center credited the improvement to more normal weather patterns — 2018 spring runoff was far lower than in the record wet year of 2017. Suspended sediment washed into the lake from the major tributaries was 10-25% of the 2017 values.

Joanne Marchetta, executive director of the Tahoe Regional Planning Agency, noted that climate change continues to affect the lake.

"Seasonal weather extremes will most likely drive greater swings in clarity from year to year in the future, so it's imperative we continue to invest in the lake's restoration to combat new and emerging threats," she said.

Tahoe named a top destination by global group

The Sustainable Destinations Top 100 program has recognized Lake Tahoe as a global sustainable destination.



The program showcases sustainable tourism and best practices of destinations around the world. Making the Top 100 does not mean a destination is fully sustainable but that it is demonstrating progress.

Tahoe was selected a top destination and was second in the "Best in Nature" category, finishing behind the Dutch Quality Coast Delta in the Netherlands.

Global nonprofit Green Destinations leads the Top 100 program. It leads a global partnership of tourist destinations, private companies, and academic institutions to promote sustainable tourism around the globe. Past winners of the Top 100 program include the Mountain West communities of Vail and Jackson Hole. To see all of the 2019 winners, visit sustainabletop100.org/.

Sustainable recreation



Illustration: Eleanor BonBon

Economy, nearby population centers increasing demand on the outdoors

By Devin Middlebrook Tahoe Regional Planning Agency

Tourism, travel, and outdoor recreation are exploding globally. According to the United Nation's World Tourism Organization, there were 1.3 billion international tourist trips in 2018 and another 5–6 billion domestic trips. In 2017, the World Travel & Tourism Council reported that the travel and tourism sector accounted for 10.4 percent of global GDP and 9.9 percent of total employment, or 313 million jobs.

Nationally, statistics from the Outdoor Recreation Satellite Account released by the U.S. Department of Commerce's Bureau of Economic Analysis show that the outdoor recreation economy accounted for 2.2 percent (\$412 billion) of current-dollar GDP in 2016. The outdoor recreation economy grew 1.7 percent in 2016. According to the Outdoor Industry Alliance, consumer spending on outdoor recreation in 2017 totaled \$92 billion in California and \$12.6 billion in Nevada. Booming populations in nearby urban centers, economic growth, and changing visitor demographics have all led to increased demand for outdoor recreation at Lake Tahoe. Consider these statistics:

- Visits to the national forest lands in the basin have increased by more than 30 percent, from 5.78 million in 2010 to more than 7.72 million in 2015.
- Official transportation plans estimate Tahoe serves 9.6 million visitor vehicles annually.
- According to the Tahoe Prosperity Center, tourism and outdoor recreation make up \$3.2 billion of the \$5.1 billion local economy. In total, 76.1 percent of jobs in the Region are visitor serving.

In peak seasons, visitation levels often overwhelm recreation and transportation infrastructure, resulting in negative effects to natural resources and user experiences. These factors produce pressure points across the Region, including traffic, lack of parking, limited access, crowding, and environmental degradation. Recreation managers increasingly don't have funding or staffing to fully address this peak demand. Additionally, much of the Region's recreation infrastructure is aging and not designed to meet current demands or visitor needs.

Collective impact

The USDA Forest Service Lake Tahoe Basin Management Unit and the Tahoe Regional Planning Agency created a multi-sector working group of conservation and recreation professionals, private and nonprofit partners, and recreation stakeholders to address these challenges. The primary goal of this collaboration is to provide sustainable and high-quality outdoor recreation experiences while preserving and restoring the natural and cultural resources of the Lake Tahoe Basin.

The future of recreation at Lake Tahoe depends on coordinated education and Continued on page 14

2-step process helps homeowners install BMPs

Improvements on developed lots help reduce stormwater problems for Lake Tahoe

By Shay Navarro

TAHOE REGIONAL PLANNING AGENCY

Why is stormwater runoff a threat to Lake Tahoe?

In a natural watershed with no development, most precipitation falls and soaks into the ground, where it filters through the soil. Development, such as roads, driveways, and rooftops, alters the watershed by creating impervious surfaces that prevent stormwater from infiltrating. Instead, stormwater runs over the surface and collects pollutants such as sediment, nutrients, oil, and grease. This stormwater enters the nearest storm drain or stream and ends up in Lake Tahoe.

What are Best Management Practices (BMPs)?

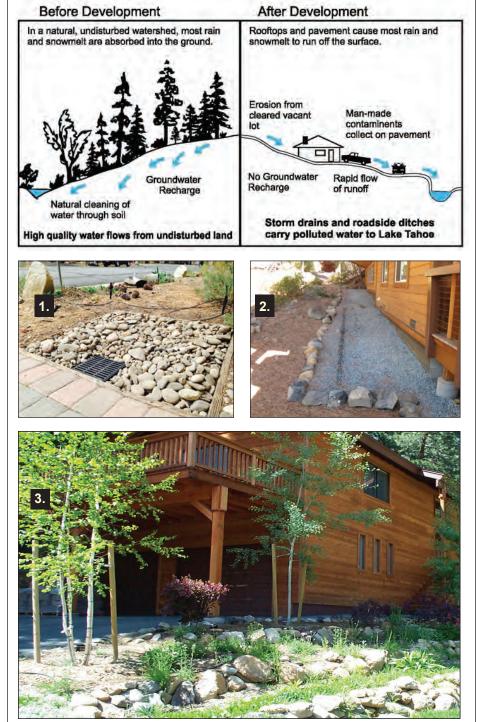
BMPs are measures homeowners and businesses put in place on their property to lessen the impacts of urban stormwater runoff on Lake Tahoe's water quality.

To mimic natural conditions, TRPA requires all developed properties in the Lake Tahoe Region to capture and infiltrate an amount of runoff equivalent to one inch of water from all impervious surfaces, stabilize any sources of sediment to prevent it from flowing off the property, and provide fire defensible space. Commercial and large multi-family properties must also treat pollutants prior to infiltration.

This can be done in a variety of ways, including:

- Installing infiltration BMPs such as gravel infiltration systems and basins;
- Employing treatment BMPs such as filters and vaults;
- Implementing source-control BMPs such as paving driveways and parking areas;
- Applying vegetation and mulch to stabilize bare soil;
- Using parking barriers to prevent off-pavement parking and preserve vegetation; and
- Applying rock to protect soil under roof driplines, decks, and elevated structures as well as maintain a 5-foot non-combustible perimeter around every structure.

Once in compliance with TRPA's



Photos: Tahoe Regional Planning Agency

A gravel infiltration system (photo #1) infiltrates runoff from driveways and a sediment trap makes it easier to perform routine maintenance. Rock (#2) protects the soil under roof driplines, decks, and stairs, as well as provides for fire defensible space. A variety of landscaping treatments (#3), such as mulch, rock, and vegetation, can stabilize soil while creating a unique design.

BMP requirements, developed properties receive a BMP Certificate of Completion.

In the past, TRPA required property owners to complete source control and infiltration BMPs all at once to receive a BMP certificate.

To make that process less burdensome, single-family residential properties may now implement BMPs in a two-step process. After first retrofitting the property by installing source control BMPs, TRPA issues a Source Control Certificate. Property owners can then design and size remaining infiltration BMPs, which may require more complex design, when permitting a property improvement, such as an addition, remodel, or tear-downrebuild.

Once the property owner installs or maintains full infiltration BMPs, TRPA issues a BMP Certificate of Completion.

While most property owners are eligible for this streamlined process, some more sensitive parcels are not: lakefront residential properties due to proximity to the lake, properties in areas identified as high priority for compliance, or multi-family residential and commercial properties because of the higher amount of pollutants they produce.

What are site constraints and areawide water quality treatment?

In certain circumstances, conditions on a property limit the ability to infiltrate stormwater on the parcel. These circumstances include high groundwater, bedrock, steep slopes, slow-infiltrating soils, retaining walls, utility placement, and subsurface contamination.

TRPA issues a Source Control Certificate when these owners install and maintain source control BMPs, and considers them in substantial compliance with TRPA's BMP requirements.

To come into full compliance and receive a BMP Certificate of Completion, these parcels must participate in an existing or future area-wide or regional water quality treatment program once it becomes available.

How do I find out if I'm in compliance?

Visit the parcel tracker at www.ltinfo. org to determine the BMP status of a property, check if the property has any verified site constraints, or check to see if the property is located within an areawide water quality treatment project area.

For more information on BMPs, visit www.tahoebmp.org and if you need assistance understanding what BMPs TRPA requires for your property, call the BMP Hotline at 775-589-5202.

Shay Navarro is the stormwater program manager for TRPA.

tahoeindepth.org

From a childhood shattered by the ravages of World War II, Lisa Maloff found refuge at Lake Tahoe. Now she's passing on *her good fortune to others and earning her nickname ...*

ANGEL of TAHOE

By David Bunker SPECIAL TO TAHOE IN DEPTH

It is no overstatement to say that Lisa Maloff's generosity has transformed South Lake Tahoe. Everything from hospital wings, university buildings, youth centers, and athletic fields have been built with her generous support. Maloff has distributed approximately \$40 million to nonprofits, community organizations, and individuals throughout South Lake Tahoe in a legendary giving spree that is both selfless and personal.

It's her way of giving everything she has to a community that gave her a home when she needed it most. And it is the reason thousands of people know Maloff by her unofficial name — "The Angel of Tahoe."

The story of how the now 90-year-old philanthropist decided to empty her pockets for community organizations across South Lake Tahoe starts during one of the world's darkest decades.

"I was raised on a farm in the Ukraine That is the beginning," said Maloff, seated on her sofa near a sliding glass door that looks out to the slopes of Heavenly Ski Resort and the greening fairways of the Edgewood Golf Course.

Maloff's parents, Ludwig and Lydia Bauer, were farmers from Poland who had relocated to Ukraine. It was a modest farm, where Lisa's caregiver Ricky Reich said "her mother used to sweep the dirt floor every week."

War erupts

That humble yet bucolic beginning would soon be shattered by World War II and the German invasion of Ukraine. And Lisa's childhood would be marked by the unbelievable cruelties of war.

Ukraine was one of the countries most decimated by World War II, first by Stalin's Soviet empire and then by



"I felt very fortunate. My husband and I were very well off and I wanted to share it. ... I don't want to be buried with a check so I am giving away as much as I can."

Lisa Maloff

the Nazi occupation. When the surprise German offensive began in Ukraine on June 22, 1941, the Soviet army launched what historians describe as a "scorched earth" retreat, blowing up buildings, destroying crops, and flooding mines in an attempt to leave nothing of value to the invading force.

But the arrival of the Germans brought an even more devastating reality. An estimated 5-7 million people died. More than 700 cities, towns, and villages were destroyed. Ten million were left homeless.

The Bauers were caught in the middle of this devastating conflict.

Sent to a labor camp

The Nazis interned millions of people. Some were forced into labor camps. Others simply disappeared. Lisa's father was taken away and was never seen again. When Nazi soldiers came for her and her mother, Lisa's future brother-inlaw, Sasha, was able to hide Lisa's two sisters.

"For some reason, the military came into our home and took me and my mother and they put us in a concentration camp," said Maloff. "We were just two little innocent women. We were no threat to anybody."

Lisa was approximately 12 years old when she was taken to the camp. After two years of internment, Sasha paid

off the Nazi guards to gain her release. Miraculously, the guards allowed her to leave. But while Lisa escaped with her life, her mother passed away from malnutrition in the camps.

Lisa left the camp as a young teen in war-ravaged Europe, without family except for her two sisters. Only the mercy of strangers allowed her and her sisters to emigrate to the United States and rebuild their lives here.

"A group of ladies in the U.S. here decided to sponsor orphans from the war. My sister and I qualified. We were under 18," said Maloff. Tania, Lisa's older sister, was over 18, but also emigrated to the U.S. after the war.

Maloff came to live in an orphanage in Los Angeles, and when she left the orphanage, she traveled to Lake Tahoe to visit her sister.

The year was 1959. She put down roots in South Lake Tahoe and never left. Over the next 60 years, South Lake Tahoe would become not only Lisa's home, but a place where she and her sisters would reassemble, as best they could, the family they had lost in World War II.

The Maloffs build a business

The early years in South Lake Tahoe were a time of both incredibly hard work and great enjoyment for the Maloffs.

Lisa had met and married Robert Maloff in Los Angeles before coming to Tahoe.

Robert began a career in construction and hotel management, and Lisa volunteered at the hospital auxiliary during the day and worked as a seamstress at Harrah's at night for \$2.50 per hour.

What would soon become an impressive Maloff hotel empire began modestly. They owned a tiny hotel called the Tropicana in South Lake Tahoe, where rooms rented for \$5 per night, said Maloff.

"When we filled up, we slept on the couch and rented our bedroom for \$5," said Maloff. That one small hotel soon grew into an impressive number of hotel and casino holdings. Over time the Maloffs, along with business partners, would own and run a number of properties, including the Lake Tahoe Inn, the Timber Cove Lodge, and the Sundowner in Reno.

Meeting celebrities

Lisa also had her own career taking care of high-profile entertainers who came to Harrah's Tahoe to perform. She got to know many of the celebrities that graced the stage at Harrah's in those days, but admits that Sammy Davis Jr. was always her favorite. Lisa said that every time the legendary singer made his way to the lake, he would greet Lisa with a hug.

"Of all the people he met he remembered my name," said Maloff. Maloff and her sisters ended up all

living on the same street in Skyland,

with the mostest"—a purveyor of fine gatherings and social events.

twice," said Reich. Lisa played the accordion, wore festive pink ensembles, and crafted costumes for her friends. To this day she insists on eating a beet and coleslaw every day.

away in 2011. Her two sisters, Tania and Slava, passed away in 2010 and 2018, respectively.

Finding a friend

During this time, Ricky Reich became her companion and caretaker. Reich had been remodeling condos within a complex where the Maloffs also owned a unit. Sasha Maloff took notice of his work and Reich was hired to remodel the Maloff's unit. Sasha then introduced him to Lisa. Reich started helping Lisa with numerous projects. He became a friend, and earned her trust.

"The crazy thing was I had no clue who the Maloffs were," said Reich. After Robert's passing, Reich and Maloff began to pass time together, dining and conversing about life.

"We laugh at the same things. We look at life with the same outlook." Reich said. In the period after the death of her husband and her sisters, Lisa was coping with loss and the sudden responsibility of handling the substantial finances she now controlled. Reich, her right-hand man, helped her move from Skyland to a smaller home that was easier to navigate, cooking for her and driving her to appointments and gatherings. It was during this time that Lisa heard a story about a man who asked his daughter that she bury him with all his money. She decided she never wanted to

follow that path.

Making donations

What ensued was a remarkable string of donations to countless local charities and organizations. She donated \$10 million in her late husband's name for a state-of-the-art orthopedic and wellness center at Barton Health. She donated \$5.8 million to the Lake Tahoe Community College for a new university center that offers four-year degrees. She donated over \$3 million to Whittell High School for an athletic field and track. Another \$3 million check was sent to the Boys and Girls Club of South Lake Tahoe for a new facility. The list goes on and on. Virtually every day, Reich receives phone

and Lisa became known as the "hostess

"She never served the same meal

Her husband, Robert Maloff, passed

calls asking for Lisa's support, and she responds to many with her unwavering generosity.

"It has transformed the community and I think that will be her overarching legacy," said Jeff DeFranco, president of Lake Tahoe Community College.

Until Maloff's donation to the college there was no way for South Lake Tahoe residents to receive a four-year college degree without leaving the community. Lisa not only donated funding to build the University Center, she also contributed \$100.000 toward scholarships for students seeking their four-year degree. Each year, 10 Lake Tahoe Community College students will become Maloff scholars as a result of her generosity.

"The University Center was not going to happen without Lisa," said DeFranco.

Her personal touch

DeFranco said that Lisa's generous donations come with a healthy dose of Maloff wit and humor that leave a personal touch on the causes she supports.

"She drinks this combination of merlot and chardonnay wine and she jokes that she invented this wine 'Charlot.' So we had a winemaker make this wine for one of our events," said DeFranco.

At Barton Health, Maloff's generosity will be felt by generations of orthopedic patients.

"Lisa Maloff's generosity sparked a new era in healthcare for Lake Tahoe with the opening of the Barton Center for Orthopedics & Wellness inside the Robert Maloff Center," said Dr. Clint Purvance, Barton Health president and CEO. "Using prevention and education to enhance health and wellness within our community, this new model of care takes a whole-person approach designed to treat the individual, not just injury or disease."

The center is home to Barton's elite orthopedic care team, an integral part of medical care in such an active mountain community.

Individuals in need

But it is not just high-profile community projects Maloff supports. Often checks go out to individual South Lake Tahoe residents who need help. These checks are often handed over with a warm hug from Lisa.





Photos: Barton Health

Lisa Maloff, top photo, at the 2016 groundbreaking ceremony for the Barton Center for Orthopedics & Wellness, and later, bottom photo, at a 2018 reception at the center, where she viewed an exhibit talking about her donation and her late husband Robert Maloff. She donated \$10 million in her late husband's name for the state-of-the-art orthopedic and wellness center at Barton Health.

Future recreation at Tahoe will rely on education, outreach

Continued from page 10

outreach programs that promote a culture of stewardship. There is a need for a renewed focus on the acquisition of social and ecological data to inform management actions, improve public access and user experience, and enhance multi-modal transit links between town centers and recreation sites that reduce dependence on private vehicles. Visit takecaretahoe.org and linkingtahoe.org to learn more.

Emerald Bay recreation corridor

The intersection of transportation and sustainable recreation is highlighted along state Route 89 around Emerald Bay. This two-lane mountain roadway is the only access route to many of Lake Tahoe's popular recreation areas and a number of the corridor's residential neighborhoods. Beach access to almost 12 miles of undeveloped shoreline is



Emerald Bay

accessed by Meeks Bay, Sugar Pine Point State Park, Emerald Bay, Baldwin Beach, Camp Richardson, and Pope Beach. Seven trailheads grant day hikes to waterfalls and alpine lakes as well as backcountry and wilderness access for overnight recreation opportunities.

Led by the Tahoe Regional Planning Agency, Tahoe Transportation District, and the USDA Forest Service Lake Tahoe Basin Management Unit, SR 89 Recreation Corridor management planning started in March 2018 and brings together 17 agencies and organizations to improve transportation and visitation management. To learn more about the visit http://bit.ly/sr89rec.

Lake Tahoe is not alone in needing new solutions to growing demands for tourism and outdoor recreation. Destinations around the globe are also experiencing pressure points and are actively working on solutions to reduce related impacts. To learn more about other destinations and tourism across the globe visit www.responsibletravel.org.

Recreation survey

What is your vision for sustainable recreation in the Tahoe Region? Complete this survey today to share your ideas: www.surveymonkey. com/r/TahoeRec2019.

Devin Middlebrook is the sustainability program coordinator for TRPA.



Photo: Liberty Utilities Work crews utilize bucket cranes to remove a tree encroaching on power lines.

Utility taking steps to improve power system

Continued from page 9

- no materials, limit the available fault current, and can reduce the duration of faults. The use of both conventional and current limiting fuses provides a high level of reliability.
- Replacement of the Brockway Substation in Kings Beach. The 60-year-old Brockway Substation was constructed with wooden poles, cross arms, and obsolete oilcircuit breakers. This facility has been deemed a fire hazard and is scheduled to be decommissioned and replaced.

In addition to these infrastructure projects, Liberty Utilities will continue undergrounding sections of the power grid in the coming years.

What You Need to Know

Liberty Utilities is taking precautionary steps to protect the community from wildfires by implementing a robust mitigation plan. The best way to stay informed about de-energization, vegetation management, and system upgrades is to ensure the personal contact information Liberty Utilities has on file is up to date. To learn more, follow Liberty Utilities on Twitter via @LibertyUtil_CA or Facebook via @ LibertyUtilitiesLT, visit LibertyUtilities. com, or call 1-800-782-2506.

Travis Johnson, P.E. is the vice president of operations for Liberty Utilities.

Bubble curtain helps prevent aquatic weeds from spreading

Continued from page 7

plants from entering Lake Tahoe. Casual brainstorming conversations between TKPOA staff, the League, and other Tahoe community members lead to project sketches on the back of a napkin at a conference and eventually a formal plan. The idea was to create a barrier of bubbles to stop invasive plant fragments from leaving the infested Keys and entering Lake Tahoe.

"Bubble curtains" have been used for decades around the world to contain marine debris and corral tuna farming operations in the open ocean but never to stop aquatic invasive plants from spreading.

In collaboration with TKPOA, League scientists worked with experts to design, fund, and install a custom bubble curtain across the west channel between the Tahoe Keys lagoon and Lake Tahoe. The "V-shaped" wall of air now dislodges plant fragments from boats passing through and moves them to the edges of the channels where they can be collected and removed. Thousands of invasive plant fragments floating in the lagoon that would normally be carried out into the Lake on surface currents are trapped and discarded.

"Because we have a major problem with aquatic invasive weeds, the Tahoe Keys is trying to provide a leadership



Much of the Tahoe Keys has been infested with aquatic invasive species that can spread if not carefully controlled.

role in Lake Tahoe by incorporating and installing different technologies to fight aquatic plants," said Greg Hoover, water quality manager and AIS management coordinator at TKPOA.

Effectiveness monitoring has been in place since the project's installation in 2018 and will be used to assess if similar projects will work at other infested marinas around the lake. In addition, the League and the Tahoe Resource Conservation District will use the best practices from Glenbrook and apply those to other HOAs wishing to protect their little piece of Lake Tahoe.

Joanna McWilliams is the communications manager for the League to Save Lake Tahoe.

Fees benefit water quality, trails, and transit

Mitigation funds help offset the impacts of development by supporting environmental improvements

By Kimberly Caringer

TAHOE REGIONAL PLANNING AGENCY

Summer is in full swing at Lake Tahoe, and that means some residents are working on home remodels or new building projects. Permits for these projects often include Tahoe Regional Planning Agency (TRPA) mitigation fees, which help fund bike and pedestrian paths, transit and bus shelters, stormwater treatment, street sweepers, and stream restoration throughout the Tahoe Basin.

Development impact fees, common everywhere, help to balance out the needs for infrastructure in the basin and the need to protect the environment. As part of the historic compromises made over managing development in the basin, stakeholders agreed that fees collected from the private sector by TRPA should go toward environmental improvement projects to help offset the impacts of development.

These fees do not pay for TRPA staff or agency operations. Instead, these mitigation fees are directly invested into local government projects that restore Lake Tahoe's environment and improve local communities. Over the past 10 years, TRPA has released nearly \$10 million in mitigation fee revenue to local governments for projects. Below are some examples:

Bike and pedestrian paths

Local governments are building multi-use paths around the lake to give people more options than just their cars to get around. These paths help traffic congestion and air quality. Mitigation fees helped construct the El Dorado Beach to Ski Run bike trail segment in the City of South Lake Tahoe, the Sawmill Bike Path in El Dorado County, and the Incline to Sand Harbor segment in Washoe County.

Transit and bus shelters

The City of South Lake Tahoe has invested funds in building more bus shelters, and Placer County uses funds for Tahoe Truckee Area Regional Transit buses.

More frequent and reliable transit service is critical to reduce traffic congestion, improve air quality, and make it easier for residents and visitors



Photo: Tahoe Regional Planning Agency Burke Creek in Douglas County was one of several creeks that were restored to a more natural state using mitigation fees.

to travel in the Tahoe Region without driving personal vehicles.

Stormwater treatment

One of the most critical projects local governments implement to protect the water quality of the lake are stormwater projects. When it rains or snows in Tahoe, water flowing through the urban environment of buildings and roads carries sediment and pollution directly into the lake. Stormwater projects such as constructing curbs, gutters, and large catchment basins in local neighborhoods help filter the water along the way.

Street sweepers

Douglas, El Dorado, and Washoe counties are using mitigations fees to buy new street sweepers — expensive equipment needed to keep Tahoe's roadways clean. Street sweeping helps keep fine sediment particles from washing off urban areas and roads into Lake Tahoe.

Stream restoration

Every county has utilized fees for stream restoration, an important priority in Lake Tahoe's Environmental Improvement Program. Stream restoration helps return lake tributaries to their more natural state, before they were altered and impeded by development.

This restoration benefits fish and wildlife and helps protect lake clarity. Funds have helped restore Snow Creek in Placer County, Lower Third Creek in Washoe, Burke Creek in Douglas County, and Meyers Creek in El Dorado County.

Funds spent locally

When TRPA collects these fees, the funds are spent within the local jurisdiction the fees were collected from, providing a more direct linkage to offset the development in that area and making sure every community around the lake benefits from the program.

"Mitigation funds have assisted in the completion of several important environmental projects in Douglas County," said Courtney Walker, stormwater program manager for Douglas County Public Works.

"These include the Burke Creek Highway 50 crossing and realignment, the Kahle water quality basin implementation project, and the upcoming basin maintenance and upgrades to the North Benjamin Drive detention basins."

The air quality, water quality, and coverage mitigation fees have resulted in significant investment in Lake Tahoe's environment and local communities.

The fees provide local governments with funding needed to meet regional goals for a healthier natural environment at Tahoe.

Every community around the lake has benefitted from this work to protect and improve the natural environment and quality of life that keeps Tahoe such a special place to live, work, and play.

Kimberly Caringer is TRPA's Environmental Improvement Program division manager.

Shoreline Plan allows for new public piers

Continued from page 1

increase in boat sticker fees, and boat rental concession fees that are now in effect for the 2019 boating season.

New programs include boater education and enforcement of the 600-foot no-wake zone at Lake Tahoe, expansion of the no-wake zone to include all Emerald Bay, and no-wake zone buffers around all swimmers, paddlers, and shoreline structures to prevent unsafe boating near the shoreline where motor boats, paddlers, and swimmers interact. Boats must stay under 5 mph within Emerald Bay and when within 600 feet of shore, 100 feet of paddlers and swimmers, and 200 feet of shoreline structures.

TRPA is partnering with the Lake Tahoe Water Trail and the basin-wide Take Care campaign, as well as with the League to Save Lake Tahoe, marinas, concessionaires, and law enforcement agencies, to implement these new boater education and enforcement activities.

In addition to strengthening its own presence on the lake with a second watercraft team, TRPA is entering an agreement with all law enforcement agencies on the lake. The goal is to coordinate and prioritize enforcement strategies through a Watercraft Task Force that will meet regularly to focus on improving compliance with boating regulations at Lake Tahoe.

"Lake Tahoe was suffering from the lack of a shoreline plan as illegal activity caused environmental degradation and conflicts among recreationists on the water," said Darcie Goodman Collins, chief executive officer of the League to Save Lake Tahoe.

"This new plan has stronger protections, more effective enforcement, and a vastly improved education program enhanced by technology."

Other new programs provide:

- Coordinated TRPA enforcement against illegal boat moorings on the lake with the California State Lands Commission and Nevada Division of State Lands;
- More monitoring and control projects to prevent the spread of harmful aquatic invasive species;
- Enhanced TRPA monitoring for noise and scenic impacts from boating activity and shoreline structures; and
- New provisions to keep noisy boats with aftermarket exhaust systems that exceed TRPA, California, and Nevada



Photo: Drone Promotions An aerial view of Sand Harbor.

sound limits from operating on the lake.

Mooring registration and permitting

Property owners can now get permits and register existing moorings online at laketahoeinfo.org/moorings. The registration period for this season will remain open until Sept. 30. Property owners who are eligible to apply to register an existing mooring in 2019 include:

- Those who have a mooring permitted by TRPA;
- Those who have previously applied for a TRPA mooring permit;
- Those who have a mooring with a state or federal permit or lease; and
- Those who have a mooring with no permit or lease but proof of its existence prior to 1972.

A \$43 annual registration fee will be charged for each mooring. Revenue from the registration fee will help pay for coordinated enforcement against illegal moorings on the lake. Each buoy is also charged a \$47 annual scenic impact fee that will help pay for projects to restore the natural scenic qualities of Lake Tahoe's shoreline.

Existing moorings that do not have a prior TRPA permit will have to undergo TRPA permit review in conjunction with the registration process.

"Registering moorings is a key part of the new Shoreline Plan that will improve recreation at Lake Tahoe and help protect the environment for generations to come," said Jan Brisco, executive director of the Tahoe Lakefront Owners' Association.

The Lake Tahoe Shoreline Plan authorizes TRPA to permit up to 1,486 new private moorings over the next 20 years.

As part of the phased plan, permitting and registration for new moorings will begin in January 2020. To apply for a new mooring, property owners must have a best management practices (BMP) certificate from TRPA.

New pier applications

The Shoreline Plan authorizes up to 128 new private piers over the next 20 years but allows up to five new single-parcel piers and up to seven new multipleparcel piers to be permitted during the first two years of the plan. New pier applications will be accepted every two years. Beginning June 1, TRPA will accept project proposals for new singleparcel and multiple-parcel piers. Selected project proposals will then be able to move forward with the application and review process. For more information about the new pier application process, visit www.trpa.org/pier_info.

Visit trpa.org/shoreline to learn more about the plan, mooring registration and permitting, and new pier applications.

Tiffany Good is a senior planner at the Tahoe Regional Planning Agency.

Shoreline structures:

- The Shoreline Plan authorizes up to:
- 10 new public piers
- 128 new private piers, with 12 pier applications accepted every two years. Piers that serve multiple properties will be prioritized, with no more than 25 pier permits available for piers that serve a single property.
- 2 new public boat ramps
- 1,486 new moorings, including buoys and boat lifts, with no more than 15 percent of the moorings permitted in any given year. In 2019, TRPA will ensure that all existing moorings on the lake are permitted and registered and will begin processing new mooring applications by 2020.
- Up to 330 of the new moorings will serve existing marinas, and up to 300 new moorings will serve public agencies with lakefront facilities.

Shoreline fees:

- \$43 annual mooring registration fee charged for all boat moorings. Pays for enforcement of illegal moorings, no-wake zone education and enforcement, and aquatic invasive species monitoring and control.
- \$47 annual buoy scenic mitigation fee charged for all buoys. Pays for projects to offset the scenic impacts of buoys.
- \$12 increase to annual boat sticker fees for all boat inspections.
 Pays for aquatic invasive species monitoring and control and watercraft inspection costs.
- \$75 annual boat rental concession fee charged for all rental boats with a 3-star or higher rating by the California Air Resources Board and \$150 annual boat rental concession fee charged for all rental boats with a lower or no CARB rating. The fee structure encourages fleet turnover to cleaner engines and pays for aquatic invasive species monitoring and control and no-wake zone education and enforcement.

tahoeindepth.org

New programs, fees set for 2019 boating season



Photo: Novus Select Boaters enjoy the calm waters off the West Shore of Lake Tahoe.

New rules take aim at excessive boat noise, no-wake zones, and safety

By Adam Jensen

TAHOE REGIONAL PLANNING AGENCY

Keeping Lake Tahoe's boaters, paddlers, and swimmers safe and protecting the natural environment are the goals behind new safety programs and fees in place for the 2019 boating season.

Additional enforcement of no-wake zones and excessive boat noise under Tahoe Regional Planning Agency's Shoreline Program are two measures being taken to protect the lake and nonmotorized watercraft and swimmers.

Boat inspections fees have also been adjusted for the first time in seven years to better safeguard the lake from aquatic invasive species, and sticker fees now include a \$12 fee as part of the Shoreline Program.

Safety and environmental measures

Lake Tahoe has no-wake zones to keep boaters, paddlers, and swimmers safe. Boats must stay under 5 mph when in Emerald Bay or within 600 feet from the shore, 100 feet of paddlers and swimmers, and 200 feet from shoreline structures. The no-wake zone around shoreline structures is included in addition to the 600-foot no-wake zone because some of the lake's buoy fields extend farther than 600 feet from the

No-wake zones

Lake Tahoe has no-wake zones to keep boaters and swimmers safe. Boaters must maintain a safe distance from shore and from paddlers, swimmers, and structures. Please stay under 5 mph when boating within:

- 600 feet of shore.
- 100 feet of paddlers and swimmers.
- 200 feet of shoreline structures.Emerald Bay.

How far is 600 feet? The length of two football fields. To measure, cruise at idle speed from shore for about 90 seconds.

shore. A Tahoe Boating app to help inform boaters about the lake and the location of no-wake zones will be available this summer. See page 23 for how to download the app.

Boats must also comply with noise limits and keep exhaust systems muffled so all visitors can enjoy a peaceful Lake Tahoe. Exceptions are in place for classic and antique boats. Vessels also should be "Clean, Drained, and Dry" before arriving at Lake Tahoe watercraft inspection stations to ensure an efficient launch and help prevent the spread of aquatic invasive species.

Boat sticker fees increased by \$12 as part of the Shoreline Program approved by the TRPA Governing Board last fall. These fees will help pay for boater education, no-wake zone enforcement, and projects to prevent the spread of aquatic invasive species in Lake Tahoe.

Boater fees changing

The 2019 inspection fee schedule condenses 13 categories to five to make it easier to understand and more accurately reflect inspection work and boat complexity. Decontamination fees were also modified to reflect the work it takes to decontaminate watercraft. To find out how the new fee schedule affects you, visit: tahoeboatinspections.com.

Controlling existing invasive species in the lake is also a priority.

"Proven methods are being used to systematically remove aquatic invasive species infestations around the lake," said Sara Matthews, Tahoe Resource Conservation District aquatic invasive species control coordinator. "These projects contribute to improving natural lake habitats and the quality of recreation."

Adam Jensen is the environmental education specialist at TRPA.



Find the perfect beach

Did you know that over 50 public beaches surround the iconic shores of Lake Tahoe? Whether you're looking for dog-friendly beaches, places where you can BBQ, rent paddleboards or boats, or find shade, TahoePublicBeaches.com is your one-stop shop to learn about each beach and how to get there.



Tallac estates

Continued from page 3

shoreline. One can leisurely stroll through the site among the nearly 20 historic structures dating from 1894 to 1923. Many enjoy exploring the Pope Estate's historic gardens, gazebo, and pond, with its trickling waterfall, and participating in free family activities each Wednesday in July and August during Heritage Days. The site offers daily historic home tours, walking tours, children's programs, and living history programs.

The Baldwin and Pope Estates host a variety of free events and activities thanks to the LTBMU's nonprofit partner, the Tahoe Heritage Foundation (THF). Visitors can take advantage of the many daily, organized tours available throughout the summer or enjoy the site through self-guided activities or watching living history blacksmithing.

"The Tahoe Heritage Foundation provides funding for interpretive programs, restoration projects, and ongoing maintenance projects at the Tallac Historic Site," said THF's Director of Operations Jude Markward. "We also coordinate the services of over 80 volunteers each year through our partnership with the LTBMU, which is vital for the success of this cherished site's operation."

"My most memorable experiences while at Tallac were working with an adventuresome group of volunteers," said THF volunteer Don Wells.

The LTBMU and THF host approximately 250,000 visitors to this cultural centerpiece each year, Markward said, noting that many stumble across the site while visiting nearby Camp Richardson or Taylor Creek Visitor Center.

For more information, contact the Tallac Historic Site at 530-541-5227 or visit tahoeheritage.org. The area is open from 10 a.m. to 4 p.m. seven days a week from May 25 to the end of September.

Jean Norman is the Tallac site director for the USDA Forest Service Lake Tahoe Basin Management Unit.

Tahoe experts helping Chilean lake



Photo: Tahoe Regional Planning Agency Researchers take a tour of Lake Panguipulli during a visit to Chile by a team of Lake Tahoe representatives. Pressure of popularity afflicting scenic Lake Panguipulli near Patagonia

Devin Middlebrook

TAHOE REGIONAL PLANNING AGENCY

Southern Chile, the gateway to Patagonia, is known for its raw natural beauty, pristine lakes, glacier-capped volcanos, and temperate forests. Within this region, 19 lakes sit at the base of towering volcanic peaks and account for 30 percent of the fresh surface water for the entire country.

One of the region's lakes, Lake Panguipulli, faces the same pressures Lake Tahoe faced in the 1950s and '60s. With a population of around 40,000 people, tourism brings an influx of over 150,000 people during summer months. Growing popularity, unregulated development, and increased tourism are impacting the environment and the quality of life for residents.

Two years ago, a small group of community leaders gathered to proactively address these issues. This group, called Chile Lagos Limpios (or Chile Clear Lakes), started by looking for examples of other lakes with similar challenges and found Lake Tahoe. The group wanted to learn about the history of Lake Tahoe, past development, and current environmental restoration programs.

One example of this is a new project for 250 vacation homes along Panguipulli's shoreline, where natural wetlands were

removed to create an artificial beach. This growing trend of development has sparked conversation among the locals about potential environmental and social impacts, including the discharge of raw sewage into the lake. Similar concerns at Lake Tahoe several decades ago led to the creation of the League to Save Lake Tahoe, an active and informed community using science from UC Davis to advocate for regional environmental protections, and the creation of the Tahoe Regional Planning Agency.

To help achieve the goals of Chile Lagos Limpios, a delegation from Tahoe with representatives from the Tahoe Regional Planning Agency, the League to Save Lake Tahoe, and the University of California, Davis traveled to Lake Panguipulli in May 2018 and January 2019. The delegation's mission was to share the Lake Tahoe story and help the people of Chile better manage their environmental resources while supporting sustainable economic development and local communities.

Tahoe and Chile working together

The people of Lake Panguipulli and Chile are struggling with the same issues Tahoe faced 60 years ago and still faces today. How do you balance the economy, environment, and community to ensure the long-term prosperity of the region? The cornerstone of the delegation's visits to the region was a public seminar attended by local officials, governors, senators, and community members. At the culmination of this event, an international partnership agreement was signed, joining Tahoe and Chile in a commitment to exchange ideas and work together to protect unique and endangered natural places around the world based on stewardship and a sense of place.

In addition to the public events, the Tahoe delegation installed the first permanent monitoring station in Lake Panguipulli. The station will provide real time data about the lake's water quality. This data will be used to guide the creation of a sustainable watershed plan for Lake Panguipulli and eventually all Northern Patagonia lakes.

There are many stakeholders in Chile with differing opinions, but they have come together to do something for the greater good. As citizens of this beautiful place we call Lake Tahoe, let us not forget that our story can help influence environmental protection and sustainability across the globe.

To learn more about this project visit www.chilelagoslimpios.cl or www. facebook.com/chilelagoslimpios.

Devin Middlebrook is the sustainability program coordinator for TRPA.

Zephyr Cove celebrates 40 years with facelift

USDA Forest Service and partner team up to make improvements to venerable resort

By Jennifer Hebert

USDA FOREST SERVICE

It's difficult to imagine a time when lakefront property sat idle on the market at Lake Tahoe, but that was the case with Zephyr Cove Resort in the 1970s. Aging and dilapidated, the patchwork facility once owned by George Whittell Jr. seemed past its prime.

Acquired by the USDA Forest Service Lake Tahoe Basin Management Unit (LTBMU) in 1979 for \$4.9 million, the facility became the third lakefront resort under agency operation. In the 40 years since the acquisition, the LTBMU and its concessionaire partner, Aramark Corporation, have wrestled with the challenges of managing a site designed for a different era. Now, as the agency celebrates four decades of ownership, Zephyr Cove Resort is in the midst of a renaissance. With rapidly escalating demands for recreation, management, and upkeep, the partners have made a variety of improvements that maintain the property's character while addressing its functionality.

The property's long history has closely mirrored the evolution of the Lake Tahoe Basin's economy since the late 1800s. Capitalizing on the Homestead Act of 1862, Andrew Boynton Gardinier (who later changed his name to Gardner) claimed 160 acres of property adjacent to the beach and meadows at Zephyr Cove and quickly built a hostelry. Gardinier aimed to profit from the construction of the Lake Tahoe Wagon Toll Road, a critical artery to the Comstock Lode. The discovery of silver precipitated a wave of prospectors eager to stake their claim, and the Zephyr Cove House was a wellplaced waypoint for weary travelers. The hostelry prospered for the better part of a decade, filling its rooms and the adjacent meadow with hopeful miners.

By 1869, the Comstock traffic had slowed to a trickle, and the Zephyr Cove House needed a new business model. The market for lumber was on the rise, and with that came new opportunities. Now under the ownership of the Carson and Tahoe Lumber and Fluming Company, the property shifted to a multi-use model. In addition to providing goods and services to travelers, the facilities hosted several cordwood cutting operations that pursued an ever-dwindling supply



Photo: Jennifer Hebert, USDA Forest Service The new marina building will be open this summer for ticket sales and equipment rentals.

of timber stands. These services were maintained until the Comstock boom drew to a close and timber operations shifted to Truckee.

A quiet interval followed. Timber companies slowly liquidated their stocks, and by the 1920s the only activity recorded on the site was livestock grazing. Meanwhile, a budding interest in recreation opportunities was forming across the nation, particularly among the middle class. Preceded by Camp Richardson and Meek's Bay resorts, Zephyr Cove entered a period of redevelopment that targeted this viable market.

From the 1930s to 1960s, proprietors developed the framework for the resort as we know it today. Under the ownership of Whittell and the management of Charles F. Wylie, the first modest cabin facilities and tentcamping sites were established. With the development of U.S. Highway 50, operations reoriented to center on the new road with a two-story shop.

After Gene F. Empey assumed management, the site experienced a period of intense development and great popularity. During the '50s and '60s, Empey added the marina facilities, rebuilt the pier and water system, greatly expanded trailer sites, and installed toilet "With strong partners like Aramark, we can better manage our unique assets to meet the growing demands for recreational access in the Tahoe Basin."

Jeff Marsolais LTBMU Forest Supervisor

and snack bar facilities by the beach. He extensively remodeled the main lodge and stables.

Until recently, Empey's additions and improvements were the last significant changes made to the site. But this once-idle property now flourishes with activity, and with demand on recreation facilities projected to increase, the resort has entered another phase of reinvention. Aramark and the Forest Service have undertaken a number of improvements to better meet the needs of visitors.

A new marina building for ticket sales and equipment rentals will be in

operation this summer, along with a new office and tack room at the riding stable. Partners have added three Airstreams offering full "glamping" amenities for guests. Several cabins also have been remodeled inside, and the lodge parking lot was reconstructed to meet accessibility and environmental standards. Designers and builders have ensured these modifications meet the needs of the visiting public and harmonize with the site's visual and historic identity.

The partnership creates opportunities for enhancing the site in ways that the Forest Service could not accomplish alone, and with each successful project, momentum grows for further improvements. Over the next decade, the resort will evolve for a new generation of guests.

"Our partnership with the LTBMU allows us to enhance the development of recreation while preserving the unique character of Zephyr Cove Resort," Aramark Regional General Manager Maggie Garcia-Nook said.

For reservation and recreational information, visit Zephyr Cove Resort's website at www.zephyrcove.com.

Jennifer Hebert is a landscape architect and presidential management fellow with the USDA Forest Service Lake Tahoe Basin Management Unit.

UV-C lights helping with aquatic invasive species

By Nicole Carwright Tahoe Resource Conservation District

A pilot program using ultraviolet-C (UV-C) lights to kill submerged aquatic invasive plants shows promising results and is being recommended for ongoing control and continued analysis at Lake Tahoe.

Aquatic invasive plants are one of the greatest threats to Tahoe's clarity and ecology, but the UV-C project showed that applying the light treatment caused invasive plants to deteriorate or completely collapse within seven to 10 days after treatment.

Tahoe Resource Conservation District (Tahoe RCD) conducted the study in collaboration with Inventive Resources, Inc. The initial laboratory findings prompted Tahoe RCD to recommend continued use and analysis of the light treatment as a control tool at Lake Tahoe.

Aquatic invasive species pose a serious threat to the recreational and natural resources of the Lake Tahoe watershed. Aquatic invasive species compete with native species and can increase algae growth that contributes to the decline of Lake Tahoe's famous water clarity. Thick aquatic plant growth hinders navigation and can tangle on rudders, hulls, and paddles. This thick aquatic vegetation also provides an unnatural habitat that allows other non-native species to establish.

"We are pleased that our company was able to participate in such an exciting project that demonstrates the innovative positive impact technology can have on the environment and our community,"



Photo: Tahoe Resource Conservation District A set of UV-C lights lowered over a bed of aquatic invasive plants.

said John J. Paoluccio, president of Inventive Resources, Inc. "We are so proud that we were able to help add a new treatment control method to combat the spread and reduce the amount of aquatic invasive plants in Lake Tahoe."

Paoluccio brought the idea of using this technology to treat aquatic invasive plants at Lake Tahoe after successful treatment of algae in sensitive cave environments. Inventive Resources initiated a project using UV-C light to treat aquatic plants in their laboratory and it was very successful, showing five- to 15-minute exposure times deteriorated the plants. Complete eradication of aquatic invasive plants may not be achieved with only one treatment, but a decrease in plant percent cover, mean plant height, and plant density, was observed. It is believed that with a consistent and comprehensive treatment plan, UV-C will be a successful tool to control aquatic invasive plants in Tahoe waterways, paired with other approved techniques.

"Invasive plant populations can be reduced, and with continued treatments and a combination of tools available, we will be better equipped to manage populations around the lake in the future," said Mollie Hurt, director of programs for Tahoe RCD. "We are encouraged by the results and look forward to additional UV-C light treatment projects to explore the full potential of this new tool."

Tahoe RCD is working on further environmental analysis that expands available techniques for lakewide control and treatment of aquatic invasive plants at Lake Tahoe. This expanded analysis will include UV-C light along with other proven mechanical techniques.

The initiative was funded by a Lake Tahoe Science and Lake Improvement Account grant from the California Tahoe Conservancy, private contributions from the Tahoe Fund, and many project partners, including Lakeside Park Association, Action Watersports, Marine Taxonomic Services, Green(e) Consulting, California State Department of Parks and Recreation, Dr. Ravi Jain, and Inventive Resources, Inc.

For the final monitoring report, visit tahoercd.org/tahoe-aquatic-invasive-species-resources/.

Nicole Cartwright is the executive director at Tahoe RCD.

Maloff's generosity has touched every corner of her adopted home of Lake Tahoe

Continued from page 13

The breadth and scope of her donations are unique, said Bill Roby, director of the El Dorado Community Foundation.

"It is a rare individual that has that vision and ability to engage at that level," said Roby.

Maloff's impact is not only in her giving, but in her leadership, said Roby.

"The extent at which they raise up the nonprofit, community-based organizations in Tahoe is a life-changing experience," said Roby. "These organizations are often on the funding treadmill and that treadmill can be really fast. Through Maloff's giving, they have been taken off that treadmill. It allows them to dream 'what else can we do?'"

One of Lisa's favorite ways of giving is when she dresses up as Mrs. Claus for the annual Christmas party for Tahoe Youth and Family Services. More than 125 children line up to meet Maloff as she impersonates Mrs. Claus, and each child receives a Christmas gift and an ample amount of Maloff's attention.

In those moments, the girl who was orphaned in war-torn Ukraine, left without parents or a home, finds the immense joy of giving the gift of love to the line of children crowded around her.

"It means a lot to me because I was raised on the farm in the Ukraine and I survived a concentration camp in the war,"

said Maloff.

And despite giving everything to the community she calls home, she is still astounded by what she receives in return. Her living room is filled with letters of gratitude from the community and banners expressing the community's thanks for her boundless generosity.

"People have gone out of their way to show their appreciation," Maloff said.

Recently, the City of South Lake Tahoe, in a tribute to Maloff's contributions to the community, started the process of renaming Airport Road "Lisa Maloff Way." The recognition brought back memories of her childhood and is a testament to the remarkable life of The Angel of Tahoe.

"Isn't that a miracle? I was raised on a farm and here I am, they are naming a street after me. I am overwhelmed. Totally overwhelmed," said Maloff.

But for the community members of South Lake Tahoe, the ongoing miracle is that by some wild twist of fate a young Ukranian girl would improbably survive the horrors of World War II, find a home and happiness in Lake Tahoe, and become a legendary benefactor for the entire community. The miracle is The Angel of Tahoe.

David Bunker is a freelance writer and editor in Truckee.

Group addresses peak-time traffic

Travel concerns prompt local push to communicate better with motorists

By Adam Jensen

TAHOE REGIONAL PLANNING AGENCY

Lake Tahoe experienced quite the winter. The California Department of Water Resources found the snowpack near Echo Summit contained twice as much water in 2019 as it typically does around April 1.

With the heavy winter came headaches for motorists trying to get into, out of, or around Lake Tahoe communities or recreation areas at peak travel times on popular weekends.

Recognizing the concerns with congestion, and that no one organization or agency could tackle them on its own, more than two dozen people from a wide variety of South Shore entities organized this winter to discuss some of the reasons behind the backups and to work on solutions.

North Lake Tahoe also added new transportation programs and partnerships, including additional shuttle services through Tahoe Truckee Area Regional Transit supplementing existing regional shuttles, non-stop flights, and trains.

The South Shore group took immediate action to improve coordination of communication between organizations and the public. The group expects to continue to work on congestion issues and has taken a few other initial steps to help ease backups at the busiest times.

"All of the various agencies coming together with the common goal of coordinated and consistent messaging is the only way to meet the challenges presented by weather and complicated by traffic volumes during peak timeframes," said Carol Chaplin, executive director of the Lake Tahoe Visitors Authority. "We always think better and thus work better toward meaningful solutions when we tap into all of the expertise and knowledge of this larger group."

The group distributed recommended tips for Sunday departures to Lake Tahoe Visitors Authority lodging properties to better inform motorists of some of Lake Tahoe's unique traffic challenges.

The tips include avoiding driving at peak travel times, monitoring weather forecasts and being prepared for weather conditions, and checking CalTrans (quickmap.dot.ca.gov) and Nevada Department of Transportation (nvroads. com) websites and social media feeds



Photo: Drone Promotions Winter traffic moving slowly on a stormy Tahoe weekend.

for the latest on road conditions and closures.

Following congestion concerns, the California Highway Patrol also began testing an electronic closure system on North Upper Truckee and Sawmill roads to ease traffic congestion in neighborhoods caused by people seeking alternate routes during peak periods. Highway infrastructure is inadequate for peak traffic days, and solutions are still being sought for temporary relief, said CHP Lieutenant Terry Lowther.

The City of South Lake Tahoe also launched its CivicReady emergency alert and city news system earlier this year. The system alerts those who sign up for the program with National Oceanic and Atmospheric Administration-issued weather alerts, as well as any city-issued emergency alerts. People can also choose to opt-in to receive non-emergency notifications about community events, activities, and important updates by texting JOIN NEWS to 30890.

"The City is placing a renewed focus on getting people the information they need, when they need it," said Chris Fiore, communications manager for the City of South Lake Tahoe, "We know traffic can be a real hassle in South Lake Tahoe. Having good information at the right time can make a big difference, and this new alert system is just one more way we are trying to help."

Encouraging people to use transportation other than private vehicles is also key to easing traffic issues at Tahoe.

A variety of basin partners are working to enhance transit service, improve the Region's network of paths and trails, enhance shuttle service, bring new rideshare programs to Tahoe, and develop technological solutions to help people plan travel around the Region.

Information on a wide range of travel options in the Lake Tahoe Basin is available at linkingtahoe.com, which was developed by the Tahoe Regional Planning Agency and Tahoe Transportation District.

The goal of the site is to increase public awareness of travel options in the Tahoe Basin and encourage more people to walk, bike, use transit, take water shuttles, and choose off-peak times to drive to better manage congestion on the Region's roads.

Adam Jensen is the environmental education specialist at TRPA.

Tahoe RCD grant helps city upgrade its watering system

By Andrea Buxton

TAHOE RESOURCE CONSERVATION DISTRICT

Thanks to a Proposition 84 grant, Tahoe Resource Conservation District (Tahoe RCD) is partnering with the City of South Lake Tahoe to save thousands of gallons of water a year with upgrades to the city's irrigation technology.

The city irrigates about 33 acres of landscaped land, including a golf course, dog park, playgrounds, ball fields, right of ways, and public parks like Lakeview Commons. Irrigation maintains healthy vegetation, but the city's system of 40 irrigation zones controlled by manually programmed timeclocks requires a two-person maintenance crew to drive many hours to all locations to adjust them according to weather conditions.

Tahoe RCD's grant from the Integrated Regional Water Management Grant Program established to spearhead water conservation projects addressing climate change resiliency — allowed the purchase of new timeclocks and flow meters to allow for remote access to the irrigation zones.

Systems can now be managed more efficiently to conserve water. Time and flow are remotely adjustable and new flow meters can detect when flows are higher than a set threshold. This helps detect a broken line or damaged sprinkler head, and the system will automatically shut off and notify managers, preventing waste that can amount to thousands of gallons.

The new timeclocks will be linked to weather-monitoring stations and will automatically calculate how much water is needed in each zone based on temperature, precipitation, and humidity. The process adjusts timing and flow rates to improve efficiency. With this new system, irrigation zones can be turned off remotely with the click of a button, saving hundreds of gallons of water and hours of driving time to manually turn off each zone during precipitation events.

Andrea Buxton is the stormwater program manager at Tahoe RCD.

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Find us online at Tahoeindepth.org. Email us at tahoeindepth@gmail.com





What's New For 2019 Boating Season

NO-WAKE ZONES

Lake Tahoe has no-wake zones to keep boaters and swimmers safe. Motorized boats must maintain a safe distance from shore and from paddlers, swimmers, and structures. Remember, for everyone's safety, please stay **under 5 mph** when boating within:

- 600 feet of shore
- 100 feet of paddlers and swimmers
- 200 feet of shoreline structures
- Emerald Bay

KEEP BOAT ENGINES MUFFLED

Boats must comply with noise limits and keep exhaust systems muffled so all visitors enjoy a peaceful Lake Tahoe. Exceptions are in place for classic and antique boats and special events.

AQUATIC INVASIVE SPECIES

Remember to arrive with your boat Cleaned, Drained & Dry to help keep aquatic invasive species out of Lake Tahoe. TRPA and partners are ramping up programs to protect the lake from invasive species and boat sticker fees increased in 2019.

Look for updates at tahoeboatinspections.com

TAHOE BOATING APP

This summer, TRPA and partners are launching a new Tahoe Boating App to inform boaters about Lake Tahoe, no-wake zone boundaries, area attractions, and how to enjoy the lake safely and responsibly.

Download the free app at TahoeBoating.org







Learn more about TRPA's shoreline plan at: trpa.org/shoreline

App Store





FREE TO DOWNLOAD!

WILDFLOWERS



Photos: Tom Lotshaw Tahoe yellow cress: This sprawling, leafy plant with small yellow flowers grows on Tahoe's shoreline—and nowhere else in the world contending with changing lake levels. Be careful not to trample it in sandy areas.

Thanks to a snowy winter, it's going to be a big year for showy blooms

By Tom Lotshaw

Special to Tahoe In Depth

April snow surveys confirmed what everyone tired of shoveling already knew: This winter was a big wet one. And with the Sierra's snowpack at 200 percent of average, hopes are high for summer wildflowers.

Outstanding blooms made appearances throughout California this spring. The winter soaked everywhere from Anza Borrego in the low desert to Joshua Tree National Park and the Carrizo Plain, bringing the landscape to life with colorful blooms that could be seen from space.

"It's going to be a great wildflower season," said Will Richardson, director at the nonprofit Tahoe Institute for Natural Science.

Richardson and his team are organizing a 'Wildflower Big Year' this summer, offering a variety of wildflowerfocused presentations and group hikes

for people to learn about Tahoe's flowers or just get out to enjoy them.

Hikes start in June and will continue through August, as Tahoe's wildflower blooms are expected to do, Richardson said.

The institute is trying to offer something for everyone when it comes to enjoying wildflowers.

"There's a really broad range of people's sophistication when it comes to wildflowers. Some people want to pull out their hand lens and identify every plant they see, which makes it kind of hard for others who just want to hike and see a great landscape with some color," Richardson said.

"We're trying to provide diverse offerings, with some hikes that are just hikes pointing out a few flowers along the way, and others that are real botanical excursions where you barely get out of the parking lot after two hours because there's so much diversity when

it comes to plants."

The walks will take people into Tahoe's scenic, wildflower-adorned landscapes from Carson Pass to Donner Summit. They will also seek out some rarer plants around Tahoe with help from the USDA Forest Service and California Native Plant Society.

That's because the Tahoe Wildflower Big Year is also a citizen-science project - people are encouraged to report plant species they find through iNaturalist.org. This helps track wildflower populations, ranges, and bloom times.

"The last time we did this, I think we had over 5,200 observations and 900 species of plants," Richardson said. "That's good data, and if we do this every few years, we'll build up a good database to help keep tabs on the flowers and their distribution."

Learn about the Tahoe Wildflower Big Year, attend a presentation, or join a hike by visiting www.tinsweb.org.

Keep an eye out for:



Phantom orchid Suaarstick Phantom orchid and

sugarstick

Phantom orchid has ghost-white flowers and grows in shady, mature forests-places like Emerald Bay. Sugarstick, which favors similar areas, has a red- and white-striped stalk with red flowers.



Tahoe draba

Watch out for this small yellow flower on Tahoe's highest mountains, such as Freel Peak. It grows in these fellfields at Tahoe and nowhere else.





Anderson's thistle

One of Tahoe's native thistles. it can be found in high country forests and openings in California, Nevada, and Oregon.



