

## Invasive mudsnails found

The rapid response has been anything but a snail's pace

### By Victoria Ortiz

TAHOE REGIONAL PLANNING AGENCY

This September, SCUBA divers with Marine Taxonomic Services (MTS) were conducting monitoring dives for aquatic invasive plants offshore of the Upper Truckee River mouth in South Lake Tahoe when they noticed something strange. Tiny black dots littered the lake's floor, something they had never seen while diving the lake. The divers brought some back to the lab and gave them to supervisors Monique Rydel-Fortner and Seth Jones.

"Under the microscope, they were small snails about the size of a grain of rice," says Rydel-Fortner. "My heart sank because they looked like New Zealand mudsnails, a species that we've never seen in Tahoe before."

New Zealand mudsnails are an

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## Remembering Dianne Feinstein

## 'An unstoppable advocate'

**Jeff Cowen** 

TAHOE REGIONAL PLANNING AGENCY

U.S. Sen. Dianne Feinstein was a stalwart protector of Lake Tahoe and a key architect of legislation and federal partnerships to restore and protect the lake for more than 25 years. The California senator passed away Sept. 29, 2023 at the age of 90.

Throughout her service, Feinstein championed Lake Tahoe's core environmental restoration initiatives and is remembered as a tireless proponent of forest health, wildfire preparedness, and aquatic invasive species protection.

"Senator Feinstein was an unstoppable advocate whose dedication to protecting Lake Tahoe ran as deep as the lake itself," said Tahoe Regional Planning Agency Executive Director Julie Regan. "She would sometimes carry a section of pipe around Capitol Hill completely encrusted with invasive quagga mussels from another lake to remind her colleagues what could happen to Tahoe without their help."

Feinstein's love for Lake Tahoe began during many childhood days spent at the lake with family. By the 1990s, as Feinstein was taking her seat as

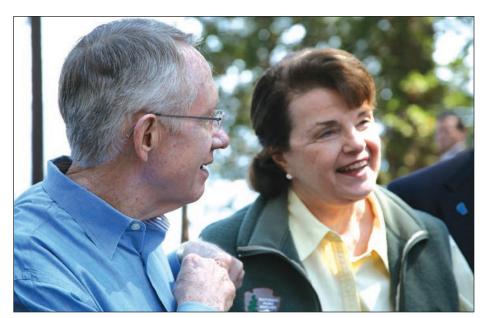


Photo: Tahoe Regional Planning Agency
The late U.S. Sen. Harry Reid, left, chats with Dianne Feinstein during a Tahoe Summit. Feinstein
passed away on Sept. 29.

California's first female U.S. senator, Lake Tahoe was reaching a tipping point. Despite regulations on new development, lake clarity continued to decline. Science was showing that previously existing development, damage to marshes and meadows, and the network of roadways carrying pollutants into waterways threatened to wreak irreversible damage to the lake's clear blue water.

Feinstein and the late U.S. Sen. Harry Reid of Nevada helped bring national attention to Lake Tahoe's plight by organizing the 1997 Lake Tahoe Presidential Summit with then-President

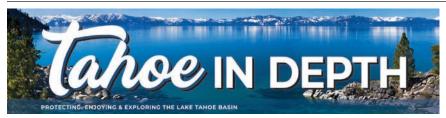
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## Winter, here we come!

Welcome to the 25th issue of *Tahoe In Depth*! I hope you enjoy this paper as much as we enjoy bringing it to you. 2023 has been a milestone year for me as



well. This year marks 20 years since I started working at the Tahoe Regional Planning Agency and my first full year as its executive director. Through it all, one of my proudest moments was the launch of Tahoe In Depth in 2012.

Now, 25 issues later, our award-winning paper continues to explore community issues, important initiatives, and scientific breakthroughs that shape our understanding of this precious region we call home.

It's a special honor to dedicate this issue to the late U.S. Sen. Dianne Feinstein, who was a tireless advocate for Lake Tahoe. Here you can read how Senator Feinstein's leadership and dedication to preserving this national treasure has had a lasting impact on the lake she so loved.

In my first year as executive director, I've spent time listening to many of you through community conversations and at a series of TRPA Talks on both the North and South Shores. These touchpoints have inspired me to deepen the collaborative work of TRPA and our partner agencies as we work together to ensure Lake Tahoe is sustainable, healthy, and safe for our communities and future generations.

We also share concerns for the challenges ahead. Confronting the threats of climate change, solving deep-rooted affordable housing issues, and improving Tahoe's transportation network will take all of us working together. Here's to our continued success!

Happy Holidays,

— Julie Regan, executive editor

## **Tahoe In Depth**

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Photo: Jordan Drew

Gaining access

For people with a mental or physical disability, enjoying the outdoors is not always easy or even possible. Barriers to recreation access can include the high cost of adaptive equipment, lack of transportation options, accessible facilities, and more. Find out what a few local groups are doing to provide adaptive sports access in the Tahoe Region.

## Tahoe clarity's big challenge: runoff

Efforts focus on reducing damaging discharge from roads, parking lots, and driveways

By Jeff Cowen

TAHOE REGIONAL PLANNING AGENCY

The most well-known indication of Lake Tahoe's health is its incredible water clarity. While clarity fluctuates from month to month and year to year, the long-term health of the lake depends on the quality of the water going into it.

The news earlier this year that the lake's average clarity in the last five months of 2022 reached a 40-year high of 80.6 feet was a hopeful sign. However, that hope must be tempered by the knowledge that just five years earlier, record winter storms and high summer temperatures produced the lowest annual average clarity ever recorded at 60.3 feet for 2017.

Since its formation by the states of Nevada and California in 1969, the Tahoe Regional Planning Agency (TRPA) has placed a high priority on managing conditions that affect rain and snow runoff. The most pernicious runoff comes from impervious surfaces like parking lots, driveways, and pavement—simply called land coverage.

For millennia, the Tahoe Basin's porous, stable soils worked in tandem with its sponge-like marsh and wetland ecosystems to filter or "treat" runoff from the 63 streams and rivers that feed into it. The result was a lake practically devoid of anything that could harm its clarity—99.9 percent pure. Land coverage not only stops precipitation from soaking directly into the ground, it allows runoff to pick up pollutants and carry them toward waterways at high velocity, simultaneously increasing erosion. It's a trifecta of environmental impacts.

Considered innovative in landscapescale conservation, the Lake Tahoe Regional Plan sets multiple strategies to reduce the impact of land coverage on lake clarity:

- Preserve naturally functioning open space by setting science-based limits on the amount of land coverage a property owner can create.
- Require water quality Best
  Management Practices (BMPs) or
  participation in area-wide programs to
  treat runoff from impervious surfaces.
- Create land acquisition programs and establish regional "land banks" to reduce the potential for new development and remove existing



Photo: Drone Promotions

development from sensitive lands. and the growt

Fine sediment from vehicles pulverizing road grit can damage the clarity of Lake Tahoe.

■ Further mitigate new and existing land coverage by setting aside a portion of permit application fees to help fund water quality and stream restoration projects.

Mitigation funds from project permit fees help public agencies purchase and restore sensitive land and complete dozens of projects under the Lake Tahoe Environmental Improvement Program, or EIP. Since 2005, TRPA has passed on \$14.3 million in land coverage mitigation fees to local government partners to help fund EIP projects like Placer County's Snow Creek Restoration Project and the Lower Wood Creek Roadway BMP and Stream Restoration Project in Washoe County. Mitigation fees have also helped every jurisdiction purchase high-efficiency street sweepers to vacuum fine sediment and other lake-harming pollutants off roadways.

Tahoe isn't the only place looking to land coverage for water quality solutions. On the other side of the country, a partnership between Washington, D.C. and the six states that share the Chesapeake Bay watershed employs strategies to slow the loss of forest canopy

and the growth of impervious surfaces to advance restoration and protection of the 64,000-square-mile watershed.

To cover the cost to treat polluted runoff entering the Potomac River within the District of Columbia, commercial and residential properties are being assessed monthly stormwater fees—basically a utility bill—based on the square footage of impervious surface on each property. Fees can be reduced by installing BMPs, such as green roofs, bioretention areas, and permeable pavement.

Conditions at Tahoe allow a different approach. TRPA's growth caps stopped urbanization, and land coverage limitations allow on-site solutions. Most residential BMPs call for low-maintenance vegetation, soil stabilization, and gravel drainage areas for rooflines and driveways, all of which are consistent with fire defensible space guidelines. In high-density town centers where more sophisticated stormwater systems are needed, incentives are available to help increase investment in environmental improvements. Public agencies are matching the efforts with significant water quality investments

and have so far improved hundreds of miles of roadway to reduce erosion and stormwater pollution.

With all these resources coming to bear on lake clarity, focusing on the most effective strategies is critical. In 2011, the science-based Total Maximum Daily Load, or TMDL, came forward to guide the work and target the biggest concerns.

"Mostly it's the very fine sediment that's been pulverized by car tires that park and shed their sediment," said Jacques Landy, P.E., retired U.S. EPA coordinator who helped develop the Lake Tahoe TMDL. "And that was kind of a surprise. Early on, everyone thought it was algae that was clouding the lake, but research behind the TMDL showed that as well as algae, fine sediment thinner than a human hair that stays suspended in the lake is a major contributor."

The TMDL created a roadmap to achieve the Clarity Challenge, which is the shared goal of cutting pollutant loads by 65 percent to restore Lake Tahoe to its historic clarity of 97.4 feet. The TMDL set targets to reduce the three main pollutants affecting clarity—ultrafine sediment particles, nitrogen, and phosphorus. Nitrogen and phosphorus are nutrients that help lake algae grow to unnatural levels.

In the first 10 years of TMDL implementation, private property owners, and EIP partners reduced pollutants by 23 percent over the 2004 baseline, surpassing the interim target of 21 percent. According to the report by Nevada's Division of Environmental Protection and California's Lahontan Regional Water Quality Control Board, more than 600,000 pounds of fine sediment, nitrogen, and phosphorus combined are being kept out of Lake Tahoe every year.

"When you look at how far the region has come, it's clear that together we are making incredible strides toward a more sustainable Lake Tahoe and more resilient communities," said TRPA Executive Director Julie Regan.

"With climate change impacts now threatening our progress, we also can't slow down. We must strengthen our partnerships and our resolve."

For more information, visit stormwater. laketahoeinfo.org.

*Jeff Cowen is the public information officer for TRPA.* 

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## Science Council holds pivotal 3-day conference

October gathering celebrated the science partnership driving environmental improvements

**By Robert Larsen** 

TAHOE SCIENCE ADVISORY COUNCIL

The partnership between resource managers and the scientific community is a cornerstone of environmental protection at Lake Tahoe. More than 50 years ago, Dr. Charles Goldman with UC Davis began research and monitoring at the lake and was the first to document declining ecological conditions. By sounding the alarm, his work drove critical management action, including legislation that required the export of all sewage from the watershed, ending the dumping of sewage and the eutrophication, or lake "greening," it caused.

From the late '90s through the mid-2000s, academic partners were instrumental in refining our understanding of Lake Tahoe's clarity loss and in developing the environmental thresholds that underpin Tahoe's Environmental Improvement Program (EIP). The EIP has applied more than \$2.8 billion in funding to projects that improve the Tahoe environment and restore the lake's famed clarity.

More recently, research partners have investigated the impacts of wildfire smoke on water quality, led work to understand how the lake's ecology is influencing its clarity, and supported agencies as they respond to new aquatic invasive species discoveries. Throughout the scientific community's half-century-long partnership with land managers, the emphasis has remained consistent — advancing, interpreting, and translating scientific research into actionable recommendations for the public agencies that manage Tahoe's treasured natural resources.

Today, the Tahoe Science Advisory Council carries on this longstanding tradition. The council is a collaborative effort between Nevada, California, and federal research institutions that was established to provide coordinated science advice to resource managers. Together, these experts represent leadership, management, research, and preservation efforts for a place they all share a desire to protect — Lake Tahoe.

In October, the council hosted a three-day conference to celebrate the science/management partnership and provide the opportunity for dialogue.





The event opened with a reception and keynote address from Dr. Valerie Hipkins, the associate deputy chief for research and development at the USDA Forest Service. Hipkins spoke about her experiences with the science-management partnership at the federal level and shared anecdotes from her career about challenges and successes in effective coordination.

The program for the second day was centered around a series of panel presentations and small group discussions. Topics included Lake Tahoe nearshore conditions, microplastics, biodiversity, water quality and clarity, stewardship and recreation, and landscape restoration in the context of traditional ecological knowledge. Each panel included two scientists and two managers to provide balanced perspectives on research, policy, and

implementation activities. Following brief presentations from the panelists, conference participants engaged in small group discussions about what they heard before suggesting their own solutions — often synthesizing data spanning several different fields. There were three sets of two concurrent panels, and the conversations were lively!

The final day was reserved for an integrated session to look at the big picture. Each of the panel facilitators summarized the highlights from the presentations and small group findings, offering the opportunity for all conference participants to learn about various topics. These reports set the stage for a broad, holistic exchange about the science/management partnership. Key observations included the need to better communicate scientific findings and needs to the public, agency staff, and

Photos: League to Save Lake Tahoe
Participants at the three-day conference
discussed environmental issues in small
groups (above) and later joined in a teambuilding exercise led by Dr. Darcie Goodman
Collins (below, left).

decision-makers. There were also ideas about how to leverage Council working groups to tackle various challenges. Dr. Darcie Goodman Collins, the chief executive officer of the League to Save Lake Tahoe, closed the conference with an inspirational activity that focused on the importance of working together.

An uncertain climate future and associated pressures demand collaborative, cohesive research and monitoring. The Council's role in science delivery and coordination is critical for prioritizing implementation actions and driving management policy. Through engagements such as this science conference, the Council continues to bring together a diversity of research, management, and community representatives to strengthen our partnership and enhance the long-term ecological, cultural, and social resilience of Tahoe's incredible landscape.

Robert Larsen is the Tahoe Science Advisory Council program officer.

## Smarter than the average bear

Tips for coexisting with Tahoe's urbanized black bears

By Victoria Ortiz

TAHOE REGIONAL PLANNING AGENCY

It's a story we've all heard in Tahoe, or perhaps experienced: One finds their car doors open to the elements, trash strewn across the driveway, and sometimes the culprit still on the scene. These clever neighbors are hungry and have learned that trash provides a high-calorie and reliable food source. These resourceful feeders are, of course, our urbanized American black bears.

Toogee Sielsch, a 40-year resident of South Lake Tahoe and a wildlife enthusiast, started learning about bears after chasing one from his campsite at Grover Hot Springs years ago. In his professional role as the senior vector technician for El Dorado County, he regularly encounters bears while walking near streams in his community.

"I've become a boots-on-the-ground resource when it comes to the urbanized black bear population for the South Shore," says Sielsch. "I've crawled under hundreds of houses to get bears out from crawlspaces, and set up cameras to better observe their behavior. I try to be a positive resource in sharing my knowledge."

Black bears often get misidentified by their coat, which, contrary to their name, can range from cinnamon to blond to black. Tahoe only has black bears; California's last brown bear (also known as a grizzly bear) was killed in 1922. These opportunistic omnivores can consume berries, Kokanee salmon, Cheetos, and hamburgers.

Humans unwittingly provide access to their food or pet food, trash, or bird feeders, all of which offer far denser calories than the bears' native food sources. These foods also change their bodies and behavior.

"The extra sugar in their urbanized diet is causing them to weigh more and their teeth to rot faster, and we tend to see more damaged claws from bears breaking into homes," explains California Department of Fish and Wildlife Regional Connectivity Specialist Sara Holm. "Sometimes they don't go into torpor, a type of hibernation, because they have access to food throughout the winter. They also tend to be more tolerant of other bears because they have unlimited access to calories."

Both Sielsch and Holm point to the



Photo: Michael Goodman

A bear cub clings to a tree in Tahoma while its mother peeks out from behind the tree in the lower portion of the photo.



Photo: Toogee Sielsch

A bear peers out from under a house where it attempted to hibernate.

region's ample (human-provided) food supply as one of the reasons the Tahoe Basin hosts hundreds of black bears, one of the highest concentrations in the nation. And that population shows no signs of slowing down.

Thanks to the region's abundance of unlocked trash, sows give birth to additional cubs that are also more likely to survive. The sows then teach their cubs how best to access this trash, perpetuating a cycle of more bears on the landscape and human-bear interactions. Oftentimes these encounters happen on the road, though there's no centralized database to say exactly how many bears die in vehicle collisions.

Lake Tahoe Wildlife Care in South Lake Tahoe is one of three certified rehabilitation centers in California for injured and orphaned cubs. The staff and volunteers try to limit the interaction with the cubs so that they can stay wild, but they are a smart species that can quickly adapt to their environment.

"We want to see it as a bear problem, but it's a human problem because we're the ones creating it," said Deb Redmon, a volunteer and former operations director for Lake Tahoe Wildlife Care.

Wildlife biologists see this humandriven progression of behavior across the country. Garbage initially attracts bears. When humans start containing their trash, bears break into vehicles. Then they try unoccupied homes at night. Once they become too habituated to food, they don't care if it's daytime or nighttime or if a home is occupied. When the California Department of Fish and Wildlife tries to relocate bears, most of the time they quickly return.

"There's no magic pill to keep a bear from moving through the natural landscape that we also inhabit," says Sielsch. "The long-term goal is to educate the public on how to coexist for the safety and well-being of both humans and bears."

TahoeBears.org provides resources for helping people keep Tahoe bears wild. Many of the tips focus on removing attractants, such as food, garbage, and recycling, that lead to negative wildlife interactions such as break-ins.

"You are responsible for keeping your trash locked up at all times, including

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## A ranger's perspective on Sand Harbor

Popular state park struggles to accommodate all the visitors it receives

**By Kevin Fromherz** 

NEVADA TAHOE RESOURCE TEAM

Over 1 million visitors stop by Sand Harbor State Park each year. For many, this visit will be a once-in-a-lifetime vacation memory. The long sandy beaches, crystal clear water, and views that stretch for miles attract visitors locally and internationally.

But increasingly, these visitors are having to get up early to gain access to the amazing Sand Harbor experience.

Meanwhile, inside the park, I clock in for my morning shift before the sun is up. It is going to be a long day. The park staff have been working hard for the past hour, making sure bathrooms are clean, trash cans are emptied, litter is picked up, and the park is ready for another day. I check in with my key staff members to see if they need any assistance. Before long, I am needed at the park entrance, where traffic is already backing up.

Heading south, I find cars already blocking northbound traffic. A couple of quick blasts on the air horn followed by an announcement on the public address system gets traffic moving. I then drive north to find several cars blocking the southbound turn lane. Eventually, so many vehicles arrive it is impossible to keep traffic moving. Congestion has overwhelmed the highway. I pull into the center median by the main entrance and advise the Highway Patrol of the situation.

Looking in my mirrors and seeing no oncoming traffic, I open the door and step out onto the highway. My neon safety vest shines brightly in the morning light, although the sun is still hidden behind Herlan Peak and won't rise for another hour. The flashing red and blue lights on my patrol truck create a surreal experience.

I am quickly brought back to reality by the honking of horns as a car suddenly stops to ask a question. The screeching of brakes as someone driving too fast almost hits the car that just stopped and fresh tire marks are left on the highway. A local resident drives by yelling, "Hey ranger, do something about this."

Now the highway is at a standstill and my focus shifts to getting all these vehicles into the park. After that the gates will be locked and the focus shifts again — to the thousands of disappointed



Photo: Nevada State Parks (above) and tusharkoley of Adobe stock photo (below)

Cars often begin lining up to get into Sand Harbor State Park before dawn during the summer months (above) for a spot on its gorgeous beach (below).



visitors who will be turned around to find another beach. This routine plays out day after day, week after week, month after month until Labor Day passes and a sense of calm returns.

But another summer is also ahead. Park leaders are called to solve the most complex question of all.

Hey ranger, what are you going to do about this?

It's a simple, but impossible question. What can be done about the overcrowding that so many vacation destinations and national parks are experiencing? What can be done about traffic jams, litter, and resource damage? What can be done about a park that was never designed to handle so many visitors?

Sand Harbor was originally constructed in the 1970s as a summertime park. New facilities such as restrooms, visitor centers, and the East Shore Trail have improved on the original design. But nothing has been done to upgrade the parking lots and park roads. Between the fee booth and the highway, a total of 30 cars can wait before they start backing up the highway. The park has 520 parking spots, which can fill up in under an hour on a busy day. The park has operated over capacity for more than a decade and is literally being loved to death. Resource damage is starting to take its toll on this aging park.

To combat over-visitation, the park implemented numerous measures starting in 2011. Still, the number of visitors has increased. In July 2011 the park had 141,237 visitors. Eleven years later in July 2022, the park had 155,128 visitors.

For Sand Harbor to function effectively in today's environment of extreme visitation demands, the facility must be designed to accommodate anticipated visitation. The facility is not designed for large influxes of visitors, which impact our highways, natural resources, and facilities.

In Reno, the Spaghetti Bowl was constructed at the same time as Sand Harbor. Both projects were completed in 1972. During the same period, the Spaghetti Bowl was reconstructed two times and is in the middle of a 20-year upgrade.

Now it is Sand Harbor's turn, and we are thinking big. A complete redesign of the park is on the table.

The Nevada Tahoe Resource Team
has selected Design Workshop to lead
a year-long project to update the 1990
Lake Tahoe Nevada State Park Master
Plan. When updated, this master plan
will present a vision for Sand Harbor
State Park's future. The final plan will be
implemented as a series of Environmental
Improvement Program projects. These
projects will lead to a new Sand Harbor
— one that will be sustainable for the
decades to come.

The master planning effort will focus on engaging locals, stakeholders, and visitors. All are welcome to participate. Follow Nevada State Parks on social media and be on the lookout for invitations to workshops, listening sessions, and surveys. Your opinion matters to us and will help shape the future of Sand Harbor State Park. For more on basin-wide destination stewardship work being done, see page 14.

Kevin Fromherz is the Nevada Tahoe Resource Team program manager and the former supervisor of Sand Harbor State Park.

## Prescribed fires a key part of wildfire suppression

A wide variety of conditions must be present before burns are initiated

By Adrienne Freeman

USDA FOREST SERVICE

"Relationships and everyone's willingness and desire to work together are the biggest things that we have going for us here in the Lake Tahoe Basin," says USDA Forest Service Lake Tahoe Basin Management Unit (LTBMU) Fire Chief Carrie Thaler.

The list of agencies she sees supporting each other to use fire to reduce hazard fuels around the Lake Tahoe Basin is all-encompassing. CAL FIRE, local fire protection districts, and state partners on both the California and Nevada sides of the lake are moving in the same direction to ensure that the area's forests are as healthy as the communities they house.

It hasn't always been this way. For over 100 years, the USDA Forest Service policy of rapid-fire suppression contributed to overcrowded forests dense with a thick, impenetrable understory—a long way from the natural forest that came before. As devastating wildfires swept the area, exacerbated by changing global climate conditions made more complex by an ever-increasing human population, we learned that our attempts to overpower fire, a natural phenomenon as at home here as sunshine and snow, made things worse.

Many Native people in California, including the Washoe Tribe of Nevada and California, used and continue to use burning as a way to improve ecosystems and to encourage desirable species to grow. In most of the Lake Tahoe Basin, the average "fire return interval" (time between historic lightning-caused fires and Tribal burning) is about 5-17 years. Now, the LTBMU needs to continue moving in the direction of using fire to promote resilient forests. Being a century behind the curve to restore forest health, the LTBMU is getting to work.

Returning fire to the landscape is challenging, and it's not a responsibility the LTBMU takes lightly. Prescribed fires are set by forest managers during favorable weather conditions and kept within control lines so the fire is low severity, consuming fuels that would otherwise burn at high severity during dangerous weather. At the LTBMU, a multitude of complex factors must converge to move forward with a



Photos: Tom Stokesberry, USDA Forest Service
Lake Tahoe Basin Management Unit Fire Chief Carrie Thaler (above) walks the Angora Ridge Trail
on the Fallen Leaf Pile Burn unit. Tallac Hotshots (below) burn slash piles.



## To learn more about prescribed fires:

■ The USDA Forest Service
□ Prescribed fire: tinyurl.com/ykw7et27

□2023 prescribed fires: tinyurl.com/39e7tcac

- Air Quality Index
  - □ airnow.gov
- Tahoe Living With Fire: Prescribed Fire Map

  □ tahoeliving with fire.com

prescribed burn. We're looking to obtain a very specific outcome (e.g., burn less than 10 percent of mature trees and less than 50 percent of understory) outlined in a guiding document called a prescribed fire burn plan, which is tied to an indepth environmental analysis. Is it too wet? Too dry? Too windy? Not windy enough? Will smoke disperse or settle? How will communities and visitors be

affected? Are there cultural resources or native species to plan for or around? Could a fire start elsewhere in the state and make personnel scarce? Do these perfect conditions line up when staff is prepared to carry out the burn? It's a nogo if the burn plan is not met, meaning all the planning and preparation has to wait for another day.

Thaler's staff has decades of experience

## Forests were once much thinner, healthier

Mixed conifer forests across California looked very different before a century of fire suppression. Studies conducted in the same area 100 years apart (1911 and 2011) show that, on average, forests in 1911 supported a wide variety of tree species and ages. Only about six trees per acre were below 13 inches in diameter. Today, forests are choked with many, many more small trees — approximately 150 per acre in lower elevations and over 200 in higher elevations. This changes the forest ecology by inhibiting the growth of slower-growing, fire-resistant, and shade-intolerant trees and increases the threat of destructive wildfire.

and extensive knowledge of the land. This makes it possible to be flexible. If conditions aren't right in one place, they're likely perfect in another.

"It takes energy, determination, and expertise to put fire on the ground in the Lake Tahoe Basin," said Thaler. "We work together across jurisdictions to collectively protect the Lake Tahoe Basin."

Crews from around the Tahoe Basin work shoulder to shoulder, and the LTBMU has ambitious plans to conduct over 700 acres of pile burns and prescribed fires, if conditions permit, over the coming months.

This fall the LTBMU, along with fire resources from other California National Forests, completed approximately 60 acres of pile burning near the Lily Lake Trail above Tahoe Mountain Road close to the Angora Ridge Trail. Next on the list is an area further up the ridgeline past the Angora Lookout toward the Angora Lake Trailhead.

This year, students from the Fire Academy at Lake Tahoe Community College took the opportunity to learn about the ecology and the benefits of prescribed fire, joining Forest Service and partner crews on the burn near the Lily Lake Trail.

Adrienne Freeman is the fire information public affairs specialist for the USDA Forest Service Pacific Southwest Region.

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## New sawmill will aid forest health work at Tahoe

New facility will process 50 million board feet annually, filling void that hampers forest thinning

**By Caroline Waldman and Kevin Leary**Special to Tahoe In Depth

A recent report from Land Tender estimates that the Tahoe Basin has 22 million more trees than a healthy forest should.

Overly dense forests are potent fuel for wildfires. Stress from overcompetition leaves trees prone to disease and death, making them highly flammable. Since 2010, an estimated 692,000 trees have died in the Tahoe Basin.

Prior to western settlement, the Washoe people stewarded a healthy and thriving forest in Tahoe, with about 25 trees per acre. Mining interests later clear-cut the landscape, causing trees to grow back all at once. Firefighters' policy of "suppression first" led to basin forests with close to 200 trees per acre.

Fortunately, agencies, utilities, tribes, and private landowners have ambitious goals to thin the forests and increase the pace and scale of forest restoration.

But what can they do to get rid of all of the wood and biomass? Decades ago, there were about a dozen large sawmills operating within 50 miles of Tahoe. Today, there are none. The nearest offtake sites for logs and woody biomass are 100-plus miles away, and the haul cost often exceeds the commercial value of the wood. Additionally, the few remaining sawmills in the Sierra region are at or near capacity. As a result, requests for

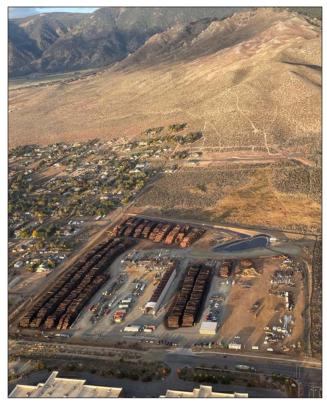


Photo: USDA Forest Service
The new sawmill under construction in Carson City.

proposals for fuel-reduction projects often receive zero bids.

Luckily, Tahoe Forest Products, a new sawmill in Carson City, is changing the game. The mill — the first of its size in the Tahoe Region in over a century — will process approximately 50 million board feet annually. It has already

received over 36,000 hazard trees from the Caldor burn area at Sierra at Tahoe. It is also receiving logs from power line safety and fuels reduction work in the Lake Tahoe Basin, Inyo, and Eldorado National Forests.

"Our owners and team members have called the Tahoe Basin home for decades and we care deeply about leaving our region in a better place for the next generation," said Chris Verderber, president of Tahoe Forest Products. "Tahoe Forest Products will process logs that might otherwise end up at the landfill or burned, creating good jobs for locals, and providing a locally manufactured,

sustainable product."

The Tahoe Fund worked with Tahoe Forest Products and the Washoe Development Corporation (WDC), the business development arm of the Washoe Tribe of Nevada and California, to bring the sawmill to life.

"Our goal at the Tahoe Fund is to

facilitate more forest health treatments, and the lack of offtake sites for excess fuel was standing in the way," explained Amy Berry, Tahoe Fund CEO. "When Tahoe Forest Products came to us with this solution, we jumped at the chance to help. But none of this would have been possible without the Washoe Tribe."

The Tribe leased 40 acres to Tahoe Forest Products for the mill, and will receive a share of the sawmill's revenue. Tribal members will also be offered employment.

"The WDC recognized that this project would enhance and support the rejuvenation of the Washoe Tribal Land and Mother Earth," said WDC President Wendy Loomis.

The sawmill will open doors for new green and hazard tree contracts, helping long-awaited restoration projects.

"Having an offtake site right here in the Tahoe Region is a game changer for the restoration economy," said Lake Tahoe Basin Management Unit Forest Supervisor Erick Walker. "This facility will play a crucial role in our forest health goals by helping to create a market for woody material from hazardous fuels reduction projects."

To learn more about the sawmill, visit tahoeforestproducts.com.

Caroline Waldman is the communications and program director for the Tahoe Fund. Kevin Leary is chairman of Tahoe Forest Products.

## Bear box technology tries to stay ahead of crafty, garbage-loving bears

Continued from page 5 on service day," says Incline Village General Improvement District Resource Conservationist Madonna Dunbar.

Many people rely on residential bear boxes — hard-sided receptacles with special animal-resistant locking mechanisms — to secure their trash. While Dunbar acknowledges that this is still the best storage system, she knows that bears are evolving with the technology.

"I've seen videos of a sow teaching its cub how to open the panel-style bear box by mimicking the motion. The adult paws are too big to open it, but little bears can maneuver the space," Dunbar says.

Bear box companies now offer retrofits that make the space smaller so that a

human hand will still fit but a cub's paw will not. There are also effective models that use Allen keys, which the bears have yet to master.

Bear boxes can be expensive, and in El Dorado County, South Tahoe Refuse & Recycling will be unveiling a new three-cart system in the summer of 2024 to separate trash, recycling, and yard waste. The new system, prompted by California Senate Bill 1383, requires each jurisdiction to provide color-coded containers for the different waste streams. The bill does not require them to be animal resistant, but South Tahoe Refuse has selected the same black bear-certified carts already deployed in Mammoth Lakes, California.

"Soon, every customer will have a bear-resistant option," says Catherine



Photo: California Department of Fish and Wildlife *A bear ambles along a Tahoe road.* 

Howell, environmental compliance manager with South Tahoe Refuse & Recycling. "We regularly pick up bags without a can, or cans with no lids, which are extremely easy for bears and other wildlife to access. This new system will be a massive improvement, but a big factor is also how each customer then

## Top tips for living in bear country:

- Never feed or approach bears.
- Secure food, garbage, and recycling.
- Remove bird feeders when bears are active.
- Never leave pet food outdoors.
- Clean and store grills.
- Alert neighbors to bear activity.

manages their trash."

Learn more about how to live responsibly with bears at TahoeBears.org.

Victoria Ortiz is the community engagement manager at TRPA.

## Agencies tackling housing issue from all angles

Deed-restricted projects offering significant help to workers across the region

By Jeff Cowen

TAHOE REGIONAL PLANNING AGENCY

The disparity between housing cost and affordability for local workers in Lake Tahoe is a major problem for the lake's environment and the vibrancy of communities. Displaced workers commuting into the basin increase vehicle miles traveled, which leads to more congestion, engine emissions, and runoff into the lake. Without housing that is affordable to local workers and families, communities will continue to lose the workforce and services that help them thrive, including teachers, nurses, firefighters, and restaurant staff.

"It's a huge challenge to find adequate housing in the basin," said Incline Village resident Miranda Jacobsen, a reporter with the Tahoe Daily Tribune. "We are incredibly lucky to have found a landlord that understands the struggles of the area and charges us a decent price. I do rent month-to-month, so there is always a fear that we could be faced with having to leave on short notice."

It's a deep-rooted problem in many mountain towns today. The Tahoe Regional Planning Agency (TRPA) and housing partners in the basin recognize there isn't a single solution to an issue this complex and are working from multiple angles and sectors at the same time.

Large-scale, deed-restricted projects built with public and/or private subsidies are making significant progress across the region. Deed restrictions help protect workforce housing by recording a permanent, legally binding contract on a property's title, or grant deed, with terms that specify sale and rental restrictions.

The first 68 deed-restricted units of the 248-unit Sugar Pine Village project in South Lake Tahoe are expected to be available next year. Also on the South Shore, a 100-bed low-income student housing facility at Lake Tahoe Community College is expected to open in 2025. On North Shore, Placer County is leading the Dollar Creek project outside Tahoe City expected to provide 110 deed-restricted workforce units. These projects will join a number of past projects, including the 77-unit Domus project in Kings Beach and 48 units at The Aspens in South Lake Tahoe, to name a few.

However, with an estimated regional



mage: Studio T-Square (top)

An artist rendering of the gathering space envisioned for the 248-unit Sugar Pine Village project in South Lake Tahoe is shown above. The first 68 deed-restricted units of the project (below) are expected to be available by next year.



need for approximately 5,800 workforce units, much more needs to be done and additional solutions are being sought from the private sector through targeted changes in land-use policies.

"If the Tahoe Region really wants to encourage multi-family projects for local workers, you have to make it easier and cheaper to build the same way that building a single-family home is," said Meea Kang, Senior Vice President of Development for Related California, which is building the Sugar Pine Village project. "No builder is going to take on the higher costs that come

with workforce housing without more flexibility or financial assistance. That's the reality and it's good TRPA is trying to change it."

In 2020, TRPA convened local governments, non-profits, and housing and real estate professionals including Kang as the Tahoe Living Working Group. The group has been helping identify policy amendments that can open doors to private property owners and builders wanting to create more deed-restricted workforce housing while continuing to deliver water quality and transportation improvements.

Amendments approved in 2021 made it more favorable to convert motel units into workforce housing and to add allowed accessory dwelling units, like granny flats, on single-family residential properties as long as they are long-term rentals.

The working group, along with TRPA staff and workforce housing consultants, also showed how the Regional Plan's long-standing growth management system, rules on building height, land coverage, and limits on the density of multi-family units allowed per parcel are actually making it more costly to build smaller, more affordable homes and apartments than high-end, single-family home and condos.

"We have to do a lot with a little," said TRPA Principal Planner and Housing Ombudsperson Karen Fink. "None of our proposals would change the development caps that have been in place for many years. It's not about adding residential units, but helping the remaining development allowed in the Tahoe Basin to take shape in ways that improve water quality, transportation, and workforce housing."

This month, the TRPA Governing Board is considering Regional Plan amendments that could significantly lower the cost to construct publicly or privately funded deed-restricted projects like apartment buildings, duplexes, and triplexes. Since April of this year, PAGE 10 ■ TAHOE IN DEPTH tahoeindepth.org

## The path to better transportation

Microtransit and regional plans can ease traffic and impacts

By Chris Joseph

LEAGUE TO SAVE LAKE TAHOE

For most of us, it's an afterthought. You have somewhere to go, so you get in the car and drive yourself. Simple. Yet, that unconscious reliance on our vehicles has a very real and lasting impact on Lake Tahoe's environment and our quality of life.

## Why it matters

The tiny specks of ground-up pavement and dust created by traffic rolling over roads and parking lots are the primary threat to Tahoe's water clarity. Synthetic rubber in your tires is also likely a major source of microplastics (tiny strands and bits of petroleum-based trash) that pollute our lake. Tailpipe emissions contribute to climate change, while also providing food for algae that can turn Tahoe's blue water green. That's not to mention the stress we feel from sitting in traffic. Being car-centric is bad for people and the environment.

To Keep Tahoe Blue, the League to Save Lake Tahoe (League), Tahoe Regional Planning Agency (TRPA) and many other public and private entities are working to reduce dependency on the (private) automobile. In other words, we're working to create alternative, lake-friendly ways for people to get around. That goal is not new. It is a core tenet of the revised 1980 Bi-State Compact, a legal agreement that's the foundation for Tahoe's nation-leading environmental regulations and protections.

### How we got here

In the race to improve transportation in Tahoe, we started from behind, thanks to history. By the time the original 1969 Bi-State Compact that created TRPA was enacted, most of the buildable area in the Tahoe Basin was already covered in carcentric development.

Fast forward to 2012. TRPA's updated Lake Tahoe Regional Plan placed a renewed emphasis on transportation solutions to offset the impacts of development. The plan prioritized active transportation, or creating walkable and bikeable communities, plus transit, as noncar alternatives.

### **Getting back on track**

However, there still is a mismatch: development is largely privately funded,



Photos: League to Save Lake Tahoe When vehicles back up on busy highways (below), tailpipe emissions worsen. One lake-friendly alternative is to use a free, microtransit solution like Lake Link (above).



whereas transportation improvements are mostly publicly funded. Financial backers of new development must be convinced that paying into transportation improvements is in their best interest — or they must be compelled to pay in through permit conditions.

The League is heavily involved in conversations with developers and landuse planners to ensure new building and redevelopment projects don't just offset the impacts from their clientele's traffic, but improve our transportation system for everyone.

The truth is, every business and organization that benefits from public transit, bike paths, and sidewalks should provide financial support, whether they're building a new project or not.

Much of transportation funding for

public transit and infrastructure is allocated based on population, leaving Tahoe with a meager share. Although 2 million visitors spend around 17 million days in the basin each year, full-time residents number only 54,000. So, publicly funded buses have to do a whole lot with very little. The same goes for Tahoe's roads, which feel far more wear and tear than there are dollars for maintenance. Righting this imbalance by ensuring Tahoe gets the resources it deserves is a central focus of the League's lobbying work.

The 2020 Regional Transportation Plan, which charts Tahoe's transportation vision through 2045 in terms of specific projects, looks at funding challenges realistically. The plan's goal of reducing vehicle miles traveled (VMT), and the pollution it creates, comes with a \$20 million annual funding gap. To bridge the gap, the costs must be shared between federal, state, and local governments, and potentially by everyone who drives into the basin and parks their car.

### Where we go from here

In Tahoe, one single large project — like a subway, bridge, or tunnel — is not going to solve our travel conundrum. Instead, Tahoe's trail to better transportation is made up of multiple projects working together to create a connected system.

Challenges aside, Tahoe has made progress, which builds momentum for more progress.

Regional microtransit programs provide free, on-demand rides. On the North and West shores, TART Connect shuttles carry workers, residents, and visitors. Lake Link does the same on the South Shore. The League first funded and launched the microtransit concept in Tahoe in 2018. Now, after seeing sustained high demand, we are working to electrify the fleets.

The East Shore Corridor Plan, part of the 2020 Regional Transportation Plan, has implemented a combination of managed parking in Incline Village with the bikeand pedestrian-focused East Shore Trail to Sand Harbor. This "demonstration" project shows that people are willing to pay to park, and those fees can fund alternative modes of travel. It has cleared the way for the construction of additional managed parking lots for Chimney Beach and Spooner Summit on the East Shore, to be followed by improved trails and transit service.

### All aboard

Before transportation projects improve how you get around, they take shape as road cones and lane closures. Put that temporary annoyance in perspective. Fifteen-minute construction delays for one summer are better than a future of endless, creeping traffic and a dull, green lake.

Tahoe is changing, so we all need to change as well. After a few years, keeping your car parked won't just be a viable option, it will be your unconscious habit — one that's better for you and the lake's beautiful, blue waters.

Chris Joseph is the communications director for the League to Save Lake Tahoe.

## Ski resorts unveil new parking strategies

Heavenly and Northstar implement reservation-based paid parking programs

**By Brian Bigley and Doug Burnett** Special to Tahoe In Depth

It is no secret that road congestion and parking have been a serious challenge in the Lake Tahoe Region for several seasons. This past winter may have been the most challenging yet, with 14 atmospheric rivers amidst a big season for tourism. These issues are felt across the region, and certainly at ski resorts like Heavenly Mountain Resort and Northstar California Resort.

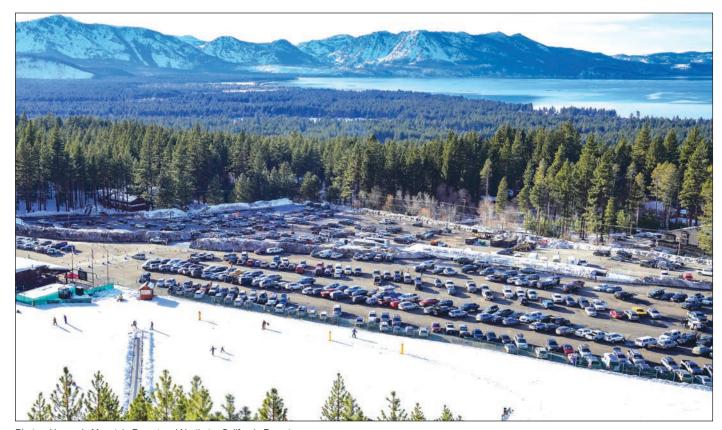
Instead of standing by and allowing this to continue, the two resorts want to be a part of the solution. After taking a deep dive into their current parking practices and traffic patterns and learning from other resorts, Heavenly and Northstar will be implementing a reservations-based paid parking program for the 2023-24 season.

### **Heavenly Mountain Resort**

At Heavenly, the biggest traffic challenge is at the California Lodge. This winter, the lot will transition to a reservations-based paid lot during weekends and peak periods. There will be plenty of choices for guest parking, with a mix of paid and free options across the resort.

The California base area will require reservations and a \$20 fee for vehicles with three or fewer occupants before 12 p.m. on weekends and peak periods. If you have four or more people in a vehicle, a reservation will still be required, but parking will be free. By putting this program into action, our goal is to encourage carpooling and discourage vehicles without a reservation from trying to enter the lot.

The Stagecoach and Boulder Lodge lots will remain free seven days a week, and the California Lodge will remain free without the need for reservations on Monday through Friday during the winter season, except for peak periods. It will also be free without reservations after 12 p.m. on weekends and peak periods. Ski Run Boulevard parking will remain free with a shuttle service to and from the California Lodge. Saddle Road (between Ski Run Boulevard and Wildwood Avenue) and Keller Road (between Saddle Road and Sherman Way) will also remain free with shuttle



Photos: Heavenly Mountain Resort and Northstar California Resort

Heavenly's new parking program will be implemented at the California Main Lodge base area (above) while Northstar's new parking program will be implemented at the Village View lot (below).



service from Ski Run Boulevard to the California Lodge and back.

### **Northstar California Resort**

A similar system will be implemented at Northstar. This winter, the Village View lot will become a paid, reservations-based lot on weekends and peak periods; reservations to park in the Village View lot on weekends and peak periods before 1 p.m. will be free for vehicles with four or more occupants, and \$20 for vehicles with

three or fewer occupants. The lower village preferred paid lot will remain a fee-based lot but will now require reservations on weekends and peak periods until 3 p.m.

The fees to park in the lower village preferred paid lot will remain the same as winter 2022-23: \$20 during the week and \$40 on weekends and peak periods, regardless of how many occupants are in a single vehicle. The Castle Peak lot will remain free with no reservations required every day this season. Locating free lots

outside of the main base area will reduce congestion by keeping vehicles from the busiest areas.

The two resorts are always watching traffic patterns and evaluating their approach and will make changes to their parking plans as needed in the future.

Northstar and Heavenly encourage visitors to carpool as much as possible this season or use public transportation. Whether you're gathering a group for a big carpool or utilizing Heavenly or Northstar shuttles, Tahoe Transportation District buses, Tahoe Truckee Area Regional Transit (TART) services, or Lake Link shuttles, all options will help keep vehicles off the road, reduce congestion, and reduce environmental impact. Ultimately, Heavenly and Northstar want to reshape the way guests think about transportation within our mountain communities.

To learn more, visit the parking and transportation pages at Heavenly and Northstar's websites.

Brian Bigley is the director of Heavenly Mountain Resort's base area operations and Doug Burnett is the director of Northstar California Resort's base area operations. PAGE 12 ■ TAHOE IN DEPTH tahoeindepth.org



## DIANNE FEINSTEIN

# California U.S. senator played a pivotal role in Tahoe protections and environmental improvemen

Continued from page 1

Bill Clinton and Vice President Al Gore. The event helped launch one of the most comprehensive landscape-scale conservation programs in the nation—the Lake Tahoe Environmental Improvement Program. Following that, Feinstein and Reid were instrumental in passing the Lake Tahoe Restoration Act of 2000, landmark legislation that delivered \$300 million in federal support for Environmental Improvement Program projects in the Tahoe Basin.

She also spearheaded the renewal of the Lake Tahoe Restoration Act in 2016, which since enactment has provided an additional \$110 million for further Environmental Improvement Program projects. Under the collaborative program, federal, state, local, and private partners have completed nearly 800 restoration and infrastructure projects, including 92,000 acres of forest health treatments, 107,000 aquatic invasive species watercraft inspections, and 198 miles of bike path improvements.

When invasive quagga mussels were discovered in Southern Nevada at Lake Mead in 2007, she immediately became an ardent supporter of aquatic invasive species protections and the Lake Tahoe Watercraft Inspection Program. The senator helped secure \$17 million for the Lake Tahoe Aquatic Invasive Species Program through the Bipartisan Infrastructure Law.

"Beyond her personal connection to the lake, she felt that if any place could be successfully preserved, it is Tahoe," said Dr. Darcie Goodman Collins, CEO of the League to Save Lake Tahoe. "She helped make this place a model of conservation for the world. Thanks to her, Tahoe is still blue."

Feinstein's commitment and determination also ensured the Lake Tahoe Summit would return to the basin every year. One year she attended the Summit on a broken ankle she received on a hike earlier that morning. Unbeknownst to many, she wrapped it and pushed on, only seeking treatment after her work was done.

The late senator named the core group of environmental and business organizations advocating for the lake "Team Tahoe." She and Reid have passed their passion for Tahoe's preservation on to U.S. Sens. Catherine Cortez Masto and Jacky Rosen of Nevada and their colleague Alex Padilla of California.

"Beyond her personal connection to the lake, she felt that if any place could be successfully preserved, it is Tahoe," said Dr. Darcie Goodman Collins, CEO of the League to Save Lake Tahoe. "She helped make this place a model of conservation for the world. Thanks to her, Tahoe is still blue."

## Feinstein remembered

Sen. Dianne Feinstein's love of Lake Tahoe brought her to the lake many times over the years, including in 2008 (top photo), where she posed with Nevada U.S. Sens. Harry Reid and John Ensign, Interior Secretary Dirk Kempthorne and other dignitaries. She also hosted the annual Tahoe Summit (middle left) and posed in her Washington office with Julie Regan of the Tahoe Regional Planning Agency (middle right). As mayor of San Francisco in 1986, Feinstein spoke at the recommissioning of the battleship USS Missouri (lower right). After her death, her statue in San Francisco was adorned with flowers.











Photos: Tami Heilemann, Department of Interior (top photo), Tahoe Regional Planning Agency (middle photos), Combined Military Service Digital Photographic Files (lower right).

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## **Destination Stewardship Plan makes progress**

Residents and visitors see reduced impacts from traffic, trash, and illegal campfires

### By Devin Middlebrook

TAHOE REGIONAL PLANNING AGENCY

This summer a new group of partners in outdoor recreation, environmental protection, and tourism launched the first Destination Stewardship Plan for the Tahoe Region.

The planning process began in early 2022 after the community and environment felt immense challenges brought on by the COVID-19 pandemic. Eighteen regional organizations collaboratively developed the plan's vision and actions with the participation of over 3,000 residents, visitors, and businesses through surveys, interviews, and workshops.

The plan identifies 32 actions across four strategic pillars:

- Foster a tourism economy that gives back.
- Turn a shared vision into shared action.
- Advance a culture of caring for the greater Lake Tahoe Region.
- Improve the Tahoe experience for all. Regional partners have wasted no time in making tangible progress on the plan. While recreating at Tahoe, residents and visitors can see the changes, which are making their experience more enjoyable and reducing the impacts of traffic, trash, illegal campfires, and more. This work is being done under the newly formed Destination Stewardship Council, which oversees and funds the implementation of the plan.

### **Traffic and transportation**

South Lake Tahoe: The app-based Lake Link launched in the summer of 2022, allowing visitors and locals to request free rides on the main thoroughfares from the casinos and the new Tahoe Blue Event Center in Nevada to the Al Tahoe neighborhood in South Lake Tahoe. In its first year, Lake Link provided over 160,000 rides with 50 percent of those being taken by residents.

North Lake Tahoe: TART Connect offers free, on-demand, year-round microtransit service throughout North Lake Tahoe and Truckee to promote sustainable transportation and reduce traffic congestion. TART Connect serves over 200,000 riders per year, including a 19 percent increase in its second year of



Photo: Alizabeth O'Neal

Kyra, Ethan, and Lidia (I-r) were among the ambassadors positioned at highly impacted beaches and trailheads over the summer.

operation

Regional: Transportation agencies and recreation land managers are working together to improve Tahoe's most popular roadway corridors along State Routes 89 and 28. Tahoe's recreation access points were not designed for the rising popularity of outdoor recreation and the increasing impacts of climate change on surrounding communities. Improvements include increased trail and transit access, restriction of roadside parking, and better infrastructure, including trash cans.

### Litter

Ambassadors were positioned at popular beaches and trailheads over the summer to directly interact with the public about such issues as litter and not feeding wildlife. In 2023, ambassadors spent over 3,000 hours interacting with visitors at these high-use recreation areas.

The City of South Lake Tahoe banned the sale of single-use plastic water bottles by April 2024 citywide to reduce litter across the community and encourage people to enjoy the great tasting Tahoe tap water.

South Lake Tahoe's Clean Tahoe Program is now operating on the North and East shores of the lake, picking up more litter at recreation sites and in



residential neighborhoods.

North and South Lake Tahoe have invested in solar compacting trash cans that can handle larger volumes of trash at highly impacted sites. These trash cans text park staff when full so they can be emptied when needed.

Area nonprofits continue to organize litter clean-ups around the Basin. The League to Save Lake Tahoe's Blue Crew program engaged 864 volunteers to remove 6,836 pounds of trash in 2022. Additionally, Clean Up The Lake

continued to clean up underwater trash by SCUBA divers and hosted the first Litter Summit in the summer of 2023 to bring together partners to develop more solutions to the region's litter challenges.

### **Tourism initiatives**

The new Tahoe Blue Event Center in Stateline, Nevada, includes events during the shoulder season to help spread visitation and provide year-round employment opportunities for seasonal workers. The event center opened in September 2023 and early bookings demonstrate the flexibility and appeal of the new multipurpose venue.

The North Tahoe Community Alliance recently awarded \$20 million in community grants. Many of the funded projects will address tourism impacts, including new trail construction, litter clean-ups, improved access to recreation sites, and expanded microtransit operations.

North Lake Tahoe is sponsoring alternative transportation plans for large events, including bike valets and transit.

## **Equitable access**

The California Tahoe Conservancy granted \$449,000 to equitable recreation access programs that will get those most in need connected to Tahoe.

The Tahoe Regional Planning Agency completed a transportation equity study and a housing equity and climate assessment.

The goals are to ensure everyone has equal access to Tahoe's outdoors and essential services and that the local workforce can afford to live within the Tahoe Basin. For more information on housing affordability programs, read the housing article on page 9.

Working with local community members, South Lake Tahoe's newest park is located on Ski Run Boulevard and will serve residents who previously had little park access.

Tahoe partners are committed to creating a more sustainable outdoor recreation system for residents, second homeowners, and visitors to the region. For more information, visit stewardshiptahoe.org.

Devin Middlebrook is the government affairs manager at TRPA.

## States making parks more inclusive

California and Nevada reaching out to people who historically haven't had access to the outdoors

By Kathryn Reed

SPECIAL TO TAHOE IN DEPTH

Nevada and California parks and natural resource officials are trying to bring a wider variety of users to the land, including people of color, those with mobility issues, and others who traditionally have not found it easy to visit parks and access public lands.

"When you drive through our parks, we lack a diversity of visitors," Bob Mergell, administrator for Nevada Division of State Parks, said. "Our goal is to try to reach out to groups who historically may not have utilized state parks."

In November, California released a document titled *Outdoors for All: Providing Equitable Access to Parks and Nature.* In addition to English, it was translated into three other languages, which is another effort to be inclusive.

The public had an opportunity to comment on this document when it was released last summer and during multiple workshops, including one in Truckee.

"What I heard in Truckee and at other rural places is that you can be surrounded by public lands and still not have access," Katherine Toy, California Natural Resources Agency's deputy director for access, said. "Access to recreation in Tahoe can be expensive; transit is an issue."

For downhill skiing, expenses include more than \$100 for a lift ticket, renting or buying gear, appropriate clothing, and lessons to learn how to participate.

"One in four Californians do not have the same access to the outdoors that others have. That is something we can do better," Toy said. "There are a number of positive health outcomes for those who have easy access to nature. People deserve to have access to the outdoors in their everyday lives and not have it just as a special treat."

Toy is in charge of the state's Outdoors for All initiative, which was launched in 2021 when the state allocated \$1 billion to the cause. This included \$500 million in grants to local communities for park infrastructure, transportation, and education programs. The other \$500 million is for expanding access to state parks and other state facilities through infrastructure and improvements to existing programs.



Photos: Kathryn Reed

Jim Mrazek leads a Tahoe Rim Trail Association hike about the history of Van Sickle Bi-State Park
on the South Shore (above) while a family enjoys fishing at Sawmill Pond near South Lake Tahoe
(balow)



## **Forming alliances**

Both states are working to hire more people of color as well as use promotional materials that reflect diversity.

It's not just about getting people to participate in sports popular in the Tahoe-Truckee area, it's about getting people to their local and regional parks. It's about developing outdoor spaces where there aren't any. People also need to feel safe, and that isn't always the case for nonwhites.

"The strategies outlined in this section will help achieve a future where every Californian feels safe, welcome, and encouraged in the outdoors, and can enjoy California's outdoor spaces without hesitation," the document says.

California has the largest state parks system in the country with 279 parks.

"One in four Californians do not have the same access to the outdoors that others have. That is something we can do better."

## Katherine Toy, deputy director for access

California Natural Resources Agency

The state estimates that six in 10 residents live in park-poor neighborhoods, which by definition is less than 3 acres of open space per 1,000 residents.

For comparison, Nevada has 27 state parks.

In mid-October, California State Parks signed a five-year memorandum of understanding with the Shingle Springs Band of Miwok Indians (who are based on the West Slope of El Dorado County) at the future site of the California Indian Heritage Center known as Pusúune in West Sacramento. It's being built for the protection, preservation, and interpretation of parks on the tribe's ancestral homelands.

This is the fifth memorandum California State Parks has signed with a tribe in the last year.

Nevada is working with groups like Blacks in Nature and Black Folks Camp

A bill approved by the Nevada Legislature in 2019 created the Office for New Americans. One component of the law is that every state agency must have a diversity and inclusion liaison.

For Nevada state parks, that person is Janice Keillor. She is also the department's deputy administrator.

"Little by little we are going to chip away at the barriers that exist," Keillor said.

Kathryn Reed is a journalist who has spent most of her career covering issues in Northern California and Northern Nevada. She has published four books, with the most recent being Sleeping with Strangers: An Airbnb Host's Life in Lake Tahoe and Mexico.

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## Orchid discovery prompts botanical sleuthing

Extremely rare early coralroot found in two locations near Lake Tahoe

By Chelsea Kieffer

USDA FOREST SERVICE

After the monumental winter of 2022-23, which brought over 700 inches of snow to the Sierra Nevada, wildflowers didn't start blooming in the Lake Tahoe Basin until June. But as the snow receded, they emerged in enthusiastic numbers.

As a member of the botany crew for the Lake Tahoe Basin Management Unit (LTBMU) of the USDA Forest Service, one of my projects was to survey burned riparian areas within the 2021 Caldor Fire footprint.

On the first day of the survey, I headed out with Dr. Alexander Ebert, the new botanist for the LTBMU. We were looking for new weeds that might be emerging but also for some of the basin's rare plants. One of our stops was at a site where moonwort — a type of small fern that typically grows in open woods, meadows or other open habitats — had emerged in past years.

While searching for signs of moonwort fronds, I spotted some other yellow-green plants growing along a shaded, relatively bare bank beside a little creek. I immediately realized that it was early coralroot, a type of orchid native to North America. It's part of a group of orchids called coralroot because their roots resemble ocean coral.

Ebert and I had seen early coralroot in other parts of the country. It's typically found in diverse habitats, including forests, grasslands, and mountainous regions and is common in the northern and eastern United States and Canada.

However, early coralroot is extremely rare in California. The only record we found of the plant in California was made when well-known research botanist Bruce Sorrie discovered an isolated patch near Quincy in Plumas County in 1977.

Ebert and I started researching to determine if there was any other evidence of early coralroot in California. I located two — a 1920 herbarium specimen found near Meyers by Alice Ottley, one of the first women to practice botany at UC Berkeley, and a 1954 record of the plant near Echo Summit. The 1954 record by Galen Smith lists two locations — Echo Stables near Echo Lake and Benwood Meadow near the Pacific Crest Trail. However, Smith's record was somewhat suspect; the specimen attached to the



Prioto: Cheisea Kieπer, USDA Forest Service

Early coralroot is an orchid that is very rare in California, but was found in two different locations in the Tahoe Basin in 2023.

record was early coralroot, but Alaska was also listed as the collection location. So, where did this specimen actually come from — Echo Summit or Alaska? I set out on a mission to verify the location information from these records and find out if the orchids still grew there.

### The hunt is on

The Echo Summit coralroot record referenced a trail running from Echo Stables to the Lower Echo Lake rim. I pored over old maps but found no reference to Echo Stables. Undaunted, I made my way out to Lower Echo Lake.

The owners of Echo Lake Chalet
— Tom Fashinell, his wife, and his
son — were at the store that day. Tom
immediately knew where the stables
used to be. From his description, I
remembered seeing an unmarked trail on
the south side of the lake toward Becker
Peak. I hiked up the trail and came upon
a spring and a meadow, but the edges
and surrounding forest were burned
significantly in the Caldor Fire. I could
not find any early coralroot.

The next day I hiked to Benwood Meadow. The area was a maze of thickets

and streams, open patches, and border forests. There was a great deal of suitable habitat, and I was overwhelmed with the amount of ground to cover. And then there it was — one plant on a dirt bar along a creek across from an alder patch.

I later contacted the database manager overseeing Smith's records and learned that the coralroot specimen had indeed been collected in Alaska and not California. The plant recorded near Echo Stables was actually an aster, not an orchid. I had followed a lead that technically did not exist, but I had found the reclusive early coralroot nonetheless!

### **Coralroot in perspective**

Coralroot discoveries in California excite botanists. After Sorrie discovered the plant in Plumas County, botanists still reflected on the find 14 years later. The late botanist Ron Coleman, the author of *The Wild Orchids of California* and a lifelong orchid hunter, marveled at the discovery.

"Until the Sorrie specimen, there was no literature or herbarium records of the plant in California. Plumas County is a well-studied area, with its Butterfly Valley Botanical area known around the world for its botanical diversity. Does early coralroot hide so well that it has been overlooked by everyone until relatively recently? Has it been there since the retreating glaciers, just waiting to be discovered? If it is a relict, why is it not in some of the identical habitats all over the Sierra?"

Coleman continued, "Sorrie believes it was waiting in the mosses and grasses of other counties for someone to walk by. On the other hand, perhaps it is new to California, the gift of chance and windborne seed dispersal. We may never know, but it is inspiring that new things are still happening in the world of native orchids."

Like Coleman, I too was surprised that being in such a highly trafficked, heavily explored area like Lake Tahoe would still yield any new discoveries. I think early coralroot hides so well and has been overlooked, and it is just waiting in the "mosses and grasses" for someone to walk by and notice it.

Chelsea Kieffer is a biological science technician specializing in plants for the USDA Forest Service Lake Tahoe Basin Management Unit.

## TRPA recognizes Lake Spirit Awards winners

**By Victoria Ortiz** 

TAHOE REGIONAL PLANNING AGENCY

This year the Tahoe Regional Planning Agency (TRPA) honored six outstanding individuals with Lake Spirit Awards for their commitment to preserving Lake Tahoe. Recognized in three categories—Citizen, Agency Representative, and Lifetime Achievement—the winners, hailing from both North and South Shores, embody a spirit of collaboration and environmental stewardship.

Among the distinguished citizens, Helen Neff, a leader in traffic safety on the North Shore, spearheaded the "Take It Slow, Tahoe" campaign, promoting pedestrian safety throughout the region. Lila Peterson, from the South Shore, demonstrated exceptional dedication to waste diversion and zero-waste initiatives at Vail Resorts/Heavenly Mountain Resort.

Agency representatives Heidi Doyle and Jean Diaz were recognized for their stewardship and fundraising efforts for California State Parks and for providing affordable housing through the St. Joseph Community Land Trust, respectively.

The Lifetime Achievement category celebrated Roland Shaw, who dedicated 48 years to fuel reduction and forest resilience projects with the Nevada Tahoe Resource Team, and Don Lane, with an impressive 50-year (and counting) tenure at the USDA Forest Service.

Since 2011, TRPA has celebrated the Lake Spirit Awards, a testament to the exemplary citizens and agency representatives who not only display a profound commitment to Lake Tahoe's environment, but also exemplify a spirit of collaboration.

Victoria Ortiz is the community engagement manager at TRPA.



Photo: Tahoe Regional Planning Agency
TRPA Executive Director Julie Regan, far right, and Community Engagement Manager Victoria
Ortiz, far left, recognized the agency's Lake Spirit Award winners at TRPA headquarters.
Recipients were, from left, Roland Shaw, Lila Peterson, Jean Diaz, Heidi Doyle, and Don Lane. Not pictured is Helen Neff.

## Mudsnails discovered

Continued from page 1

invasive species discovered in North America in the Snake River, Idaho, in 1987. They are now found in 22 states, including California and Nevada. Their hardiness, small size, and rapid reproduction allow them to quickly colonize a waterbody.

The MTS team regularly monitors the lake for new aquatic invasive species (AIS) infestations, which can irreversibly harm Lake Tahoe. Non-native species can overwhelm Tahoe's native species and hurt lake clarity. AIS are costly to control and usually impossible to eliminate.

MTS immediately sounded the alarm and notified the Tahoe Resource Conservation District (Tahoe RCD) and the Tahoe Regional Planning Agency (TRPA). These agencies work together along with many partners to implement the nationally recognized Lake Tahoe Aquatic Invasive Species Program.

"My initial response was not appropriate to print," said TRPA AIS prevention coordinator Tom Boos. "We have not had new invasive species discoveries since 2008, when Tahoe boat inspections began. It underscores the value of prevention programs to reduce the risk of new infestations."

TRPA sent the samples to multiple snail experts for identification as well as to a lab for DNA analysis. The agency wanted to be sure the specimens weren't a similar-looking native snail. The lab results cemented their suspicions.

"There wasn't much time for lamenting that it happened or wondering how it happened," Boos said.

New Zealand mudsnails have been found in the Lower Truckee River near Reno and the Lower American River near Sacramento. It is likely they were carried to Tahoe on boats, fishing gear, paddle craft, life vests, or beach toys that weren't Clean, Drained, and Dry.

"We treated it like any emergency and quickly set out a plan to understand the extent of the infestation, gather the latest science and best practices, and keep our partners and the public informed," Boos said.

Boos became the incident team commander for the response. It was an all-hands-on-deck situation.

"We focused on preventing the spread of New Zealand mudsnails to other lakes, which is what our boat inspection program has done since it began," said Chris Kilian, aquatic invasive species program manager with the Tahoe RCD.

The boat inspection program requires motorized watercraft entering Tahoe to be inspected for aquatic invasive species and decontaminated if necessary. The program has inspected more than 100,000 vessels. A program known as Tahoe Keepers helps educate nonmotorized paddlers, anglers, and divers about how to Clean, Drain, and Dry their gear to prevent the spread of aquatic invasive species.

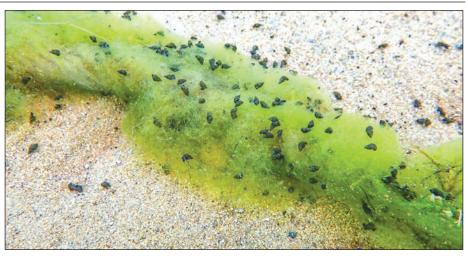


Photo: M. Rydel-Fortner, Marine Taxonomic Services

New Zealand mudsnails are about the size of a grain of rice.

The team quickly assessed the extent of the infestation. Ongoing MTS surveys have thus far revealed sporadic snail patches in a 4.5-mile stretch of the South Shore between Camp Richardson and Ski Run Marina. The team updated boat inspection protocols and notified neighboring waterbodies so boats traveling from Tahoe would be decontaminated.

"Even with our robust prevention and education program there will be nonnative species that slip through," said Dr. Sudeep Chandra, a limnology professor at the University of Nevada Reno who serves on the Tahoe Science Advisory Council. "We need to quantify the potential impacts to the nearshore environment and augment our education and outreach programs so we target nonmotorized equipment. I am certain we can minimize the number of species we add to the watershed."

Every person who enjoys Lake Tahoe shares the responsibility to protect its treasured waters. Be vigilant about keeping your boat, fishing gear, paddlecraft, and beach toys Clean, Drained, and Dry to avoid spreading or introducing New Zealand mudsnails or other invasive species. Visit tahoeboatinspections.com to get specific instructions for popular activities and to learn more.

Victoria Ortiz is the community engagement manager for the Tahoe Regional Planning Agency. PAGE 18 ■ TAHOE IN DEPTH tahoeindepth.org

## New agency leaders taking aim at key Tahoe issues

## Climate change, continued collaboration on the agenda for California and Nevada

By Jim Sloan

TAHOE IN DEPTH

Several agencies with responsibilities in the Tahoe Basin have brought on new leaders promising to continue the work of protecting the lake from challenges posed by climate change and other environmental factors.

"Climate change remains the biggest challenge threatening our communities and the basin's natural resources," said Jason Vasques, named the new executive director of the California Tahoe Conservancy in 2022. "At this point, every aspect of the Conservancy's work—from land management, to recreation and public access, to restoring wildlife habitat and protecting biodiversity, to addressing wildfire risk and racial equity—has climate resilience woven into it."

Other new leaders noted the importance of all agencies with jurisdiction at Lake Tahoe to continue working together.

"Collaboration is critical to effective stewardship of Lake Tahoe," said James Settelmeyer, who was appointed director of the Nevada Department of Conservation and Natural Resources (Nevada DCNR) by Gov. Joe Lombardo in January 2023.

Settelmeyer, a fourth-generation rancher with over 25 years of public policy experience, was a Nevada legislator for 16 years and has served on the Tahoe Regional Planning Agency (TRPA) Governing Board for a number of years. At TRPA, Settelmeyer has worked on committees focused on such things as Regional Plan implementation, environmental improvement,

transportation, and public outreach. He also served on a key working group to update the Environmental Threshold goals for the region.

"I authored legislation that garnered bipartisan approval in Nevada for the enhancement of the Bi-State Tahoe Regional Planning Compact and Regional Plan," Settelmeyer noted. "This legislative action secured the continued safeguarding of Lake Tahoe, all the while promoting its social and economic wellbeing."

Vasques and Settelmeyer join other recently appointed leaders at Lake Tahoe. These include Julie Regan, selected as TRPA executive director in late 2022; Mike Vollmer, named executive director of the Tahoe Resource Conservation District in 2022, Erick Walker, named forest supervisor of the USDA Forest Service Lake Tahoe Basin Management Unit in late 2021, and Mike Plaziak, promoted to executive officer of the Lahontan Regional Water Quality Control Board in December 2020.

As Nevada DCNR director, Settelmeyer oversees multiple divisions that play an important role in Tahoe, including the Division of Environmental Protection, Division of Forestry, Division of State Parks, and Division of State Lands. The state lands division, along with Vasques' California Tahoe Conservancy, are critical in Lake Tahoe's protection because they operate as land banks to facilitate private restoration projects, move existing development out of sensitive areas, and manage public land acquisitions. Including state and federal land acquisitions, more than 9,000 private parcels have been preserved in the Tahoe

Region as open space.

Since Julie Regan was selected from a national field of candidates to replace retiring former TRPA Executive Director Joanne Marchetta in late 2022, she has toured the basin to meet with a variety of citizens and community groups. Regan has been with TRPA for 20 years and said her TRPA Talks sessions with scores of attendees reminded her "how critical TRPA's role in the region remains."

A key topic at every talk concerned affordable housing. When workers are forced to commute from outside the basin, it hurts the environment as well as "the fabric of our communities," Regan said. She noted, however, that her agency is reacting to the problem with targeted incentives to land coverage, building height, and allowed density that will lower the cost to build multi-family housing for local workers.

Other issues discussed in the talks included wildfire threats and traffic congestion, which Regan called "a crosscutting issue where concerns about air and water quality, safety, equity, tourism, and climate resilience come together." She noted that TRPA's Environmental Improvement Program has enabled significant bike and pedestrian, transit, and roadway safety improvements in recent years.

"Each of these projects brings the vision of a safe and interconnected transportation system closer to reality," Regan said. "TRPA is helping increase the pace of projects coming forward by leading broad-based coordination among corridor management agencies and bringing millions of dollars to the basin from federal and state grants."

Settelmeyer agreed that transportation challenges must be addressed in the context of a strong economy.

"It is essential that we continue to make environmental gains by addressing transportation challenges and human-related impacts while balancing the importance of economic vitality," Settelmeyer said. "The Nevada Department of Conservation and Natural Resources plays a pivotal role in implementing programs dedicated to achieving these goals."

In addition, Vasques noted the work the California Tahoe Conservancy has done to address wildfire risk. Over the years, his agency has provided \$5.4 million in grants to improve forest and wildfire resilience.

"Tahoe faces big challenges," said Vasques. "Fortunately, the Conservancy has a great team in its employees and partners, who care just as much as we do about the region's communities and landscapes. Working together, we can get the things done that we need to protect this special place. I am honored to lead the Conservancy at this critical time."

Vasques, Regan, Walker and Dominique Etchegovhen, representing Settlemeyer and Nevada DCNR, were all named to the Tahoe Fund's Board of Directors advisory council in April this year. The Tahoe Fund is a nonprofit founded in 2010 to support environmental improvement projects that restore lake clarity, enhance sustainable recreation, promote healthier forests, improve transportation, and inspire greater stewardship of the region.

Jim Sloan is a copy editor for Tahoe In Depth.

## Housing Continued from page 9

Fink and other TRPA staff have been vetting amendments that would add to environmental redevelopment incentives already available to commercial and tourist accommodation properties in Lake Tahoe's 12 town centers. A stepped down version of the incentives would also be available in multi-family zones near town centers.

The amendments allow additional building height, up to five or six stories in some cases, and allow projects to

provide parking based on need rather than one-size-fits all parking minimums. Projects would also be allowed more land coverage, which is essentially the building footprint. Instead of setting a limit on the number of units per parcel, the project applicant would determine density based on building size, the kind of units they want to provide, and other considerations like parking area and space needed for water quality infrastructure.

The increased return on investment will help offset environmental

improvements and lower rental rates or sales price. The development rights for each unit would come from the existing pool of development rights for the basin, which has about 940 deed-restricted workforce housing units remaining.

"These amendments are going to make a difference for certain projects and will hopefully help a lot more people live and work in our communities," said TRPA's Karen Fink. "As much as we'd like to see privately funded workforce housing, we can't predict that there will be a flood of projects coming forward. We will keep

adding tools to the toolbox and supporting solutions of many shapes and sizes."

"I'm grateful for what I have with housing but am fearful for people like me who are not as lucky," said journalist Miranda Jacobsen. "It's hard to feel like you're being pushed out of your home, your community, your place of work, because the price of living is far too high for someone in their twenties still trying to develop a career."

*Jeff Cowen is the public information officer* 

## **Groups providing adaptive sports access**

Achieve Tahoe, High Fives, and Access Tahoe removing barriers to recreation

By Devin Middlebrook

TAHOE REGIONAL PLANNING AGENCY

Winter at Tahoe means skiing, snowboarding, sledding, cross-country skiing, and a cup of hot chocolate after a long day of adventure. For most of us, we take these experiences for granted. However, for those with a disability, whether physical or mental, enjoying the outdoors is not always easy or even possible. Barriers to recreation access can include a high cost of adaptive equipment, lack of transportation options, accessible facilities, information about accessible activities, and more.

To solve the challenges around a lack of equitable access to the outdoors, especially in the winter, several local organizations are providing adaptive sports access in the Tahoe Region.

### **Achieve Tahoe**

North Tahoe-based Achieve Tahoe was founded in 1967 with the mission to provide affordable, inclusive physical and recreational activities that build health, confidence, and independence. Their programs serve 600–800 people per year with the help of 250 volunteers. Programs include winter sports and hiking and kayaking during the summer.

"If you are a person with a disability trying to get outside, it takes a lot of research and effort to find what is available," explained Marina Gardiner, executive director for Achieve Tahoe. "The information available about accessibility isn't always accessible or not actually available at that recreation site."

"Access in the Tahoe area is very limited. As organizations and community members, we need to keep access in mind. Anytime we plan a new project, trail, or construction we need to keep access in mind."

The people Achieve Tahoe serves give Gardiner and the program volunteers a real sense of purpose. "The excitement you see in the participants when they learn a new skill or do something independently is pretty cool," said Gardiner.

## **High Fives Foundation**

Roy Tuscany sustained a spinal cord injury in 2006 that changed his life. Tuscany says he owes a debt of gratitude to his friends and family in Truckee and



Photo: Jordan Drew

"If you are a person with a disability trying to get outside, it takes a lot of research and effort to find what is available."

## **Marina Gardiner, executive director**

Achieve Tahoe

Vermont for helping him recover and get back to the outdoor sports that he loves. Tuscany wanted to pay this support forward, so in 2009 he founded the High Fives Foundation. High Fives serves anyone with the goal of recovery from a major injury and removes barriers to getting back into the sports people love. Based in Truckee, High Fives is now 15 years old and serves athletes who have gone through life-changing injuries in all 50 states across five different sports,

including skiing, snowboarding, cycling, surfing, fishing, and motorsports.

"Hope is the biggest thing we see in individuals that join our programs," Tuscany said. "People are in a place of despair and come away being able to see hope and what is next for them. They learn that life is not over and can still be awesome."

Tuscany and High Fives are also helping make recreation sites more accessible. With several partnering organizations, they have helped build three fully accessible mountain bike trails in the Reno-Tahoe area. They are working with Palisades Ski Resort to identify and remove barriers to mountain access.

"When I got hurt, there wasn't something like this. Now there is something that provides hope and resources for people," Tuscany said. "Knowing I created a support program for people like me is a great feeling."

### **Access Tahoe**

Achieve Tahoe and High Fives are based in the North Tahoe and Truckee areas, and South Tahoe resident Angie Reagan recently founded Access Tahoe to bring more equitable access to South Lake Tahoe.

Since April of this year, Reagan has been hosting community round table events to discuss equitable access and heighten awareness of the issue. The goal is to connect those with needs to the programs that can get them outdoors.

"Incorporating access as part of our community culture is important," Reagan said. "We need more awareness and open-mindedness to make small changes that can have a huge impact on people."

Reagan hopes to grow Access Tahoe and push the community toward a more equitable future, including ADA accessibility, meeting transportation needs, creating more activities for special needs families, and better access for everyone.

If you are interested in supporting these organizations or learning more, visit www.achievetahoe.org, www. highfivesfoundation.org, or Access Tahoe's Instagram @accesstahoe.

Devin Middlebrook is the government affairs manager at TRPA.

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## Highlighting key 2023 environmental projects

The Environmental Improvement Program has completed more than 800 projects in last 26 years

ormed in 1997 at the inaugural Lake Tahoe Summit, the Environmental Improvement Program (EIP) is an unparalleled partnership working to achieve the environmental goals of the region. The EIP is implemented through a strong collaborative partnership that spans all jurisdictions and government sectors and includes the private business community, the science community, and the Washoe Tribe of Nevada and California. In the last 26 years partners have completed more than 800 projects and invested \$2.8 billion to restore and enhance Lake Tahoe and its communities. Below are a few highlights of EIP projects completed around the lake in 2023.



## San Bernadino class 1 bike path

Photo: El Dorado County

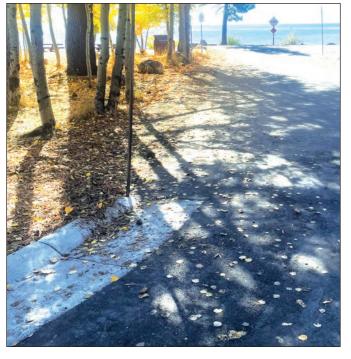
El Dorado County constructed a 0.37-mile multi-use path across San Bernardino Avenue over the Upper Truckee River toward Tahoe Paradise Park. The pathway and bridge provide safe access to Washoe Meadows State Park, Tahoe Paradise Park, and Meyers Elementary School.



## **Emerald Bay aquatic invasive species removal**

Photo: M. Rydel-Fortner, Marine Taxonomic Services, LTD

Thanks to critical funding from the Lake Tahoe Restoration Act and the Tahoe Fund, divers removed aquatic invasive plants from 1.5 acres of Emerald Bay to preserve Lake Tahoe's famed clarity and improve water quality. A decade ago, EIP partners treated 6 acres in Emerald Bay for aquatic weeds and declared it weed-free. Now, annual surveillance efforts by contract SCUBA divers and a California State Parks dive team help detect any invasive weeds and trigger removal efforts to prevent species like Eurasian watermilfoil from establishing in the bay.



## Lower Secline Water Quality Improvement Project

Photo: Placer County This summer, Placer County constructed the Lower Secline Water Quality Improvement Project with the goal of improving lake clarity. The project brought needed drainage infrastructure to both Secline Street and Brockway Vista Drive to help prevent an estimated 2,000 pounds of sediment runoff from entering the lake.

## **Lahontan cutthroat trout reintroduction**



Photo: Washoe Environmental Protection Department This summer, the Washoe Environmental Protection Department in collaboration with the U.S. Fish and Wildlife Service reintroduced native Lahontan cutthroat trout (LCT) to Meeks Bay. LCT are an important cultural resource for the Washoe Tribe and one of the few species native to Lake Tahoe. Their numbers have been decimated by climate change, stocked fish for recreational fishing, and aquatic invasive species, and the Washoe Tribe is collaborating with Tahoe agencies to increase their numbers in hopes that this important food resource will be restored to Lake Tahoe.

## Prescribed understory burning at Burton Creek State Park



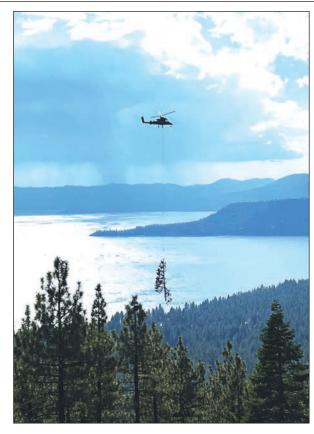
Photo: Rich Adams, California State Parks California State Parks conducted prescribed fire understory burning operations on a 60-acre plot in Burton Creek State Park this fall. Understory burns improve forest health but are only administered following initial fuel reduction and pile burning to reduce the amount of understory vegetation. Managing and maintaining this forest landscape will provide additional fire protection to adjacent homes and community structures in the event of a wildfire.

Continued on page 21

Continued from page 20

## NV Energy corridor thinning and fuels reduction

Photo: Nanette Hansel, Ascent Environmental Inc. NV Energy continued to make progress on its Resilience Corridors Project. The project is thinning forests around NV Energy utility infrastructure, reducing hazardous fuels. Once complete, the project will create resilient forests adjacent to 28 miles of NV Energy utility infrastructure and will have thinned 290 acres. NV Energy coordinated with the USDA Forest Service on this critical forest health project.





## **Chimney Beach parking**

Photo: Paul Potts, USDA Forest Service Lake Tahoe Basin Management Unit
The Forest Service started implementing the Chimney Beach Trailhead Parking Upgrade Project.
The project will construct 130 parking spaces to replace unsafe parking on the State Route
28 highway shoulder. The project will include trailhead facilities, including trash receptacles,
restrooms, improved signage, transit, and a pedestrian crossing at State Route 28.



## **Máyala Wáta Restoration Project**

Photo: Washoe Environmental Protection Department

Washoe Environmental Protection Department staff and League to Save Lake Tahoe volunteers removed conifers from Máyala Wáta, the meadow adjacent to Meeks Bay. Meeks Meadow and Meeks Creek have been important food, medicine, and fishing sites for the Washoe Tribe for thousands of years. This is one of the most conifer-encroached meadows in the Tahoe Basin, and the Washoe Tribe is partnering with other agencies to restore ecological and hydrologic function to the meadow.



## **Battling aquatic invasive species**

Photo: League to Save Lake Tahoe

The League to Save Lake Tahoe and other partners have been testing innovative technology around the lake this year to combat litter and aquatic invasive species (AIS). The CD3 mobile unit (above), helped users clean, drain, and dry 550 non-motorized vessels this year to prevent the spread of AIS.

## Homewood owners say public access part of their plan

Homewood Mountain Resort is planning some changes but has announced it doesn't intend to become a private resort.

The Tahoe Regional Planning Agency (TRPA) received a proposal in late 2022 from Homewood owners suggesting changes to its 2011-approved master plan. The proposal would have changed public access to the ski area and other concepts

in the master plan.

However, over the last year, TRPA has heard from many skiers and community members opposed to any changes that limit public access to the venerable ski area. Homewood is one of the last small, rustic ski areas remaining in the Lake Tahoe Region, and many longtime Homewood users worried the changes would make Homewood a members-only

luxury destination.

TRPA management and planners have continued working with Homewood Mountain Resort representatives, Placer County staff, and community representatives around the resort's plans. In June of this year, Homewood provided an early concept that maintained public access.

Although Homewood managers intend

to keep the mountain open to the public, TRPA is requiring an application to amend the 2011 master plan if the resort wants to make any other changes. An amendment would include adequate environmental review and public input opportunities to consider how the broader vision for the resort is changing. To submit comments or stay updated on the process, visit trpa. gov/major-projects/#homewood.

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Congratulations Kevin Patterson, Novato, California.





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## Letter from a reader

Dear Editor:

I have just finished reading the latest edition of Tahoe In Depth.

I learn new and interesting things each time I read your publication, and I want to thank you for your efforts.

This is a fantastic newspaper, and I appreciate all of the time and attention to detail that is put into this wonderfully informative publication.

Very sincerely,

J. Moore





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## **Mark Twain by McAvoy Layne**

After 35 years and 4,000 performances, retiring actor leaves a lasting impression

By Jim Sloan

TAHOE IN DEPTH

McAvoy Layne recently walked from his Incline Village home down to Burnt Cedar Beach. It was a blustery day. The wind whipped up the waves and lowflying clouds skittered over the Sierra peaks to the west. From his vantage point, Layne could not see a single structure. It was as if he'd stepped back in time, perhaps all the way back to 1861, when Mark Twain visited Lake Tahoe.

"Moments like that have an emotional impact on me," Layne said.

It wasn't the first time Layne felt like the famed author and humorist Mark Twain. Layne has been filling those shoes as the "Ghost of Mark Twain" for more than 35 years. Before retiring in September, Layne estimates that he performed his impression of Mark Twain more than 4,000 times, traveling to all corners of the globe to delight audiences with shows that blended Layne's mischievous delivery with the witticisms and wisdom of one of America's most revered writers. Watching Layne on stage—pipe in hand, his white suit impeccably tailored—it's easy to drift back in time and feel you're in the presence of Twain himself.

### One man, two personas

Actually, it's easy to feel Twain's presence even when Layne is wearing a fleece pullover and chatting with you over a Zoom call. At 80, Layne still has that Twain unruly mop of hair, his thick handlebar mustache, and the author's droll, bemused view of the world. In conversation, it's difficult to tell where Layne ends and Twain begins. Over the years, performing in theaters, showrooms, concert halls, classrooms, and camps, the two men have merged into one.

"All I need to do to become Twain is to muss up my hair a little," Layne says. "When I pick up a cigar or a pipe and I'm in the white suit, I'm him. I can't help it. I don't think I have a problem with that, but my friends tell me I do."

Fittingly, Layne's last formal performance as Twain's ghost took place at Piper's Opera House in Virginia City—the place where he first honed his Twain persona. Since that September performance, he's hung up his tailored

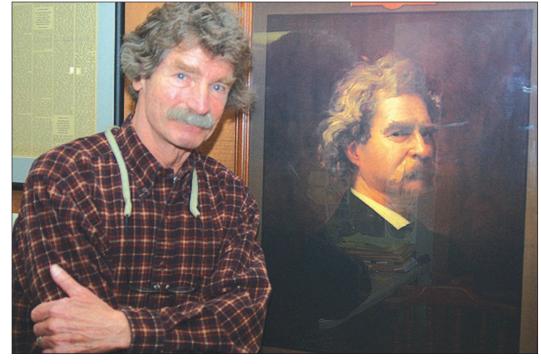


Photo: McAvoy Layne
The performer pauses by a portraint of his inspiration. His fascination with Twain began during a ski trip to
Tahoe when he was snowbound for five days with a copy of The Complete Essays of Mark Twain.

suits (six in all, including the one he kept in his car for emergency performances) and now only entertains visitors who schedule time with him in his home through his website (ghostoftwain.com).

The story of Layne's journey to Tahoe and Twain is as serendipitous as a Sam Clemens yarn. He was working as a morning DJ in Maui ("Off the air at 10 a.m., on a wave by 10:10," he says) when he met a woman on a ski lift while visiting Tahoe. This was 1983. They chatted and the woman offered him a job as morning DJ for a station she was starting at the lake.

"I went from a surf bum to a ski bum in less than two weeks," Layne recalled.

### A case of cabin fever

On a previous visit to Tahoe, Layne had been snowbound in an Incline Village cabin for five days. One of the books on the shelf was *The Complete Essays of Mark Twain*. Layne, wracked with cabin fever, stretched out and got hooked. After moving to Tahoe for his new radio job, he started visiting local schools to address the students as Twain. He was visiting about 10 schools a week when he got a call from Carol Piper Marshall. Would he be interested in doing a series of shows at Piper's Opera House in Virginia City? He certainly was.

He did two shows a day, six days a week for four months.

"This was a wonderful break for a person in the performing arts because it gave me a chance to try out new material—well, new to me—and see what worked with a modern audience," Layne recalls.

### The Sandwich Islands

The rest, as they say, is history. Layne went on to perform all over the world, including Russia, where he got to crawl inside Sputnik, and his old stomping grounds in Hawaii, where Layne's shows featuring Twain's accounts from the Sandwich Islands played to packed houses. Twain's letters back to California from Hawaii made him "the best-known honest man on the Pacific Coast," Twain said, and were "like Neil Armstrong describing what is was like on the moon," Layne says.

"The only white people there at the time were whalers and missionaries," Layne says.

Layne has received a number of awards over the years, but one of the least expected came in 2015 when he, as Twain, was recognized for setting the first "prescribed burn" in the Tahoe Basin by the North Lake Tahoe Fire Protection District. The honor stems from a Twain tale from *Roughing It* in which

"All I need to do
to become Twain
is to muss up my
hair a little. When
I pick up a cigar or
a pipe and I'm in
the white suit, I'm
him. I can't help
it. I don't think
I have a problem
with that but my
friends tell me I
do."

**McAvoy Layne** 

Twain accidently touched off a wildfire that produced a "tall sheet of flame." Layne accepted the recognition with characteristic humility—"I could live for month on a compliment like this, without food," he deadpanned—but also set the record straight.

"That fire was really just a floor fire," Layne explains. "But floor fires don't sell books. So, in *Roughing It*, Twain made it a full-fledge forest fire." Layne also noted that local Native Americans had been using controlled burns to enhance Tahoe's environment for years before Twain arrived.

Tall tales aside, Layne, Twain and Tahoe will be forever linked. As Layne has frequently reminded us over the years, it was Twain who described Tahoe as "the fairest picture the whole earth affords."

And, as Layne realized as he stood in the sand at Burnt Cedar Beach, he had indeed been given a special opportunity to cherish both the man and the lake he loved.

"The air up there in the clouds is very pure and fine," he thought as cold wind threw back his tangled hair. "Bracing and delicious. And why shouldn't it be? It is the same the angels breathe."

Jim Sloan is a copy editor for Tahoe In Depth.