

MONO LAKE

N E W S L E T T E R

Summer 2019

If you have arrived at Mono Lake and picked up this *Newsletter*, wondering “what is this place and who are these people,” you’re in good hands.

On page 16 you can find the Mono Lake story in a nutshell, and the essay on page 22 gives a brief history of this organization. There’s a map and things to do on pages 14–17. You can learn, like the students who come to the Outdoor Education Center, about the physical tie between Mono Lake and Los Angeles that is the Los Angeles Aqueduct. You can see the intricacies required to keep Mono Lake protected at an everyday, practical level—the comments we submitted on proposed fishing regulations, the temporary license change we negotiated to best benefit the recovering streams this year, how closely we monitor the lake level.

Most importantly—get yourself down to the lakeshore (use that handy map)! There are Osprey on nests perched on the tufa towers. Taste Mono’s salty, baking-soda-flavored water. Take a South Tufa tour to see tufa form right before your eyes.

Longtime members may recognize the Committee’s early days in Fran Spivy-Weber’s essay, or remember the State Water Board hearings when Tom Cahill and many other experts spoke up for Mono Lake. You may have known Andrea Lawrence, whom we celebrate each year by honoring those, like Elsa Lopez, who carry on her legacy.

If you know Mono Lake, you know the smell of its fresh briny air. You’ve watched phalaropes gliding and twisting in flight—the very same birds that fly to South America and back every year. You’ve felt the salty water dry to a white coating on your hands after a paddle on the lake, the same minerals that tinge saline lakes all over the world. You know Mono Lake is remote, unique, and yet truly connected via the 16,000 members who successfully shape its future.

Mono Lake is for everyone. If you’ve been with us for years—thank you. If you’re new here—welcome. We can’t wait to show you around.

—Elin Ljung, Communications Coordinator



COVER PHOTO COURTESY OF DAVID GUBERNICK, RAINBOWSPIRIT.COM

ANDREW YOUSSEF

Mono Lake Committee Mission

The Mono Lake Committee is a non-profit citizens’ group dedicated to protecting and restoring the Mono Basin ecosystem, educating the public about Mono Lake and the impacts on the environment of excessive water use, and promoting cooperative solutions that protect Mono Lake and meet real water needs without transferring environmental problems to other areas. The Mono Lake Committee is a 501(c)(3) non-profit organization, also known as the Mono Lake Foundation. Tax ID: 77-0051124.



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MONO LAKE
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Deep snowpack to raise Mono Lake

Streams will benefit from interim restoration rules this year

by Geoffrey McQuilkin

Today it is once again possible to see the sky out of the windows at the Mono Lake Committee office—instead of a wall of snow—but the wet and snowy 2018–19 winter will continue to affect Mono Lake and its tributary streams throughout the summer and well into fall.

Storms rolled into the Sierra this past winter and temperatures stayed cold, allowing for a large snow accumulation in Lee Vining and along the shore of Mono Lake. In February one noteworthy storm sequence dropped nearly four feet of snow in town and turned the entire Mono Basin into a snowfield. Another delivered blizzard conditions that closed the highway for days, leaving students from nearby June Lake stranded at school to sleep overnight at homes in Lee Vining.

By April 1, the winter snowpack measured 157% of average for the Mono Basin. It was an impressively wet winter, although other parts of the Sierra measured even higher. The winter snow is now melting, producing runoff that winds its way down Mono Lake's tributary streams from April to August—this year's Mono Basin runoff forecast is 145% of average.

Mono Lake on the rise

All this winter excitement is good news for Mono Lake. Ample snowmelt will more than replace annual evaporation from the lake's surface and Mono will rise throughout the summer.

At more than 45,000 acres, Mono Lake is nearly twice the size of San Francisco—it takes a lot of water to raise the lake level. The Mono Lake Committee forecasts an impressive net rise in lake level of a foot and a half by next March. That gain, by volume, is over 60,000 acre-feet of water, which is enough to cover the state of Rhode Island an inch deep, or to fill

the Rose Bowl to the top more than 235 times. Importantly, it is 15% of the rise needed to achieve the ecologically sustainable long-term level required by the California State Water Resources Control Board.

Wet years like this one perform the critical task of ratcheting the lake upward to higher levels. Average years, like winter 2017–2018, counteract evaporation and keep the lake stable. But it's the wet years when lake rise happens—lifting the surface toward the required management level and restoring significant amounts of the 2.2 million acre-feet of water lost during decades of excessive water diversions.

Amidst a year of plenty, it is worth remembering that dry years happen. Although California's recent five-year drought is fading into memory, Mono Lake is just now recovering from the seven-foot drop the 2012–2016 sequence of dry years caused. Had the drought not happened, the lake would be close to reaching its long-term management level. Next winter, the winter after, and the winters that follow will be critical factors in determining when Mono Lake will achieve that ecologically sound level, after which new export rules take effect to lock in those gains.

New temporary rules benefit stream restoration

This year's ample runoff means Rush, Lee Vining, Parker, and Walker creeks will get the high flows that restore habitat by enhancing channel structure, scouring pools for fish, and spreading seeds and sediment across the floodplain to rebuild riparian forests. But will this water be delivered to maximum benefit? Thanks to recent action the answer is yes for 2019.

The Los Angeles Aqueduct impedes these tributaries, altering the timing and amount of water in 20 miles of stream that lie below the diversion dams. Extensive scientific work has informed a set of rules that maximizes the restoration benefits of the flows by guiding aqueduct operations throughout the year and ensuring that high flows are delivered in a natural pattern.

In 2013, after 15 years of intensive stream monitoring and three years of negotiations between the Committee, Los Angeles Department of Water & Power (DWP), and others, the Mono Basin Stream Restoration Agreement set forth a plan for implementation of the scientific recommendations. The new rules will ultimately become terms

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ANDREW YOUSSEF

With 157% of average snowpack by April 1, it was an impressively wet winter in the Mono Basin.

of DWP's license to divert water from the Mono Basin. They include flow requirements, a feasible plan for the construction of a new outlet to overcome limitations of DWP's 80-year-old Grant Dam, as well as monitoring and other important restoration matters.

However, the legal process of finalizing the license has been moving agonizingly slowly, and six years later the package of critical restoration measures in the Agreement has yet to be implemented.

The Committee has argued that the creeks should not have to wait any longer for the benefits of the new flow rules just because procedural matters are dragging on. Although high flows in Rush Creek can't be achieved until the new outlet is constructed, existing aqueduct infrastructure can be used to deliver portions of the Rush Creek flow pattern, along with the new flow patterns for Lee Vining, Parker, and Walker creeks.

The State Water Board agreed.

A recently approved temporary license change puts the new streamflow requirements into action for 2019. That means decades of scientific study are now being put to work on a daily basis to restore the health of Mono's long-

suffering tributary streams.

Awaiting State Water Board action on DWP's delay

Implementation of the full Stream Restoration Agreement remains a critical area of work for the Committee. DWP's water license must be revised under the Agreement to permanently implement the new flow pattern, construct a new outlet at Grant Dam, and implement other important provisions.

The State Water Board is ready to take action and is waiting on just one thing: a supporting environmental document

from DWP. Delivery of this document has been promised for years but has yet to happen. The State Water Board has expressed increasing impatience about the protracted delays. Committee staff and attorneys are pursuing multiple strategies to bring the license revision process to completion.

In the meantime, the temporary license change will make the most of the ample runoff. Despite lingering infrastructure limitations, Mono Basin streams will get the best restoration benefits possible this year. ❖



Mono Lake's tributaries, including Lee Vining Creek, will receive high streamflows that better mimic the natural runoff pattern, thanks to a recently-approved temporary license change.

Advanced snow survey technology may scale up statewide

by Bartshé Miller

The Airborne Snow Observatory (ASO) uses a LIDAR-equipped aircraft that flies over the Sierra Nevada, precisely capturing surface snowpack topography down to two-meter area grids and with ten-centimeter vertical accuracy. The LIDAR technology, and specifically the coordinated application of the high-resolution equipment developed by NASA's Jet Propulsion Laboratory, has grown and demonstrated its value. ASO flights can measure the water content and snow depth of watersheds up and down the Sierra Nevada with much greater accuracy compared

to traditional snow surveys (see 2017 Summer *Mono Lake Newsletter*).

Irrigation districts, water utilities, resource managers, and the Mono Lake Committee have already benefitted from ASO data. With more accurate information about how much water is in the snowpack, the Los Angeles Department of Water & Power and the Committee can more confidently forecast runoff year-types, project Mono Lake's level, and plan delivery of stream ecosystem flows. ASO data would enable similar benefits up and down the state, and it would also allow water managers to better evaluate the risk of flooding from rain-on-snow

atmospheric river events.

The California legislature is now considering Senate Bill 487, introduced by Senator Anna Caballero representing Senate District 12, which would fund ASO to repeatedly conduct snow surveys each winter. The Committee supports the bill in concept, and has asked for language that will ensure that the raw data, along with Department of Water Resources snow assessments, are made available to the public in a manner that is both timely and consistent with the Open and Transparent Water Data Act.

Lundy wilderness property protected

Persistence pays off

by Lisa Cutting

Curious Mono Lake Committee members may remember an article that ran over a year ago (see Winter & Spring 2018 *Mono Lake Newsletter*) about a private land parcel for sale up in Lundy Canyon, well away from any buildings, completely within the Inyo National Forest and adjacent to the Hoover Wilderness.

We are pleased to report that a partnership between the Mono Lake Committee, Wilderness Land Trust (WLT), and Eastern Sierra Land Trust (ESLT) has successfully protected the 49.3-acre parcel with the express intent of transferring ownership to the Inyo National Forest, thereby protecting the property in perpetuity.

The Committee loaned WLT \$25,000 to purchase the property. We were able to provide the loan at the critical moment thanks to a generous bequest from writer, advocate, and Board Member Emerita, Genny Smith. Genny was a strong voice for protecting the special wild places that make California unique, and her determination and strategic thinking turned lofty goals like this into real accomplishments. The Committee is grateful and honored to be able to use these funds from Genny to help protect Lundy Canyon.

Lundy Canyon property

The property, an undeveloped mining claim inholding, is located in upper Lundy Canyon, completely within the Inyo National Forest; it also includes a portion within the Hoover Wilderness as well as a portion adjacent to the wilderness boundary. For those familiar with the area, the property is across from the old beaver pond (now mudflat) that is approximately one quarter-mile west of the Lundy Canyon trailhead. The lowest property line is at about 8,500 feet above sea level; the property extends up the steep south canyon wall and has no established vehicle access.

This dramatic and scenic location is within sight of the Lundy Canyon trail and multiple waterfalls, and is within endangered Sierra Nevada bighorn sheep habitat. Dr. Connie Millar, Senior Research Ecologist with the US Forest Service's Pacific Southwest Research Station, has documented that this site has one of the most northern stands of limber pine in the Sierra Nevada. Lundy Canyon is a popular hiking area, and a valuable recreational asset to Mono County's tourism-based economy.

Acquisition roller-coaster

Since 2017 the property has been in and out of escrow with multiple potential buyers. The Committee remained undeterred as WLT's efforts to acquire the property the first time fell through. When the property was relisted in December 2018,

the team was ready. WLT staff began negotiations and ESLT contributed \$5,000 to support this rare opportunity to reduce the risk of inappropriate development in Lundy Canyon. The Inyo National Forest immediately confirmed that the acquisition was a high priority. The purchase was successfully completed in April.

WLT is now doing the legal and administrative work needed to transition the property into public ownership, which is expected to take one to two years. In the meantime, we can all rest assured that the integrity of upper Lundy Canyon will remain intact and the scenic views protected. ❖

Lisa Cutting is the Committee's Associate Policy Director. Lundy Canyon is one of her favorite places, with Excelsior Peak, Mill Creek's headwaters, Sierra Nevada bighorn sheep, pika, and wild trout.



The recently-protected 49.3-acre parcel in Lundy Canyon is located on the talus slope above the mudflat on the south canyon wall.

ROBBIE DI PAULO

Mono Lake: Surviving the Anthropocene

by Bartshé Miller

Saline lakes are in steady decline around the world. Treasures on a planet of primarily freshwater lakes, saline lakes are unique, wild, and fascinating in their own right, as well as critical niche ecosystems in which birds and people live.

Because they are located in arid and semi-arid regions where evaporation loss is significant, water diversions have an increased impact on these lakes. Diversions have, in some cases, led to ecological collapse and loss of fisheries and/or critical bird habitat along with catastrophic air quality problems. Climate change is frequently blamed, but saline lakes began shrinking and disappearing decades ago as water diversions increased well ahead of global temperature rise. The Aral Sea in Uzbekistan and Kazakhstan, Great Salt Lake in Utah, Abert Lake in Oregon, the Dead Sea in Jordan and Israel, Bolivia's Lake Poopó, Iran's Lake Urmia, Walker Lake in Nevada, and Owens Lake are among the current examples of languishment or loss—the result of perennial, unbalanced water diversions from tributary sources.

Mono Lake stands apart

Today, with an active lake-level management plan backed by legislative support of the public trust, Mono is likely the only salt lake ecosystem on earth with meaningful protection on a watershed scale. The 1994 California State Water

Resources Control Board Decision 1631 established a clear management plan for Mono Lake in terms of lake level, water diversions, and mandated restoration. The plan was designed to balance the ecological health of Mono Lake, fisheries in tributary streams, and air quality with the legitimate water needs of Los Angeles, while recognizing that drought years and wet years were inevitable.

Climate change was not a consideration when the State Water Board issued its decision in 1994; however, the decision helped Mono Lake endure the 2012–2016 drought—the worst to impact California in centuries. Exacerbated by climate change, the drought lowered Mono Lake seven vertical feet. As Mono Lake fell, the State Water Board rules restricted the Los Angeles Department of Water & Power's (DWP) water diversions from Mono Basin streams based on lake level. Mono Lake fell, but its ecosystem remained protected.

Los Angeles endured the drought as well, but remains resilient—with less water. The drought pushed the city to reduce overall water consumption to 50-year lows in spite of decades of population growth. This is a story inextricably linked to the protection of Mono Lake, and a city ethos shaped by drought, climate change, and the environment. The city leadership is unflinching—charging ahead with plans for stormwater capture and 100% wastewater recycling (see page 10).

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PHOTO COURTESY OF MARIE READ

Mono Lake is likely the only salt lake ecosystem on earth with meaningful protection on a watershed scale. It is also a critical stop on the Pacific Flyway for migratory birds like phalaropes, seen here.

Mono's sister lakes

During the recent drought, Great Salt Lake reached its historic low, and Abert Lake shrank to a mere puddle. Both lakes are sister Great Basin salt lakes that collectively support a global migratory network of shorebirds and waterfowl numbering in the millions. Their future looks unsteady. No authority oversees lake level at Abert Lake or Great Salt Lake, and there are no other saline lakes in the 209,000 square miles of the Great Basin that have comprehensive safeguards for ecosystem function, air quality, and recreational and scenic values. Mono Lake is alone.

In the Western Hemisphere south of the equator, the plight of saline lakes travels a similar path. South America is home to a number of saline lakes along the Altiplano, or Andean Plateau. Many of these lakes share the same hemispheric species of shorebirds with North America. Like their unprotected sister lakes in the Great Basin, Altiplano lakes are managed neither for ecosystem health nor human health. Mining has rapidly expanded in the region. Together with agricultural diversions, these water uses accumulate over time, impacting a fragile desert hydrology.

In 2015 Lake Poopó went dry, its fishery blinked out, and untold numbers of shorebirds, waterfowl, and flamingoes lost habitat. Like a large and deadly game of musical chairs, as saline lakes and their wetlands go dry, birds are further squeezed into fewer remaining habitats, incapable of supporting population numbers that existed just decades ago. The Bolivian government claims that climate change is to blame, but the dramatic uptick in mining operations impacts the fragile hydrologic system feeding Lake Poopó, which is further confounded by heavy metal contamination from the mines. The impaired hydrology of the region is now increasingly vulnerable to climate change.

Prevention vs. expensive intervention

Well before the struggles facing Lake Poopó, Great Salt Lake, and Abert Lake, there was the Aral Sea, Owens Lake, and recently, Lake Urmia. These lakes have declined to various stages of ecological collapse, causing economic hardship and unhealthy air quality for people living in the region. However, there is an example of partial redemption.

Owens Lake, dry for decades, is now intensively managed to mitigate for unhealthy air quality, and is rapidly rebounding with bird life. Shallow irrigated ponds, managed to submerge portions of a dry lakebed that would otherwise emit unhealthy particulate matter, also provide habitat for alkali flies that in turn draw American Avocets, Western Sandpipers, California Gulls, Black-necked Stilts, and other migratory birds by the thousands. While Owens Lake will not refill, nor has its true ecological value been restored, it is no longer a complete ecological disaster. Twenty years of work and \$1.5 billion later, air quality in the Owens Valley has dramatically improved, and quite unexpectedly, so has bird habitat. Managing the lake is not cheap, and DWP will continue to pay for the cost well into the future, but Owens Lake has a

management plan that uses very little water, and makes sense for at least one saline lake that had no other pathway back from catastrophe.

There is immense economic and ecological value in managing saline lakes long before diversions reduce them to dust. In part, because of the loss of Owens Lake, efforts to protect Mono Lake became more urgent in California. Economic, cultural, social, environmental, and political hurdles to conserving saline lakes around the world are substantial, but climate change is not the excuse for decline and inaction. Mono Lake and Los Angeles are an inspiring example of what we can accomplish for saline lakes in spite of climate change.

We do not have to settle for a future of dwindling saline lakes. Finding solutions that involve more efficient and thoughtful use of water backed by strong management plans can be a path forward for people, birds, and saline lakes. ❖

What about the Salton Sea?

Formed in the early 1900s as a result of a breached canal carrying Colorado River water, the Salton Sea is not located in the Great Basin, like most of North America's other saline lakes. However, over the last hundred years it has become critical habitat on the Pacific Flyway for millions of birds of nearly 300 species. The Salton Sea has become, in essence, substitute habitat for many of these birds since the Colorado River Delta has dried up, including Eared Grebes and others that arrive from Mono Lake.

The Salton Sea is also unusual because agricultural diversions have sustained it instead of depleted it—its inflow comes primarily from agricultural runoff from farms in the Imperial Valley. However, in 2003, Colorado River water that filled the sea in the form of agricultural runoff began to be diverted elsewhere. Water that partially compensated for that loss was cut off in 2017, accelerating the rapidly falling water level, habitat loss, and toxic dust blowing off miles of exposed dry lakebed.

State, federal, and regional officials have long seen the air quality and habitat loss crises coming, but plans to control dust and restore wetlands have been stymied by the high costs of implementation, bureaucratic issues, and the 2012–2016 drought.

This year has brought hope for the Salton Sea. For the first time, California has allocated substantial funding for habitat restoration and dust mitigation. Governor Gavin Newsom, the State Water Board, and the Natural Resources Agency have recommitted to implementing the Salton Sea Management Plan. As at Mono and Owens lakes, it will take a monumental effort from state agencies, water districts and managers, elected officials, non-profit partners, and community organizations to create a sustainable future for the Salton Sea.

Major changes to fishing regulations possible

Sometimes simplifying isn't simple

by Lisa Cutting

Just a month before this year's fishing season opener, the California Department of Fish & Wildlife (DFW) threw out a lunker of a proposal—a potential change to existing fishing regulations to allow year-round inland trout fishing throughout the state of California, including the Eastern Sierra. According to DFW, the motivation for the change is to simplify fishing regulations statewide.

Since the announcement, DFW has hosted a series of meetings around the state. Locally, the topic has sparked much interest—not only among anglers and fishing guides, but also business owners, seasonal resort owners, and public officials, all of whom have attended outreach meetings in force. Concerns about the proposed regulations include reduced business revenue, the potential for more winter safety issues on ice-covered waters, and the loss of “Fishmas,” the unofficial, beloved opening day holiday.

Special considerations needed for Mono Basin streams

The current proposal is a mixed bag for Mono Lake's tributaries, which would all be opened to year-round fishing, with special regulations on some waters. Though open to fishing year round, Rush Creek below Grant Lake Reservoir and Lee Vining, Parker, and Walker creeks below Los Angeles aqueduct diversion facilities would retain their current regulation restrictions of a zero bag limit (“catch and release”) and artificial lures with barbless hooks only.

For decades, the self-sustaining trout populations in these sections of Mono Lake's tributaries have been used as a measure of restoration progress and for that reason have not been stocked. Even though the new regulations would

specify a zero bag limit, trout can still be adversely affected by increased fishing pressure, especially in winter when water levels are lowest and conditions are most challenging for fish.

The Committee is focused on restoring the health of the 20 miles of streams in the Mono Basin that are still suffering from the impacts of decades of excessive Los Angeles Department of Water & Power water diversions. The existing zero bag limit regulations are an important part of the recovery program. The Committee consulted with fisheries experts and submitted formal comments on the proposal supporting retention of these restrictions and urging DFW to continue the current winter fishing closure on Rush, Lee Vining, Parker, and Walker creeks for the benefit of the recovering fishery.

The Committee is also supportive of the local community and Mono County initiative to maintain natural fishery reproduction by setting a zero bag limit on Rush Creek waters between Silver Lake and Grant Lake Reservoir during the spawning season to protect mature brown trout. In general, winter angling pressure on trout is problematic in the Eastern Sierra because fish are highly vulnerable during extremely low streamflows when food is scarce and shelter from natural predators is challenging to find.

The challenge to simplify is clear

California is the third-largest state in the nation and the most biologically diverse in terms of habitats. It is also the most populous state—and that population loves to get outside and recreate. DFW is responsible for managing fisheries for recreation as well as the protection of native fish, and the proposed fishing regulations seek to balance those responsibilities through rules that are easy to understand and follow. However, the Committee is concerned that in the case of Rush, Lee Vining, Parker, and Walker creeks and their unique history, the year-round proposal tips the scale too far toward anglers' access and does not fully consider the State Water Board-ordered stream restoration obligations in the Mono Basin.

DFW has made it clear that they want public input and will be taking all information received into consideration as the final proposal is developed. The California Fish & Game Commission—the policy-setting arm of DFW—will make the final decision in 2020 after another round of extensive public review. For the most current information go to <http://bit.ly/proposedfishingregs>.

All of this is a good reminder to always check your local regulations before casting out your fishing line this season. ❖



ELIN LJUNG

The California Department of Fish & Wildlife has proposed that year-round inland trout fishing be permitted throughout the state, including on Mono Basin streams.

Policy notes

by Arya Harp & Bartshé Miller

Winter weather delays invasive weed war

California Gulls returned to Mono Lake to breed this spring, and are contending with the encroaching presence of an invasive weed. *Bassia hyssopifolia* has rapidly expanded over the Negit Islets, the primary nesting site for California Gulls at Mono Lake (see Winter & Spring 2019 *Mono Lake Newsletter*).

Continuing winter weather through March thwarted Inyo National Forest plans to conduct a controlled burn on the islets to stem the advance of *Bassia*. Plans for a controlled burn have been underway for two years, but the unusual logistical challenges of traveling to the islets, weather conditions, and extreme fire seasons have derailed those plans. Winter storm systems and an unusually deep, lower-elevation snowpack also prevented Mono Lake Committee staff and volunteers from launching the research boat and accessing the islets for *Bassia* evaluation and limited hand-

removal in time. By April 1, as snow began to melt and weather conditions improved, Mono's islands and islets officially became off-limits for the nesting season.

Once the gull breeding season is over and the islands reopen after August 1, plans to survey *Bassia*, manually eradicate high priority plots, and implement a controlled burn with the Inyo National Forest will resume. As with past burn plans, weather conditions and regional fire conditions will determine when and if a controlled burn occurs in the fall.

Long Valley water reprieve ... this year

As a lawsuit by Mono County regarding the Los Angeles Department of Water & Power's (DWP) abrupt dewatering of over 6,000 acres in Long Valley continues, DWP recently announced plans to irrigate the valley this year.

While you won't catch many complaints about 30,000 acre-feet of water slated for pastures, meadows, and Greater Sage-Grouse habitats, context here is key. It's a wet year, which, in some ways, means there is water to spare. So it's good news for now, but DWP's announcement does not indicate a reversal of its previously-announced intention to dewater Long Valley for the long term.

In spring 2018 DWP abruptly stopped irrigating Long Valley, reversing its established 70+ year land management practice of irrigating 6,000 acres of land adjacent to Crowley Lake Reservoir, and causing substantial local and regional concern. At stake are wildlife habitat, notably for Greater Sage-Grouse, fire breaks, agriculture, recreation, and scenic views. Concerns about DWP's lack of communication, unilateral management decisions, and the potential for a new era of water extraction are not unrealistic given DWP's history in the Eastern Sierra. ❖



NOEL BATES

Plans have been underway for two years for a controlled burn to eradicate an invasive weed that threatens the California Gull nesting habitat at Mono Lake's islets. Those plans were further delayed by the severe winter weather that continued up to the start of breeding season this year.

LA Mayor makes a big water conservation move

100% reuse goal would make city a national leader

by Geoffrey McQuilkin

Los Angeles Mayor Eric Garcetti set a remarkable goal in early 2019 when he announced that the City will recycle 100% of its wastewater by 2035.

Wastewater recycling involves using advanced treatment processes to extract clean water from sewage. These typically involve reverse osmosis systems that are also used for desalination efforts—except they are less energy intensive than stripping salt out of ocean water—combined with additional purification measures. Recycled water is commonly delivered for large-scale landscaping, industrial use, and groundwater recharge.

Currently, 2% of the City's water supply comes from water recycling, leaving it trailing successful efforts in Orange County and elsewhere to routinely recycle large volumes of wastewater. The effort will include all LA treatment facilities but the focus will be on the Hyperion Water Reclamation Plant just south of Santa Monica. Hyperion handles 80% of LA's wastewater and by size is the largest treatment plant west of the Mississippi. Currently it handles 275 million gallons of wastewater daily, discharging most of it after treatment into the Pacific Ocean.

If Hyperion outflow can be fully recycled in 15 years it will catapult water recycling to supplying 35% of LA's needs and will play a critical role in meeting separate Garcetti goals to cut purchases of imported water by 50% by 2025 and source 50% of water locally by 2035.

The recycled water goal is part of the Mayor's larger Los Angeles Green New Deal that sets aggressive sustainability goals. They include making the city

carbon-neutral by 2050, moving toward zero landfill waste, and planting an urban forest to shade residents as climate change raises temperatures.

Critics of the recycled water goal question its substantial construction and operation costs in comparison to continuing to rely on the purchase of imported water. However, the value of reducing water extraction impacts on the environment and building capacity for the City to be self-sustaining in the face of climate change are typically omitted from such calculations.

The potential for remaking Los Angeles into a highly efficient water use leader seems to now have firm traction. Such solutions have long been promoted by the Mono Lake Committee to offset excessive water diversions from the Mono Basin. Efforts in the 1990s showed the potential for conservation when the ultra-low-flush toilet retrofit program, which was funded in part to protect Mono Lake, achieved water savings totaling 50% of the historic exports from the Mono Basin. The program, implemented by urban LA community groups rather than distant consultants, also showed how environmental justice and community building can be woven into conservation initiatives and led to the Committee's Outdoor Education Center program that connects urban youth with the source of their water at Mono Lake.

Mayor Garcetti deserves praise for setting aggressive goals that will change water supply planning in Los Angeles permanently. The plan "marks the dawn of the City's transformation to a sustainable water management future, where every drop of local water is treated as essential," said Mark Gold,

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UCLA Associate Vice Chancellor for Environment & Sustainability and one of the City's environmental leaders. "Full water recycling can supply Los Angeles with approximately a third of our annual water supply, which is the most critical step in making this megacity a sustainable LA."

For Mono Lake the new recycled water goal is welcome news. Continued work and advocacy will be needed to shape how the Los Angeles Department of Water & Power translates this newfound water source into operational policy for the Los Angeles Aqueduct. The Committee will be engaged in that topic—and in supporting achievement of the Mayor's visionary goal on schedule. ❖

Watershed moments

news from the Mono Basin Outdoor Education Center
by Rose Nelson and Santiago Escruceria

Expanding education concepts

The main focus of the Mono Basin Outdoor Education Center (OEC) program is to connect the people of LA to the source of their water. We achieve this by focusing on curriculum-based watershed concepts that students experience by canoeing Mono Lake, walking along South Tufa, visiting the Los Angeles Aqueduct, and even using the sink at the OEC. This season, in addition to teaching the importance of water and water conservation, we will also be incorporating concepts relating to plastic pollution in our watersheds.

Discussions will focus on the impacts of plastic pollution at home, in the Mono Basin, and worldwide. Emphasis will be placed on the power that students have to make a real difference based on their actions and decisions, and how they can make changes in practical and realistic ways. Students often leave the OEC with a renewed sense of self-worth, empowerment, and agency in their own lives—our goal is for these discussions to help strengthen those feelings and actions.

Grant helps more kids get to Mono Lake

The OEC has been awarded \$3,500 from the California State Parks Foundation to bolster the OEC Access Fund, which helps to break down barriers that keep underserved Los Angeles students from visiting Mono Lake. For some groups, hiking shoes and sleeping bags are obstacles, and for others, funds to rent a van or pay for gas are obstacles.

By design, the OEC program fee is low compared to similar programs, thanks to support from Mono Lake Committee members. But raising enough money to make the journey to Mono Lake can still be an impossible endeavor for groups. Grants help us make this life-changing program possible for even more students. Special thanks to the California State Parks Foundation for supporting this effort.



Our mission is to build understanding and appreciation for the Mono Basin/Los Angeles watershed through education programs and muscle-powered recreational activity; to demonstrate that balanced solutions are possible for meeting the water needs of people and the environment; and to kindle stewardship through service projects that restore and improve the quality of the Mono Basin watershed.

monolake.org/education
facebook.com/mono.oec

On the horizon

- This year OEC students will continue to give back to the Mono Basin with stewardship projects, including invasive plant species removal, lakeshore and stream clean-ups, and working in the Lee Vining community garden.
- The Trail Chic fashion show fundraiser for the OEC Access Fund is Saturday, July 20 in Lee Vining. See monolake.org/trailchic for more.
- Thanks to a generous donation from John Coats of June Lake, the OEC has a new telescope for visiting groups and local students to use. The clear night skies of the Mono Basin are a superb backdrop to explore and deepen our understanding of humanity's place in the universe.
- We are seeking gently used hiking shoes. Many of the 300+ students who visit each year rely on borrowing hiking shoes from our loaner closet to hike to Mono Lake, trek along tributary streams, and climb mountain peaks. If you have a pair you can donate, please contact Education Program Manager Rose Nelson (rose@monolake.org) at (760) 647-6595.

Mono Lake to rise one foot by August

by Greg Reis

Thanks to copious February and March precipitation that blanketed the Eastern Sierra with a deep snowpack, Mono Lake is projected to rise one foot by August and at least 1.5 feet by April 1, 2020. The projected August elevation of 6383.1 feet above sea level will return the lake to the August 2012 level that was reached just one year into the recent five-year drought.

This is a significant rise, however it is much less of a rise than the 3.5 feet the lake rose in the extremely wet 2017 runoff year, which had 35% more runoff as well as greater precipitation on the lake's surface. Also, because the land around much of Mono Lake's shore does not rise steeply, at higher lake levels it takes a greater volume of water to raise

the lake by the same vertical increase. For example, even if this year was as wet as 2017, it would take 5% more water to raise the lake 3.5 feet above its current elevation.

The projected 1.5-foot rise for the 2019 runoff year (April 1, 2019–March 31, 2020) following the 0.2-foot rise in runoff

year 2018, the 3.5-foot rise in 2017, and the 0.2-foot rise in 2016, means that Mono Lake is currently experiencing four years of lake rise in a row. Since water diversions to Los Angeles began in 1941, a four-year-rise has only occurred one other time, in the late 1990s, when it rose six years in a row. ❖



With a runoff forecast of 145% of average, Mono Lake is projected to rise 1.5 feet by next April.

Streamwatch

Another wet year without an outlet

by Greg Reis

Awet February and March increased this year's snowpack from average levels at the beginning of February to over 150% of average at the beginning of April. The preliminary runoff forecast is 145% of average for the 2019 runoff year, which means it is officially classified as a Wet runoff year.

In early April, the California State Water Resources Control Board approved a "temporary urgency change" in order to allow the Los Angeles Department of Water & Power (DWP) to release Stream Ecosystem Flows (SEFs)—as recommended in the Stream Scientists' 2010 Synthesis Report and adopted by the

2013 Mono Basin Stream Restoration Agreement—instead of the Stream Restoration Flows (SRFs) required by Order 98-05. This is a temporary measure until the State Water Board incorporates the Agreement terms into a revised water license for DWP (see page 3).

SEFs are a product of 15 years of monitoring and analysis and are to be implemented to the extent feasible. They are superior in restoring the stream ecosystem and meeting fish needs compared to the flows in the existing license. On Lee Vining Creek the diversions follow a "diversion rate" strategy, allowing the creek to rise and fall below the dam instead of being held steady at the minimum flow. All flow exceeding 250 cubic feet per second (cfs) is passed downstream, ensuring that the peak flow won't be diverted.

Rush Creek flows follow a more natural pattern, rising to a snowmelt

bench in May followed by a peak flow and slow drawdown to low baseflows in late summer and even lower fall-winter flows. The peak flow required in a wet year is 650 cfs for five days. Without the construction of the new outlet in Grant Lake Reservoir, however, the best DWP can do is release 380 cfs through the return ditch plus whatever passively flows over the spillway. Grant is likely to begin spilling sometime in June.

The last Wet runoff year, 2011, was a test year for the release of SEFs, however without an outlet in Grant, the peak flow fell far short of 650 cfs. In Extreme Wet 2017, SEFs were not released, and reservoir spill failed to achieve the peak SEF for that year type. ❖

Greg Reis is the Committee's Information & Restoration Specialist. In April a paper he co-authored was published in the journal San Francisco Estuary & Watershed Science.

6417'

6392'

6382.1'

6372'

Prediversion lake level, 1941

Management lake level

Current lake level

Historic low, 1982

ENLJLJG

Mono Basin Journal

A roundup of quiet happenings at Mono Lake

by Geoffrey McQuilkin



ANDREW YOUSSEF

It is well known that streamflow destined for Mono Lake can be diverted by the Los Angeles Aqueduct on a long journey elsewhere. As it turns out, Mono Lake can travel too. Not by picking up its many miles of shoreline and shifting place, but rather in each of us.

Mono Lake fans know this when, months after a visit, they reflect back on a flock of phalaropes skimming the lake's surface, or tufa towers glowing in the sunset light. Recently I was talking to a young scientist, as the light grey cumulus clouds of a warm spring day in the Mono Basin built overhead, who was carrying a piece of the lake within her. For her, the lake has been a motivation to find a meaningful path in life, guidance in choosing an advanced degree in geosciences,

and inspiration to apply her skills for the greater good.

This is how the Mono Lake story advances, and how protection of this special place will continue. Mono Lake travels with each of us, not just from place to place in our travels but across time, through careers and families, and in the legacy we leave to future generations. ❖

Geoff McQuilkin is the Committee's Executive Director. He's proud of his daughter Caelen, who is graduating from Lee Vining High School and heading off to Amherst College in the fall, for writing a moving essay for the 2020 Mono Lake Calendar that shows the benefits of growing up amidst wild places.

Benchmarks



GABRIELLE RENTERIA

February 2017: After a historic drought, Mono Lake reached a 21-year low during the 2016–2017 winter, stranding tufa far from the water. Mono Lake level: 6,377.7 feet above sea level.



ANDREW YOUSSEF

May 2019: Just over two years later, Mono Lake has risen about four and a half vertical feet to 6,382.1 feet above sea level. Another one-foot rise is expected by August.

Custom guided trips

The Mono Lake Committee offers custom guided trips for those looking for a personalized experience. Let us do the planning—we will tailor a trip to your specific interests, group, and schedule. Our staff has over 100 years of collective experience in the region, so whether you are looking for a natural history adventure, a new hiking spot, a special canoe tour, or a birding trip, we've got you covered. See more, do more, and learn more on a custom guided trip!

Better birding

Working on your life list? Hoping to take great bird photos? We'll take you to the best habitats and help you make the most of your time birding.

A glimpse into the past

Jump back in time while you discover the rich and complex history of the Mono Basin on a custom trip tailored to your specific interests.



Mono Lake: The whole picture

Spend a day learning all about the natural history of the lake while exploring the basin with an expert.

Ice & fire

Explore the Mono Basin's fascinating geology and transport yourself millions of years into the past.

Photography

Want to get that early morning sunrise shot? Let us lead you in the dark.

A note from the Lead Naturalist Guide

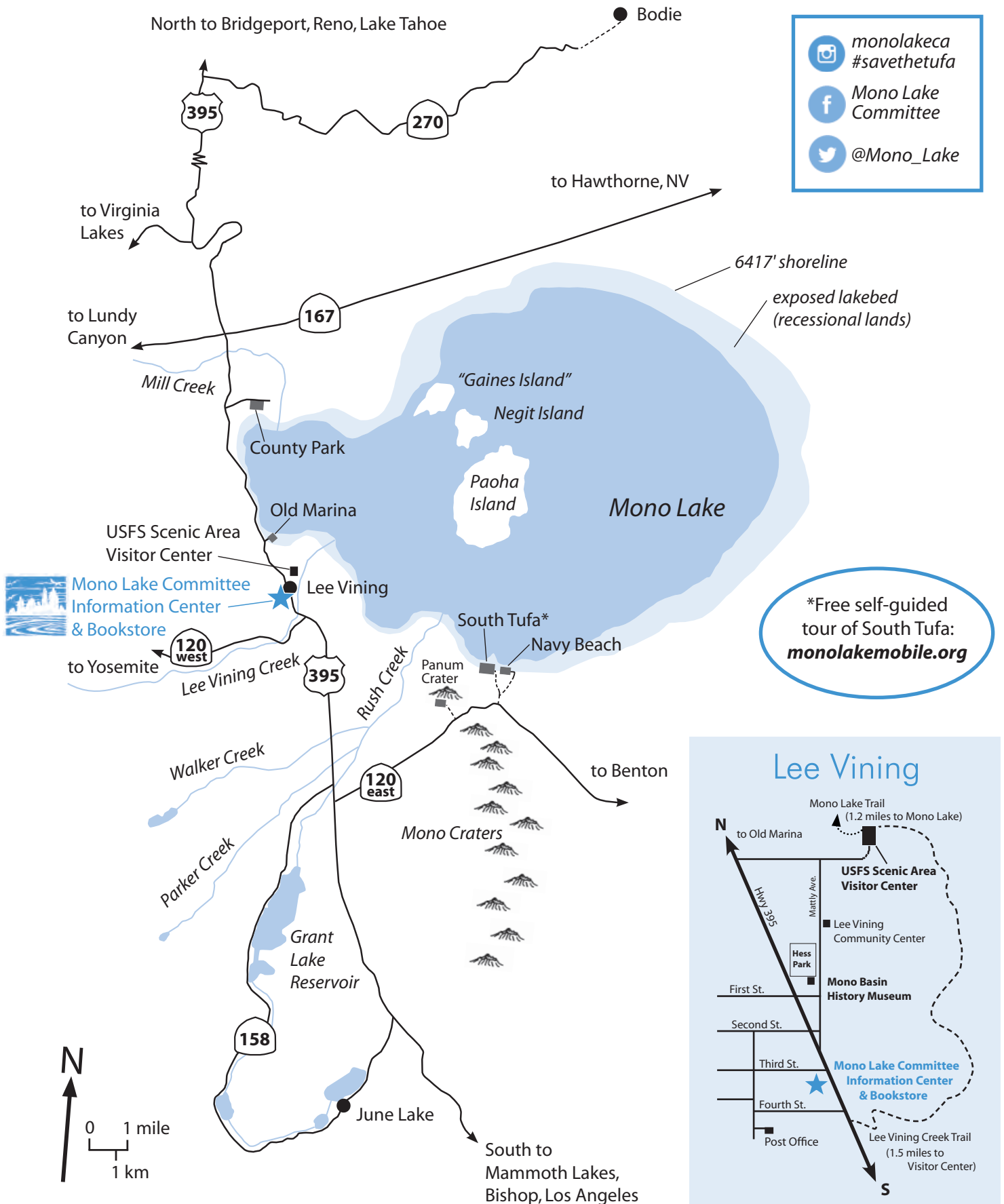
Summertime in the Mono Basin is the richest season in biodiversity and ecological activity. It has been amazing to watch nature unfold as seasonal migrants return one by one and flowers burst into color on the hillsides and along streams. Paying attention is key, because just a few days make a difference in phenology—if you blink you might miss something!

Since I'm doing the 5-Mile Radius Challenge this year—where I dig deeper into the natural history within a five-mile radius of my home—I'm being extra-observant when I walk out the front door. I am also finding off-the-beaten path locations and making unique plant and animal observations I would have otherwise overlooked. My list of birds, butterflies, wildflower, fungi, mammals, and more grows as the days get warmer and longer. I feel like I know my home better than ever. The better we know and love our home, the better we can protect it. What's happening in your five-mile radius?

Yours in nature, Nora Livingston



Summer at Mono Lake



When you visit Mono Lake

Nestled at the edge of the arid Great Basin and the snowy Sierra Nevada, Mono Lake is an ancient saline lake that covers over 70 square miles and supports a unique and highly productive ecosystem. The lake has no fish; instead it is home to trillions of brine shrimp and alkali flies. Freshwater streams feed Mono Lake, supporting miles of lush riparian forests of cottonwood and willow. Along the lakeshore, scenic limestone formations—tufa towers—rise from the water’s surface. Millions of migratory birds visit the lake each year.

The Mono Lake story begins

In 1941, the Los Angeles Department of Water & Power (DWP) began excessive water diversions from Mono Basin streams. Mono Lake dropped 45 vertical feet, lost half its volume, and doubled in salinity.

The Mono Lake Committee was founded in 1978 in response to the threat of inevitable collapse of the Mono Basin ecosystem. The Committee bought the old dance hall in Lee Vining to use as headquarters and went to work spreading the word about Mono Lake. The Committee took the City of Los Angeles to court, arguing that DWP had violated the public trust doctrine, which is “an affirmation of the duty of the state to protect the people’s common heritage of streams, lakes, marshlands and tidelands...” —Supreme Court of California, 1983

In 1994, after over a decade of litigation, the California State Water Resources Control Board ordered DWP to let Mono Lake rise to a healthy level of 6392 feet above sea level—twenty feet above its historic low. DWP has reduced its Mono Basin water exports by over 80 percent, and Mono Lake is on the rise. This is truly an environmental victory.

Mono Lake’s recovery depends on water conservation



Mono Lake Committee Information Center & Bookstore

- Open daily from 8:00AM–9:00PM during the summer
- monolake.org, monolakemobile.org, and (760) 647-6595

See detailed displays about Mono Lake’s political history and the current work of the Mono Lake Committee, “The Mono Lake Story” film, an art gallery, a comprehensive selection of books on natural and local history, T-shirts, maps, and locally made artisan gifts. This is also the Lee Vining Chamber of Commerce.

in Los Angeles, and the Committee has created solutions to the demand for water by implementing conservation and recycling programs in LA that have saved more than enough water to share with Mono Lake. Today LA is one of the most water-conscious cities in the United States, and the Committee works statewide to promote wise water use for people and the environment.



Canoe on Mono Lake

- Saturdays and Sundays at 8:00, 9:30, and 11:00AM
- June 22, 2019 through September 1, 2019
- Tours last one hour
- \$35 per person; \$20 for kids ages 4–12
- Reservations required: monolake.org/signup or (760) 647-6595
- Sorry, no kids under the age of 4 and no pets

Guided canoe tours provide a unique look at the ecology and geology of Mono Lake. Discover bubbling springs, alkali flies, brine shrimp, underwater tufa towers, and migrating birds from the vantage point of a canoe. No canoe experience is necessary and all equipment is provided.

you are part of the Mono Lake story



GABRIELLE RENTERIA

Free naturalist tours at South Tufa

- Daily at 10:00AM and 6:00PM* starting June 22, 2019
- *Reservations recommended: monolake.org/signup or (760) 647-6595
- Tours are free, but there is a \$3 per person entrance fee to the South Tufa area
- Meet at the kiosk at the South Tufa parking lot

Find out why Mono Lake is salty, taste alkali fly pupae, make tufa, and see migratory and nesting birds on this fascinating hour-long walk. (If you can't make a tour, you can take a self-guided tour on monolakemobile.org.)

The Mono Lake story is not over

The Committee works in public policy, ecological protection and restoration, public education, water conservation, and scientific research. We continue to strive for solutions that balance the needs of people and the environment.

Protection. Challenges facing Mono Lake include demands for water, poorly-planned development, increasing recreational use, underfunded management agencies, and climate change.

Restoration. Restoration work at Mono Lake seeks to achieve healthy, self-supporting lake and stream systems that will thrive into the future. Rejuvenating the Mono Basin ecosystem's dynamic natural processes is the best way to heal the damage caused by 50 years of excessive water diversions.

Keep up with Mono Lake



monolake.org/signup
monolakemobile.org



[monolakeca](https://www.instagram.com/monolakeca)
[#savethetufa](https://www.instagram.com/savethetufa)



[@Mono_Lake](https://twitter.com/Mono_Lake)



[Mono Lake Committee](https://www.facebook.com/MonoLakeCommittee)



(760) 647-6595



info@monolake.org

Education. The Committee offers hands-on programs to share the sense of wonder that Mono Lake evokes. South Tufa tours, canoe tours, activities for school groups, Field Seminars, custom guided trips, and the annual Mono Basin Bird Chautauqua all provide ways to learn more about Mono Lake. In addition, the Mono Basin Outdoor Education Center brings students from Los Angeles to learn about the source of their water, educating the next generation of California's policymakers.

Science. Scientific research is the basis of our policy work, a guide for restoration, and an inspiration for understanding Mono Lake. The Committee supports and works closely with researchers, hosts a comprehensive research library, and runs the Mono Basin Field Station to enhance the scientific knowledge of Mono Lake, its tributary streams, and the surrounding lands.

Get involved at Mono Lake

Mono Lake is a great success story, and you can be a part of it! Add your voice to the 16,000 members who are committed to the protection and restoration of Mono Lake. Your support as a Committee member will be put to hard work for Mono Lake.

Join us on a walking tour, canoe tour, Field Seminar, or design your own custom guided trip. Check out Mono Lake online at monolake.org. Stay connected to Mono Lake and help ensure its protection for generations to come. ❖



ELIN LUNG

Free bird walks

- Fridays* and Sundays at 8:00AM at Mono Lake County Park
- Saturdays* at 8:00AM in Lundy Canyon
- *Reservations recommended: monolake.org/signup or (760) 647-6595

Magic is literally flying and flitting through the air in the Mono Basin. Join a resident expert to see everything from shorebirds to songbirds on a free walk for all levels of birders. Bring binoculars and a bird book if you have them (not required).

Genny Smith memorial naturalist hikes

by Nora Livingston

Genny Smith was the Naturalist Queen of the Eastern Sierra. She wandered many Eastern Sierra trails in search of flowers, birds, mammals, and quiet serenity, and in turn learned about the important interactions between all of the life in these habitats and the ancient geology that sets the stage. These experiences inspired her ardent activism—fighting a highway proposed to cut through Minaret Summit and Devils Postpile—and her guidebooks to the Mammoth Lakes region.

Genny passed away last year at the age of 96 (see Summer 2018 *Mono Lake Newsletter*) but her legacy lives on. We

are excited to offer two natural history hikes this summer to celebrate her legacy and cultivate the careful attention to our surroundings she taught. We will read excerpts from Genny's books to bring her voice to the mountain air once again, and immerse ourselves in the beauty of the trails she loved so dearly.

Join us on Saturday, July 13, and Saturday, August 24, for free, moderately strenuous 2–5 mile hikes with many stops to view flowers, rocks, and wildlife. Meet at the Mammoth Lakes Welcome Center at 2510 Main Street in Mammoth Lakes at 9:00AM. Space is limited, so sign up for these free hikes at monolake.org/signup. ❖



PHOTO COURTESY OF ANDREW ALDRICH

Join us on July 13 and August 24 for hikes in memory of naturalist Genny Smith—register at monolake.org/signup.

Refreshments with Refreshing 'Ologists summer lectures

by Joslyn Rogers

Join us this summer for the Mono Lake Committee's Refreshments with Refreshing 'Ologists lecture series, featuring scientists presenting their work in the region. The talks are great opportunities to hear from the researchers who are conducting studies in the Mono Basin and the surrounding area on topics like hydrology, wildlife, birds, climate change, and more. Last summer we “bugged out” with researcher Kristie Nelson, tracked glaciers in the Mono Basin with Jace Shuler, and learned how pikas are coping in a changing climate with Dr. Connie Millar.

Refreshments with Refreshing 'Ologists lectures happen on Wednesdays at 4:00PM in the Mono Lake Committee Information Center & Bookstore gallery. Presentations last about one hour and include light refreshments. On July 10, California Department of Fish & Wildlife researcher Brian Hatfield will kick off the series with his presentation, “A New Detection of the Threatened Sierra Nevada Red Fox.” Register for this free program at monolake.org/signup to reserve a seat. Lectures are listed as they are scheduled at monolake.org.

2019 Field Seminars



SANTIAGO M. ESCOBEDERA

Mono Basin & Bodie Photography

June 21–23 • David Gubernick
\$300 per person / \$275 for members

Capturing the Mono Basin in Pastel

June 28–30 • Ane Carla Rovetta
\$192 per person / \$177 for members

Wildflower Waltz

July 5 (half day) • Nora Livingston
\$110 per person / \$100 for members

Mono Basin Big Day Birding

July 6 • Nora Livingston
\$140 per person / \$130 for members

Birding the White Mountains

July 12 • Nora Livingston
\$140 per person / \$130 for members

Butterflies of the Mono Basin & Sierra Nevada

July 13–14 • Kristie Nelson
\$172 per person / \$157 for members

Full Moon Hike

July 16 (half day) • Nora Livingston
\$90 per person / \$80 for members

Wildflower Waltz

July 18 (half day) • Nora Livingston
\$110 per person / \$100 for members

Mono Basin Mammals

July 19–21 • John Harris
\$182 per person / \$167 for members

The Art of Wildflower Macrophotography

July 26–28 • David Gubernick
\$275 per person / \$250 for members

Please visit monolake.org/seminars or call (760) 647-6595 to register for a field seminar or request a 2019 seminar catalog.

Mono Basin Landscapes & Milky Way Photography

August 2–4 • Jeff Sullivan

\$275 per person / \$250 for members

Mono Basin Natural History: Aquatic & Terrestrial Habitats

August 2–4 • David Wimpfheimer

\$207 per person / \$192 for members

Mono Lake canoe tour included

En Plein Air at Mono Lake: Beginning Oil Painting

August 9–11 • Penny Otwell

\$192 per person / \$177 for members

Mining the Past through Binoculars

August 10 • Nora Livingston

\$140 per person / \$130 for members



PHOTO COURTESY OF BOB VATES

Mono Lake sits in a geologic bowl formed by ancient volcanic sediments and recent volcanic eruptions.

Falling for the Migration: Bridgeport Valley & Mono Basin

August 15–16 • Dave Shuford

\$172 per person / \$157 for members

Geology of the Mono Basin

August 16–18 • Greg Stock

\$182 per person / \$167 for members

Falling for the Migration: Crowley, Mammoth, Mono

August 17–18 • Dave Shuford

\$172 per person / \$157 for members

Miwok-Paiute Basketry

August 23–25 • Lucy Parker, Julia Parker, & Ursula Jones

\$265 per person / \$250 for members

\$80 materials fee; group campsite included

Birding the White Mountains

August 30 • Nora Livingston

\$140 per person / \$130 for members

Volcanism of the Mono Basin

August 31 • Nora Livingston

\$140 per person / \$130 for members

A Long Journey: Shorebird Migration

September 1 • Nora Livingston

\$140 per person / \$130 for members

Creating the Illuminated Field Journal

September 6–8 • Hannah Hinchman

\$192 per person / \$177 for members

Mono Basin Tree Identification

September 13 • Nora Livingston

\$140 per person / \$130 for members

Fire Ecology of the Eastern Sierra

September 14–15 • Malcolm North
\$172 per person / \$157 for members

Los Angeles Aqueduct Tour

September 20 • Bartshé Miller
\$165 per person / \$150 for members

Geology of the Mono Basin

September 20–22 • Greg Stock
\$182 per person / \$167 for members

Fall Color Foray

October 4 (half day) • Nora Livingston
\$90 per person / \$80 for members

Watercolors in the Wild: Autumn Flora

October 4–6 • Andie Thrums
\$192 per person / \$177 for members

Arborglyphs & Aspen Natural History

October 5–6 • Richard Potashin &
Nancy Hadlock
\$197 per person / \$182 for members

Fall Color Foray

October 11 (half day) • Nora Livingston
\$90 per person / \$80 for members

Mono Basin Fall Photography

October 11–13 • Robb Hirsch
\$275 per person / \$250 for members

Mono Basin Landscapes & Moon Photography

November 8–10 • Jeff Sullivan
\$275 per person / \$250 for members



In autumn, quaking aspen trees light up Mono Basin canyons with hues of gold.

Field Seminar information

To register for a Field Seminar, please visit monolake.org/seminars or call (760) 647-6595.

To see complete Field Seminar itineraries, cancellation and refund policies, seminar leader information, and answers to frequently asked questions, visit monolake.org/seminars.

Field Seminars are open to all, but Mono Lake Committee members get to register early and receive discounts. All instructors are experts who have received high ratings from past seminar participants. We emphasize a spirit of learning and camaraderie in this magnificent outdoor setting for a reasonable cost. Proceeds from Field Seminars benefit research and education in the Mono Basin.

All Field Seminars and custom trips operate under Inyo National Forest and California State Parks permits.

Long live Mono Lake

by Frances Spivy-Weber

Editor's note: Each year we ask a writer to contribute to the Mono Lake Calendar—this essay appears in the 2019 calendar.

When I became Executive Director of the Mono Lake Committee in January 1997, its Board of Directors had decided to reinvent the Committee and to renew the original mission to protect the lake at the same time—not an easy transition for its members or the staff. The Committee was founded to save Mono Lake, which, at first, meant fighting the Los Angeles Department of Water & Power (DWP) creatively but tenaciously in order to secure more water for Mono Lake and its tributary streams.

Without breaking stride, the Committee needed to learn to balance continuing vigilance of DWP with the new challenge of working with DWP on multiple fronts: education, monitoring, restoration, and structural changes in the Grant Lake Reservoir Dam and other aqueduct infrastructure that controlled streamflow to the lake. A new strategy was needed to keep alive both the fighting soul of the Mono Lake Committee, while also growing the Committee's programs that would be important at the time and for generations to come.

The good news is that the Mono Lake Committee could “walk and chew gum” at the same time. It has not always been easy, nor has it always been clear how to accomplish both—but this dual approach is now embedded in everything the Committee does.

The first big decision was whether to reboot the Committee after getting the positive State Water Resources Control Board decision that DWP must share water with Mono Lake. “Wasn't the lake saved?” people would ask. Important, too, was the promise from Los Angeles that there would be no appeal of the State Water Board decision—after almost 20 years of fighting, it was logical to think they might. Now, more than twenty years later, it is hard to imagine there could have been no Mono Lake Committee, but at the time it was an option. Luckily, the Committee's Board of Directors decided to stay the course.

Next, where would the Committee expand its programs? Education and restoration were two immediately clear answers, with solid bases on which to build. The Outdoor Experiences program was already providing opportunities for families and youth, particularly from Southern California, to spend time at the lake. At the time, DWP allowed the Committee to use a former aqueduct caretaker's house for the program for one dollar a year—a good faith nod to the importance of working together towards solving California's water needs into the future. That program has thrived—growing into what is now the Mono Basin Outdoor Education Center, thanks to the dedicated staff and to the fascination that all who come to the lake develop once they get to know more about Mono Lake. Now, two dozen groups spend up to a week each year enjoying all that the lake and its surrounding

Continued on page 23



COVER PHOTO COURTESY OF DAVID GUBERNICK, RAINBOWSPIRIT.COM

watershed has to offer.

Restoration had begun already, too, based on the sound scientific findings of many of the individuals and institutions that were engaged in protecting the lake and streams. Trees were being planted and efforts were made to support the broadening of the riverine system, but mostly the streams were allowed to recover on their own, in natural ways.

And there were programs that did not have to change, such as the Mono Lake Calendar. It had always promoted the lake and the surrounding environment with beautiful landscape images of each month. The only innovation was to add even more pictures, albeit smaller, within each month, bringing in more of the basin's wildlife and botany.

But there were new programs, too. During the lawsuit years, Committee members and supporters would ride their bicycles hundreds of miles from Los Angeles to Mono Lake with vials of water filled at DWP's reflecting pool to be poured into the lake at the end of the ride to raise awareness of Mono's plight. Once the Committee had won at the State Water Board, however, it was an outdated visual. We experimented for several years by joining others for a bicycle ride in the Mono Basin, which was fun, but eventually the Bike-A-Thon was replaced with the Mono Basin Bird Chautauqua. This allowed Committee members of all ages and dexterities to enjoy the lake and to see and participate in the subtle and obvious changes that were happening when more water flowed in snowy years and less in droughts. More than 300 people come to the Chautauqua every year now.

There were films made about the Committee in this new era—the most important, award-winning one is *The Mono Lake Story*, which you can see at the Mono Lake Committee Information Center & Bookstore in Lee Vining. The bookstore and messaging in the store were remodeled to tell the David and Goliath story of how the Committee successfully fought and won against DWP as well as to show how the story is playing out today.

The Committee added more property to its base in Lee Vining, the town overlooking Mono Lake. This new property, a former motel, was converted to low-cost housing and meeting space for scientists—encouraging those studying the area to make Lee Vining their base and to share their findings with the community. Since this program began in 2004, 138 researchers working on 81 field season projects have used the Committee's facilities. These studies have covered many wildlife species—from alkali flies to Greater Sage-Grouse to Willow Flycatchers and more. They have also focused on air quality, climate science and paleoclimatology, and geomicrobiology.

There is now a collaborative program to train volunteers to help federal, state, and local agencies and organizations do their jobs to educate tourists visiting the area. These volunteers also play an important role doing much-needed hands-on restoration work. The Mono Lake Volunteer program has 87 active volunteers and continues to grow!

Since the 1994 State Water Resources Control Board made



PHOTO COURTESY OF DENNIS FLAHERTY

its historic decision requiring DWP to share water with Mono Lake and its tributary streams, the decision by the Committee to remain fierce in protecting the lake and to also work with DWP and Los Angeles where possible, has been a good one. DWP is a large bureaucracy in a large city with many priorities. The Mono Lake Committee is the essential lookout for threats or obligation lapses that could harm the lake as well as to say “Good job,” when DWP's actions warrant a pat on the back. The Committee is essential in educating newcomers to leadership roles in the Mono Basin, Sacramento, and Los Angeles, as well as in reminding Californians and visitors from around the world that the lake continues to need their attention.

It has been a joy to have had a role in the Mono Lake story, and this joy is shared by those who love the lake and continue to support it in small and large ways. Long Live Mono Lake. ❖

Frances Spivy-Weber, former Executive Director of the Mono Lake Committee and former Vice Chair of the State Water Resources Control Board, is now retired and lives with her husband, Michael, in Sacramento. Fran continues to enjoy the opera and symphony in Los Angeles; exploring natural areas at Mono Lake, the coast, and deserts; and best of all, spending time with friends. Of course, she and Mike travel a lot, too.

Court memorial honors Judge Finney

by Arya Harp

On the wall at Mono Lake Committee headquarters, quietly perched above the fray, it reads, “People protecting Mono Lake for future generations.” There are many protectors—birders, scientists, students, lawyers ... a bright star in that constellation, Terrence Finney passed away in November 2018, but his legacy will forever shine at Mono Lake.

According to the El Dorado County Superior Court, in Judge Finney’s 20 years of service, the Mono Lake case was “the biggest case of his career.” It certainly was vital to the protection of Mono Lake and restoration of the tributary streams.

In 1989 Judge Finney’s courtroom became the epicenter of the reversal of the Los Angeles Department of Water & Power practice of excessive water diversions from Mono Lake’s tributaries—and the plummeting level of the lake itself. Judge Finney issued the injunction to halt diversions, mandated the formation of a restoration technical committee, and visited the dry creeks with court reporter and stenograph in tow—always with proper decorum and his sense of humor. He listened to experts, he understood the magnitude of the case before him, and he took deliberate, measured action.

In the end, six critical years in Judge Finney’s courtroom produced required minimum flows for all four diverted streams, launched the restoration

programs that continue today, and ensured that Mono Lake not fall into ecological collapse while waiting for the State Water Board’s 1994 water rights decision. John Hart’s *Storm Over Mono* reports the story in gripping detail, but to understand the significance of what Judge Finney did, walk from Lee Vining Creek down to Mono’s shoreline to see his Mono Lake decisions living on. ❖



PHOTO COURTESY OF RICHARD ROOS-COLLINS

Honored to have been part of hearings in his courtroom: restoration consultant Scott English, hydrogeographer Peter Vorster, and attorney Richard Roos-Collins with a photo (from *Storm Over Mono*) of Judge Terrence Finney, at the court memorial in January.

Record attendance at the Wild & Scenic Film Festival

by Joslyn Rogers

The Mono Lake Committee hosted our eighth annual Wild & Scenic Film Festival in Pasadena and Santa Monica this past March. Each year Committee staff migrate to Los Angeles to bring a selection of inspiring films to our friends and members on the southern end of the Los Angeles Aqueduct. This year marked the most successful Wild & Scenic yet—both showings sold out, with over 200 people in attendance enjoying 13 short films. The audiences particularly enjoyed the film *Sacred Strides*, which centers on a group of Native American tribes who came together to run 800 miles as a symbol of their support for the

protection of Bears Ears National Monument.

The festival is a fundraiser for the Mono Basin Outdoor Education Center. Thank you to Herley Jim Bowling and Mono Basin Outdoor Education Center program student volunteers from Port of Los Angeles High School, John Muir High School—Generation Green, and Communities for a Better Environment. The festival is also made possible by our local sponsor, the Los Angeles Department of Water & Power.

We hope to see you next March for the ninth annual Wild & Scenic Film Festival in Los Angeles!



ROBBIE DI PAOLO

Andrea Lawrence Award honors Elsa Lopez

by Anna Christensen

Community members, friends, and family of Andrea Mead Lawrence gathered at Mammoth Mountain's Parallax Restaurant on May 3 to present Los Angeles community leader Elsa Lopez with the 2019 Andrea Lawrence Award.

Elsa is a pioneering educator and activist committed to strengthening the link between Los Angeles and Mono Lake. Beginning in the 1980s, Elsa engaged her organization, Mothers of East Los Angeles-Santa Isabel, in the successful implementation of LA's ultra-low-flush toilet retrofit program, creating effective water conservation solutions in her community.

Elsa envisioned physically connecting community youth participating in the water conservation program by bringing them to Mono Lake to see the remarkable place they were protecting. Beginning with these early trips in partnership with the Mono Lake Committee, Elsa's leadership inspired the modern Outdoor Education Center program that connects inner-city youth with the source of their water through week-long adventures at Mono Lake.

The 11th annual Andrea Lawrence Award Dinner would not be possible without the generous support of the Lawrence family and Mammoth Mountain Ski Area. Thank you also to our guests; to speakers Casey McCoy, Greg Newbry, Martha



Current and former Mono Lake Committee staff with Quentin Lawrence and 2019 award recipient Elsa Lopez (second and third from left).

Davis, and Claudia Corona; and to award recipients like Elsa Lopez for their inspiring and transformational work. Proceeds from the event support the Andrea Lawrence Fund to encourage collaboration and to inspire youth to become environmental leaders. ❖

Naturalist notes

by Nora Livingston

Summer is in full swing and on the wing. Colorful Neotropical migrants have returned to the Mono Basin to breed—strawberry-lemonade Western Tanagers in Jeffrey pines, bold orange and black Bullock's Orioles, and a circus in the sky of Violet-green Swallows (their name says it all). There is a Great Horned Owl camouflaged in a cottonwood at County Park, her chicks hidden in plain sight. Last year, a tagged Mono Lake Osprey was sighted in Corpus Christi, Texas, a warm spot to spend the winter. Now the Osprey are back atop tufa nests of angled sticks softened by feathers.

This spring, painted lady butterflies streamed through the Eastern Sierra by the tens of thousands, nectaring on early flowers and warming themselves on south-facing rocks. This summer will be another amazing wildflower year, thanks to above-average snowpack—mature tree roots and dormant seeds alike will drink their fill as the melting snow seeps down the mountainsides to Mono Lake—and inch by inch the lake will rise.



Staff migrations

by Jessica Schneider

Incoming seasonal staff are like spring flows in the creeks, bringing excitement, growth, and renewal to the whole Mono Basin. Without them, our extensive education programs at the lake and in the Information Center & Bookstore would be nearly impossible, and their zest for all things Mono Lake reminds us why we are all here.

We have two staff returning this year. **Ava Stavros** is back for her third year as an Outdoor Education Instructor after a winter working at The Lift café, a new woman-owned business in June Lake. **Alison Kaplan** will once again be leading weekend tours as the Canoe Coordinator after working for the Land Conservancy of San Luis Obispo County over the winter.

Information Center & Bookstore Assistant **Kevin Brown** has a wealth of retail experience in addition to experience as an educator and researcher at Carnegie Mellon University, UC Santa Barbara, and for Pittsburgh city parks. With his background in US environmental history, he will be well-suited to assisting visitors in the store.

Merryn Venugopal, Information Center & Bookstore Assistant, has a strong background in customer service and retail. She has spent time working, volunteering, and climbing in Yosemite Valley, and knows the Eastern Sierra and Mono Lake well. Additionally, her minor in Travel & Tourism from Clemson University will make her a great addition to the bookstore staff.

Since graduating from Brown University in 2017, Outdoor Education Instructor **Miranda Norlin** has worked as a Wilderness Educator for Baxter State Park in Maine, a crew member for Nevada Conservation Corps, and a farm manager on Musk Ox Farm in Alaska. Her commitment to environmental education and public lands interpretation will serve her well at the Outdoor Education Center.

Krista Fanucchi is eager to bring her birding and interpretive experience to the Mono Lake Committee as this year's Birding Intern. With experience at HawkWatch International, Point Blue Conservation Science, and Yosemite National Park doing both research and interpretation, she is well prepared to lead bird walks this summer.

Caroline Bottega, Mono Lake Intern, graduated from Lafayette College this spring, where she was a teaching assistant for the Environmental Geology lab, and a tutor in the college's writing program. This season at Mono Lake will likely be quite different than her environmental consulting internship at Langan Engineering & Environmental Services, her most recent position.

Mono Lake Intern **Meghan Cihasky** started out her college career at the University of Minnesota, Duluth, where she was a successful cross country/track and field athlete, but after studying abroad in Christchurch, New Zealand and being inspired by how environmental issues are handled in other



ROBBIE DI PAOLO

During a brief migration to the southern end of the aqueduct for the Wild & Scenic Film Festival (see page 24), Committee staff also toured a portion of the Los Angeles River with Friends of the LA River.

parts of the world, she is excited to explore how a successful environmental non-profit works to save Mono Lake.

Chloe Isaacs, Mono Lake Intern, graduated from Oberlin College with a major in Geology and minors in French and East Asian Studies. She studied abroad in Christchurch, New Zealand, where she researched humpback whale migration. She has interned at the Weir Farm National Historic Site in Connecticut, where she was in charge of the teen outreach program, reinvigorated the park's social media presence, and assisted with promotional strategy.

Mono Lake Intern **AnnaLisa Mayer** graduated in May from Sterling College in Vermont. She first visited Mono Lake during a semester in the West course, and is bringing her natural history knowledge back to help with South Tufa and canoe tours. Not only has she guided ecology walks and done trail maintenance, she is also a Suzuki violin teacher.

Ellie Neifeld, Mono Lake Intern, attends Bowdoin College in Brunswick, Maine, and is working on her BA in Earth & Oceanographic Science. She is an outing club leader, and loves to guide canoe trips and off-trail orienteering. She has studied abroad in Iceland and the Himalaya, hiked the John Muir Trail, and rock climbed all over the world. She volunteers with the Southern Utah Wilderness Alliance, Bowdoin College Children's Center, and the Bowdoin Food Co-op. ❖

Interested in working at Mono Lake, or know someone who might be? We accept applications for seasonal staff positions each year starting January 1. Find more information at monolake.org/jobs.



From the mailbag

News from members and friends

by Ellen King

Sometimes Lee Vining reminds me of the opening scenes of *The Wizard of Oz*. In winter, town is a quiet black and white landscape of leafless trees silhouetted against a gray sky and hills covered with snow. With the arrival of summer, color comes to town as trees leaf out, migratory birds return, and visitors from around the world fill the sidewalks and local businesses on their way to and from Mono Lake.

We thank all of you who made donations in honor or in memory of your friends and loved ones—you make Mono Lake's future colorful and bright.

In honor

Dyanna Gallagher of Solomons, MD, made a donation in honor of the retirement of her daughter **Mary Scoonover** from the Resources Legacy Fund. **Margret Lohfeld** of Los Angeles gave a gift in honor of her brother **Martin Engel**.

In memory

Richard & Kimberly Anderson of Almont, MI, and **Robert Dunfield** of Centreville, VA, sent contributions in memory of **Elizabeth "Betty" Anderson**. **Paul Hancock & Anita McProud** of Lone Pine gave a gift in memory of **Lorenzo Stowell**: "He was an avid outdoors person and traveler, as well as a genuinely nice guy." **Chilton Lee** of Los Altos made a donation in memory of **John A. Hetzner**. **Stacy Lieberman** of Los Angeles sent a contribution in memory of **Ralph Kunin**. **Carol Mathews** of Walnut Creek gave a gift "in loving memory" of **Robert Mathews**.

Linda Messenger & Robert Distad of Saint Helena made a donation in memory of **Will Richmond**. Will was an attorney who specialized in environmental matters and helped the Mono County District Attorney protect important principles of public access and management at the Mono Lake Tufa State Natural Reserve. He also advocated for the flow of water through the Owens Gorge on behalf of the county; he was a true friend of Mono Lake.

Mark Perry & Alice Robertson of Bakersfield sent a contribution in

memory of **Mary Haworth Coleman**. **Laurie & Cal Steinberg** of Westlake Village gave a gift in memory of **Marian Dunbar**, "who loved visiting this exquisite site." **Linda Tate** of Long Beach made a donation in memory of members of the **White family**. **Ben Thompson** of Oakland sent a contribution in memory of his father **Roger Thompson**. **Jeanne Walter** of Swall Meadows gave a gift "celebrating the life of **Lorenzo Stowell**."

Tom Cahill

Here at the Committee we recently received news of the passing of a true Mono Lake champion, **Dr. Tom Cahill** of UC Davis. Tom was physicist who was one of the pantheon of scientific protectors of Mono Lake. His research

documented the air quality and public health implications of the alkali dust resulting from excessive water diversions, and he played a crucial role in the hearings that led to the State Water Board's protection of Mono Lake.

During a long career Tom enthusiastically applied his physics expertise to important public problems. He was involved in battles to remove lead from gasoline, protect air quality in national parks, and safeguard first responders following the 2001 World Trade Center disaster. Although his scientific contributions to preserving the environment and public health were many, even up to his last days he held his role in helping preserve Mono Lake amongst the very highest of the victories to which he was able to contribute. ❖



Board chair Sally Gaines gave a genuine, old-fashioned slide show about the Committee's early days at a recent staff meeting.



MONO LAKE COMMITTEE

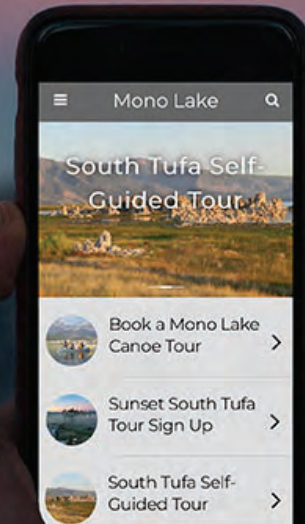
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