

ll the dictionary definitions of "restoration" apply to the State Water Board's new Order 2021-86, which you'll read about in the following pages of this *Newsletter*.

My favorite definition is "restitution of something taken away or lost."

Restoration work began in the 1980s with the restitution of the water itself, the vital ingredient that DWP had taken away when it completely diverted four of Mono Lake's tributaries starting in 1941. With the water gone, so much was lost—the fish, forests, and animals. The ability of the streams to generate and support life was lost. The possibility of life was lost.

The restoration program's technical streamflows and infrastructure improvements are bringing restitution to the fish with precise amounts of water at specific times. The forests are getting restitution through newly opened stream channels that bring water to more of their roots. Restoration is bringing back the possibility of life for animals who could not live along dry washes.

If you've ever sat by a stream in the desert you know what else we are restoring. The dense presence of other beings—birds, fish, willows—going about their lives in the stream community. That specific aroma of damp soil that immediately means life. A cool, green respite from the sun that our instincts crave.

I invite you to come see the restoration. When you step from the sagebrush into the forest near Rush Creek you'll smell that incredible fresh scent of water. When you dip your toes into Lee Vining Creek you'll feel instinctively at home. When the Yellow Warblers flit about their business above your head you'll know there's life.

"Restitution of something taken away or lost." The water, the possibilities, our home. We're about to see restoration like never before.

-Elin Ljung, Communications Coordinator



Each summer, thousands of Wilson's and Red-necked phalaropes stop at Mono Lake to fuel up on alkali flies and brine shrimp before making a 3,000-mile journey to their wintering grounds in South America.

#### **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.



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# State Water Board launches new era of Mono Basin stream restoration

by Geoffrey McQuilkin

s the yellows and oranges of autumn tinged the aspens and cottonwoods, great news arrived for Mono Lake's tributary streams. On October 1, the California State Water Resources Control Board issued Order 2021-86, amending the Mono Basin water rights of the City of Los Angeles to incorporate extensive new requirements that maximize the restoration of the 20 miles of stream habitat that were damaged by the Los Angeles Aqueduct.

This historic action is the long-awaited final step in a years-long journey to mandate the restoration measures. Mono Lake Committee supporters can celebrate that our persistence has paid off. After eight years of detailed work, delays, and unexpected challenges we have made a lasting, landscape-scale difference for the birds, wildlife, fish, and forests of this special place.

The new order affirms the State Water Board's continuing commitment to its landmark protections of Mono Lake and tributary streams.

"We all know Mono Lake is a special place," said State Water Board Chair E.

Joaquin Esquivel. "This is noteworthy progress for restoration of an area that helped establish the Board's obligation to consider the Public Trust Doctrine when weighing the environmental impacts of water rights."

#### Los Angeles follows through

The State Water Board's action draws on decades of detailed scientific study and builds on the 2013 Mono Basin Stream Restoration Agreement negotiated by the Mono Lake Committee and conservation partners California Department of Fish & Wildlife (DFW) and California Trout with the Los Angeles Department of Water & Power (DWP).

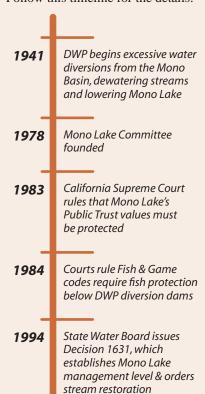
The Agreement documented an important City of Los Angeles commitment to repair the stream damage done in the past and create a more sustainable future—a vision advanced by Los Angeles Mayor Eric Garcetti since 2013. The Committee has worked with the mayor and his leadership team over the past several years to ensure that the promises made held strong.

Although DWP caused multiple delays that slowed implementation progress, the partnership with city leadership broke through the logjams and supported the process reaching completion. "It's an important achievement," the Los Angeles Times highlighted in an editorial, "demonstrating that it's possible for a city that once plundered [Mono

Continued on page 4

# How we got here and what's next

state Water Board Order 2021-86 is the culmination of years of science, negotiation, and persistence. Follow this timeline for the details:





A view of the Rush Creek bottomlands. Order 2021-86 requirements were designed by Stream Scientists tasked with identifying the best methods to accomplish the State Water Board's goal of restoring "functional and self-sustaining stream systems with healthy riparian ecosystem components" and "trout in good condition."

Lake and its tributary streams] to be a champion of its restoration."

Indeed, the new era of restoration in the Mono Basin is a success that Mono Lake supporters and all Angelenos can celebrate together.

"In the face of rising temperatures and drier climates, we have to rethink the way we preserve our natural world, and work together to ensure we can count on access to water for generations to come," said Mayor Garcetti when the order was issued. "This collaboration between the City of Los Angeles, Mono Lake Committee, and the State will help make some of our most crucial waterways more resilient as we grapple with our new reality of longer and more intense droughts."

#### A landmark for streams

The order mandates a comprehensive set of Stream Ecosystem Flows, plus a suite of specific measures that will significantly advance the recovery of the habitats, trout populations, streamside forests, and wildlife—all of which suffered extensive damage due to past excessive water diversions by DWP that dried up the streams.

The new requirements were designed by independent fisheries and river ecology scientists tasked with identifying the best methods to accomplish the State Water Board's goal of restoring "functional and self-sustaining stream systems with healthy riparian ecosystem components" and "trout in good condition." The order requires the Los Angeles Aqueduct to deliver a detailed and variable pattern of streamflows to Rush and Lee Vining creeks that mimic natural patterns of Sierra Nevada snowmelt to reactivate the processes that will shape and sustain the streams.

The order also ends the diversion of Walker and Parker creeks entirely to ensure the delivery of cold water flow in a naturally variable pattern to the Rush Creek bottomlands. As climate change impacts increase, such as extended drought and higher late-season water temperatures, measures like these are essential to building the resilience that stream habitats desperately need.

One of the order's significant action items will be the modernization of antiquated aqueduct infrastructure at the Grant Lake Reservoir dam, which was constructed in the 1930s and lacks the capacity to release necessary wet-year water flows into Rush Creek.

Order 2021-86 also establishes an ongoing process for science-based adaptive and real-time management of the annual flow patterns. And, for improved efficiency, administration of monitoring activities will be jointly run by a new team made up of the settlement parties.

#### A new chapter in a big book

It has been a long road to get to Order 2021-86. The State Water Board laid the groundwork back in 1994 with Decision 1631. That Decision determined how much water would flow down the streams into Mono Lake. And, in light of the extensive damage caused by decades of total water diversions, the State Water Board also mandated a major stream restoration program.

But how could fish and habitat restoration be maximized with the flows allocated? The State Water Board realized on-the-ground scientific study was needed to answer that question. They chose independent experts to lead extensive studies to craft restoration flow requirements, conduct physical restoration measures, and evaluate the need for an outlet at Grant Lake Reservoir. In 2010 the Stream Scientists finalized the "Synthesis of Instream Flow Recommendations" report, which compiled over a decade of monitoring data and detailed the scientists' recommendations for the next phase of stream restoration.

The State Water Board would have implemented the recommendations right away in 2010 except for one thing: an objection from DWP that some of the measures were "infeasible," primarily the construction of the outlet at Grant Dam. The Committee, CalTrout, and DFW disagreed, and the State Water Board asked the parties to undertake a facilitated settlement process to discuss the issues. The result, after three years,

Continued on page 5

1998	Orders 98-05 and 98-07, which specify stream restoration measures
1999– 2009	Stream Scientists conduct studies and restoration projects, monitor habitat restoration
2010	Stream Scientists produce "Synthesis of Instream Flow Recommendations" report
2010- 2013	DWP claims Synthesis Report recommendations aren't feasible to implement, triggering three years of facilitated negotiations
2013	Mono Basin Stream Restoration Agreement signed
2014– 2015	State Water Board reviews Agreement, asks DWP to finish Grant Outlet design and environmental documents
2016	DWP informs State Water Board it will submit final documents by end of year and is planning for outlet construction in spring
2017	DWP halts finalization of environmental documents; MLC objects to DWP plan to conduct its own studies
2020	April: DWP asserts it will not complete Grant Outlet environmental documents unless long-term water exports are guaranteed (not part of Agreement); State Water Board indicates it will take over document process if DWP won't complete it
	October: LA Mayor and leadership break logjam and move documents forward

1998

State Water Board issues

was the Mono Basin Stream Restoration Agreement of 2013, a voluntary settlement that set forth mutually agreeable ways to implement the Synthesis Report in full.

#### Persistence for the streams

In the fall of 2013 we celebrated the Stream Restoration Agreement atop Grant Dam, complete with speeches, tree planting, and diagrams of the new outlet drawn in chalk on the floor of the spillway itself. DWP officially submitted the Agreement to the State Water Board a month later. A Board order was anticipated by 2015, but instead the process took eight years.

At the start, the Committee and settlement parties worked on necessary projects with State Water Board staff to address their questions, compile license documentation, and produce a necessary environmental document. However, by the end of 2016, DWP had created delays and obstacles, such as releasing the environmental document for public comment and then abandoning it. These obstacles took the following five years—and dogged persistence—to unravel and overcome. Committee staff and attorneys have spent countless hours pushing the process forward, both at the State Water Board and politically in Los Angeles. Particularly challenging was the assertion by DWP, starting in 2020, that it would not fulfill its stream restoration promises unless it was given new water export guarantees in the entirely separate matter of restoring Mono Lake to its healthy management level (see page 8). We pushed back hard and ultimately overcame this roadblock, bolstered by the text of the Agreement, which plainly showed the DWP argument to be baseless.

In these final rounds of advocacy, Mayor Garcetti and his Los Angeles leadership team stood by the city's commitments to restoration and the Agreement, in contrast to DWP staff attempts at delay. The bigger picture commitment to both sustainability and to meeting the city's environmental obligations was essential to the outcome.

The State Water Board also tired

of DWP's maneuvers, especially after receiving an eleventh-hour DWP letter asking for additional delay and alleging that a draft of the order—containing the very provisions requested by DWP and the settlement parties—was "legally deficient."

#### A new era of stream restoration

Order 2021-86 demonstrates that leadership from the State Water Board matters, a recipe that the LA Times editorial highlighted as a model to "settle California's future water wars." Hard work from stakeholders, especially environmental advocates, is a key ingredient, with the editorial noting that "particular credit is due to the Mono Lake Committee."

Committee supporters already know well that persistence and collaboration are essential ingredients for healing Mono Lake and its tributary streams-and are reasons we have banded together to make protection and restoration a reality. Indeed, work remains to implement this order and ensure Mono Lake reaches its mandated management level. The State Water Board's finalization of Order 2021-86 shows that these lengthy efforts can lead to positive results.

Today the creeks are flowing to Mono Lake alive with the promise of a healthier, sustainable future. It is now up to us to take the words from the pages of the order and transform those promises into reality. �

"As we stand amongst the trees that are now three to four times our height, I tell my daughters stories of how the healing of the creek is about healing a relationship between water, the land, and all of the plant and animal relatives."

-mark! Lopez, Los Angeles community organizer

isit monolake.org/2021order for more perspectives, plus photos, video, related stories, and Order 2021-86 itself.

2021 **April:** DWP Commission approves final environmental documents October 1: State Water Board issues Order 2021-86, amending DWP's water export licenses and implementing the Stream Restoration Agreement **Going forward:** Compliance timeline **November:** Work begins on forming the Mono Basin Monitoring Administration Team (MAT) 2022 March: First Annual Operation Plan (AOP) due in coordination with parties to address adaptive management, hydrology forecast, and exports **April:** DWP required to submit Grant Outlet design and finalize permits for construction, operation, and maintenance; MAT agreement to be finalized Operation Plan (MBOP) with parties; possible Outlet 2023 First year of MBOP implementation; second

**October:** DWP to complete development of Mono Basin groundbreaking for Grant

year of AOP and restoration and monitoring programs as directed by MAT; annual commitments and reporting continue while awaiting completion of Grant Outlet

DWP required to fully complete construction and begin operation of Grant Outlet or cost offsets expire

2025

Future generations will see accelerated restoration of stream health taking place on Rush, Lee Vining, Parker, and Walker creeks...

# What State Water Board Order 2021-86 means for the streams

by Geoffrey McQuilkin

he State Water Board order landed with great impact in a short, 19-page document. The foundation for the new era of stream restoration rises from the carefully crafted content of those pages. But what of the details? Those arrived in the amended water licenses issued under the authority of the order; they clock in with 70 pages that often draw on the vast written record of stream restoration in the Mono Basin.

The Mono Lake Committee's long history with the many elements of the Mono Basin stream restoration program will be a great advantage as we dive into detailed implementation of Order 2021-86. A review of the new order's highlights shows just how exciting it is for the future of stream restoration in the Mono Basin.



New Stream Ecosystem Flows (SEFs) will now be fully implemented on Rush and Lee Vining creeks. SEFs mimic natural runoff patterns to activate natural stream processes.

#### Climate resilience

The stream restoration actions required by Order 2021-86 are essential steps that build the streams' resilience in the face of climate change. Impacts

such as earlier snowmelt, rising water temperatures, and extended drought are significant challenges. It is more urgent than ever to reactivate the natural stream processes and restore ecosystem health so that the streams, riparian forests, and wildlife all can be resilient in the face of these new pressures.

#### Voluntary agreements

The Mono Basin Stream Restoration Agreement of 2013 documented a successful resolution of differences between the signing parties, saving the State Water Board the time and expense of holding a contested hearing about stream restoration. Voluntary agreements like this are an often-used approach to addressing many current California water disputes, but for environmental advocates the question often is: Do they

represent a genuine mutual commitment to beneficial changes that leaders and regulatory agencies will implement in a timely fashion? The order shows that a voluntary agreement crafted in response to State Water Board mandates can positively inform public policy.

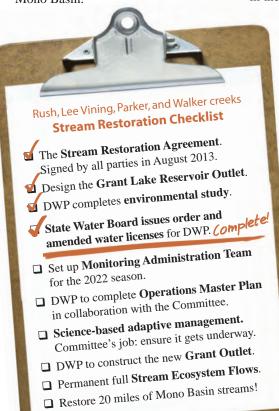
#### Adaptive management

Adaptive management is a modern approach to achieving complex resource management goals like ecosystem restoration. The strategy is to establish goals, implement beneficial programs, monitor the results scientifically, and then use analysis of the outcomes to adapt the programs to better achieve the goals. The State Water Board's multi-decade restoration process is a demonstration of successful adaptive management and it is a model for California and the West. While adaptive management is a popular concept, the final steps of connecting scientific analysis to policy modifications often falter. Here at Mono Lake, Order 2021-86 turns those steps into a bold leap forward.

#### **Unified water license**

The order amends Los Angeles' stream diversion water licenses,

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which date back to 1934. Typically, one water right amendment piles atop another and a major research project is necessary to answer the simple question: What are the current license requirements? With Order 2021-86 the State Water Board consolidated 90 years of license components into a comprehensive, unified, and up-to-date license document. The Committee spent substantial time supporting this effort because it will be much easier to identify compliance, or violation, of the license requirements going forward.

#### Stream Ecosystem Flows

The new Stream Ecosystem Flows (SEFs) were designed by fisheries biologist Ross Taylor and river ecologist Dr. Bill Trush in their roles as independent scientists reporting directly to the State Water Board on stream restoration. The order fully implements the SEFs designed by Trush and Taylor.

SEFs mimic natural runoff patterns to activate natural processes, such as overbank flooding to reseed trees and pool scouring to build fish habitat, which will restore the streams to health. SEF requirements are crafted individually for Rush and Lee Vining creeks and are built on direct field studies that correlate water release amounts at aqueduct facilities to downstream conditions.

For example, SEFs require a late-June Rush Creek five-day peak flow of 650 cubic feet per second in a wet runoff year. The Stream Scientists established that, five miles downstream of the release point, this specific amount of water will have the volume and energy to move large cobbles to rejuvenate pool habitat for fish, spread seeds to broaden the riparian forest, and reshape distributary channels across the Rush Creek bottomlands.

How sophisticated are the SEFs?

Consider this: In 1994, the State Water Board set two minimum flow levels for Rush Creek, one for summer, another for winter. The minimums were higher in wet years, and lower in dry ones.

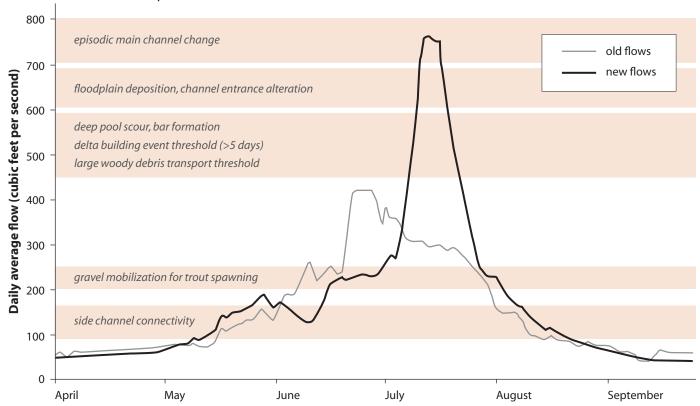
In contrast, the new SEFs specify ten different flow levels throughout the year, including early flow benches that signal the start of the springtime high flow season to macroinvertebrates, peak flows for geomorphic benefits, and low winter flows that help fish conserve energy. The flows are fine-tuned for seven different runoff situations ranging from extremely wet to very dry, and the rate of flow change is also specified. For example, the Stream Scientists found that a flood event that distributes seeds and establishes new seedlings is only productive if the water recedes at a rate no faster than the ability of seedling roots to grow downward into the soil.

On Lee Vining Creek, DWP

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#### Benefits of the new streamflows

A comparison of Rush Creek flows under the old and new streamflow rules



A comparison of wet year streamflows required in the Rush Creek bottomlands. Currently, the highest flow that can be reliably achieved is approximately 400 cubic feet per second. Under Order 2021-86, once the Grant Outlet is operating, much higher streamflows can be delivered.

diversions have often impaired springtime peak flows. Now, in addition to minimum flow requirements, the SEFs provide new rules that halt diversions at higher streamflow levels, whenever they may happen, to ensure the critical peak flows are successfully passed downstream.

With the SEFs we expect to see a significant leap forward in stream recovery, from fish size and productivity to increased riparian habitat complexity.

# Diverted no more: Parker and Walker creeks

The order ends the diversion of Walker and Parker creeks altogether. These smaller tributaries will deliver cold water flow in a naturally variable pattern to the Rush Creek bottomlands where it is needed to offset and reduce the warmer water released from Grant Lake Reservoir. As climate change impacts such as extended drought and increasing late-season water temperatures grow, measures like these are essential to building the resilience stream habitats need.

# Grant Lake Reservoir Dam gets new outlet

Operating the aqueduct to deliver the SEFs is generally a matter of opening



Ongoing science-based adaptive management is a key component of the new order; it will incorporate ongoing monitoring into the program to maximize restoration and also provide the flexibility to respond to climate change impacts.

gates and turning valves at the right time, with one big exception: Grant Lake Reservoir Dam. Constructed in the 1930s, the dam has no outlet to release water into the creek below the dam. Workarounds currently deliver daily flow to Rush Creek, but can't handle the required SEF volume in wetter years. As a result, the order mandates that DWP construct an outlet that reliably delivers full SEFs to Rush Creek.

The new outlet has already been engineered and studied, meaning construction could start in 2022. The order expects construction to be complete within four years. The design consists of lowering the existing passive reservoir spillway and installing two 14-foot-tall Langemann gates to allow controlled release of reservoir water to meet SEF requirements.

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# New State Water Board proceeding will focus on the separate matter of Mono Lake's level

uring the last two years, Los Angeles Department of Water & Power staff have repeatedly attempted to tie the stream restoration order to the issue of raising the level of Mono Lake, threatening at one point to further delay environmental documents unless long-term water exports were guaranteed, and more recently accusing the State Water Board of crafting a "legally deficient" order by focusing on stream restoration.

However, these claims have never had any support in the actual text

of the Mono Basin Stream Restoration Agreement. In Order 2021-86 the State Water Board discusses Mono Lake's status, identifies lake restoration as a separate matter, and charts a path forward.

"Mono Lake has not yet reached 6,391 [feet above sea level] as of the trigger date for a lake level hearing," the order observes. "Further analysis ... is appropriate for a separate proceeding from resolution of the stream restoration issues addressed by this Order, as anticipated in D1631."

There is indeed reason for concern:

Mono Lake is currently 12 feet below the level mandated to protect the unique ecosystem, a requirement essential to building resilience to climate change impacts. The Committee appreciates the State Water Board's commitment to "work with stakeholders and interested parties to separately schedule appropriate proceedings to gather and consider pertinent information on this issue" and we have already mobilized our scientific, legal, and political staff and resources in preparation for this essential effort.



The State Water Board expects the Mono Lake Committee and partners to play a key role in creating and operating the Monitoring Administration Team.

#### **Operating the aqueduct**

A new multi-year Mono Basin Operations Plan covering all aqueduct facilities and operations in the Mono Basin is an essential element of the order. A key focus for the Committee: Grant Lake Reservoir needs to be high enough in the springtime for the new outlet to deliver the mandated SEFs, and that requires keeping it high enough year-round to not miss the mark. The order specifies a collaborative approach for multi-year and annual Mono Basin aqueduct operations planning; Committee staff with technical expertise will be deeply involved.

# Ongoing adaptive management

The order authorizes the Stream Scientists to adaptively manage the annual SEF schedule, duration, magnitude, and rate of change based on their monitoring findings and in response to emerging situations. Not only does this incorporate ongoing science into the program, it also provides flexibility to respond to climate change impacts.

#### Monitoring Administration Team

A new Monitoring Administration Team (MAT) will facilitate the implementation of the restoration and monitoring programs. The MAT, composed of the Committee, CalTrout, DWP, and DFW, will report to the State Water Board, and we expect that the new collaborative approach will avoid disputes over contracting and administration that have occurred in years past. DWP will fund the science monitoring work with a single annual payment to an independent fiscal administrator, and the MAT will make sure programs are funded on time and efficiently implemented.

#### Mono Lake limnology

The order appoints Dr. John Melack, a renowned saline lake expert, as Limnology Director to run the required program that gathers data on key indicators of the health of Mono Lake. While not directly related to stream restoration, the Committee is pleased

that the order resolves a separate matter of dispute that arose in 2012 when DWP unilaterally canceled Melack's contract to conduct lake studies.

# New Committee responsibilities

As always, the Committee will be a vigilant watchdog, ensuring that all these beneficial order requirements are implemented. We monitor aqueduct operations daily, for example, to be sure the SEF requirements are followed. And we'll engage to keep DWP on track with outlet construction.

The order has also created a new kind of work for us: we have official assignments! Building on the collaboration of the Stream Restoration Agreement, the State Water Board expects the Committee and partners to play a key role in creating and operating the MAT, to be engaged in aqueduct operations planning, and more.

Here in Lee Vining we are actively planning to dedicate the skilled staff and expert advisor time we need to succeed with these assignments. It adds to a busy roster of work and we are happy to figure out how to make it happen. The order has lifted our spirits and the rejuvenation of Mono Lake's tributary streams is a goal worth working for! ❖



The Rush Creek delta at Mono Lake. Twenty miles of Mono Lake's tributary streams are poised to make a significant advance in the recovery of the habitats, trout populations, streamside forests, and wildlife—all of which suffered extensive damage due to past excessive water diversions by DWP that dried up the streams.

# Covering up the air quality problem at Mono Lake: Just add water

by Bartshé Miller

"The principal values plaintiffs seek to protect, however, are recreational and ecological—the scenic views of the lake and its shore, the purity of the air, and the use of the lake for nesting and feeding by birds ... it is clear that protection of these values is among the purposes of the public trust."

—Supreme Court of California, February 17, 1983

Imost forty years have passed since the California Supreme Court's landmark Public Trust ruling, and Mono Lake hovers at an artificially low level, generating the worst particulate air pollution in the nation.

Decades of past excessive water diversions by the Los Angeles Department of Water & Power (DWP) dramatically lowered Mono Lake, reduced its volume by half, and exposed 18,000 acres of lakebed. The diversions resulted in devastating ecological, scenic, and recreational impacts, and created an air quality hazard that persists to this day. Today, Mono Lake is 12 feet below its target management level, and on windy days the exposed alkali lakebed emits large plumes of dust, producing air quality violations that exceed the public health standards of the federal Clean Air Act.

The number and degree of exceedances are not trivial. Mono Lake has, unfortunately, achieved notoriety for being the source of the most concentrated particulate air pollution measured in the United States for the past nine years. According to the Great Basin Unified Air Pollution

Control District, "the magnitude of the PM<sub>10</sub> concentrations at Mono Lake are the highest in the nation and the frequency of the violations of the National Ambient Air Quality Standard is unsurpassed." PM<sub>10</sub> is defined as particulate matter of ten microns or less, or one tenth the diameter of a human hair. Particles of this size are small enough to become lodged in the lower respiratory tract and can cause short-term and chronic respiratory problems.

#### First Owens, now Mono

For many years the dry Owens Lake, 120 miles south of Mono Lake, was the largest source of PM<sub>10</sub> pollutants in the country. Unlike Mono, Owens dried up after DWP fully diverted the Owens River over a century ago. After a lengthy and contentious legal

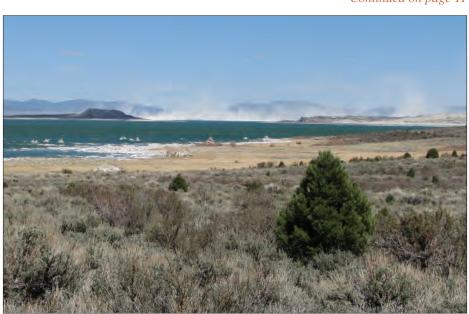
process that began in the late 1990s, DWP was required to fix the air quality problem at Owens Lake. To achieve this, DWP engineered an extensive mitigation project to control dust-emitting soils over large portions of the dry lakebed. The project is so large that it is easily identified on satellite imagery. The effort achieved a high level of air quality attainment for  $PM_{10}$  emissions at a cost that has surpassed \$1.5 billion, and the total cost continues to grow.

The landscape engineering solutions that worked on the surface of dry Owens Lake—spreading gravel, planting salt grass, and constructing berms, pipelines, and sprinkler systems—would not be appropriate at Mono Lake. These methods would shatter the scenic integrity of the lake and the basin, which is recognized and protected by a State Natural Reserve and the Mono Basin National Forest Scenic Area, the first federally designated Scenic Area in the United States. Such methods would also cause adverse impacts to the lake's ecology, and ultimately, would be submerged by the rising lake.

#### "The only feasible method"

When the California State Water Resources Control Board issued Decision 1631 in 1994, setting a management level for Mono Lake, they understood that the air quality problem at Mono Lake would be effectively remedied by allowing more water to flow into Mono Lake. The State Water Board concluded, "The only feasible method of reducing the  $PM_{10}$ 

Continued on page 11



Mono Lake has been, unfortunately, the source of the most concentrated particulate air pollution measured in the United States for the past nine years.

# Recognition effort advances for the Mono Lake Kutzadika'a Tribe

by Geoffrey McQuilkin

The Mono Lake Kutzadika'a people have lived on the lands surrounding Mono Lake since time immemorial. Despite decades of effort they have never been formally recognized by the federal government.

This past summer, Kutzadika'a Tribe Chair Charlotte Lange says, marked "a superb step forward," when Congressman Jay Obernolte (CA-08), whose district includes Mono Lake, introduced HR 3649, a bill that, if passed, would extend federal recognition to the Mono Lake Kutzadika'a Tribe.

The importance of federal recognition is vast. "Our people are disadvantaged through the loss of our homeland," says Dean Tonenna, Tribe elder. "We remain vulnerable to continued losses, even under the law, because we do not have the status to assert our rights as a people and as a nation." Tribe member Vicki Glazier observes, "We keep having to prove who we are. We've been doing this for a long time. I'm in my seventh decade of waiting for recognition."

The Mono Lake Committee supports federal recognition of the Kutzadika'a Tribe. The Kutzadika'a were the first voices of the Mono Basin, and they are still very much here. Their wisdom is essential to creating a sustainable future for this very special part of California. The Kutzadika'a and the Committee frequently work together in pursuit of common goals of protecting and restoring Mono Lake and its tributary streams and surrounding lands. Lange reflects, "We are here to take care of Mono Lake and the land and preserve all of those traditions that we do, like the basket weaving, and plants that we eat, the fire that brings back those plants in full force, because some plants need to be burnt."

The introduction of the bill is monumental, but ensuring passage is no easy task. As the process unfolds the Committee will share information about how to support the bill and the Tribe on the long road to recognition; for more go to *monolake.org/kutzadikaa*.

The progress made this year makes many in the Tribe hopeful. "People nowadays, they see what we stand for, and we're kind of fighting all the same fight—conservation, water rights, protecting the land," says Tribe member Jason Small. "I think this year will be our best shot." •

Thanks go to the Tribe members whose thoughts are shared here and to local reporter Caelen McQuilkin, who documented their words in interviews for the Mammoth Times newspaper.

#### Air quality from page 10

emissions sufficiently to come into compliance with the National Ambient Air Quality Standards is to increase the water elevation of Mono Lake and submerge much of the exposed emission source area... Improving air quality at Mono Lake by reducing the severity of periodic dust storms in the Mono Basin would also protect the views and scenic resources for which the Mono Basin is widely known."

DWP's Mono Basin stream diversions continue annually based on lake level thresholds established in Decision 1631. While the annual total diversions are much less than those of the last century, the continued water diversions have delayed the lake's rise and Clean Air Act violations continue.

#### The path to compliance

The Clean Air Act establishes national emission standards for hazardous air pollutants, including PM<sub>10</sub>. The Environmental Protection Agency (EPA) regulates under the Clean Air Act and works with states to ensure compliance. The Great Basin District works in partnership with the California Air Resources Board and EPA and it, along with the 34 other local air districts in California, is the lead agency for regional air quality monitoring and enforcement. Great Basin's district

covers Alpine, Inyo, and Mono counties, a territory larger than the state of Maryland.

Earlier this year, Great Basin sent a letter to the DWP Board of Commissioners asking that "immediate action" be taken to remedy significant air quality violations at Mono Lake. Citing the need to raise the lake to stop the emissions, the letter requests that DWP staff "enter into discussions with [Great Basin] staff on minimizing, even to the point of fully curtailing, the taking of water from the Mono Basin."

Unless significant precipitation arrives this winter, the low lake level could automatically reduce the allowed DWP diversions from 16,000 to 4,500 acre-feet. This has happened before, and the increasingly water-efficient City of Los Angeles was able to conduct business as usual.

DWP spent \$1.5 billion to fix the air quality problem at Owens Lake. Great Basin poses a more affordable, feasible, and ecologically beneficial solution for Mono Lake—allow more water to flow into Mono Lake to attain air quality compliance sooner rather than later. Great Basin will hold a workshop this fall in Lee Vining, and it may help clear the air regarding future air quality actions at Mono Lake. ❖

# Dusting off the gull protection fence

by Bartshé Miller

alifornia Gulls at Mono Lake can't catch a break.
Another drought year and a legacy of excessive
water diversions are increasing the threat of coyotes
crossing the emerging landbridge to Twain Islet and reaching
vulnerable eggs and chicks during the nesting season. Lake
level projections for next year indicate Mono Lake will be
at a dangerously low level, and that the landbridge will be
exposed. Anticipating this, Mono Lake Committee staff are
once again planning to install the temporary electric fence that
successfully protected the gulls just four years ago.

#### A proven strategy

In early 2017 the Committee, in partnership with California State Parks and the Inyo National Forest, installed a one-mile long, solar-powered electric fence (see 2017 Winter & Spring *Mono Lake Newsletter*). The crowd-funded fence was the type normally used for livestock—a light mesh construction designed for easy setup and removal. While fence installation across a mile of barren, silty, and alkaline lakebed was anything but easy, the fence was highly effective. The Committee also set up a network of wildlife cameras and recorded coyotes walking the fence line but failing to find a way through it. The electrification discouraged coyotes from digging under the fence, and they did not swim around the ends that terminated in Mono Lake.

#### Tracking lake level and risk

Lake level projections indicate that by April 1, 2022, Mono Lake will be very close to 6380 feet above sea level, the elevation at which the landbridge to Twain Islet is exposed enough to allow coyotes to cross to the gulls' nesting grounds. The last documented coyote incursion on the islands was in 2016 very close to Twain Islet. If the coyotes had reached Twain while birds were incubating eggs or feeding chicks, it



Due to Mono Lake's low level, the Mono Lake Committee is planning to re-install the temporary electric fence across the landbridge to protect nesting California Gulls from coyote predation.



In April 2017 a motion-activated wildlife camera on the landbridge documented a coyote walking the fence line, which confirmed that it functioned as a barrier to predators.

might have ended the nesting season for the majority of gulls at Mono Lake because more than 50% of California Gulls nest on this critical patch of habitat. Gulls will scatter and abandon nests and chicks with the arrival of a coyote.

When food and reproductive strategies are at stake, animals like coyotes and gulls remember: coyotes become more willing to swim through shallow alkaline water with the expectation of a food reward, and gulls remember the nesting disruption and are unlikely to return. Managing the coyote risk is the work that must be accomplished proactively to protect the gulls when Mono Lake is this low.

#### Insurance policy for gulls

With another dry winter Mono Lake will be perilously close to the elevation at which coyotes have crossed to the islands in the past. A wet winter would brighten the lake level outlook, but the lake wouldn't rise until the runoff season is underway, well after nesting begins in April. In 2017, fence construction began in January after staging supplies and equipment on the landbridge. While that winter turned out to be extremely wet, the lake didn't start to rise significantly until June, and the fence successfully protected the gulls throughout the nesting season. The fence was removed that August after the gulls fledged.

The planning process has started, and the Committee anticipates reconstructing the fence over the winter. Conversations about permitting and logistics are underway with California State Parks and the Inyo National Forest. The environmental planning with State Parks accomplished in 2016 will be updated and staging tools and materials on the landbridge, which requires detailed coordination and cooperation from the agencies, will follow. Committee staff will be busily organizing for the project, pulling the fence and the solar panels from storage, and preparing them again for an unhoped-for deployment on the remote and wind-scoured landbridge. �



# OEC reopens for a busy season

Silver linings and success stories have come from the Outdoor Education Center (OEC) this year. Collective dedication to Covid-19 safety protocols has allowed the program to come back strong.

The season started with two Port of Los Angeles High School groups; the juniors, who missed their Mono opportunity last year, made it up as seniors this summer. They were followed by East LA Performing Arts Magnet and Outward Bound Adventures. The next group to return was East Yard Communities for Environmental Justice, who also attended the community screening of the poignant film *Manzanar Diverted*, hosted by the Mono Lake Kutzadika'a Tribe.

Girl Scout Troop 7911 spent a week at the OEC and then the Lopez family, helmed by OEC champion Elsa Lopez, visited with grandkids in tow—the fourth generation of Lopezes in the program. Camp Cricket squeezed in a short trip followed by Pacoima Beautiful.

The last group to visit before we paused for the Inyo National Forest closure was the John Muir High School alumni trip facilitated by Generation Green. When they arrived, we got a wonderful surprise—two students from when I was an OEC instructor back in 2017 were now leaders! The rhythms of the OEC are a beautiful reminder that good things continue to happen.



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/oec

facebook.com/mono.oec



## Landscape updates at the OEC

The OEC has helped facilitate understanding and appreciation of the extended Mono Basin-Los Angeles watershed for more than 25 years. This year, we partnered with water conservation-focused landscape design and build team Watershed Progressive to kick off the first phase of a landscaping project aimed at making the OEC safer and more immersive for participants.

Phase one focused on moving the primary gathering and camping area from the front of the house to the back. This made it possible to design the area to mimic the Mono Basin watershed. Berms and boulders used for wind protection echo the crest of the Sierra Nevada while a sunken fire pit is reminiscent of Mono Lake. Paths with camping areas pass through the site, mirroring tributary streams.

The OEC program is carefully designed to connect participants from LA to the source of their water in a meaningful way. These landscaping improvements were designed to help infuse the participants' experience of the OEC home base with the lessons they're learning while in the Mono Basin.

This multi-year project is a collaboration between the Mono Lake Committee, DWP, and the Kutzadika'a Tribe. We consulted with both DWP and the Tribe on the plans and a Tribal Monitor was on site to make sure the earthwork did not disrupt any culturally significant artifacts or sites. If you are interested in learning more about the project or how you can help support it, please email *rose@monolake.org*.

#### Streamwatch

### Dry year forecast challenges

by Greg Reis

or the second consecutive year, forecasts of snowmelt runoff in the Mono Basin and other nearby watersheds were overly optimistic. News headlines even noted the "missing runoff" that was forecasted but didn't materialize in many of the state's snowmelt watersheds in the spring, primarily due to snow measurement challenges and dry conditions.

There is evidence that there was less snow at the highest elevations this year compared to what was expected, but our understanding is hampered by inadequate snow measurements. The Airborne Snow Observatory and other new snowpack measurement technology can provide a better understanding of snowpack dynamics under a changing climate, and can be used to refine the forecast based on conditions after April 1.

On April 1, 2021, the Los Angeles Department of Water & Power (DWP) forecasted 53% of average runoff for April through September, but that assumed median precipitation after April 1. The median forecast is usually appropriate to use, but DWP also issued a "reasonable minimum" forecast of 41%, which was more appropriate to use this year when precipitation failed to materialize in April and May. Actual runoff was approximately 39% of average—pretty close to the forecast adjusted for the dry spring conditions.

This means the 2021 snowmelt season was slightly drier than 2020, which had 50% of average runoff, and is the driest since 2015, which benefitted from record

summer precipitation. Despite an average June and a wet July, this year's spring—summer precipitation was less than in 90% of years at high elevations, although rainfall was more typical at the lower elevations to the east around Mono Lake. Because variables like precipitation, soil moisture, and snow distribution play a more important role in the water balance in dry years, forecast accuracy tends to decline during droughts—especially as climate conditions shift away from historical averages. ❖



Actual April–September Mono Basin runoff was approximately 39% of average this year.

#### Lakewatch

## Mono Lake drops below 6380 feet

by Greg Reis

his fall Mono Lake dropped below 6380 feet above sea level, to 6379.9' on October 1. Thanks to a wet July—the wettest on record at Cain Ranch and

fecord at Cain Ranch and
fourth-wettest in Lee
Vining—Mono Lake's
surface elevation is
tracking about twotenths of a foot higher
than the Mono Lake
Committee's May
forecast. The lake is
likely to reach a late
fall low point around
6379.5' and an April 1,

2022 level of about 6380'. A warm and rainy winter could raise the lake above 6380' by April 1, and a cold, dry one could keep it below.

For Cain Ranch precipitation, the last two winters tied with 2014–2015 as the driest two consecutive winters on record, after first place 1976–1977. A weak La Niña is expected this winter. That isn't a strong predictor of Mono Basin weather, except that it leans toward weather that is on the colder and drier side of average.

However, looking at the recent past is no longer a good guide for what is likely in the future. Six of the last ten years have been in the "Dry" quintile, something that happened in 1987–1992, but otherwise hadn't occurred in the last 130 years. Four more Dry years wouldn't necessarily make this a record drought, but because of Mono Lake's artificially-lowered level, any sequence of dry years would be devastating for the ecosystem.

Why do we care if Mono Lake is above or below 6380' on April 1? Under the existing rules, when the lake is below 6380', the surface water exports from the Mono Basin would be reduced from a limit of 16,000 acre-feet to 4,500 acre-feet. •

ediversion lake level, 1941

# Mono Basin Journal

A roundup of quiet happenings at Mono Lake

by Geoffrey McQuilkin



fter the order was issued, I stood atop the dam at Grant Lake Reservoir on a cool autumn day. Across the water orange aspens spilled down the mountain slopes. It was quiet; eight years ago a large crowd was gathered, speeches in the air, celebrating the signing of the Stream Restoration Agreement. On that day I walked down the reservoir spillway with Los Angeles Department of Water & Power (DWP) General Manager Ron Nichols and we discussed the work that, all agreed, would be done to bring the facility into the 21st century. It was 80 years late by one measure, but a welcome plan for change.

Back in the 1930s DWP General Manager H.A. Van Norman had built the facility with a simple plan to "divert the entire flow" of the streams. Rush Creek apparently didn't matter to him. But it has always mattered to the fish and birds and wildlife and the people who love this special place, and the damage done in the 1900s must be repaired. Van Norman wouldn't get far, thankfully, with his philosophy today.

The site looks essentially unchanged over the last eight years, but there are clues of what is to come. A two-foot-square cement patch in the spillway, cut out to allow drilling for geotechnical analysis. A survey marker on the spillway slope. And, in my hand, Order 2021-86, the official word from the State of California that Rush Creek matters—that this aqueduct facility must change to respect that. Next fall I don't expect this spot to look the same at all. �

## **Benchmarks**



August 2010: Stream restoration at work! Studies called for reopening the clogged entrance of Channel 8 in lower Rush Creek. The work was completed and seasonal flow returned in 2007, rejuvenating the channel structure.



September 2021: Natural stream processes reshaped the channel entrance during peak runoff in 2017, leading to year-round flow. The new Stream Ecosystem Flows will do more to activate natural processes to restore Rush Creek.



## MONO LAKE COMMITTEE

INFORMATION CENTER & BOOKSTORE
Fall Catalog

See more product photos online at MONOLAKE.



Layer up in this Mono Lake Committee exclusive long sleeve

shirt like Will and Bree. This muted-yellow, 100% cotton shirt is soft and comfortable with a tufa graphic and the words "Protect & Restore Mono Lake" on the chest and back. Protect & Restore Mono Lake long sleeve shirt, muted yellow, unisex sizes S–XXL: \$40.00





CHEST & BACK

#### California Gull hoodie

Lily and Andrew are nice and cozy in these heather navy 50% cotton, 50% polyester hoodies. The front chest sports the Mono Lake Committee logo and the back features a line drawing of clouds, the sun, and Negit Island within the outline of a California Gull, one of Mono Lake's most iconic bird species.

Mono Lake Committee exclusive. California Gull hoodie, heather navy, unisex sizes S–XXL: \$59.99



#### Mono Lake Committee coasters

Protect your tabletops and Mono Lake with these *Mono Lake Committee exclusive* wood and resin coasters. Each set of two or four coasters is handmade
from American black walnut and features the Mono Lake Committee logo engraved into
the wood with a swirling blue resin "stream" crossing the coaster. *Mono Lake Committee and tree places their set of two or four handwards items were eligibility* 

Mono Lake Committee coasters, please specify set of two or four, handmade items vary slightly: \$30.00 for two or \$50.00 for four

#### MONO LAKE OSPREY TRUCKER HAT

Protect yourself from the sun in style like Ryan in this Mono Lake Committee exclusive trucker hat. This bold design showcases the beloved Mono Lake Osprey and the art of local Yosemite resident Autumn Stock. The adjustable

hat is vibrantly printed and has a suede-like fabric bill and mesh construction for a comfortable, breathable fit. Mono Lake Osprey trucker hat, one size fits most: \$22.00





#### MONO LAKE FAIR ISLE KNIT BEANIE

This USA-made custom beanie, modeled by Robbie, is too fun not to wear this winter! It features a Mono Lake Committee exclusive design of tufa towers, gulls, and rippling water on a deep navy blue background. This 95% acrylic and 5% lycra beanie is as warm and comfortable as it is unique. Mono Lake Fair Isle knit beanie, one size fits most: \$20.00

#### MONO LAKE PATTERNED FACE MASK

Show your love for Mono Lake with this three-layer face mask from ChicoBag printed in a playful pattern of birds, brine shrimp, mammals, and flowers in varying shades of blue. Made from high-quality, durable cotton and polyester, it's machine washable and convenient to use. The mask fits snugly against your face, comfortably around your ears or head using an optional clip to relieve ear pressure, and the contoured adjustable nose piece means it won't fog up your glasses. Each mask comes with a pouch to safely stash your used mask for washing later.

Mono Lake Committee exclusive.

Mono Lake patterned face mask, one size fits most, monochrome blue: \$12.50



#### MOLLY HASHIMOTO WINTER BIRDS HOLIDAY CARDS

This boxed set of 20 cards featuring four different captivating relief prints by artist Molly Hashimoto is sure to delight. Each card pictures a bird surrounded by a winter landscape with "Season's Greetings" written inside. Set includes five each of the following: Ruby-crowned Kinglet, Owl, Red-naped Sapsucker, and Ptarmigan.

Molly Hashimoto winter birds holiday cards, set of 20 assorted cards with envelopes, 5"x 7": \$16.95



RUBY-CROWNED KINGLET





RED-NAPED SAPSUCKER



PTARMIGAN



#### 3D WILDLIFE PUZZLES

These adorable 3D puzzles will delight kids ages 6 and up. Each design uses recycled, biodegradable, and non-toxic materials to create adorable wildlife models. Choose between a bear, Bald Eagle, and chipmunk, or collect them all.

3D wildlife puzzles, approximately 3"x 7"x 1", please specify bear, Bald Eagle, or chipmunk: \$12.00



BEAR





BALD EAGLE

CHIPMUNK

# RAINBOW TROUT

#### Mono Basin Critter finger puppets

You might spot these critters along one of Mono Lake's tributary streams as they continue to be restored. Finger puppets are great for creative play and conversations about protecting creatures and places we love. Choose between a shiny rainbow trout or a slinky mink to bring the fun of creek-side play wherever you go.

Mono Basin critter finger puppets, approximately 7"x 2"x 2", please specify rainbow trout or mink: \$10.00

#### MONO LAKE PATTERNED INSULATED BOTTLE

Keep your favorite drinks the perfect temperature at home or on the go with this vacuuminsulated bottle from Klean Kanteen, which is printed with a Mono Lake pattern of birds, brine shrimp, mammals, and flowers in reds, pinks, and blues on a sunny yellow background. This BPA-free bottle is constructed of foodgrade stainless steel with a leak-proof to-go lid and collapsible carry handle for easy drinking and transportation. The wide-mouth design makes adding ice cubes easy and simplifies cleaning (it's also dishwasher safe). This versatile bottle will keep beverages hot up to 14 hours and cold up to 47 hours.

Mono Lake Committee exclusive.

Mono Lake patterned insulated bottle, 16 ounces: \$29.95



#### CHARLEY HARPER BIRDS HOLIDAY CARDS

This boxed set of 20 cards featuring four different geometric bird designs by artist Charley

Harper is a splendid way to send out your holiday greetings. Each card features birds in Harper's signature style in a winter landscape with "Season's Greetings" written inside. Set includes five each of the following: White-breasted Nuthatch, Backyard Birds, Cardinal Cuisine, and Evening Grosbeaks.

Charley Harper birds holiday cards, set of 20 assorted cards with envelopes, 5"x 7": \$16.95



WHITE-BREASTED NUTHATCH



BACKYARD BIRDS



CARDINAL CUISINE



EVENING GROSBEAKS

## Fall Catalog

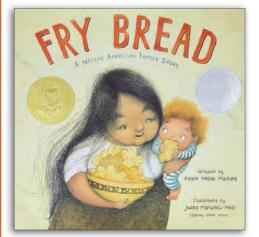
#### THE THING ABOUT BEES: A LOVE LETTER

BY SHABAZZ LARKIN

The Thing About Bees is a tender story about why bees are important and the love of a family. This book is simply beautiful, from the artful and expressive illustrations to the heartfelt message.

The Thing About Bees, hardcover, ages 3–7, 32 pages, 8½"x 8½": \$17.99





# FRY BREAD: A NATIVE AMERICAN FAMILY STORY

BY KEVIN NOBLE MAILLARD

ILLUSTRATED BY JUANA MARTINEZ-NEAL

Through lyrical text and beautiful illustrations, this lovely book touches on themes of family, inclusivity, and history through a story about preparing fry bread for a family meal. It's a celebration of both a cultural food and an Indigenous identity.

Fry Bread, hardcover, ages 3-6, 48 pages, 10"x 10": \$18.99

#### BIRD COUNT

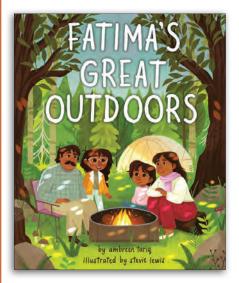
BY SUSAN EDWARDS RICHMOND

ILLUSTRATED BY STEPHANIE FIZER COLEMAN

This educational picture book is perfect for the little birder in your life. The story follows a young girl named Ava as she and her mother participate in the annual Christmas Bird Count. Ava uses all of her skills and senses to be the best citizen scientist she can be.

Bird Count, hardcover, ages 4–8, 32 pages, 9½"x 10½": \$17.95





#### FATIMA'S GREAT OUTDOORS

BY AMBREEN TARIO

ILLUSTRATED BY STEVIE LEWIS

Join Fatima Khazi and her family on her first-ever camping trip. After moving to America a lot of things are different and uncertain, but camping shows Fatima that she can do anything in her new surroundings, from pitching a tent to building a campfire.

Fatima's Great Outdoors, hardcover, ages 4–8,

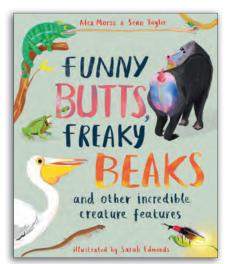
40 pages, 9½"x 11¼": \$17.99

# FUNNY BUTTS, FREAKY BEAKS, AND OTHER INCREDIBLE CREATURE FEATURES BY ALEX MORSS & SEAN TAYLOR

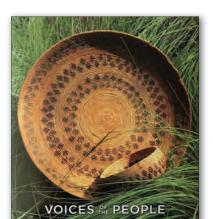
BY ALEX MORSS & SEAN 1 AYLOR ILLUSTRATED BY SARAH EDMONDS

Explore the strange, wonderful, and unique features of the animal kingdom, from the glowing rears of fireflies to the distinctive noses of elephant seals. This beautifully illustrated book is a great read for the budding zoologist and reminds us that it's the things that set us apart that are truly magnificent.

Funny Butts, Freaky Beaks, hardcover, ages 6-8, 48 pages, 9"x 11": \$14.95



## ♣ Fall Catalog



#### VOICES OF THE PEOPLE

BY THE TRADITIONALLY ASSOCIATED TRIBES OF YOSEMITE NATIONAL PARK This book is a first-of-its-kind compilation of stories, histories, photographs, and family chronicles from the Seven Associated Tribes of Yosemite National Park, written in their own words and from their own perspectives. This book highlights the Kutzadika'a, the Indigenous people of the Mono Basin, along with six other regional Tribes whose traditional lands and routes encompass what is now Yosemite National Park. This book offers an opportunity for understanding and reflection on the experiences of these First Nations and their hopes for the future on their native land.

Voices of the People, hardcover, 292 pages, National Park Service, 7½"x 9½": \$25.00

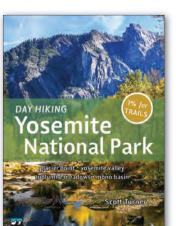


BY GIULIO BOCCALETTI

Water has the profound ability to shape its surroundings,

including the human civilizations depending on it. This expansive history explores how water has changed the structures of our societies, from the advent of agriculture to modern water infrastructure.

Water, hardcover, 400 pages, Pantheon, 6½"x 9½": \$30.00



#### DAY HIKING YOSEMITE NATIONAL PARK

BY SCOTT TURNER

If you're already planning your next journey over Tioga Pass this book will be a helpful resource. With 90 detailed route

descriptions, color photos, and topographical maps covering all areas of Yosemite (and even a section for the Mono Basin), this book is a comprehensive companion for your next visit and beyond. Day Hiking Yosemite National Park, paperback, 320 pages, Mountaineers Books, 5"x 7": \$21.95

#### When the Light of the World Was Subdued, Our Songs Came Through: A Norton Anthology of Native Nations Poetry

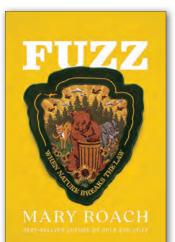
EDITED BY JOY HARJO

This book offers a glimpse into the immense sweep of Indigenous poetry from the 17<sup>th</sup> century to the present day across five geographic regions. This collection highlights the work of a diverse

selection of North America's Indigenous poets whose literary traditions stretch back centuries.

When the Light of the World Was Subdued, Our Songs Came Through, paperback, 496 pages, W. W. Norton & Company,

6"x 91/4": \$19.95

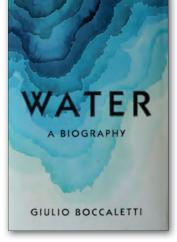


#### Fuzz: When Nature Breaks the Law

BY MARY ROACH

Mary Roach has a well-deserved reputation for being a hilarious science writer, and her newest book *Fuzz* delivers humorous insight into the science behind human-wildlife conflict and the crossroads of human behavior and wildlife biology. From misbehaving macaques to hazardous trees, Roach explores many of nature's lawbreakers and humanity's attempt to deal with them, ultimately revealing just as much about humans as the natural world.

Fuzz, hardcover, 320 pages, W. W. Norton & Company, 5¾"x 8½": \$26.95



WHEN THE LIGHT OF THE

WORLD WAS SUBDUED.

OUR SONGS

CAME THROUGH

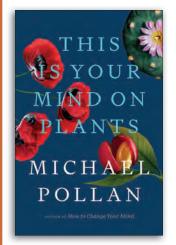
EDITED BY JOY HARJO

#### ENTANGLED LIFE: HOW FUNGI MAKE OUR WORLDS, CHANGE OUR MINDS & SHAPE OUR FUTURES

BY MERLIN SHELDRAKE

Immerse yourself in the fascinating realm of fungi with biologist Merlin Sheldrake as he illuminates the world from a fungal point of view. From yeast to massive underground fungi, these mysterious organisms are crucial to many of life's processes—with the power to heal our bodies, change our minds, and remediate environmental disasters.

Entangled Life, paperback, 368 pages, Random House, 5"x 8": \$18.00



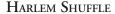
#### THIS IS YOUR MIND ON PLANTS

BY MICHAEL POLLAN

Michael Pollan is well established in the world of food writing and its intersection with science and botany. In his newest book, Pollan uses his knack for storytelling to explore the human relationship

with psychoactive plants and their compounds: opium, caffeine, and mescaline. This combination of history, science, memoir, and journalism explores biology, consciousness, culture, and our interactions with psychoactive plants and the natural world.

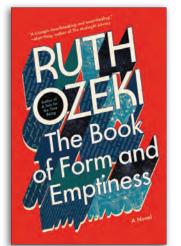
This is Your Mind on Plants, hardcover, 288 pages, Penguin Press, 6½"x 9½": \$28.00



BY COLSON WHITEHEAD

The newest novel by Pulitzer Prize winning author Colson Whitehead is a family saga set in New York City during the early 1960s. Protagonist Ray Carney supports his family with a modest furniture business, but unbeknownst to most he comes from a family of crooks that imperil his life of normalcy. When roped into a hotel heist that doesn't go as planned, Ray must navigate his internal struggle between Ray the upstanding salesman and Ray the crook in this story about race and power.

> Harlem Shuffle, hardcover, 336 pages, Doubleday, 6½"x 9½": \$28.95



#### THE BOOK OF FORM AND EMPTINESS

BY RUTH OZEKI

This inventive new novel by Booker Prize finalist Ruth Ozeki follows the story of Benny Oh, a 13-year-old boy who has lost his father and has begun to hear voices emanating from inanimate objects. Benny's mother has sunk into a hoarding habit, and the overwhelming voices from all of her possessions drive him to a library where objects are better behaved and speak in whispers. In the library he meets the people and finds the book that ultimately helps him discover his own voice. This compelling story manages to be playful and poignant yet also beautiful and strange. The Book of Form and Emptiness, hardcover, 560 pages, Viking,

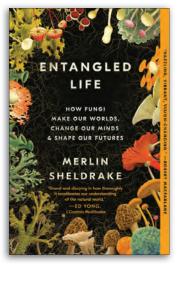
61/4"x 91/4": \$30.00

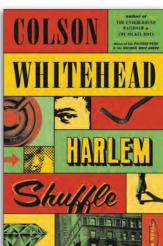
#### Anxious People

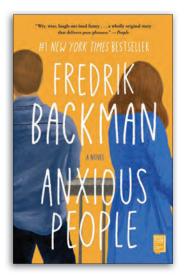
BY FREDRIK BACKMAN

When an apartment open house gets hijacked by a bank robber and becomes a hostage situation, personal dramas unravel amongst the eclectic group of captives. Each person carries a lifetime of hurt, grievances, secrets, and passions that are ready to boil over, and no one is entirely who they appear to be.

Anxious People, paperback, 352 pages, Washington Square Press, 51/4"x 81/4": \$17.00









#### Brine Shrimp Ornament

Liven up your holiday decorations with a brine shrimp ornament, which measures 3 inches long and serves as a festive tribute to the endemic *Artemia monica* of Mono Lake. This *Mono Lake Committee exclusive* is available in either silver or gold.

Brine shrimp ornament, please specify silver or gold (shown actual size): \$10.00

#### EL CAPITAN & HALF DOME EARRINGS

Adorn your ears with these iconic granite formations crafted from sterling silver by local Yosemite artist LothLorien Stewart. This purposefully mismatched pair of earrings features El Capitan and Half Dome, the two most recognizable features of Yosemite National Park, Mono Lake's neighboring park to the west. El Capitan & Half Dome earrings, sterling silver, 1½" long (shown actual size): \$65.00







#### HAND-CRAFTED SOAPS

This fresh and festive soap is hand-crafted in Mammoth Lakes. These bars are available in two seasonal scents that are perfect for the holidays or year-round. Choose "forest bath" to be transported to the woods or "orange clove" to evoke a cozy holiday celebration.

Hand-crafted soaps, approximately 4 ounces, please specify forest bath or orange clove: \$7.50

#### SOY WAX CANDLES

Get swept away to the high desert by the aroma of these hand-poured soy wax candles made in Los Angeles with either piñon or cedar & sagebrush scents. Each candle is packaged into amber glass so they will look and smell lovely anywhere in the home.

Soy wax candles, 7.2 ounces, please specify piñon or cedar & sagebrush: \$18.50







#### HANDMADE CERAMIC MUG

Cozy up with your favorite hot beverage in this beautiful mug, which is handmade by local artist Michael Cooke. These one-of-a-kind mugs are dishwasher and microwave safe with lead-free glazes in rich shades of blue, purple, and green. *Handmade ceramic mug, 12 ounces, handmade items vary slightly: \$32.00* 

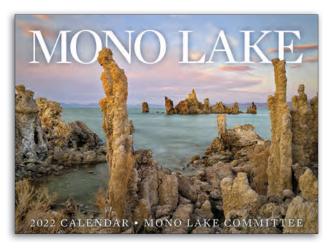


#### 2022 Mono Lake Calendar

The 2022 Mono Lake Calendar features stunning images of our favorite wild and wonderful watershed. Bring Mono Lake into your home 365 days of the year, with views of tufa towers, sunsets, streams, wildlife, storms, fall colors, and winter landscapes as captured by skilled photographers. Printed in the USA on recycled paper. Special bulk pricing is available on orders of two or more calendars.

Mono Lake Committee exclusive.

2022 Mono Lake Calendar, 13"x 91/2": \$14.95





#### MONO LAKE SCENE ORNAMENT

Add the art of John Muir Laws to your holiday decorations with this stainless-steel ornament printed with a vibrant Mono Lake design. This ornament features some of the Mono Basin's notable species and a tufa landscape, all protected under an epoxy coating.

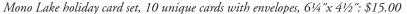
Mono Lake Committee exclusive.

Mono Lake scene ornament, 3" tall: \$10.00

#### Mono Lake holiday card set

Artist Wendy Morgan's original designs make this seasonal card set a beautiful way to send holiday wishes. Each set includes 10 cards with different wildlife designs and the message "May you have a Happy Holiday and joyous New Year" printed in red ink inside.

Mono Lake Committee exclusive.





NUTHATCHES



GOLDFINCHES



HAIRY WOODPECKER



CHICKADEES



BEARS





STELLER'S JAYS



GOLDEN-CROWNED KINGLETS



ERMINE



WHITE-CROWNED SPARROWS

See all catalog products and more in color and place your order online at MONOLAKE.ORG/STORE or call (700) 647-6595.



# Policy notes

by Arya Harp, Claire Landowski, Elin Ljung

#### Los Angeles Mayor visits restoration sites at Rush Creek and Grant Lake Reservoir

While on a multi-stop trip to the Eastern Sierra, Los Angeles Mayor Eric Garcetti added a visit to Rush Creek, Grant Lake Reservoir, and the site of the new outlet that Los Angeles Department of Water & Power (DWP) will soon build to return a healing natural flow pattern to Rush Creek.

Garcetti has served as mayor since the 2013 Mono Basin Stream Restoration Agreement was signed, and he and his administration have helped move that groundbreaking Agreement toward implementation through State Water Board Order 2021-86, which amended water licenses for Rush, Lee Vining, Parker, and Walker creeks.

Garcetti has launched visionary efforts to change water use in Los Angeles in ways that will make the city more self-sufficient in an era of climate change and reduce impacts on distant water sources like Mono Lake and the Owens Valley. The mayor has committed Los Angeles to reducing per capita water consumption by 25% by 2035, sourcing 70% of the city's water locally, recycling 100% of the city's wastewater for potable use, and capturing 150,000 acrefeet of stormwater annually.

#### New Mono Lake District Ranger

In August, Stephanie Heller started her tenure as the new Mono Lake District Ranger. She follows Acting District Ranger Megan Mullowney, who served a summer detail and worked to revitalize relationships between the Inyo National Forest and their many Mono Basin partners.

Much of Heller's 20+ year career with the US Forest Service has involved restoration programs in the Lake Tahoe Basin, where she focused on planning, designing, and implementing stream



Mayor Garcetti, third from right, visited restoration sites at Rush Creek and Grant Lake Reservoir with Mono County Supervisors and Mono Lake Committee Executive Director Geoff McQuilkin.

and meadow restoration projects. Her strong restoration background will come in handy in the Mono Basin, where a robust stream restoration program has been underway for decades and is a celebrated feature of the district.

The Mono Lake District Ranger is an important leadership position that had been missing since it was consolidated with the Mammoth Ranger District ranger position nearly a decade ago. Forest Supervisor Lesley Yen reestablished the role so the Inyo will be able to spend more time and attention on issues north of Mammoth Lakes, including within the specially designated Mono Basin National Forest Scenic Area.

# Hydroelectric relicensing process begins for Lee Vining Creek

Southern California Edison (SCE) has initiated the relicensing process for hydroelectric infrastructure on Lee Vining Creek, seeking a renewal of their 30-year license from the Federal Energy Regulatory Commission (FERC) to continue operating three dams and reservoirs and a power plant in the Mono Basin headwaters. SCE manages the reservoirs and dams at Saddlebag Lake, Tioga Lake, Ellery Lake, and the Poole Powerhouse on Lee Vining Creek.

The existing license was granted in 1997 and will expire in 2027. The five-year application process requires SCE to engage governmental agencies, Native American Tribes, stakeholders, and interested members of the public to gather input on resource concerns related to hydropower operations and to collect study proposals that should be completed as part of the application process. The Mono Lake Committee is participating in the technical working groups that propose and inform these studies, and will be engaged throughout the relicensing process.

SCE's license with FERC for their Rush Creek hydroelectric facilities will also expire in 2027, and that relicensing process will begin this coming winter. The Committee also plans to participate in that process.

#### Chiura Obata Great Nature Memorial Highway designated

In late August, approximately four miles of a high-elevation section of Highway 120 West, near the eastern entrance to Yosemite National Park (Tioga Pass), was dedicated the Chiura Obata Great Nature Memorial Highway in honor of the artist's remarkable life and celebrated work.

Continued on page 26

## Free Drawing to protect Mono Lake

## Tickets due by December 8

hen you enter the Mono Lake Committee's Free Drawing you get a chance to win one (or more) of these exciting prizes, and you give Mono Lake a chance for a bright future. Thank you to all the generous businesses and organizations who donated prizes for this year's Free Drawing, which is one of our largest annual fundraisers. Mail in your tickets today (find them in the center of this Newsletter) for a chance to win and see all the prize details at monolake.org/freedrawing. Thank you, and good luck!

## You could win one of these fabulous prizes:

- two-night stay at the Wawona Hotel in Yosemite, plus a National Parks Annual Pass
- one-night stay at Murphey's Motel in Lee Vining, plus a Mono Basin Field Seminar for two, and coffee from Mono Cup Coffee
- one-night stay at the Double Eagle Resort & Spa in June Lake, full-day boat rental at Silver Lake Resort, a movie at Minaret Cinemas, and a gift card to Stellar Brew
- sailing trip on San Francisco Bay with Captain Kirk's Sailing Adventures and lodging at the Golden Gate Hotel
- June Mountain ski pass
- Tamarack Cross Country Ski Center season pass
- Mammoth Bike Park season pass
- Mono Lake Committee canoe tour for four
- REI camp chair and Rumpl recycled puffy blanket
- Pentax Papilio II 8.5 x 21 binoculars
- gift certificates to Eastside Sports and Great Basin Bakery in Bishop

- one-night stay at El Mono Motel in Lee Vining with a half-day Mono Lake custom trip, plus breakfast at Latte Da Coffee Café
- one-night stay at Lake View Lodge in Lee Vining, plus a Mono Lake canoe tour for two, and lunch at Hermitage Juice Bar in June Lake
- one-night stay at Evergreen Lodge outside Yosemite and a Yosemite Conservancy guided outdoor adventure
- Patagonia Nano Puff jackets
- Patagonia Black Hole backpack or duffel bag
- registration for two for the Owens Lake Bird Festival
- Bodie Foundation custom tour for four
- registration for two for the Mono Basin Bird Chautauqua
- two tickets to the Aquarium of the Pacific
- Mono Lake Committee gift packs: reusable glass cup, T-shirt, hat, and 2022 Mono Lake Calendar
- Mono Lake canvas tote with photography books by Dennis Flaherty, Robb Hirsch, Jeff Sullivan, and Dan Suzio

#### El Mono Motel & Latte Da Coffee Cafe









































# Staff migrations

by Claire Landowski

s another unusual summer season drew to a close, the leaves changed to brilliant yellow and orange and the first snow of the season fell. Here at the Mono Lake Committee we look back proudly on a return to much of our regular summer work during the busy season.

The Information Center & Bookstore was open every day; Field Seminar groups explored the Mono Basin; daily South Tufa tours introduced hundreds of visitors each month to the wonders of Mono Lake; 12 groups visited the Outdoor Education Center; scientific researchers and Committee staff counted birds, monitored streams, and collected samples. A few of us returned to the office for daily work, and we rejoiced in the normality of sharing the day-to-day doings together, in person, rather than exclusively on screens.

We wished bon voyage to Facilities Superintendent **Bill Lundeen**, who migrated to milder climes for the winter. We hope to have him back in the spring, but until then **Alex Miller** will be ably taking up the duties of keeping the Committee buildings and grounds in good shape. Here's hoping Alex has lots of snow to shovel!

With the close of the summer 2021 season, we wished all the best to this year's Mono Lake Interns who moved on. They all did a wonderful job answering questions and handling purchases in the Information Center & Bookstore, telling the Mono Lake story while leading South Tufa tours, and helping innumerable visitors. Will Hamman supported the communications team and completed the Tioga Pass Run; he has taken to the open road for some relaxing travel and visits to friends. After a summer helping with social media and data management, Trevor Lemings headed to the Upper Peninsula of Michigan for an AmeriCorps position as an academic advisor for first-generation and disadvantaged community college students. After supporting several local events and making gains on our photography archiving project, Bree Salazar returned to her home base in Los Angeles to take an interpretive position with the non-profit Community Nature Connection.

We're pleased that **Ryan Garrett** is staying on as a Project Specialist through the winter and spring, so look for him in the bookstore or on your next South Tufa tour. He was indispensable over the summer supporting monitoring projects and bird surveys, and we will be putting his experience in education to good use on a range of projects this winter. We are also welcoming back former Canoe Coordinator **Forrest English** as a Project Specialist for the winter; he will be staffing the bookstore, fulfilling mail orders, and assisting the membership team through the busy holiday season.

In August we were treated to a visit from beloved former staff members **Vern Gersh & Terry McLaughlin**. While Terry hiked with friends in the Ansel Adams Wilderness, Vern relaxed in Lee Vining—though we did briefly put him to work solving a couple of small electrical mysteries at the bookstore that had puzzled us for a while. Thank you, Vern! •



The 2021 Mono Lake Committee staff.

#### Policy notes from page 24

The road dedication proposal was initiated by Robert Hanna, a champion of Mono Lake and a descendant of conservationist John Muir. Assemblymember Frank Bigelow introduced Assembly Concurrent Resolution 112 to designate the highway, which was passed by the California Legislature in September 2020. Kimi Kodani Hill, Obata's granddaughter and the family's historian, supported the resolution.

The resolution summarizes Obata's life, including his formative trip to the Sierra Nevada:

"In 1927, Obata made a six week camping trip to Yosemite and the Sierra Nevada Mountains that proved to be a defining

moment in his professional life, about which he would later say, 'This experience was the greatest harvest for my whole life and future in painting;' Obata's art is infused with his reverence for nature, which he viewed as a powerful spiritual force; he thought of nature as dai-shizen, or Great Nature, reflecting his belief that it is an essential source of inspiration and peace for all human beings; Obata's life and work have been celebrated and exhibited throughout the world, and his legacy remains an inspiration for all Californians."

Go to *monolake.org/obatahighway* to read the full text of the resolution. �



# From the mailbag

News from members and friends

by Ellen King

t was wonderful to welcome people back to Mono Lake this past summer. Greeting people in the bookstore and leading walking tours at South Tufa again felt good—let's hope that we can safely resume canoe tours next year. Thank you to everyone who sent contributions in honor or in memory of friends and loved ones. Your support is what makes our work to protect this special place possible.

#### In honor

Margaret Buckingham of Austin, TX sent a contribution in honor of Lindy Tolbert: "Mono Lake is one of her favorite places in the Sierra." Kristin Carter of Mt. Shasta gave a gift in honor of Tom Carter. Ronald Franklin of Bend, OR made a donation on behalf of the National Sierra Club in honor of Range of Light members Lynn Boulton and Igor Vorobyoff. Jani Krambs of Forestville sent a gift "in honor of our friend, Anne Chadwick, in appreciation of her love and work for nature and the environment." Margret Lohfeld of Los Angeles gave a gift in honor of her brother Martin Engel. Thais Mazur of Mendocino made a donation in honor of John Mazur. Georgia Rudderow of Oakland sent a gift in honor of **David** Lewis, who "believes in the work you do." Bob Rutemoeller of Gualala gave a gift in honor of **Beverley Thompson**. Kristen & Paul Schmidt of Irvine made a donation in honor of **Ed Martinez**.

#### In memory

Betsy Bigelow-Teller of Berkeley sent a contribution in memory of Chuck Teller. Joyce Breslin of Pasadena gave a gift in memory of Robbie Smith. Dan & Mary Cervenak of Sylmar made a donation in memory of Joe Gunto. Britney Charme of Boise, ID sent a gift in memory of Roni Charme. Rayma Harrison of Pasadena gave a gift in memory of Donald Marshall Harrison. Linda Judd of Windsor made a donation in memory of Robert Judd. Doug Leo of Upland sent a gift in memory of Greg Leo. Henry Little & Lydia Mendoza of San Francisco gave a gift in memory

of Anne Degenhardt. Fred Lucas of Owens Cross Roads, AL made a donation in memory of his mother, Alice R. Lucas, "who introduced me to the Eastern Sierra as a boy." Carol Mathews of Walnut Creek sent a gift "in loving memory" of Robert Mathews.

Alice Nakahata of San Francisco gave a gift in memory of Donald Nakahata. Donna Ponzi of Sacramento made a donation in memory of Andrea Mead Lawrence. Ralph Rea of Laguna Woods sent a contribution in memory of his wife Patti Rea. William Scoble of Camden, ME gave a gift in memory of Judy Scoble, who "loved Mono Lake and all of California's wildness." Gitane Serrato of San Pedro made a donation in memory of Rodolfo Carmella Gismonde, "beloved uncle and world traveler, taken from us before his time." **Bruce Stangeland** of Berkeley sent a contribution in memory of Susan Stangeland.

Stephen Tillinghast of Mt. Shasta gave a gift in memory of Mary Tillinghast. Langdon Van of Arcadia made a donation in memory of Tom LaBonge, who "cared for the city of Los Angeles and its ecosystem so much. If there were more people like him, we would have a better world." Linda West & Scott Honkonen of Tucson, AZ sent a gift in memory of Bobbie Vande Griff: "She was a strong advocate for preserving natural beauty." Cheryl Wolff of Walnut Creek gave a gift in memory of **Jeffrey Derr**, "remembering his love of nature and appreciation for the beauty of Mono Lake." Joyce Wulff of Tujunga made a donation in memory of David Wulff.

We received a gift in memory of Chet Anderson from the Chet & Eloise Anderson Fund. The North Channel Yacht Club First Mates of Clay, MI made a donation in memory of Mary L. Richards, mother of Colleen Hall.

We received gifts in memory of **Bruce Cornelius** from **Mike & Sandy Ahrens** of San Francisco—"Bruce and his family so enjoyed their time hiking together around and at Mono Lake;" from **Peter Benvenutti** of Oakland; from **John Fiero** of San Francisco—"Bruce was a fine man with a real appreciation for California and its natural beauty. His passing is a great loss to many;" and from **Arthur Haines** of New Harmony, UT—"Bruce left us far too early. He loved the outdoors, the High Sierra and Mono Lake."

We received gifts in memory of Peter Johnson from Jyoti Amin of Lorton, VA, Phil & Mary Ellen Deardorf of Los Gatos, Paula Matzek of Mt. Prospect, IL, Alka Patel of Oakland, Don & Nancy Sager-Ruggles of Denver, CO, John Schick of Moraga, Paul Schmitt of Petaluma, Kathleen Sturges of Charlottesville, VA and Lynne & Michael Wolf of Fulshear, TX.

Longtime member **John C. McKellar** passed away in August 2021. Jack led many backpacks and hikes in the Sierra, adventuring cross country to remote alpine valleys and lakes. He will be remembered as a chemist, professor, traveler, and environmentalist.

We received gifts in memory of **Peter Zeldis** from **Deborah & Michael Boucher** of Mammoth Lakes and **Bill Zeldis** of Santa Barbara. �



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