

MONO LAKE

N E W S L E T T E R

Winter & Spring 2017



Record-setting Wet Winter

#LongLivetheGulls

Protecting Bighorn Sheep

New Field Seminars

Nimble. That's the word of the year so far for the Mono Lake Committee. We were braced to face a sixth year of drought, with plans and contingencies in place to protect Mono Lake to the best of our ability. And then the calendar ticked over into 2017 and the weather faucets turned on! Suddenly, thankfully, our plans needed some new math.

I guess it shouldn't surprise me—since 1978 we've worked to find solutions to human-created problems, which sometimes requires changing horses mid-stream.

The temporary fence we'll be putting up in late March to protect the California Gull colony is a good example of that: a human-caused low lake level due to excessive water diversions and exacerbated by drought is threatening the gulls. We can do something to help solve the problem—put up a temporary fence until the snow melts and the lake can rise—and so we will. All the while calculating and calculating as Mono Lake rises and the fence can be shortened, instead of lengthened, as we had originally planned.

Bartshé writes on page 24: "Making the best cooperative decisions with the best information available is part of the legacy of the Mono Lake Committee." You'll see that throughout this issue of the *Newsletter*—from our near-weekly hydrologic model runs to factor a big winter into Mono Lake's predicted rise, and how we can work together to best protect endangered bighorn sheep, to what we will do to stay nimble enough to adapt to a changing climate.

—Elin Ljung, Communications Coordinator



After five years of drought, there wasn't much complaining about clearing snow to keep the bookstore and office open and accessible through the winter storms. Andrew and Jess clear the way to the recycling shed.

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.



Mono Lake Office Information Center & Bookstore

Highway 395 at Third Street
Post Office Box 29
Lee Vining, California 93541
(760) 647-6595

info@monolake.org
monolake.org
monobasinresearch.org

Los Angeles Office

1718 Wellesley Avenue
Los Angeles, California 90025-3634

Staff

Executive Director..... Geoffrey McQuilkin
Eastern Sierra Policy Director..... Lisa Cutting
Education Director..... Bartshé Miller
Communications Director..... Arya Degenhardt
Office Director..... Jessica Horn
Membership Coordinator..... Ellen King
Information & Restoration Specialist..... Greg Reis
Sacramento Policy Associate..... Betsy Reifsnider
Outdoor Education Center Manager.....
..... Santiago M. Escruceria
Lead Naturalist Guide..... Nora Livingston
LA Education Coordinator..... Herley Jim Bowling
Communications Coordinator..... Elin Ljung
Information Center & Bookstore Mgr..... Lily Pastel
Bookkeeper..... Donnette Huselton
Membership Assistants..... Maureen McGlinchey,
..... Terry McLaughlin
Project Specialists..... Robert Di Paolo,
..... Gabrielle Renteria, Andrew Youssef

Board of Directors

Sally Gaines, Mammoth Lakes, Chair
Tom Soto, Santa Monica, Secretary
David Kanner, Redwood City, Treasurer
Martha Davis, Nicasio
Vireo Gaines Schiller, Colorado Springs, CO
Richard Lehman, Fresno
Gina Radieva, Sacramento
Sherryl Taylor, Mammoth Lakes
Doug Virtue, San Pedro
Kristine Zeigler, Walnut Creek

Directors Emeriti

Helen Green • Ed Grosswiler
Genny Smith
Brent Coeur-Barron, Corporate Counsel

Founded by David Gaines in 1978

MONO LAKE NEWSLETTER

Winter & Spring 2017
Volume XXXVIII, Numbers 3 & 4

The *Mono Lake Newsletter* is a quarterly publication of the Mono Lake Committee. Written material contained in this newsletter may be quoted or reproduced for review, reporting, educational purposes, or related non-profit uses; a copy of the publication is requested. Reproduction or quotation for other purposes may be approved upon written request.
ISSN #0275-6633. Copyright © 2017 Mono Lake Committee.
Printed on 100% recycled paper.

Mono Lake to stay above critical level

Drought worsened lakebed dust storms

by Geoffrey McQuilkin

The big water question of this year for Mono Lake—I expected—was going to be the same as 2016: Would Los Angeles be halted from exporting water due to Mono Lake's low level, or would the already-reduced export allotment continue?

The rule is well established: When the lake drops below, or is forecasted to drop below, 6377 feet above sea level, water exports must halt. So our action plan was for detailed lake level forecasting and analysis (last year the lake remained a mere two inches above that critical level) and a fair amount of discussion with the Los Angeles Department of Water & Power (DWP), to be sure any export cutback happened smoothly. In fact, I visited with the head of DWP's aqueduct system and water operations in December to talk about this very topic.

But then came January and February, and the weather patterns of the Pacific gave us a rather wonderfully different reality to work with. One after another, atmospheric rivers brought record snowfall to the Sierra Nevada—including the high-elevation

mountainous terrain of the upper Mono Basin watershed. At press time the lake has already risen a foot, and February snow surveys showed the water content of the Mono Basin snowpack at nearly 200% of normal (see page 14).

As a result, I'm crossing "water export cutback" off the issue list for 2017. Analysis by Mono Lake Committee staff and experts shows

there is now essentially no chance that the lake will fall below the key 6377 level this year. That's good news for the health of Mono Lake, and good news for Los Angeles as well.

So what will happen? DWP will be able to export 4,500 acre-feet of water to Los Angeles, an amount set by the California State Water Resources

Continued on page 4



Mono Lake won't drop below 6377 feet above sea level this year, which means that Los Angeles is allowed to export a total of 4,500 acre-feet of water.

Trump executive order affects Eastern Sierra

Regular readers of the news are likely aware that on the day of his inauguration, President Donald Trump put a two-month freeze on pending Environmental Protection Agency (EPA) regulatory actions. Less well known is that this directly affected the Eastern Sierra.

Dust storms at Owens Lake violate the Clean Air Act and, as at Mono Lake, the Great Basin Unified Air Pollution Control District is responsible for implementing a plan to bring the region

into compliance with health standards. This has been a matter of extensive legal dispute with the Los Angeles Department of Water & Power, but a 2014 settlement led to a new path forward. The agreements were formalized in a 2016 State Implementation Plan (SIP) which must be reviewed and approved by the EPA. That process was at its final stage, with the SIP scheduled to become legally binding on January 27, 2017—seven days after the inauguration.

The executive order, so far, delays the

effective date of the Owens plan and 29 other regulations to March 21. On the one hand, this may simply give new EPA staff time to become familiar with the plan, and it will go into effect as written. On the other hand, it is possible that new EPA Administrator Scott Pruitt might seek to revise or otherwise weaken the plan, altering the positive settlement of a contentious, long-running Eastern Sierra health issue. We will know more when March 21 arrives.

Control Board in its 1994 Mono Lake decision. The decision also allows for larger exports of up to 16,000 acre-feet if the lake is above 6380 feet on April 1. That was the regular export before the drought, but is an improbable scenario this year.

The year's export allocation points to a larger truth: this wet weather is a welcome change in hydrologic direction, but recovering from the five-year drought is a tall order. The lake won't leap back to recover the seven feet lost during the drought years in a single season. And it still has 14 feet to rise to reach the ecologically sound management level of 6392 feet set by the State Water Board.

Evidence of the drought—which included the driest year ever recorded in the Mono Basin—is easily seen in the lake level. The impacts of a low lake are many—ranging from increased salinity impacts on the ecosystem to exposure of the California Gull colony to predators crossing the landbridge (see page 5).

Air quality is another connected, and critical, area of drought impact. As the lake drops, more salty lakebed is exposed to winds that whip up dust storms containing fine particles and toxins that are hazardous to human health. Indeed, the drought exposed an additional six and a half square miles of lakebed by December 2016.

Every year, wet or dry, these dust storms violate Clean Air Act standards—a problem that will be solved when the lake reaches its all-important management level. Recent

As Mono Lake drops, more salty lakebed is exposed to winds that whip up dust storms that are hazardous to human health. Indeed, the drought exposed an additional six and a half square miles of lakebed by December 2016.

data shows that these dust storms have become more numerous as a result of the drought.

The Great Basin Unified Air Pollution Control District (Great Basin), the agency in charge of regional air quality enforcement, operates a sophisticated set of monitoring equipment to measure airborne dust from the exposed lakebed. In fact, Owens Lake and Mono Lake produce the largest particulate air pollution events in the nation, and Great Basin has had to develop special instruments and protocols uniquely tailored to these very dense dust storms. We checked in with them recently to learn what effects the drought has had in the Mono Basin.

Did the drought years produce more frequent, or bigger dust storms?

Not always. In the first years of the drought, violations numbered ten or more annually, which was fewer than expected. The most likely reason was that weather patterns were not conducive to generating large dust events.

As the drought continued, though, and Mono Lake continued to drop, things got notably worse. The last drought year, 2016 (with the lowest lake level since 1995), set new records. "Exceedances" are days when, over the course of 24 hours, the average particulate count exceeds the federal standard. 2016 produced 33 such days—about 30% more than the previous record number. And it wasn't just the number of days: 2016 also set a new record for dust storm severity. The maximum recorded particulate density was 6,507 micrograms per cubic meter—25% higher than the previous record and a whopping 43 times the federal health standard.

The fix to this serious problem is straightforward: raise the lake. The State Water Board noted that a key purpose of the 6392-foot management level is to "reduce blowing dust from presently exposed lakebed areas in order to protect health and comply with federal air quality standards." Answering the question of how long that will take is an active area of analysis and modeling. Wet winters, like the one we are seeing now, will raise the lake, and each bit of progress toward the management level will be a positive step in controlling dust storms and complying with the Clean Air Act. ❖



Mono Lake and Owens Lake produce the largest particulate air pollution events in the country, like this dust storm in October 2016.

Gull protection fence to go up in March

Epic winter lifts spirits but won't raise Mono Lake in time for nesting season

by Geoffrey McQuilkin

Plans continue to advance for installing a temporary electric fence on the exposed landbridge to protect Mono Lake's nesting gulls from mainland predators.

The problem is that five years of drought lowered Mono Lake seven feet, shrinking the protective moat of water between the lake's north shore and Negit Island and adjacent islets that are home to one of the world's largest nesting colonies of California Gulls. Last summer signs were found on several of these islets that coyotes crossed the remaining 500 or so feet of shallow water to prey on eggs and chicks.

Ultimately Mono Lake will rise, covering the landbridge and restoring the natural watery protection that the gulls have relied on for safety for centuries. But in the meantime, the Mono Lake Committee has been working with California State Parks, in consultation with the Department of Fish & Wildlife and US Forest Service, on a plan for a solar-powered electric mesh netting fence, similar to those used with livestock on ranches. The fence will be temporary and fully removable when the lake rises above the threshold of concern, and it will be removed for the fall and winter to avoid obstructing wildlife outside the nesting season.

Not enough water in the moat

Currently there is not enough water in the moat separating the gull colony from the landbridge to provide safety. When researchers found clear signs that coyotes had crossed to some



In December, the Committee and partners put up a test fence on the landbridge and determined that the mesh netting stands up well to the elements.

of the islets last summer, Mono Lake stood at 6378.3 feet above sea level—only a few inches higher than the current lake level. Although the impact of the breach was limited, the concern is that knowledgeable coyotes are likely to return and use their experience to explore deeper into the colony.

Analysis to determine when a fence is needed requires careful examination of lake levels. As the lake has fallen during the drought, 6378 feet has been the “trigger” level for starting the project, representing a level at which island access is clearly possible and the cost and effort of mounting a fence project in response is worthwhile. The lake fell below 6378 feet in September 2016 and plans for fence construction moved to implementation as a result (see Fall 2016 *Mono Lake Newsletter*).

The construction trigger, however, is not the same as determining when the gull colony is naturally protected by the lake. With the winter turning unexpectedly wet, the Committee has begun to focus less on “when a fence is needed” and more on “when it is *not* needed.” At 6380 feet, the moat grows wide enough and deep enough to serve as a natural deterrent to coyote access.

Thus the question we've been spending time analyzing (while the office has been buried under snow): How high will Mono Lake rise—and how fast?

Timing is everything

California Gulls arrive at Mono Lake during the waning days of winter and start building their nests and laying eggs

#LongLivetheGulls crowdfunding campaign

Want to help keep the gulls safe? Visit monolake.org/gullfence to watch our short video about the project and see the perks you can receive for backing the campaign!

Equally important, please take a moment to tell your friends and family—on Facebook, by email, on Instagram, by telegram—whatever you prefer. On social media, use #LongLivetheGulls.

We're hoping to raise the \$15,000 needed for the fence materials so we can install the fence by April 1. We, and the gulls, thank you.

Continued on page 6

in April. Gulls are consistent about this schedule pretty much regardless of weather conditions because they have an important deadline to beat: chicks need to hatch, grow, learn to fly, and be strong enough to head to the coast before the next winter arrives.

However, winter snows don't usually melt enough to significantly raise Mono Lake's level until around June. So even if storms continue to cross the Sierra Nevada and drop much-needed snow in the Mono Basin watershed, the major lake rise from that meltwater will arrive in summer, long after the gulls need protection for the nesting season.

Committee staff and experts have been forecasting lake level rise using four different scenarios that are updated frequently as winter precipitation stacks up. At press time the takeaway is this: due to the extremely wet year, Mono Lake is likely to rise to 6380 feet, but not until the first half of July. This matches the regular pattern of lake rise in wet years and confirms that the fence is still needed this year.

Variations on the theme

Depending on how wet the remainder of the winter is, some variations on the main fence plan may be in order. For example, the planned route is designed to accommodate the lake level falling during the four months of the nesting

season. Now that the reverse situation has arrived, with the lake expected to rise monthly through the spring and summer, the fence route can be adapted and possibly shortened.

Could upcoming storms make a difference?

Even with the above points in mind, it is reasonable to ask whether it is possible that the winter will end up so wet that a fence will not be necessary. After all, the snowpack was 200% of average on February 1.

The answer is: it is highly unlikely. The drought has impacted Mono Lake and all of California heavily, and recovering from those impacts, particularly lake level decline, will take more than a single wet year. In the Committee's lake level projections the chance of an extraordinary end to the winter causing the lake to rise fast and high enough to eliminate the need for the fence is essentially zero.

We will continue to watch closely to see how the lake level forecast develops. Should an unprecedented rise become a reality we will gladly cheer the snow gods, celebrate Mono Lake's rise, and put the fence plans on the shelf in case of a future drought. But analysis tells us the lake won't rise in time to protect the gulls, and so the fence is needed. As a result the Committee and partners continue to advance the fence effort with implementation expected in March. ❖

2016 Mono Lake California Gull report

by Kristie Nelson, Point Blue Conservation Science

In 2016 Point Blue Conservation Science monitored Mono Lake's California Gulls for the 34th consecutive year, in order to help understand how wildlife populations respond to change over time. A number of significant finds were documented.

For reasons not entirely clear, the population size was the lowest ever recorded. One contributing factor was that many nests, which should have contained eggs about to hatch in late May, were found mysteriously empty on Twain and Tahiti islets. Predation, either by an invading predator or by neighboring gulls (who will consume their neighbors' eggs if they are disturbed off their nests) is suspected.

Additionally, fresh coyote scat and tracks were relatively abundant on Negit Island, and scat was found on Java islet. This marks the first time that coyotes have been detected on Negit Island or islets since 1996. It also means that coyotes swam to access these sites. In addition, we found what appeared to be coyote scat on Twain islet—home to about half the nesting gull population. We are awaiting genetic confirmation from the scat samples, and if coyote is verified, this will mean that a coyote made a fairly lengthy swim to access this crucial gull nesting site.

Find the full 2016 California Gull report online at bit.ly/CAGUreports.



Gull biologist Kristie Nelson trekking out on the landbridge with fence materials as part of the gull protection fence test run.

Mono Lake shoreline wetlands destroyed

Damage generates response from multiple agencies

by Lisa Cutting

Three acres of sensitive State Park land on Mono Lake's west shore were illegally cleared last fall; fortunately, quick agency response halted the activity and contained the damage. Enforcement actions are now underway.

In mid-October, Mono Lake Committee staff noticed that work, contracted by the Tioga Lodge to remove burned trees from its property below Highway 395 after the Marina Fire began to encroach on State land (see Fall 2016 *Mono Lake Newsletter*). The activity occurred despite clearly-identified property survey markers and repeated communication from State Park staff alerting the contractor to the State land boundary. When grading crossed onto the Mono Lake Tufa State Natural Reserve, the Committee alerted state and local agencies.

Extent of the damage

Before authorities could stop the destructive excavating, dense unburned willow thickets and shrubs were ripped out and a once-lush lake-fringing wetland was left barren and exposed. The contractor also leveled the area—stacking the cleared vegetation in piles to be burned. Exacerbating the damage,

non-native grass seed was distributed over the cleared State land.

In addition to the damage to State Park land, Post Office Creek—which flows through Tioga Lodge property—was fully diverted out of its natural channel and re-routed into an artificial pond, without the appropriate permits. The original riparian corridor was filled with soil and compacted, with all vegetation buried. A new ditch was created below the pond, also on Tioga Lodge property. Because of this activity, now when Post Office Creek leaves the Tioga Lodge property it spreads out across the ground well away from the original creek channel, eroding soil from State Park land before flowing into Mono Lake.

Strong and swift agency response

The complexity of the situation—multiple violations on both State and private property—prompted action from multiple agencies. Mono County was the first to respond—issuing a cease and desist order to stop the non-permitted grading on the Tioga Lodge property itself. Although probably the least ecologically-significant of all the infractions, that order stopped



Water from Post Office Creek eroding its way toward Mono Lake after it was diverted out of its natural channel.

all work and provided time for enforcement personnel from California State Parks, the Department of Fish & Wildlife (DFW), and the Lahontan Regional Water Quality Control Board (Lahontan) to respond.

Each state agency involved in this situation has a unique and specific authority. In this particular case, Lahontan is responsible for protecting the water quality of Mono Lake, Post Office Creek, and the wetland areas. DFW's jurisdiction relates primarily to protecting Post Office Creek's natural flow and the integrity of its stream banks. DFW codes prohibit relocating creek channels and altering stream banks without a permit; violations may result in civil or criminal prosecution. State Parks is responsible for protecting and managing the lands and waters within the Mono Lake Tufa State Natural Reserve, which is protected by law.

Violations result in fines and remedial action

It is unclear why the owner of the Tioga Lodge directed this work, especially in light of the clearly-visible

Continued on page 25



In October, grading below the Tioga Lodge crossed onto State Park land, damaging wetland habitat that was recovering from the Marina Fire that burned last summer.

Charting weather extremes and understanding climate change impacts

by Bartshé Miller

A wet winter and record January have brought needed relief to a drought-stricken Mono Lake. However, a glimpse at Lee Vining weather data reveals that predictions about climate change in California and the Sierra Nevada are becoming real.

Warming temperatures, along with more extreme and less-frequent precipitation, are reflected in our local weather. The record-setting drought of the last five years still casts a shadow across the Mono Basin. Multi-year impacts to the watershed and ecosystem have accumulated due to record high temperatures, remarkably low runoff, and wildfires. As climate forces further change, monitoring, assessment, and adaptation will be critical to the future restoration and protection of Mono Lake.

The soggiest month

This January set a record for the wettest month in Lee Vining's weather data history. For three decades, Mono Lake Committee staff have been recording daily temperature and precipitation data at a National Weather Service cooperative weather station. In January, the station registered 11.23 inches of precipitation, beating out all previous January totals by a wide margin and topping the previous all-time wettest month of 9.85 inches (March 1995). January in Lee Vining is, on average, the wettest and coldest month of the year. While snowfall was impressive during the month, snowfall alone did not set a record. Atmospheric river events brought high snow levels and significant rain. Warmer and wetter storms with higher snow levels continued through the first two-thirds

of February. The unusual amount of rain is a reminder that, while there may be snowy years even in a warming climate, Lee Vining is at an elevation (6,780 feet) where small increases in sea surface and atmospheric temperatures will translate into more winter rain.

Climate change research suggests that precipitation in California may become more intense and variable, with longer dry stretches. Local weather data reflects this. In the last 19 months, Lee Vining has set three all-time high calendar month precipitation records: May and July 2015, and January 2017. These record months appear within extreme drought and since the historically-low Mono Basin snowpack and runoff of 2015.

Warming in the numbers

Average temperatures have been increasing in California since the 1980s. Every climate division in the state shows warming in the long-term data. Lee Vining weather data also points to warming. In 2016 there were a record 18 days at 90°F or higher, topping the previous record of 14 days in 2002. Since 2006, the annual average number of days at or above 90°F has nearly doubled from 4.2 to 8.2. Warmer winter days are also on the increase. In 2015 there were a record 14 days during January and February that were 60°F or higher; in 2016 there were 7 days. From 1989 to 2005, the average was 0.4 days. In the last ten years that average has increased almost sevenfold to 2.7 days in January and February. Looking back over five years of temperatures in town, 48 of the last 60 months have been warmer than average.

Precipitation and lake level

One of the questions we hear often is “what will happen to Mono Lake with climate change?” There is no simple answer, and it's a broad and complicated subject depending on which aspect of the lake you're talking about—ecosystem, tributary streams, or lake level. Despite the recent punishing drought, which reduced the lake level by nearly 7 vertical feet, we still expect Mono Lake to continue a long-term trek to its management level. Mono Lake has a management plan that includes reduced diversions during drought conditions, and wet years have the capacity to quickly erase lake level deficits caused by drought. For example, during a very wet 1995, Mono Lake rose 3.5 feet, reversing the impact of previous dry years. Both rain and snow run off and eventually reach Mono Lake but it's the quantity of precipitation over many years that matters for lake level. Increasing temperatures do increase evaporation, but this may have less

Continued on page 24



January 2017 set a record for wettest month in Lee Vining's weather data history: 11.23 inches of precipitation.

Important opportunity for bighorn sheep

County could eliminate disease risk for local herd

by Lisa Cutting

The herd of Sierra Nevada bighorn sheep that live in Lundy Canyon reside precariously close to domestic sheep that are grazed each summer on Conway and Mattly ranches under a lease from Mono County. Decisions made by the County in coming months could prove to be pivotal to the overall health and long-term recovery success of the entire endangered species.

Bighorn sheep are susceptible to a strain of pneumonia carried by domestic sheep. The disease is transmitted through contact between the species, is nearly always fatal to the bighorn, and can only be avoided through physical distance. Even one incident of transmission could quickly wipe out the entire Lundy herd and threaten adjacent herds in Yosemite National Park and at nearby Mt. Gibbs and Alger Lakes.

The agencies responsible for the recovery of the bighorn have long known about the disease risk and for years have been urging the County to eliminate domestic sheep grazing on their lands. The US Fish & Wildlife Service and the California Department of Fish & Wildlife have gone so far as to track bighorn sheep movement daily when domestic sheep are on the County's property to ensure that contact is not made. While bighorn sheep summer mostly at high elevations, documentation exists of bighorn moving to lower elevations at times—including venturing east of Highway 395 onto Conway Ranch.

Mono County evaluating options

The current sheep grazing lease expires in November 2017. Because the lease is up for renewal, the County has an opportunity to make a change. Recently, the Board of Supervisors and County staff have been focusing on understanding the current science related to the disease risk and evaluating grazing options for the property.

A comprehensive management plan for Conway Ranch has long been discussed but does not exist. Therefore, the primary guiding policy is a conservation easement that was established in 2014 (see 2015 Winter & Spring *Mono Lake Newsletter*). The easement carries forward the management goals associated with the original grants the County used to purchase the property in 2000. The primary easement requirements include maintaining the property for wildlife habitat, deer migration corridors, and open space protection. Other uses—such as fish-rearing and livestock grazing—are allowed on the property as long as they aren't in conflict with the primary requirements.



PHOTO COURTESY OF CHRIS CLEVELAND

Mono County has an opportunity to protect the Lundy Canyon herd of bighorn sheep by not renewing domestic sheep grazing leases in the Mono Basin.

Science supports separation of sheep species

The risk of pneumonia is one of the most critical factors affecting the recovery of the Sierra Nevada bighorn sheep population. Domestic sheep and goats carry, and can survive with, the bacteria that causes the pneumonia. But the bacteria is fatal to bighorn, and there is currently no vaccine. It has been documented that when a bighorn sheep population gets infected, as much as 90% of the herd can die. Even if some individuals survive, their lambs do not, often dying before weaning. Additionally, when infected bighorn migrate, they can spread the bacteria to other herds, which is ultimately how entire herds get wiped out.

Despite claims otherwise from some in the sheep grazing community, the evidence, based on multiple studies, is clear. Physical distance between the bighorn and domestic sheep is the *only* reliable way to reduce the potential for disease transmission.

Bighorn sheep should be protected

The Mono Lake Committee has encouraged Mono County to eliminate the risk to the Sierra Nevada bighorn sheep population by eliminating domestic sheep grazing on Conway and Mattly ranches. The expiring lease presents the County with an opportunity to support the recommendations of state and federal wildlife agencies to protect an important endangered megafauna species.

In lieu of sheep grazing, there are other options that the

Continued on page 26

SoCal water notes

by Robert Di Paolo

Each March when a handful of Mono Lake Committee staff visit Sierra Madre near Los Angeles for the Wild & Scenic Film Festival, I always notice the varying residential landscapes in the area. Neighborhoods have the occasional green lawn, but there are also yards featuring drought resistant plants, rock gardens, or simply dry grass—many staked with yard signs proclaiming “Take the Pledge, I’m a Water Saver!” The message to save water certainly seems to be taking root, but last year one yard in particular really stood out from the rest.

Mono Lake Committee member Carolyn Dasher’s front yard is covered in wood chips and has a rock-filled trench that stretches the entire length of her 50-foot yard. This trench is one of four “swales” on the property that allows water to flow easily and efficiently into the ground. Carolyn reconfigured her 16,000-square-foot property so that all rainwater landing in the yard and on the house flows to one of the four swales. When it rains the swales fill up like bathtubs and allow the water to slowly permeate and be stored in the soil for the plants on the property and the surrounding area.

So I wondered, what inspired her to do all of this?

“It started in September of 2014,” Carolyn told me, “when I took a class at the arboretum in Arcadia, California about ‘lasagna mulching’ from The Growing Club.” Lasagna mulching is a process used to condition soil to be more absorbent and fertile. Carolyn’s grass lawn prior to the swale project had compacted the soil, dried up, and actually inhibited water from penetrating the ground. By layering cardboard, composted horse bedding, and wood chips over the grass (like a lasagna), the remaining lawn was broken down to return nutrients to the less-constricted soil. After introducing worms and nitrogen-fixing plants to promote soil health, the yard was softer to walk on within two weeks and already more absorbent. The four swales were then constructed according to a survey of the property to distribute the water evenly with special consideration for the lemon, tangerine, fig, and persimmon trees in Carolyn’s yard.

The purpose of having swales is simple: keep water on your property and help recharge the aquifer. But in many ways

that philosophy goes against traditional perceptions of what you want to do with urban runoff. In most urban areas, concrete structures and roads cause rainwater to accumulate above ground instead of entering the soil. Anticipating this accumulation, urban planning has often focused on quickly moving water from the street into a conveyance system that ultimately spills out into the ocean. Opportunities to store water in the soil with landscaping like Carolyn’s means less stress on sewer conveyance systems, and simultaneously decreases outdoor water use. This is a great example of how California’s five-year drought has started to pull communities out of traditional mindsets about water use.

When Carolyn first began the surveying and permitting process to create the swale network on her property, there was hesitation from community members with concerns about issues with flooding. However, since its completion, community classes, the mayor, and many residents of Sierra Madre have toured the project. Carolyn’s yard, as well as two additional swales located near city hall, the police station, and the fire station in Sierra Madre have become well known demonstration pieces, garnering respect and admiration.

Different communities currently have different processes for proper permitting to construct a swale, but as more people become interested in and find the means to develop this type of project it will be easier to implement swales in the future. With efforts from individuals like Carolyn and larger communities alike, we can reinvent California’s relationship with water.

Interested in learning about other projects like this in LA? Visit waterla.org and thegrowingclub.com. ❖



PHOTO COURTESY OF CAROLYN DASHER

“Lasagna mulching” is one step in the process of creating swales.



Luna

by Lisa Godenick, Outdoor Education Instructor

The full moon begins to show its subtle beauty as I sit atop Sagehen Peak looking towards the White Mountains. We are here with Pacoima Beautiful, the first environmental justice non-profit in the Northeast San Fernando Valley. There are ten students and four leaders, and we are all huddled together in awe of the moonrise.

These students are so excited to learn—about the wildflowers, about the volcanoes, about their watershed. One leader said, “I waited an entire year to swim in Mono Lake and see mile zero of the LA Aqueduct.” The leaders are not the only ones intrigued by the Eastern Sierra; Mono Lake captures the attention of people of all ages and backgrounds. Earlier in the day one of the students had asked “How can we best promote water conservation in our hometown?”

How can we? I realize that water conservation and a love for the earth can only come through education and experience, both of which the Outdoor Education Center programs offer. After all, how can you love a place that you have not been in? Seen, touched, smelled, tasted, breathed? Experiential education offers something that typical classrooms do not—the chance to be part of the environment and ecosystem.

For kids, this is the difference between caring about something and feeling empowered to make a difference and merely reading about a conservation issue in a textbook. As one student expressed, “This program motivated me to continue to save water even if you’re the only person doing it. One person can make a big difference.” Experiential education is the opportunity to be a whole person—to use both sides of the brain and heart.

You can find Lisa Godenick’s entire essay and more inspiring stories by Outdoor Education Center instructors at monolake.org/today.



Wishlist

At the Outdoor Education Center we keep a library of books to encourage curiosity and learning, as well as a library of gear to encourage students to enjoy the outdoors safely. Do you have items that could help us stock our libraries? We are looking for:

- Inspiring books about nature and people for adults and youth
- Warm and sun hats, gloves, jackets, hiking boots—outdoor gear that is in good useable condition

If you have items to donate, please contact Santiago Escruceria (santiago@monolake.org) at (760) 647-6595.



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

PHOTOS BY SANTIAGO M. ESCRUCERIA

Policy notes

by Lisa Cutting

Phase one of Rockfall Project completed

The two-year construction work to stabilize slopes west of Highway 395 adjacent to Mono Lake was completed on time last fall despite unexpected challenges resulting from a wildfire that burned through the project area in June (see Fall 2016 *Mono Lake Newsletter*).

Begun in 2015, the Lee Vining Rockfall Safety Project was implemented to reduce rockfall occurrences along a narrow stretch of Highway 395 north of Lee Vining and adjacent to Old Marina, making the highway safer for motorists. Phase one of the project—scaling slopes of loose material and installing anchored mesh—was the most visually prominent part of the project. But it is phase two—the five-year vegetation establishment program—that offers the greatest long-term slope stabilization through natural plant growth and regeneration. This two-phase approach is unique among Caltrans projects, and will help ensure that all of the project goals are achieved.

As the vegetation recovery phase gets underway, there are multiple remedial actions that can be triggered throughout the five-year time period if progress goals are not met. This innovative approach, which the Mono

Lake Committee helped build into the project during the planning stages, ensures that the goals of vegetation recovery—soil rehabilitation, slope stability, and reestablishment of native plants—are achieved even if additional treatments are needed.

Marina Fire barricade and fence

With the Rockfall Project construction work completed, all equipment and fencing along Highway 395 north of Lee Vining was supposed to be removed, leaving only anchored mesh on the slopes. And yet, a white concrete barricade and heavy duty high fencing is still there—this equipment remains not due to the Rockfall Project, but because of the Marina Fire, which burned in June 2016.

Post-fire safety measures were implemented during the final Rockfall Project construction work last fall. The white barricade and high fence that now line the shoulder of the west side of Highway 395 are there as a precautionary measure to prevent debris and/or rocks from falling onto the highway since the burned slopes no longer have vegetation to naturally stabilize them. So far the slopes have held their ground even with the heavy rain and snow in January and February.

The Committee supports using the barricade and fencing for safety, but once the slopes have proven to be secure and able to withstand Mono Basin weather, the Committee expects that agencies will conduct a reassessment so the barricade and fence can be removed.

Mono County District 3 leadership change

After 14 years of public service, Tim Alpers has retired and relocated with his wife Pam to Reno, Nevada. He served four terms as Mono County Supervisor, which ended at the close of 2016. Involved in many facets of Mono County politics, Tim shaped and supported several initiatives, including the 2009 Wilderness additions to the Inyo and Humboldt-Toiyabe National Forests, designating the Upper Owens River as a Wild & Scenic River, and helping to protect Conway Ranch in the Mono Basin—both the initial acquisition by the County in 2000 and also the eventual permanent protection through a conservation easement with the Eastern Sierra Land Trust in 2014.

Perhaps best known for his “Alpers Trout” originally raised at his historic ranch on the Owens River, Tim also led the way in championing recreational fishing opportunities in the Eastern

Continued on page 13



Phase one of the Lee Vining Rockfall Safety Project along Highway 395 west of Mono Lake was completed on time last fall. Safety measures installed after the Marina Fire, including white concrete barricade and heavy duty high fencing, will remain until the slopes are secure.

Sierra and worked diligently to enhance and protect those resources.

The new supervisor following in Tim's footsteps is Bob Gardner. Bob grew up in Bishop and returned to the Eastern Sierra two years ago after a 30-year career in federal government service, which included financial management positions in Washington, DC. No stranger to community government, Bob served on the Redlands City Council for four years. Since returning to the area, Bob has been the Executive Director of the Eastern Sierra Interpretive Association

and is currently the President of the Eastern Sierra Land Trust.

Frances Spivy-Weber's State Water Board term ends

After two re-appointments and ten years of serving on the California State Water Resources Control Board, Frances Spivy-Weber's tenure ended in mid-January. As vice-chair, Fran helped to lead the five-member board in protecting water quality and water supply throughout the state. The State Water Board is responsible for allocating and balancing surface water

for agricultural use, public trust values, and urban water needs. All of these tasks were particularly challenging during the recent drought years.

Fran is no stranger to Mono Lake, having served as Mono Lake Committee Executive Director from 1997 to 2006. She deeply understands the importance of the Mono Lake–Los Angeles water connection and was a consultant to Los Angeles Deputy Mayor Nancy Sutley in 2006. Additionally she has served on water efficiency committees, state water planning task forces, drought planning workgroups, and many other water conservation entities.

As the public representative on the State Water Board, Fran helped greater Los Angeles—one of the largest urban areas in the state—continue to make impressive water conservation gains. Programs encouraging people to replace lawns with drought-tolerant landscaping, greywater system development, as well as programs to decentralize water recycling systems, which promoted expanded recycled-water use, were central to Fran's work. Thank you, Fran, and congratulations on your years of service! ♦



PHOTO COURTESY OF JEFF SIMPSON

Tim Alpers, second from left, with Supervisor Stacy Corless, the Committee's Geoff McQuilkin, and Supervisor Larry Johnston at Tim's final Mono County Board of Supervisors meeting.

Tioga Inn project at the Mobil gas station moving forward

Mobil Station owners have begun working with Mono County to secure necessary approvals to add development components to the property's Specific Plan, which was approved in 1993. The "Tioga Inn" specific plan already allows a two-story, 120-room hotel and a 100-seat restaurant. The owners are proposing to change the plan to allow a three-story, 120-room hotel, two restaurants, and other modifications. The existing Whoa Nellie Deli would remain in operation.

Even though the Tioga Inn specific plan components were approved 24 years ago, the proposed changes and additions must be analyzed

under the California Environmental Quality Act (CEQA), and a Subsequent Environmental Impact Report (SEIR) must be prepared and evaluated. Mono County solicited scoping comments from the public last fall and has promised that the SEIR will be "comprehensive in scope, addressing the full range of potential environmental issues."

The Mono Lake Committee's scoping comments called for the SEIR to include thorough water supply studies—including evaluation of any impacts to nearby Lee Vining Creek—and for the SEIR to conduct detailed visual impact studies since the project is adjacent to the Mono Basin National Forest Scenic

Area. The Committee's comments also recommended updated studies on impacts to both wildlife and the town of Lee Vining. See the Committee's scoping comments at monolake.org/tiogainn.

The Tioga Inn draft SEIR is expected to be released sometime in 2017 contingent on the completion of necessary studies, at which point the public will have an opportunity to comment. Contact Gerry LeFrancois (glefrancois@mono.ca.gov) at the Mono County Community Development Department for information about the draft SEIR release and comment period.

Streamwatch

Big snowmelt runoff expected in 2017

by Greg Reis

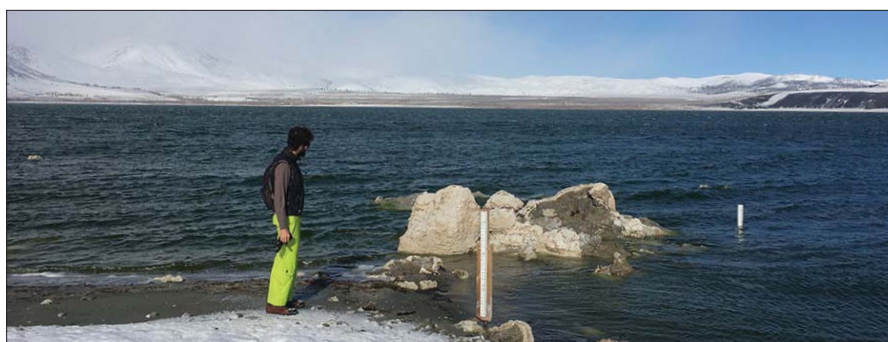
A very wet October started off the 2017 water year (October 1, 2016–September 30, 2017), and by the end of December, precipitation remained slightly above average but snowpack was below average. Then in January and February a series of atmospheric rivers channeled moisture from the tropics into California. At Cain Ranch, it was the third-wettest January in 86 years (after 1969 and 2006). As of mid-February, the water year was already wetter to date than any since 1978.

January was warmer than average at higher elevations, but large amounts of snow accumulated above 9,000 feet even during the warmest storms. The Mono Basin didn't experience flooding, but Yosemite Valley—just 16 miles west of where the Mono Basin and Merced River watersheds meet—was flooded in early January and again in early February. On the same days, Mono Basin streams peaked below typical summer snowmelt

peak flows. Had all the precipitation fallen as snow, Lee Vining would have experienced a 1969-like “snow emergency” of more than double the 51 inches of snow accumulation that were measured in January.

Most of the water from those storms is still in the snowpack, and more continues to accumulate. With an expected “Extreme Wet” year-type—the runoff forecast based on the February 1

snowpack is 179% of average—large peak flows similar to what occurred in 1995 will occur on each of the streams in spring and early summer. If Grant Lake Reservoir spills by mid-July, Rush Creek might have its highest flow since 1998. Peak flows provide water and energy needed to restore stream health, which means 2017 will be an exciting year for Mono Basin stream restoration! ❖



The January 11, 2017 lake level reading revealed that Mono Lake had risen nearly 4 inches in the first eleven days of the new year.

ANDREW YOUSSEF

Lakewatch

Mono Lake is rising; 200% of average snowpack so far

by Greg Reis

Due to record drought over the four-and-a-half years prior to December, Mono Lake dropped 6.9 feet—just a tenth of a foot less than the drop during the 1987–1992 drought. At the end of December, it was looking likely that another dry winter would extend the drought another year. Then two weeks of storms turned things around in a big way—and the storms just kept coming.

Mono Lake rose 0.9 feet to 6378 feet above sea level between January 1

and February 14, more than the 0.7 feet of precipitation received at Cain Ranch during that time. Due to the rain shadow effect of the Sierra escarpment, Mono Lake receives a smaller proportion of the Cain Ranch weather station total, but high snow levels during the early January and February storms meant that a lot of rain fell, causing additional runoff to flow into the lake.

As of February 14, Mono Lake was back at last year's February level. Unlike last year, when snowpack and runoff were below-average, the February 1 snowpack was 200% of average. Assuming average conditions in the future, that amount of snow is likely to generate enough spring and

summer runoff to raise the lake another two and a half feet by the end of gull nesting season (end of July). If the rest of winter and spring are wet, a three-foot rise is not out of the question. Already, enough snow is poised to melt that Mono Lake at its seasonal fall low point in 2017 will be close to its 2013 level—in a single year reversing the decline from the last three years of the five-year drought. ❖

Greg Reis is the Committee's Information & Restoration Specialist. He is excited that Mono Basin streams may experience runoff similar to 1995, which was his first year in the Mono Basin, and which was significantly exceeded only by 1983 runoff.

6417'

Prediversion lake level, 1941

6392'

Management lake level

6378'

Current lake level

6372'

Historic low, 1982

Mono Basin Journal

A roundup of quiet happenings at Mono Lake

by Geoffrey McQuilkin



GEORGE MCQUILKIN

Last fall a parade of lake level gauges stretched across dry sand, measuring nothing, leading to the sole gauge remaining in the lake. Now two have their feet in the water thanks to this unexpected, surprisingly wet winter, which has become the source of many snowy Mono Lake adventures only dimly remembered after the long drought years.

Just getting across snow berms and drifts to the lake is an event, with the regular access roads and sites all buried under multiple feet of snow. Skis and snowshoes are favorite methods.

Or there are other ways: a kayak proved to be fairly easy to slide down to the lake's icy waters in January. With fresh snow caps crowning each tufa and thick poconip ice fog just

starting to lift, the lake was a wonderland of light, silence, and sights of a kind I have rarely seen here. Big, bulky Osprey nests entirely hidden but for a twig or two poking from the snow. Delicate rime ice frills hanging off snowy tufa. Thin sheets of ice where a shoreline spring floated fresh water out onto the salty lake. Pillows of snow atop every tufa that broke the water's calm surface.

The scene was white and grey, a monochrome palette, but for one thing: the deep green waters of the lake, a sign that algae are thriving as they always do, building a rich crop of food for next year's brine shrimp, just as the mountains are building a deep crop of snow to feed a happily rising Mono Lake. ❖

Benchmarks



ANDREW YOUSSEF

February 16, 2016: Although last winter was wetter than the previous four, warm temperatures quickly melted the snow. February 1 Mono Basin snowpack was 90% of average.



LIVY PASTEL

January 23, 2017: Snow blankets the entire Mono Basin after a series of atmospheric rivers brought significant precipitation. February 1 Mono Basin snowpack was 194% of average.

Leopold's capacity for self-renewal

by Bill Trush

Editor's note: Each year we ask a writer to contribute to the Mono Lake Calendar—this essay is from the 2017 calendar.

Each field season traveling south to “the lake” I stop at the Highway 395 overlook located just before the highway twists its way down to the Mono Basin floor. If I am lucky, no one else is there. I get out of the car, stretch (after the ten-hour drive from Humboldt County), then find just the right boulder to sit on, or two boulders to nestle between, depending on the wind. This is my time to get reacquainted. I have been privileged to study an incredible ecosystem that has schooled me patiently and made me a better scientist. I particularly like arriving near nightfall.

Hello Mono Lake. Nice to be here again. Remember me? I inhale deeply to taste and smell the thin air. I strain to see Rush and Lee Vining creeks on the far side of the lake. Just as I thought, both creeks are still there. I note the lake level and the wave pattern (if sufficient light) generated by the prevailing wind. If the ants do not find me, I might remain a half hour or two. Eventually, though in just a moment, I know it is time to go. I jump up, stretch again, and get back into the car now ready to attack the week ahead.

I'm one of the original “three amigos” stream scientists

(Rich Ridenhour and Chris Hunter the other two) brought on board by Judge Finney in 1994 to break an impasse. The Restoration Technical Committee, tasked by the California State Water Resources Control Board to guide restoration in the Mono Basin, got bogged-down frequently because of its five-member consensus decision-making. With us three independent scientists as additional committee members, the judge's new six-vote majority greatly improved the committee's overall productivity.

A PhD restoration scientist should know how to evaluate ecosystem health, just as any medical doctor does for patients. Most people would agree that a doctor should hold some professional insight as to what a healthy patient is when asked. But I've disappointed students and colleagues for years by not offering a legitimate definition for “ecosystem health.” I've tried hard; even Wikipedia failed me. In front of seven hundred attendees at an aquatic ecosystem conference in Seattle, I resorted to quoting from the Tao Te Ching when asked the dreaded question. You really could hear a pin drop. My quest for this holy grail of a single sentence (and an end to public embarrassment) ended unexpectedly two years ago at a screening of *Green Fire*, a documentary on Aldo

Continued on page 25



PHOTO COURTESY OF FRICK KATTELMANN

An aerial view of the Lee Vining Creek delta, photographed during one of the five Eared Grebe surveys that take place by airplane each year.

2017 Field Seminars



PHOTO COURTESY OF RICHARD ERB

Breeding Birds of the Mono Basin

June 2 • Nora Livingston

\$95 per person / \$85 for members

Early summer is a great time to find breeding birds in the Mono Basin singing from the tops of every tree and shrub to declare their territories to rivals and protect their mates. This one-day seminar will visit the hotspots in the Mono Basin to learn about the many birds that raise their young here.

Mono Basin Spring Landscapes & Astrophotography

June 2-4 • Jeff Sullivan

\$275 per person / \$250 for members

Spring is a special time for photographers in the Eastern Sierra, with wildflowers emerging, snow lingering on Sierra Nevada peaks that catches the morning alpenglow, and afternoon cumulus clouds for potential sunset color, typically yielding to clear skies for night photography. Local professional photographer Jeff Sullivan will show you some of his favorite techniques and spots for landscape and night photography in the Mono Basin.

Mining the Past through Binoculars

June 3 • Nora Livingston

\$95 per person / \$85 for members

The Mono Basin is rich with Native American, mining, logging, and ranching history. This seminar will visit historic locations that give background to the tenacious pioneers, legendary basket weavers, and hardscrabble miners who came before us. We'll also learn about the animals and plants that inhabit these places now.

Birding Mono Basin Hotspots

June 4 (half day) • Nora Livingston

\$75 per person / \$65 for members

Mono Basin creeks and canyons are hidden jewels for breeding and migrating songbirds in a region where high desert habitat dominates. This half-day birding trip will explore lush riparian areas that are hotspots for bird activity. Expect to see warblers, sapsuckers, pewees, buntings, sparrows, towhees, vireos, and if you're lucky, an American Dipper or Townsend's Solitaire.

This year we have expanded our Field Seminar offerings to include several new one-day and half-day seminars led by the Mono Lake Committee's Lead Naturalist Guide Nora Livingston. To register for a seminar, visit monolake.org/seminars or call (760) 647-6595.

Twilight Birding & Owling

June 7 (half day) • Nora Livingston
\$60 per person / \$50 for members

Evening in the Mono Basin is spectacular—clouds light up with vivid color, fading light turns the landscape an inky blue, and unique wildlife emerges. Spend the twilight hours with a naturalist while the sun sets. We will look for songbirds as the light fades, search for twilight specialists like Wilson's Snipe and Common Nighthawk, scan the trees for owls, and scour the back roads for poorwills.

Mono Basin Moonlight Photography

June 9–11 • David Gubernick
\$275 per person / \$250 for members

Nighttime opens up a new world of photographic possibilities, both compelling and challenging. Through guided practice sessions, field trips in the Mono Basin and upper reaches of the Eastern Sierra, coaching in the field, and review of images, professional photographer David Gubernick will help you learn to create nighttime images with visual impact.



ARVA DEGENHARDT

Seeing the full moon rise above Mono Lake is unforgettable.

Natural History of Mono Basin Woodpeckers

June 13–15 • Steve Shunk
\$165 per person / \$150 for members

Woodpeckers are one of the most specialized bird families in the world, and at least nine species of woodpeckers occur regularly in the Mono Basin, making the forests around Mono Lake a perfect stage for observing these amazing forest carpenters. Join North American woodpecker expert Steve Shunk for this dynamic overview of Mono Basin woodpeckers. This field seminar will complement the Mono Basin Bird Chautauqua, taking place June 16–18, 2017.

Twilight Birding & Owling

June 22 (half day)
Nora Livingston
\$60 per person / \$50 for members

See the June 7 seminar description on this page.

Miwok-Paiute Basketry

June 23–25 • Julia Parker, Lucy Parker, Ursula Jones
\$265 per person / \$250 for members
\$80 materials fee
seminar takes place at Mono Lake County Park; no camping included

During this seminar, participants will prepare materials and create a small Miwok-Paiute basket. This seminar is designed for weavers of all levels, who either wish to learn a new basket material technique or are new to basket weaving. It will take place at Mono Lake County Park, on Mono Lake's northwest shore (the August basketry seminar will take place at a private campsite near Lundy Canyon). Spend the weekend overlooking Mono Lake in the cool shade of the park, learning to weave from three generations of local master basket weavers: Julia Parker, her daughter Lucy, and Lucy's daughter Ursula.

Los Angeles Aqueduct Tour

June 23–25 • Greg Reis
\$165 per person / \$150 for members

The Mono Basin extension of the Los Angeles Aqueduct began transporting water 350 miles south to the City of LA in 1941. Visit all the major aqueduct facilities in the Mono Basin and learn about their modern relationship with Los Angeles, Mono Lake, and its tributary streams. We'll discuss past and present diversions and see how modifications to 20th century infrastructure can serve 21st century water needs. In this record-setting wet year, this seminar will likely coincide with peak flows on the streams—flows not seen since 1995!

Natural History Ramble

June 28 (half day) • Nora Livingston
\$75 per person / \$65 for members

At the edge of the Great Basin high desert and the steep eastern escarpment of the Sierra Nevada, the Mono Basin has beautiful and diverse habitats, as well as ample opportunities to observe wildlife, wildflowers, and wild views. Hike with a naturalist guide on this half-day seminar and learn to identify local plants, birds, mammals, clouds, rocks—you name it!

Looking for a new bird species for your life list? Email guides@monolake.org for a custom trip.



ELIN LJUNG

Join one of the three wildflower seminars to discover the plethora of blooms that grace the Eastern Sierra each summer.

Birding Between the Breweries

June 29 (half day) • Nora Livingston
\$135 per person / \$125 for members

Mono County is notable for spectacular scenery, great birding, and a growing collection of high-elevation breweries. Combine your love for birds and brews on this relaxing afternoon trip, which will introduce you to some great birding at a few local hotspots as well as great beer at hotspots of another kind. Bring your binoculars, proof of age, and thirst for birds (beginners and experts welcome). We will provide a ten-person van and sober birding guide(s). One beverage per person per brewery is included in the tour fee; participants may purchase additional beverages and food.

Wildflower Waltz

June 30 (half day) • Nora Livingston
\$75 per person / \$65 for members

Working on your wildflower identification? This will be the perfect year to practice as the flowers will be out in abundance, taking advantage of plentiful runoff from this wet winter. On this half-day seminar we will scour meadows and canyons for the plethora of blooms that grace the trails. We will focus on identification and natural history of the flowers we see. Great for photographers and budding botanists.

Mono Basin Natural History: Aquatic & Terrestrial Habitats

July 7-9 • David Wimpfheimer
\$190 per person / \$175 for members

The Mono Basin is one of the most diverse ecosystems on the continent; this field seminar will be an overview of the varied habitats that are found here. We will enjoy the rich diversity of mammals, butterflies, wildflowers, trees, and other plants as we explore the Mono Basin, and a major focus of this

seminar will be the identification and ecology of birds that breed here. A guided canoeing exploration of Mono's south shore is included in this seminar.

Full Moon Adventure

July 9 (half day) • Nora Livingston & staff
\$165 per person / \$150 for members

There is no better way to deeply immerse yourself in the majestic calm of Mono Lake than to experience it by moonlight. This special program starts with a natural history walk in the late afternoon and the opportunity to canoe on Mono Lake during the full moon rise. If the weather doesn't allow us to canoe, we will hike up Panum Crater to watch the moon rise. Afterwards, we will wander in the brightly moonlit Jeffrey pine forest for storytelling and sky-gazing.

Sierra Nevada Wildflowers

July 14 • Nora Livingston
\$95 per person / \$85 for members

Summer in the Sierra brings a flood of flowers, and there is endless learning to be had. In this one-day seminar, we will scour lower-elevation wet meadows and canyons for the plethora of blooms that grace the trails, focusing on identification and natural history of the flowers we see. Great for photographers and budding botanists.

Capturing the Mono Basin in Pastel

July 14-16 • Ane Carla Rovetta
\$175 per person / \$160 for members
\$50 materials fee*

The sparkling light and radiant skies of the Mono Basin are pure inspiration. Add a set of brilliant pastel chalks and your own unique imagination, and you have an incredible weekend



SANDRA NOLL

Canoeing among the tufa towers is one of the best ways to experience Mono Lake's aquatic ecosystem.

PHOTO COURTESY OF KRISTIE NELSON



A West Coast Lady, *Vanessa annabella*, is one of the many butterfly species found in the Mono Basin.

of color exploration and art. Artist Ane Carla Rovetta will guide students through a value system she modeled after Ansel Adams' work that will help organize the overwhelming hues of the summer terrain. Each participant will go home with at least one small finished painting and several sketches, color studies, and value experiments that will fuel future artistic endeavors. **Ane Carla can provide you with your own set of 72 pastel chalks; you must reserve your set when you register.*

Butterflies of the Mono Basin & Sierra Nevada

July 15–16 • Kristie Nelson
\$155 per person / \$140 for members

Join local naturalist Kristie Nelson for an exploration of butterflies of the Mono Basin and Sierra Nevada high country. With a range of habitats and plant species on which butterflies depend, this region is an excellent place to get acquainted with these bright splashes of living color. In fact, the Tioga Pass region is known to be one of the most productive and species-diverse regions for butterflies in the United States.

Natural History Ramble

July 19 (half day)
Nora Livingston
\$75 per person /
\$65 for members

See the June 28 seminar description on page 18.

Interested
in a private tour at
Mono Lake? Email
guides@monolake.org
for a custom trip.

Wildflower Waltz

July 21 (half day) • Nora Livingston
\$75 per person / \$65 for members

See the June 30 seminar description on page 19.

Mono Basin & Bodie Photography

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

Professional photographer David Gubernick creates a warm and supportive atmosphere for learning photography techniques in the uniquely beautiful Mono Basin and at the world-renowned Bodie State Historic Park. Field trips and classroom sessions will combine to cover a multitude of photographic topics. Plus, the group will visit Bodie for private after-hours evening access.

Mono Basin Mammals

July 21–23 • John Harris
\$165 per person / \$150 for members

This class will cover the diversity of mammals found in the Mono Basin, from desert sand dunes to forests and alpine meadows of the high Sierra. More mammals occur here than in many states, and the group will try to see as many as possible by live-trapping and field observation. Participants will look for tracks and learn to identify skulls, focusing on identification and adaptations to Mono's varied environments.

Volcanism at Mono Lake

July 28 • Nora Livingston
\$95 per person / \$85 for members

Mono Lake sits in a bowl formed by ancient volcanic sediments and recent volcanic eruptions. This one-day seminar will visit several volcanic formations around the lake while discussing the overall picture of volcanism in the Mono Basin and its role in shaping the landscape we see today.

En Plein Air at Mono Lake: Beginning Oil Painting

July 28–30 • Penny Otwell
\$175 per person / \$160 for members

Painting outdoors allows an instant connection with landscape,

monolake.org/seminars or (760) 647-6595 to register

and the textural possibilities and complete-coverage quality of oil paint allow students to portray their own unique feelings in their work. This field seminar is designed to be an introduction to the sometimes-intimidating subject of oil painting for students who may or may not have experience painting, but who want to learn oil painting outdoors.

High Country Plants & Habitats: How are they coping with climate change?

July 28–30 • Ann Howald
\$165 per person / \$150 for members

This class will explore the mosaic of habitats found in the Eastern Sierra high country—flower-filled meadows fed by meandering streams, sagebrush-covered slopes, lodgepole pine forests, subalpine lakes bordered by willows, and flowery rock gardens. A special focus will be the ways high elevation plants and animals of the Mono Basin are affected by climate change, now and in the future.

Full Moon Adventure

August 7 (half day) • Nora Livingston & staff
\$165 per person / \$150 for members

See the July 9 seminar description on page 19.

Natural History Ramble

August 10 (half day) • Nora Livingston
\$75 per person / \$65 for members

See the June 28 seminar description on page 18.



SANDRA NOLL

*Brewer's Sparrows, *Spizella breweri*, are one of the many bird species that inhabit the Mono Basin's sagebrush scrub.*

Birding the Migration: Mono Basin & Bridgeport Valley

August 10–11 • Dave Shuford
\$155 per person / \$140 for members

Birding the Migration: Mono Basin & Long Valley

August 12–13 • Dave Shuford
\$155 per person / \$140 for members

The east slope of the Sierra Nevada is a major migration route for birds traveling from northern nesting areas to warm southern habitats. As a result, late summer is the time of year to see fall migrants and early-arriving wintering birds in the Mono Basin, Bridgeport Valley, and Long Valley. In these seminars we will learn to identify about 100 species by plumage and calls, and we will discuss migration strategies, behavior, and ecology that complement our field observations.

Mining the Past through Binoculars

August 16 (half day) • Nora Livingston
\$75 per person / \$65 for members

See the June 3 seminar description on page 17.

Birding the White Mountains

August 19 • Nora Livingston
\$95 per person / \$85 for members

The gradient from the Owens Valley up to the White Mountains provides a great swath of diverse habitat, from desert oasis to high-elevation piñon-juniper woodland. On a day of birding like this, one could easily see over 100 species in eight hours. This seminar will search high and low for a great variety of species and end the day tallying up the list at the Mountain Rambler Brewery in Bishop.



SANDRA NOLL

Birding field trips have been a popular part of the Mono Lake Committee's education program since its founding in 1978.

A Long Journey: Shorebird & Waterfowl Migration

August 20 • Nora Livingston
\$95 per person / \$85 for members

As birds fly south for winter it's common to wonder, "Where exactly are they going? Where are they coming from? How long does it take them to get there? How do they know where to go?" This one-day seminar strives to answer these questions during a fun time in the field observing these lightweight travelers as they fuel up along their migration. We will focus on waterbirds and shorebirds, but there will be plenty of landbird migrants to see as well.

Birding Between the Breweries

August 24 (half day) • Nora Livingston
\$135 per person / \$125 for members

See the June 29 seminar description on page 19.

Miwok-Paiute Basketry

August 25–27
Julia Parker, Lucy Parker, Ursula Jones
\$265 per person / \$250 for members
\$80 materials fee
primitive group campsite included (no pets)
See June 23–25 seminar description on page 18.

Geology of the Mono Basin

August 25–27 • Greg Stock
\$165 per person / \$150 for members

From volcanic craters to glacial moraines, earthquake faults to tufa towers, the Mono Basin displays some of the most unique, spectacular, and accessible geology anywhere in the world. In this seminar, consisting mostly of field visits to locations

like Tioga Pass and Panum Crater, Greg Stock will guide you through eons of fascinating Mono Basin geology.

Full Moon Adventure

September 6 (half day) • Nora Livingston & staff
\$165 per person / \$150 for members

See the July 9 seminar description on page 19.

Fire Ecology of the Eastern Sierra

September 9–10 • Malcolm North
\$155 per person / \$140 for members

We live in a pyrogenic landscape, where most forests are born and shaped by fire. Fires are inevitable in much of the western United States, but many modern fires burn differently than what forests evolved with. This seminar will visit several recent fires in the Mono Basin, show fire effects on forest ecosystems, and discuss the good, bad, and ugly of current fire management and policy.

Don't see the trip you're looking for? Email guides@monolake.org for a custom trip.

Mono Basin Tree Identification

September 15 • Nora Livingston
\$95 per person / \$85 for members

This one-day seminar will delve deeply into the diversity of trees in the Mono Basin and their identifying traits. We will examine, observe, and even smell the trees to help ingrain the knowledge into our senses.

Visions of the Past: Sierra Gold, Aurora Silver

September 16–17 • Terri Geissinger
\$155 per person / \$140 for members

The gold-mining operations of Bennettville and the Log Cabin Mine and the silver-mining town of Aurora offer visions of the past to those who visit these now-deserted outposts at the Sierra crest and in the high desert. At Bennettville and the Log Cabin Mine we will get a sense of the miners' struggle to hit pay dirt at the highest elevations of California, overlooking Mono Lake. After traveling the legendary Aurora cutoff route we will be treated to spectacular views and tales of Aurora's lively history.

Geology of the Mono Basin

September 22–24 • Greg Stock
\$165 per person / \$150 for members

See the August 25–27 seminar description on this page.



Learn about the fascinating geologic history of the Mono Basin with Yosemite National Park geologist Greg Stock.



Autumn in the Mono Basin is a stunning season, perfect for ambling through aspen groves with a camera in hand.

Creating the Illuminated Field Journal

September 29–October 1 • Hannah Hinchman
\$175 per person / \$160 for members

A field journal is an ideal vehicle to record moments of discovery about the natural world, as well as a quiet way of simply being present outdoors. In this workshop, artist and writer Hannah Hinchman will guide you in exploring the variety of nearby habitats—opening windows to nature’s many secrets and learning to personalize these experiences through journal entries, both drawn and written.

Fall Color Foray

October 4 (half day) • Nora Livingston
\$75 per person / \$65 for members

Every fall, quaking aspen trees famously paint the landscape with golden hues as their leaves change. This half-day seminar

will hit the hotspots of colorful groves during peak season. We will enjoy glittering golden, ruby, and emerald forests while learning about aspen ecology. Great for photographers.

Full Moon Adventure

October 5 (half day) • Nora Livingston & staff
\$165 per person / \$150 for members

See the July 9 seminar description on page 19.

Mining the Past through Binoculars

October 7 (half day) • Nora Livingston
\$75 per person / \$65 for members

See the June 3 seminar description on page 17.

Fall Color Foray

October 12 (half day) • Nora Livingston
\$75 per person / \$65 for members

See the October 4 seminar description on this page.

Mono Basin Fall Photography

October 13–15 • Robb Hirsch
\$275 per person / \$250 for members

Autumn in the Mono Basin is one of the greatest photographic experiences in the country. Spectacular foliage and skies combine with exceptional light, presenting ample subject matter for photographers in both color and black-and-white. Explore shoreline locations at sunrise and sunset, fall color in nearby canyons, and grand overviews of the Mono Basin with Robb Hirsch, who, as a past naturalist and educator, has a positive and engaging teaching style.

Fall Color Foray

October 16 (half day) • Nora Livingston
\$75 per person / \$65 for members

See the October 4 seminar description on this page.

Field Seminar Information

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

To see full 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.

2016 Free Drawing for Mono Lake

by Gabrielle Renteria

The 2016 Free Drawing for Mono Lake was a success! Thank you to everyone who entered—your generous contributions ensure that Mono Lake will be enjoyed by generations to come. Congratulations to this year's winners, and a huge thank you to the generous sponsors who donated the prizes that make this fundraiser so successful.

Stephen Gliessman & Robbie Jaffe of Santa Cruz won the iPad Mini 4. Southwest Airlines tickets: Marty Mosman



Gabby pulls a ticket for the 2016 Free Drawing as Lily, Robbie, Geoff, and Andrew await the winner's name.

of Nevada City. Cali4nia ski pass: Charles & Mary Mae Kilpatrick of Bishop. Mono Basin adventure vacation: Laurie Stowe of Groveland. Yosemite holiday retreat: Dave Coronel of San Luis Obispo.

A day on the Bay went to Luella Hoge & Terrie Bressette of Sacramento. Hope Valley escape: Rasa Mikalonis of South Pasadena. Crowley Lake vacation: Yvonne Zellmer of West Hills. Death Valley golf weekend: Marilyn Thorpe of Laguna Woods. Benton Hot Springs escape: Tim & Debby Anderson of Santa Barbara. Friends of the River rafting and more: Adonis De Jesus of Glendora.

Neil & Mimi Burton of Kentfield were the lucky winners of the Eastern Sierra getaway. Golden Gate vacation: John Quinn of Santa Rosa. Bishop escape: Raymond Rose of San Diego. Mammoth Lakes vacation: Joan Weaver of Chatsworth. Tamarack cross country ski pass: William Fjellbo of Coarsegold. Bodie adventure: Richard Fish, Jr. of Canyon Country. Kings Canyon National Park vacation: Debra Jurey of Templeton. Channel Islands experience: Theresa Voss of Auburn.

Chris Brundle of Soquel and James Lewis of Irvine won the Patagonia jackets. Mono Lake Committee gift packs: Janis Davies of Westwood and Gordon Milldrum of Reno, NV. Aquarium of the Pacific passes: Anna Fitzgerald of Ridgecrest. A day at the Huntington: Mary Richards of Porter Ranch. Friends of the Inyo membership: Dean Pregerson of Pacific Palisades. ❖

Climate change from page 8

of an impact on lake level compared to small increases or decreases in overall annual precipitation and runoff. We will probably see more intense droughts in the decades ahead, but it's also possible we will see more intense precipitation when it does occur. How this affects Mono Lake over the years is uncertain; this year's April 1 lake level reading and snowpack measurements will be important data points for Mono Lake after five years of drought.

Runoff timing still matters. Mono Basin streams formed over the millennia with a winter snowpack that melted off gradually through the summer months. Hydropower and diversion infrastructure was engineered to work with this natural hydrograph too. As warming temperatures, earlier runoff, and extreme precipitation events occur, the entire watershed undergoes change from the alpine regions to the Mono Basin bottomlands. The task of restoring the streams becomes increasingly difficult and management challenges multiply as the amount and timing of water passing through dams, reservoirs, and diversion infrastructure changes.

Science pathway

Climate change poses challenges to the protection and restoration of Mono Lake. Relatively small annual increases in temperature or changes in hydrology can alter underlying chemistry and physics and the biological systems they support. From bacteria, to bitterbrush, to birds, the ecosystem we have known at Mono Lake and in the Eastern Sierra will shift with the climate. Determining the character and degree of these changes, and understanding the best way to adapt to them, will require continued monitoring, science, and collaboration.

Making the best cooperative decisions with the best information available is part of the legacy of the Mono Lake Committee. Continuing that tradition is one of the many ways the Committee will adapt to climate change too. We will continue to operate a small field station, support research, conduct analysis and forecasting, and gather important data, including weather data, in downtown Lee Vining. ❖

survey markers. Some speculate that a business expansion is in the works, possibly involving a campground. Regardless, Mono County's building codes require securing permits in advance of project work on private property. The County is now requiring that the property be returned to its original state before permit approval will even be considered.

All of the violations carry some form of fine and corrective action as well as the possibility of criminal prosecution. The agencies have been working in a coordinated fashion—gathering information, assessing damage, and striving to reach resolution with the owner as quickly as possible. State Parks

has completed a detailed assessment of the resource damage to State property and is developing a restoration plan. For Lahontan and DFW, the main priority is to return Post Office Creek to its natural channel before spring runoff occurs.

The Mono Lake Committee is keeping a close watch on the area first affected by the Marina Fire last summer and now this additional disturbance and damage to the creek and wetlands. The Committee will continue to work with the agencies to restore this fragile and important wetland habitat along Mono Lake's shore—a public resource that belongs to all of us, not just to one property owner. ❖

Leopold from page 16

Leopold's legacy as the most influential conservationist of the 20th century. In the complete dark of the theater, I wrote down the four magic words on a dollar bill retrieved from my wallet, to never forget.

He didn't need to call an ecosystem an "ecosystem" back in the 1930s and 1940s to know what an ecosystem is. In fact, I don't think there has been an ecologist, alive or dead, that has achieved Leopold's understanding. Instead of "ecosystem" he called it the "land organism."

Conservation is a state of health in the land. The land consists of soil, water, plants, and animals, but health is more than a sufficiency of these components. It is a state of vigorous self-renewal in each of them, and in all collectively. Such collective functioning of interdependent parts for the maintenance of the whole is characteristic of an organism. In this sense land is an organism, and conservation deals with its functional integrity, or health.

—From Leopold's 1944 essay *Conservation: In Whole or in Part?*

For me, no other definition comes close. The *capacity for self-renewal*—those four words I wrote on the dollar bill—could apply to defining our personal health as readily as it does an ecosystem's. Perhaps that is why Leopold's definition is so appealing. But does Leopold's definition trade an indefinable noun (health) for an indefinable phrase (capacity for self-renewal)? What does capacity for self-renewal really mean, and as a scientist, how do I measure it objectively?

With more water reaching Mono Lake, the State Water Board directed the stream scientists to specify how streamflow releases could (paraphrasing from the Order) restore functional and self-sustaining stream systems and trout populations with healthy riparian ecosystem components to Rush Creek and Lee Vining Creek. Though lacking the near poetic ring of "capacity for self-renewal," the State Water Board's intent was the same: determine what the capacity for self-renewal requires. We embarked on an eight-year monitoring program funded by the Los Angeles Department of Water & Power that lasted closer to

12 years to find out.

In 2010, the Synthesis of Instream Flow Recommendations Report was submitted in its final version to the State Water Board by now only two amigos, Ross Taylor and me. Our affinity for recovering ecological processes did not mirror the State Water Board timetable for meeting carefully crafted restoration termination criteria. Luna Leopold, Aldo Leopold's son and my advisor/friend at UC Berkeley, elegantly defined (a chip off the old block?) a process as *a physical impetus with an expected response*. Table 3-1 in the Synthesis Report links streamflows to key desired ecological outcomes. For example, the release of streamflows below Grant Lake Reservoir simulating a snowmelt flood in late-spring (the physical impetus) elevates the groundwater table, thereby accelerating recovery of Rush Creek's floodplain cottonwoods (the expected ecological response/outcome).

When will we know that the capacity for self-renewal in Rush and Lee Vining creeks, and throughout the Mono Basin, has been achieved? In some ways, I think the capacity has already arrived, through the tireless diligence of many. However, the one prime recovery ingredient for which we have no authority or leverage is time. The closest we can hope is assuring ourselves and all interested parties that the recommended actions (i.e., the impetuses) will produce the desired ecological outcomes on which self-renewal relies.

While at the Rush Creek delta as night fell, I sensed the wheels of renewal continuously turning all around. I remembered Yogi Berra's enigmatic quote: *The future isn't what it used to be*. It made me smile, then sigh. Our reassembled Humpty Dumpty of stream ecosystems will have pieces missing and missed. But then I realized with some relief that the future never is. ❖

Bill Trush is Co-Director of the Humboldt State University River Institute and Adjunct Professor in the Department of Environmental Science & Management in Arcata, California. Appointed by the State Water Resources Control Board, he has been a stream ecosystem scientist in the Mono Basin since 1995.

Join the Mono Lake Volunteer program

by Jessica Horn

The Mono Lake Volunteers play an increasingly essential role in educating people about Mono Lake. The group, which has grown to more than 60 people of all ages, contributes to visitors' experiences at South Tufa and the State Reserve boardwalks at County Park and Old Marina. Each summer, volunteers spend thousands of hours in the Eastern Sierra giving Mono Lake tours to summer visitors from all over the world, helping with Mono Lake Committee membership mailings, pulling invasive plant species to help restore Mono Lake's tributary streams, and more.

This year, in an effort to make it easier for new volunteers to join, we have a new training schedule. Training will take place from 9:00AM to 4:00PM in a three-day block over one weekend, starting Friday, June 2 with South Tufa roving and natural history of Mono Lake, and culminating in the graduation ceremony on Sunday, June 4 at 4:00PM.

Retired State Park Ranger Janet Carle teaches the volunteer training, and with her vast knowledge of the area helps the Mono Lake Volunteers be some of the most knowledgeable people in the basin. During the three-day training, volunteers will learn about the geology of Panum Crater and get introductions to Old Marina, County Park,

and the north shore. Volunteers will tour the Mono Lake Committee, the Old Schoolhouse Museum, and the Mono Basin National Forest Scenic Area Visitor Center as well.

New volunteers are required to attend all three days of this free training, and are asked to donate roughly eight hours a month to the program, from June through August, on a flexible schedule. Participants must be at least 18 years old, be able to walk short distances, and stand for two hours.

The Mono Lake Volunteer Program is a joint initiative sponsored by California State Parks (the Mono Lake Tufa State Natural Reserve), the US Forest Service, and the Mono Lake Committee, with support from the Eastern Sierra Interpretive Association and the Bodie Foundation. Volunteers have opportunities to work with all of the partners.

The program would not be possible without the hard work of Karen Gardner, Mono Lake Volunteer Coordinator. We extend a huge thank you for all of the time and work that both Karen and Janet devote to the Mono Lake Volunteers.

If you are interested in volunteering, or for more information, please contact Office Director Jessica Horn (jessica@monolake.org) at (760) 647-6595. ❖



PHOTOS COURTESY OF KAREN GARDNER

Tour training at South Tufa with State Park Ranger Dave Marquart.



Janet Carle and Karen Gardner of the Mono Lake Volunteer program.

Bighorn sheep from page 9

County should consider for the historic ranch property, including other forms of livestock grazing such as cattle. Overall, the County should approach its decision from the perspective of what is best for this piece of land and all wildlife, especially the protected species, which include not only Sierra Nevada bighorn sheep but the Bi-State population of Greater Sage Grouse as well.

What actions will keep the land healthy? What actions will support wildlife needs and satisfy the requirements of the conservation easement? And, most importantly,

what will protect the Lundy Canyon bighorn sheep herd from fatal disease? The answers to these questions will provide valuable guidance as the County moves forward and considers its options. It is clear what is best for Sierra Nevada bighorn sheep. ❖

Lisa Cutting is the Committee's Eastern Sierra Policy Director. She's excited that the Red-winged Blackbirds have returned—singing in the falling snow—signaling that spring hiking and fishing are not far off.



From the mailbag

News from members and friends

by Ellen King

As I reflect on my decade of working at the Mono Lake Committee, one of the best parts of my job is opening the mail to find your contributions in honor or in memory of your friends and loved ones. These gifts help us carry on the work that will keep Mono Lake a special place for many generations—thank you.

In honor

Kathy Barger of Newcastle sent a contribution in honor of **Mavis Grover** “who passed away this past June. I worked for her at Saddlebag Lake Resort 48 years ago for a few years. I loved coming down to Lee Vining to do laundry with her. Through her I was introduced to the High Sierra and all its beauty.” **Marybel Batjer** of Reno, NV gave a gift in honor of the **McVicar/Batjer families** of Smith Valley, Nevada. **Carol Blaney & John Sun** of Redlands sent a contribution in honor of “our loved and loving daughter **Isabel**, who thrilled at the beauty of Mono Lake and the east side of the Sierra.”

Rosanne Catron of Reno, NV made a donation in honor of her father **James Wilson** and “all his hard work to protect our public lands.” **Margaret Dean** of Minneapolis, MN wrote, “I just donated because I visited Mono Lake for the first time and am very interested in it. I am the beneficiary of **Sitze family** hospitality and I made this donation in their honor.” **Karen DeMello** of Mountain View sent a contribution in honor of **Tim Alpers**. **Jane Grossman** of Reno, NV gave a gift in honor of **Brad Rassler**.

Steve Long of Petaluma made a donation in honor of the entire **Long family**. **Angela Moskow** of Albany sent a contribution in honor of **Peter Vorster**. **Sherreye Plowman** of Chilhowie, VA gave a gift in honor of **Patsy Hess**. **Ron Rutkowski** sent a contribution in honor of **Patricia Rutkowski & Lauren Mitchell**. **Joy Zimnavoda** of Redondo

Beach made a donation “in honor and appreciation of **Janet Carle**.”

In memory

Bea Beyer of Mammoth Lakes gave a gift in memory of **Eva Beyer**. **Martha Davis** of Nicasio made a donation in memory of **Grace DeLaet**. **Edith Gaines** of Los Angeles sent a contribution in memory of her son **David’s** birthday—December 30, 1947. **Ann Howald** of Sonoma gave a gift in memory of **Dr. J. Robert Haller**, “my mentor and friend.”

Don Jackson of Forestville made a donation in memory of his father **William Jackson**. **Jill Lachman** of Long Beach sent a contribution in memory of **Rick Knepp**. **Matthew Lawrence & Kimberly Seater** of Seattle, WA made a donation “in loving memory” of **Andrea Lawrence**. **Carol Mathews** of Walnut Creek gave gifts “in loving memory” of **Robert Mathews**. **Susan McLean** of Ukiah made a donation in memory of **Vernon D. Bennett, Jr.** **Mark Perry** of Bakersfield sent a contribution in memory of **Donald Haworth**. **Mary Lou Reed** of Coeur d’Alene, ID gave a gift in memory of **Scott Reed**, “who loved the lake.”

Louise Rose of Agua Dulce made a donation in memory of **William Rose**. **Soibian Spring** of Crowley Lake wrote, “this donation is made with the memory of **Chesley Spring** and the love of **Charles Duncan** in mind.” **Jacqueline Whited** of Torrance sent a contribution in memory of **Lyle Whited**.

Qualified charitable distributions from an IRA

We’ve recently received inquiries from members about making a qualified charitable distribution from an IRA to the Mono Lake Committee. We asked our financial advisors for guidance, and here’s what we learned:

If you are required to take a minimum distribution from your IRA, you can donate it to a charity as a qualified charitable distribution. These distributions are both federal and California income tax-free to the donor (consult a tax professional if you live in a state other than California). Qualified charitable distributions may be made from any IRA or an individual retirement annuity, but not from a simplified employee pension, a simple retirement account or an inherited IRA.

The IRA trustee or custodian must make a transfer *directly* from your IRA to the Mono Lake Committee. (Funds that have been distributed from an IRA to the IRA owner and are then contributed to a charity do not qualify for the tax exemption.) We will send you a letter acknowledging receipt of your donation that should be kept for your tax records. ❖

Ellen King is the Committee’s Membership Coordinator. Despite having to learn again how to drive in winter conditions, she is thrilled at the wild winter we’ve been having. Her drive to work takes her along Mono Lake’s shoreline, where signs of a rising lake make her very happy.



MONO LAKE COMMITTEE

Highway 395 at Third Street
Post Office Box 29
Lee Vining, CA 93541

Nonprofit Organization
U.S. Postage
PAID
Mono Lake Committee

Mono Lake's California Gull colony is
in danger. Help us put up a fence
to protect the gulls:



[monolake.org/
gulfence](http://monolake.org/gulfence)

#LongLivetheGulls

Custom guided trips with the Mono Lake Committee's Lead Naturalist Guide

Looking for a life-list bird? Interested in a trip on
a particular date? Want a trip for your family?



Email
guides@monolake.org
to set one up!

Andrea Lawrence Award Dinner

May 5, 2017

**Parallax Restaurant
Mammoth Mountain Ski Area**

reserve your seat by April 10: (760) 647-6595



Trail Chic Fashion Show



**August 26, 2017
at the Lee Vining
Community Center**



a fundraiser for the
Committee's Outdoor
Education Center programs

