We were talking about the dropping level of Mono Lake. Geoff was at his desk, Lisa was perched in her regular spot on the blue steps, Bartshe was leaning on the door jamb, Jess and Elin were on folding chairs, and Greg and I were on the speakerphone delicately balanced on a small stool—all within the space of about ten square feet.

During the discussion I was struck by the fact that when we talk about the lake level we almost always use “we” instead of “it.” “If the lake drops one foot we’ll be at...” “If we get the wettest March on record, where would that put us on April 1?” The whole staff does it. Mono Lake Committee founder David Gaines famously wrote, “We are Mono Lake.” And I don’t want to be overly groovy about it, but here we are many years and many lake levels later saying the same thing without even realizing we’re doing it. But it’s so true—when the lake rises we are proud. When the lake drops we take it hard.

So... we are at 6379’. If we are still below 6380’ on April 1 water exports from the Mono Basin will be reduced from 16,000 to 4,500 acre-feet. That’s a lot of water, and the fact that this reduction in water supply to Los Angeles is happening after three consecutive years of drought is anything but a lucky coincidence. Many people over many years have worked tirelessly, and with enough foresight to plan ahead for this lake level. And many people have conserved water with hopes of avoiding the lake getting this low again. This keeps us going, and inspires us no matter what lake level we’re at.

—Arya Degenhardt, Communications Director

Project Specialist Lily Pastel hands over the flow meter from a safe, frozen vantage point while monitoring Mill Creek. Year-round monitoring of the creeks helps track restoration progress and informs future management decisions.

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.
A superlative drought continues for California and the impacts are unprecedented. Wherever you live in the state you can’t easily ignore the feeling that winter has been mostly absent. Rain and snow have largely missed California four years in a row. Record dry and warm conditions have combined to produce the worst drought in the state’s recorded weather history. By some measures it’s the most acute in 1,200 years.

The central Sierra Nevada sits at the epicenter of the worst drought conditions. Mono Lake and the Eastern Sierra remain at the boundary of exceptional and extreme drought categories as defined by the US Department of Agriculture. It has been so dry that Lee Vining and the Mono Basin have lost roughly the equivalent of an entire year’s worth of precipitation within the last three. So far this water year, we are running at 23% of normal with more than half of the winter past us. Record warm temperatures in the Sierra continue with increased sublimation, evaporation, and further dehydration of soils.

For a terminal lake, the balance sheet of precipitation and temperatures is the bottom of the watershed—Mono Lake itself. The lake is now five feet lower than it was before the drought began. Evaporation has greatly exceeded input. If this year remains dry, Mono Lake will lose another 1.5 feet of elevation, approaching a 20-year low-stand.

Drought in a parallel universe

Mono Lake is lower because of drought, but that doesn’t tell the whole story. Since 1941, the Los Angeles Department of Water & Power (DWP) has diverted 4.28 million acre-feet (af) of water from the Mono Basin—water which would have otherwise ended up in the lake.

What if DWP had decided not to extend the Los Angeles Aqueduct to the Mono Basin? What if the lake’s tributary streams had never been diverted at all? The entire basin would look very different. Lower Rush and Lee Vining creeks would have retained robust riparian corridors, complex deltas, and thriving fisheries. Mono Lake would be perched at just over 6416 feet above sea level—37 vertical feet higher than we see it today. The landbridge between Negit Island and the mainland would be completely submerged, protecting the California Gull colony and other nesting birds from coyotes. Expansive alkali flats,

continued on page 4
the source of violations in air quality regulations, would be covered with many feet of water. The lake would retain an ecologically healthy salinity and waterfowl habitat would remain rich and extensive around stream deltas and the lakeshore.

The “what if” elevation of 6416 feet takes into account the loss of elevation due to the current, historic drought. We might still be concerned about the lake in this alternative scenario, but the drop in lake level would be well within the lake’s natural long-term fluctuation. Our “what-if” lake would be one foot lower today compared to the actual lake when diversions started in 1941.

Return of the landbridge

With the record warmth and drought that have pushed Mono Lake five feet lower comes 2,800 acres of newly exposed land. Between Black Point and Negit Island, the lake is particularly shallow and the visual impact is pronounced. The infamous landbridge is making a comeback.

One of the reasons for raising the level of Mono Lake was to keep the landbridge submerged, thereby maintaining a barrier between coyotes and the California Gull colony. Though relatively few California Gulls have returned to nest on Negit Island, nearly all of the gulls continue to nest on the nearby Negit Islets—perilously close to the growing landbridge. Coyote predation was periodically documented on the Negit Islets between 1989 and 1996 when one or more coyotes crossed up to 200 meters of open water. Today the lake level is the same as it was in the spring of 1996, and it’s expected to drop further through the coming spring.

Stepladder recovery

There are three lake level thresholds that determine stream diversions: 6377, 6380, and 6391 feet above sea level. The higher the lake, the more water for Los Angeles. The lake can rise and fall within a year, but April 1 is the day when lake level matters the most—the day that fixes diversions for the year.

You can think of the lake levels as a three-rung stepladder. When we are standing on the ground we are below the lowest rung—6377’. If at any point Mono Lake drops below 6377’, or is projected to, no diversions are allowed. Once we step onto and above the 6377’ rung, diversions to Los Angeles can flow at 4,500 acre-feet per year. The next step is 6380’. When we reach this point diversions flow at the rate of 16,000 af per year. The final rung on the ladder requires the biggest step—6391’. This is the final step, and the diversion rules change so we never drop far below it again. Once here, the lake is projected to stabilize at a long-term average of 6392’ and DWP can divert much more water each year, excepting the amount required to maintain the creeks and lake level.

Drought has knocked us off the second rung, so we are below 6380’. On February 1, 2015 we stood at 6379’—between the first and second rung. The April 1 measurement will match this, barring an extremely wet conclusion to the winter. This year DWP will reduce its diversions from 16,000 acre-feet to 4,500 acre-feet.

The temporary loss of diversions from the Mono Basin adds up to roughly 2% of the city’s total water use. When Mono Lake eventually reaches its management lake level of 6392’, Los Angeles stands to gain as much as 6% of water supply relative to current estimated use.

The wisdom of D1631

When the California State Water Resources Control Board issued Decision 1631 in 1994, modifying DWP’s water license, no one knew exactly how long it would take for the lake to reach the 6392’ management level. Predictions and modelling always came with the caveat, “It depends on the climate.”

Over two decades ago when the State Water Board was piecing together their “stepladder” solution for achieving a future, managed lake level, they understood that California’s precipitation was highly variable. They anticipated that Mono Lake would rise and fall with streaks of wet years and drought. The State Water Board was careful to choose a balanced approach to diversions that would provide some protection against drought while also considering the water needs of Los Angeles.

The current drought is the worst the lake has endured since the decision was implemented, and the first time that DWP’s diversions will be reduced based on the decision. DWP is expecting the reduction and is prepared. Meanwhile, Los Angeles is committed to meeting ambitious new water conservation goals while implementing strategies to better cope with climate change and extreme drought (see page 17).

Accelerated change in Los Angeles

Los Angeles is a veteran of drought,

Continued on page 24
Waiting for a hole in the dam

by Gary Nelson

Editor’s note: Each year we ask a writer to contribute to the Mono Lake Calendar—this essay is from the 2015 calendar.

I have always looked forward to strolling along the lake at Navy Beach before the start of canoe tour season. The greening of this arid shore, the return of our iconic avian migrants, and the anticipation of sharing this wondrous place with visitors from around the world give me a feeling of joy.

My most recent inspection of the launch site has left me with an entirely different feeling: I get a pain in my lower back just looking at it! You see, before our visitors can float above bubbling springs with attendant plumes of brine shrimp, and canoe guides can poetically interpret their surroundings, we have to get the people into the boat and get it afloat.

We used to load the canoes from a sandy beach where passengers would board with dry feet, and guides could shove off and shortly be afloat. Unfortunately after three years of—dare I say it—drought, Mono Lake has dropped, and this beach is now separated from the waterline by around 30 horizontal feet of dry, dusty, moonscape-looking, relicted lakebottom. I have seen this process before; a submerged tufa becomes an island, which morphs into a peninsula, and is then absorbed by the expanding shore.

Once again, the intrepid canoe team will adapt to the current situation so that our passengers will not be inconvenienced, although hopefully they will bring sandals or water shoes. We will launch the canoes using the tried and true “3G” method. We will Grunt to get the boat moving and Groan as we Grind the canoe out to deeper waters. Thank heavens for young interns!

I really shouldn’t complain, considering that even after three dry years, the current lake level is still three feet higher than it was when we started the canoe tours in 1989. Back then the tours were less interpretive and more eco-evangelical since the fate of the lake still hung in the balance. After the California State Water Resources Control Board issued Decision 1631 in 1994, our tour focus began to change from advocacy to education while still keeping our passengers aware of the problems involved in the implementation of D1631 concerning streamflows and restoration.

In 2013 I began to hear tantalizing rumors that an agreement with the Los Angeles Department of Water & Power (DWP) was in the works, and might even include a “hole in the dam” at Grant Lake Reservoir. This hole turned out to be the proposed Grant Lake Reservoir Outlet which would install a gate upon, and reconfigure, the existing (and often dry) overflow spillway. This would enable DWP to precisely release required streamflows into Rush Creek. Releases could even mimic natural flow regimes to aid...
restoration of the lower stream courses.

On my way back from Navy Beach I took a detour up to the Grant Lake Reservoir spillway. In several places you could see where small sections of the concrete spillway had been cut out so that core samples could be taken from beneath. These holes, and painted survey markings along the spillway, were harbingers of a new era in Mono Basin water management. Using water in the most efficient way possible is rapidly becoming a mandatory mantra of California water management. The Mono Lake Committee, in completing the Mono Basin Stream Restoration Agreement with DWP in September 2013, is once again on the leading edge of this trend.

This spring the State Water Board will release a draft of DWP’s new water license, which will be followed by a 30-day public comment period. When the draft comes out, the Committee will need members’ voices to be heard.

Please take a moment to visit monolake.org/action and make sure we have your correct email address. Then watch your inbox for a notice about the draft’s release, and add your voice in support of restoring health to Mono Lake’s long-suffering tributary streams.

1. Go to monolake.org/action.
2. Make sure we have your email address.
3. Wait for news of the draft license to hit your inbox.

Gary Nelson, also known as Admiral Nelson, is the Committee’s Canoe Tour Supervisor. He has gone through many lake ups and downs in over a quarter century of launching canoe tours from the shore of Mono Lake.
Last fall, in recognition of twenty years of implementing the public trust at Mono Lake, the UC Berkeley Center for Law, Energy & the Environment hosted a special symposium in Sacramento at CalEPA Headquarters. The one-day conference brought together lawyers, scholars, and California State Water Resources Control Board staff with students, educators, scientists, advocates, interested members of the public, Los Angeles Department of Water & Power (DWP) staff, and Mono Lake Committee staff. The event focused on the public trust in the context of State Water Board Decision 1631, which amended Los Angeles’ water rights and protects Mono Lake, its tributary streams, and waterfowl habitat.

Panelists discussed a range of public trust issues around the state, implemented over time, and across the legal landscape, charting the evolution and application of the doctrine that became the cornerstone of Mono Lake’s protection and California water law.

**It’s not easy to apply the public trust**

From the successes at Mono Lake to the consideration of the public trust in groundwater at the Scott River, the symposium uncovered the complicated relationship of the three legal principles at work in California water history: reasonable and beneficial use, public trust, and Fish & Game Code section 5937. Present on everyone’s mind was the ongoing drought, and how it might accelerate or slow future solutions.

The Mono Lake Committee’s work was among the cases highlighted. Executive Director Geoff McQuilkin described the recent Mono Basin Stream Restoration Agreement with DWP and how it is a natural evolution of the public trust, modernizing aging infrastructure to manage water for the people of Los Angeles while also protecting and restoring Mono Lake and its tributary streams. Geoff illustrated a key point echoed by many that day: long, focused, and tireless collaboration is necessary to reach a solution that works. The public trust requires negotiation and compromise, and when that’s not enough—as Justice Cole Blease described the role of lawyers and courts, “a few good orders will create a lot of action, political and otherwise.”

**The public trust “can opener”**

One of the most inspirational moments came from former Committee Executive Director Martha Davis, who characterized the public trust as a “can opener.” It’s a tool that can be used to open up past decisions and ask a different question: “What is the right thing to do in light of today’s needs?” She applauded the people of Los Angeles for their astounding success in conserving water and moving further to reduce their use and reliance on imported water, saying that what LA has achieved is “not the exception, but the future.”

State Water Board members Felicia Marcus and Dee Dee D’Adamo provided introductory and closing remarks, and Justice Ronald Robie concluded the day’s proceedings by urging cooperative effort and stressing the difference that the Mono Lake Committee and other groups make in the context of the public trust: “None of these answers are just the push of a button and the State Water Board does this, or somebody else does that.”

For a full listing of the speakers and to see the archived livestream video of the day visit monolake.org/monoat20.

Special thanks to hardworking symposium organizers Michael Kiparsky, Richard Roos-Collins, and Peter Vorster for convening the event to celebrate the ongoing importance of the Mono Lake decisions in the public trust legacy.
Each summer, Mono Lake undergoes a transformation. Brine shrimp flourish, alkali flies assemble, birds multiply, and the lake slowly transitions from green to tropical blue. Trillions of the endemic brine shrimp, *Artemia monica*, graze on algae in the upper water column, efficiently converting algal biomass into *Artemia* biomass. By early summer, following a peak in *Artemia* population, the upper waters shift from looking murky green to transparent blue. The process is so dramatic that the difference can be seen from space.

During the summer of 2014, for the first time that we know of, the lake did not turn blue. Like previous years, *Artemia* hatched in the late winter, slowly developed through the spring, and grew to seemingly robust numbers in May and June. Unlike previous years, the lake retained its greenish cast through July. *Artemia* persisted, but spotting them was difficult in the algae-rich lake. By August their numbers seemed to thin considerably and the lake became a further opaque green—locals and frequent Mono Lake visitors noticed. Looking at satellite images of Mono Lake in 2014 and comparing them to earlier years confirmed earth-bound observations.

The natural response is, “What’s up with Mono Lake?” The answer, like the lake, is unclear. The chemical and biological systems within the lake and their relationships are surprisingly complex for such a simple ecosystem. The total and peak productivity of *Artemia*, for example, depends on a wide range of variables including salinity, freshwater input, past and present stratification of the lake, and weather.

Thanks to more than 30 years of limnological monitoring we have a lot of data to give us a sense of what might be happening. One interesting trend is that *Artemia* population growth and peak has been trending more rapidly and earlier over the last decade. Why this is happening is complicated, and there may be several variables responsible. One suspected variable is increasing average spring temperatures. 2014’s limnological monitoring results will be particularly interesting given the fact that *Artemia* did not appear to fully graze the algae from Mono Lake’s upper water column.

Between 1–1.5 million Eared Grebes annually depend on Mono Lake during their fall migration. *Artemia* are their principal food source before departing for the Salton Sea and Gulf of California in November and December. In 2014 total Eared Grebe numbers were down, and the peak migratory population plummeted by mid-October to roughly one-third of their previous year’s abundance (see page 9). An early decline in *Artemia* may have been the reason. Staff and visitors reported an unusual number of dead Eared Grebes at the shoreline, with 85 tallied by Mono Lake Committee staff one day along a stretch of South Tufa in October.

The Committee is, of course, concerned, but further monitoring and study is needed before we can piece together a clear picture of why the ecosystem behaved differently in 2014 than in past years. We eagerly await the results of the 2014 limnological monitoring while we pay careful attention to how the lake behaves in 2015.

**Bartshé Miller** is the Committee’s Education Director. He is ever-hopeful that he will see a porcupine while hiking in the Sierra Nevada.
In 2014, Point Blue Conservation Science conducted the 32nd consecutive year of monitoring the population size and reproductive success of California Gulls at Mono Lake. The study looks at gulls as an indicator species for lake ecosystem health, and tracks the gull population through changing conditions.

Each year we count nests, band chicks, and survey mortality rates. Chick production was slightly above the long-term average; consistent with previous findings that productivity is higher in years with warmer spring seasons and no lake stratification.

The population size, however, was below the long-term average, strengthening a declining trend that we’ve observed. About 40,000 gulls nested on Mono Lake’s islands in 2014, while the long-term average is around 46,500. It’s not a huge difference, but considering that nine out of the past ten years have been slightly to prominently below average, we’ve taken note.

A study using data from 1987–2003 found that gull population size positively correlated with brine shrimp density around the time of gull egg laying. Since 2004, shrimp densities have been peaking significantly earlier—closer to egg-laying time. One might expect the gull population to respond positively, yet the opposite has occurred. More study of this trend is needed to find out why.

This study is one of the longest ongoing studies of birds in North America and is an important tool for assessing the ecological condition of Mono Lake. Securing funding for long-term research is always difficult, but Point Blue Conservation Science and the Mono Lake Committee have made it possible to continue this important program. A combination of staff support, dedicated volunteers, and Committee funding are currently keeping the study alive. See the full 2014 California Gull report online at bit.ly/CAGUreports.

After many years of faithful service, the gull research boat engine had to be retired for safety reasons. We are looking for a short-shaft-tiller Honda motor. Please contact Policy Director Lisa Cutting (lisa@monolake.org) at (760) 647-6595 if you can help!

2014 Eared Grebe survey

by Lily Pastel

Each fall huge flocks of Eared Grebes stop at Mono Lake to feed, molt, and rest during their southern migration. Up to 30% of the North American Eared Grebe population has been recorded at Mono Lake, making this inland sea an internationally important staging site for the species.

Since Mono Lake is such critical habitat for the grebes, the Mono Lake Committee and research scientist Dr. Sean Boyd of Environment Canada’s Science & Technology Branch have been working together to document the number of birds visiting the lake each fall. The grebes are counted using aerial photography, which relies on skillful volunteer photographers, local volunteer pilot Geoff Pope, our flight sponsor LightHawk, and volunteers who painstakingly count the grebes in each photo, as well as the splashes left behind when they dive underwater.

In the past only one survey flight was conducted each year in mid-October, when it was assumed that the total number of grebes was at a peak. In 2013 we added four more flights in order to generate an abundance curve and gain a better understanding of grebe numbers over time. The findings from 2013 suggested that the grebes were indeed most abundant during mid-October, with approximately 1.3 million grebes at the peak (see figure on page 24). For the 2014 survey, five flights were conducted between mid-September and early November, resulting in a very different abundance curve compared to 2013. Although the maximum number of grebes on the lake was similar (approximately 1 million), the birds were most plentiful in mid-September with numbers declining rapidly in each subsequent survey. This difference in abundance curves from 2013 to 2014 is surprising and could be related to changes in...
After two years of public meetings with diverse stakeholders, numerous field visits, and countless rounds of legal review and revision, the Conway Ranch Conservation Easement was signed and recorded by the Eastern Sierra Land Trust (ESLT) and Mono County on December 1, 2014.

The two parties successfully worked out myriad easement details with the dual goals of protecting open space and wildlife habitat while allowing for limited economic activities, specifically fish rearing and sheep grazing.

The easement is cause for celebration—the protections it secures for this beloved, 800-plus-acre historic ranch are an important piece of the patchwork quilt of land management that covers the north Mono Basin.

_Easement simplifies, clarifies protections_

Grant money that Mono County used to purchase Conway Ranch in 2000 came from multiple sources—the California Department of Transportation (Caltrans), the California Department of Parks & Recreation, and the National Fish & Wildlife Foundation. Requirements from the grantors became a complex web of restrictions. The new easement has been endorsed by all of the original grantors and brings together all of the property requirements in one place.

Additionally, the easement provides a new layer of protection through a recorded deed on the property that will last in perpetuity. Among other requirements, the easement specifically stipulates a public management process that will happen by way of annual meetings and annual operating plans—both of which had been lacking in the past.

_Next steps_

With the goal of securing protection achieved, it is now critical to turn that accomplishment into action. Mono County continues to own and manage the property but it will be ESLT’s responsibility to monitor things such as the total number of acres of wetlands and use of water for allowed purposes, and to enforce the terms of the conservation easement. This is no small task.

Meanwhile, the County has begun working on the 2014 Annual Report and is finalizing an Operations Plan for 2015. These documents include details related to fish-rearing, irrigation, sheep grazing, and public access and recreation.

_Committee’s involvement continues_

Through the process, the Mono Lake Committee has been an advocate for balancing the natural values of the property—wetlands and springs, open space, migratory routes for mule deer, and Greater Sage Grouse habitat—with sheep grazing, fish-rearing operations, and public access.

The Committee was also an advocate for assembling the management details into a single unified document. Instead of deciphering multiple grant documents, all parties will now be using the easement as the ultimate guide, which is extremely helpful when it comes to on-the-ground management and oversight.

_Mill Creek still awaiting its water_

Through the decades-long process of protecting Conway Ranch, the land and wildlife haven’t seen much change—deer still migrate through, birds still seek out ponds and wetlands, and the historic ranch buildings still stand as sentinels over the property.

However, despite a 2005 Federal Energy Regulatory Commission mandate to rehabilitate the Mill Creek return conveyance, the project has not yet been realized and Mill Creek still does not flow with all the water that it is entitled to. This has caused widespread damage to the lower section of Mill Creek. The Committee would have liked to have seen stronger language related to Mill Creek water rights and the lawful distribution of Mill Creek water incorporated into the easement.

So, while we celebrate the achievement of a conservation easement on Conway Ranch, we are also well aware of the work that still needs to be done to protect and restore Mill Creek. Protection of the north Mono Basin won’t be complete until Mill Creek has the water that it needs to be a fully functioning and vibrant stream system.
Hundreds of school and community groups have made the trip to the Mono Basin Outdoor Education Center (OEC) since 1994. Community groups are extraordinary—they have their own character, culture, mission, and programs, and they are supported in many different ways by the individuals in the community they build together. One of these community groups is Kid City, located in the South Park area of downtown Los Angeles.

Kid City just celebrated their sixth year of serving young people, introducing them to new experiences (learning to dance, sing, play instruments, study, apply to college) and new ways of working and being together. In those six years Kid City has grown a support network for success and has gone from having one community member in college to having over 100 students, many the first in their families, in college this year.

Like the story of stone soup, this group is adept at making something out of nothing. For their trips to Mono Lake each student commits to getting donations in the form of food from markets, parents, and community members. The students also organize an annual fundraiser, Splash of LA, a family festival with food, games, a bouncy house, a dunk tank, a chess tournament, and performances—all produced and created by Kid City kids. This year, Splash of LA is Saturday, August 8, 2015.

Kid City also worked with another OEC group, Outward Bound Adventures, to get transportation, including drivers to, from, and during their time in the Mono Basin.

In the OEC program evaluation, one Kid City leader described the effect of a trip to Mono Lake as “an experience of a lifetime for wonderful teens who will use the experiences and knowledge they gained on the trip to improve their communities and continue the fight for water conservation.”

Participant Naty Rico Rosales listed her favorite moments from her week at the OEC on the Kid City Facebook page:

- Accomplished a solo walk in the forest, by myself, at night, in the dark, no flashlight or anything. Just me, the stars, and my new friend the moon.
- Got the opportunity to learn about the sources of LA County’s water and the important role Mono Lake plays not just for the LA Aqueduct, but for the migration of birds as well.
- Walked up the beautiful Nunatak Trail, just two miles from Yosemite.
- Did a daytime solo walk in which I spotted a wild deer at a close distance.
- Visited the ghost town of Bodie, where I learned that places like this still exist and are accessible to the public.

Naty found her week in the Mono Basin to be “one of the most fun, challenging, educational, peaceful and soothing trips I’ve probably ever been on. My mind and physique have been challenged like never before, but it’s probably one of the best things to ever happen to me.”

Groups that have been to Mono Lake not only learn about where their water comes from, but they also learn about themselves and are more committed to each other and to their work together when they return to Los Angeles. They have rediscovered—in the words of Father Gregory Boyle, founder of Homeboy Industries, another OEC group—that “we belong to each other.”

OEC groups work hard to fundraise for their trips to the Mono Basin. If you would like to help kids have this opportunity by sponsoring a group, please contact Education Director Bartshé Miller (bartshe@monolake.org) at (760) 647-6595.
Deputy District Ranger for Mono Lake moves on

Deputy District Ranger for the Mammoth & Mono Lake Ranger District, Sarah Tomsky, accepted a promotion to serve as District Ranger for the Bradshaw Ranger District on the Prescott National Forest. Sarah started her new assignment in Arizona on December 1, 2014. The Inyo National Forest will assign a temporary ranger to the district while selecting someone to fill the position permanently.

Since arriving in the Mono Basin in 2012, Sarah was the Mono Lake Committee’s go-to person for anything related to the Mono Basin National Forest Scenic Area. Her quick response and logical approach to local issues was appreciated and valued. As a resident of the Mono Basin, Sarah fell in love with Mono Lake and we wouldn’t be surprised if one day she returns to the Eastern Sierra.

Byng Hunt retires from Mono County Board of Supervisors

After representing District 5 on the Mono County Board of Supervisors since 1999, Byng Hunt has left Mono County government with a long list of accomplishments. As a four-term supervisor he was at times a lone voice pushing others to protect the unique beauty of the Eastern Sierra and tailoring his positions around actions that enhanced the visitor experience, knowing it was key to solid economic sustainability for Mono County.

Prior to becoming a supervisor, Byng had built a solid reputation in Mono County through his experience as Town Councilman and Mayor of Mammoth Lakes. He also served for the county on the boards of organizations such as the Sierra Nevada Conservancy and the Great Basin Unified Air Pollution Control District, which are tasked with balancing the protection of our natural landscapes with community needs.

Stepping into the District 5 seat is newly elected Supervisor Stacy Corless, former director of the Mammoth Mountain Community Foundation and past director of Friends of the Inyo. An active outdoor enthusiast, Stacy values the balance that Byng so strongly represented. From Stacy herself: “Following in the footsteps of retiring Supervisor Byng Hunt, I will request assignments that focus on our region’s environmental and economic sustainability.”

Owens Valley dust agreement

A longtime dispute between the City of Los Angeles and Great Basin Unified Air Pollution Control District was

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settled last November when the two agreed to the long-term use of a new method to suppress the toxic airborne dust that rises from Owens Dry Lake. The new method is nearly waterless (which LA likes) and has proven to be effective (which Great Basin likes). The method uses tractors to turn damp lakebed clay into furrows and basketball-sized clods. The clods bottle up the dust for years before breaking down. Once that starts to occur the process is repeated.

Owens Valley regulatory agencies and the Los Angeles Department of Water & Power (DWP) have been at odds for decades over the dust. Prior solutions mostly used water—lots of water. But this nearly waterless solution is expected to save Los Angeles three billion gallons of water the first year and almost ten billion gallons three years later. That’s enough water to supply 150,000 Los Angeles residents for a year.

The agreement includes a requirement that some portions of the lakebed remain wet in order to provide habitat for migrating waterfowl and shorebirds. It also establishes an Owens Lake Reserve for migrating waterfowl and shorebirds. It also establishes an Owens Lake Reserve and a 19-mile section of the Owens River between Crowley Lake Reservoir and Pleasant Valley Reservoir. To do this, the agency must rewater the Owens River Gorge, a 19-mile section of the Owens River, between Crowley Lake Reservoir and Pleasant Valley Reservoir.

Triggering the dispute was a water pipe that broke back in 1991, which essentially rewatered a section of the Owens River. Following precedents set in the Mono Basin, once the river was rewatered, Fish & Game code section 5937 was invoked and charges relating to the dam owner’s responsibility to protect the downstream natural resources were filed. The dispute, however, continued for the next 24 years, with hard-fought battles to secure interim flows, scientific studies, and a lot of meetings. This final outcome allows DWP a two-year transition period to make necessary infrastructure improvements to accommodate the increased flow volume in the Owens River Gorge.

**Spending bill rider generates confusion over sage grouse protection**

The federal budget bill passed last December carried a rider that complicates sage grouse protection. Specifically, it prohibits the Fish & Wildlife Service from using funds to “write or issue” listing rules for four types of sage grouse, including the bi-state population of Greater Sage Grouse found in the Eastern Sierra. The rider language is ambiguous, confusing, and will no doubt eventually need to be interpreted by the courts.

Interior Secretary Sally Jewell reassured Fish & Wildlife that it is not barred from completing analysis for potential rulemaking, which is a necessary step when considering listing a species. Jewell also reassured the public that the Obama administration “is still moving full-steam ahead, and will continue to work with urgency alongside our federal, state, and local partners to put conservation measures in place to protect important sagebrush habitat” and that “the rider has no effect on our efforts to develop and implement state and federal plans and to build partnerships to incentivize conservation.” The Committee will continue to track this especially as things become clearer for the bi-state population of Greater Sage Grouse.

**Tuolumne River Plan approved**

After years of steady work, Yosemite National Park finalized the Tuolumne River Plan (TRP) in June 2014 and has plans to begin implementing it this summer. Under the Wild & Scenic Rivers Act, designated rivers must have a comprehensive management plan that identifies specific actions to protect one-quarter-mile on either side of the designated river.

Begun in 2005, the planning process to identify impacts to the Tuolumne River, study scientific recommendations, and balance visitor experience and access to key visitor locations has been arduous. Competing needs and desires for often conflicting visitor experiences has challenged Park staff, especially with regard to Tuolumne Meadows, a sub-alpine ecosystem that is the location of many specific TRP actions.

Changes the public will see include meadow restoration, stabilization of erosion-prone roadway slopes, limitations on stock grazing in certain areas, a relocation of the visitor center, and expanded visitor parking lots. Once the parking lots are established, parking along Highway 120 will no longer be permitted.

Mono Lake Committee members may remember that one of the alternatives included relocating seasonal Park staff to housing units in Lee Vining Canyon. That concept was not incorporated into the final plan; seasonal housing for Park employees will remain within the Park boundary.

Lisa Cutting is the Committee’s Policy Director. She knows it’s a long shot, but she’s hoping to see a Sierra Nevada red fox this summer in northern Yosemite.
A year after the governor declared a statewide drought, conditions have only gotten worse. Lee Vining has had only two winter season months with above-average precipitation in almost four years (since March 2011). The 2014 water year (October 1–September 30) was drier than 2013, and so far 2015 is drier than 2014. As the drought deepens, extraordinarily warm temperatures make it more severe—August was the only month in 2014 with below-average temperatures.

The December storms that briefly drenched the coast split apart before reaching the Eastern Sierra, resulting in a very dry December for the Mono Basin. After an almost snowless January, the February 1 snow surveys—which measure the water content of the snow at locations called “snow courses”—found 23% of average snowpack in the Mono Basin. Gem Lake, the lowest snow course at elevation 9,150 feet, had the lowest February snowpack ever recorded. The higher-elevation snow courses—Tioga Pass, Gem Pass, Saddlebag Lake, and Ellery Lake—had snow water content lower than any year but 1991.

In 1991, an almost snowless February was followed by a “Miracle March,” which kept the year from being the driest on record, and snow water content reached about 80% of average on April 1, 1991.

If it doesn’t snow in February and March, Mono Basin snowpack will be less than 15% of average on April 1, 2015. If there is an average increase in water content, the snowpack will be about 50% of average. A February–March period wet enough to reach the April 1 average snowpack has been recorded only a handful of times.

This means it is likely that we are looking at another dry year. However, with the wettest February and March on record (this occurred in 1958, 1983, or 1986 depending on the snow course), there is the possibility that the peak April snowpack could end up between 118–154% of average.

As a fourth dry winter comes to a close, the last three runoff years (April 1, 2012 to March 31, 2015) will go down in history as the three driest consecutive years on record in the Mono Basin, with just 52% of average runoff. In 2014, Mono Lake dropped 1.8 feet from its April 1 high point to its autumn low point. The lake also fell 1.8 feet in 2013, and 2 feet in 2012. The lake’s winter rise was 0.2’ in 2013, 0.3’ in 2014, and 0.1’ so far in 2015, adding up to a net 5-foot drop since April 1, 2012 to the current level of 6379’.

For perspective, Mono Lake also dropped 5 feet during the first three years of the last drought (April 1987 to January 1990), when runoff was 62% of average. But the water export rules designed by the State Water Board to protect Mono Lake were not fully in place back then. Thanks to State Water Board Decision 1631, annual exports have been restricted to 16,000 acre-feet in recent years, and will be reduced by 11,500 acre-feet this year—enough water to raise Mono Lake by 0.25 feet from its current level.

But all of that water may not make it to Mono Lake this year. Water not exported to Los Angeles stays in the Mono Basin, but remains in Grant Lake Reservoir unless the reservoir spills or another plan for releasing the water is made. If it is as dry as last year, most of the unexported water would have to remain in the reservoir to keep the already-low reservoir above the required minimum of 11,500 acre-feet of storage. However, if it is a wetter year, and critical reservoir thresholds can be met, some additional water might be released down Rush Creek, ideally during the peak flow period. That water would slow the declining Mono Lake level.

The drought would have to continue for two to three more years before Mono Lake gets into a zone where coyotes have historically reached nesting California Gulls on Negit Island and Pancake Islet. On the hopeful side, if we start getting wet years next year, in three years Mono Lake could rebound to the highest it has been since Decision 1631.

Greg Reis is the Committee’s Information & Restoration Specialist. His great-grand-uncle, Refugio Bilderrain, was the LA City “Water Overseer” from 1892–1894, three years after LA’s first water meter was installed at the behest of William Mulholland, then superintendent of the LA City Water Company.
A few years ago I took Huell Howser and his California’s Gold team out in a canoe for an anniversary expedition 15 years after his first trip to Mono Lake. Here we are, I told him proudly; we are paddling on five feet of water that lies on top of the ground you walked on in 1992. The lake was on the rise and recovering some of the volume lost to historic water diversions, making it, I told him, like a trip back in time to the higher lake levels of the early 1970s. I even had a long pole to measure the depth of the water below us.

The problem, of course, with traveling back in time is that not everything from the past is rosy. Now we are three solid years into the drought, with the fourth winter showing little sign of changing the pattern. So much for time travel to the higher lake levels of the 1970s. Most of the gain that I showed Huell is now gone, and my Mono Lake time travel machine only takes me back to the 1990s, when the lake was similarly low and the victories of the State Water Board were brand new.

Today, the path to the water’s edge at Old Marina winds ever longer and looks more and more like the dry trail we used to follow to the annual rehydration ceremony that called attention to the lake’s plight in the pre-protection days.

And yet the situation is much different. Back in the rehydration days we weren’t sure we’d ever see the lake higher again—it fell every year due to diversions. Now the lakeshore view may look similar but the context is not. The Mono Lake Committee’s hard-won successes mean water export to Los Angeles will ratchet down this year, and will drop to zero if further dry years arrive. As much as the lake may look like it did back in the bad old days, the protections in place are modern and strong—and that’s where my confidence in the long-term future health of the lake lies.
**Water 4.0: The Past, Present, and Future of the World’s Most Vital Resource**

*By David Sedlak*

Explore the evolution of how water gets to our homes, schools, and businesses in this timely book by UC Berkeley engineering professor David Sedlak. From Roman Empire aqueducts through present-day water conveyance systems, Sedlak explores a future multi-faceted approach to water management including conservation, recycling, stormwater aquifer recharge, smart irrigation technology, and desalination.

*Water 4.0, hardcover, Yale University Press, 352 pages, 9½"x 6½": $28.50*

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**Relicts of a Beautiful Sea: Survival, Extinction and Conservation in a Desert World**

*By Christopher Norment*

The Inyo Mountain slender salamander is found in only five locations and has been listed as endangered since 1996. The Devil’s Hole pupfish is described as the world’s rarest fish and only lives in one small 93˚ Fahrenheit pool in the Amargosa Valley. These species have descended from ancestors living in the Great Basin when it was an enormous sea. In this fascinating book, Norment looks at the creatures that have survived, making a plea for the conservation of all species, not just those that benefit humans.

*Relicts of a Beautiful Sea, hardcover, University of North Carolina Press, 288 pages, 6¼"x 9¼": $28.00*

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**Mono Lake Committee glass mug**

Thick, heavy glass gives this mug a satisfying heft and balance, and helps your hot drinks stay hot longer. With the Mono Lake Committee’s logo in white, this mug is perfect for morning coffee, afternoon tea, or a Mexican hot chocolate, savored after a day of skiing in the Eastern Sierra.

*Mono Lake Committee glass mug, 13-oz: $10.00*

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**Mono Lake Committee Chico bag**

This lightweight, sturdy nylon bag is the perfect solution to reduce paper and plastic bag consumption, and it has the beautiful Mono Lake Committee logo! The bag opens into a handy size for groceries, and packs into its own tidy carrying bag with a convenient clip for your backpack, purse, or car keys.

*Mono Lake Committee Chico bag, 17"x 13" when open, 4"x 3"x 1" when packed: $12.00*
In October 2014 Los Angeles Mayor Eric Garcetti committed the nation’s second-largest city to aggressive water conservation goals that push beyond LA’s already-impressive achievements.

In response to the ongoing drought, Garcetti issued an executive directive requiring Los Angeles to reduce per-capita water use 20% by 2017, and then to reduce imported water use by 50% by 2024. Garcetti’s move continues to focus the city on water conservation, water recycling, stormwater capture, and local supply cleanup as the best steps to meeting long-term urban water needs.

Local supply programs are integral to the successes achieved so far in protecting Mono Lake—indeed, they have been critical to answering the question of how Mono Lake can be protected without transferring the city’s water demands to other natural resources. For example, the Mono Lake Committee and Los Angeles community groups were closely involved in the ultra-low-flow toilet retrofit program in LA, replacing water-guzzling toilets with free low-flow models. The result: over 100,000 acre-feet of annual water savings for Los Angeles. That’s more than was diverted each year from Mono Lake’s tributary streams back before the State Water Board protected the lake in 1994.

The new goals are aggressive yet achievable. A Water Cabinet of leaders of city agencies, including the Department of Water & Power, will meet monthly, report to the Mayor, and assure that cross-department programs are implemented.

Voluntary and institutional measures are the focus for achieving the goals, and range from major water recycling and groundwater cleanup facilities to measures as diverse as rain barrels, turf removal, and recirculation of water at car washes. However, Garcetti set forth incremental targets that must be met along the path to achieving the 20% reduction goal and indicated that mandatory restrictions would be implemented if the targets are not met.

Mono Lake friends should note a key distinction in the 2024 goal, which seeks to reduce imported water use by 50% and save millions of dollars in the process. Mono Basin and Owens Valley water transported through the Los Angeles Aqueduct, interestingly, doesn’t count as “imported” by this measure, since the goal is focused on water purchased from the Metropolitan Water District and delivered through its aqueducts.

Nonetheless, the water reduction goals benefit Mono Lake and the Eastern Sierra. Reduced water consumption in Los Angeles is critical to the continuing protection of Mono Lake, and is how the reduction of Mono Basin diversions allowed this year will happen without loss to the city (see page 4). As the water supply graphs below show, expanded conservation, recycling, groundwater, and capture programs are the places Los Angeles now looks to meet future water needs—not Mono Lake, and not the Owens Valley.

“Our relationship with water must evolve,” Garcetti observed. “We cannot afford the water policies of the past. We must conserve, recycle, and rethink how we use our water to save money and make sure that we have enough water to keep LA growing.”

Los Angeles’ water plans are slowly institutionalizing the expectation that for years to come Mono Lake will be protected at a healthy level, that dust will be controlled at Owens Lake, and that other water obligations in the Eastern Sierra will be satisfied. And that, quite simply, is remarkable progress.

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**SoCal water notes**

by Geoffrey McQuilkin
Caltrans’ rockfall project on 395 to begin this year
by Lisa Cutting

The California Department of Transportation (Caltrans) project to improve motorist safety by reducing rockfall incidents along a one-mile section of Highway 395 near Old Marina is scheduled to begin in June. The project will stabilize six eroded slopes using a combination of anchored mesh material and an aggressive soil rehabilitation and revegetation plan.

Once the project begins, people traveling on Highway 395 north of Lee Vining can expect routine traffic delays of up to 20 minutes, 24 hours a day, seven days a week. Even though construction won’t be occurring 24 hours a day, the highway will be reduced to a single lane with temporary traffic signals that will remain in place for the duration of the project.

In addition, the project will include two eight-day periods of complete road closure for up to one hour, Monday–Thursday mornings between 6:00 AM–7:00 AM. These hour-long closures will not take place on Friday, Saturday, or Sunday in order to minimize the number of people affected by the delays, and the specific dates will be communicated well in advance on Caltrans’ electronic highway information signs, temporary signage, and online. The Mono Lake Committee Information Center & Bookstore as well as monolake.org will also serve as a source for closure information and other updates on the project.

At first, the project area will look worse because of the slope disruption necessary to install the mesh. Once the anchored mesh is secure, the soil rehabilitation and revegetation phase of the project will begin, allowing plants to further stabilize the slopes, ultimately improving the area by revegetating the rockfall areas to a state similar to the adjacent healthy, and safe slopes. Committee engagement and member input have been critical in assuring that this project achieves positive outcomes (see Summer 2014 Mono Lake Newsletter for project details).

The Mono Lake Committee recommends all travelers check monolake.org before traveling in the area this summer.

Environmental community loses Martin Litton
by Lisa Cutting

The natural world lost an uncompromising environmental activist and fierce advocate of all things wild when Martin Litton died on November 30, 2014 at the age of 97.

The long list of Litton’s accomplishments includes being a Colorado River guide, World War II pilot, Sierra Club board member, travel editor of Sunset Magazine, and a freelance writer and photographer. He is best known for his leadership in battles over the Colorado River and his efforts to protect wilderness.

Litton also had a long connection to Mono Lake—going back 80 years. At the age of 18, he wrote what might be one of the first “Save Mono Lake” letters in existence. The Los Angeles Times published his letter to the editor on October 27, 1935:

To Save Mono Lake
INGLEWOOD, Oct 21.—For the disappearance of Owens Lake there is some excuse. Los Angeles really needed the water. But when our City of the Angels will wantonly dry up beautiful, mysterious Mono Lake to selfishly add a few unnecessary gallons to an already adequate supply, things are going a little too far. The people of the Owens Valley region are already deeply resentful toward the great city which has made their once fertile and productive land into a barren desert waste. The people of the entire State should rise up against the destruction of Mono Lake. Mono Lake is a gem—among California’s greatest scenic attractions—a beautiful and historic landmark which must not be destroyed.

MARTIN LITTON
Visions of the Past: First Discoveries
June 6–7 • Terri Geissinger
$155 per person / $140 for members
The Mono Basin is filled with monuments to a bustling past—take a journey back in time and discover its fascinating history. The past will spring to life as you hear stories of the discoverers, the prospectors, and the families who settled here and made the Mono Basin their home. Visit Dogtown, Monoville, Bodie (with a special visit to the Bodie Bluff!), Mono Mills, stagecoach routes, railroads, and gold mines. Terri Geissinger is a Bodie State Historic Park interpreter and guide with a contagious love of history.

South Shore Kayak
June 13 • Stuart Wilkinson & Committee staff
$105 per person / $95 for members
limited to 12 participants
Early summer reveals snow-capped mountains towering over a glassy Mono Lake—a great time to kayak! Join Stuart Wilkinson and a Mono Lake Committee staff member for a guided naturalist expedition that will cover a wide variety of topics relating to this unusual Great Basin lake, such as geology, ecology, history, and politics. Expect to see underwater tufa towers, birds, brine shrimp, and lake-bottom springs. Some kayak experience is helpful, but not necessary; kayaks and safety equipment are provided.

Woodpeckers of the Mono Basin
June 16–18 • Steve Shunk
$165 per person / $150 for members
Join North American woodpecker specialist Steve Shunk for this dynamic overview of Mono Basin woodpeckers. 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. Steve has studied the ecology of western forests for the last 16 years and recently completed the Peterson Reference Guide to Woodpeckers of North America.

Music & Ecology in the Mono Basin
June 26–28 • Cole & Priscilla Hawkins
$180 per person / $165 for members
This nature and music adventure in the Mono Basin will connect the grandeur of the Sierra Nevada and Mono Lake with the music of Ludwig Van Beethoven and Jean Sibelius.

Mono Lake Committee Field Seminars fill quickly every year—call (760) 647-6595 or register online at monolake.org/seminars.
The seminar will include dinner catered by Linda Dore at the Hawkins’ home on the north shore of Mono Lake. Priscilla Hawkins received a Bachelor of Music from the University of Michigan, holds a California Teaching Credential and has taught cello and chamber music for 40 years. Cole Hawkins earned a Master’s in Biology at Fresno State and a PhD in Wildlife and Fisheries Sciences from Texas A&M.

Mono Basin Natural History: Aquatic & Terrestrial Habitats
July 10–12 • David Wimpfheimer
$245 per person / $230 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 kayaking exploration of Mono’s south shore is included in this class. David Wimpfheimer has been an educator and interpreter for over 20 years, focusing on birds and California’s natural history.

Insects & Plants: An Ecological Marriage for the Ages
July 17–19 • Richard Potashin & Nancy Hadlock
$165 per person / $150 for members
Explore the complex, intimate relationships and attractions between insects and plants, including the threats to this essential relationship and how cultures, artists, and poets have interpreted this “marriage for the ages.” Richard Potashin is a longtime Eastern Sierra resident who, in a previous life as a landscape gardener, developed a passion for native flora. Nancy Hadlock has been a naturalist, interpreter, and educator for the National Park Service and US Forest Service for over 30 years.

Los Angeles Aqueduct Tour
July 18 • Greg Reis
$105 per person / $95 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 the aqueduct’s effects on Mono Lake, its tributary streams, the Upper Owens River, and land management in the area. The group will discuss the history of water diversions, the effort to save Mono Lake, and the future of habitat restoration. Greg Reis is the Committee’s Information & Restoration Specialist with 20 years of experience in Mono Basin hydrology and restoration.

Mono Basin Streams: Flow, Fish, Forests, & Feathers
July 19 • Greg Reis
$75 per person / $65 for members
The new Mono Basin Stream Restoration Agreement reached with the Los Angeles Department of Water & Power will begin changing the Mono Basin’s streams for better in the next few years. Join the Committee’s Information & Restoration Specialist Greg Reis for a tour of Lee Vining and Rush creeks to see and discuss evolving restoration philosophies, the process of reaching the Stream Restoration Agreement, and what the expected results are for flows, fish, trees, birds, mammals, and Mono Lake.

Mono Basin Mammals for Kids
July 24–25 • John Harris
$90 per person / $80 for members
This class is designed for kids ages 6 to 12 and their adult companions (a parent or guardian must accompany kids taking this seminar) who are curious about the mammals found in the Mono Basin, from desert sand dunes to the

The Los Angeles Aqueduct Tour seminar includes a visit to the Walker Creek diversion dam.
forests and alpine meadows of the high Sierra. Through live-trapping and field observation of tracks, scat, burrowing, and the animals themselves, this seminar will introduce participants to the diversity of mammals found in the Mono Basin, with an emphasis on kid-friendly instruction. John Harris is a Professor of Biology at Mills College whose interest in Mono’s mammals began in 1975 while studying chipmunks as an undergraduate.

Geology of the Mono Basin
August 14–16 • 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. This seminar, consisting mostly of field visits to the premier sites, will present in understandable fashion the geologic stories of the Mono Basin. Greg Stock is the first ever Yosemite National Park geologist. He has authored or co-authored over 50 papers and abstracts on Sierra Nevada geology and is co-author of the book *Geology Underfoot in Yosemite National Park.*

Birding the Migration: Mono Basin & Bridgeport Valley
August 20–21 • Dave Shuford
$190 per person / $175 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 and Bridgeport Valley. If the water level of Bridgeport Reservoir is high enough, this seminar will include a half-day of birding by boat. Dave Shuford has been a staff biologist at Point Blue Conservation Science for over 30 years. He has conducted numerous surveys and research projects in the Mono Basin and beyond and is well acquainted with where to find birds in the Eastern Sierra.

Loosen Up with Watercolor
August 21–23 • Penny Otwell
$175 per person / $160 for members
limited to 12 participants
With larger brushes and brilliant transparent watercolor, learn to express your vision of the remarkable landscape of the Mono Basin through this field seminar. Painting exercises focusing on design and color will form the basis of this class for beginner to intermediate painters while working both indoors and outdoors. Instructor Penny Otwell paints professionally in the Sierra Nevada, and her distinctive style has evolved as a self-taught painter. Her work has been influenced by the work of Chiura Obata, Maynard Dixon, Edgar Payne, and Wayne Thiebaud.

**Mono Basin & Bodie Photography**
July 31–August 2 • David Gubernick
$300 per person / $275 for members
limited to 12 participants
Join this warm and supportive field seminar to enhance your photo-taking abilities 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. David Gubernick is an internationally and nationally published and award-winning nature photographer and workshop leader. His exhibition prints can be seen at Gallery Sur in Carmel and the Ventana Inn & Spa in Big Sur.

**Introduction to High Country Plants & Habitats**
July 31–August 2 • 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. Sight identification of common trees, shrubs, and wildflowers will be emphasized, as well as the many ways that plants, birds, insects, and other wildlife interact in high country habitats. Ann Howald is a retired consulting botanist who has taught popular Committee field seminars for over ten years.
Birding the Migration:  
**Mono Basin & Long Valley**

August 22–23 • 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 full migrants and early arriving wintering birds in the Mono Basin and Long Valley. Dave Shuford has been a staff biologist at Point Blue Conservation Science for over 30 years. He has conducted numerous surveys and research projects in the Mono Basin and beyond and is well acquainted with where to find birds in the Eastern Sierra.

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**Miwok-Paiute Basketry**

August 28–30 • Lucy Parker & Julia Parker  
$190 per person / $175 for members  
$80 materials fee  
limited to 12 participants  
primitive group campsite included (no pets)  

During this seminar, participants will prepare materials and create a small Miwok-Paiute burden basket—used for gathering pinenuts, acorns, and berries. This seminar is designed for weavers of all levels and participants are encouraged (but not required) to camp with the group at the peaceful private campsite near Lundy Canyon. Lucy Parker is a descendant of the Yosemite Miwok, Mono Lake Kutzadika'a, and Kayasha Pomo peoples. She learned traditional handiwork from her mother Julia, a master basket weaver who has dedicated her life to learning and teaching basketry.

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Creating the Illuminated Field Journal

September 4–6 • Hannah Hinchman  
$175 per person / $160 for members  
limited to 12 participants  

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/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. Hannah is the author of three books about field journals, and has been teaching field journal workshops all over the US for over 20 years.

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Visions of the Past:  
**Bodie & Aurora**

September 12–13 • Terri Geissinger  
$155 per person / $140 for members  

In the Bodie Hills are ghost towns full of stories of pioneer families, prospectors, muleskinners, heroes, and gunslingers. This guided tour will visit the town and the cemetery of Bodie, once the second-largest city in California, with tours of the Standard Stamp Mill and the Bodie Jail. Next, a journey that hasn’t changed much since the historic mining days will end up at Aurora, once a bustling town of 8,000 souls in the 1860s. Your leader Terri Geissinger is a Bodie State Historic Park interpreter and guide, with a talent for making history come alive.

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**Mono Basin**  
**Moonlight Photography**

September 25–27 • David Gubernick  
$275 per person / $250 for members  
limited to 10 participants  

Nighttime photography 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, you will learn to create nighttime images with visual impact. David Gubernick is an internationally and nationally published and award-winning nature photographer and workshop leader. His exhibition prints can be seen at Gallery Sur in Carmel and the Ventana Inn & Spa in Big Sur.

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monolake.org/seminars or (760) 647-6595 to register
Geology of the Mono Basin

October 2–4 • 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. This seminar, consisting mostly of field visits to the premier sites, will present in understandable fashion the geologic stories of the Mono Basin. Greg Stock is the first ever Yosemite National Park geologist. He has authored or co-authored over 50 papers and abstracts on Sierra Nevada geology and is co-author of the book Geology Underfoot in Yosemite National Park.

Mono Basin Fall Photography

October 9–11 • Robb Hirsch
$225 per person / $200 for members
limited to 12 participants

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. Join accomplished photographer and workshop leader Robb Hirsch to explore shoreline locations at sunrise and sunset, fall color in nearby canyons, and grand overviews of the Mono Basin. Photographers of all levels are welcome; a fully adjustable camera of any size or format is suggested.

Field Seminar Registration Information

To register for a field seminar, please call the Mono Lake Committee at (760) 647-6595 and ask for the seminar desk, or register online at monolake.org/seminars.

We accept VISA, MasterCard, and Discover only. We cannot accept personal checks or registration by mail or email. Seminars are limited to 15 participants except where noted. If a seminar receives less than six participants (with some exceptions) the seminar will be cancelled two weeks in advance, and full refunds will be issued.

If you cancel three weeks prior to the seminar start date, we will refund your payment (less a $15 processing fee). No refunds can be issued for any reason if cancellation is within three weeks of field seminar date, but tuition can be applied to another seminar that takes place within one calendar year of cancellation date. If you cancel within one week of the seminar start date, no credit can be issued.

Participants must sign a liability release form. All seminars operate under permits from the Inyo National Forest and California State Park system.

The Mono Lake Committee works with instructors and field leaders 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 Mono Lake Committee Field Seminars benefit research and education in the Mono Basin.

Mono Lake Committee Field Seminars are open to everyone, but Mono Lake Committee members get to register early and receive class discounts. If you are not a current member of the Mono Lake Committee, you can receive the discount by joining when you register.
conservation, efficiency, and adaptation. Thoughtful changes began in the late 1980s when a previous stretch of critically dry years threatened water supplies. Today the city uses less water than it did 40 years ago despite a 25% increase in population. Los Angeles has the lowest per capita water use of any major US city with a population greater than one million. The city continues to push hard to conserve and reduce its reliance on imported water.

In October 2014, Mayor Eric Garcetti issued an executive directive to reduce fresh water consumption by 20% and to slash the city’s reliance on imported water by 50%. The detailed directive provides a long list of actions with target thresholds affecting residential customers and all levels of city government. The order also creates a new Mayoral Water Cabinet to oversee progress on water policy goals while moving forward on three key areas; (1) developing a strategy to increase local water supply through stormwater capture, recycled water, conservation, and groundwater remediation, (2) recommending a new tiered water rate system that better encourages conservation, and (3) initiating a statewide leadership position on water reuse and stormwater capture.

Drought and climate change are forcing change, and Los Angeles is moving decisively. If you’re a DWP customer, you might not see the difference in your water bill just yet, but if you have a lawn, the price to replace it with a drought-tolerant landscape just went up to $3.75 per square foot.

Looking ahead

We have already entered conditions predicted by climate modeling. Extreme drought year types are expected to increase in frequency, along with more extreme rain and floods connected to atmospheric river events. Decreasing Sierra snowpack and earlier spring runoff is already occurring. Warmer overall temperatures have been trending in California for decades. Last year was the warmest in the history of the state, by a record margin.

Since the 21st Century began, 11 of the last 16 years in California have ranked the warmest on record. Every year since 1998 has produced average temperatures above the 1901–2000 mean. It is getting warmer, and the droughts of the past aren’t comparable with those of this century now that increasing temperatures are at play.

The consequences of climate change are large, complex, and affect us all. The Mono Lake Committee is asking questions and seeking answers in terms of what this change means for the Mono Basin. As a group of concerned citizens who care about the lake and streams, it is part of our mission to figure out what lies ahead for Mono Lake. At the same time, neither the state nor the federal government have the time nor the resources to dedicate to climate change issues on the ground. While Los Angeles is working quickly to improve water and energy efficiencies, we know that DWP’s efforts will not be focused on the condition of Mono Lake except as required by the State Water Board. Finding solutions that work for Mono Lake will be up to the Mono Lake Committee and all of us as we navigate future conditions.
We would like to send out a big thank you to all those who entered the 2014 Free Drawing fundraiser—your generous donations help protect and restore Mono Lake! Congratulations to all the winners, and many thanks to all of the businesses and organizations who generously donated the prizes for the Free Drawing.


Lily Pastel is a Committee Project Specialist. She’s so excited about canoe tours she’s already got the canoe tour reservation system up and running. If you’re dreaming of summer too, visit monolake.org/canoe to make your reservation.

Volunteer for Mono Lake

The Mono Lake Volunteer Program is a fun way to meet other Eastern Sierra enthusiasts while helping out at your favorite lake. Each summer, volunteers staff the boardwalk at Old Marina and County Park, meet with visitors at South Tufa, pull invasive plants, and help with a wide variety of other projects in the Mono Basin.

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. If you are interested in volunteering, or for more information, please contact Jessica Horn (jessica@monolake.org) at (760) 647-6595.
Although neighboring peaks hold only a light dusting of snow, the Mono Lake Committee staff is hard at work and making the best of the unseasonably warm weather.

The Committee is fortunate to welcome two new board members to the family. As an Environmental Scientist for the Environmental Compliance & Evaluation branch of the California Department of Water Resources, Gina Radieve represents the next generation of science-oriented supporters of Mono Lake. With a BS in Biology from Humboldt State University, a post-baccalaureate certificate in GIS, and a decade of field work, she is a great addition to the organization. Gina said, “Mono Lake’s unique ecology and outstanding natural beauty are very interesting to me. As a biologist, I am drawn to the community of plants and wildlife (and humans!) that have adapted to life in the specific conditions in and around this saline lake.” We are pleased to have Gina’s fresh perspective on the board.

Kristine Zeigler, who has trekked to Mono Lake since she was a little girl in the early 1980s, comes to us with 17 years as a fundraiser for animal welfare and the environment. Currently serving as Director of Philanthropy at the Nature Conservancy in California, her experience will be an asset to the Committee. “Mono Lake represents the use of a creative approach to ensure that a very special place is protected for generations to come. The Mono Lake Committee works with the very people who divert and use the water in order to restore the ecosystem and to educate future generations on wise water use,” said Kristine. Kristine is also a fiction writer, outdoorswoman, and enjoys flying.

Congratulations are in order for Communications Coordinator Elin Ljung, who married Mammoth Lakes local Nathan Taylor in Bridgeport last October. They were married by Judge Stan Eller, who famously sent sheriff’s deputies to prevent DWP from “turning off” Rush Creek in late 1984, and who received the Mono Lake Committee’s Defender of the Trust award in 2001. We wish Elin and Nathan many years of fun together as they hike, ski, and bike around the Eastside.

Although we are sad to see her go, Terry McLaughlin will not be wandering too far as she retires from a long and impactful career as an outdoor educator. Terry has been indispensable in her time at the Mono Lake Committee. She originally served as the lead Outdoor Education Instructor in the summer of 2012. A year later, she picked up the reins as the temporary Information Center & Bookstore Manager, and then promptly filled in as Office Manager at the peak of the summer last year. Terry and her husband Vern Gersh plan to start her retirement by taking a three-month birding trip across the country, and will return in the summer to Lee Vining.

After serving a summer as the lead Outdoor Education Instructor, Elina Rios became the Committee’s first Los Angeles Watershed Education Coordinator, dividing her time between the Mono Basin and Los Angeles with the purpose of connecting children and adults alike with the source of their water. We wish her the best in her new position of Associate Family & Outreach Director at the YMCA of Cupertino.

We are excited that local resident Jessica Horn has returned to the Committee to take on the ever-varied challenge of being our Office Director. Jess previously worked in the Information Center & Bookstore, including two years as manager, and then spent a year working in June Lake. She’s already deep into planning for the summer 2015 season, and her energy and enthusiasm for Mono Lake will assure that all the Committee’s wheels are turning smoothly.
The Outdoor Education Center is in need of three new picnic tables. Our goal is to purchase commercial-grade steel tables with a thermoplastic finish—this style is comfortable, durable, and heavy enough not to flip over in the Mono Basin’s high winds. Picnic tables play a central role in the OEC program, allowing groups to eat together and learn together. Please contact Education Director Bartshé Miller (bartshe@monolake.org) at (760) 647-6595 if you can help.

From the mailbag

News from members and friends

by Ellen King

Thank you to everyone who sent in contributions in honor or in memory of your friends and loved ones. We appreciate these gifts that help us carry on the work that will keep Mono Lake a special place for many generations.

In honor

Ted & Nan Lindsay of Millbrook, NY made a donation in honor of their daughter (and former Committee staff member) Morgan Lindsay. Angela Moskow of Albany gave a gift in honor of Peter Vorster. Carolyn Pickton of Denver, CO made a donation in honor of Shailer & Alice Pickton. Joy Zinnavoda of Redondo Beach sent a contribution in special appreciation of volunteer coordinator Janet Carle.

In memory


We received donations in memory of Norma McKinney from Joyce Johnson of Wilmington, DE and from Norma’s daughter Kathy Schreiner of Naperville, IL.

We received donations in memory of J. Richard Johnston from Steven Abernathy of Piedmont, Arvi Dorsey of Oakland, E.C. & Janet Halbach of Berkeley, Julia Henshaw of Oakland, Joan Miura of Emeryville, and Robert & Bodil Platt of San Rafael, who wrote, “our gift is in memory of Dick Johnston—a great human being and a wonderful friend.”

Ellen King is the Committee’s Membership Coordinator. She is looking forward to exploring the Bodie Hills this spring.

Wish list: Picnic tables

The Outdoor Education Center is in need of three new picnic tables. Our goal is to purchase commercial-grade steel tables with a thermoplastic finish—this style is comfortable, durable, and heavy enough not to flip over in the Mono Basin’s high winds. Picnic tables play a central role in the OEC program, allowing groups to eat together and learn together.

Please contact Education Director Bartshé Miller (bartshe@monolake.org) at (760) 647-6595 if you can help.

Farewell Rick Knepp

In December Mono Lake lost a dedicated admirer and tireless advocate with the passing of photographer Richard Knepp.

Rick fell in love with Mono Lake and began working for the Mono Lake Committee in 1992. He helped the Committee through the renovation of the Information Center & Bookstore in 1993, worked to elevate the Mono Lake Calendar, and was the voice in the popular Mono Lake Story slideshow, but he is probably best known as a photography field seminar instructor. He had a talent for teaching photography and telling a story at the same time—reminding everyone that the beauty of Mono Lake is tied to protection and restoration.

Rick was also a mentor—inspiring countless students to see the world with sharper vision. After 20 years of instruction, visits, and warm friendship, we miss him dearly.

Our hearts go out to Rick’s immediate and extended family. His legacy will live on in our memories and in his own exquisite photographs of Mono Lake.

join us for the

Andrea Lawrence Award Dinner

Friday, April 24, 2015
at 5:30PM

Parallax Restaurant
Mammoth Mountain

RSVP by April 1 to Lily:
lily@monolake.org or (760) 647-6595.

the 14th annual

Mono Basin Bird Chautauqua

June 19–21, 2015
registration opens
April 15
at birdchautauqua.org

Trail Chic Fashion Show

July 24, 2015
at the Lee Vining Community Center

a fundraiser for the Committee’s Outdoor Education Center programs

WILD & SCENIC® FILM FESTIVAL

Los Angeles

March 5, 2015
7pm
Old Town Music Hall
El Segundo

a fundraiser for the Mono Basin Outdoor Education Center

monolake.org/wildandscenic