Summer Events

Water Reclamation Issue
he pass is open. Those are four powerful words around these parts. And with what feels like an explosion of adventurous travelers, summer is officially here. Ready?

This issue of the Mono Lake Newsletter is as full as the bookstore on a warm summer evening—we’ve got so much going on! Mono Lake Tufa State Reserve updates are on page 6 and a bighorn sheep update is on page 7. Don’t miss Part II of our four-part series on the sources of Los Angeles’ water on page 12. Explore a new side of fishing by one of our staff fishing experts on page 13. Don’t lose the lessons learned from the ghost town of Bodie in the article on page 22. Come on out for two of our big events—Restoration Days and the High Sierra Fall Century—details are on pages 18–19. And if you are visiting the Mono Basin, be sure to look at pages 16–17 for helpful travel information.

Best wishes for a wonderful summer, and come float in Mono Lake with us sometime soon!

—Arya Degenhardt

Microbial research is currently underway at Mono Lake. Here, scientists based out of the Sierra Nevada Aquatic Research Laboratory are using high-tech instruments to measure water currents in order to further understand microbial habitat in the lake.

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 is a part of the Western Hemisphere Shorebird Reserve Network, a member of the international Living Lakes partnership (www.livinglakes.org), and home to a United States Forest Service Scenic Area and a California State Reserve.
There is no new water

by Frances Spivy-Weber

Earth is a big water-recycling machine, moving water between the land, the sea, and the atmosphere. No water gets lost, it merely changes locations, quality, and form.
— Sandra Postel, Pillar of Sand (Worldwatch Institute, 1999)

There is no new water. Having accepted that there is no new water, let’s add a few additional facts:

• California’s (and the world’s) population will rise sharply over the next few decades. The numbers are debatable, but the trend is not.
• California’s economic growth during the same period will place increased demands for water, particularly high quality water, on local and regional governments.
• Water quality research is causing federal and state agencies to ratchet up water quality standards. Water treatment research, particularly membrane technology, is moving ahead quickly too.
• Traditional water users are increasingly expected to share water with the environment—fish, recreational streams and rivers, watershed wetlands, and natural areas—and to protect the environment from polluted water.
• During droughts, no area of California can count on imported water, so a local strategy for self-sufficiency is important.

There is a simple solution to California’s (and the world’s) increasing demand for good quality water: improve water’s productivity by using less overall and using what we have more than once. And high on the list of strategies for increasing water use efficiency is water recycling.

This article will focus on recycling wastewater from sewage treatment plants and putting it back into use. There are other opportunities for conservation such as capturing, treating, and re-using storm water, dry-weather run-off, agricultural drainage, and water used in industrial processes. Water productivity must also come from developing new crops, cultivation, and irrigation methods that use water more efficiently, and, as we are doing now with the environment, making some hard, value-laden decisions about reallocating the legal rights to water.

Water recycling

The stream of wastewater going into sewage treatment plants from homes, gardens, streets, and industries is guaranteed to increase during the first half of this century. If that water can be separated from contaminants and treated for health and safety, it is a valuable local addition to the water supply for people and the environment. If not made safe for reuse, many more sewage treatment plants will have to be built to handle the increased volume—and new schemes for disposing of the wastewater will have to be developed.

Thankfully, treatment techniques are good and getting better every day. Many communities, particularly in Southern California, have developed cost-effective ways to use recycled water that are safe and receive the California Department of Health Services’ seal of approval. Experts say that some of the “cleanest” water being used today is reclaimed water. It is used for landscape and agricultural irrigation, industry, direct groundwater recharge, and in injection wells as a barrier to salt water intrusion into coastal groundwater basins.

The Mono Lake Committee is strongly committed to helping Los Angeles and the state of California make the best use of its available water, thereby allowing us to preserve ecologically valuable water resources like Mono Lake. Many questions are raised about recycled water by the press and others, and following are some answers to the most common ones:

Is reclaimed water safe?

Most people’s questions about

continued on page 4
reclaimed water are variations on an understandable uncertainty about the health and safety of taking wastewater, treating it, and using it again in ways that may one day put that water into your tap. What are the risks? What are the safeguards?

First, let’s go back to the first statement of this article: there is no new water. So, we are already drinking water that is brought in from aqueducts or pumped from the ground and that has been used by many others upstream. Much of that use is not “pretty.” In the future, more restrictions on upstream users may greatly reduce their degradation of this water, but changing the habits of industries, towns, farmers, foresters, and citizens will take time. So how do we know it is safe to drink today? We make sure that imported and pumped tapwater is safe by requiring that it meet a number of water quality standards.

The same is true for reclaimed water.

And while regular water sources must satisfy federal and state health standards, reclaimed water projects receive even more rigorous review. The standards of more than a dozen federal, state, and local agencies responsible for protecting the environment, public health, and water must be met before reclaimed water can leave the treatment plant.

Reclaimed water is given three levels of treatment before it is first introduced into the environment, and then there are restrictions and safeguards on how it is released. Once introduced, reclaimed water is monitored, blended with other water underground, and when it is pumped from the ground months or years later it is treated again and mixed with a minimum of 80% other water to be used as drinking water. With this many water quality controls in place, it is no exaggeration to say that reclaimed water is the cleanest water being introduced by humans into the urban environment.

How does reclaimed water help stretch water supplies in a drought?

Most Californians are familiar with the reality of droughts, which limit the amount of water available to all water users—agriculture, industry, communities, the environment. When the Sierra Nevada snowpack is low, there is not much water to export to urban centers or to farms. Those communities who have local sources of water are in the best position to maintain near normal conditions for their residents. Reclaimed water is a local source. It is a substitute for imported or pumped water through replenishing groundwater basins and keeping them filled.

Are there other benefits of using reclaimed water?

A great deal of public and local taxpayer money goes into treating wastewater to secondary levels and then to disposing of it somewhere—usually into streams, bays, or the ocean. For a relatively small additional cost, this water can be treated a third time to drinking water quality and used again. Some industries—oil companies, technology companies—are eager to take this tertiary-treated water and use it for cleaning their systems, which are highly sensitive to “dirty” water. In Southern California, Chevron, Arco, Mobil, and others have shifted from treating regular drinking water to using reclaimed water from El Segundo’s West Basin Water Recycling Facility because it comes to them “cleaner” and is less damaging to their equipment.

The East Valley Water Reclamation Project in Los Angeles is scheduled this year to begin delivering water to spreading grounds in Los Angeles, which will over five years—filter into the City’s groundwater basins. The Mono Lake Committee worked closely with state leaders in the 1980s and early 1990s to
For 25 years, Orange County Water District’s Water Factory 21 has successfully purified wastewater and produced highly treated drinking-quality water to inject into their coastal seawater intrusion barriers, protecting the county’s critical groundwater supply. The treated water eventually blends into the groundwater.

What about desalination as an alternative?

Desalination is another water use tool that is benefiting from lowered cost of micro-filters. Some parts of coastal California are using desalination to clean-up brackish water caused by seawater intruding into groundwater basins. Desalination is not more cost effective than reclamation, however, because desalination plants have to treat contaminated seawater in much the same way as reclamation plants, in addition to removing the higher salt content.

What about the cost of recycling?

Recycling is not cheap, but the cost of reclaimed water has come down over the years as utilities gain experience and as technology changes. At the same time, the cost of imported water has gone up, particularly during drought years, making the difference between the cost of recycled and imported water more negligible. When this reduced cost difference is added to the reliability of reclaimed water in a drought, the cost arguments against recycling are muted.

If these questions have raised more questions in your mind or if you just want to talk to someone about recycled water and other water policy measures, please call Frances Spivy-Weber (frances@monolake.org) at (310) 316-0041.

Fran is the Committee’s Executive Director of Policy. Based in LA, she’s a Sacramento shuttle flight master.

Mono Lake Committee staff standing with distinctive purple recycled water pipes on a tour of the East Valley Water Reclamation Project with Los Angeles Department of Water and Power staff.

How much experience do water agencies have with mixing reclaimed water and groundwater?

For over forty years Los Angeles and Orange Counties have recharged their groundwater with some recycled water. Studies in 1984, 1987, and 1996 each found that the process of recycled groundwater recharge used for drinking water resulted in no harmful effects.

raise $36 million for this project. The reason was simple. The project will ultimately deliver 35,000 acre feet per year of recycled water—enough to supply water to 200,000 families each year—and it will help to offset the up to 78,000 acre feet of water now flowing to Mono Lake.
Threat to State Reserve is on hold

by Craig Roecker

There has been progress in the negotiations between private property owners and state agencies representing the Mono Lake Tufa State Reserve regarding land use issues at Mono Lake. While the resolution passed in February by the Mono County Board of Supervisors—a resolution that threatened the land base of the State Reserve (see Spring 2000 Newsletter)—remains on the desks of legislators in Sacramento, it is clear that most parties prefer an administrative solution allowing private landowners to make reasonable use of adjacent land at Mono Lake while maintaining the State Reserve itself.

On March 21, the Board issued a memorandum in response to the flood of letters that they had received from private parties and public agencies about this issue. The purpose of the memorandum was to clarify the intent of the February resolution. In it the Board laid out the land use issues at hand and the status to date. They also stated emphatically their support for the State Reserve. They indicated that the intention of the Board “was not to undermine the land base of the Tufa State Reserve, nor to adversely affect the Reserve in any fashion.” The Board also reaffirmed that “the Board of Supervisors has historically supported the existence of the Tufa State Reserve, most recently by Board Resolution 92-11, and still supports it today.” These statements are reassuring, and the Committee is arguing that the Board can best substantiate them by withdrawing its original, confusing resolution.

The matter was reheard by the supervisors in early May. Representatives for the state and the landowners explained that they had reached a conceptual land-use agreement. It appears that the main “sticking point” was whether the agreement would be in the form of a lease or another type of contractual arrangement. The upland property owners feel that any agreement drafted in the form of a lease would prejudice an ongoing ownership dispute. (The land exposed by the falling lake, Mono Lake’s relitected land, is currently claimed by the state under the laws of reliction. Several upland landowners dispute this claim.)

While the February resolution was not rescinded, several positive steps were taken. The Board decided to conduct a workshop in the field to better understand the issues at hand. They also passed a resolution, in part because of how this issue was handled, that requires that all future resolutions submitted by the public be subject to a two-week review by staff prior to any action.

However, the State Reserve issue will not be resolved until the Board of Supervisors withdraws the February resolution from the desks of legislators in Sacramento. Thank you to all members who have written letters reminding the Board of the critical role of the State Reserve at Mono Lake. Keep checking our website at www.monomailake.org for updates, or call Craig (craig@monolake.org) at (760) 647-6595 for information about this ongoing issue.

Craig Roecker is the Committee’s Mono County Outreach Coordinator. He and his family just got an adorable yellow lab puppy named Ritter.

Important public trust protections for Mono Lake

Editor’s note: The recent threat to the Mono Lake Tufa State Reserve revealed some confusion about the respective roles of the Mono Lake Tufa State Reserve and the Mono Basin National Forest Scenic Area in the Mono Basin. Both provide important and different protections for Mono Lake and the lake’s many public trust values.

The Mono Lake Tufa State Reserve was established in 1982 by the California Legislature to protect tufa and associated sand structures, to provide for their interpretation to visitors, and to provide all of the natural resource protections of the state park code. As a California State Reserve it provides the highest degree of environmental protection in the state park system. The Mono Lake Tufa State Reserve protects tufa on relitected lands and throughout the Mono Basin, and staff provide law enforcement, public safety, interpretive programs, and a general field presence at the lake. Approximately 3.5 million visitors have come to the State Reserve since 1983.

The Mono Basin National Forest Scenic Area was created in 1984 by the federal government to protect geologic, ecologic, cultural, natural, scenic, and other natural resources in the basin while allowing recreational, scientific, and other activities consistent with this goal. It includes 77,000 acres of land within the basin. The Scenic Area Visitor Center provides general information about the area and offers interpretive displays that explain the cultural and natural history of the basin.

Together the State Reserve and Forest Service Scenic Area offer broad protection for the lake and the basin. The two collaborate on resource management and interpretive tours (the latter in conjunction with Mono Lake Committee staff). Combined, the Mono Lake Tufa State Reserve and the Mono Basin National Forest Scenic Area draw an average of 250,000 visitors per year and generate an estimated $4 million in revenue for local businesses.
Restoration notes

The 2000 field season is progressing with Mono Basin restoration activities begun in 1999 by the Los Angeles Department of Water and Power (DWP). Much of the work this year will focus on monitoring—measuring the effects of flows on stream channels, tracking vegetation recovery along the streams and in wetlands around the lake, and surveying waterfowl during the key migration months. The information derived from the monitoring will help shape future restoration activities and ultimately will be used to assess whether Mono Lake and its streams have been restored as required by the State Water Resources Control Board's 1994 decision protecting Mono Lake.

In addition, several technical aspects of restoration are pending. The Committee—with the help of its advisors—is participating in restoration's “adaptive management” (see Fall 1997 Newsletter) by reviewing and commenting on:

- when and how to reopen channels in Rush Creek’s bottomlands based on several years’ monitoring data on the creek
- which engineering retrofit of DWP’s diversion facilities, among the alternatives recently proposed by consultants, will best allow sediments to pass downstream.

The Committee also is taking steps to resolve a lingering dispute between DWP and the California Department of Fish and Game over how to retrofit the Rush Creek return ditch in order to get high flows down Rush Creek (see page 10.)

Bighorn protection

The U.S. Forest Service has proposed closing two domestic sheep grazing allotments—Bloody Canyon and Alger Lakes—in response to a disease that domestic sheep easily transmit to endangered Sierra Nevada bighorn sheep. The Forest Service is attempting to comply with the Endangered Species Act by removing the domestic sheep (and therefore the potential risk of disease transmission) from allotments that geographically border bighorn habitat.

The Sierra Nevada bighorn are a unique race of bighorn sheep that are found only in the Sierra Nevada mountains. Their current population includes approximately 125 individuals, and they are highly susceptible to the pneumonia that is transmitted through domestic sheep herds.

The Mono Lake Committee believes that the potential for high mortality rates to the bighorn poses a threat that is unacceptable given their precarious population numbers. Eliminating the threat (removing the domestic sheep) allows the bighorn a much stronger chance of surviving.

Removing grazing also will benefit the streams by allowing natural recovery of riparian corridors. The absence of domestic sheep will allow the banks to stabilize, vegetation to return, and a reduction in stream sedimentation. Since ungrazed meadows may not be irrigated, protecting the bighorn may lead to changes in previously irrigated areas that have become dependent upon water.
Water Resources Center Archives update

by Melissa McGann

The organizational papers of the Mono Lake Committee will be available for public use early this summer at the Water Resources Center Archives (WRCA) on the University of California, Berkeley campus (for directions see www.lib.berkeley.edu/LibraryMap). The collection documents the organizational history of the Committee from 1978 to 1995. Items of particular interest include:

- administrative records
- correspondence documenting the creation and evolution of the Mono Lake Committee
- subject, research, and clipping files compiled by the Committee
- unpublished research and data
- legislative files related to Mono Lake issues
- extensive court records, exhibits, testimony, and other legal documents

When completely processed, the collection will consist of nearly 100 archival boxes, which equals approximately 50 linear feet of storage space. The finding aid/container list for this collection will be available at the WRCA and on the internet at the Online Archive of California website www.oac.cdlib.org.

Two fundraising events co-sponsored by the Committee and the WRCA provided financial assistance for processing the collection: the premiere of the documentary The Battle for Mono Lake in October 1997 and the benefit concert Music for Mono in November 1999. These funds helped make it possible for the WRCA to purchase archival supplies and hire a processing archivist to arrange and preserve the collection.

Great public interest in the Mono Lake Committee Collection is anticipated. The Committee’s efforts to save Mono Lake during its first twenty years have had a remarkable impact on regional, national, and international environmental issues. Although all interested parties are welcome, the collection will be of particular use to policy makers, grassroots organizations, environmental consultants, lawyers, scholars, and students. For more information, please contact:

Water Resources Center Archives
410 O’Brien Hall
University of California
Berkeley, CA 94720-1718
Phone: 510-642-2666
Website: www.lib.berkeley.edu/WRCA
Email: lvida@library.berkeley.edu

Melissa McGann is the processing archivist at the Water Resources Center Archives. She received a Master of Arts in Public History at California State University, Sacramento, and has put her background in archives and photograph management to the test with the Mono Lake files. Thank you Melissa!

Good news, bad news on low-flush toilets

By one vote, the House Commerce Subcommittee rejected HR 623, the bill authored by Congressman Knollenberg, to weaken water efficiency standards. Each of you who wrote to your member of Congress can take credit for the bill’s defeat. It is not often that a bill is defeated in subcommittee, particularly when the chair of the committee, in this case Congressman Barton (R, TX), is a co-sponsor.

THANK YOU!

The bad news is that Congressman Knollenberg wants to make this bill a “rider” on an Energy and Water Appropriations Subcommittee bill. To accomplish this, HR623 would have to be approved by the Appropriations Subcommittee, which is chaired by Congressman Ron Packard from San Diego. Congressman Packard says he will not approve the bill, but to be safe, it is important to let him know you support his commitment to water conservation.

Write:
Honorable Ron Packard
Energy and Water Development Appropriations Subcommittee
2362B, RHOB
Washington DC 20515

Mono Lake Newsletter
Students become teachers
in a Mono Lake Committee–Peer Partners in Environmental Education joint program
by Herley Jim Bowling

Students become teachers in a collaboration between the Mono Lake Committee, the Los Angeles Water Conservation Council (LAWCC), and the Peer Partners in Environmental Education program of the Center for Environmental Education. High school and middle school students attend a presentation and training seminar on the Mono Basin ecosystem, their watershed, sources of their water, water conservation, and actions they can take to make a difference through water conservation. They then develop and give their own presentations in teams of three to nearby elementary school classes, where they are very popular teachers with the younger students.

The student-teachers come away having consolidated their learning by teaching others, and are inspired to do more. Some do water audits of their school with the help of the Los Angeles Department of Water and Power or their local water agency. Others work with local members of the LAWCC to organize one-day ultra low flush toilet (ULFT) distributions at their school. These events raise funds for the school or the school’s ecology club at $5–$15 per toilet distributed. The ULFT-distribution community group creates jobs, people in the community get free toilets, more water is conserved, and water conservation and education is fostered in communities.

The excerpt on the right is from one of the student-teachers, Mary Pearce, on teaching about Mono Lake.

In many cases, students who work with LAWCC bring members of their communities to Mono Lake in the summers as part of the Outdoor Experiences program. The Outdoor Experiences program combines environmental education with muscle-powered outdoor activities helping young people come to understand the source of their water while discovering a world beyond Los Angeles.

For more information about education programs in Los Angeles, or how you can host a program in your school, contact Herley Jim Bowling (herleyjim@monolake.org) at (310) 826-6152. For information on the Outdoor Experiences program contact Bartshe Miller (bartshe@monolake.org) at (760) 647-6595.

Education consultant Herley Jim Bowling works with schools and community-based organizations in Los Angeles. His dynamic presentations, which involve hands-on activities such as making tufa, bring Mono Lake to life 350 miles away. Included in his bag of tricks is a Zulu song which he sometimes sings to his classes!

Thoughts on yesterday’s teaching

Yesterday I experienced something that I’ve never really experienced before. Self-satisfaction. I felt like I really made a difference. The kids listened, they understood, and they participated. And there is no greater feeling than to have people look up to you and believe in you.

I really do believe that we made a small difference in their lives. Many kids said that they will change their ways, take shorter showers, and even tell their parents ways to conserve water. And if those 20 minutes made a big difference in those small children’s lives then those 20 minutes were worth it. I had a great time and I wish I could do it again.

Mary Pearce
Science, Period 1
December 9, 1999

Photo by Herley Jim Bowling
Student-teachers Mary Pearce and Anthony Auzenne after their presentation at the Angeles Mesa Elementary School.
Just another average runoff year

by Greg Reis

The runoff forecast for the Mono Basin for April 2000 through March 2001 (the 2000 runoff year) is 94% of average, or 115,000 acre-feet of water in Rush, Lee Vining, Parker, and Walker creeks. This is identical to the volume of the 1999 runoff year. The Los Angeles Department of Water and Power (DWP) will be allowed to divert up to 16,000 acre-feet of water again this year. Mono Lake is currently 0.3 feet lower than it was at this time in 1999—the first year since diversions have resumed that Mono Lake has dropped. Assuming average precipitation, the forecast calls for Mono Lake to be at 6384.5 feet above sea level by next April.

The table below shows the changes in lake level since 1992.

Despite 2000 being a normal runoff year, Rush Creek is not likely to receive normal-year restoration flows this year (Rush Creek has not received restoration flows in four of the six past years). Rush Creek’s 2000 peak flow is projected to be 222 cfs, significantly less than the 380 cfs required in the Water Board’s 1998 restoration order. The reason is mechanical: Restoration flows can’t be made available to Rush Creek because the Rush Creek return ditch, which delivers water to Rush Creek, needs work to improve its flow capacity. This work—which at the latest must be completed by fall 2000—has been stalled for a year and a half due to a dispute between DWP and the Department of Fish & Game over habitat requirements and regulatory authority. Recently, there’s been progress, however, and it is possible that DWP will complete the upgrades in time for the 2001 runoff season.

Average runoff doesn’t mean it will be a boring summer. Summer is always an eventful time of year, and 2000 is no exception. Channel re-openings, monitoring activities, and highway construction will all be affecting the streams. Four to six trillion brine shrimp will thrive in Mono Lake’s rich waters and 40–60,000 California Gulls will nest on the islands. One quarter of a million people will visit the lake, many for the first time. The buzz of life will fill the Mono Basin between cold winters. And the National Oceanic and Atmospheric Administration predicts La Niña to end in August, which means that next winter ....

Greg Reis is the Committee’s Information Specialist. During June he will be at Expo 2000 in Hanover Germany where he will be representing Mono Lake as part of the Living Lakes Partnership.

Mono Lake has risen 9.9 vertical feet since the Water Board decision in 1994. A runoff year is April 1 of the year stated to March 31 of the following year. (af = acre feet)
Windblown cotton from creekside cottonwoods is in the streets of Lee Vining, announcing the real arrival of warm weather in the Mono Basin. With the end of another snowfall season at hand, the official snow surveys and runoff forecasts are rolling in, and the word is clear: another normal runoff year, not much different than last year.

What that means for the creeks is quite quantifiable in terms of cubic feet per second rolling down toward the lake. Likewise, estimates are made of how the lake will rise and fall as a result—this month, this year, if this happens, if that happens. But what does it mean down at the lakeshore, along the tufa outcrops, out where the alkali flies thrive and rabbitbrush has been going underwater?

Through the late nineties, rising lakewater gave us new images of grass leading right into Mono Lake and of wave-cut cliff lines changing the shape of the shore. Oddly enough, the past two years of average snow in the mountains makes the lake look more like the sandy-shored place most of us are used to. With the lake taking a break in its long climb toward its future level, the undulating berms of sand—built by longshore currents and continuous wave action—are back. Ponded lagoons of brackish water have formed behind these shoreline berms, and recent days revealed American Avocets, Black-necked Stilts, and others wading thorough this familiar but transient habitat.

The lesson is, no single day at the lake reveals what the future lake will be like, nor does a single month or year. We have forecasts of what the future holds in terms of ecology, air quality, and a dozen other factors, but the actual shape of next year’s landscape is still something of a mystery. In an ever-changing landscape, the lake is an ever-variable element of change itself, and we cannot avoid being captivated as we watch a sometimes-familiar but ultimately all-new Mono Lake being created.
Part II: From pueblo to city
by Greg Reis

The Los Angeles River was the greatest attraction. It was a beautiful, limpid little stream with willows on its banks. It was so attractive to me that it at once became something about which my whole scheme of life was woven. I loved it so much.
—William Mulholland, 1877, upon first seeing the Los Angeles River

Editor’s note: The following article is the second in a series of four which takes a close look at the sources and infrastructure of Los Angeles’ water. For more on local sources of water also see the article on page 3.

From the Pacific Ocean to the base of the Santa Monica, San Gabriel, and Santa Ana mountains stretches the flat Los Angeles Coastal Plain. It is an alluvial basin formed from runoff and erosion from the constantly rising mountains, which have deposited sediment as thick as 20,000 feet. There are three major rivers: the Los Angeles, San Gabriel, and Santa Ana. Artesian groundwater basins once existed under 300 square miles of the coastal plain due to infiltration from the three major rivers. During storms the rivers flooded large areas and woodlands, lakes, and marshes dominated the vegetation of this area.

The first European habitation, aside from the missions, was the tiny Spanish Pueblo of Los Angeles, built at this location in 1781 in part because of the reliability of the Los Angeles River. The dry season flow of the river came from the immense San Fernando Valley aquifer, underlying 175 square miles of the valley and capable of holding 3.2 million acre-feet of water. Even today only two human constructed reservoirs in California are larger: Lake Shasta and Oroville.

The river was enough to sustain LA and nearby agriculture until the transcontinental railroads caused rapid population growth. The population of the city of LA almost quintupled, rising from 11,000 to over 50,000 between 1880 and 1890. By 1900, LA at times took all the water in the river. Water extraction facilities were expanded to keep pace with water demand, at the time an average of over 300 gallons per person per day. Installing water meters reduced water use to an average of 136 gallons per person per day, but the population kept growing.

With a population of 240,000 by 1906, peak water demand was so great that parts of the city experienced periodic losses in water pressure and service. Pumping of ground water increased, which lowered the water table and caused the area of artesian water on the coastal plain to shrink 33% between 1898 and 1904. Reservoirs were covered to reduce evaporation. Lakes in city parks weren’t filled. Meanwhile, nearby cities were incorporated into LA, since the city had rights to the only reliable water supply. In 1903, William Mulholland urged the city council to refrain from expanding the city limits beyond what the water system at the time could serve. By 1913, when the first imported water from the Owens River arrived in LA, local water supplies were supporting almost half a million LA city residents.

Today, Southern California as a whole, with over 16 million people, depends on local supplies for one third of its water supply. The city of LA, with 3.8 million people, depends on local groundwater sources for an average of 15% of its water. LA’s groundwater rights in the San Fernando Valley and coastal basin total approximately 111,000 acre-feet per year.

In the late 1980s, pollution caused some wells to be abandoned, and the lack of groundwater pumping resulted in groundwater upwelling into the Los Angeles River. The court-appointed watermaster (all the south coast groundwater basins have been adjudicated due to overpumping in the past) warned LA that it could lose rights to this water if it didn’t use it. LA eventually ended up building a treatment plant in order to resume pumping from some of the wells and to retain those water rights. Pollution and saltwater intrusion from the ocean into aquifers are real threats to this otherwise pure and reliable water supply.

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Mono Lake Newsletter
“Why-To” Fishing Tips

by Jeff Darlington

The two best times to fish is when it’s rainin’ and when it ain’t. — Patrick F. McManus

If you’ve never read humorist Patrick McManus’ work, you’re missing some of the simplest distillations of outdoor enjoyment. The truism above reflects the level of fanaticism that anglers have for fishing: come hell or high water, anglers will grab their rod and reel and disappear for days at a time at the merest mention of phrases like “mayfly hatch,” “lunker trout,” or “don’t tell nobody, but ...”

Simply put, fishing is one of the most rewarding activities one can enjoy in the outdoors. It combines the raw pleasure of the outdoors with complex feelings of hope and joy, longing and belonging, anticipation and reward. And if you’re lucky, a good fishing trip can leave you about a pint short of adrenaline.

But fishing is so much more than just fish. Don’t get me wrong, the thrill of hooking and landing a fish is one of the most electric feelings in the world. But what began as a rather unique method of subsistence hunting has evolved for myself and millions of other anglers into a leisure activity that allows one to experience the beauty of one’s natural surroundings with all five (or more) senses. American outdoor writer Hal Borland wrote in 1954, “If you ever wondered why fishing is probably the most popular sport in this country, watch that boy beside the brook and you will learn. If you are really perceptive you will. For he already knows that fishing is only one part fish.”

Indeed, here in the Mono Basin, a half-day fishing trip can expose you to more beauty than most people see in a year. Open your senses to it, and you will be amazed.

... peering over a rock at a beautiful rainbow trout holding in the shade in Rush Creek, remembering the role of local anglers, CalTrout, and the Department of Fish & Game in securing minimum stream flows for the streams that feed Mono Lake.

... walking along Lee Vining Creek under the shade of willows, aspens, and cottonwoods, listening to songbirds and gulls as you choose your steps on the river rocks.

... flyfishing with a loved one in the Parker Lake shallows while dozens of Violet-green Swallows weave a tapestry of sight and sound in the air around you.

If you do it right, fishing is not just a pursuit of fish, but a spiritual communion with nature. I encourage you to give it a try here in the Mono Basin, and to drop by the Committee with a fishin’ tale or two (the taller the better).

Jeff Darlington is the Committee’s Office Director. He and his new wife Christiana love to spend time outdoors with their dog Malone.

Recommended Reading

The Mono Lake Committee carries several excellent fishing books. Here are some of my favorites:

• for the local angler: Angler’s Guide to the Eastern Sierra, by John Barbier

• for the deep thinker: Pavlov’s Trout, by Paul Quinnett

• for fans of wild fish and wild areas: Pursuing Wild Trout, by Bob Madgic

• for the comparison shopper: California Fishing, by Tom Stienstra

• for the trout enthusiast: Sierra Trout Guide, by Ralph Catter

• for the naturalist: Fishes of the Great Basin, by William & John Sigler

• for anyone wanting to read a magical story about fishing, environmentalism, and life: The River Why, by David James Duncan

To order a book from the Mono Lake Committee Bookstore, email us at (bookstore@monolake.org) or call Ramona at (760) 647-6595. Or visit us in Lee Vining. Remember that proceeds from all sales in our bookstore (including fishing books!) benefit the protection and restoration of the Mono Basin. So if you’re going to buy a fishing book, put your dollars to work by buying it here!
Mail Order

Morning at Mono Lake, 1930  Before the Rain, Mono Lake, 1930  Along Mono Lake, 1927  Lee Vining Creek Trail, 1927

Eight Notecard Set by Chiura Obata
A collection of four images from original artwork. In 1927 Chiura Obata spent most of the summer in the High Sierra and at Mono Lake, documenting his trip with a series of watercolors and woodblock prints. His work gained him worldwide recognition as an exhibitor, instructor, and lecturer. Now you can enjoy the art of Obata through these notecard reproductions. Each card has an inspiring quote on its reverse. Cards measure 5"x7" and are printed on heavy-stock recycled paper with vegetable based inks.
Obata note card set, 8 cards with envelopes: $14.95 (# 3442)

Obata’s Yosemite
This book walks you through Chiura Obata’s High Sierra trip in 1927. Relive his adventure through these full page color plates and descriptive letters to his family. Obata received the Emperor’s Award for promoting goodwill and cultural understanding between the United States and Japan. Rediscover Yosemite through the watercolors and woodblock prints in this beautiful coffee-table book.

Softcover, measures 10"x10", Yosemite Association Press, 151 pages: $24.95 (# 902)

Special thanks to the Obata family for their support through the use of Obata’s images.

Obata T-shirts
Membership Coordinator Brett Pyle (left) is wearing Morning at Mono Lake, 1930, and Office Manager Jeff Darlington (right) is wearing Before the Rain, Mono Lake, 1930. Printed on 5.8 ounce organic cotton by Patagonia, a longtime supporter of the Mono Lake Committee.

Morning at Mono Lake t-shirt, on natural color organic cotton, sizes S (# 3448), M (#3449), L (#3450), XL (#3451): $19.00
Before the Rain t-shirt, on pure white organic cotton, sizes S (#3452), M (#3453), L (#3454), XL (#3455): $19.00
2001 Mono Lake Calendar

With 12 full-color monthly images as well as insets of birds, flowers, and tufa towers, the 2001 Mono Lake Calendar captures the seasons and the beauty of the Mono Basin. This year's calendar has an essay from a speech given in Lee Vining by Zulu leader Credo Mutwa, whose heartfelt words, sense of humor, and spiritual wisdom strike at the heart of what lake protection is all about—at Mono Lake and all around the world. Keep the Mono Basin's rushing creeks, spectacular sunsets, fall colors, snowfall on tufa towers, and the rising lake with you all year long. Featuring photographs by Kennan Ward, Larry Ulrich, Dennis Flaherty, William Neill, Jim Stimson, and more, this calendar will bring the Mono Basin to your home or office.

2001 Mono Lake Calendar, measures 13 1/4 x 9 1/2: $10.95 (#3427)

Mono Lake Topo Map T-Shirt

Back by popular demand! Communications Coordinator Arya Degenhardt is wearing the new version of the classic topo map t-shirt. This updated t-shirt shows Mono Lake as it will be when it reaches the projected average of 6392 feet above sea level. Printed on a 100% preshrunk cotton t-shirt.

Mono Lake topo map t-shirt, on camel, S (#3554), M (#3555), L (#3556), XL (#3557): $15.00

Drowning the Dream: California's Water Choices at the Millennium

Don't miss this new book from Mono Basin resident and State Reserve Ranger David Carle. Working from a wide range of historical and contemporary sources, Carle explores the historic changes of water use in California that shape our future. The new millennium may be the time to stop drowning the California dream of the good life.

Hardcover, Praeger Publishers, 235 pages, measures 9 1/4 x 6": $45.00 (#1943)

Order by Phone: (760) 647-6595, Fax: (760) 647-6377, or Email: bookstore@monolake.org

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South Tufa walks

Join a naturalist on a walking tour at the South Tufa area to learn about the ecology, geology, and natural and human history of the Mono Basin. Conducted three times daily throughout the summer, these walking tours are an excellent introduction to Mono Lake. Walks last about an hour and meet at the South Tufa parking lot at 10:00AM, 1:00PM, and 6:00PM. No charge for the walk, but a $3 fee is required to enter the South Tufa area. No reservations are necessary.

Canoe tours

Glide through groves of tufa spires, dip your paddle into swarms of brine shrimp, and float alongside diving birds. As we tour along Mono Lake’s south shore, your expert guide will explain the natural history of this ancient, biologically-rich lake. Tours depart every Saturday and Sunday morning at 8:00, 9:30, and 11:00 AM, and last for about one hour. $17 for adults, $7 for children. Reservations are required; call (760) 647-6595.

Lee Vining Creek hikes

Learn about birds, trees, flowers, fish, Native American history, and current restoration work on this leisurely walk down the Lee Vining Creek Trail. Led by Mono Lake Committee naturalists, this walk is an excellent opportunity to see restoration in progress.

Lee Vining Creek walks are free, and begin in front of the U.S. Forest Service Visitor Center Monday and Saturday mornings at 9:30AM through Labor Day weekend. People of all ages and hiking abilities are welcome to join us on this moderate, two-mile, two hour hike.

Travel Resources

There are lots of summer activities in and around the Mono Basin—don’t miss out!
Contact us about bird walks, star talks, campfire programs, fishing, hiking, and special events.

The Mono Lake Committee Information Center and Bookstore is open 9AM-10PM daily throughout the summer.

- Mono Lake Committee Information Center
  (760) 647-6595 www.monolake.org
- Lee Vining Chamber of Commerce
  (760) 647-6629 www.leevingin.com
- U.S. Forest Service Visitor Center
  (760) 647-3044 www.fs.fed.us/inyo/vvc/mono
- Mono Lake Tufa State Reserve
  (760) 647-6331 www.cal-parks.ca.gov
- Mammoth Lakes Visitor Center (760) 924-5500
- June Lake Chamber of Commerce (760) 648-7584
- Inyo National Forest Wilderness Permits
  (760) 873-2408 www.fs.fed.us/inyo
- Yosemite www.nps.gov/yose
  Information by phone (209) 372-0200
  Campground Reservations (800) 436-7275
  Hotel and Motel Reservations (559) 252-4848
  Wilderness Permit reservations (209) 372-0740
- Devil’s Postpile (760) 934-2289
- White Mountain Ranger District—Bishop
  (760) 873-2500
- Lone Pine Interagency Visitor Center (760) 876-6222
- Death Valley Reservations (760) 786-2345
- Bridgeport Ranger Station—Toiyabe Forest (760) 932-7070
- California Road Conditions (800) 427-7623
How far is it?

Distance in miles from Lee Vining to:

- South Tufa: 11 mi (18 km)
- Yosemite Park entrance: 13 mi (21)
- Tuolumne Meadows: 21 mi (34)
- Mammoth Lakes: 27 mi (44)
- Bodie: 32 mi (52)
- Bishop: 66 mi (106)
- Yosemite Valley: 77 mi (124)
- Lake Tahoe: 110 mi (177)
- Reno: 140 mi (225)
- Death Valley: 177 mi (285)
- San Francisco (via 120): 250 mi (402)
- Los Angeles: 303 mi (489)
- Las Vegas: 340 mi (547)

Summer 2000
Join us for Restoration Days!
September 1–4, 2000

Restoration Days is an annual event put on by the Mono Lake Committee every Labor Day! Join us for four days of workshops, hikes, star-talks, bird walks, story telling, Mono Lake traditions, and most importantly, restoration work.

Restoration Days is for monophiles old and new, kids, parents, and friends—if you’ve never come, then now is the time! We welcome you to join us as we celebrate the victories of the past, discuss the plans for the future, and have some good solid fun at Mono Lake.

For more information call (760) 647-6595
High Sierra Fall Century
September 16, 2000

The 6th Annual High Sierra Fall Century ride will take place on Saturday, September 16, 2000. This 100-mile course takes you through miles of sagebrush, pine forest, and aspen groves in fall colors, at the base of the Sierra Nevada's snow capped peaks. The ride begins near Mammoth Lakes, goes past Mono Lake in the Mono Basin, and through Adobe Valley with views of the White Mountains. Two short courses of 30 or 45 miles are also available. All rides boast spectacular scenery, only one stop sign, and not a single stoplight!

The $35 entry fee includes five fully stocked rest areas, roving support and gear vehicles (SAG), a gourmet lunch at mile 55 catered by The Mono Inn at Mono Lake, and a post-ride party. An event T-shirt is included for all pre-registered riders, and cycling jerseys will be available for purchase. The High Sierra Fall Century is an important event for both the Mono Lake Committee and the Sierra Cycling Foundation. The event helps to raise public awareness about the efforts to restore the Mono Basin as well as of cycling safety in the Eastern Sierra.

The Los Angeles Department of Water and Power, Mammoth California, and the Mono Inn lend generous support to the High Sierra Fall Century

We are proud to announce that the Los Angeles Department of Water and Power (DWP) has generously donated money to help underwrite costs associated with this year's event.

Mammoth Mountain ski area is another generous supporter of the Century, providing tables, gates, water jugs, barriers, flagging, and signage for the event. In addition, Mammoth California will provide a box van and a driver to deliver and set up equipment along the route, and will also provide their race team van with a bike trailer and a driver as a support vehicle. Wait, there's more! At the post ride celebration two lucky participants will have the chance to win a three-day lift and lodging package for two people all courtesy of Mammoth California.

Last year the Mono Inn at Mono Lake provided a gourmet lunch at mile 55 — and they're doing it again! Not only do they provide a delicious, well-balanced meal to fuel cyclists for the last half of the ride, they do so with a smile for over 300 riders!

For registration information about the High Sierra Fall Century, visit our website at www.monalake.org/century, or contact Shannon Nelson (shannon@monolake.org) at (760) 647-6595.

Ride to Remember 2000 is a non-profit organization working to raise funds for the Mark Milford Memorial Scholarship, a scholarship program administered by the San Diego Track Club for an aspiring scholar-athlete in San Diego.

The idea for Ride to Remember was born when the organizers of the High Sierra Fall Century decided to dedicate the ride to Dr. Milford's memory. Two of Dr. Milford's close friends thought it would be fitting to ride in his memory. Word got around, and soon no fewer than 70 friends, family, patients, and co-workers of Dr. Milford decided to join in the effort.

Dr. Milford worked for the Southern California Permanente Medical Group in San Diego where he was a pioneer in the field of advanced laparoscopic surgery—a technique using advanced video technology allowing the performance of highly complex intra-abdominal operations with tiny incisions and miniaturized instruments. Thousands of patients have benefited from Dr. Milford's pioneering techniques, which result in shortened hospital stays and rapid recoveries. He was respected by his peers and loved by his patients.

Dr. Milford was also an avid athlete. Dedicated primarily to running, he discovered cycling and began training fiercely. Tragically, he was killed in a single vehicle rollover accident while on his way to participate in the 1999 High Sierra Fall Century.

He left behind his wife Jennifer of 24 years, his twin daughters, Alexis and Caitlin, and hundreds of colleagues, friends, and patients.

For more information on Ride to Remember contact Tom Paluch at ride2remember_2000@yahoo.com.
This exciting trip will provide historical background on many unique areas while travelling in a comfortable and friendly environment. Travel is in a California Parlor Car Tours deluxe full-sized bus that seats only 35 people. Passengers can board the bus in San Francisco or in Oakland.

This four-day, three-night adventure includes all lunches, dinners, wine, outdoor activities, accommodations, and travel for $900 per person.

Friday, September 22 See the sights en route to Mono Lake with special stops for a picnic at Knight’s Ferry Resort on the Stanislaus River and cocktails at the top of the Tioga Pass with a presentation on the history of the area. Dinner will be at the Mono Inn overlooking Mono Lake, and we’ll spend that night at the Best Western Lakeview Lodge.

Saturday, September 23 Choose from a trip to the historic ghost town of Bodie, bird watching, canoeing, swimming, or hiking with guides. Picnic lunch will be provided by two local restaurateurs at Mono Lake. Then visit the Ansel Adams Gallery to view well-known artist Zenaida Mott’s new exhibit of oil paintings of Mono Lake and the Mono Basin where Sarah Adams, Ansel Adams’ granddaughter, will be our host. Dinner will be at the new Double Eagle Resort in June Lake.

Sunday, September 24 Board the bus for Yosemite where we will have lunch at the world-famous Ahwahnee Lodge with views of incredible waterfalls and Yosemite’s Glacier Point. Enjoy an afternoon in Yosemite Valley before heading to the four-star Tenaya Lodge at Yosemite where we will be welcomed with an outside, catered barbecue for dinner.

On Monday, September 25 Explore the Kesterson Wildlife Refuge where a ranger will take us on an hour-long guided tour. Farewell lunch will be at the historic España Restaurant in Los Banos. For a brochure or for more information, please contact Shelly Backlar (shelly@monolake.org) at (818) 716-8488, or Grace de Laet at redelaet@aol.com.

Thanks to the energy and enthusiasm of Grace de Laet, Mono Lake Committee Board Member Emeritus, for organizing this Luxury Bus Tour.

Winter Reflection, oil painting on canvas. Zenaida Mott. See an exhibit of Zee Zee’s work on display at the Mono Inn from September 23–October 29, 2000.
**Naturalist notes**

*A Mono Basin chronicle*

**April:** a Horned Grebe in bright breeding plumage in a shallow lagoon near the shoreline with six American Wigeons ... Yellow-headed Blackbirds, Northern Orioles, Western Tanagers, and Yellow-rumped Warblers bring a bright array of color to Mill Creek’s budding willow (*Salix spp.*), black cottonwood (*Populus trichocarpa*), and aspen (*Populus tremuloides*) ... Double-crested Cormorants and Common Mergansers on Grant Lake ... desert peach (*Prunus andersonii*) lights up in pink patches and the no-see-ums will get you with their little itchy bites if you stop to admire the flowers for too long ... days of wind and snow, but the weather is warm and forgiving for the opening day of fishing season ... and a remarkable number of alkali flies line the shore despite the high wind ...

**May:** lupine (*Lupinus spp.*), Indian paintbrush (*Castilleja angustifolia*), Western wallflower (*Erysimum capitatum*), and skunk monkey flower (*Mimulus jepsonii*) can all be found down at the lakeshore ... the constellations of Castor and Pollux, the twins of Gemini set over the Sierra in the early evening twilight ... evenings down at the lake bring the telltale cloud formations of summer, and after the Sierra Wave fades to grey spotlights of sunshine light up the islands, Old Mono Craters, and sometimes the White Mountains ... bitterbrush (*Purshia tridentata*), prickly phlox (*Leptodactylon pungens*), and arrowleaf balsamroot (*Balsamorhiza sagittata*) join the wildflower bloom ... birds to note include a Lazuli Bunting and a Yellow-breasted Chat ... and a Swamp Sparrow, and a Black-and-white Warbler both out of their common range ...

**June:** a Green-winged Teal eating brine shrimp just offshore ... it has to snow at least once every June it seems, and this year is no exception ... yet many wildflowers survive ... sulphur flower (*Ergonum umbellatum*) in yellow, orange, and red spots through the sage (*Artemisia tridentata*). Western tiger swallowtails and morning cloak butterflies flit along Lee Vining Creek. ... Rose-breasted Grosbeaks down at the County Park and nine Brants off the end of the boardwalk ... a covey of California Quail down by the piezometers on Lee Vining Creek ... the newly planted Jeffrey pine (*Pinus jeffreyi*) trees are being nurtured to grow tall and strong and will, with some luck, eventually emit the sweet scent of vanilla from the furrows of their bark ... prickly poppy (*Argemone polyanthemos*) blooming in bright yellow and white ... three Western Grebes, two American Avocets, a handful Eared Grebes, two Black-crowned Night Herons, and a pair of Osprey nesting atop a tufa were spotted from canoes floating on a nearly glassy lake ...

*Drawing by Helen Constantzine*

Desert Peach, *Prunus andersonii*. Summer 2000
Changes beyond the season

by Gary Nelson

Spring is a time of turbulent transition in the Mono Basin. The growing power of the sun brings promises of summer that are often quickly dashed by bitter winds funneling down eastside canyons from snowfields high above on the Sierra crest.

This tug of war between winter and summer causes flora and fauna to awaken to different, yet parallel rhythms. Spring here is a phenomenon that is slowly overlaid upon the landscape like pieces of a mosaic. Urged on by the higher sun, these rhythms eventually blend into a sublime chorus of nature renewing its vows of life.

To be in the Mono Basin in springtime is to contemplate change. Evidence of change through time abounds here. Spring flowers bloom for only a few days upon ancient shorelines hundreds of feet above the current lakeshore. These wave-cut terraces speak of Lake Russell, fed by melting glaciers to the point of overflowing. Beaches strewn with ejected pumice and obsidian give an ominous aura to the silent, hulking Mono Craters.

The Kutzadika'a Paiutes lived within, not upon the environment. One has to look closely to find the arrowheads and grinding rocks that evidence their prehistoric stewardship of the Mono Basin.

However civilization has brought about considerable change in a relatively short time. Scarred slopes and piles of mine tailings high on the mountains north of Mono Lake serve as sure landmarks to locate Bodie. The discovery of gold there in the 1860s caused changes far beyond this treeless, sagebrush flat that eventually became home to 10,000 people. Entire forests of pinyon and Jeffrey pine were soon felled to supply Bodie with charcoal for smelting ore, lumber for building, mining timbers, and fuel wood. Portions of the railroad grade constructed to haul lumber can still be seen between Bodie and Mono Mills.

Bodie’s suddenly teeming population needed to be fed, but its location on a barren windswept plain at 8375 feet elevation meant that the food would have to come from elsewhere. This brought in farmers and ranchers to Mono County. The resulting hunting and grazing combined with the cutting and burning of pinyon forests for charcoal brought an end to the Kutzadika’a's traditional subsistence economy.

The boom times of Bodie spurred the settlement of much of Mono County but as the ore played out, the harsh environment and several destructive fires hastened its end as a viable town.

In 1941, as mining operations were drawing to a close in Bodie, the beginnings of another bonanza were taking place just forty miles to the southwest. A snow surveyor named Dave McCoy set up the first rope tow on Mammoth Mountain, causing an unheard of crowd of 250 skiers to visit the mountain over the Thanksgiving weekend.

Rope tows soon gave way to army surplus “Weasel” tracked vehicles. The first chair lift was installed in 1955, attracting skiers from growing Southern California metropolises. Today Mammoth Mountain is the most visited ski area in the state. At the foot of the mountain, the town of Mammoth Lakes has grown proportionately, its economy based on tourism and skiing. During drought years this economy becomes precarious as locals anxiously wait for storms, sometimes resorting to sacrificial ski burnings to appease the snow gods.

Given the inherent insecurity of continued on page 23
Changes beyond the season continued from page 22

Mammoth Lakes’ winter economy, the news in 1996 that international ski resort conglomerate Intrawest Inc. had become partners with the McCoy family was cause for celebration. Intrawest announced that it would begin several new developments within the town, causing real estate values to skyrocket.

Andrea Lawrence, longtime Mammoth resident, former Mono County supervisor, and Committee board member describes the inevitable results: “How I characterize what happens with a company like Intrawest is that they come in and they let it be known that they are going to dump 500 or 600 million dollars into your community. Now, for a community that struggles for survival, that is a gold rush! With these inflated values, people who work in the community, personal people—lawyers, school others, people you need to have to part of a viable community—can no longer afford to live here, much less the people who pour coffee at six o’clock in the morning. They need to be here in town. That’s what a community is!”

The effects of this socio-economic displacement are being increasingly felt in different ways by surrounding communities. Just south of Mammoth in Crowley Lake, a rancorous debate over low income housing is taking place amidst an unprecedented building boom.

The Mono Basin will not be exempt from these changes. Intrawest owns 90 acres at the foot of June Mountain ski area just 15 miles from Lee Vining. Lee Vining has so far been affected in ways less obvious but still important. Just before the beginning of the school year Lee Vining High School teacher Jeff Putman was essentially forced out of his home in Mammoth Lakes by rising housing costs, and now teaches in Lone Pine. Jeff was many things to Lee Vining students: mentor, friend, basketball coach, and teacher of science, rock climbing and mountain biking. Jeff contributed to the community of Lee Vining in ways that cannot be measured in economic terms. Yet in Mammoth, and increasingly elsewhere in the eastern Sierra economic terms represent the default criteria for living in these communities.

The Mono Lake Committee will have a changing role in Mono Basin land use issues. Andrea Lawrence succinctly summarizes this process: “Community members and decision-makers need to have the backbone not necessarily to say no, but to ask how?”

Occasionally during springtime at Mono Lake a truce occurs between summer and winter. These days bless all who are here with the best traits of both seasons; the warmth of summer and the quiet stillness of winter.

The perfectly clear air allows one to see details on the Wassuk range 40 miles away in Nevada. But it is the utter and absolute silence that envelops these telescopic views and brings home the immensity of the Great Basin to me.

On days such as these you feel as if you can see and hear forever. Yet not even the most perceptive Kutzadika’a’ standing long ago on Mono’s shore could have seen the sun glint off of the prospectors pick high on the Bodie Hills, or hear his cry of discovery. A cry which nonetheless echoed far.

Gary Nelson is the Committee’s Canoe Tour Supervisor. He is known for his trips to visit Cecil, the Walker Lake monster, in Hawthorne, Nevada.

Part II: From pueblo to city continued from page 12

The LA River’s dry season flow is now less than 5% from groundwater—30% is from storm drains, and nearly half is from water reclamation plants. Water conservation and recycling (see page 3) will be discussed in the last article of this series.

There are opportunities for harnessing more local water, which would reduce dependence on imported water. During the rainy season, winter storms rolling off the Pacific occasionally drop tremendous amounts of rain and snow on the LA-San Gabriel River watersheds, which reach as high as 7,000–10,000 feet in elevation in the San Gabriel Mountains. Over 57% of the watersheds are urbanized, and the rain that falls here runs off impervious surfaces rapidly, picking up pollutants and causing both pollution and flood control problems. Capturing 80% of the precipitation that falls on 25% of the urban area could reduce stormwater runoff by 30%. Demonstration projects using technologies such as permeable paving have shown that it is feasible. This would reduce flooding and nonpoint source pollution, and increase groundwater recharge. For example, the 1969 flood—a 150-year rainstorm—recharged 320,000 acre-feet of groundwater using dams, debris basins, and spreading grounds. Reclaiming all stormwater could potentially reduce imports by 50%.

A great new book where much of this information was found is The Los Angeles River: Its Life, Death, and Possible Rebirth, by Blake Gumprecht. David Carle’s new book Drowning the Dream gives a fascinating portrayal of what the Los Angeles costal plain was like before development. Another good source of information, especially regarding stormwater management, is the Los Angeles & San Gabriel Rivers Watershed Council, 111 N. Hope St., Suite 2113, Los Angeles, CA 90024.

Greg Reis is the Committee’s Information Specialist. His trip to Germany is not only for work, but also for a pilgrimage to the origins of the card game Doppelkopf.
California Gull Research:
Gull Response to a Rising Lake
Dave Shuford/ Point Reyes Bird Observatory
May 24–28
$120 per person per day; overnight; meals included

Join a research team directed by the Point Reyes Bird Observatory and Cornell University in collecting data on the gull colony. Gain hands-on experience in field survey techniques while investigating whether the lake’s changing chemistry—due to Mono’s recent lake level increase—is affecting gull reproductive success. Your help is needed in continuing this important research. The rare adventure of visiting Mono Lake’s spectacular Negit Islets and observing at close quarters the second largest California Gull rookery in North America is for the stout of body and heart. Please contact the Field Seminar Desk for more information on this unique Mono adventure.

Birds of the Eastern Sierra
Lisa Hug, June 10–11
$95 per person/ $80 for members

The Eastern Sierra offers a wide variety of breeding habitats for many species of birds during spring and summer. In this two-day seminar, we will explore the saline lakeside, desert scrub, riparian canyons, Jeffrey pines, and lodgepole pine forests to discover the unique blend of birds that reside in the region. We will focus on sharpening field identification techniques as well as learning the life history strategies of the common local birds. Lisa Hug is a California naturalist with experiences in the Eastern Sierra as a Committee intern and as a field assistant for the Point Reyes Bird Observatory breeding bird study. She has led many public bird walks through Point Reyes National Seashore. She currently teaches a shorebird identification course through the community education department at Santa Rosa Junior College.

Call (760) 647-6595 for registration and information. Ask for the seminar desk.
**The Story Behind the Land: Geology of the Mono Basin**

Tim Tierney, June 17–18
$95 per person/ $80 for members

The Mono Basin is a geological showcase, featuring young volcanoes, glaciated landscapes, stark mountains and weird mineral towers, all set about ancient and saline Mono Lake. Explore this land with geologist Tim Tierney, author of the Committee’s field guide *Geology of the Mono Basin*, and learn how to recognize the geology, know the reasons behind why things have happened, and what the future may hold. The first day of the seminar will be spent gaining an overview of the area via car and short walks. The second day will focus on thoroughly exploring a few select areas with extended hikes. Tim is an excellent teacher and interpreter of the “hard” languages.

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**California Gull Research: Chick Banding**

Dave Shuford/ Point Reyes Bird Observatory
July 1–4
$120 per person per day; overnight; meals included

This seminar will focus on the actual banding of the gull chicks. See description of California Gull Research seminar above.

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**Paiute Burden Basketry**

Lucy Parker, July 14–16
$135 per person/ $115 for members (primitive group campsite included)
$50 materials fee

Learn to weave baskets in the tradition of the regional Paiute. Students will prepare and use willow strings and whole shoots for a miniature cone-shaped basket. California red bud will be added for color design. Plain twining will be used for weaving and a stack stitch design will be created. Three-strand weaving will also be incorporated. The cone-shaped basket was traditionally used for gathering pine nuts in the Mono Basin. Lucy Parker is a descendent of the Yosemite Miwuk, Mono Lake Kutzadika'a, and Pomo peoples. She learned traditional handwork from her mother, a master basket weaver, and will pass on some of her knowledge in this special three-day/two-night camping seminar. You do not have to camp to participate, but the evenings will be spent around the campfire with traditional songs and stories. This seminar is designed for those with prior basket-weaving experience.

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**Mono Basin Wildflowers**

Mark Bagley, July 22–23
$95 per person/ $80 for members

From the sagebrush scrub to the aspen forests of Lundy Canyon, from the marshes and meadows along the shore of Mono Lake to the whitebark and lodgepole pine forests of Tioga Pass, the Mono Basin is home to a wide variety of wildflower habitats. This workshop is for beginners, as well as for dedicated wildflower enthusiasts who want to know more about the plant life of the Mono Basin. We will learn to identify many common wildflowers, trees, and shrubs and the plant communities they inhabit. We will also review the names of some basic plant parts, learn how to recognize a few of the most important plant families, and
examine the environmental factors which shape the various habitats. Mark Bagley, your instructor, is a full-time consulting botanist in the Eastern Sierra and Mojave Desert. Mark is well-known among past seminar participants for his easy-going pace and engaging teaching style in the field.

**Ancient Landscapes of the Mono Basin**
Wally Woolfenden, August 5–6
$95 per person/ $80 Members
Climate and volcanism have been the chief architects of Mono environments during the past several millennia. Vegetation associations, animal populations, lake levels, weathering rates, glaciers and, more recently, human communities all responded to dramatic changes in climate. Occasional eruptions of magma created numerous rhyolite domes and covered the area with pyroclastic flows and ash. Prehistoric people also left their imprint on the landscape. This field seminar will explore geological and archaeological sites throughout the Mono Basin area and discuss the evidence and methods used by scientists to reconstruct past environments and human cultures. Dr. Wally Woolfenden has lived and worked in the Sierra Nevada as an archaeologist and paleoecologist for the Forest Service over the past two decades. He has recently studied vegetation and climate history from pollen deposited in the sediments of Owens Lake and Glass Creek Meadow. This seminar will involve moderately strenuous hiking into unique Eastern Sierra landscapes.

**Fall Bird Migration**
Dave Shuford, August 26–27
$95 per person/ $80 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, early autumn is the time of year to see the greatest diversity of landbirds, shorebirds, and waterbirds in the Mono Basin and on Crowley Reservoir. Dave Shuford has been a staff biologist at Point Reyes Bird Observatory for twenty 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.

**Mono Basin, Bodie, and Full Moon Photography**
Don Jackson, August 11–14
$235 per person/ $195 for members
Join award-winning photographer and 15-year Monophile Don Jackson in exploring and photographing the wonders of the Mono Basin and Bodie State Park during the full-moon weekend and the peak of phalarope visitation. This four-day workshop will be a combination of field sessions and classroom work and will cover the art and technical aspects of creating impactful images, including composition, perspective, lighting and exposure, the Zone System, new films, and more. Critiques of participants’ work will be an important part of this workshop. Open to all color and black and white photographers that have a fully-adjustable camera (35mm to view camera) and a basic understanding of its operation. To see Don Jackson's work visit his website at www.donjackson.com.

Call (760) 647-6595 for registration and information. Ask for the seminar desk.
Surviving on the Edge: Sierra Bighorn Sheep in the Mono Basin
John Wehausen and Karl Chang, September 2-3
$95 per person/ $80 for members
Controversy surrounds the fate of the Sierra bighorn, one of the most recent additions to the federal list of endangered species. This field seminar will involve discussions of the biology and conservation of these animals with attempts to view them. John Wehausen is a research scientist at White Mountain Research Station in Bishop. He has been investigating various aspects of the Sierra bighorn and working for their conservation since 1974. In the late 1970s he initiated the restoration program that brought bighorn back to the Mono Basin. This seminar involves strenuous hiking at the 10,000-foot elevation and above.

Paoha Island Kayak
Stuart Wilkinson and Committee Staff, September 9
$65 per person/ $55 for members
Wind and weather permitting, visit Paoha Island for a picnic lunch! Join Stuart Wilkinson and a Mono Lake Committee staff member for a guided naturalist expedition to Paoha Island. Your leaders are well-versed in Mono Lake geology, ecology, history, and politics, and this natural history kayak tour will cover a wide variety of topics relating to this unique high desert lake. Plan on four to five hours for the tour. Some kayak experience is recommended for this trip to Paoha Island. Kayaks and safety equipment are provided.

Miwok-Paiute Work Basketry
Lucy Parker, September 15-17
$135 per person/ $115 for members (primitive group campsite included)
$50 materials fee
Learn to weave baskets in the tradition of the regional Paiute. Students will prepare and use whole shoots of willow for a bowl-shaped basket. A design of cleaned willow will be incorporated for color, and a close plain twining will be used. This basket was traditionally used for gathering corns and berries. Lucy Parker is a descendent of the Yosemite Miwok, Mono Lake Kurzadika, and Pomo peoples. She learned traditional handiwork from her mother, a master basket weaver, and will pass on some of her knowledge in this special three-day/two-night camping seminar. You do not have to camp to participate, but the evenings will be spent around the campfire with traditional songs and stories. This seminar is designed for those with little or no experience in basket weaving.

Mono Basin Fall Photography
Richard Knapp, October 6-8
$150 per person/ $125 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. Join accomplished photographer Richard Knapp to explore varied shoreline locations at sunrise and sunset, and fall color in nearby canyons. Subjects for discussion include composition, exposure techniques, filtration, basic theory of the Zone System, and developing a personal vision. Photographers of all levels are welcome; a fully adjustable camera of any size or format is suggested.

Registration Information
Call the Mono Lake Committee at 760-647-6595 and ask for the seminar desk to register. A more complete seminar description is available upon request. Sorry, we cannot accept registration by mail.

• Registration •
Seminars are limited to fifteen people except where noted. If a seminar receives less than six participants, the seminar will be cancelled two weeks in advance and full refunds will be given. If you cancel three weeks prior to the seminar start date, we will refund your payment (less a $10 processing fee). No refunds after that date, but tuition can be applied to another class in 2000. We accept VISA, MasterCard, and Discover or personal checks payable to the Mono Lake Committee. Participants must sign a liability release form. All seminars operate under permit from the Inyo National Forest.

• Discounts •
Mono Lake Committee members receive discounted seminar prices where noted. If you are not a current member of the Mono Lake Committee, you may receive the discount by joining when you register.

Call (760) 647-6595 to register
On May 17th the Lee Vining Elementary 5th and 6th grade class helped plant Jeffrey pine saplings along Lee Vining Creek. This is the second year in a row that Jody Aas’ class has planted trees along the creek. This particular section of Lee Vining Creek has been slow to revegetate decades after diversions and fire destroyed a once-lush riparian corridor.

Restoration began in the classroom where the students learned the finer points of Jeffrey pine planting: digging a good hole, pointing the tap root down, measuring the root collar level with the ground, and properly watering the tree. After a quick review the class met Committee staff down by the creek to plant the trees. With buckets, shovels, and saplings, we were able to plant over 60 pines during the course of the morning. Carefully and methodically the students dug holes, checked the depth, placed trees, watered, filled, and watered again. All of the trees planted that morning were given the best chance of survival with a proper root burial. These Jeffrey pines now join the surviving Lodgepole and Jeffrey pines planted last year in the same area.

There was one other important point in the restoration process that some of the students pointed out. It is in fact important to name the individual trees when you plant them. Not all Jeffrey pines are named “Jeffrey”—some are named Rex, David, Steve, and Tom (6th grade boys don’t usually assign girl names to trees they plant themselves).

During the course of the summer other students as well as Outdoor Experiences participants from Los Angeles will come to Lee Vining Creek to water these trees—helping them to establish roots in the cobble and sand floodplain of the delta. Some of these trees will survive, rising above the burned Jeffrey and Lodgepole snags that used to shade a healthy stream system.

If you find yourself in Lee Vining this summer, and want to continue where the Lee Vining 5th and 6th graders left off, please stop by the Mono Lake Committee. We will be happy to show you where the trees are and we’ll even provide the buckets.
Staff migrations

Staff meetings are getting pretty crowded these days. We’re happy to announce that we’ve added ten, yes ten, seasonal staff to an already packed house. With increased bookstore hours, daily sunset South Tufa walks, Lee Vining creek tours, canoe tours, restoration work, creek monitoring, the Outdoor Experiences program running, events in the near future, and lots to do around the office, we need it!

You’ll see the new, friendly, and helpful face of Heather Cleary on the counter this summer! Heather has lived in Mammoth Lakes for five years, and helping visitors with her knowledge of the area. When she’s not on the counter you’ll most likely find her out backpacking!

Outdoor Experiences is graced with the return of two familiar faces. Santiago Escuderoi, our crazy Columbian, is back for his second summer of night hikes, canoe tours, tree watering, and water fights. We’ve lured him back to the basin after his winter of kayaking in Baja California. Former intern Kristen Drake will also be working with the OE program for the summer—and not a moment too soon as we’ve put her to work right away. We are lucky to have Kristen this summer, especially since she just recently got engaged! She met her fiancé Dan Patterson while serving in the Peace Corps in Niger, West Africa. Congratulations!

And a big welcome to our six interns! Being an intern is no easy task, and the responsibilities are essential to all of our programs in the summer. Thank you in advance for your enthusiasm and hard work.

Megan Simmons is a Southern California native and in the basin for her first time ever. She is currently studying environmental science at University of San Francisco, and has experience with research at the Salton Sea.

Paul McFarland is also a Southern California native—and happy to be back in the Mono Basin. He studied geology at the University of California at Davis and has lots of interpretive naturalist experience.

Daniel Klaus comes to us from Claremont College where he is studying in the Environment, Economics, and Politics program. Daniel has international experience as he was raised mostly in Africa and studied in Cairo.

Sang Kim has connections to the Committee via the Outdoor Experiences program when he worked with the Korean Youth and Community Center doing water conservation work. He is excited for the change of pace from Los Angeles city life.

Camden Richards has spent many summers with his family at Walker Lake right here in the Mono Basin. She is studying English and art history at Boston College and is looking forward to being back in the basin this summer.

And last but certainly not least, Martin Lenk, a German native. We were first introduced to Martin at the Living Lakes international conference in Lee Vining last fall. His experience both with ecology and the German language will be put to good use.

Also back in the basin, former intern Nathan Bonner of Oklahoma will be working for the Mono Lake Tufa State Reserve this summer. Come fall he will switch gears and return to the Mono Lake Committee for the winter!

Not quite staff, but in the basin for a while was the Committee’s long term CPA Larry Richards. Thanks to Larry for all the help with the annual financial review!

Congratulations to Office Manager Jeff Darlington and his wife Christiana on their recent marriage. May your happiness be as long lived as Mono Lake!

The Alejandro Flores Trust

During the month of January Lee Vining High School senior Alejandro Flores volunteered as an intern at the Mono Lake Committee. As a part of his high school experience he chose to learn what it is like to work for a non-profit environmental organization. Ali spent time working with almost every staff member, and brought his diligent work ethic and enthusiasm to each project he was assigned. Over the course of the month we got to know Ali both as a student and as a friend.

Tragically and suddenly, Ali’s mother died of Hantavirus in March. This loss has been felt by the family as well as the entire Lee Vining community. As a token of our appreciation for his hard work and as an expression of our sympathy staff members have started a trust fund for Ali—to help with college, or his continuing educational goals.

If you are interested in contributing to the fund you can send a check to the Mono Lake Committee c/o Bartshe Miller, P.O. Box 29, Lee Vining, CA 93541. Checks can be made payable to the Alejandro Flores Trust.
The Lee Vining Canyon fire

In the morning on May 29, 2000, a wildfire broke out in Lee Vining Canyon, near route 120 to Yosemite. The cause is unknown and under investigation but suspected to be human-caused, possibly a campfire. The fire was not the result of any prescribed burn activity.

No structures were burned, or people injured, but the fire came quite close to the Forest Service Ranger Station and the Tioga Gas Mart and temporarily closed both Highways 120 and 395. Generally, it burned the south moraine slopes in Lee Vining Canyon, going up and over the top to Horse Meadow. It also burned eastward from the moraine crest, and jumped Highway 395, burning a small area east of the highway.

Six hand crews, twelve fire engines, five water tenders, and two helicopters worked to control the fire. Many local fire agencies were involved in the effort. Happily, the winds did not push the fire north into Lee Vining, but the fire was only a mile away! Avid Mono Lake WebCam watchers noticed the smoke in Sunday's WebCam images.

The following images were taken the day of the fire.

Correction

In the Spring 2000 Newsletter, we reported that the Mono Lake Committee had been awarded a $25,000 grant from the Commission for Environmental Cooperation (CEC) to integrate migratory bird studies with restoration activities in the Mono Basin. In fact, the Committee was awarded $19,500 from the North American Fund for Environmental Cooperation (NAFEC).

The CEC created NAFEC in 1995 as a means to fund community-based projects in Canada, Mexico and the United States that promote conservation, protection, and enhancement of the North American environment.

Funding from NAFEC and Mono Lake Committee Members' made it possible for the Committee to launch the initial version of the Mono Basin Clearinghouse Website www.monobasinresearch.org. The Clearinghouse is growing into a comprehensive source of scientific and historical information on the Mono Basin.

We thank NAFEC for supporting the Committee's work.
Charitable Reminder Trust

Sally Gaines' father, Vern Judy, writes a wonderful column on money management. For those who need income now, but who ultimately want to reduce their estate, I have taken excerpts from Mr. Judy's column on the Charitable Remainder Trust (CRT). A charitable remainder trust is an estate planning device that can be set up to benefit both a person with an estate as well as an organization like the Mono Lake Committee. **If you want to pursue this idea further, contact a professional tax or trust advisor.**

The ideal asset to transfer to a Charitable Remainder Trust is one that is producing little or no income, has highly appreciated in value, and has a very low cost basis. You are reluctant to sell the asset because of the large capital gains tax. You feel “locked in.”

A CRT will normally produce more current income, immediate tax deductions, avoid capital gains tax, and remove the asset from your estate.

When an asset is transferred to a CRT, a market value must be established for the amount of the gift. For stocks, newspaper quotes will establish value. For real estate, or any liquid asset, an appraisal must be obtained from a member of the American Institute of Appraisers. The value of your gift, your age, and the return from the CRT combine to determine your tax deduction. For example, the older you are, the larger the deduction; a 6% return receives a larger deduction than a 9% return. The IRS has tables for this, so you can be told in advance the amount of your tax deduction, which can be carried forward for three years.

Thanks

A big thank you to all of our members who responded to the Mono Lake Tufa State Reserve appeal. It was heartening to see the thousands of responses and the numerous hand written notes and letters expressing support for the Reserve.

Your letters and feedback are important to our decision-making process—helping us determine what actions we should take to protect Mono Lake.

Also a special thank you to **Anne Douglas** who, after visiting Mono Lake and the Eastern Sierra for many years, joined the Committee and also gave gift memberships to her friends **Eric Cogswell** and **Katherine Castro**.

We hope to see you in the basin this year and for years to come.

Thank you to the friends of the Committee garden! **Marty Strelneck** of Lee Vining donated seed starts and **Connie Henderson** of Mono City put her green thumb to work in our flower buckets and garden!

Matched Gifts

Thanks to all of you who went to the extra trouble to get matching gifts for your donations!

**BankBoston** matched a donation by **Michelle McKay** of San Jose. **Bank of America Foundation** matched a gift from **Arthur Feidler** of Kentfield. The **Prudential Foundation** matched a donation from **Rebecca Craft** of New York, NY. **Washington Mutual Foundation** matched a gift from **Valerie White** of Santa Clarita. **Sun Microsystems Foundation** matched gifts from **Michael Riley** of Campbell and **Glenn Skinner** of Palo Alto. **IBM International Foundation** matched the 2002 donations of **Gwen Lennon** of Morgan Hill, **Maria Magaña** of San Jose, **Alfred Gigliotti** of Cocketsville, and **Barbara Bacon** of El Cerrito. **Microsoft** matched a gift by **John Platt** and **Lisa Heilbron** of Fremont as well as **Thomas L. McMahon**. And special thanks to **The William and Flora Hewlett Foundation** for matching 2 to 1 a donation from **Michael Fischer** and **Jane Rogers**.

Matched gifts can double your donation! Check with your employer to see if they have a matching gifts program.

In Memory

**Bob** and **Ruth Lewis** of Santa Paula donated in memory of longtime, and much missed, **Mono Basin resident Harry Blaiver** who passed away in April.

Brett Pyle is the Committee’s Membership Coordinator. This summer he is sure to be coordinating games of Doppelkopf and rendezvous down at the lake.
Open House

Thursday, June 29, 2000
10AM–6PM

Restoration Days

September 1–4

High Sierra Fall Century

September 16, 2000

LUXURY BUS TOUR TO MONO LAKE

SEPTEMBER 22–25

For event information call
(760) 647-6595

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