The destruction of Mono Lake, as Harold Gillam observes, is right on schedule (see page 4). While bureaucrats and legislators talk about the problem, and National Guardsmen blast a moat around Negit Island, Mono continues to shrink and die. The welcome reprise for Mono's gulls does not bring us closer to the lake's salvation.

The Mono crisis reminds us there are rivers, lakes, birds and even brine shrimp at the other end of our taps, and that soon there may be dust and death. It reminds us we are reaching the limits of the land's carrying capacity.

We cannot allow the Owens Valley, the Delta, north coast rivers or any other region to be held ransom for Mono Lake's life. California's surplus water is no longer in our streams and groundwater basins. It is in our drains and gutters being wasted through thoughtless consumption.

A moderate program of statewide water conservation could save Mono Lake many times over. But the choice to conserve is not enough. We must also choose to spare this water for other living beings and the earth we share.

1962: The tops of two tufa towers barely visible above Mono's surface.

1968: The same tufa towers entirely exposed.

1978: The towers high and dry. Mono Lake has fallen over 35 vertical feet as a direct result of water diversions by the City of Los Angeles, and is currently dropping nearly two feet per year.

WHAT YOU CAN DO: The newly formed state/federal Interagency Mono Lake Task Force (see page 3) will be holding public workshops in Lee Vining on May 11, in San Francisco on May 15, and in Los Angeles on May 21. We must assure that water conservation is seriously and thoroughly considered. Contact Task Force Chairman Jack Coe (Chief, Southern District, California Department of Water Resources, 849 South Broadway, Los Angeles, CA 90014; 213/620-4108) or the Mono Lake Committee; express your desire to review a draft of the task force's proposals and to participate at the public workshops.
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Getting to Know Mono Lake. See p. 8.

Recent Literature and Research. See p. 10.


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THE SECRETARY/TREASURER SPEAKS

I ask your patience with my slow response to correspondence. Mail is forwarded to me from the Oakland Post Office box. There is a further delay of at least one month before your contributions are deposited with our mother organization in Santa Monica.

When you change your address, please tell me the zip code of your old address. Our 900 subscriber cards are filed by zip.

Because I am not a computer, it takes hours to sort and file the mailing cards. But I will correct any inaccuracies as soon as you tell me about them.

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The MLC Newsletter features updates on the latest developments affecting Mono's future as well as articles on the natural, geological, and human history of Mono and other Great Basin lakes, reviews of current research and recent publications, plant and animal checklists, and announcements of field trips and talks. We invite your comments and contributions.

The newsletter is published at cost four times a year by GRT Book Printing, 1494 MacArthur Blvd., Oakland, CA 94602.

IMPORTANT! If your copy is improperly addressed, if you fail to receive an issue, or if your are moving, please let us know!
Outcry of Concern for Mono's Survival

During recent months Sacramento has received hundreds of letters from private citizens pleading for the preservation of Mono Lake and its wildlife. This outcry of public concern has finally forced government officials to face the issue.

Blasting Scheduled to Protect Mono's Gulls

Emergency Stop-Gap Measure

During the first week in April a shallow channel will be dynamited through the landbridge that has linked Mono Lake's Negit Island to the mainland. The channel is essential to protect 38,000-40,000 California Gulls, the world's largest known colony, from coyotes, rats, snakes and other mainland predators. The California National Guard, back for a repeat of last year's performance, will conduct the blasting under the auspices of the California Department of Fish and Game.

But the blasting is a stop-gap and all-too-temporary reprieve. Unless diversions are curtailed, the gulls will again face disaster next year.

Fish and Game is considering dredging a 10-foot deep channel this autumn, if funds can be appropriated. Such a channel would afford the gulls several years of protection at present diversion rates. That is, if they do not succumb to increasing salinities, an entirely plausible possibility.

On behalf of the gulls let us thank Fish and Game and the Guard for coming to the rescue. But let us not forget that blasting and dredging are risky last-ditch means of buying time. Time is needed to negotiate an equitable long-term solution. But, if at all possible, let it be bought with a stable or rising lake level, not with another technological fix.

Interagency Mono Lake Task Force Formed

On December 20, 1978, state and federal agencies met with the Los Angeles Department of Water and Power in Sacramento to discuss long-term solutions to the Mono Lake crisis. An Interagency Task Force, chaired by Jack Coe of the Department of Water Resources, was formed to "develop and recommend a plan of action to preserve and protect the natural resources in Mono Basin, considering economic and social factors, by June 30, 1979."

The public, including the Mono Lake Committee, has been barred from attending the closed-door sessions of the task force. Two public hearings, one in Los Angeles and one in Mono County, have been announced, but no dates have been set. The Mono Lake Committee has asked that additional hearings be convened in northern California.

While we are heartened by the Interagency Task Force's existence, we fear that Mono Lake will be held ransom for the Owens Valley, the peripheral canal, or even north coast rivers. At the December 20th meeting, the task force considered the following alternatives for raising Mono Lake to its 1976 level: 1) eliminate diversions from the Mono Lake basin, 2) provide water from the California Aqueduct to compensate for reduced or eliminated diversions from the Mono Basin, 3) seek alternative sources of water from other basins on the east side of the Sierra, 4) consider increased ground water pumping in the Owens Valley. Water conservation was not seriously addressed.

What You Can Do: Write to the members of the Interagency Task Force. Emphasize that Mono Lake should be protected, not at the cost of other parts of California, but through more efficient statewide use of our water resources both in urban and agricultural areas.
MONO LAKE is being destroyed by the inastible demands of Los Angeles for water. But far more is involved than the future of one lake.

What is happening at Mono reflects the alarming water deficit of the entire state and most of the West. We are using more water than is available on a continuing basis. We are also using more energy and more minerals than are likely to be available in the future.

We formed our profligate consumption habits at a time when water, energy and minerals were abundant and cheap. Those habits no longer have survival value. Survival requires that we be more frugal in the use of energy and efficient in its use. There is reason to believe that American know-how can meet the challenge.

Let's look at Mono lake as a symptom. It lies east of the Sierra, beyond Yosemite, in a basin that has no name. The lake is a million years old. It is a region of mountain lake, emerald green and green with soft, mossy banks and meadows. The lake is a product of geologic time, a natural treasure.

Some of those craters are islands in the lake. And one of those islands — Negit — seems a large proportion of the gulls that we see the rest of the year along the California coast. After the Great Salt Lake, Mono is the largest breeding area of the -California gull. It is also a home base or major stopover for millions of other birds: one-third of the world's Wilson phalaropes, 800,000 eared grebes, tens of thousands of seagulls and other shorebirds. Los Angeles is now legally taking 100,000 acre feet a year from streams flowing into Mono lake, and the surface is dropping about two feet per year, leaving thousands of acres of dry lake bed. The alkali flats are beginning to resemble the desertic bed of Owens lake, drained by Los Angeles long ago.

By 1977 the water level had dropped far enough to make a peninsula out of Negit island, the gulls' nesting place. A land bridge to the mainland permitted the migration of small mammals, which in turn would attract coyotes that would also prey on the birds' nests. And that would be the end of the Negit island gull colony.

To protect the colony, federal officials last year used dynamite to breach the land bridge, but the effort was only temporarily successful. Further drops of the surface subsequently restored the bridge.

In a couple of months the gulls will again come to the island, as their ancestors have done every spring for thousands of years, and authorities are trying to find some other way to protect them — perhaps a fence. But any such protection would only offer a stopgap, as the lake level continues to drop.

** * * *

LOS ANGELES Department of Water and Power officials do not talk about "destroying" the lake.

The Destruction Of Mono Lake Is on Schedule

By Harold Gilliam

They say they are "stabilizing" it. It would shrink to about one-third of its present volume and theoretically remain there. But the water level would fluctuate between evaporation, seepage and intake. But a lake is more than water. It is an ecosystem that includes the plant and animal life dependent on it. The destruction of the wildlife would turn Mono lake into a dead swamp.

The Mono Lake committee, sponsored by Santa Monica Audubon and backed by Friends of the Earth, the Sierra Club and other groups, is raising its batte cry "8750 or fight!" That's the elevation of the lake, about four feet above its present level, that would restore Negit island and maintain the lake's ecosystems. To keep the surface at that elevaton, the committee says, would require that Los Angeles cut down its annual diversions from 60,000 to 25,000 acre feet.

That sounds like a small concession to ask. But here is the response of Bruce Kuebler, Senior Hydrologist of the Los Angeles Department of Water and Power:

Mono basin is the source of 15 to 20 per cent of our total water supply. If we cut Mono's yield by 75,000 acre feet, we would have to buy that amount, through the Metropolitan Water District, from the State Water Project, which is overcommitted already. Even if the water were available, it would cost $100 an acre foot at current prices. So to get 75,000 acre feet would cost us $7.5 million.

But that would be only part of the cost, because we also use the Mono water for power. As it flows down from Mono by gravity, the 25,000 acre feet generates 225 million kilowatt hours of energy. If we had to generate that energy by burning oil in power plants, it would require 375,000 barrels of fuel oil a year and cost us about $5.5 million, at current oil prices. So we're talking about at least $9 million a year and probably a lot more as energy and water prices go up.

** ** **

There are further complications. When the Central Arizona Project goes into operation in the 1980's, the amount of water available to Southern California from the Colorado river will be cut back by more than half.

The Metropolitan Water District's plan is to make up the difference by buying water from the State Water Project, through the California aqueduct and the Tehachapi tunnel. But the State Water Project has contracted to deliver more water than is available. If the Peripheral Canal and planned dams are built, there will be additional water. But in the driest years there will probably not be enough, at projected rates of consumption, to compensate for the Colorado river loss, for 15 million acre feet per year can go through the Delta as recently ordered by the State Water Resources Control Board and for cutting the Mono basin diversion by 75,000 acre feet.

The only way to save Mono lake would seem to be by conservation — using less water. A State Department of Water Resources study in 1977 indicated that Los Angeles could cut by 24 per cent its projected use of water by the year 2000, and save Mono lake, by such methods as better plumbing fixtures, more efficient lawn irrigation, the use of dry-region plants and reduction of pressure in the water system. A large share of the remaining demand could be met by reclaiming waste water.

But the year 2000 is two decades away, and Mono lake needs water now. In the interim additional water from the California aqueduct might supplement some of the water that Los Angeles now takes from Mono, particularly during the years needed to restore the lake to its proper level. And that would mean water conservation in all areas served by the State Water Project.

So Mono lake is not purely a Los Angeles problem. It is simply the most visibly vulnerable symbol of California's water deficit, particularly critical in the San Joaquin valley.

For the moment the focus is on Mono. "We're going to take a hard line on saving the lake," says David Phillips of Friends of the Earth. "We're asking that the lake be made a national park or national monument or scenic area so the federal government can defend it in court."

Optimists hope that court action will be unnecessary, that Los Angeles will voluntarily stop taking water from Mono lake. But the laws must do — take decisive action to economize on water. It would be a giant step toward developing a society that is sustainable in the long haul, living on what nature can provide.

reprinted from the San Francisco Examiner, This World section, Sunday, March 11, 1979
Legislation Introduced to Save Mono Lake

Assemblyman Norman Waters (D-Lodi) has introduced legislation that could prevent the Los Angeles Department of Water and Power from diverting water from Mono's tributary streams until the lake returns to its 1970 level. AB 367 is the legislature's only attempt to address the Mono Lake crisis so far this session.

The Waters' bill maintains that the L.A. diversions are "an unreasonable use of water" and hence should be prohibited unless all of the following conditions are met: 1) Mono Lake is above its 1970 level (6390 feet), and 2) further diversions will not endanger California Gulls, brine shrimp or bristlecone pines*, or significantly increase the alkali content of the air.

The Assembly Committee on Water, Parks and Wildlife will hold the first hearing on AB 367 on April 18th at the State Capitol. MLC Chairperson David Gaines hopes to testify, but this is contingent on Waters' choice of speakers. The committee consists of Chairman Kapiloff (D-San Diego), Vice Chairman Kelley (R-Hemet), Berman (D-L.A.), Filante (R-San Rafael), Lehman (D-Clovis), Rogers (R-Bakersfield), Boatwright (D-Concord), Mello (D-Monterey) and Perino (D-Stockton). The latter three assemblymen co-authored the bill.

AB 367 does not address how Los Angeles is going to replace or compensate for the loss of its Mono Basin water and power. For this reason the bill may be subject to compromising trade-offs favorable to Los Angeles development interests, such as the legitimization of unlimited groundwater pumping in the Owens Valley or the construction of the Peripheral Canal.

The MLC could never support such trade-offs. We endorse a statewide program of mandated water conservation and water use planning as the most sensible and equitable means of protecting Mono Lake.

What You Can Do: Since Mono's fate will eventually be decided in the state legislature, we need to educate our assemblymen and senators NOW. Tell them of the urgency of the crisis. Explain why Mono Lake is a precious natural resource that must be preserved. Relate personal experiences that you have had at the lake. Talk about birds, brine shrimp, tufa, volcanos, etc. Declare yourself willing to conserve water so that Mono Lake can live!

MLC Pleads Mono's Cause Before L.A. Commissioners - Diversions This Year?

On January 18th Mono Lake Committee Chairperson David Gaines addressed the Los Angeles Board of Water Commissioners in Los Angeles. Present at the meeting were high-level officials from the Department of Water and Power and representatives from City Hall. With the aid of color slides, Gaines outlined the biological, scientific and esthetic values which will be lost if water diversions from the Mono Basin continue unabated. He then asked the board's cooperation in seeking an equitable solution that would protect the Mono Lake environment. His address was met with neither appreciative applause nor critical questions, but with stony silence.

(continued on page 14)
Six state agencies have strongly criticized the Los Angeles Department of Water and Power's draft EIR on "Increased Pumping of the Owens Valley Groundwater Basin." State Department of Water Resources Director Ronald Robie assailed the report for using "grossly insufficient data," and the Department of Fish and Game expressed fears that the pumping "may result in long-term significant adverse impact to both flora and fauna in one of the most important outdoor recreational areas in the West."

Owens Valley, which lies on the eastern side of the Sierra to the south of Mono Lake, has long supplied Los Angeles with water through diversion of its surface streams. The DWP claims that groundwater pumping is needed to meet increasing demands for water by its customers, and to reduce the city's reliance on more expensive supplies from other sources. Critics counter that the pumping will devastate vegetation, wildlife and air quality in the Owens Valley while fueling more urban sprawl and pollution in southern California.

Especially welcome is State Resources Secretary Huey Johnson's call for "an overall resources management plan covering water conservation in the Los Angeles area." Johnson specifically states that "the EIR should contain a discussion of the effects of the project on the continuing decline in water level in Mono Lake."

"The project should not be undertaken," says Johnson, "without more serious consideration of both the long-range environmental effects on the area from which the water will be exported, the Owens Valley, and the area which will receive it, the Los Angeles Basin... Will the growth inducing effects of proposed additional water imports increase already serious problems of air pollution and sewage disposal? By increasing population density, will such imports be a factor in decreasing the quality of life for people who live in the Los Angeles Basin?"

We applaud Huey Johnson, Ronald Robie and their colleagues for facing the need to moderate growth in order to safeguard natural resources and the health of our environment.

What You Can Do: Johnson and Robie are being pressured by pro-development interests to moderate and weaken their positions. They deserve our support. Please write to Huey and Ron (1416 Ninth St., Sacramento, CA 95814) to express your appreciation for their courageous and intelligent criticism of the DWP's draft EIR.

DWR'S MERAL REBUTS MLC CRITICISM

Dear Dave:

I would appreciate it if you could run the attached as a letter to the editor. I didn't respond to the comment that I didn't seriously mention water conservation as an alternative, since the newsletter later contradicts that with many references to our water conservation projections.

Gerald H. Meral, Ph.D.
Deputy Director, Department of Water Resources
Thanks for the kind words in the newsletter about our projections for water conservation in Los Angeles. We stand by them, despite some Southern California criticism that they are too high.

I would like to correct some impressions you received of the briefing held with the Sierra Club last December. First, the meeting was coordinated by the Sierra Club — I am sorry you received inadequate notice. We will make a special point to keep you informed in the future. Second, as you know, the information describing the situation is complex. In an effort to make it more understandable we put it on graphs and tables. If there is additional amplification I can provide, please let me know. Third, our findings result from our own analysis; we do not "parrott [sic— Parott's Ferry on his mind?] the DWP line," or any other. Finally we must all consider the effects of action at Mono Lake on the rest of the state. Your analysis of water supply to the City of Los Angeles indicates that it might be possible to restrict the city's import of Mono water while not taking anymore water from the Delta. However the analysis does not include the fact that the rest of Southern California would continue to import Delta supplies. The City of Los Angeles cannot be considered an isolated island in the South Coastal plan when, in fact, it is part of a huge metropolitan area with interdependent urban and agricultural needs.

As chair of the Interagency Mono Lake Task Force, DWR is working for a solution preserving Mono Lake which will also consider water supply and environmental problems of the rest of the state. We will look forward to working with the Mono Lake Committee toward that goal.

editor's note: DWR deserves our unqualified praise for their scholarly documentation of the potential for more efficient water use in California (see review of "A Pilot Water Conservation Program" on page 10). They have heretofore discounted this potential, however, when addressing the crisis at Mono Lake. We are still uncertain whether Jerry shares our conviction that Mono should be saved through water conservation, not only in Los Angeles, but throughout California.
"Raw and incongruous at first, you must give it time. Moreover, treat it with the respect you would give a very old, very wise person."

... Gray Brechin

I write this article with some trepidation. Many of Mono Lake's delicate tufa sculptures have been severely damaged or even carted away by uncaring or avaricious humans. Its birds have been harassed and shot at. Insensate mobs of tourists could harm the lake in these and other, subtler ways.

Homo sapiens is not yet obtrusive at Mono Lake. Above the paved highway that runs for several miles along its western shore, a few modest dwellings are concealed by sagebrush and poplars.

The hamlet of Lee Vining, with its stores, motels and gas stations, is dwarfed by the steep Sierran escarpment. Only an occasional hiker, birdwatcher or fisherman (angling for the Mono Monster) challenge the coyotes and ravens which claim its shores. Though the hand of man hangs heavy over its future, Mono still retains the magic and power of primeval America.

I wonder whether this elusive and precious quality can survive with large numbers of people, however well-intentioned? With vistas and
trails demarcated with neat interpretive signs? With rangers, museums and campfire programs? If Mono can be wrested from the L.A. developers, I suppose it will be claimed by the park service. Which may be for the best, for our fight must publicize Mono and, inevitably, lure people to its shores. Rangers, perhaps, can keep us from loving it to death.

But none of this exists at present. One can wander for miles along sandy beaches, savoring the salty air, the dance-like flights of gulls, and the play of light on lake and mountains, and see no sign of man. One can be scorched by sun, blasted by blowing sand and washed away by cloudbursts, not to mention perish of thirst. Mono demands preparation and probably propitiation as well.

Aldo Leopold once said, "Of what avail are forty freedoms without a blank spot on the map?" Mono is as blank a spot as you can find anymore. I would not spoil it by being exhaustive, even if I could. The places I mention are points of departure for your own journeys of discovery. Keep alert, be kind to the earth, and you may learn something worth knowing.

So come visit Mono. The old lake needs new friends, and will not begrudge some more human footprints along its shores, provided we walk lightly. Attend one of our field trips. If on your own, try the tour described below. But, please remember—

DO NOT VISIT NEGIT ISLAND OR THE ISLETS TO THE NORTHEAST BETWEEN APRIL AND AUGUST; DISTURBANCE WREAKS HAVOC AMONG THE NESTING GULLS!

THE LAKE CAN BE TREACHEROUS, AND STORMS CAN APPEAR WITHOUT WARNING; STAY CLOSE TO SHORE!

MANY SAND-TRAPS LURK ON SIDEROADS; GET OUT AND WALK BEFORE YOU HAVE TO!

HELP PROTECT THE TUF A SCULPTURES BY NOT CLIMBING ON THEM OR TAKING "SOUVENIRS;" SHARE THIS ETHIC WITH OTHERS!

It is best to begin with an overview, and none could be more spectacular than that from the summit of Mt. Dana, Mt. Warren, Koip Peak, or some other Sierran summit. From such a vantage point one looks down a vertical mile on the circular expanse of Mono Lake, its blue waters broken by its one white and one black island.

The automobile traveler can garner a similarly grand vista from CONWAY SUMMIT, the high point on Highway 395 to the north of the lake. From the "Mono Lake Overlook" one looks south across Mono's waters towards the Mono Craters, the White Mountains and the jagged Sierran crest. All-too-visible is the white alkali-encrusted landbridge which has emerged between Black Point and Negit Island.

From Conway, Highway 395 descends rapidly to HIGHWAY 167, the road to Hawthorne. Within a mile to the east the alert traveler will discover weathered tufa formations rising among the sagebrush. These were formed
beneath the waters of a much larger ice-age lake. Looking to the north and west one can discern shorelines and terraces left by this lake, which last covered this area about 11,000 years ago.

A few miles further south on 395 a sign marks the turn-off to MONO LAKE COUNTY PARK (picnic tables, rest-rooms, etc.). Leave your car in the parking lot and stroll through the groves of tufa to the lakeshore. The route is soggy, so come prepared and beware the "Mono Muck," a viscous mud left by the receding lake. Springs water lush meadows of grasses, bulrushes and colorful flowers. Flocks of gulls and shorebirds congregate on the mud-flats, gossiping noisily.

Between the county park and Lee Vining is SNEAKER FLAT, which, because of its proximity to the highway, is the most frequently visited but least attractive spot on the lake. If you do stop here, you will have to walk through the muck and perhaps lose your shoes like many others before you.

The SOUTH SHORE can be reached via the dirt roads branching north off Highway 120, the road to Benton. Be careful to stay on well-traveled routes, as it is easy to get hopelessly stuck in the soft pumice sand. This shore, besides its delicate tufa formations and Sierran vistas, offers some of the better spots for swimming.

The geologically-minded will relish the hike up PA. CRATER, a perfectly formed "plug-dome volcano" with a jagged plug of obsidian and tuff surrounded by a doughnut of frothy pumice. The summit of Panum affords another awesome view of Mono Lake and the Sierra Nevada, with its many glacier-sculpted canyons and moraines.

While exploring the southwest shore, you will cross the usually dry, rocky beds of Rush and Lee Vining Creeks, once the lake's largest tributary streams. Diversions have destroyed the verdant vegetation which used to follow these creeks to the lakeshore, and dessicated many nearby springs. This area, now so dry, was once as lush as that near the county park.

RECENT LITERATURE


In recent years the DWR has not only talked about water conservation, they have initiated studies and pilot programs to evaluate its potential. This bulletin reports on simple, inexpensive means of introducing water-saving devices in homes. During the summer and fall of 1977, such devices were distributed in six California communities.

The results of this program document dramatic savings, not only of water, but of energy as well. In San Diego, where 22% of all households voluntarily installed toilet devices and 13% installed shower devices, water use dropped by 3,008 acre-feet per year. Energy consumption decreased by the equivalent of 76,000 barrels of oil, due primarily to reduced heating of shower water. If every San Diego household installed these devices, approximately 20,000 acre-feet of water and 350,000 barrels of oil would be conserved annually; in Los Angeles, over 60,000 acre-feet and 1,120,000 barrels. In urban California generally, the savings would be many times as impressive.
"Installing water saving devices," notes Resources Secretary Ronald B. Robie, "is only one phase of a successful urban residential water conservation program. Longer-term benefits will come from changes in building code standards that require built-in conservation features in homes, from standards for more efficient water-using appliances, and finally from development of conservation awareness on the part of the general public."

Yet, as this study proves, even such modest retrofit measures as toilet dams, water displacement bottles, toilet float adjusters and shower flow reducing devices could be the salvation of Mono Lake, Owens Valley and California's wild rivers, marshes and baylands.

Water—Bridge to Understanding (draft), by Miki Bratt, Water Consultant, League of Women Voters of Claremont, assisted by Joan Smith, Arlene Banks and Judy Wright

The crisis at Mono Lake is symptomatic of the water imbroglio faced by California and much of the West. Those who have tried to pierce the bureaucratic veil concealing the truth about water will be grateful for the detective work of Miki Bratt and her colleagues from the League of Women Voters.

Bratt may not have all the answers, but she asks the pertinent questions. For instance: What does water supply cost? Who pays? Do rate structures affect the use of water? Do taxpayers subsidize water use? Do property tax levies interfere with sound water management policies, such as the reduction of per capita water demand? What is the effect of tax-paid public water district lobbies, such as those of the Municipal Water District and the Los Angeles Department of Water and Power, on sound water supply management? Is there any remaining "surplus" water in California?

The discussion of these issues, and of the politics of water in general, are concise and revealing. Draft copies of "Water—Bridge to Understanding" are available from: Claremont's Water Future, League of Women Voters of Claremont, 226 W. Foothill Blvd., Suite C, Claremont, CA 91711.

Desertic Terminal Lakes, ed. by Dean C. Greer. Available for $5 from: Utah Water Research Laboratory, Utah State Univ., Logan, Utah 83272

Collected in the 436-page volume are the proceedings of the International Conference on Desertic Terminal Lakes, convened in Ogden, Utah in 1977. A desertic terminal lake, by the way, is "one resulting from geographic and climatic conditions which do not allow drainage to reach the oceans of the world." Mono and Great Salt belong in this category, as do 13 of the world's 40 largest lakes.

Unfortunately this compendium of otherwise fascinating scientific papers scarcely mentions Mono Lake. But it does furnish an invaluable perspective on terminal lakes in general. Papers are segregated into sections on paleo-climatology and lake level prediction, brine chemistry characteristics, lake level control and hydrology, and biology. Subjects range from "the physico-chemical basis of legends of the Dead Sea" and "lake levels and astronomical causes of climatic change" to "heavy metals in the Great Salt Lake" and "ecological studies of terminal

May the sequel make more of Mono!

ON-GOING RESEARCH

Limnology

Dr. John Melack, Department of Biological Sciences, University of California at Santa Barbara, has been awarded a modest grant from the National Geographic Society to study Mono Lake. His research will combine laboratory and field experiments to determine 1) the growth rates and nutrient needs of the phytoplankton, 2) the reproductive, grazing and nutrient excretion rates of the brine shrimp, 3) the influence of salinity increases on the reproductive success of the biota, and 4) the seasonal dynamics of the plankton populations. Melack has previously studied soda lakes in Africa, where he correlated drastic reductions in plankton populations and the emigration of large numbers of Lesser Flamingos with an abrupt increase in salinity. His work at Mono, which
was initiated last year, will provide the first thorough analysis of the much neglected biological community living in the lake.

Petra H. Lenz, a graduate student at U.C. Santa Barbara, will be assisting Dr. Melack and continuing the research on brine shrimp she began last year.

Entomology

David Herbst, Department of Zoology, Oregon State University at Corvallis, will be studying the ecology of brine flies and other shore insects both at Mono and other alkaline, Great Basin lakes. His work will also furnish data on the genetic distinctness of the Mono Lake fly population.

Ornithology

David Winkler, Museum of Vertebrate Zoology, University of California at Berkeley, will be initiating an in-depth study of the nesting biology of the California Gull. Incidental to his work with the gulls he will be conducting censuses of the lake's other bird populations.

ON BEHALF OF MONO LAKE, MILLIONS OF BIRDS, AND MILLIONS OF BRINE SHRIMP, WE THANK THE FOLLOWING NEW CONTRIBUTORS FOR THEIR GENEROUS SUPPORT:

PATRONS

SPONSOR
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*denotes renewal or gifts.
During the summer of 1978 a group of dedicated field biologists conducted a detailed study of the breeding biology of the Snowy Plover at Mono Lake. The Snowy Plover is a plump, brown-backed, white-bellied five inch long shorebird that lives on wind-swept coastal beaches and, strangely enough, also on the desolate shores of inland alkaline lakes.

There has been increasing concern in recent years that human activity has been driving the Snowy Plover from its major breeding habitat on California's sandy beaches. This species has been placed on the Audubon Society's Blue List, which means that most birdwatchers agree that its breeding populations are declining seriously.

In 1977 Point Reyes Bird Observatory initiated a survey under my direction to determine how many Snowy Plovers were still breeding in California. In 1978 the survey was extended to encompass inland populations.

On the coast the results were much as I had anticipated. Only 1200 Snowy Plovers were found on the coastal beaches, and there was evidence that the species has disappeared entirely from sections of the coast, particularly in Orange and Los Angeles Counties. The big surprise was the large number of plovers found in the interior, some 2100, many more than anyone had imagined. Mono Lake's contribution, at least 384 birds, is the second largest concentration known in California.

In 1978 the Mono Lake plovers were producing about as many young as the coastal population, about 0.6 chick per pair. California Gulls ate the eggs in several nests, but there were no losses due to human disturbance.

Snowy Plover nests were scattered around the lake, some on old sand beaches 1.5 km from the shore, others on white-crusted flats within 150 m of the water. Within a few hours after hatching the chicks were able to obtain their own food, and some walked as far as 6 km to choice feeding areas. The parents acted as sentinels, warning of approaching predators with piercing alarm calls. In response the chicks crouched and remained motionless, trusting to their mottled, camouflage feathering to avoid detection.
In 1979 we will return to Mono Lake for another look at the Snowy Plover. We hope to discover how the gulls find their well camouflaged nests, and what tactics the plovers employ to lessen the gull's chances of finding them. We will be looking for Snowy Plovers marked with color bands in 1978 to see what proportion have returned to breed for another year. We hope to obtain some information on the different kinds of insects eaten by the plovers so that we can determine just how important the brine fly is in their diet. We will make another count of the breeding population as a basis for evaluating population trends if the lake's level and food resources dwindle with continued diversions.

WHAT'S HAPPENING, continued from page 5.

In the following letter to Sara C. Stivelman, President of the Board of Water Commissioners, Gaines committed to writing the MLC's key request:

Dear Ms. Stivelman and fellow Commissioners:

Please permit me to reiterate the urgent need to stabilize Mono Lake for at least an interim period. This time is needed to weigh the lake's values, to determine the salinity tolerances of its bird, brine shrimp and brine fly populations, to research the impact of alkali dust pollution, and to develop an equitable alternative to its biological destruction.

No one can deny that Mono Lake possesses substantial values that will be lost if water diversions continue at their present rate. Conversely no one can deny that the water and the hydro-electric power it generates are worth millions of dollars a year. But this dollar value is no excuse for ignoring the cost being exacted on the plants, animals and people of the Mono Basin, nor the esthetic and scientific values being jeopardized. Many consider these values to be priceless. We cannot convince you of that. But we trust you will agree that we have a moral obligation to future generations to carefully weigh these values against those of water export, and to consider the alternatives to further degradation of the Mono Lake environment.

To fulfill this obligation, however, Mono Lake must be stabilized for an interim period. If diversions continue unabated and the lake continues to shrink, irreversible damage will probably occur within the next few years. Mammal and reptile populations will colonize Negit Island, for example, and destroy the gull colony. Increasing salinities may jeopardize the migratory bird populations. Alkali dust pollution will worsen. It is neither reasonable nor ethical to risk this damage before deciding, in light of the alternatives, the degree of protection Mono Lake deserves.
The Mono Lake Committee appeals to you to grant Mono Lake this interim protection. Based on current knowledge, a surface elevation below the 1976 level of 6378 feet could seriously harm the lake's ecological community. We urge, therefore, that no water be exported in this year of apparently normal or above-normal precipitation, and that the level of Mono Lake be maintained above its present level for at least the next five years.

**Mono Lake Committee to Incorporate**

The Mono Lake Committee has filed Articles of Incorporation with the State of California as an independent, non-profit corporation. The Santa Monica Bay Audubon Society has been a loving parent, but with 1000 members, it is time for us to leave the nest. This will shift the burden of depositing donations from Santa Monica's treasurer to our own, expediting and simplifying our handling of funds. We should be official by sometime this summer.

We thank Gary Haas for his assistance in drafting our by-laws, and Roberta A. Kehoe, Legal Assistant for Morrison and Foerster of San Francisco, for preparing and filing the needed documents.

**Sierra Club Mono Lake Task Force**

The Sierra Club has formed a task force to guide its efforts to preserve Mono Lake. If you belong to the club and would like to participate, please contact Joe Fontaine (Box 1142, Star Route, Tehachapi, CA 93561, 805/822-4323).

**Audubon Society's Pledge Support**

In January, at a convention in Sacramento, the 44 California chapters of the National Audubon Society unanimously voted Mono Lake and the California Condor their number one 1979 conservation priorities. The next week the National Board of Audubon, at the behest of director George S. Peyton, Jr., passed a resolution calling for Mono Lake's protection. Such resolutions are drafted only on issues of national significance. Audubon's support reflects growing recognition of the value of Mono's biological, scientific and esthetic resources to the nation as a whole.

**New Help for the Mono Lake Committee**

New faces are helping our organization forge ahead. Peter Vorster now fills Gray Brechin's shoes as our new director Gray, who has been living hand-to-mouth while serving the cause, has accepted more lucrative employment as an architectural historian. He remains our chief propagandist and raconteur.

Peter, who combines acute monomaniac with seemingly limitless energy, has been on the phone almost constantly promoting our hoped-for media blitz of the Negit Island blasting. Miraculously he has also found time to write news releases, look into air quality laws, talk to legislators, attend conferences, distribute displays and literature, fund-raise, and oversee the printing of T-shirts. Peter helped research the recently completed State Water Atlas.

Mark Hamlin joins David Winkler as our second biological consultant. In fact we rely more on his political acumen than his biological expertise. During the past few months he has discussed AB 367 and Mono Lake in general with numerous legislators and their staffs. Together with Dean Jue, Stuart Schutz and Peter Vorster, he keeps us posted on the latest developments in the state capitol.

Corliss Knistenson and Dr. Florence F. Sharp of the Los Angeles Audubon Society are researching the applicability of endangered species legislation to Mono's unique invertebrate populations.

Elliot Burch and Stephanie Zeiler have volunteered their summers to lead field trips and conduct bird censuses at Mono Lake; we are fortunate indeed to have such highly qualified naturalists and teachers.

Our campaign to publicize Mono's plight has gained momentum with the addition of Cameron Barrows, David Herbst, Jim Rowan, Jim Stroup and Don Szalay as regional subcommittee chairpersons. They will be answering requests for information, disseminating leaflets and displays, scheduling slide presentations, and generally talking and working their hearts out for the ol' lake.

Meanwhile our original stalwart crew keeps on keepin' on. During January chairperson David Gaines presented more talks than he can remember to groups in Los Angeles, San Diego, Santa Barbara
and other southern California communities. In February he ranged to Reno, Chico and Stockton. Many other slide shows were presented by Steven Cunha and Cameron Barrows in southern California, Dave DeSante, Jim Sano, Gray Brechin, Sally Judy and Ted Beedy in northern California, and David Herbst in Oregon.

We owe a special debt to Sally Judy, our Secretary/Treasurer, and Mark Ross, our printer and spiritual advisor. Mark has donated his weekends to slave-labor printing our literature, saving the committee many hundreds of dollars. Sally has struggled valiantly to keep up with correspondence, maintain our mailing list, and generally keep the forces of entropy at bay.

To the many other people who have donated time, energy and money so that Mono can live, we express our thanks. Our modest success to date is your success. Let's keep it up!

YOU TOO CAN VOLUNTEER!

All we ask is tireless energy, the willingness to cheerfully wade through tedious, but necessary tasks (such as typing this newsletter), a fine disdain for monetary reward, and unrequited love for Mono Lake.

Specifically we need volunteers to:

1) Set up slide talks or present slide shows. Slides with accompanying scripts are available.

2) Set up exhibits and/or literature tables at conferences, schools, libraries, stores, etc. We have attractive 18" by 36" displays available, and have ample literature.

3) Fund-raise. T-shirts, post-cards, photographic prints, etc. can raise needed money while publicizing Mono's plight. We need creative, imaginative people to pursue these and other projects.

Educating the public, especially in southern California, is still our most important task! The committee has only three full-time volunteers. There is only so much we can do. If you can help, please contact Peter Vorster or the Golden Gate Audubon Society (415/843-2222).

OWENS LAKE — INFORMATION PLEASE!

Gray Brechin is researching what was lost when Owens Lake, Mono's twin to the south, dried up early in this century. Anyone knowing of biological accounts of the lake or of personal impressions by those who lived nearby or visitors should write to Gray at 2007 Franklin St., San Francisco 94109.

SPECIAL THANKS TO: Friends of the Earth for sharing their booth at the New Earth Exposition; Friends of the River and the California Wilderness Coalition for an energizing Confluence; Altacal Audubon for donating proceeds from their environmental art sale; Bev Steveson for donating 500 exquisite Mono Lake post-cards to help our publicity efforts; Jim Stroup for photographs for use in our literature, news releases and press packets; Judy and Robinson Securities for the use of their typewriter; Keith Hansen for his Snowy Plover sketch; Becky Shearin for her war-weary gull sketch; Eben McMillan for the photos of tufas in years gone by; Dale and Grace Kayser and Joe Medeiros for rescuing our chairperson when his car broke down en route to a talk in Modesto; and to Edith Gaines for inspiring dedication to the Mono Lake cause...

We gratefully acknowledge receipt of a donation in memory of Bill Sabo, Yosemite National Park employee who lost his life in Mono Lake last year.

FIRST ANNUAL GENERAL MEETING OF THE MLC

The Mono Lake Committee will convene its first annual general meeting and pot-luck dinner at 3:00 p.m. at the Mono Lake County Park on Sunday, May 27th. See you there!
Dying in Northern California

Do you believe it is fair to the Earth to allow its natural and spiritual energies to be replaced by scrubbed concrete, manicured lawns and more swimming pools?

WE HOPE YOU DON'T!

If you cannot act now for the sake of Mono Lake, its proud gulls and its grebes . . . then help save a beautiful, real vision for your kids.

Contact the Mono Lake Committee (P. O. Box 2764, Oakland, California 94602) for information on the various ways to become involved. And/or send some tax-deductible dollars.

YOU'LL FEEL LOTS BETTER.

Rich Stallcup

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I want to help Mono Lake live on.

Here is my contribution of $_______ for the Mono Lake Legal Defense Fund.

Here is my contribution for:

☐ $10 regular membership
☐ $5 "I can't afford more" membership
☐ $25 sponsor
☐ $50 patron
☐ $100 monophile
☐ $500 monomaniac
☐ I cannot afford to contribute, but I'm willing to write letters and I would like to receive Action Alerts
☐ I'm interested in promoting local publicity

☐ I am a new member.
☐ I already belong. This is an additional contribution (or renewal).
SWIMMING AT MONO

Sunday, March 18
Lee Vining, CA

Dear Dave and Sally,
Here's a little piece for the newsletter. I get the feeling Jeffers wrote about in "Wild Swans" where he realizes the inadequacy of words to capture "one glistening flash of the beauty of things." Still, he did better than most, and I too am addicted to words, these symbols that mean so much and nothing at all.

I mean, who am I to write that crap about being part of things, driving my Datsun all over creation and sending my garbage to the Bay?

I just hope that blasting will do some good, but the more I get into this, the less I believe in these technological fixes. Why won't people see the light and stop having babies for a few years?

Monomaniacally,

Gray

p.s. it's Monday and there are snowflakes big as gull chicks coming down!

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Years ago, I had a dream that I was a gull following a huge cloud of locusts into the gathering darkness over Egypt. It was brief, and I still don't know if there are gulls in Egypt, but it was one of those rare and memorable dreams from which you wake feeling perfectly happy, the way you feel when singing in harmony with a large chorus. Swimming in Mono is something like that.

It is the stillness and the light, as well as the life, which makes swimming in Mono so different from pool, ocean, or river swimming. By July, the lake is a warm and living broth of brine shrimp grazing the water pastures of algae. Swimming in clouds of these feathery animals, your body buoyed by the heavy brine, gulls wing slowly about you while thousands of grebes bob and dive at eye level all the way to Paoha. Paddling, or just floating, you are suspended at the interface of two living media, between predator and prey. Air and water are saturated with the light which rains on the valley and lances down the Sierran canyons in the late afternoon, flickering from the lake's surface and stoking the food chain beneath it. The basin seems to brim with light, and you are suspended in the midst of it, as you are in time, on one of the many levels of old Lake Russell.

This meditative suspension in the midst of a vital fabric which is an extension of your own flesh is what whales may feel, buoyed and enveloped in a living medium from which they take only what they need of krill or fish, and the pleasure of being in it. It is the too-rare feeling of singing in harmony with the world which supports us. Feel this, and you will know that to hurt it is to hurt yourself.

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Gosh Gray. Those are your thoughts while swimming? You probably never even went in. I bet you just stood on shore looking dreamily out over the water making up images. What a mixture, anyway. Singing whales flying over Egypt?

Just tell folks that swimming in Mono Lake is fun on a hot day, that it's nice to float on your back and look around at the neat tufas, craters and giant mountain ranges. And don't neglect to warn them that the salts sting eyes and cuts, and leave you looking a little like a tufa (until you rinse off with fresh water).

- Sally
FIELD COURSES ON THE NATURAL HISTORY OF THE MONO LAKE - TIOGA PASS REGION
Sponsored By: The Altacal Audubon Society and The Mono Research Group

To the east of Yosemite the rugged snow-crowned Sierra Nevada drops steeply to the shores of Mono Lake. A journey of a few short miles takes the traveler from the climatic-ecological equivalent of the Arctic to the Great Basin desert and one of the world's most biologically interesting lakes.

These courses offer an intimate, four-day introduction to the natural history of this diverse region. Field trips are interspersed with informal lectures and evening campfire discussion sessions. The courses convene at noon on Friday and disband at noon the following Monday. Fees do not include meals or lodging. Participants are urged to car-camp as a group; alternatively, motel accommodations are available. Additional information is furnished upon enrollment.

THE ECOLOGY OF MONO LAKE
David Winkler and David Gaines, instructors
July 20-23 or September 7-10  Limit: 15 persons  Cost: $40

This course begins with Mono Lake's birth, traces its geologic history through millions of years, and proceeds to an in-depth examination of its unique biotic community and the impact of the Los Angeles water diversions. We roam Mono's shores and boat on its waters, exploring first-hand its tufa formations, algae, brine shrimp, brine flies, and water birds.

NATURAL HISTORY OF THE MONO LAKE - TIOGA PASS REGION
David Gaines and David Winkler, instructors
July 27-30 or September 14-17  Limit: 20 persons  Cost: $30

This course offers a general introduction to the plants, animals and geological history of the eastern Sierra. We range from Mono Lake to the headwaters of its snow-fed tributaries high above timberline, exploring the intricate relationships between plants, animals, climate, elevation and soil in a near-pristine environment.
MONO LAKE FIELD TRIPS

Sponsored by: The Mono Lake Committee

SPEND A DAY EXPLORING THE GEOLOGY, BOTANY, ZOOLOGY AND HUMAN HISTORY OF THE MONO LAKE REGION...

LEARN FIRST-HAND HOW WATER DIVERSIONS ARE AFFECTING THIS IRREPLACEABLE NATURAL TREASURE...

Half-day (8 am - 2 pm) field trips are scheduled for every Saturday or Sunday from June 9th thru September 9th. Field trips are free, but are limited to 40 people.

TO SIGN UP: Select a preferred and an alternate date, enclose a stamped self-addressed envelope, and send to: MONO LAKE FIELD TRIP
PO Box 29
Lee Vining, CA 93541

We'll let you know where to meet and what to bring.
FLOWERS, SHRUBS AND TREES OF THE MONO LAKE - TIOGA PASS REGION
David Gaines and David Winkler, instructors
July 13-16 Limit: 20 persons Cost: $30

Few places on earth surpass the eastern Sierra in the diversity and beauty of their flora. In this course we learn how plants have adapted to a wide range of climatic and soil conditions, and explore the dynamic relationships between plants and the animals that eat them, pollinate their flowers and/or disperse their seeds. Basic identification skills, such as using a botanical key, are also covered.

BIRDS OF THE MONO LAKE - TIOGA PASS REGION
David Gaines, instructor
August 17-20 Limit: 20 persons Cost: $30

This course acquaints participants with the wide diversity of alpine, forest, desert and water birds which inhabit the eastern Sierra. We learn not only to identify birds by pattern, behavior and call, but also to understand their behavior, breeding ecology, migrations, and relationship to their environment.

THE ECOLOGY OF BIRD MIGRATION
David Winkler and David Gaines, instructors
August 31 - September 3 Limit: 15 persons Cost: $40

In this course we study shorebirds, warblers and other migratory birds both in-the-field and in-the-hand. Participants learn not only basic bird-banding and censusing techniques, but also to record and understand data. Through our observations we come to appreciate first-hand the strategies birds have evolved for traversing hundreds of miles of sagebrush desert.

MAMMALS OF THE MONO LAKE - TIOGA PASS REGION
John Harris and David Gaines, instructors
August 10-14 Limit: 20 persons Cost: $30

In this course we become acquainted with the mice, kangaroo rats, chipmunks, squirrels, rabbits and many of the larger mammals which make their homes in the eastern Sierra. Through field observations, live-trapping and the study of tracks, scats and other signs we come to appreciate the important and fascinating roles mammals fill in the ecological fabric of the Mono Lake region.

ABOUT THE INSTRUCTORS: David Gaines, David Winkler and John Harris blend intimate knowledge of natural history with contagious enthusiasm for all things wild. Harris and Winkler are conducting PhD. research in the Mono Basin—Harris on the small mammals which dwell along Mono Lake’s shores, Winkler on the lake’s nesting gulls. Gaines, a part-time teacher and full-time student of natural history, has taught numerous courses for U.C. extension and Yosemite National History Association, and is the author of Birds of the Yosemite Sierra.

I enclose $____ in payment for the following courses:

☐ Ecology of Mono Lake July 20-23
☐ Ecology of Mono Lake September 7-10
☐ Natural History July 27-30
☐ Natural History September 14-17
☐ Flowers, Shrubs and Trees July 13-16
☐ Birds August 17-20
☐ Ecology of Bird Migration August 31 - Sept 3
☐ Mammals August 10-14
