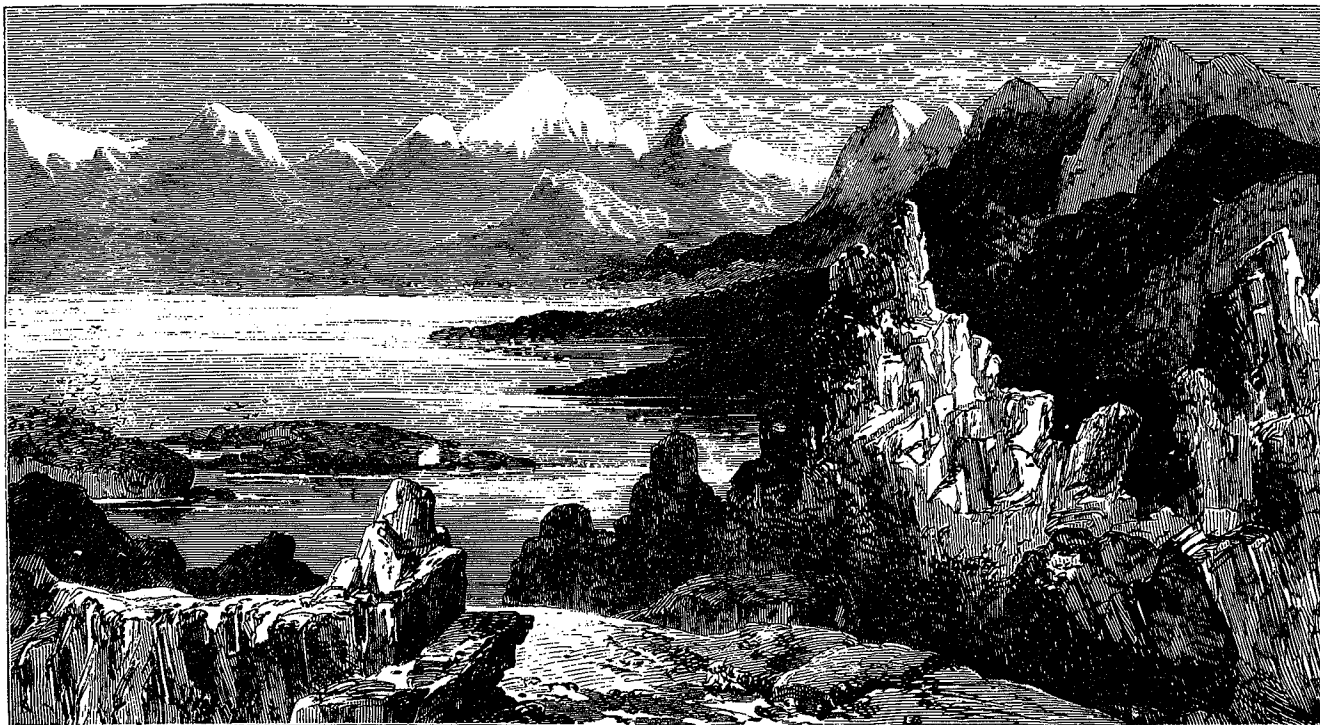


# THE MONO LAKE COMMITTEE

Newsletter

Editors: D. Gaines & D. Taylor

Vol. 2, No. 3  
Winter, 1980



MONO LAKE.

"VAST CHASMS AND ROCKY CANYONS OPEN OUT UPON THE SHORES OF THE LAKE... MOUNTAIN AFTER MOUNTAIN ROLLS OFF IN THE DISTANCE, LIKE THE WAVES OF AN ANGRY SEA... MIGHTY POTENTATES OF THE WILDERNESS... IN SUBLIME SCORN OF THE PUNY CIVILIZATION WHICH ENCIRCLES THEIR FEET..."

... J. Ross Browne, Harper's New Monthly Magazine, 1865

The artist who published Mono's first portrait in an 1865 Harper's must have been stunned by the lake's primeval grandeur. The mountains are magnified, the canyons are deepened and the islands are distorted. Yet he faithfully depicts flocks of birds hovering over Negit Island. Today we are still overwhelmed by the same grand drama of mountains, birds and lake.

Our children may be overwhelmed by alkali dust. While debate intensifies, Mono continues to shrink and die. It is as if we were using Yosemite Valley as a landfill while deciding whether

it should become a national park.

For the third consecutive winter, snows are deep in the Mono Basin watershed. The runoff could raise the lake one to two feet, reduce its salinity, help keep predators off Negit Island, and generally stave off disaster while the fate of the lake is decided.

But unless WE speak out, the water will flow into the Los Angeles Aqueduct--not because it is needed, but because it is cheap. We and our children will pay for the rape of Mono Lake.

The MONO LAKE COMMITTEE is a not-for-profit citizen's group.

**OUR PURPOSE:** To preserve the scenic, wild-life and scientific values of Mono and other Great Basin Lakes by limiting water diversions to levels that are not environmentally destructive, to further public interest in the natural history and preservation of these lakes, and to facilitate relevant research.

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**THE SECRETARY SPEAKS**

Can you believe that March, 1980 is the MLC's second anniversary? We all hope that by March, 1981 the lake will be saved and we can turn to other things.

Time for Renewals?

To save time for more pressing matters (like saving Mono Lake), we do not send out renewal notices. Unless you let us know, we will keep you on the mailing list until the jubilant (or bitter) end.

But we do depend on your renewed monetary support to sustain our efforts (see page 22). So we'd like to cultivate voluntary renewals on a calendar year basis. If you have not contributed recently, and are not utterly destitute, please send us something for 1980!

Mailing List Confusion?

Our apologies to everyone who received more than one newsletter-- most of the duplicate mailing cards have now been weeded out. To minimize future confusion, please:

*When you send in checks, renewals, donations or whatever, **BE SURE TO TELL (OR REMIND) ME WHETHER YOU ARE ALREADY ON OUR MAILING LIST!***

***BE SURE TO TELL ME WHENEVER YOU MOVE, AND LET ME KNOW YOUR OLD ZIP AS WELL AS YOUR NEW ADDRESS.** Because our newsletters are mailed second class, they are neither forwarded to you nor returned to us.*

*If you wish to donate funds, but do not wish to be on our mailing list, please tell us.*

New Treasurer

Kathleen Teare is our capable new treasurer, bookkeeper and financial guru. She introduces herself with a tidy financial statement (p. 21) and a cartoon illustration of what she has learned about bookkeeping.

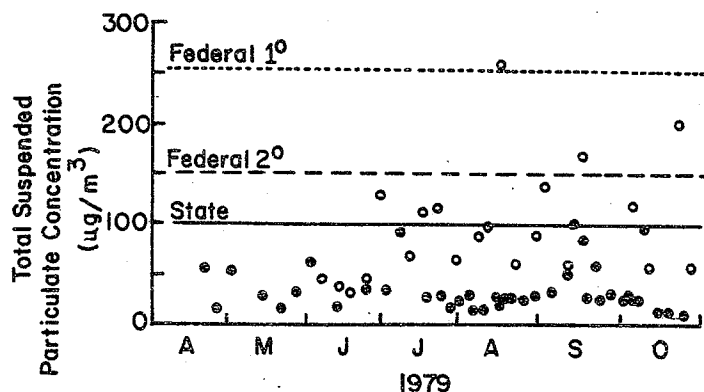
Slide Shows, Displays-- Where Are You?

We would like to know who presently possesses MLC displays and slide shows. If you no longer are using these materials, please return them posthaste; they are greatly in demand.

And don't forget our annual membership meeting and picnic coming up on the last Sunday in May at the Mono Lake County Park.

\*\*\*\*\*  
 \* The Mono Lake Committee Newsletter features \*  
 \* updates on the latest developments affect- \*  
 \* ing Mono's future as well as articles on \*  
 \* the natural, geological and human history \*  
 \* of Mono and other Great Basin Lakes, re- \*  
 \* views of current research and recent publi- \*  
 \* cations, plant and animal checklists, and \*  
 \* announcements of field trips and talks. \*  
 \* We invite your comments and contributions. \*  
 \*  
 \* IMPORTANT: If your copy is improperly \*  
 \* addressed, if you fail to receive an \*  
 \* issue, or if you are moving, please let \*  
 \* us know. \*  
 \* \*\*\*\*\*

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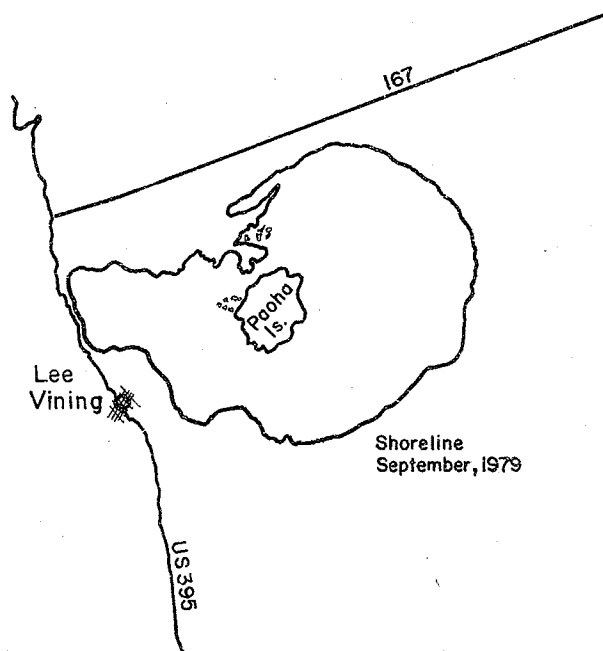
Mono Basin air quality in Summer, 1979. Data are from two locations: Hansen residence (closed circles, near county park) and Binderup's residence (open circles, NE of lake). State and federal air-quality standards are shown; federal primary standard "protects public health," federal secondary "protects public welfare." Data are in micrograms per cubic meter of air.

## TASK FORCE PLAN P DESERVES (AND NEEDS) OUR SUPPORT!

The final report of the Interagency Task Force on Mono Lake recommends the restoration of the lake to its 1970 elevation of 6,388 feet, 15 feet above its present level. In Plan P, the Task Force details exactly how modest water conservation and wastewater recycling can accomplish this goal. The plan will save energy as well as water, and cost the average Los Angeles resident only 54¢ per year. Plan P is summarized on page 5.

NOW is the time to press our legislators and public servants to act on the Task Force recommendations. It may soon be too late.

During the past 12 months, the level of Mono Lake has fallen another 22 inches. Negit Island has become a peninsula (see map). Alkali dust storms have violated state and federal air quality standards (see graph). Predators have evicted Negit's 38,000 nesting gulls. We, the gulls and the Mono Lake environment should not have to bear another year of the same.



In a January 8th letter, the National Audubon Society appeals to Los Angeles Mayor Tom Bradley "to halt the further desecration of the Mono Lake environment while the people and the legislature weigh the Task Force recommendations..." The letter continues as follows:

(continued next page...)

TASK FORCE PLAN NEEDS SUPPORT, continued

"Three consecutive winters of bountiful precipitation have replenished reservoirs throughout California. Colorado River supplies are at an all time high. Water from Leevining and Rush Creeks, Mono's two principal streams, is not needed in Los Angeles this year. It is desperately needed by Mono Lake...

"We urge you to authorize the immediate release of Leevining and Rush Creek water into Mono Lake. This will arrest further decline in the lake's level, prevent the worsening of the dust storms, protect the wildlife that still persists and, perhaps most importantly, augment the effectiveness of Fish and Game's predator fence around Negit Island. Without water from Rush and Leevining Creeks, it is exceedingly unlikely that the fence will protect the island's nesting gulls."

Meanwhile the Los Angeles Department of Water and Power (DWP) has embarked on an unscrupulous campaign to discredit the Task Force and minimize the seriousness of Mono's plight. Their widely distributed leaflet *Mono Lake and the Billion Dollar Threat to California's Water Supply* (see p. 6) is riddled with distortions and half-truths. Such blatant propaganda from a respected, supposedly neutral public agency is close to criminal-- for it is bound to bias the uninformed public.

UNLESS WE SPEAK OUT LOUDLY AND EFFECTIVELY, NEITHER MONO LAKE NOR THE TASK FORCE WILL RECEIVE THE HEARING THEY DESERVE.

"On behalf of the citizens of Mono County, and the recreationists who enjoy the Eastern Sierra, I would like to acknowledge the fact that members of the Mono Lake Committee and the National Audubon Society and other interested citizens provided the wave of public opinion which resulted in the Task Force Report. But our work has just begun - public interest and involvement must now be directed toward state and federal legislation, necessary for implementation of the recommended Plan P to save Mono Lake and its environment for humans, wildlife and vegetation."



Joan Green  
Chairperson, Mono  
County Board of  
Supervisors

GULLS NEED AN ISLAND - GET A FENCE

On January 3rd, the California Department of Fish and Game called for bids to erect over 2500 feet of chain link fence across the Negit landbridge in order to bar predators from the gull colonies.

The \$250,000 appropriation from the California legislature to Fish and Game last September had been earmarked for channel dredging. But a look at the logistics of hauling a dredge to the site and excavating a ditch through the lakebottom ooze dissuaded the department.

Back in 1974 DWP suggested erecting a predator-proof fence, but rejected the idea as too expensive. Now that the state will be paying the bill, they tout the fence as the gulls' salvation..., in other words, another excuse for diversions-as-usual (or above usual, if its another wet year).

But if the DWP does not release Rush and Leevining Creek water, the money spent on the fence will be down the drain. The proposed six-foot high barrier, which is to have a 30-inch sheet metal skirt embedded in the muck and a three-strand barbed wire outrigger mounted at its top, may deter coyotes this spring. But what about in years to come? By 1981, if diversions continue unabated, the length of the fence will have to be doubled. Eventually some hungry and clever coyote will dig under it, wade around it, or slip through a hole left by vandals... that is, if the increasing salinity has not yet poisoned all of Mono's gulls.

One well wonders whether the fence can even provide short-term protection. According to U.C. biologist and gull guru David Winkler, it will probably depend as much on bird psychology as the trespass of predators. Even if the fence does prove coyote-proof, the gulls may not be 'at home' on a peninsula. After all, they and their ancestors have been nesting on an inviolate island sanctuary for at least two millennia. Nonetheless Winkler believes the fence may buy the gulls a little more time. But precious little at best.

Ultimately the survival of the Negit Island gull colony will depend on our success in halting diversions and allowing this spring's runoff to raise Mono Lake.

## WHAT YOU CAN DO:

Your voice is our only defense against the DWP's well-heeled lobbying and public relations campaign. Your letters, telegrams, phone calls and personal visits with your legislators count! Just a few handwritten sentences can be very effective!

1. URGE YOUR ELECTED REPRESENTATIVES TO ACT ON THE TASK FORCE RECOMMENDATIONS BEFORE IT IS TOO LATE!

We will be sending you a Legislative Action Alert as soon as Mono Lake bills are introduced in the state legislature. As of press time, Assemblyman Norman Waters and State Senator John Garamendi were drafting legislation. On the federal level Congressman Norman Shumway has already introduced a bill in the House of Representatives (H.R. 6196) that would implement the federal role in Plan P.

Stress that Mono Lake legislation must (1) provide for a lake elevation of at least 6,388 feet, and (2) assure that replacement water will ultimately derive from conservation and wastewater recycling, and not from another watershed. We do not want to solve one environmental crisis by creating another!

BE SURE TO OPPOSE LEGISLATION THAT FUNDS RESEARCH, BUT DOES NOT REDUCE THE DWP DIVERSIONS. DWP would have us study the lake until there is nothing left to save! An immediate moratorium on all water export is the only way to protect the Mono Lake environment while the Task Force recommendations are being weighed.

If you live in Los Angeles, let your representative know that the DWP does not speak for you! Wherever you live, express your personal commitment to statewide

water conservation and wastewater recycling to protect, not only Mono Lake, but all our remaining natural heritage.

2. COMMEND OUR PUBLIC SERVANTS FOR AN EXCELLENT TASK FORCE REPORT, AND URGE THEIR CONTINUED INVOLVEMENT IN PUSHING FOR IMMEDIATE IMPLEMENTATION. These officials have been under heavy attack from the water merchants and their ilk, and urgently need to hear of our support:

*Cecil D. Andrus, Secretary, Department of the Interior, Interior Bldg., Washington, D.C. 20240*

*James B. Ruch, State Director, Bureau of Land Management, Federal Office Bldg., 2800 Cottage Way, Sacramento, CA 95825*

*Ronald B. Robie, Director, Department of Water Resources, 1416 Ninth St., Sacramento, CA 95814*

*Huey D. Johnson, Secretary for Resources, The Resources Agency, 1416 Ninth St., Sacramento, CA 95814*

3. JOIN THE MONO LAKE HOTLINE! Let our Southern California Coordinator (Tom Cassidy; [213] 838-4909) or Northern California coordinator (Sam Mayhew; [415] 849-4727) know that you are willing to contact legislators and public servants at a moment's notice. You will be telephoned whenever your letters, telegrams and screams are needed!

## MLC LOS ANGELES OFFICE NEEDS VOLUNTEERS!

Our Los Angeles "office," staffed by Southern California Coordinator Tom ("Captain Brine Shrimp") Cassidy, has been in existence since November.

A few weeks back, Tom sent us the following report:

*"I wish I could report we had teeming cadres of true believers ready to infest L.A. with Monomania. We don't..."*

*"There are thousands of things waiting to be done-- more displays, more slide talks, more members, more fundraising, more water for the lake. We need volunteers to distribute our displays and leaflets, and to set up and man MLC information booths at colleges, centers, fairs, the Venice boardwalk, anywhere there are people!"*

BE A GRASSROOT, AND COME GIVE TOM (AND MONO LAKE) A HAND! He can be reached at: [213] 838-4909.

# DWP's Leaflet



## MONO LAKE and the Billion Dollar Threat to California's Water Supply

**Q.** Is there an immediate threat to the Mono Lake environment?

**A.** NO! There is no evidence indicating the Mono Lake environment must be protected by immediately halting all water diversions.

**Q.** What would halting Mono Basin diversions cost?

**A.** About \$1 billion (\$1,000,000,000) to water and electricity users in Los Angeles over a 25- to 30-year period. For all Californians, the cost will be even higher.

**Q.** Couldn't Los Angeles easily conserve enough water to replace the Mono Basin supply?

**A.** NO! Conservation is offered by some as the "easy" answer to provide more water for Mono Lake, but there is little potential for achieving the necessary additional conservation without regular water rationing. Los Angeles currently is using less water than it did 10 years ago and has one of California's lowest per capita uses as the result of a continuing comprehensive conservation program. To achieve the nearly 20 percent additional conservation needed to eliminate the need for Mono Basin water, Los Angeles would have to enforce strict water rationing on its water users nearly every other year.

**Q.** Is energy a consideration in maintaining Mono Basin diversions?

**A.** Yes, since the Mono Basin water generates clean hydroelectric power equivalent to 500,000 barrels per year of foreign oil, valued at \$10 million, as it flows through a series of hydroelectric plants on the Los Angeles Aqueduct System. Assuming water would be available, another 500,000 barrels of imported oil would be required annually to pump replacement water to Los Angeles via the California Aqueduct. At present, the annual cost of this one million barrels of oil would be about \$20 million, with costs escalating rapidly in the future.

This leaflet appeared about the time of the Task Force Hearings in September, and has since been widely distributed. Due to space limitations, we have excerpted key passages. If you would like to read the unabridged version, you may request a copy from:

Los Angeles Department of Water and Power  
Box 111  
Los Angeles, CA 90051

**Q.** How have the Mono Basin water diversions affected Mono Lake?

**A.** Since Los Angeles began diversions in 1940, the lake level has been gradually declining. In approximately 50 to 100 years, the lake will stabilize at approximately half its present size, an area of approximately 20,000 acres.

**Q.** Should immediate action be taken to stop further diversions?

**A.** Before any drastic action is taken, an impartial study should be made of the lake environment, including the California Gull rookery. Arguments for the immediate halt of all water diversions center around the use of Mono Lake islands as a summer nesting area for a portion of the California Gull population. Specifically, proponents of halting water diversions allege that raising the lake level is necessary to protect the gulls nesting on Negit Island, which has become a peninsula in recent years due to the declining water level. This has increased the threat of predator and human access to the island, which may have affected 1979 nesting at Negit Island.

**Q.** Will the lake level decline affect recreation?

**A.** Very little because only minimal use is made of the lake for recreation due to the highly saline water. The lake is much too salty to support fish, and the water irritates skin and corrodes boating equipment.

**Q.** What is Los Angeles' position on Mono Lake?

**A.** Los Angeles urges immediate implementation of a joint federal, state and local agency study of the environmental aspects of the lake. The Department of Water and Power has already endorsed funding one-third the cost of the proposed \$500,000 study. Los Angeles believes that the needed Mono Lake research programs can be conducted simultaneously with continued diversions without significant irreversible ecological damage occurring at the lake.

# MLC's Reply



## THE PLAN TO SAVE MONO LAKE.... AND ITS BILLION DOLLAR BENEFIT TO THE PEOPLE OF LOS ANGELES

Q. Where is Mono Lake?

A. It is set amidst spectacular volcanos and snow-clad peaks immediately east of Yosemite National Park and 350 miles north of Los Angeles.

Q. Who does Mono Lake belong to?

A. All of us! Most of its shoreline and watershed are in public ownership. Each year thousands of people walk its beaches, boat and swim in its waters, marvel at its dramatic setting, delicate mineral formations and flocks of birds, or just enjoy its pristine, wide-open feel.

Q. What is happening to Mono Lake?

A. It is drying up and dying because its major tributary streams are diverted south into the Los Angeles Aqueduct. As a result, this most ancient and life-productive of all North American lakes is becoming a chemical sump and alkaline dustbowl.

Q. Can we save this irreplaceable natural treasure?

A. YES! A government task force consisting of representatives from the Bureau of Land Management, U.S. Forest Service, Fish and Wildlife Service, Department of Water Resources, Fish and Game, Mono County and the L.A. Department of Water and Power has developed a plan to restore Mono Lake to its 1970 elevation of 6,388 feet. The plan has been endorsed by the California League of Women Voters, the National Audubon Society, many other citizen's groups, and every agency participating on the task force except the L.A. Department of Water and Power.

With the help of Mary Test, we hurriedly drafted this reply. A typeset version is in preparation.

Q. How will the Task Force Plan save the people of Los Angeles billions of dollars?

A. The plan calls for an immediate reduction in water diversions from the Mono Basin, and a modest program of water conservation and wastewater recycling in Los Angeles. When water is saved, the energy needed to treat, distribute and heat that water is also saved. Reduced energy bills will save Los Angeles residents approximately \$4.0 billion over the next 50 years.

Q. Can we easily conserve enough water to save Mono Lake?

A. YES! The entire savings is achieved mechanically through water-saving bathroom, kitchen and laundry fixtures and the recycling of wastewater for use in irrigation, industry and groundwater recharge. It will not require water rationing, nor any change at all in user habit.

Q. How long will it take to put the Task Force Plan into effect?

A. The plan will be phased in over five to seven years. By 1987, it will be saving more than the 85,000 acre-feet of water per year needed to save Mono Lake.

Q. In the interim, is replacement water readily available?

A. YES! Through the 1980's there are more than ample supplies to replace the relatively small amount of water that would be returned to Mono Lake (less than 0.2% of the total diverted state-wide). Storage in the Colorado River reservoirs is currently at an all-time high, and the Central Arizona Project will not become operational until at least 1985. The L.A.D.W.P. can augment dry year supplies by drawing water stored in the San Fernando Groundwater Basin, for which it now has management responsibility and legal access.

# reply...

Q. Who will pay for the replacement water?

A. The cost of replacement water will be shared equally by the state government, federal government, and the City of Los Angeles.

Q. Is replacement energy a problem?

A. NO! Energy savings from water conservation more than compensates for the loss in hydroelectric power generated by the Mono Basin diversions (less than 1% of the city's electrical supply), and will save L.A. residents billions of dollars.

Q. Why is action to save Mono Lake needed immediately?

A. Each day we delay risks more serious, irreversible damage. Alkali dust swept off the exposed lakebed has already violated air pollution standards, and threatens human health far from the lake itself. Our largest inland seagull rookery has already been annihilated, and can only be restored through a rising

lake level. These are the first symptoms of an imminent ecological and human catastrophe of major proportions. Unless diversions are curtailed NOW, air quality will continue to deteriorate, the survival of millions of birds will be jeopardized and we will all be left with a grim, deserted deathscape.

Q. How can I assure that my children will inherit, not a plundered wasteland, but a living lake set in the midst of natural splendor?

A. Those of us who live in the City of Los Angeles should contact our representatives in the City Council. If you are not sure who your representative is, call the County Registrar of Voters (721-1100). We can all write our elected officials in the State Assembly and State Senate, urging them to support the Task Force Plan to preserve Mono Lake and place an immediate moratorium on Mono Basin diversions. Express your personal commitment to using water wisely so that Mono Lake may live.

## DWP LOBBIES WASHINGTON AGAINST TASK FORCE

In November, DWP's General Manager Louis Winnard, Chief Aqueducts Engineer Duane Georgeson, and three members of the Board of Water and Power Commissioners flew to Washington D.C., met with Secretary of the Interior Cecil Andrus, and hosted the entire California congressional delegation at a costly luncheon on Capitol Hill. Reputedly they tried to convince the secretary and congressmen that the Task Force recommendations would impose "strict water rationing," "shortages," and "energy losses" on the people of Los Angeles. To some extent they succeeded, for soon thereafter 25 California legislators joined San Fernando Valley Congressman Jim Corman in asking the federal government to "withhold their final approval and issuance of the Task Force report."\*

How many of these legislators realized that the Task Force recommendations would save energy? That they would not entail

any water rationing, nor any change at all in user habits?

The expenses for this junket by a supposedly "neutral" public utility will undoubtedly be paid by Los Angeles and Inyo water and power customers.

\*At least one congressman, Ron Dellums, says he was duped into signing Corman's letter. The following congressmen also signed: Glenn Anderson, Anthony Beilenson, George Brown, Tony Coelho, George Danielson, William Danne-meyer, Julian Dixon, Robert Dornan, Donald Clausen, Barry Goldwater Jr., Wayne Grisham, Augustus Hawkins, Robert Lagomarsino, Jerry Lewis, Jim Lloyd, Daniel Lungren, Carlos Moorhead, Jerry Patterson, John Rousselot, Bill Royer, Edward Roybal, Bob Wilson, Charles Wilson.

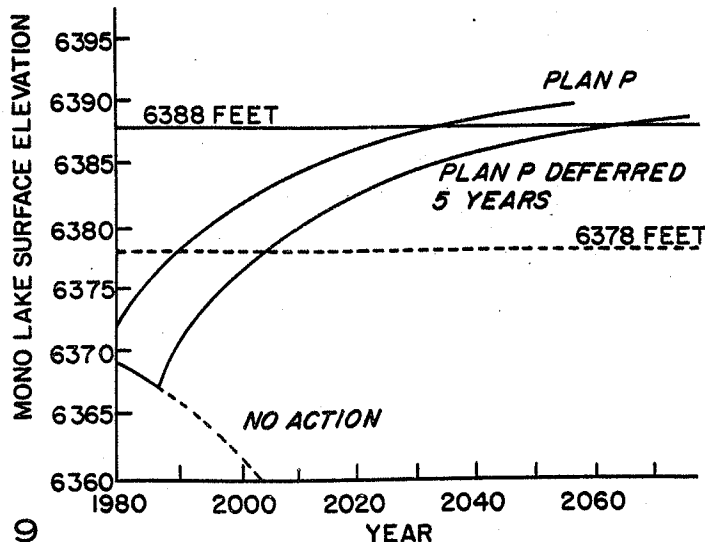


## FINAL TASK FORCE REPORT ISSUED - Plan P ENDORSED

The final *Report of the Interagency Task Force on Mono Lake* was issued on January 7, 1980. The recommended plan to save Mono Lake remains Plan P, modified from the draft report. Plan P is summarized below. As of press time, we have not had the opportunity to fully check the cost figures. This landmark document is required reading for all those concerned with Mono's future. You can obtain a copy from: Department of Water Resources, P.O. Box 6958, Los Angeles, CA. 90055

1. Implement gull rookery protective measures.
2. The City's export from Mono Basin would be reduced from 100,000 AF/year to 15,000 AF/year. State legislation would provide an average annual inflow to Mono Lake of 85,000 AF/year, achieving a lake level of 6,388 feet in about 50 years. During drought conditions, consideration will be given to permitting the City to divert more water, provided Negit Island remains protected.
3. By 1985, the City would achieve 15% water conservation. Because of the need to reduce diversions from Mono at once, the City is being asked to achieve a goal set statewide for the year 2000.
4. State legislation would require the use of an inverted water rate structure by all water utilities in the State.
5. Use of reclaimed waste water in the City would be expanded to 44,000 AF/year in 1987.
6. City would purchase water from MWD at the cheapest rate available to replace water not exported from Mono, and not made up from the aforementioned water conservation/reclamation efforts.
7. A five-year research program would be conducted under the leadership of BLM and Fish and Game, to look at impacts of water use on the Mono Basin environment.
8. State legislation would protect the City's water rights against loss through nonuse. Exercise of the portion of the right in excess of 15,000 AF/year would be postponed until the lake reaches 6,388 feet elevation.
9. Hydroelectric generation loss resulting from reduced diversions would be  $267 \times 10^6$  kWh/year, or 435,000 barrels of oil per year. This amounts to 1% of the City's electrical energy demand per year.
10. Annual electrical energy savings from water conservation in the City would be  $49 \times 10^6$  kWh/year [equal to 80,000 barrels of oil per year].
11. Annual savings to residential users in the City of Los Angeles from reduction in amount of natural gas required (heating less water as a result of water conservation) would average  $35 \times 10^6$  therms/year over the 50 year lifetime of the plan. This is equivalent to 577,500 barrels of oil per year.
12. The total net energy savings of Plan P amounts to an equivalent of 222,500 barrels of oil per year over the 50 year plan.
13. The present worth cost of the plan assuming 1979 dollars, is estimated to be about \$250 million, with the present worth of natural gas savings as a result of water conservation estimated to be about \$205 million. Annual equivalent net cost of the City's share, considering natural gas savings is 54¢ per capita per year.

The figure below depicts the effect of delaying implementation of Plan P by 5 years on the stabilization regime of Mono Lake.



## MONO LAKE SUIT FACES POSSIBLE DELAY

At the November 26th pretrial hearing in Markleeville, Alpine County Superior Court Judge Hillary Cook set a March 24, 1980 trial date for the MLC/Audubon Society/Friends of the Earth lawsuit.

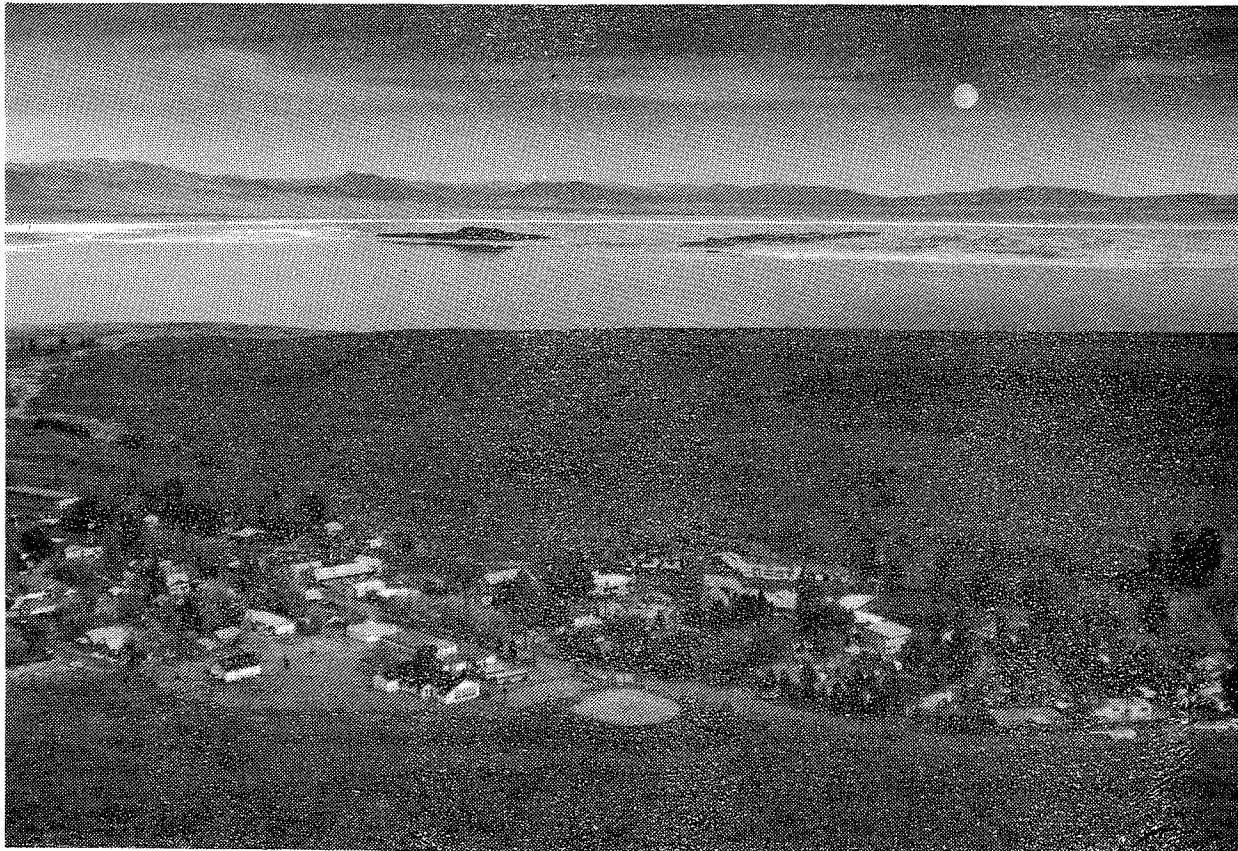
Whether we actually go to trial on that date may depend on the outcome of the DWP's attempt to drag 117 new parties into the litigation. These parties consist of Mono Basin water appropriators and water rights claimants, including the State of California, the Federal Government, the June Lake and Lee Vining Public Utility Districts, and a bevy of private landowners.

At a December 21st hearing before Judge Cook, DWP argued that in-basin users, not

just Los Angeles, are diverting water and lowering the level of Mono Lake. In response we stressed the comparatively small amount of such in-basin consumptive use (less than 3% of the average DWP export), and its insignificant impact on the Mono Lake environment.

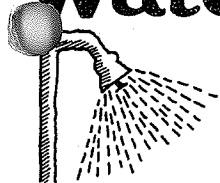
As of press time, Judge Cook had yet to hand down a ruling.

*LATE BULLETIN: Just before going to press, we learned that the judge will allow DWP to file cross-complaints against the 117 new parties. Despite this setback, we will still do everything possible to get to trial before the birds return this spring.*



*Jim Stroup, our photographic consultant and photo editor for our forthcoming book, is offering for sale 16 by 20 inch prints of his photograph 'Lee Vining, CA' for \$150, of which half will be donated to the Mono Lake Committee. All prints will be originals, and will be numbered and matted on 22 by 28 inch rag board. To order a print, send a check (payable to Jim Stroup) to: The Mono Lake Committee, PO Box 29, Lee Vining, CA 93541. Please order before March 15, 1980.*

# Water Conservation Can Save Mono Lake



... (HOW YOU CAN PROVE IT!)



The Interagency Task Force on Mono Lake, by recommending water conservation rather than new water projects, has taken a courageous step on the path towards environmentally responsible resource use. The Los Angeles Department of Water and Power (DWP) and other Task Force critics, however, have charged that water conservation will not work.

Anyone who has looked at a typical neighborhood knows that it can. Gardeners hosing down driveways, sprinklers watering sidewalks and hoses left running into gutters are just the most conspicuous examples of flagrant water waste. When we consider how much is squandered inside and outside our homes, and by profligate agricultural practices as well, the total amounts to at least 5 million acre-feet of California's water annually--enough to save Mono Lake 60 times over!\* Either DWP has its head in the sand, or is intentionally deceiving the public.

This article reviews some simple, effective water conservation techniques that we all, if we have not done so already, can practice in our everyday lives. Keep track of how much you save, and pledge those savings to Mono Lake!

## THE OTHER END OF OUR TAPS

How many of us know where our water comes from? Or where it goes when we flush our toilets, turn on our showers or water our gardens?

During my boyhood years in Los Angeles, I had no idea that most of my family's water supply originated in the snowfields of the Sierra Nevada mountains hundreds of miles away. For all I knew we lived, not in a sub-desert watershed, but in a Hawaiian rainforest. Water was cheap, seemingly limitless, and taken for granted by nearly everybody. In our neighborhood, most yards sprouted swimming pools and luxuriant, water-consumptive tropical landscaping. We kids played in the streams that coursed down the street-curbs into the gutters. No one thought twice about hosing the leaves off lawns. No one knew, or cared very much about, what was happening at the other end of our taps in the watersheds of the distant Sierra.

At that "other end," Mono Lake is dying an unnatural and needless death. Its plight reminds us of the vital connections between our use of resources and the health of the earth.

Because we have forgotten these connections, and have yet to realize the ultimate cost, we have been flagrantly careless and wasteful in our use of water and other precious resources. The installation of simple, inexpensive water-saving fixtures in every California household could save Mono Lake many times over. But, blinded by greed and myopia, we think it cheaper to let our children pay the price for our plundering of the planet.

Mono Lake is a warning about the earth's limited resources, and a signpost pointing out the path to ecologically sound resource use. Let us consider how we, in our everyday lives, can conserve enough water to save this lake, our last remaining wetlands, and ourselves.

## THE LESSON OF THE CALIFORNIA DROUGHT

During 1976 and 1977, Californians weathered the worst drought in the state's history. With rainfall a fraction of normal and reservoirs reduced to puddles, people had to conserve. In 1977 urban water consumption dropped by 20 percent, saving 434,000 acre-feet statewide. The San Francisco Bay Area conserved 32 percent, while Marin County and some Sierran foothill communities conserved over 50 percent. More water was saved than anyone, especially the water agencies, thought possible.

The people of Los Angeles conserved 16 percent (97,000 acre-feet), more than enough to maintain Mono Lake. No lawns withered, no swimming pools were drained, and virtually no one complained of the hardships of sweeping leaves off driveways or watering lawns at night.

The drought exposed our water-wasteful ways, and taught us we could thrive on much less. When the rains returned, this lesson was not entirely forgotten. In Los Angeles, water consumption remained 9 percent below pre-drought levels. In parts of the San Francisco Bay Area, it remained over 20 percent below.

But, unfortunately, per capita water consumption is again on the rise. Cries are being heard for more dams, more aqueducts, more dollar and energy expensive water projects that will sicken our environment and mortgage our future.

How can we nurture the water conservation alternative? Here are some suggestions:

1. Let people know that water, like energy, is a precious, limited resource that is running out.
2. Set an example, in your own life, of frugal, responsible water use, and urge neighbors and friends to do the same.
3. Spread the word that water conservation is easy and rewarding, and that saving water saves energy.
4. Support and promote water conservation and wastewater recycling programs rather than new dams and water projects.

An excellent primer for children (and adults too!) is *The Captain Hydro Water Conservation Workbook* (available from the East Bay Municipal Utility District, Box 24055, Oakland, CA, or your local water company)

## WATER CONSERVATION BEGINS AT HOME

Let us turn, then, to some of the readily available means of reducing our own water consumption. Modern man uses most of his household water to carry away wastes. Fully 95 percent ends up in the sewer. As 75 percent is used in the bathroom, it is there we look first for means to conserve.

Five to seven gallons of water gush through the typical flush toilet at every flushing. The simplest means to conserve flush water is to flush less often. You can easily and effectively save much more by placing water-filled plastic containers, weighted down with pebbles, into your toilet tanks. Two one-quart soap or bleach bottles will displace one-half gallon of water and save that much at every flushing. Plastic containers are better than ordinary building bricks, which, while they displace about a quart of water, may disintegrate and clog your toilet.

Toilet dams, flushing valve sleeves and adjustable float assemblies are inexpensive, commercially available water-saving devices that do much the same thing as displacement containers. In typical commodes, you can expect a one-to-two gallon savings per flush. These devices are easily installed and are available at most large plumbing supply outlets.

## HYDRO HELPS AT HOME



Far more effective, but more costly, is the replacement of a water-consumptive toilet with one of the shallow-trap models now on the market. Toilets that use  $3\frac{1}{2}$  gallons per flush are available for less than \$50. Ultra water-saving designs cost about \$200, but flush efficiently on only  $1\frac{1}{2}$  gallons of water.

Your best efforts to conserve flush water will come to naught, however, if you have a leaky toilet. To find out, add a few drops of coloring to the tank water. If there is a leak, colored water will appear in the bowl. A worn or poorly seated tank ball or a defective toilet tank valve can silently leak many hundreds of gallons of water a day.

#### GOOD-BYE TO THE FLUSH TOILET?

Of course the most effective water-saving alternative is a dry toilet that does not use water at all. These range from pit out-houses and chemical toilets to energy-wasteful incineration and oil flush toilets. An especially promising development is the composting privy, which naturally decomposes feces, urine, paper and kitchen garbage into an odorless, humus-like residue that can be safely used to fertilize non-edible plants and fruit trees.

#### THROTTLING THE TAP

As about 30 percent of interior water is consumed by showering and bathing, it is there we look next for ways to conserve. Just taking shorter showers, washing hands in the basin instead of under a running faucet, turning off the tap while brushing teeth, washing dishes in a dish pan instead of under running water, and so forth can save hundreds of gallons a day. These savings can be greatly augmented through the use of flow restrictors, aerators and water-saving heads on showers and sink faucets.

Flow restrictors are inexpensive valves that are easily installed in flow lines behind faucets and shower heads. Instead of getting a blast when you turn on the tap, you get a steady, even flow. They reduce water use by up to 50 percent.

Aerators are equally simple, inexpensive devices that are usually thread-mounted on the ends of faucets. By mixing air with water as it leaves the tap, aerators reduce water use by as much as one-third.

Water-saving shower heads also create an aerated spray that reduces flow rates to as low as one-half gallon per minute, one-twentieth that of some standard models. These heads, which cost as little as \$13 for two gallon per minute designs, quickly pay for themselves in water-heating energy savings.

The value of these water-saving devices, however, can be more than cancelled by a plumbing leak. Hundreds of gallons per day can drip from a single leaky faucet down the drain.

#### RECYCLING GREYWATER

Dirty household water, except that from toilets, can also be reused for flushing toilets and watering yards and gardens. The technology to safely recycle this "greywater" is rapidly developing, and the first home greywater recycling systems are now on the market. Greywater systems, like composting privies, are promising innovations in water-saving domestic plumbing that are still relatively expensive and have yet to be sanctioned by many local health and sanitation agencies. For more information, refer to the references cited as the end of this article.

#### OUTSIDE THE HOUSE

Imagine the garden hose to be the gasoline hose at the filling station. Of course you would not leave it running while washing the car, and it would certainly be too valuable to use to move some leaves off of the driveway.

It's used too freely on lawns and garden plants too. Be sure to water only as needed, and set the sprinkler or hose for a delivery rate that the soil can absorb. Covering the soil with mulch or watering at night will minimize evaporative losses and further reduce watering requirements.

And consider letting those sissy, water-consumptive tropical plants reach their P.W.P.\*, so you can convert to plants that prefer less water. Before you dismiss the idea with barren visions of cactus/rock gardens, consider the following examples of moisture-eschewing plants: geraniums, ceanothus, honeysuckle, bottlebrush, star jasmine, oleander, ice plant, periwinkle, pittosporum, cotoneaster, agapanthus... You don't have to go "whole-wheat" and restrict yourself to California natives. For more information, consult the references listed at the end of this article, or visit an arboretum or good nursery.

The most worthy use of outside irrigation is to grow edible plants. Why water ivy when you could be picking fresh strawberries or asparagus from the same spot?

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\*Permanent Wilting Point: where mesophytes (water loving plants) meet their maker...

## THE TASK FORCE WATER CONSERVATION PLAN

We could extend our discussion of water conservation to many additional pages on water-saving appliances, drip irrigation, and many other important topics. But let's leave that for another article, and return to the simple domestic water-saving measures we have already discussed. How do they relate to the Task Force Plan to save Mono Lake?

Contrary to its critics, who have used the specter of "strict water rationing" to scare and deceive the public, the Task Force Plan's water conservation measures rely entirely on water-saving plumbing designs (57,300 acre-feet/year), industrial conservation (7,000 acre-feet/year), water efficient landscaping in new developments (3,500 acre-feet/year), and utility system leak repair (1,100 acre-feet/year). The entire reduction in demand (68,900 acre-feet/year) is achieved mechanically, that is, without any change at all in people's habits. Los Angeles residents will still be permitted to hose driveways and water gutters to the same extent as other Californians.\*

Water-saving toilets, showerheads and/or toilet devices are the cornerstone of the Task Force conservation proposals. They would be required in all new construction, and installed free in every household.

If these modest Task Force measures were followed, not just by Los Angeles, but by every California community, we would conserve about 460,000 acre-feet every year without even changing our water-wasteful habits! Conscientious water use inside and outside our homes could increase this savings to well over a million acre-feet annually!

To this we can add the millions of additional acre-feet that can be conserved through statewide wastewater recycling and agricultural water conservation (agriculture uses 85 percent of California's water supply, and wastes a goodly share... but that is the stuff of another article).

Saving water, moreover, saves the substantial amounts of energy that would otherwise be consumed in water conveyance, distribution and treatment, and in home water heating.

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\*The Task Force estimates that elimination of "conspicuous waste" could save another 36,200 acre-feet of water annually in Los Angeles.

## WATERSHED HOUSEKEEPING

As important as these energy and water savings obviously are, there is a more vital reason for us to conserve. Through using only what we really need, we not only save water and energy, but we also connect our lives with the life of the earth, and assume responsibility for its (and our) well-being. We become watershed housekeepers, responsive to the needs of the land from which we draw our sustenance and health.

"Water and power conservation... a way of life" proclaims the stationery of the Los Angeles Department of Water and Power. The Mono Lake crisis is an opportunity to transform this slogan into a living example for the rest of California and the rest of the earth.

David Gaines, Sally Judy, Tom Cassidy

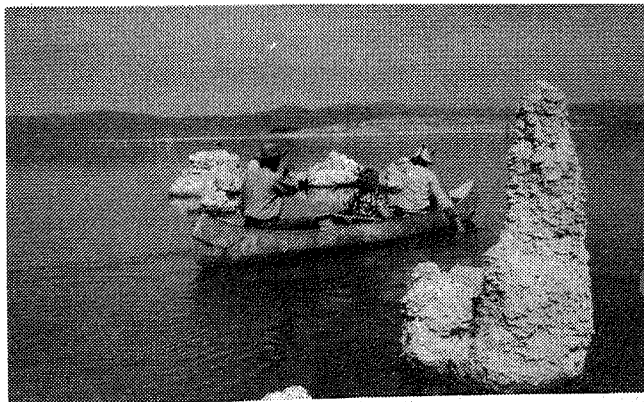
### FOR FURTHER WATER CONSERVATION INFORMATION...

Contact your local water utility. They should have free pamphlets and other materials on water-saving techniques. If they don't, complain!

The *Little Compendium of Water-Saving Ideas* (available for \$7 postpaid from North Marin County Water District, PO Box 146, Novato, CA 94947) ably and critically skims the cream from the vast technical literature on domestic water conservation. The *Compendium* describes and evaluates water-saving devices, reviews case examples of their use, includes a valuable bibliography of 114 references, and lists outlets and distributors of water-saving equipment nationwide.

In *Goodbye to the Flush Toilet* (Rodale Press; \$6.95 paperback) Carol Hupping Stoner has edited informative essays on bathroom history, composting privies, greywater recycling and ater conservation. Additional essential information, especially for the do-it-your-selfer, may be found in Sim Van der Ryn's *The Toilet Papers* (Capra Press; \$3.95 paperback).

For information on dry garden landscaping, try the following: *California Plants for Central Valley Dry Gardens*, by Warren Roberts (available for \$1 postpaid from The University Arboretum, UC Davis, Davis, CA 95616; make checks payable to Friends of the Davis Arboretum); *Successful Gardening with Limited Water*, by Margaret Tipton Wheatley (Woodbridge Press, \$3.95 paperback); *Saratoga Horticultural Foundation* (PO Box 308, Saratoga, CA 95070; for \$3 postpaid, they will send you the booklet *Selected California Native Plants*, that includes a list of suppliers; *California Native Plant Society* (2380 Ellsworth St., Suite D, Berkeley, CA 94704); *Theodore Payne Foundation for Wild Flowers and Native Plants, Inc.* (10459 Tuxford Street, Sun Valley, CA 91352).



# Conservation Crusaders



PLANNING AND CONSERVATION LEAGUE  
717 K St., Suite 209  
Sacramento, CA 95814 \$20+/yr



**Friends of the River**

FRIENDS OF THE RIVER  
401 San Miguel Way  
Sacramento, CA 95819 \$15+/yr

Founded in 1965 "to protect and conserve the quality of California's environment and establish methods of planning that will contribute to the wise use of resources", the PCL is California's oldest environmental lobbying organization. Under the able direction of David Abelson, they have become an effective, sober voice for responsible resource use. No group has argued more persuasively for statewide water conservation and wastewater recycling. Their bimonthly publication, California Today, will keep you well informed on land and water planning in California.

FOR is dedicated to "the preservation of our remaining free-flowing waters and to the conservation of our water and energy resources". Inspired to action by the drowning of the Stanislaus River, they have waged an amazingly effective campaign on behalf of all our singing rivers and the water conservation alternative to their destruction. Their dedicated staff survives on love and a barely subsistence budget. The latest issue of their informative newsletter, Headwaters, includes an update on Mono Lake.

## RECENT PUBLICATIONS

### The CALIFORNIA WATER ATLAS

Government documents tend to be rather lackluster publications, but, hopefully, the *California Water Atlas* is the antithesis of this trend. The *Atlas* is a folio-sized compendium of data on our state water resources. Indeed everyone concerned with the wise, un wasteful use of this limited resource should study the *Atlas*--acquire a copy for that matter, as the price (ca. \$42.50) is very reasonable considering the lavishly prepared contents.

The book contains numerous color photographs portraying data on California water--its origins, uses, storage, transfer, but only a few misuses. A historical perspective is maintained throughout, belying the relationship between water development and prosperity.

The *Atlas*, however, is lacking somewhat with regard to natural history. The diversity

of California's biota-- the most varied in temperate North America-- is due in large measure to its climate and waterscape. This relationship is understated throughout the *Atlas*.

The *Atlas* would be more useful had more references to sources of data been included. As it is, the data must be assumed to be accurate. A real index would be invaluable. Also, are not brine shrimp considered an inland fishery (p. 62)? If the citizenry of Big Pine in the Owens Valley really used 1500+ gallons of water per capita daily, the place would be a jungle, would it not? Poor Mono Lake is not even given a byline in the chapter *Unresolved Questions for the Future*--did the authors of the *Atlas* assume it was all resolved? We must remind them that such is not the case.

The *Atlas* is highly recommended. ...D.T.





# EXTRA! EXTRA! GET YOUR LATEST MONO LAKE XMAS BIRD COUNT SCORES

YEAR	'77	'78	'79		'77	'78	'79		'77	'78	'79
Eared Grebe	43	44	17121	Sandpiper sp.	-	3	-	Hermit Thrush	1	-	-
Great Blue Heron	2	1*	3	California Gull	-	-	1	Mountain Bluebird	25	-	-
Swan sp.	-	4*	-	Ring-billed Gull	-	3a	1	Townsend's Solitaire	34	7	18
Canada Goose	12*	-	-	Gull sp.	1	-	2	Golden-crowned Kinglet	-	30	1*
Mallard	1	-	-	Great Horned Owl	5	2	-	Ruby-crowned Kinglet	1	1	-
Pintail	5	-	1	Long-eared Owl	3	-	1*	Water Pippit	42	12	20
Gr. Winged Teal	-	-	110	Belted Kingfisher	1	-	-	Northern Shirke	6	-	1
Common Goldeneye	1	1	-	Common (Red-Shafted) Flicker	29	2	3	Loggerhead Shrike	4	-	-
Bufflehead	1	-	-	Red-breasted Sapsucker	1	-	2	Shrike sp.	2	-	-
Ruddy Duck	5	-	125	Hairy Woodpecker	13	3	6	Starling	62	5	60
Common Merganser	-	3*	-	Downy Woodpecker	9	1	5	Audubon's Warbler	-	1*	-
Duck sp.	3	-	-	White-headed Woodpecker	2	-	-	House Sparrow	60	4	20
Goshawk	-	1a	-	Horned Lark	19	-	12	Western Meadowlark	16	-	3
Sharp-Shinned Hawk	1	1	1a	Stellers Jay	106	5	37	Red-winged Blackbird	-	-	3
Coopers Hawk	4	1	4[3a]	Scrub Jay	-	-	6	Rusty Blackbird	-	1	-
Accipiter sp.	1	-	1	Black-billed Magpie	60	54	59	Brewers Blackbird	40	8	1*
Red Tailed Hawk	11	10	8	Common Raven	10	6	27	Cassin's Finch	-	3	-
Rough Legged Hawk	16	4	-	Pinyon Jay	250	150	1	Finch sp.	-	-	2
Buteo sp.	1	-	-	Clarks Nutcracker	76	80	19	American Goldfinch	-	-	9
Bald Eagle	2[1a]	-	1a	Mountain Chickadee	88	75	132	Goldfinch sp.	4	-	-
Marsh Hawk	1	3	3	Plain Titmouse	2	-	-	Pine Grosbeak	3	-	-
Prarie Falcon	1	-	-	Bushitt	154	2*	60	Red Crossbill	17	-	-
Merlin	2	-	1	White-breasted Nuthatch	14	3	11	Rufous-sided Towhee	9	-	7
American Kestrel	2	-	1	Red-breasted Nuthatch	8	4	5	Dark-eyed Junco (Slate C.)	5	2	8
California Quail	1	-	-	Pygmy Nuthatch	9	6	12	Dark-eyed Junco (Oregon)	168	35	156
Mountain Quail	1	-	-	Brown Creeper	8	6	7	Tree Sparrow	-	-	3
Quail sp.	-	-	5*	Dipper	2	3	-	White-crowned Sparrow	1	1*	16
Chukar	4	-	-	Bewicks Wren	4	-	3	Golden-crowned Sparrow	-	-	4
American Coot	10	4	54	Long-billed Marsh Wren	4	2	4	Fox Sparrow	1	-	-
Killdeer	14	9	7	Canyon Wren	-	1	1	Swamp Sparrow	-	2	1
Common Snipe	3	6	3	Wren sp.	-	2	-	Song Sparrow	25	6	10
Spotted Sandpiper	4	-	-	Mockingbird	1	-	1				
Least Sandpiper	43	2	44	American Robin	370	-	24	Totals	'77	'78	'79
				Varied Thrush	4	-	-	Count-Day			
								No. species	69	40	60
								No. individuals	1952	615	18282

\*Indicates Count Period record, but not on Count day.

**SOPENCHE\*** was a Miwok Indian village in Northern Mariposa County, California.

**SOPENCHE** is also a local non-profit tax exempt organization dedicated to furthering the understanding and appreciation of the unique character of the Central Sierra Nevada through education and research.

The professional educators and naturalists of **SOPENCHE** provide courses for the public and school groups on human and natural history, environmental education and wilderness studies.

**SOPENCHE** is available for consultation in educational program development, resource management and alternative technologies.

For information or course listings write to: PO Box 357, EL PORTAL, CA. 95318 or call (209) 379-2289.



\* Sopenche is the Miwok word for mountain mahogany (Cercocarpus betuloides), a shrub of the foothill chaparral.

## ACCOLADES

We are continually encouraged by the many people who donate their talent, time and energy to the Mono Lake cause.

Grace and Rick deLaet graciously hosted a marvelously enjoyable and successful fund-raising dinner at their home-- for 60 people! The Monogram Paper Company of San Francisco donated napkins and place mats attractively adorned with sea-gulls for the occasion. Dave Phillips and Greg Serrurier of Friends of the Earth gallantly helped serve the excellent food and wine-- a warm-up for a FOE Mono Lake fundraiser three days later, which they organized. That gala affair featured pep talks by David Brower, Huey Johnson and David Gaines, and the second preview of Stephen Johnson's fine photographic exhibit At Mono Lake.

Sopenche, a non-profit band of Yosemite naturalist/educators (see left), sponsored two ol' timey music and bake sale fund-raisers to benefit Mono Lake.

(continued on p. 21)



RECENT PUBLICATIONS, continued.

STATE STUDIES PROVE EFFECTIVENESS OF "RETROFIT" WATER CONSERVATION PROGRAMS

The California Department of Water Resources (DWR), the agency responsible for the Task Force water conservation program, has recently released studies that prove the long-term effectiveness of just such "retrofit" measures.

In June of 1977, DWR sponsored free door-to-door distribution and installation of toilet dams and shower head flow restrictors in the community of Oak Park, Ventura County. After 22 months, 75% of the shower head restrictors and 59% of the toilet dams were still in place. This resulted in a 25% reduction in waste water flow for the entire community. Another DWR commissioned study of a similar program in San Diego found that after 20 months, 88% of the shower flow restrictors and 69% of the toilet dams were still in place, resulting in an average savings of more than 18,000 gallons of water per household per year.

The reports are entitled *The Oak Park Retrofit Program Still a Success* and *A Follow-Up Survey of Households Which Participated in the San Diego Pilot Water Conservation Program*, and are available from the Dept. of Water Resources without charge.

MONO ECOLOGICAL STUDY REPRINTED AND UPDATED

During the summer of 1976 the Mono Basin Research Group, 12 university students supported by the National Science Foundation, investigated the geology, hydrology, limnology, botany, entomology and ornithology of Mono Lake. The end result, a 185 page report entitled *An Ecological Study of Mono Lake, California*, contains invaluable information on the lake's biology and the probable impact of unrestricted water diversions.

The *Ecological Report*, which has been out of print since 1978, has been reprinted by the Mono Lake Committee. The 1980 edition includes a brief update on recent developments, on-going research and recent publications. If you already own the report, you will probably wish to procure the update.

To order the *Ecological Report*, please send us \$7 (California residents add 30¢ sales tax). To order the *Update* alone, please send us 50¢. Checks should be payable to *The Mono Lake Committee*, and sent to PO Box 29, Lee Vining, CA 93541.

PHOTOGRAPHS NEEDED FOR A BOOK ON MONO LAKE

The Mono Lake Committee is sponsoring a book on Mono Lake, and we need high quality black-and-white photographs. Because of our poverty-level budget, we ask that photographers donate their work. Every photograph we use will be credited and the photographer gratefully acknowledged.

Our emphasis will be on Mono Lake, its islands, shoreline features and wildlife. The book will encompass the entire Mono Lake watershed, however.

Specific Needs:

1. Water oriented features (Dana or Conness Glaciers, mountain streams, melting snow, shoreline springs, *et cetera*)
2. Geologic features (glacial moraines, Sierran escarpment, old lake terraces, volcanos, *et cetera*)
3. Historical features.
4. Water diversion facilities, such as reservoirs, diversion dams, aqueducts, *et cetera*.
5. Mono Lake wildlife, especially close-ups of brine shrimp and brine flies, flocks of birds (Grebes, gulls, phalaropes, snowy plovers, *et cetera*)
6. Seasonal landscapes (snowscapes, thunderstorms, lenticular clouds, *et cetera*)
7. Any visually appealing scenics.

We would like black-and-white prints, preferably 8 x 10 inches. Please specify the name of the feature, location and approximate date. A model release will be required for photographs containing identifiable people that are still living. Photos will be kept in a fireproof file; those we do not use will be returned after the final selection has been made. Please send photos by 1 April 1980 to:

Jim Stroup, Photo Editor  
22A North Alisos  
Santa Barbara, CA 93103  
(805) 962-5526

SHOULD WE SHARE OUR MAILING LIST?

Should we share the MLC mailing list with other environmental causes? Advantage: we will have the use of their mailing lists to reach more people about Mono Lake. Disadvantage: you may receive mail you don't want. Please let us know how you feel.

# MONO LAKE IN 1857

## LAKE WAS LARGER, LESS SALINE THAN WE THOUGHT

You shouldn't believe everything you read. Even in the scientific literature.

In a 1965 publication, S. T. Harding defended H. B. Lynch's conclusion that Mono Lake stood at an elevation of 6,376 feet in 1857. This figure was uncritically accepted and cited in many subsequent scientific and popular articles--- including our own MLC Position Paper. It is drastically in error.

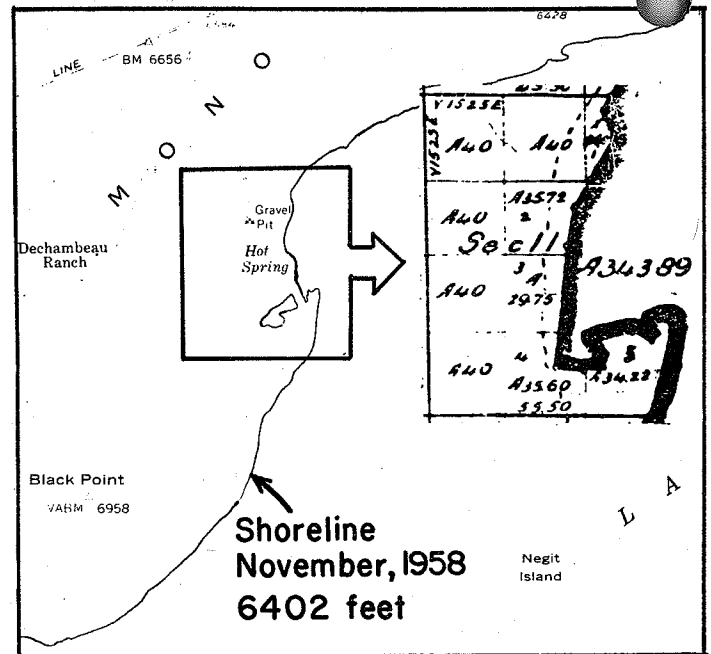
The scholarly research of University of California geographer Scott Stine has proven that the 1857 lake stood at  $6,407 \pm 1$  feet. Stine's conclusion derives from the survey notes and maps of Colonel Alexis Waldemer Von Schmidt, who surveyed, or "meandered," almost the entire shoreline of Mono Lake between 1855 and 1857. One wonders, with such straightforward evidence at hand, what led Harding and Lynch astray.

## A NEW LOOK AT AN OLD MAP

Although Von Schmidt had no way of determining Mono's surface elevation, he did "meander" its shoreline with considerable accuracy. Stine compared the position of the shoreline meandered by Von Schmidt in 1857 with that shown on 1953, 1958 and 1962 U.S.G.S. quadrangle maps. He discovered that the 1857 shoreline stood as much as 1,700 feet upslope from the 1962 shoreline and consistently upslope from the 1958 shoreline. He also found that it closely followed the 1953 shoreline. As the lake stood at 6,402 feet in 1958 and 6,409 feet in 1953, Stine concluded that Mono's 1857 level was somewhere between these two elevations. Using details in shoreline topography, such as the inlet shown in the accompanying illustration, he was able to pinpoint the 1857 lake surface elevation to within one foot.

Stine then extrapolated from 1857 to 1883, the first date for which a definite lake elevation is known. In November of that year, Willard D. Johnson, Israel Russell's topographer, etched a mark at waterline on Negit Island, enabling subsequent researchers to derive a lake elevation of 6,410 feet. Stine determined the intervening lake levels from historical accounts and precipitation records.

The results of Stine's research are depicted on the accompanying graph. They indicate that Mono Lake's surface elevation, and correspondingly its volume and salinity, did not fluctuate nearly so drastically as Harding and Lynch believed. The surface elevation of the lake did not fall below

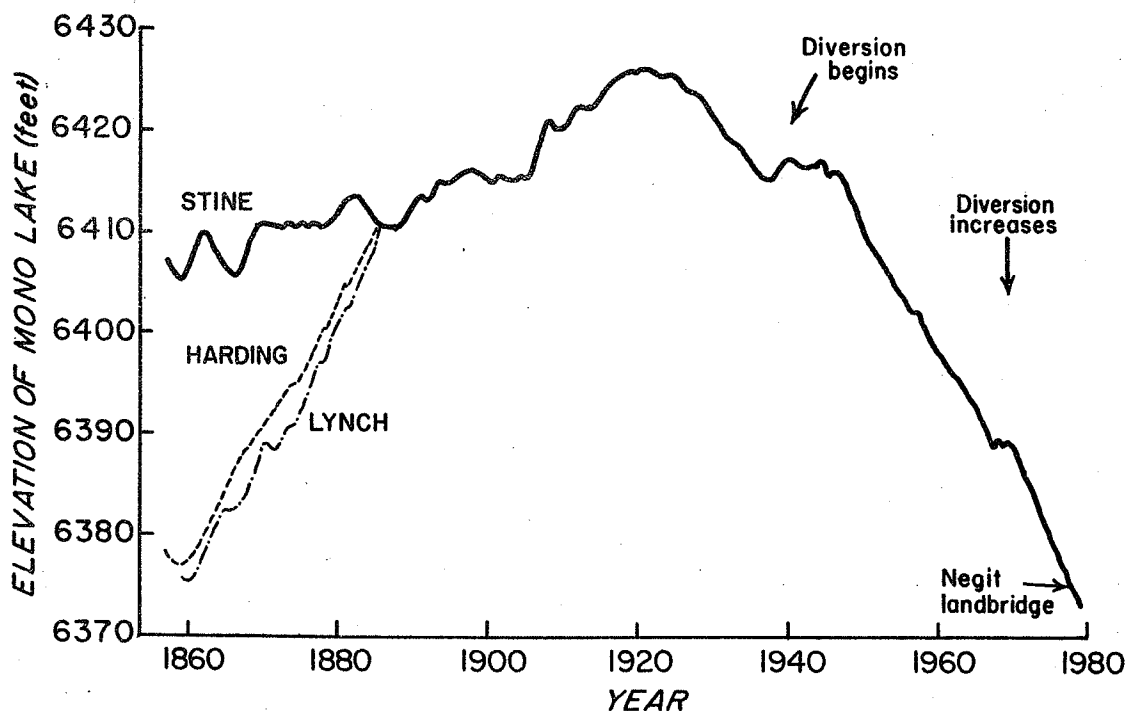


By comparing Von Schmidt's original survey plats with recent U.S.G.S. maps, Stine derived an 1857 Mono Lake surface elevation of  $6,407 \pm 1$  feet. The above figure, for instance, compares Section 11 (T2N,R26E) as depicted on the 1958 Bodie quadrangle and on Von Schmidt's original plat (insert). The reader will note that when the lake's level stands at 6,402 feet, the pond and small inlet east of Dechambeau Ranch are separated by a low bar. Von Schmidt's plat indicates that in 1857 this bar was submerged. If, as Harding and Lynch supposed, the lake had stood at 6,376 feet in that year, the shoreline would have been more than one mile east!

6,404 feet until it was artificially lowered by the Los Angeles water diversions. For the past two decades, rather than only the past two years as previously supposed, the water diversions have drawn the lake to a point lower than at any time in history, and in all likelihood, to a point lower than at any time in the past 2,000 years.

## ECOLOGICAL IMPLICATIONS

The erroneous Lynch-Harding estimates, in concert with early descriptions of faunal superfluity, led to the fallacious conclusion that ducks, other waterfowl and insect life thrived under low level and high salinity conditions in mid-19th century Mono Lake. In fact the lake at that time contained 60% water and was 60% less saline than Lynch and Harding supposed. Recent declines in duck and brine fly populations do correlate with increasing salinity, which exceeded the maximum 19th century level two decades ago and has been rising ever since.



Furthermore, Harding implied that Negit Island might have been a peninsula prior to 1857, and, if that was the case, that the gull rookery survived an invasion by mainland predators during the first half of the 19th century. Stine's research not only refutes this possibility, but strongly supports the contention that Negit Island has been separated from the mainland from its birth thousands of years ago until the emergence of the landbridge in 1978. The current dessication of Mono Lake and the consequent increase in water salinity, disruption of the Negit Gull colony, exposure of thousands of acres of alkali, and appearance of massive, noxious dust storms are not a naturally recurring phenomena, but a new and artificial one caused by the D.W.P. water diversions.

#### L.A.D.W.P. ON THE 1857 LAKE LEVEL

The first attempt to determine the 1857 level of Mono Lake was undertaken by E. A. Bayley of the Los Angeles Department of Water and Power in 1931. He calculated that the shoreline then stood at 6,408 feet, a figure in keeping with Stine's conclusions.

Two years later, Henry B. Lynch, a consulting engineer for the D.W.P., disputed Bayley's conclusion. Some of Lynch's investigations suggested that Mono Lake stood at 6,396 feet in 1857; one calculation, however, suggested a level as low as 6,376 feet in that year.

In 1974, the LADWP published a report which gives the 1857 lake elevation as 6385.9 feet. The department is now unable to explain how that figure was derived. Recently, DWP re-adopted the 6,376 foot figure, and even asserted that Negit Island was connected to the mainland by a landbridge early in the 19th century. The implication of those contentions is obvious: DWP wishes the public to believe that their lowering of the surface elevation of Mono Lake is nothing more than what occurred under natural conditions some 130 years ago.

NOTE: A complete account of Stine's research is in preparation, and will be published by the United States Geological Survey later this year. For more information, the reader may contact Mr. Stine c/o The Geography Department, Univ. of California, Berkeley, 94720.

#### REFERENCES

- Harding, S. T. 1935. Changes in lake levels in the Great Basin area. Civil Engineer 5: 87-90. [Cites 1860 Mono Lake elevation as 6,390 feet]
- Harding, S. T. 1965. Recent variations in the water supply of the Great Basin. Water Resources Center Archiv Series Report 16: 151-170. [Cites 1857 Mono Lake elevation as 6,376 feet, and states that it was rising at that time; discusses subsequent fluctuations and historical accounts]
- Harding, S. T. Unpublished notes on Mono Lake. Calif. State Water Resources Archives, Univ. Calif., Berkeley. [Pages 62-66 discuss the Bayley and Lynch calculations]
- Lynch, H. B. 1948. Pacific coast rainfall - wide fluctuations in a hundred years. Western Construction News (July): 78-82. [Cites 1857 Mono Lake elevation as 6,376 feet]
- Von Schmidt, A. W., 1855-57 Mono Basin survey notes and plats. Office of the Bureau of Land Management, Sacramento, California.

## The MONO BASIN Naturalist

### FALL IN THE MONO BASIN

October of '79 was warm and crystalline, and mostly summerish. Temperatures were generally mild (lows mid 40's in Lee Vining), with only few cloudy days (precipitation close to average). The rabbitbrush displays of the month previous no longer painted Mono's shores with golden pastels, but heavy heads of pappus and achene\* ripened in the shortening daylength. Aspen displays on the nearby Sierran slopes were vividly outlined against a fresh dusting of summit snow by mid-month, but these fiery bursts were depauperized at the hands of gale force winds on the 19th. Immense clouds of alkali dust shot up off the dry, festering shores of Mono, and 5-foot swells frothed on its surface. Multitudes of Eared Grebes remained on the lake during the windstorm, and could be seen bobbing on the waves like so many corks.

By the second week of the month, White-Crowned Sparrows replaced Brewers Sparrow and Green Tailed Towhees on the brush covered lower Sierran slopes. Several Chestnut-Collared and a lone Lapland Langspur frequented the grassy flats about South Tufa Grove, while hundreds of shorebirds, including several Pectoral Sandpipers, lingered on the southeast lakeshore. By months close, Townsends Solitaires were heard singing in the forested Sierran canyons amidst red-ripening Great Basin Rose hips and Creek Dogwood leaves. The first fall weather arrived with 4 inches of powdery snow on November 3rd, which melted with the coming of the first Rough-Legged Hawks two days later. Skies over the next fortnight were cool and calm. Starlight glimmered on the snowpeaks and the last dragonflies patrolled the afternoon stillness.

Juniper and Pinyon crops were lean this year. Evening Grosbeak flocks wafted over these conifers on Cedar Hill in the eastern basin, while at the same time White-Tailed Hares descended from the peaks to forage on the upper lake terrace above Lee Vining. Bald Eagles arrived on the lakes of the Reverse--Rush Creek drainage by mid-month, and several Whistling Swans visited Mono's shores at months close.

December was ushered in by lenticular clouds, but remained unseasonably warm until the solstice. Winter then arrived on schedule, and over two feet of snow fell in Lee Vining before the Christmas Bird Count. The first wisps of pogonip (valley frost fogs) began appearing over Mono Lake on the cold (ca. 10°F) nights at mid-month, but were dispersed by early morning. Following the snows, the pogonip blanketed the entire basin floor, while the surrounding peaks and hills shown brightly above. Flocks of Dark-Eyed Juncos, Bushtits and Mountain Chickadees foraged on the seed heads of Big Sagebrush and Rubber Rabbitbrush, these being the only portions of shrubs protruding above the snowpack. Busy routines of Black-Tailed Hare and Audubons Cottontail, Merriams Kangaroo Rat, Least Chipmunk and Coyote told numerous tales in the form of snowtrack lectures at Panum Crater at months end, just prior to being erased by nearly 1/2 inch of rain which fell on the basin floor on the eve of the new year. D.T.

\*The seed heads, or achenes, of rabbitbrush and other sunflowers are surmounted by tufts of bristles, called pappi, which allow them to disperse in the wind.



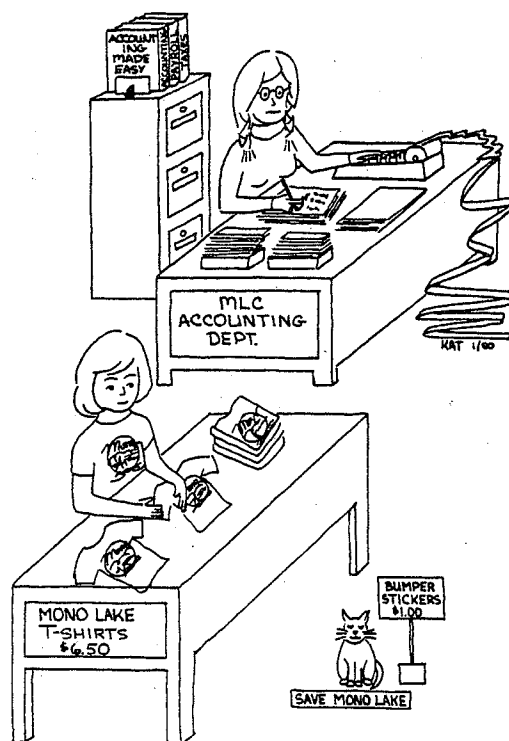
# OUR UNOFFICIAL INCOME AND EXPENSES

	3rd Quarter July 1-Sep 30	4th Quarter Oct 1-Dec 31	Total	Percent
<b>INCOME</b>				
T-shirt Sales	10,989	2,130	13,119	
Donations	9,356	12,762	22,118	
Loan		7,303	7,303	
<b>Total Income</b>	<b>\$20,345</b>	<b>\$22,195</b>	<b>\$42,540</b>	
<b>EXPENSES</b>				
T-shirt Costs	5,339	0	5,339	13.1%
Office Supplies, Postage	1,372	1,451	2,826	7.0%
Telephone	928	483	1,411	3.4%
Visitor Center Rent, Utilities	592	188	780	1.9%
Payroll	980	3,253	4,233	10.4%
Contract Labor	250	900	1,150	2.8%
Travel Expenses	1,822	897	2,719	6.6%
Printing and Photography	4,964	3,625	8,589	21.0%
Taxes	200	1,546	1,746	4.3%
Research and Grants	812	839	1,651	4.0%
Los Angeles Office Expenses	0	700	700	1.7%
Repayment to S.M.B.A.S. <sup>1</sup>	0	7,303	7,303	17.9%
Loan Repayment <sup>1</sup>	0	1,000	1,000	2.4%
Returned Checks <sup>2</sup>	0	1,447	1,447	3.5%
<b>Total Expenses</b>	<b>\$17,259</b>	<b>\$23,635</b>	<b>\$40,894</b>	<b>100.0%</b>
<b>PROFIT (LOSS)</b>	<b>\$3,086</b>	<b>(\$1,440)</b>	<b>\$1,646</b>	
<b>LIABILITIES<sup>1</sup></b>	<b>0</b>	<b>\$6,303</b>	<b>\$6,303</b>	
<b>FUND BALANCE<sup>3</sup></b>	<b>\$3,086</b>	<b>(\$7,743)</b>	<b>(\$4,657)</b>	

<sup>1</sup>In order to reimburse the Santa Monica Bay Audubon Society for financial support received during our first few months, we negotiated an interest-free loan of \$7303. We have repaid \$1000 on this loan, so our current liability is \$6303.

<sup>2</sup>We have returned checks to donors who wished their contributions to be tax-deductible. Most of these funds were subsequently donated to the tax-deductible National Audubon Society-Mono Lake Fund.

<sup>3</sup>Include liabilities.



## ACCOLADES, continued from p. 16

Valley View Junior High School of Simi Valley assembled an excellent Mono Lake display for the Ventura Cousteau Society Fair, and collected hundreds of petition signatures.

Betty and Carrol O'Neill, Grace Enfield, Gladys Kelley, Gary Haas, Enid Larson, Elisabeth Working and others donated photographs, including many views of the higher, healthier lake of times past. These photographs inspire us to keep on working to bring back such scenes. We can still use more, so please peruse you old photo albums.

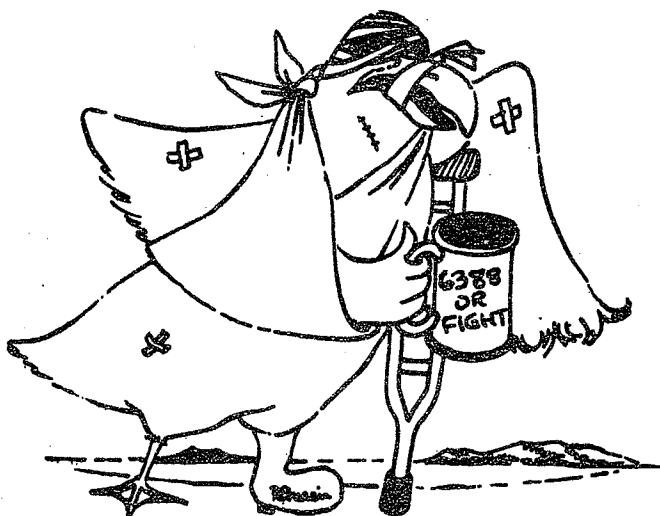
Bev Steveson also donated photographs (outstanding as always!), and worked tirelessly to wrest our beautiful postcards from the printer (see p. 23 for ordering info).

Poet-naturalist Billy Manolis donated the proceeds from "Raven," a collection of poems, to the Mono Lake cause.

The National Audubon Society Bird-A-Thon was a success, with monomaniacal birder David Gaines raising almost \$2,000. Many others raised as much or more! Thanks to everyone who participated, either as a watcher or a donor.

On a more down-to-earth level, we thank Lily Mathieu of Lee Vining for allowing us to use her truck to haul manure for our garden; it will be helping us feed next summer's crop of MLC volunteers! Rich Hubbell helped us gather enough firewood to keep typing fingers warm and nimble through the winter.

And to everyone else we forgot to mention, THANKS!



# Spare Change?

WE NEED YOUR FINANCIAL SUPPORT

Dear Friends,

If birds and brine shrimp could talk, they would be ecstatic. During the past year, thanks to your help and generosity, a strong lawsuit has been filed on Mono Lake's behalf, the state legislature has acted to aid the Negit Island gulls, and most hopeful of all, the Interagency Mono Lake Task Force has recommended a plan that we can wholeheartedly support.

But, while raising our spirits, these victories have plunged us thousands of dollars into debt at a time when funds are critically needed (see our financial statement). Unless we mount an effective campaign NOW, the Task Force recommendations will be scuttled in the Legislature.

We can find the human resources to meet this challenge. Our people are as capable as they are dedicated, and work for starvation wages or nothing at all. But human energy alone cannot purchase leaflets, slide shows and displays, nor pay phone bills, mailing costs, travel and other expenses that translate our efforts into results like the lawsuit and the Task Force plan.

Only your donations will enable us to meet our monthly budget of about \$7000-- of which less than one-sixth pays five monomaniacs to work their hearts out for the lake's survival. We see this work as a vital step towards dwelling in balance with our earth resources.

Please think about this ancient lake whose life is now in our care. Must Mono be sacrificed? To be followed by San Francisco Bay, the Eel River, the Yukon, and on and on until every last marsh, wetland and free-flowing stream has been lost? Until the last waterfowl and the last salmon follow the California Grizzly into oblivion, and we tip the balance of nature against even our own children?

Think about it, and help us continue.

*Deanne Taylor*

*Dave*

*Kathleen Teare*

*Sally*

*Mark Thor*



Yes, I want to make a TAX-DEDUCTIBLE donation to the Mono Lake cause...

*These funds will be supporting our non-lobbying expenses, in particular, education, research and the Mono Lake lawsuit.*

Please make your checks payable to:

NATIONAL AUDUBON SOCIETY MONO LAKE FUND

-or-

FRIENDS OF THE EARTH FOUNDATION - MONO LAKE FUND

Name: \_\_\_\_\_

Address: \_\_\_\_\_

\_\_\_\_\_

Please send to: the Mono Lake Committee  
P.O. Box 29, Lee Vining, CA 93541

I want to help Mono Lake live on.

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 keep me informed.  
☐ I am willing to write letters.  
☐ I am already a member; this is a renewal or additional contribution.  
☐ Please change my address (fill in our coupon). My old zip code is \_\_\_\_\_.  
☐ I'm interested in promoting local publicity

Please fill out this coupon and send to:

MONO LAKE COMMITTEE  
P.O. Box 2764  
Oakland, CA 94602

Make checks payable to: The Mono Lake Committee

Contributions are NOT tax-deductable.

name \_\_\_\_\_

address \_\_\_\_\_

city \_\_\_\_\_ state \_\_\_\_\_ zip \_\_\_\_\_

## MLC KEEPS GROWING AND GROWING

Hearty THANK YOUS to all our new and old supporters! Forgive us for not listing each of you individually (Dave thinks we should at least list folks who contributed more than \$10, but Sally thinks this is unfair-- your \$5 and \$10 donations sustain us too!).

As a crafty incentive, we continue to thank everyone individually who has given us additional donations or renewals. Big smiles for:

MONOMANIAC: Palm Stout

MONOPHILES: Roberta Burnam, Cherry Franklin, Laguna Hills Audubon Society, Meryl Sundove

PATRONS: Cathy Rose, Sheila Kojm and Digital Company

SPONSORS: Irene Berg, Lloyd and Emma Cook, Dr. and Mrs. Charles M. Davis, Mark Edwards, Kirby Eskelsen, William Mendoza, Jeanne Pond

SUBSCRIBERS: Margaret B. Roberts, Gray Brechin, Henry C. Clarke, Alan Fong, Lester Frank, James and Lucie Hupp, Tom Lewis, Mary Lawton, Michelle Meder, Adriana Mulder, Marguerite Nash, Rochelle Oldfield, Larry Oglesby, Marilyn Paladin, Mike and Kathy Paivinen, Marie Panec, Richard Pough, Kenneth Sablik, Jacob Sigg, Ron and Nancy Smith, Marion Tano-witz, Janet Wessel, Marion Yasinitzky

## MONO LAKE POSTCARDS NOW AVAILABLE

We have just received colorful postcards of Mono Lake vistas and wildlife. A brief text explains Mono's plight and includes the MLC address. Send them to your friends, and help us win support for Mono's survival.

To receive a selection of 25 cards, please send a \$3 donation to: Mono Lake Committee  
PO Box 29  
Lee Vining, CA 93541



You can help support the defense of Mono Lake by purchasing a Mono Lake t-shirt. All profits from the sale of each shirt go directly into funding continuing efforts on behalf of the Lake and its unique biological and geological resources.

RETAIL INQUIRIES WELCOME

ORDER FORM

Name \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_

MEN'S ☐ blue ☐ beige ☐ small ☐ medium ☐ large ☐ x-large

WOMEN'S (french cut) ☐ blue ☐ beige ☐ small ☐ medium ☐ large

CHILDREN'S ☐ blue ☐ beige ☐ small ☐ medium ☐ large  
6-8 10-12 14-16

PRICE: Men's \$6.50; Women's \$7.50; Children's \$5.50.

Enclosed is \_\_\_\_\_ for \_\_\_\_\_ t-shirt(s) plus \$1.25 for postage and handling. (California residents add 6% sales tax.)

Make checks payable and send to:

NATIONAL AUDUBON SOCIETY, Western Education Center, 376 Greenwood Beach Road, Tiburon, California 94920

**Mono Lake Committee**  
**P. O. Box 2764**  
**Oakland, CA 94602**

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