

Streamwatch

Driest Year Since the Water Board Decision

by Greg Reis

From the Author: Along with the environmental and design upgrades to the Newsletter, we're adding a new Streamwatch article, offering a spot to discuss and report on Mono's recovering tributaries. Of course, the hydrologic cycle of the Mono Basin connects everything: the weather affects the snowpack, which affects the streams, which affect the groundwater, and all of the above affect the lake, with the lake in turn affecting the groundwater and weather—wow! I will also make an effort to discuss more of the non-hydrology science of the lake and streams to convey a bigger picture of the events surrounding them. If you have an idea for an aspect of the lake or streams you would like to see explained here, or any feedback about these articles, please send me an email at greg@monolake.org.

This year peak flows critical for restoration on the streams came earlier and were sharper than forecasted. Coincidentally, early and sharp peak flows are one of the predicted effects of global warming. The Los Angeles Department of Water and Power (DWP) real time data Website, despite its glitches, was very useful for keeping track of what was happening during the peak flow season (see link at www.monobasinresearch.org).

Lee Vining Creek peaked at about 236 cubic feet per second (cfs) in mid-May. Lower Rush Creek had a peak of about 200 cfs that lasted for about four days in late May, three days less than required. This year marked the end of six years in a row of Grant Lake Reservoir spills—it was the first year since 1994 without a spill. All of Rush Creek's flow passed through the return ditch, which is

currently being upgraded to handle higher flows and seismic forces.

Thanks to some vigorous thunderstorms early in July and August, brief rises in streamflow and lake level were seen. Lee Vining had two $\frac{1}{3}$ inch rainstorms in July and a $\frac{1}{2}$ inch one in August. All of these events caused murky runoff to enter Lee Vining Creek, and the August event caused mudslides in Lee Vining Canyon that closed Tioga Road for several days.

Most of the Sierra snowpack is now gone and with fall come the lowest stream flows of the year. We'll be doing our snow dances here in Lee Vining and hoping for a wet year ahead. ❖



Lakewatch

Lake Level Drops as Predicted

by Greg Reis

Mono Lake dropped at the rate of about 0.1 foot per week in September and now, at the end of October, stands at 6382.7 feet above sea level—the lowest level since March 1998.

Back then the lake was rising rapidly due to an El Niño winter, and DWP installed a new lake level gauge to keep up with the rising water. A year ago that gauge was left stranded high and dry, and the

Committee encouraged DWP to install a new lower one. In July a new lake level gauge was installed. Already the new gauge has less than a foot left on it, or maybe another year left if conditions remain dry.

If the lake follows predictions, it will rise several inches through the winter to 6383.2. Looking back in history, today's level is the same as that of 1974 and almost 11 feet above the lake's lowest point, reached in 1982.

This winter the Committee will be doing some supplemental lake level forecasting and model checking to review the current lake level predictions. Watch for a report in the spring! ❖

Greg Reis is the Committee's Information

6417

Prediversion lake level, 1941

6392

Target lake level

6383

Current lake level

6372

Historic low, 1982



The lake level gauge in late October, 2001.

Specialist. His home solar panels combined with energy conservation have allowed him to achieve no net use of electricity generated from fossil fuels or nuclear power.

PHOTO BY GREG REIS