

Streamwatch

The Hidden Stream

by Greg Reis

Most individuals knowledgeable about the history of the Los Angeles Department of Water and Power's (DWP) diversions would say that DWP diverts four streams: Rush, Lee Vining, Parker, and Walker Creeks. But there is a fifth stream of water that often gets ignored, yet LA sustains the full amount of diversions from it, even to this day. During the 1989–1994 injunction against diversions while Mono Lake was low, full diversions from this stream continued unabated—about 12,000 acre feet each year, 30% more than the entire annual flow of Parker Creek. Admittedly, it isn't entirely within the Mono Basin, only about 7,300 acre-feet (60%) is believed to come from this basin (35% more than the annual flow of Walker Creek).

The Water Board sets no limits on the diversions from this stream. In fact, no one is able to prevent diverting this stream. It isn't a creek, but it is a stream of water that averages over 15 cubic feet per second, enough to raise Mono Lake two-tenths of a foot in a year. By now you are starting to guess—is it the direct precipitation into the aqueduct system? No. You scratch your head. What could it be?

This hidden stream is the groundwater inflow into the Mono Craters Tunnel. It is like a horizontal well, tapping the groundwater basin under the Mono Craters and the Jeffrey Pine forest. It is called “Tunnel Make” by hydrologists.

The numbers that show the amount of water diverted from the Mono Basin generally don't reflect it. DWP is allowed to export 16,000 acre-feet of water per year right now? No, more like 23,000 acre-feet. 33,000 acre-feet per year on average after transition to 6391? No, more like 40,000 acre-feet. DWP has reduced its Mono Basin water exports by 80%? No, more like 75%.

The environmental effects of this hidden diversion have not been studied. The water table over the tunnel is lower than if it hadn't been constructed. Mono Lake is slightly lower than it would have been otherwise. And in the Owens Basin, 4,700 acre-feet of water that would have slowly percolated through the volcanic sands into Clark Canyon and the Upper Owens River is instead dumped in at a single point. Recognizing this hidden stream exists is essential for having a complete understanding of Mono Basin diversions. ❖

Lakewatch

Rainy Year for Lee Vining Means Less Evaporation for Mono Lake

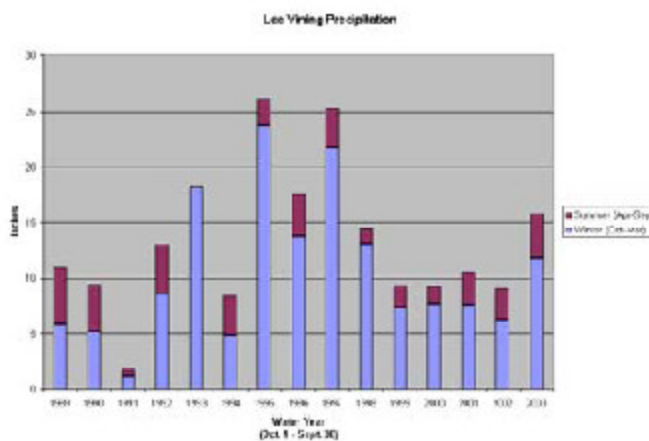
by Greg Reis

Mono Lake dropped 0.9 feet this summer between April 1st and October 1st. During the same period last year it dropped 1 foot. One possible reason for the slightly smaller drop is that it has been a wet summer (144% of average precipitation from April–Oct). At the lower elevations you could tell that there was a lot of summer rain and the sagebrush stayed green through August.

From October 1st 2002 to October 1st 2003, Lee Vining received about 16 inches of precipitation, about 120% of average, and the 5th wettest year in the 15 year record.

Close to 10 inches fell in each of the previous four years. Snowmelt runoff was below average, however, due to variations in precipitation throughout the basin.

The Committee felt this year's runoff forecast was too low based on near-record spring precipitation. April–September 2003 runoff was about 80% of average compared to the 70% forecasted by DWP. For the runoff year, based on its forecast of 74% of average,



DWP released a peak flow of 200 cfs to Rush Creek. Had the forecast been more accurate (the Committee believes runoff for the year could end up as high as 85%), at least 250 cfs and possibly 380 cfs would have been required. There is no procedure in the Water Board Decision for appealing a runoff forecast—a deficiency which the Committee is discussing with DWP and the Water Board. ❖

Greg is the Committee's Information Specialist. This summer he hiked from the top of the Rush Creek watershed to Mono Lake.

Prediversion lake level, 1941: 6417'

Target lake level: 6392'

Current lake level: 6381'

Historic low, 1982: 6372'