

Streamwatch

March Warmth Accelerates Peak Runoff

by Greg Reis

After a promising start to the winter, a very warm and dry March depleted the snowpack that would normally accumulate that month. Peak snowpack occurred around March 1—about a month earlier than usual. Late spring weather started in March and summer temperatures occurred in early May with the earliest 80 degrees on record for May.

The warm weather caused a peak flow to occur on Lee Vining Creek the first week in May, about a month earlier than was projected based upon historical records. DWP is required to pass the

peak downstream of its diversion. However, since the peak was so early, DWP diverted water during the peak, expecting a larger peak later. As of early June, DWP had passed a smaller secondary peak, with a higher peak unlikely since most of the snow had already melted. DWP has not had good success passing Lee Vining Creek’s peak, and the Committee continues to encourage DWP to manage the Lee Vining Creek peak based on real-time data available for temperatures, snow-melt, reservoir levels, and stream flows.

DWP will deliver a 380-cfs (cubic

feet per second) test flow to the Rush Creek return ditch this year. This flow is not required, however it will test the full capacity of the Mono Gate One Return Ditch, which was recently upgraded in capacity. (See the box on page 5 for an explanation of the Rush Creek Return Ditch.) This flow, the highest on Rush Creek since 1998, will ensure that the ditch can carry high flows to 380-cfs when required in the future. ❖

Greg Reis is the Committee’s Information Specialist. He recently adopted a spunky, sunscreen wearing, toothless cat named Luna.

Lakewatch

Sixth Drier-Than-Average Year in a Row

by Greg Reis

Meromixis, the failure of the lake to mix each year, ended last fall (see Winter 2003 Newsletter). This means a green, productive lake this year, however, the lake didn’t experience a sudden turnover like in 1988 when the whole basin smelled like ammonia and brine shrimp populations plummeted. This year there are reports of unusually large numbers of brine shrimp.

runoff, Mono Lake is expected to drop 1 foot by December from its current elevation of 6381.8 feet above sea level. During next winter the lake should rise a bit so that by next April the lake will experience a net loss of about 0.4 feet in the 2004–2005 runoff year (in the Eastern Sierra the April–March period is referred to as the runoff year). The lake

has dropped 1.2 feet between April and December every year since 2000, when it only dropped 1.1 feet. This very consistent April–December behavior means that the differences in how far the lake fell in recent years (ranging from a 0.3 to a 1.0 foot drop) were due to the rise caused by winter weather in the four months from December to April. ❖

6417'

Prediversion lake level, 1941

6392'

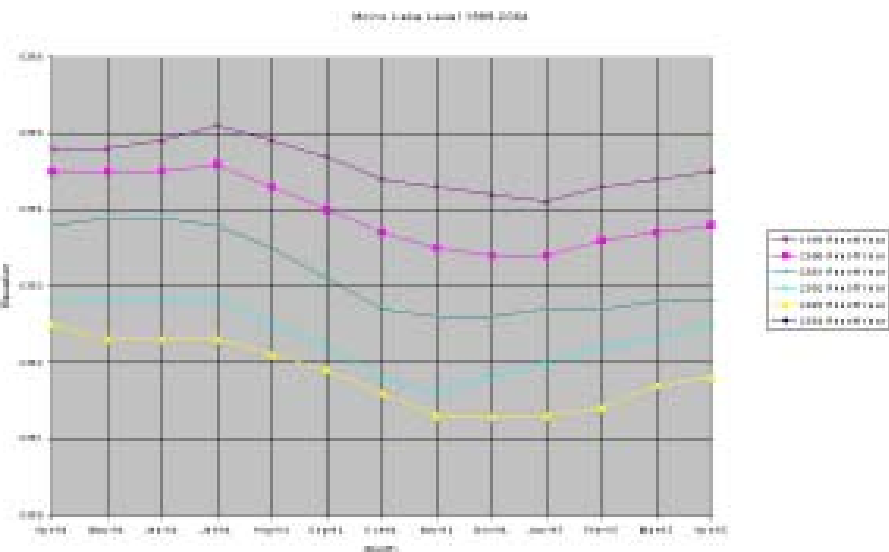
Target lake level

6382' Current lake level

6372' Historic low, 1982

Assuming runoff is close to DWP’s forecast of 80% of average, 2004 will mark the 6th drier-than-average year in a row, tying 1987–1992 for the longest string of dry years on record. 1987–1992 was much drier, however: the driest year of the last 6 years was still wetter than the wettest year of the previous dry period.

As a result of the lower-than-average



Mono Lake Monthly Levels from 1999–2004.