

Streamwatch

Wet year, wet year, dry

by Greg Reis

Runoff in 2005 and 2006 averaged over 150%. Two back-to-back years have averaged over 150% only three other times since DWP began keeping records in 1940: 1995–96, 1983–84, and 1982–83.

At the other end of the runoff spectrum, 2007 is looking dry. As of February 1, Lee Vining precipitation and high country snowpack both stood at 43% of average. As of March 1, the snow survey stood at 67% of average. DWP issued a preliminary runoff forecast of 59% for the 2007 Runoff Year (April 1, 2007–March 31, 2008). The Mono Basin hasn't experienced a year under 60% of average since 1990, when runoff was 49% (the 3rd driest year on record).

However, February ended with a series of very wet storms, which brought precipitation up to 52% of average. February and March can be quite wet, as we learned in February 1998 when

the Gem Pass snowpack went from 60% to 100% of the seasonal average in less than two weeks.

In March 2001, the snowpack increased from 60% to 78% in one week. In March 2002 the snowpack went from 72% to 84% in one week. And of course there was the “Miracle March” of 1991 when snowpack went from 20% to 85% in only one month! Precipitation, snowpack, and runoff percentages are rarely equal.

But without a miracle, there is a very real possibility that we will have a dry

year—the first one (officially defined as less than 68.5% of average runoff) since 1994. If so, this would be the first time under the Water Board Order that no peak flows are required in the streams and also the first time Parker and Walker Creeks are diverted.

Coming on the heels of back-to-back wet years exceeding 150% of average—the 6th and 7th wettest years on record—it might be the best time for a dry year, when groundwater, reservoir, and lake levels are still high, and our recovering ecosystems can best handle it. ❖

Help water trees!

Due to dry-year predictions the Committee is seeking volunteers this summer to help water Jeffrey pine seedlings planted along Rush Creek last year—seedlings that, due to a high water table, didn't need watering all summer until last fall. This summer we want to make sure they get established, and they will need water every week or two starting in May. If you would like to volunteer your help, please contact Greg Reis (greg@monolake.org) at (760) 647-6595.

Lakewatch

Weird winter weather

by Greg Reis

Mono Lake's winter lake level fluctuations are controlled more by precipitation and evaporation than by runoff in the streams, and this was still the case during the weird winter of 2006–07.

While our winter weather is almost never “average,” we can call this winter weird for several reasons. For starters, we had higher winds than usual in December, and Caltrans' Warren Bench weather station might have set a new state record on December 26 when it recorded a 208 mile-per-hour gust. And in more wind news, on February

21, a gusty day, a dust devil picked up a heavy wooden picnic table in front of the Committee Bookstore and flipped it over.

A relatively dry December and January followed a dry fall due to a mild El Niño (warm tropical Pacific waters) that weakened rapidly and became a La Niña (cold tropical Pacific waters) by February. This created a “perfect storm” of dry weather. Winter storms traveled north of the Mono Basin, or split apart to the west and south, but they rarely made it across the high, windswept, rocky crest between Yosemite and Mono Lake.

In January, a month in which only 19% of average precipitation fell in Lee Vining, there was a cold snap that plunged temperatures to negative numbers not seen in ten years. The ice buildup in the creeks and on lakes, including around the western edge of

Mono Lake, was astonishing!

At one point, the ice buildup was so great along the shores of Mono Lake that it destroyed two of the three lake level gauges maintained by DWP to keep track of the lake's elevation. The remaining gauge indicates that the lake rose a tenth of a foot per month from December through February, which is typical for a dry year—it usually rises more in wetter years. At the beginning of March the lake level stood at 6384.7 feet above sea level, 1.8 feet higher than last year. ❖

Greg Reis is the Committee's Information Specialist. He recently became “Uncle Greg,” and plans to visit his new niece in April.

6417'

Prediversion lake level, 1941

6391'

Target lake level

6384.7'

Current lake level

6372'

Historic low, 1982