Streamwatch

165% of average runoff … so far!

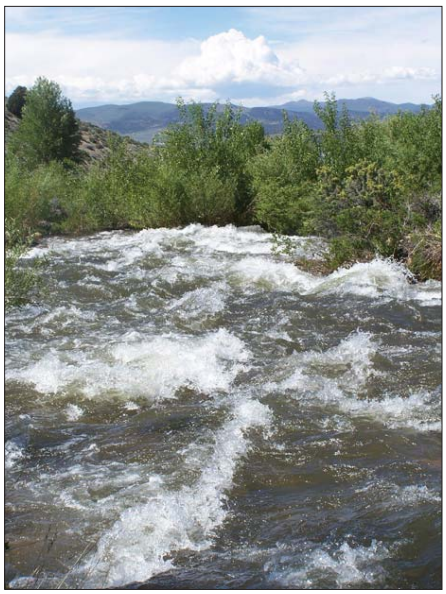
by Greg Reis

2006 is the fourth "Wet" or "Extreme-Wet" year since the 1994 Water Board Decision 1631. A "Wet" year is defined as 136.5%–160% of average runoff and an "Extreme-Wet" year is defined as over 160%. We have had no dry years yet. Interestingly, the dozen years since 1994 have been the fourth wettest 12-year period on record in terms of total runoff volume. All three wetter periods included the incredibly wet 1978–1984 period.

This year the Los Angeles Department of Water & Power forecasted 147% of average runoff (a "Wet" year); however, so far the April through July runoff has been 165% of average (an "Extreme-Wet" year). This compares to last year's 158% of average for the same period, indicating that runoff for the entire year is likely to be higher than last year—although the end of March 2007total could still be below the 160% break in year-types.

All of the streams, with the exception of Parker Creek, peaked at higher flows than last year. So far, Parker Creek and Rush Creek total runoff is less than last year due to less snowpack in those drainages.

Below their dams Rush and Lee Vining Creeks both peaked at 473 cubic feet per second (cfs) in June. These peaks are higher than any flows delivered below the dams since 1998 on Rush Creek and 1997 on Lee Vining Creek. Significant channel scour and large woody debris movement occurred all along the lower reaches of the streams, significantly advancing the habitat restoration.❖



GREG REIS

Lee Vining Creek on June 6, the day before the 473 cfs peak—a flow exceeded only twice in the last two decades. Cobble-sized rocks could be heard moving down the bed of the stream.

Lakewatch

Mono Lake rises two feet in four months!

by Greg Reis

Between April 1 and August 1, 2006, Mono Lake rose from 6383 feet above sea level to 6385.1 feet. This high point equals the high point reached in 1999, which was the highest level since 1972. This also puts the level back on the "average rise per year" line to reach 6391 feet by the year 2014.

Visitors and staff alike are very excited to see the lake this high again. Water has reached the end of the Mono Lake County Park boardwalk, it has dramatically changed the landscape of the South Tufa Area (see page 11), and it has created rias (flooded canyons) at the mouths of the creeks. The lake could drop as much as a foot to its annual low point in the fall before beginning to rise again in winter.

Many *Newsletter* readers have noticed that we changed the elevation on the "Target lake level" bar at the left side of this column. It used to be 6392 feet, but now reads 6391 feet. The reason for this change is that as we get closer to the target, it really matters what the target level is—it isn't just a round number off in the distance anymore.

6392 feet above sea level is the expected long-term average post-transition lake level calculated by the hydrologic models. We have often referred to that level as the target since the 1994 decision by the State Water Board.

But 6392 feet is just a calculation based on the standard modeling assumption that the future climate will be the same as the past-—an assumption that is not likely to occur, but since there are no agreed-upon future climate projections, one that is routinely accepted. If the future climate results in less inflow or greater evaporation than the climate of the 1940–1989 base climate period used by the models, then the average lake level will be lower. On the other hand, wetter conditions would result in a higher lake level.

During the transition period, the reality is that 6391 feet is the target. When the lake reaches 6391 feet, the rules for water export change—after that they are designed to keep the lake at a model-calculated average of 6392 feet. So the use of 6391 feet as a target reflects the legal significance of that number, and the resulting management changes that will be brought about by the lake reaching it. Don't worry—no one is trying to lower the target lake level by a foot!❖

Greg Reis is the Committee's Information Specialist. He's making a pilgrimage to the headwaters of the Mississippi River this fall.