

## Streamwatch

# 2005-2006 Runoff higher than expected

by Greg Reis

**R**unoff for the April 1, 2005 to September 30, 2005 runoff season was higher than the 137% forecasted last spring. Preliminary totals show that unimpaired runoff was 151% of average. The “Runoff Year” is not over and runs from April 1<sup>st</sup> to March 31<sup>st</sup>, but a preliminary estimate for the whole year is 143% of average runoff, compared to the 132% forecasted. This was the first above-average Runoff Year since 1998.

Preliminary Runoff Year totals show that Lee Vining Creek carried 139% of average runoff above the diversion and 125% below. Rush Creek had 153% of average runoff enter Grant Lake, and 94% downstream. The difference above and below the diversions is accounted for by the 16,000 AF (acre-feet) of water annually exported to Los Angeles and the 25,000 AF that filled Grant Lake Reservoir.

Parker and Walker Creeks are only diverted in dry years, so their entire flows passed downstream to Rush Creek and Mono Lake. 140% of average runoff coursed down Parker Creek and 149%

Watershed	April-March Runoff Year Forecast	April-Sept Runoff (preliminary)	April-March Runoff Year Estimate	Runoff Year Est. Below Diversions
Lee Vining Cr.	124%	141%	139%	125%
Walker Cr.	126%	171%	149%	149%
Parker Cr.	134%	148%	140%	140%
Rush Cr.	139%	163%	153%	94%
Mono Basin	132%	153%	143%	109%

came down Walker Creek contributing to the 103% of average flow in the Rush Creek bottomlands. Total flow through the four aqueduct-influenced tributaries below the diversion dams to Mono Lake was 109% of average. These totals are all preliminary and the final numbers will be slightly different.

What about the coming Runoff Year? On February 3<sup>rd</sup>, 2006, snow surveyors visited three snow courses in the Lee Vining Creek drainage and measured the water content and depth of the snowpack. By the end of the day, every place they measured was already over the April 1<sup>st</sup> average. Overall, they found 121% of the April 1<sup>st</sup> average and 192% of what is usually there in February. A

snow sensor at Gem Pass in the Rush Creek drainage is reporting 133% of average to date and 86% of the April 1<sup>st</sup> average. Based on this information, the Los Angeles Department of Water and Power has issued a preliminary runoff forecast of 121% of average in the Mono Basin for the 2006 Runoff Year.

The December and January storms were like a fire hose of moisture from the Pacific Ocean aimed at the northern and central Sierra. If the remainder of winter is dry, the snowpack and runoff could drop below average. However, all we need is another good storm sequence before the winter is over to assure another above average year for the creeks and Mono Lake. ❖

6417'

## Lakewatch

# Mono Lake is rising rapidly

by Greg Reis

**A**warm and dry autumn suddenly ended at the end of November when the first wintry storms began to drop snow down at Mono Lake's elevation. December stayed relatively warm and a record eight inches of precipitation fell, mostly as rain, causing Mono Lake to begin rising again after its annual autumn decline.

Following a warm New Year's rain that caused flooding in June Lake, the 5.7 inches of

precipitation in January mostly fell as snow. In fact, during one storm, between nightfall on January 1<sup>st</sup> and late-morning on January 2<sup>nd</sup>, a span of only 18 hours, over 40 inches of snow fell in Lee Vining. This caused avalanches which closed Highway 395 for four days and brought great skiing at elevations as low as Bishop.

The 13.7 inches of precipitation during December and January equals Lee Vining's average annual precipitation. Mono Lake rose 0.8 feet during these two months, and continues to rise. In early February the lake was at 6382.7 feet above sea level—1.6 feet higher than at the same time the

previous year!

The Pacific Ocean is entering a cold La Niña phase, which portends an early end to winter and a thunderstorm-filled summer. Already we are having warm and sunny days, with adult brine shrimp and alkali flies visible at the lakeshore in early February to greet the returning California Gulls. But thanks to two months of extremely wet weather, 2006 is most likely to be an above-average year for runoff, resulting in another year of a rising Mono Lake. ❖

*Greg Reis is the Committee's Information Specialist. This winter he investigated a more humid climate in Kauai.*

Prediversion lake level, 1941

6392'

Target lake level

6383'

Current lake level

6372'

Historic low, 1982