

# Grant Lake Reservoir at Lowest Level Since 1995

by Greg Reis

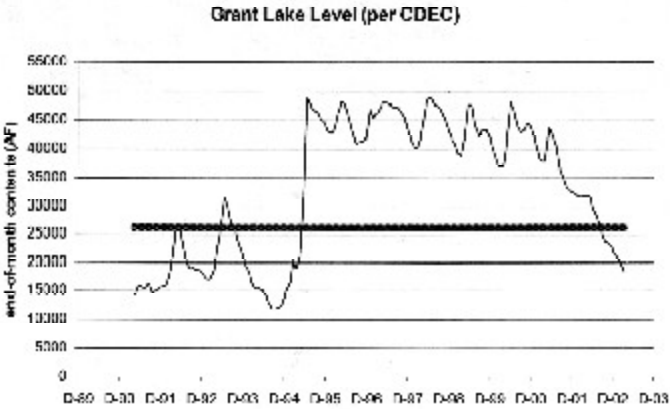
The Los Angeles Department of Water and Power's 2003 runoff forecast for the Mono Basin is 74% of average. Despite one of the wettest Aprils on record, the forecast didn't change much between April and May, although the extra water should help keep Mono Lake from dropping as much. Mono Lake dropped 0.3 feet between April 1, 2002 and April 1, 2003.

Grant Lake Reservoir is the lowest it has been since 1995, which could prevent the Grant Lake marina from operating this year. Low runoff is part of the reason, but there's actually much more to the story. The Water Board order calls for DWP to "attempt to" manage Grant at a level suitable for marina operations, but two aqueduct operational procedures have worked against that goal.

According to the plan, the water diversion load should be shared between Mono Lake tributaries; 6,000 acre-feet of the 16,000 acre-feet of water the Los Angeles Department of Water and Power (DWP) exports each year should come from Lee Vining Creek (Parker and Walker contribute in dry years). Our analysis shows that 11,000 acre-feet of this water was available since Grant stopped spilling in 2000. Over the last three years, however, almost the entire 16,000 af came from Grant Lake Reservoir with virtually no contributions from Lee Vining Creek. There's a reason for this: the diversion structure on Lee Vining Creek doesn't automatically keep a minimum flow in the creek, so it is easier for DWP to just pass the inflow instead of diverting water and monitoring it daily. Lee Vining Creek has benefited by receiving its entire flow, but the method of operation has caught up to both the creeks and Grant Lake Reservoir this year. Rush may not get its peak, and Grant is short the 11,000 acre-feet.

The second factor is that DWP released more water to Rush Creek in minimum flows than was required. Even after subtracting the water "saved" by not releasing peak flows (see Summer 2002 *Newsletter*), this adds up to around 2,000 af of water. What seems to have been overlooked by everyone involved was that the minimum flow required for Rush drops at certain inflow thresholds. The lower minimums require DWP to keep daily track of the inflow and change the outflow match, a practice now implemented.

In the end, if water management had gone according to the State Water Board's order during the last three years, Grant would be about 13,000 acre-feet fuller, and high enough for the marina to operate. The take home message is that bringing operations back on plan is the answer for Grant's predicament. The Committee, the



Dates on bottom are December of each year. The horizontal line is the level the Grant Lake marina needs to operate.

marina operator, and the Forest Service have been working extensively with DWP to do just that.

You usually don't hear the Mono Lake Committee complaining about streamflows being too high, but there are some good reasons to follow the Water Board's plan. The most obvious, of course, is that Grant Lake Reservoir is higher, and the marina can operate. But along with a higher Grant Lake goes a greater opportunity for an early reservoir spill in wet years, which means a higher restoration flow for Rush Creek, and a better-timed peak for cottonwood seed dispersal and germination. At the opposite end of the spectrum, in the driest of years, a higher reservoir allows higher baseflows in Rush Creek and easier water management. When Grant hits its minimum operating level of 11,500 acre-feet, the inflow is passed downstream, which can be as low as 12 cfs (instead of 31). Also, DWP is not required to release a stream restoration flow down Rush Creek if it would cause the reservoir to drop below that level. Managing water according to plan allows Lee Vining and Rush creeks to share the burden of water exports. And for Mono Lake, although the plan would have kept more water in the reservoir and released less to Mono Lake, Mono Lake would only be about a quarter foot lower if the plan had been followed. The Water Board order has a lot of good thinking and solid science behind it and should be followed.

With an "Awesome April" and a wet beginning for May, it is possible that the situation might improve. If we are lucky, the Grant Lake Marina might be able to operate and Rush Creek might get a significant peak flow. And in the future, everyone will be keeping a closer eye on diversions, even if it means noticing that too much water is going down the streams. ❖

*Greg Reis is the Committee's Information Specialist. He has been taking his back country skiing to new heights, including Excelsior Mountain this season!*

6417'  
 Prediversion lake level, 1941  
 6392'  
 Future lake level (average)  
 6382'  
 Current lake level  
 6372'  
 Historic low, 1982