

From: Tom Scott
To: slevitsky@dfg.ca.gov
Date: 5/5/03 5:28PM
Subject: CDFG Maximum Flow Limits on Newlands Project Credit

Susan,

In accordance with our telephone discussion, this is an attempt to present a brief discussion of the question.

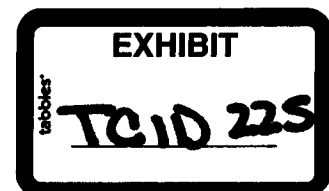
In an e-mail to Tom Strekal of march 19, you provided the following limits for July flows that should be used when planning the amounts of Newlands Project Credit Water storage: Tahoe Dam outflow = 600 cfs, Prosser Reservoir outflow = 150 cfs, Stampede Reservoir outflow = 250 cfs, and Truckee River below confluence with Little Truckee = 600 cfs. These are the "Maximum flow" limits from Table 5 of the California Guidelines. Table 5 of the Guidelines list August and September maximums as Tahoe Dam outflow = 500 cfs, Prosser Reservoir outflow = 60 cfs, Stampede Reservoir outflow = 200 cfs and Truckee below confluence with Little Truckee = 500 cfs.

The years in which Newlands Project Credit Water will be released will be years in which there will also be water right diversions from the Truckee River into Lahontan Reservoir during July through September. In addition, many of these years will have demands for the Truckee below Derby Dam of 300 cfs in July, 200 cfs during August and 120 to 170 cfs during September.

Initial investigation into operation with these demands below Derby Dam and with no Newlands Project Credit storage indicate that the Truckee river flows below the confluence with the Little Truckee will be nearly 600 cfs during July and nearly 500 cfs during August and September. These flows are required just to supply the above flows below Derby Dam, the diversion of water to the Newlands Project, the water quality dilution flow requirements and the M&I and Irrigation demands above Derby Dam. (Also, note that with no TROA operation, the Floriston Rate requirements for Truckee River flow below the confluence with the Little Truckee is 500 cfs and this is provided in close to 90% of the years.)

Decisions regarding the amount of Newlands Project Credit storage are made during the winter and spring. Those years when accumulation of Newlands Project Credit storage would appear attractive (except for the issues of this note) are often (very often) years when the expected July through September flows will be as described in the previous paragraph. Thus, the CDFG "Maximum Flow" criteria for July through September results in significant limitation upon the amount of Newlands Project Credit storage that will be accumulated.

I have assumed that the CDFG maximum flow limitations would not impair the total release of Newlands Project Credit water. I (and the operation model) decide that when Newlands Project Credit water has been put into storage and that water is "owed" to the Newlands Project (note there may sometimes be water that is surplus and not owed to Newlands) then such water will be released and diverted to the Newlands Project. Thus, if in the winter and spring a total of 10,000 acre-feet is put into Newlands Project Credit storage and in order to supply this water to Newlands it is necessary to produce



Truckee flows that exceed the CDFG maximums, the 10,000 acre-feet would be released. Thus, the CDFG maximum flow limitations become limitations on Newlands Project Credit only during the winter and spring when such water is being put into storage.

So, during the winter and spring, the operation analysis will look at expected Truckee River (and tributary) flows during July and later and estimate the probable amount of water than can be released during July and later without exceeding the CDFG maximums. These estimates made during the winter and spring often limit the amount of water stored as Newlands Project Credit water because as indicated by the above discussions, it can be expected that other Truckee water demands will produce flows that are only little less than the CDFG Maximums.

So, the questions I am raising are : (1) Is there enough uncertainty in the biological evaluation of flows to allow flows for these purposes to be increased by 50 cfs or 100 cfs (a) in the Truckee River only or (b) by these and comparable amounts below Prosser and Stampede? (2) Is the change from July to August and September more subject to adjustment so that even though July maximums might not be changed, the August and/or September Maximums might be adjusted to (equal?) the July Maximums?

Thus, I am asking if some or all of these streamflow target limitations could be revised?

Rod Hall

Also, the Floriston Rate supplies during July through September are 500 cfs.

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