



## COLUMBIA RIVER INTER-TRIBAL FISH COMMISSION

729 N.E. Oregon, Suite 200, Portland, Oregon 97232

Telephone (503) 238-0667

Fax (503) 235-4228

[www.critfc.org](http://www.critfc.org)

TO: Technical Management Team  
FROM: Kyle Martin, *Senior Hydrologist*, CRITFC Hydro Program  
DATE: May 21, 2003

SUBJECT: Impact of Pool Fluctuations on the 2003 Spring Treaty Fishery

CRITFC System Operation Request 2003-C1 was submitted April 23<sup>rd</sup>, 2003 via the NMFS' Technical Management Team forum in support of this spring's treaty fishing. The CRITFC request asked for (1) specific elevations and (2) stable pool elevations during April 24-26.

Criterion #1 asked to operate the pools within a one-foot specified elevation range. The Corps replied with a commitment to a 1.5-foot range, and then only in Bonneville pool, as they have done so since 1996 (according to the Corps' interpretation of the "Ted Strong agreement"). The Corps claims the top operating limit at the Bonneville pool is 76.5 feet, and not 77 feet (full pool) as outlined in the CRITFC request, and will not exceed that upper limit except for an emergency.

Figure 1 shows the hourly compliance of CRITFC's elevation range criteria during the treaty fishery. The Bonneville pool complied 43% of the time. The Celilo pool complied 44% of the time. The John Day pool complied 15% of the time. The spring 2002 compliance values were 63% at the Bonneville pool, 41% at the Celilo pool, and 44% at the John Day pool.

Figure 2 shows the hourly compliance of the elevation criteria if the Corps' 75.5 to 76.5 foot range at Bonneville is used. The Bonneville pool complied 82% of the time. This result suggests that a much higher compliance by the Corps may result if the 76.5-foot limit is used, which coincides with the Corps' normal operating range. Compliance using the Corps' 1.5-foot criteria at all pools was 77% to 100%.

Pool elevation data is a good measure as to the absolute pool fluctuations (Criterion #2). Figures 3 and 4 show the observed pool elevations during the times of the fishery. If the criterion was to limit fluctuations to one foot or less, irrespective to any absolute elevation criteria, then the Bonneville pool (which stayed near 0.5 foot) complied 100% of the time. The Celilo pool and John Day pool complied almost all of the time. The Corps seems to be reducing the absolute pool fluctuations, even if they are not in full compliance with the elevation criteria.

Attachments

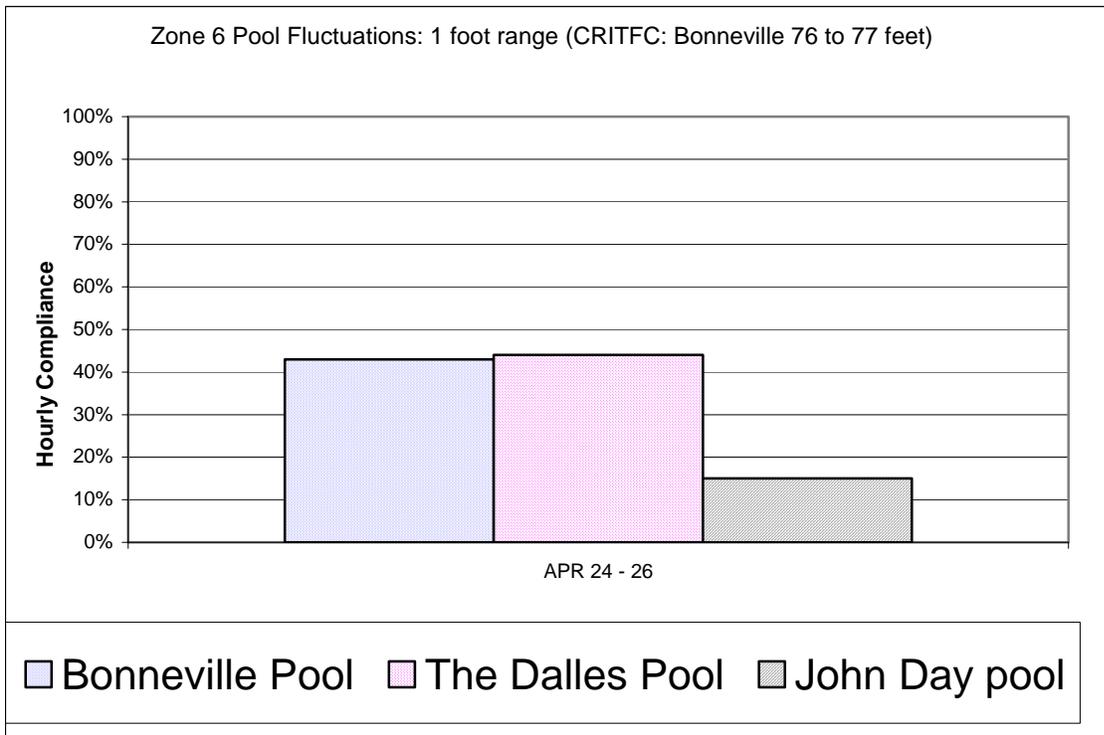


Figure 2. Corps compliance with CRITFC criteria for operating pools during treaty fishing.

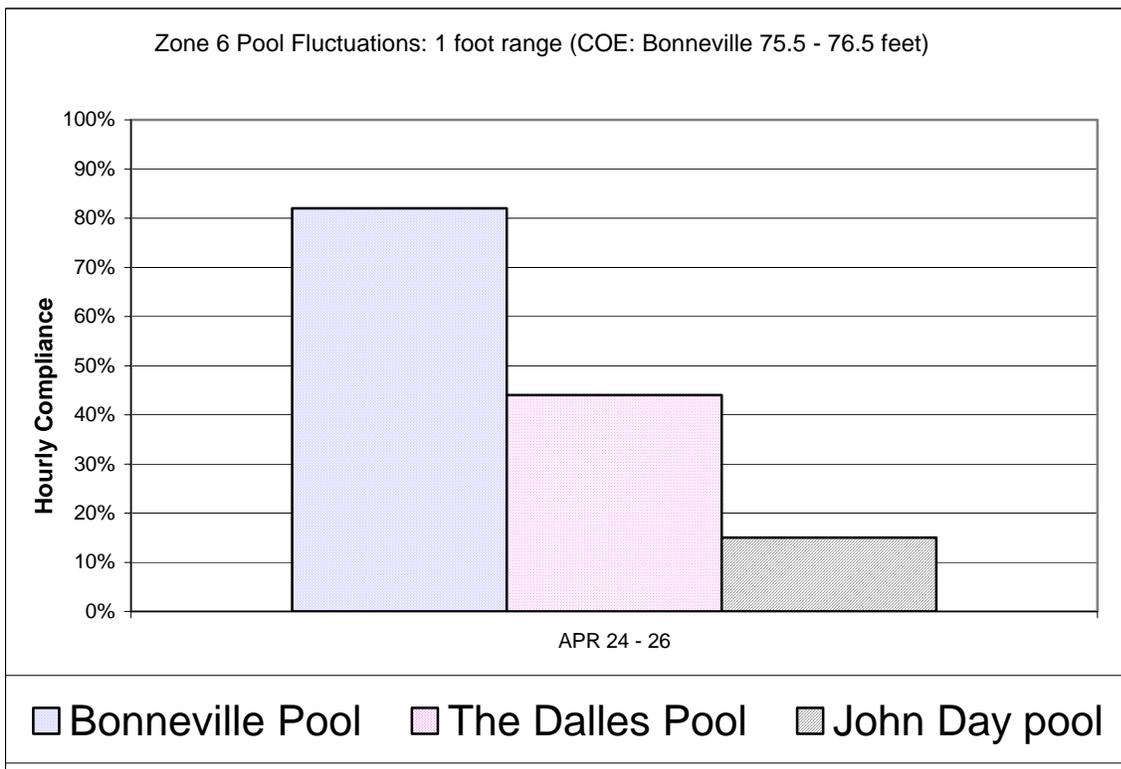


Figure 3. Compliance with CRITFC criteria, using Corps definition of full pool of Bonneville.

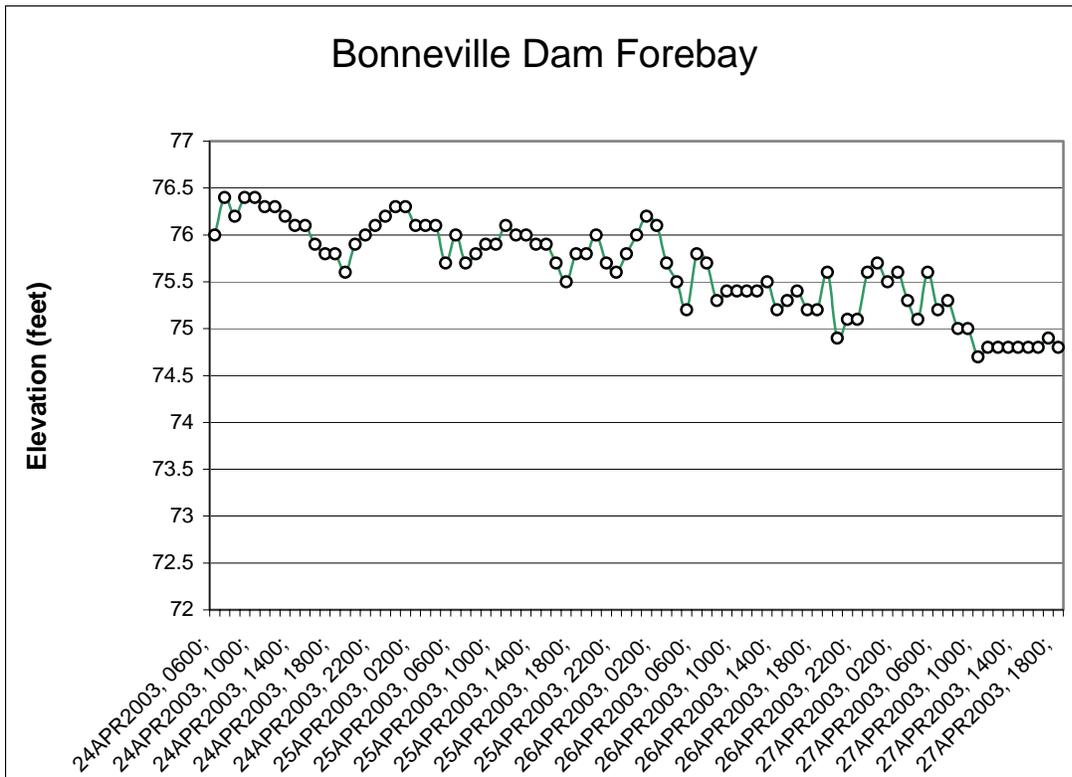


Figure 4. Observed pool elevations during 2003 spring treaty fishing for Bonneville pool.

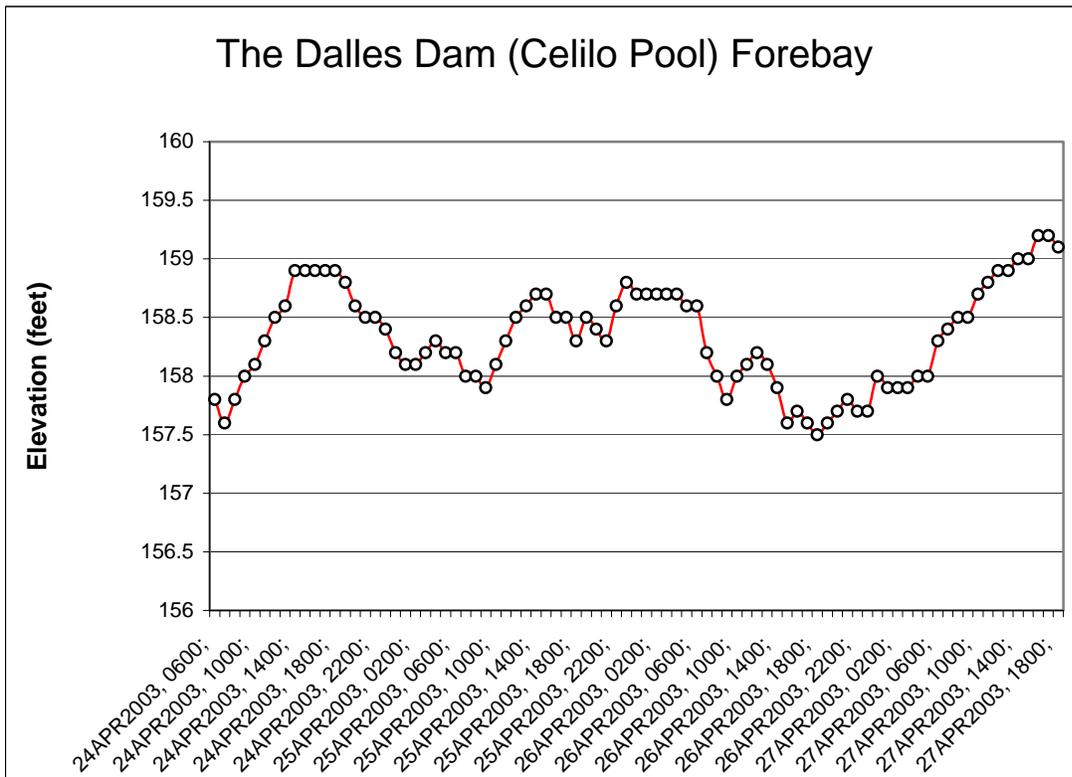


Figure 5. Observed pool elevations during 2003 spring treaty fishing for The Dalles pool.