

COLUMBIA RIVER INTER-TRIBAL FISH COMMISSION

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TO: Technical Management Team (TMT)
FROM: Kyle Martin, *Senior Hydrologist*, CRITFC Hydro Program
DATE: June 9, 2004

SUBJECT: Impact of Pool Fluctuations on the 2004 Spring Treaty Fishery

CRITFC submitted four System Operation Requests (2004-C1 through 2004-C4) via the NMFS' TMT forum to support spring treaty fishing. The CRITFC requests asked for (1) specific elevations and (2) stable pool elevations during each week of treaty fishing. The total Tribal harvest was ~17,050 fish.

Criterion #1 asked to operate the pools as a hard constraint within a one-foot specified elevation range. The Corps replied with a commitment as a hard constraint to a 1.5-foot range, or 1-foot as a soft constraint, as they have done so since 1996.

The table shows the hourly compliance of CRITFC's elevation range criteria, as well as the Corps' criteria, during the treaty fishery. Averages from the 2003 spring season are also shown.

2004	Bonneville Pool	The Dalles Pool	John Day pool
	75.5 - 76.5 ft	158.5 -159.5 ft	263.5 - 264.5 ft
1 foot range (CRITFC):			
MAY 4 - 6	62%	70%	23%
MAY 11 - 14	91%	66%	24%
MAY 19 - 21	77%	84%	28%
MAY 26 - 28	79%	59%	34%
average:	77%	70%	27%
2003 average:	53%	59%	35%
1.5 foot range (COE):			
MAY 4 - 6	97%	100%	92%
MAY 11 - 14	95%	76%	73%
MAY 19 - 21	97%	95%	80%
MAY 26 - 28	100%	82%	87%
average:	97%	88%	83%
2003 average:	98%	91%	80%

Pool elevation data is a good objective measure as to the absolute pool fluctuations (Criterion #2) as shown in Figures 1 through 12. Bonneville pool saw 1.0 – 1.6 foot swings (compared to 0.8 - 1.7 foot swings in spring 2003). The Dalles pool saw 1.0 – 2.4 foot swings (compared to 0.7 - 2 foot swings in spring 2003). John Day pool saw 0.5 – 1.7 foot swings (compared to 0.8 - 1.2 foot swings in spring 2003). CRITFC would like to understand the cause of this season's worst pool fluctuations and what the Corps can do to prevent future fluctuations.

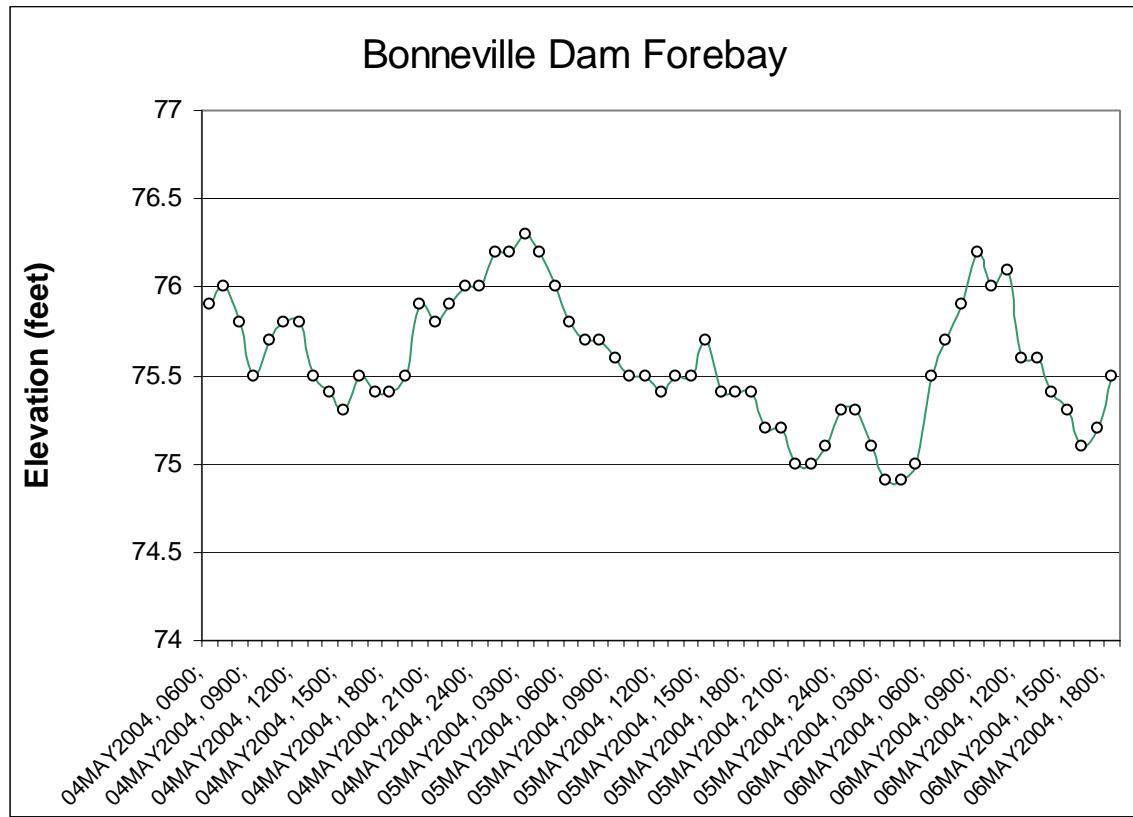


Figure 1. Observed pool elevations during May 4-6, 2004 spring treaty fishing (BON pool).

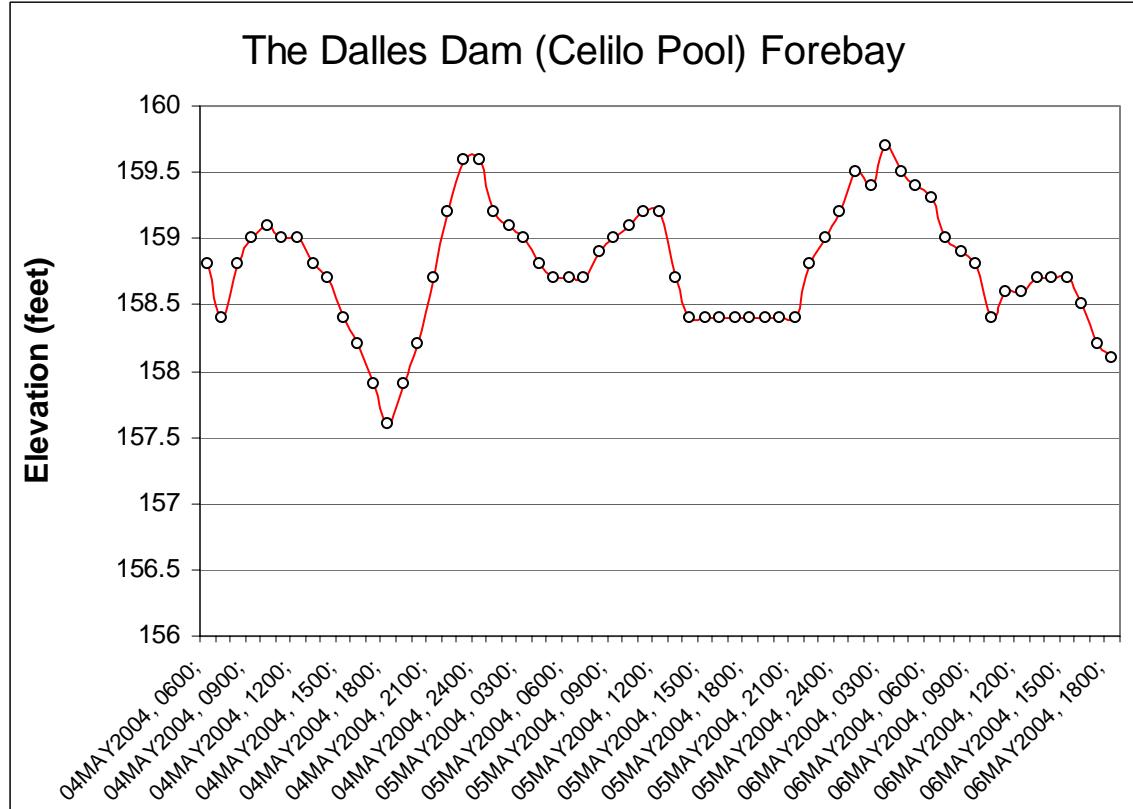


Figure 2. Observed pool elevations during May 4-6, 2004 spring treaty fishing (TDA pool).

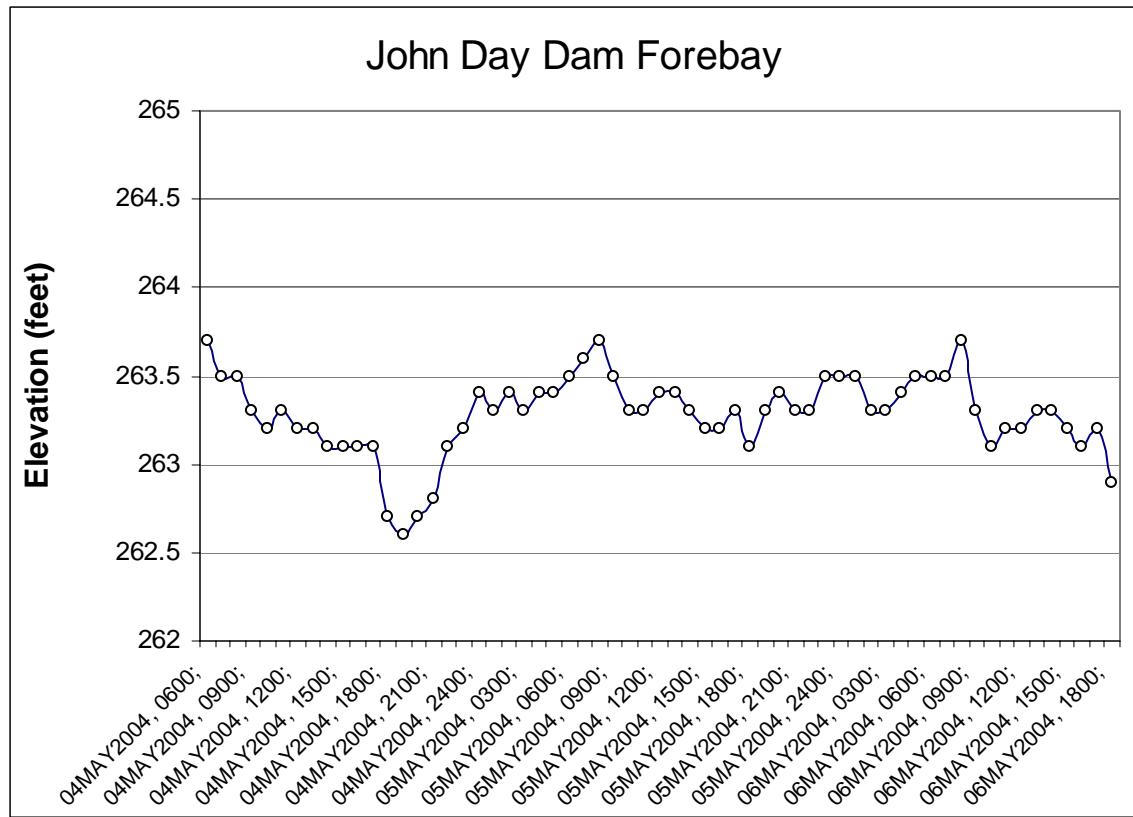


Figure 3. Observed pool elevations during May 4-6, 2004 spring treaty fishing (JDA pool).

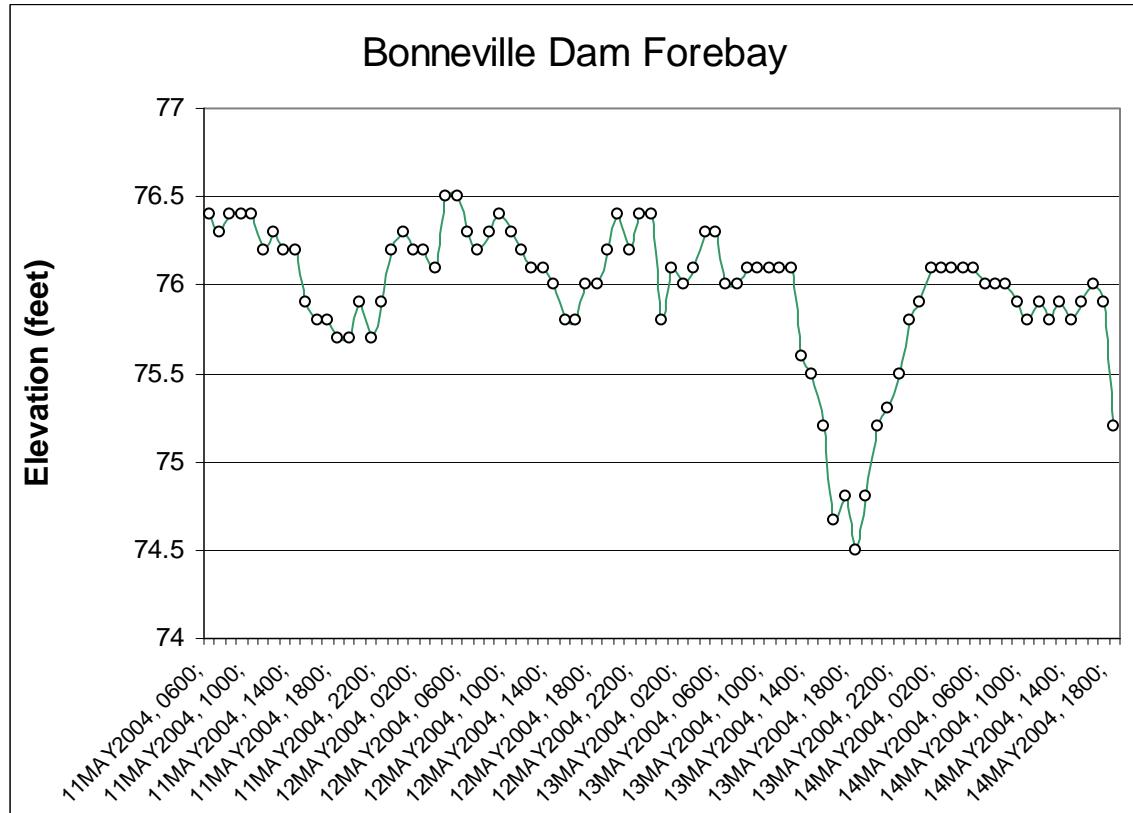


Figure 4. Observed pool elevations during May 11-14, 2004 spring treaty fishing (BON pool).

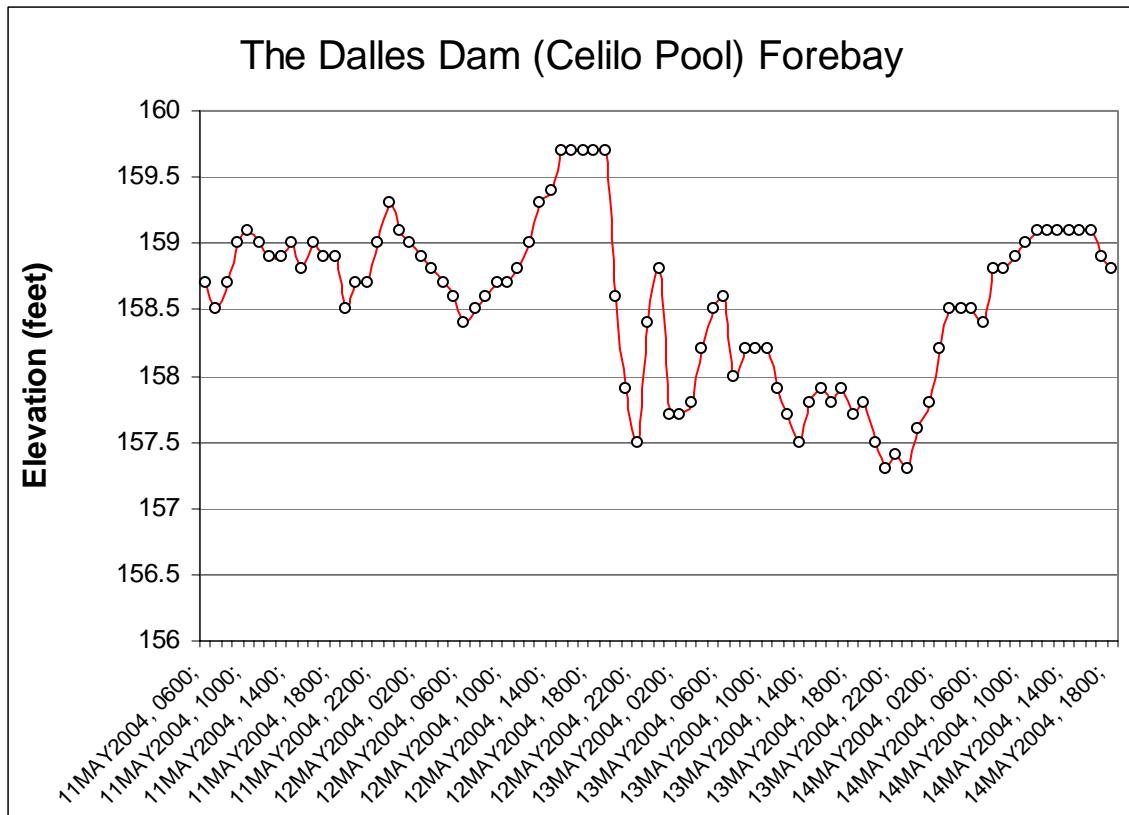


Figure 5. Observed pool elevations during May 11-14, 2004 spring treaty fishing (TDA pool).

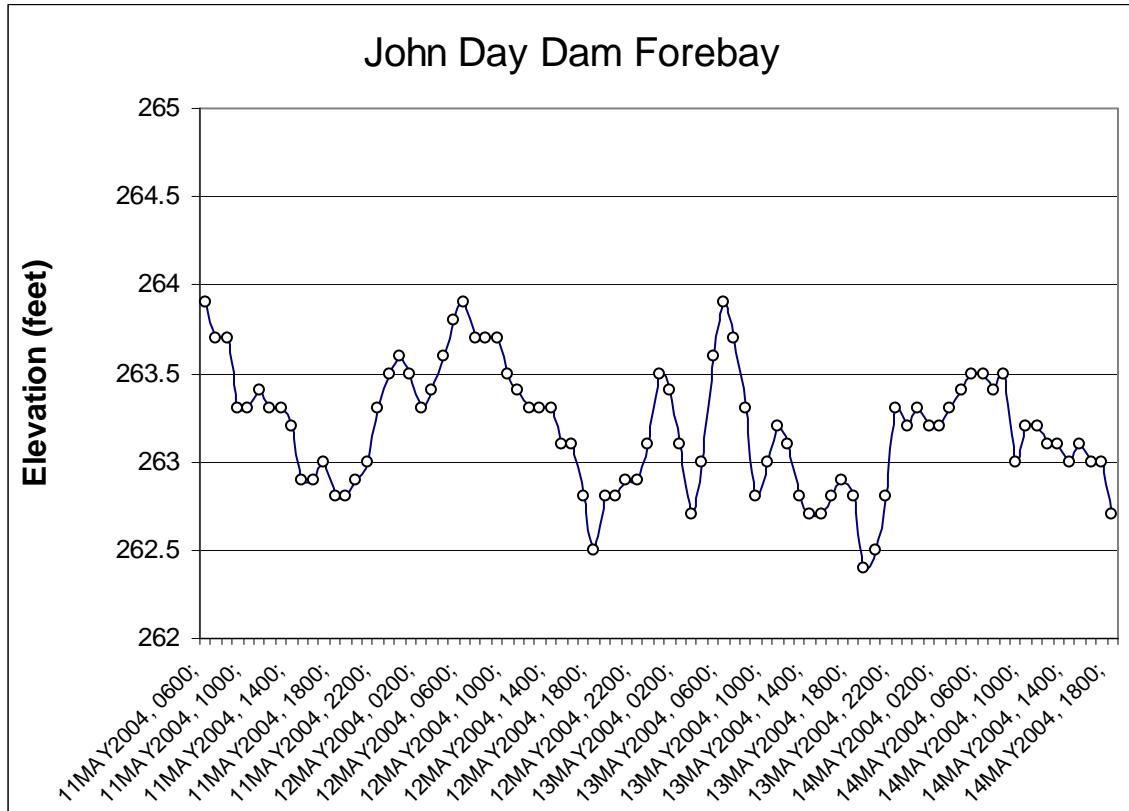


Figure 6. Observed pool elevations during May 11-14, 2004 spring treaty fishing (JDA pool).

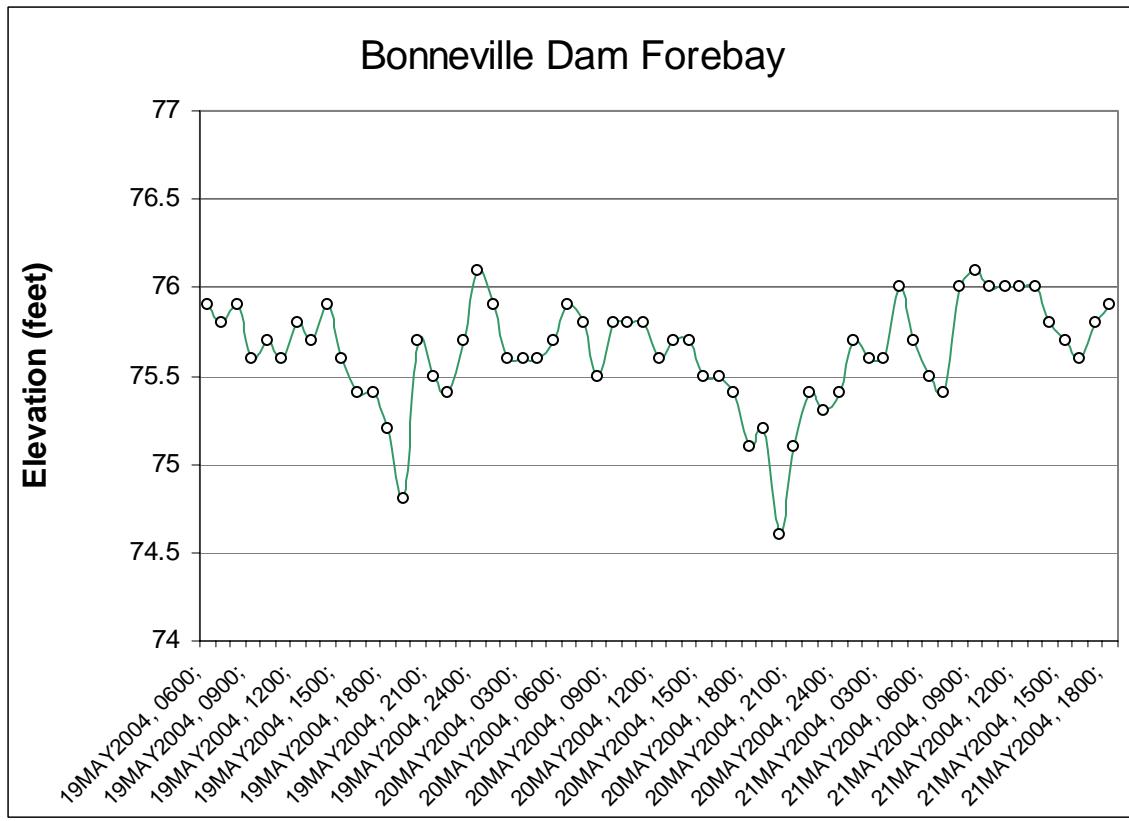


Figure 7. Observed pool elevations during May 19-21, 2004 spring treaty fishing (BON pool).

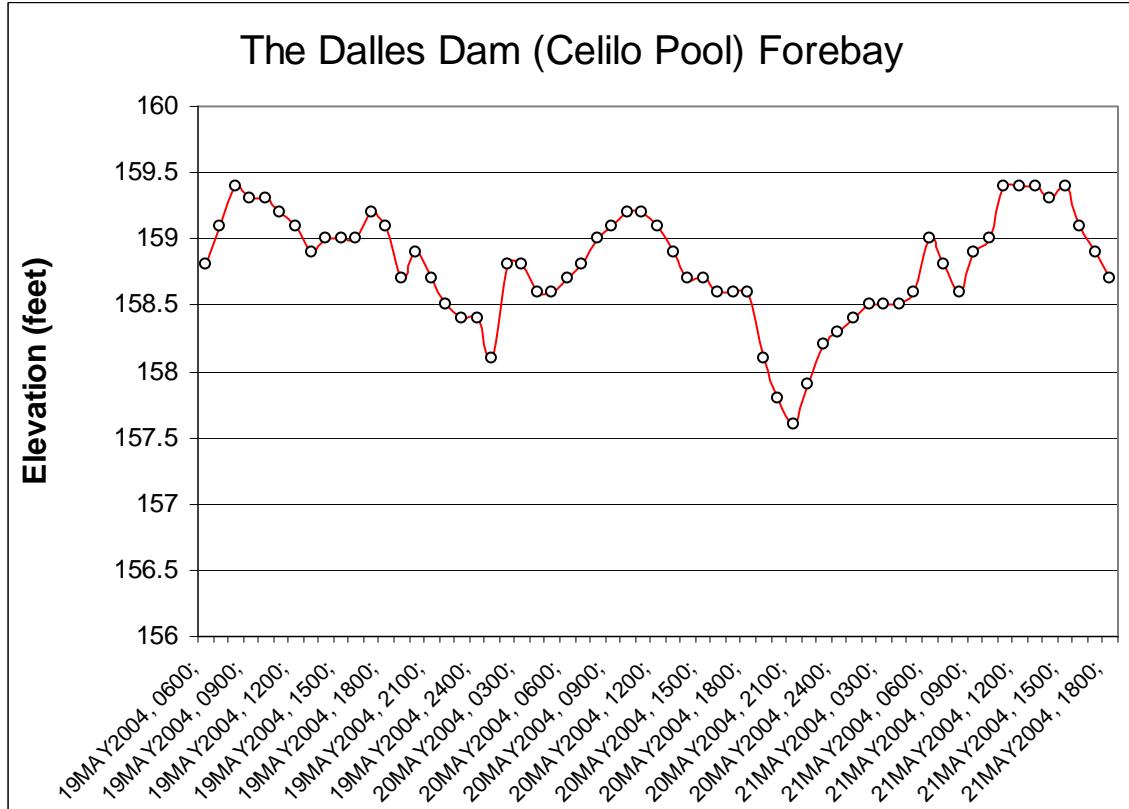


Figure 8. Observed pool elevations during May 19-21, 2004 spring treaty fishing (TDA pool).

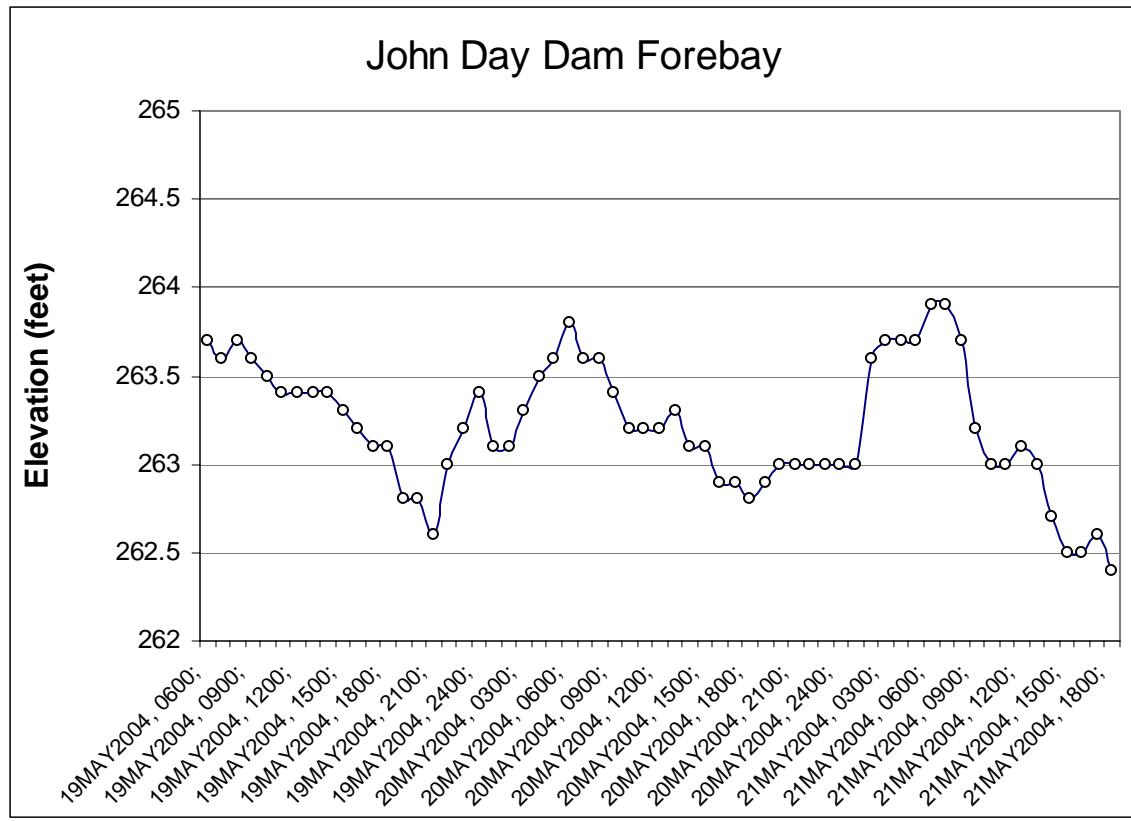


Figure 9. Observed pool elevations during May 19-21, 2004 spring treaty fishing (JDA pool).

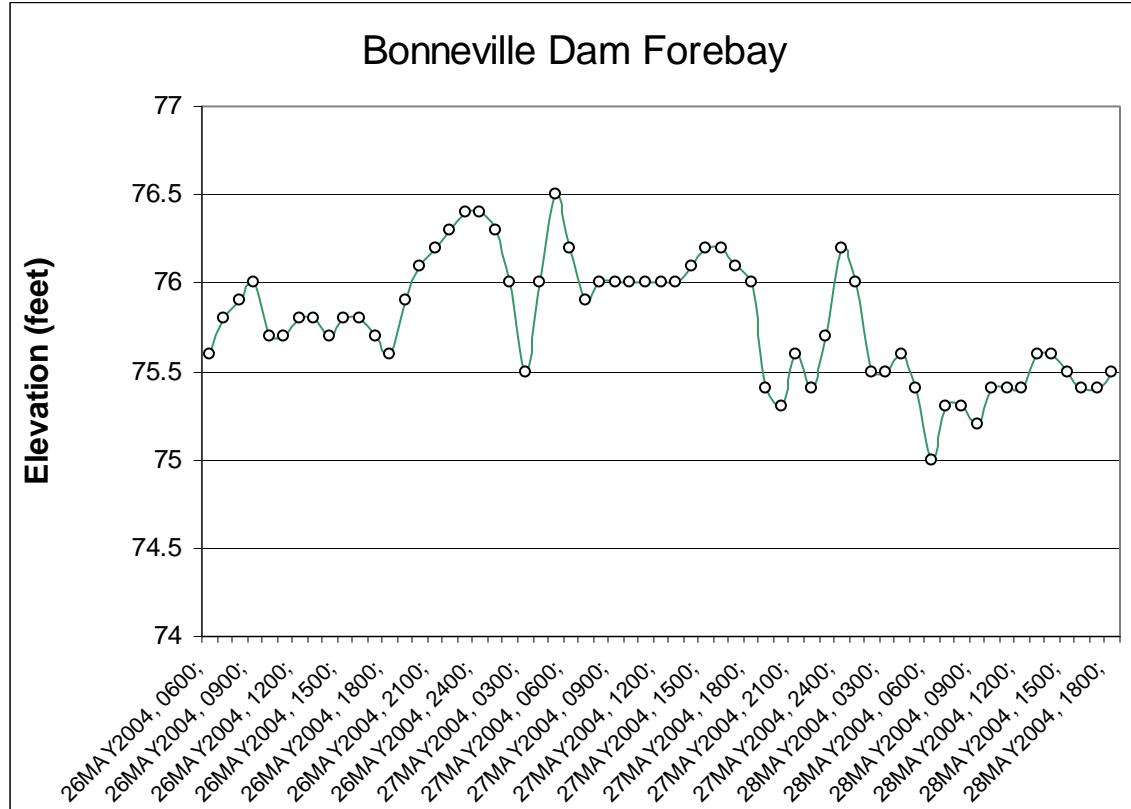


Figure 10. Observed pool elevations during May 26-28, 2004 spring treaty fishing (BON pool).

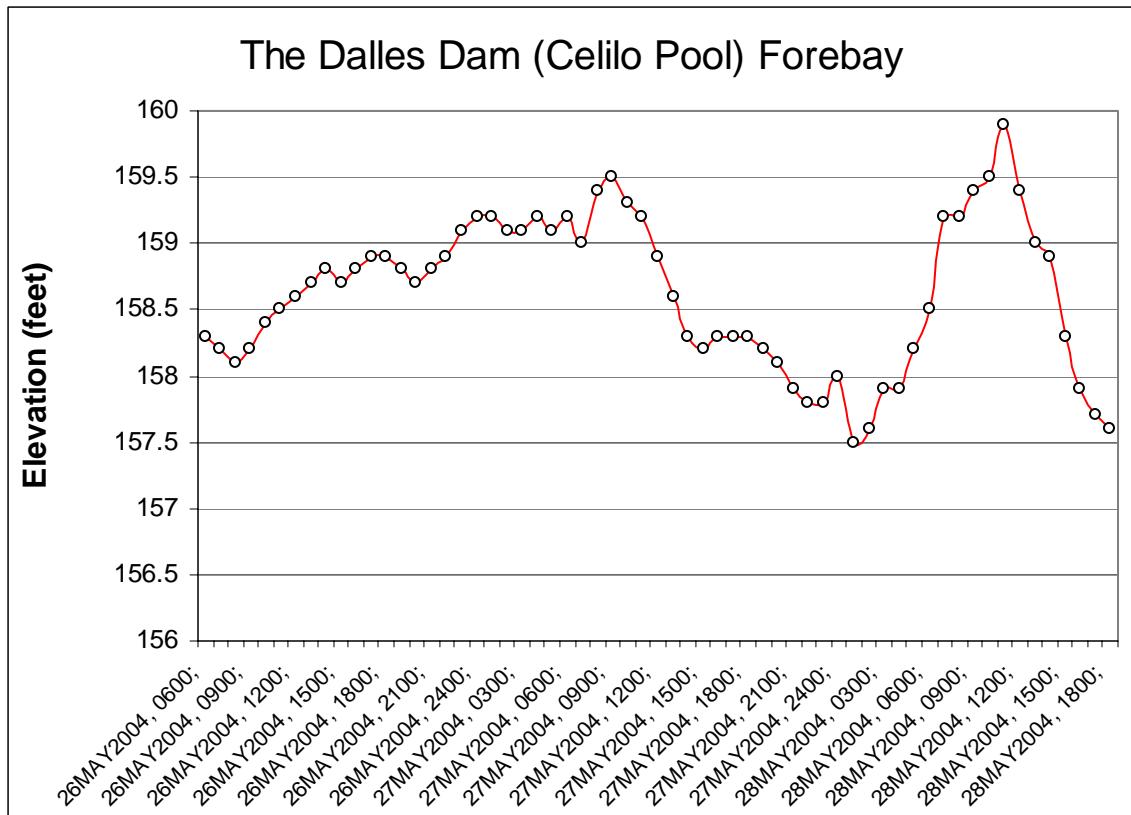


Figure 11. Observed pool elevations during May 26-28, 2004 spring treaty fishing (TDA pool).

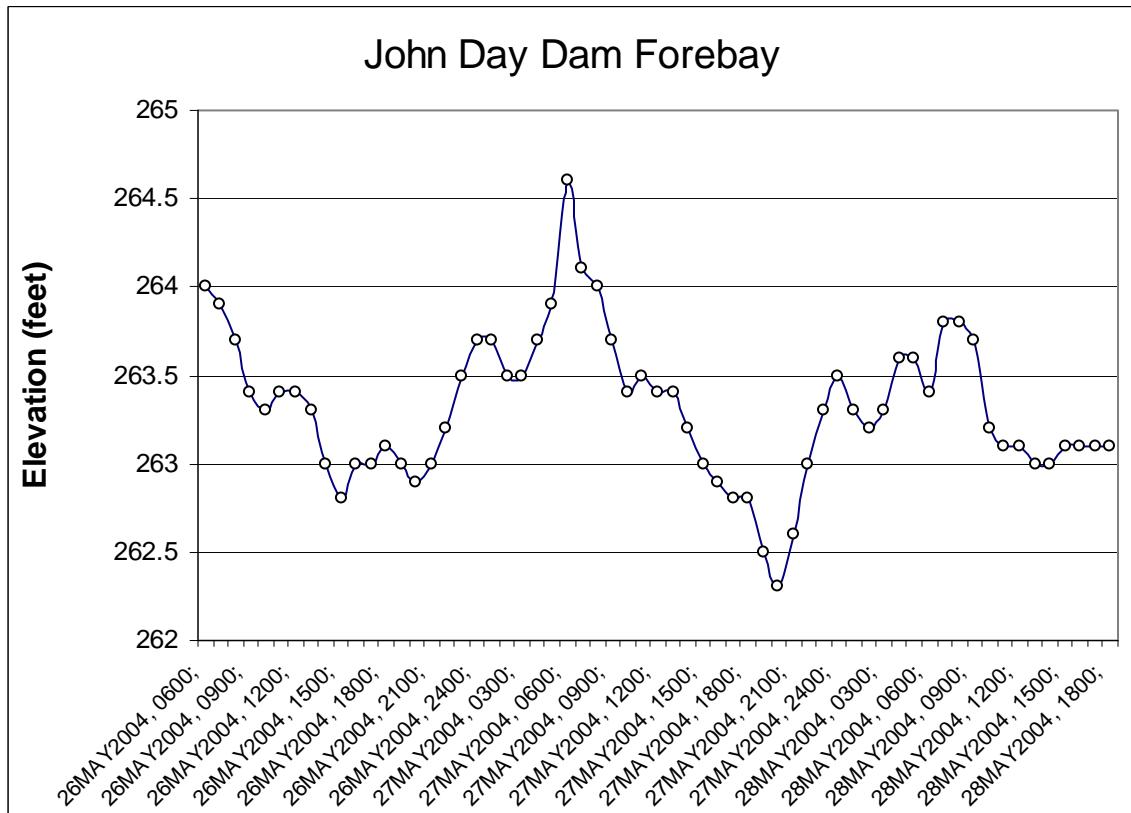


Figure 12. Observed pool elevations during May 26-28, 2004 spring treaty fishing (JDA pool).