

CORPS OF ENGINEERS CHUM ANALAYSIS

The Corps utilized two different models. It was felt the shorter term period (November 4 – December 31) could be better analyzed using the current inflow forecast from the River Forecast Center. SSARR was the model used for the short term period. The long term period of January 1 – July 31 utilized the QADJUST model so 58 different historical shapes (WY 29 – WY 87) of inflow could be analyzed. The inflows modeled were 80% and 100% of normal inflows at The Dalles

Summary of Corps Nov 4 – December 31 Model Analysis

The study for the period ending December 31 was based on forecasted inflows from the River Forecast Center in the November 5 SSARR model. In the study, it was assumed a Bonneville flow target of 125 kcfs would start on November 19, the day after a Vernita Bar survey is scheduled.

	Period:	Nov 19 - 30	Dec 1 - 31
Corps Analysis	% Meet BON Target Flow	100%	100%
	BON Target Flow	125 kcfs	125 kcfs
	GCL end of month elev		1276.7'
	GCL 85% confidence of refill elev		1265'

Summary of Corps January 1 – April 10 Analysis

The following table shows the results of the long term Corps analysis. The starting elevation for January 1 was assumed to be 1267.7' which is the December 31 elevation from the analysis above.

In the 85 MAF model, 85 million acre feet of water (80% of normal) was run off at The Dalles between January 1 and July 31 using 58 different historical shapes. The model put a priority on reaching end of month VECC at Grand Coulee. The table shows the percentage of time Bonneville monthly average flow reached a minimum of 125 kcfs.

In the 106 MAF model, 106 million acre feet of water (100% of normal) was run off at The Dalles between January 1 and July 31 using 58 different historical shapes. The model put a priority on reaching end of month VECC at Grand Coulee. The table shows the percentage of time Bonneville monthly average flow reached at least 125 kcfs.

	Month:	January	February	March	April 10	
Corps 80% of Normal Analysis	% Meet BON Target Flow	29%	29%	62%	88%	
Corps 100% of Normal Analysis	% Meet BON Target Flow	100%	95%	91%	100%	

These results indicate if January 02 – July 02 runoff at The Dalles is 100% of normal, if we receive that runoff in 58 historical shapes, we have a high likelihood of meeting 125 kcfs at Bonneville during the January 1 – April 10 period. They also indicate if January 02 – July 02 runoff at The Dalles is 80% of normal, if we receive that runoff in 57 historical shapes, we have a low likelihood of meeting 125 kcfs at Bonneville during the January 1 – April 10 period.