

# Libby : March Runoff Forecast & Flood Control Calculation

WY 2011

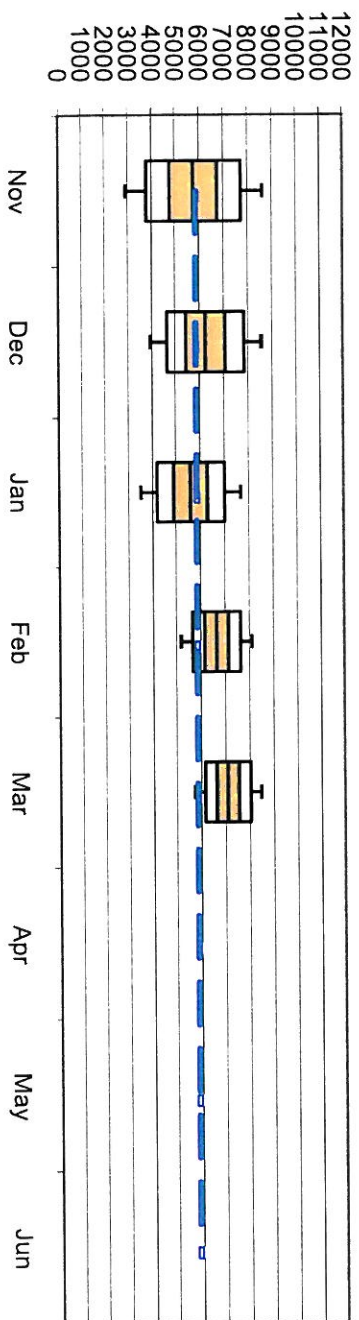
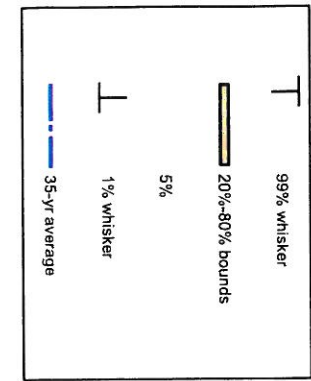
Runoff Forecast and Flood Control				1975-2009 Average	Percent of Average	1929-1999 Average	Percent of Average
<b>Most Probable Runoff Volume:</b>							
	<b>Apr-Aug</b>	<b>7105</b>	<b>KAF</b>	5865	121%	6337	112%
	<b>Apr-Jul</b>	<b>6424</b>	<b>KAF</b>	5303	121%	5771	111%
	<b>May-Jul</b>	<b>5811</b>	<b>KAF</b>	4797	121%	5247	111%
<b>31-Mar Flood Control Space</b>				<b>3407</b>	<b>KAF</b>		
<b>31-Mar Flood Control Elevation</b>				<b>2364.3</b>	<b>ft</b>		

## Seasonal Flood Control

VARQ Flood Control Implemented

Forecast Date >>	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
Apr-Aug Runoff Forecast	5775	6262	5610	6656	7105			
First-of-Month Elev	2441.5	2434.2	2411.9	2410.2	2391.2			
<b>Date &gt;&gt;</b>	<b>30-Nov</b>	<b>31-Dec</b>	<b>31-Jan</b>	<b>28-Feb</b>	<b>15-Mar</b>	<b>31-Mar</b>	<b>15-Apr</b>	<b>30-Apr</b>
Flood Control Space	500	2000	1488	2612	3407	3407		
Flood Control Elevation	2448.0	2411.0	2424.5	2392.7	2364.3	2364.3		

Spread of values around expected forecast



## Sturgeon Tiered Flows

<b>Forecast runoff Volume (maf*) at Libby</b>	<b>Sturgeon flow volume (maf) from Libby Dam</b>	<b>Min bull trout flows between sturgeon and salmon flows</b>
0.00 < forecast < 4.80	Sturgeon flows not requested	6 kcfs
4.80 < forecast < 6.00	0.8	7 kcfs
6.00 < forecast < 6.70	1.0	8 kcfs
6.70 < forecast < 8.10	1.2	9 kcfs
8.10 < forecast < 8.90	1.2	9 kcfs
8.90 < forecast	1.6	9 kcfs

\*maf = million acre feet

Normal April – August Inflow is 6.337 MAF