Libby Flood Control Operation

VARQ in 2007

TMT Meeting January 31, 2007

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Libby Dam Operations

- 2006 Documentation
  - Final Upper Columbia EIS
  - Public Meeting briefings
  - After Action Report
- January Determination and Finding
- What to Expect in 2007
  - VARQ Flood Control
  - Fish (Sturgeon Operation)
  - Summer Salmon Operation
- Reduced Flexibility in 2007

2006 Documentation

- *Final Upper Columbia EIS*

http://www.nws.usace.army.mil/Template/Display/More_Hot_Topics.cfm?recno=56

- *Public Meeting at Bonners Ferry September 6, 2006*

http://www.nws.usace.army.mil/PublicMenu/Menu.cfm?sitename=PUBLICAFFAIRS&pagename=SpringEvent2006

- *Public Meeting at Bonners Ferry November 6, 2006*
- *After Action Report posted on the web page above*

January Determination and Finding

- *Signed by General Martin January 5, 2007*

http://www.nws.usace.army.mil/PublicMenu/documents/PUBLICAFFAIRS/Libby_Decision_Document_07.pdf

- *This is a one year decision*
- *Operate in accordance with the VARQ procedures such that there will be no reduction in flood storage capability*

What to Expect in 2007

- *VARQ Flood Control*
- *Adhere to the VARQ procedures*
- *Draft through March using VARQ SRD*
- *Begin VARQ refill outflow at Libby 10 days prior to the ICF*
- *VARQ outflow will be calculated each week*
- *VARQ outflow will not be reduced except for one or two days to protect human life and safety*
- *Manage to avoid exceeding a stage of elevation 1764 feet at Bonners Ferry to the extent practicable*

What to Expect in 2007

- *Sturgeon Operation*
- *Meet the volume recommended for the sturgeon tier*
- *Current WSF is 6.995 MAF (110%)*
- *The corresponding tiered volume is 1.169 MAF (approximately 28 days at full powerhouse)*
- *Discussion will be initiated to determine the 2007 sturgeon flow operation*

Reduced Flexibility in 2007

- *VARQ refill outflow will begin on schedule ten days prior to the Initial Controlled Flow (ICF) at The Dalles*
  - *If the ICF date is computed to be later, VARQ outflow may be reduced during the next calculation*
  - *If the ICF date is earlier, VARQ outflow may be greater and spill may be needed to meet the flow*
- *Start of Sturgeon flow will be coordinated through the TMT*

Reduced Flexibility in 2007

- *Refill in 2007 may not be as likely as it was in past years*
- *The UCEIS was based on refill by July 31*
- *The refill probability in the UCEIS included the double peak operation nearly half the years modeled*
- *To reduce the double peak reduces the refill probability further than that modeled*

VARQ operations can have fish flows overlaid – Impact to refill was characterized in UCEIS

(LVI is Libby Operation with VARQ flood control and a sturgeon operation at full powerhouse outflow. LV2 is Standard Flood Control with full powerhouse plus 10,000 cfs)

Alternative	***Percent of years with peak Libby Reservoir elevation ≥ 2458 feet (1 ft from full pool elevation before July 31)***	***Percent of years with peak Libby Reservoir Elevation ≥ 2454 feet (5 ft from full pool elevation by July 31)***
LS1	*6*	*12*
LV1	*12*	*31*
LS2	*6*	*10*
LV2	*10*	*31*

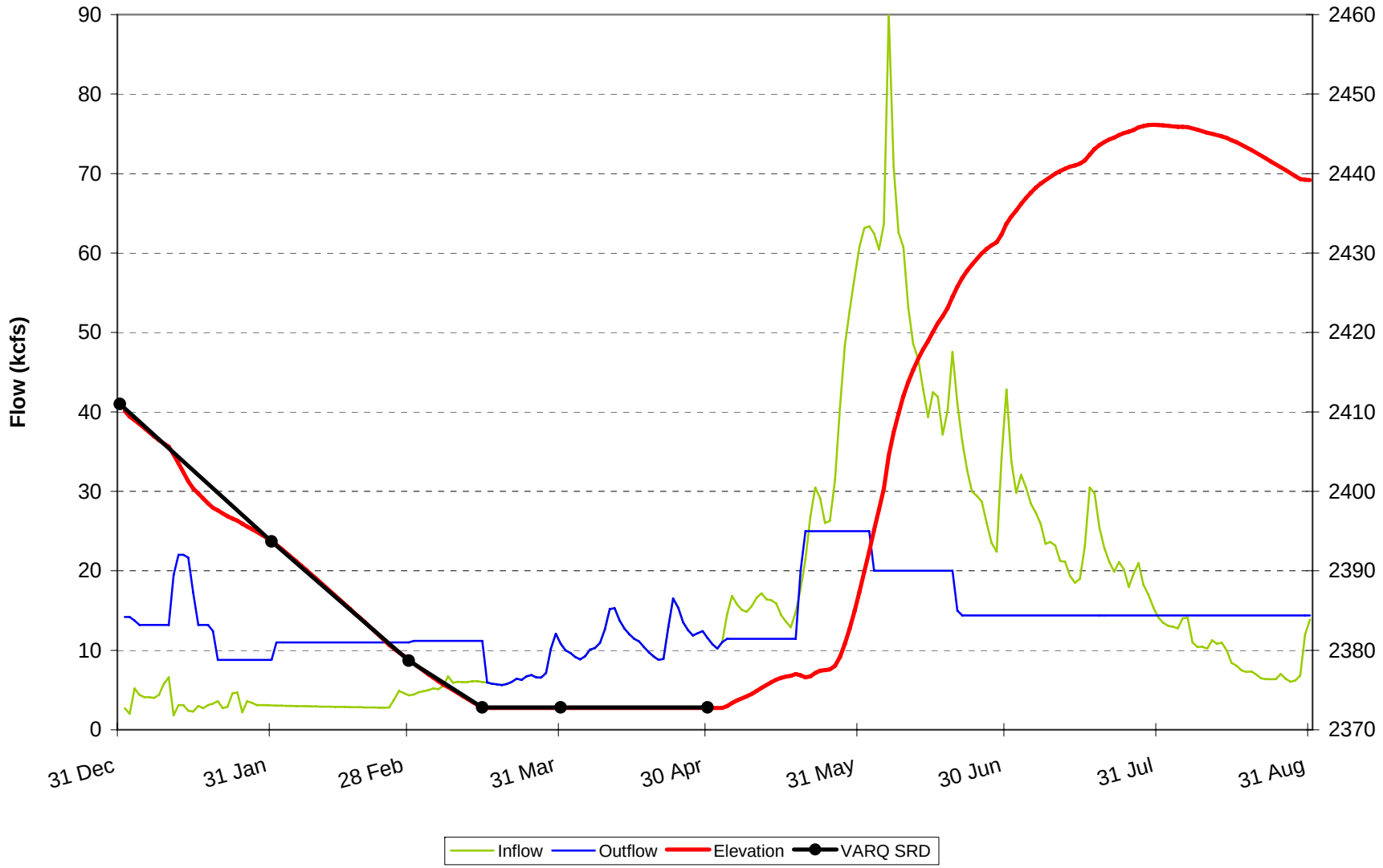
Reduced Flexibility in 2007

- *May be increased chance of double peak*
- *Potential for spill to meet required VARQ outflow*
- *Potential spill to meet VARQ outflow if a unit or transmission outage occurs*

ESP (1/23/07) INFLOWS USED STARTING 1/29/07

APR-AUG VOLUME=6.890 MAF

Libby Operations
Based on Jan Final Forecast
6.955 MAF



ESP (1/23/07) INFLOWS USED STARTING 1/29/07

APR-AUG VOLUME=6.589 MAF