BIGHORN LAKE (YELLOWTAIL DAM) ALLOCATIONS

Maximum Water Surface or Top of Surcharge Elev. 3660.00 (1,331,725 Acre - Feet)

Surcharge - 52,829 Acre - Feet

Top of Exclusive Flood Elev. 3657.00 (1,278,896 Acre - Feet)

Exclusive Flood Control - 258,323 Acre - Feet

Top of Joint Use Elev. 3640.00 (1,020,573 Acre - Feet)

Joint Use – 232,365 Acre - Feet

Top of Active Conservation Elev. 3614.00 (788,208 Acre - Feet)

Active Conservation - 318,298 Acre - Feet

Top of Inactive Conservation Elev. 3547.00 (469,910 Acre - Feet)

Inactive Conservation - 452,186 Acre - Feet

Top of Dead Elev. 3296.50 (17,724 Acre - Feet)

Dead – 17,724 Acre - Feet

Spillway Crest Elev. 3593.00

Powerplant Penstock Elev. 3450.00

Irrigation Outlet Elev. 3400.00

River Outlet Elev. 3300.0

Streambed Elev. 3166.0

Dam Crest Elev. 3660.0

Revised 10/28/2015
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Revised 10/28/2015
Water Year 2017 Review for Yellowtail Dam/Bighorn Lake
Mountain Snowpack

- Snowpack 166% Runoff 280%
- Snowpack 117% Runoff 151%
- Snowpack 109% Runoff 127%
- 144% 04%
- Runoff 192%
- Snowpack 142 % Runoff 204%
- Snowpack 144%
- Runoff 280%
Mountain Snowpack

**April-July Runoff**
- 1997: 1,957 KAF
- 2011: 2,572 KAF
- 2017: 2,953 KAF
- Avg: 1,093 KAF
May 3: Spillway Release 7,000 cfs
Bighorn Lake Elevation

Elevation (feet)

Max
90 Percentile
70 Percentile
30 Percentile
10 Percentile
Min
2017
50 Percentile
April 27: Elevation 3606.7’: 2’ Head on Gates
Yellowtail Spillway Gates, Piers, and Hoist Cables (Upstream Side)
March 26, 2003
Water Year 2018
Fall and Winter Outlook
Winter Release Calculation

**Elevation**  3638.4  -  1.6 feet below full pool
0.7 feet higher than last year

**Storage**  1,001,315 acre-feet:  112% of average
98% full

**Nov-Mar Gains**  279,650 acre-feet (930 cfs daily average)

**Boysen Winter**
**Release**  1,175 cfs

**Buffalo Bill Winter**
**Release**  640 cfs

**Yellowtail Winter**
**Release**  3,460 cfs
November Monthly Operating Plans
Maximum Probable Inflow Operations

- **Elevation (feet)**: 3600 to 3645
- **Flow (cfs)**: 0 to 12,000

**Legend**:
- Red bar: Maximum Probable Inflow
- Green bar: Actual Inflow

Summary:
- The graph shows the comparison between the maximum probable inflow and the actual inflow from November 2017 to November 2018.
- The probable inflow is consistently higher than the actual inflow, with significant peaks in June, July, and August 2018.
- The actual inflow is generally lower, with minor variations throughout the year.
Most, Minimum, and Maximum Probable Inflow Operations

River Flow (cfs)

Elevation (feet)
Questions and Comments