Bighorn Lake/Yellowtail Dam
Operations

November 12, 2014
Water Year 2014 Review
Mountain Snowpack

Snow Water Equivalent (inches)

- 134%
- 128%
- 109%

Oct Nov Dec Jan Feb Mar Apr May Jun Jul Aug Sep

Average 2014 2013

RECLAMATION
Bighorn Lake Operations 2014

Top of Joint Use: Elevation 3640.0 feet (1,020.6 kaf)
Top of Joint Use: Elevation 3640.0 feet (1,020.6 kaf)
## 2014 April-July Forecasts & Rule Curve Targets

<table>
<thead>
<tr>
<th>Date</th>
<th>Apr-Jul Forecast</th>
<th>% of Avg</th>
<th>Rule Curve Min Elev.</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jan. 1</td>
<td>1,143,200</td>
<td>107%</td>
<td>3613.3</td>
<td>5/06</td>
</tr>
<tr>
<td>Feb. 1</td>
<td>1,140,000</td>
<td>107%</td>
<td>3613.3</td>
<td>5/06</td>
</tr>
<tr>
<td>Mar. 1</td>
<td>1,646,700</td>
<td>154%</td>
<td>3606.8</td>
<td>5/16</td>
</tr>
<tr>
<td>April 1</td>
<td>1,960,800</td>
<td>183%</td>
<td>3600.4</td>
<td>5/18</td>
</tr>
<tr>
<td>May 1</td>
<td>1,952,400</td>
<td>183%</td>
<td>3603.8</td>
<td>5/18</td>
</tr>
<tr>
<td>June 1</td>
<td>1,633,384</td>
<td>153%</td>
<td>3619.2</td>
<td>6/01</td>
</tr>
<tr>
<td>Actual</td>
<td>1,724,900</td>
<td>161%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Top of Joint Use: Elevation 3640.0 feet (1,020.6 kaf)
Bighorn Lake Operations 2014

Top of Joint Use: Elevation 3640.0 feet (1,020.6 kaf)

- 3618.7'
- 3602.4'
- 3602.4'
- 3641.8'

- 8,470 cfs
- 8,500 cfs
- 7,000 cfs
- 4,500 cfs
- 2,660 cfs
- 2,500 cfs
- 1,500 cfs
- 6,160 cfs
- 6,000 cfs

- Oct-13
- Nov-13
- Dec-13
- Jan-14
- Feb-14
- Mar-14
- Apr-14
- May-14
- Jun-14
- Jul-14
- Aug-14
- Sep-14
- Oct-14

Flow (cfs)
Lake Elevation (feet)

Elevation
Inflow
River Release

RECLAMATION
Bighorn Lake Operations 2014

Top of Joint Use: Elevation 3640.0 feet (1,020.6 kaf)

Lake Elevation (feet)

Flow (cfs)

Elevation Inflow River Release

RECLAMATION
Water Year 2015
Fall and Winter Outlook
# Conditions on November 1, 2014

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Details</th>
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</thead>
<tbody>
<tr>
<td><strong>Elevation</strong></td>
<td>3637.5 - 2.5 feet below full pool</td>
</tr>
<tr>
<td></td>
<td>2.9 feet lower than last year</td>
</tr>
<tr>
<td><strong>Storage</strong></td>
<td>989,700 acre-feet: 111% of average</td>
</tr>
<tr>
<td></td>
<td>97% full</td>
</tr>
<tr>
<td><strong>Inflows</strong></td>
<td>2,200 cfs</td>
</tr>
<tr>
<td><strong>Outflow</strong></td>
<td>3,000 cfs</td>
</tr>
</tbody>
</table>
November through March Gains and Release

April-October Gain = 320,800 acre-feet

*Calculated November-March Gain = 268,900 acre-feet*

Upstream Reservoir Fall & Winter Releases =
  Boysen = 940 cfs
  Buffalo Bill = 365 cfs

End-of-October Storage = 989,700 acre-feet

Projected End-of-March Target Elevation = 3617

Calculated Fall & Winter Release for Yellowtail:
  River = 2,880 cfs
November through March Gains and Release

April-October Gain = 320,800 acre-feet

Calculated November-March Gain = 268,900 acre-feet

Upstream Reservoir Fall & Winter Releases =
  Boysen = 940 cfs
  Buffalo Bill = 365 cfs

End-of-October Storage = 989,700 acre-feet

Projected End-of-March Target Elevation = 3619

Calculated Fall & Winter Release for Yellowtail:
  River = 2,830 cfs
November Monthly Operating Plans
Most Probable Inflow Operations

Top of Joint Use: Elevation 3640.0 feet (1,020.6 kaf)
Most and Minimum Probable Inflow Operations

Top of Joint Use: Elevation 3640.0 feet (1,020.6 kaf)
Most and Maximum Probable Inflow Operations

Top of Joint Use: Elevation 3640.0 feet (1,020.6 kaf)
Most, Minimum, and Maximum Probable Inflow Operations

Top of Joint Use: Elevation 3640.0 feet (1,020.6 kaf)

Approximate Powerplant Capacity
Reclamation’s Internet Website

www.usbr.gov/gp/lakes_reservoirs/wareprts/main_menu.html

- near real-time data available through the HYDROMET data system
- summaries and plots of historical data
- annual reservoir operating plan publication
- monthly water supply reports
- project data
- snow plots
- links to related internet sites
Questions and Comments