Governor’s Drought Interagency Coordinating Committee

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Arizona Department of Water Resources

May 13, 2014
Unregulated Inflow into Lake Powell
Powell-Mead Storage and Percent Capacity

Values for Water Year 2014 are Projected. Unregulated inflow is based on the latest CBRFC forecast. Storage and percent capacity are based on the April 2014 24-Month Study.

1 Values for Water Year 2014 are projected. Unregulated inflow is based on the latest CBRFC forecast. Storage and percent capacity are based on the April 2014 24-Month Study.

2 Percentages at the top of the light blue bars represent percent of average unregulated inflow into Lake Powell for a given water year. Water years 1999-2011 are based on the 30-year average from 1971 to 2000. Water years 2012-2014 are based on the 30-year average from 1981-2010.

Source: United States Bureau of Reclamation
May 2014 April – July Forecast
Most Prob: 7.550 MAF

Source: United States Bureau of Reclamation
# Lake Powell & Lake Mead Operational Table

## Operational Tier Determinations for Water Year/Calendar Year 2014

### Lake Powell

<table>
<thead>
<tr>
<th>Elevation (feet)</th>
<th>Operation According to the Interim Guidelines</th>
<th>Live Storage (maf)¹</th>
</tr>
</thead>
<tbody>
<tr>
<td>3,700</td>
<td>Equalization Tier</td>
<td>24.3</td>
</tr>
<tr>
<td>3,635 - 3,670</td>
<td>Upper Elevation Balancing Tier (approx.)</td>
<td>15.6 - 19.3 (2008-2026)</td>
</tr>
<tr>
<td>3,575</td>
<td>Mid-Elevation Release Tier</td>
<td>3,573.69</td>
</tr>
<tr>
<td>3,525</td>
<td>Lower Elevation Balancing Tier</td>
<td>5.9</td>
</tr>
<tr>
<td>3,490</td>
<td></td>
<td>4.0</td>
</tr>
<tr>
<td>3,370</td>
<td></td>
<td>0</td>
</tr>
</tbody>
</table>

### Lake Mead

<table>
<thead>
<tr>
<th>Elevation (feet)</th>
<th>Operation According to the Interim Guidelines</th>
<th>Live Storage (maf)¹</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,220</td>
<td>Flood Control Surplus or Quantified Surplus Condition Deliver &gt; 7.5 maf</td>
<td>25.9</td>
</tr>
<tr>
<td>1,200</td>
<td>Domestic Surplus or ICS Surplus Condition Deliver &gt; 7.5 maf</td>
<td>22.9 (approx.)²</td>
</tr>
<tr>
<td>1,146</td>
<td>Normal or ICS Surplus Condition Deliver ≥ 7.5 maf</td>
<td>16.9</td>
</tr>
<tr>
<td>1,105</td>
<td>1/1/14 Projection</td>
<td>11.9</td>
</tr>
<tr>
<td>1,075</td>
<td>Shortage Condition Deliver 7.167³ maf</td>
<td>9.4</td>
</tr>
<tr>
<td>1,050</td>
<td>Shortage Condition Deliver 7.083³ maf</td>
<td>7.5</td>
</tr>
<tr>
<td>1,025</td>
<td>Shortage Condition Deliver 7.0⁴ maf</td>
<td>5.8</td>
</tr>
<tr>
<td>1,000</td>
<td>Further measures may be undertaken⁷</td>
<td>4.3</td>
</tr>
<tr>
<td>0</td>
<td></td>
<td>0</td>
</tr>
</tbody>
</table>

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Diagram not to scale

¹ Acronyms for million acre-feet

² This elevation is shown as approximate as it is determined each year by considering several factors including Lake Powell and Lake Mead storage, projected Upper Basin and Lower Basin demands, and an assumed inflow.

³ Subject to April adjustments which may result in a release according to the Equalization Tier

⁴ Of which 2.48 maf is apportioned to Arizona, 4.4 maf to California, and 0.287 maf to Nevada

⁵ Of which 2.40 maf is apportioned to Arizona, 4.4 maf to California, and 0.263 maf to Nevada

⁶ Of which 2.32 maf is apportioned to Arizona, 4.4 maf to California, and 0.250 maf to Nevada

⁷ Whenever Lake Mead is below elevation 1,025 feet, the Secretary shall consider whether hydrologic conditions together with anticipated deliveries to the Lower Division States and Mexico is likely to cause the elevation at Lake Mead to fall below 1,000 feet. Such consideration, in consultation with the Basin States, may result in the undertaking of further measures, consistent with applicable Federal law.

Source: United States Bureau of Reclamation
Potential For Shortages

• 15% probability of 7.48 MAF release from Lake Powell in 2016

• 23% probability of Tier 1 shortage in the Lower Basin in 2016 (with a 9.00 MAF release in water year 2015)

• 51% probability of Tier 1 shortage in the Lower Basin in 2017 (with 7.48 MAF release in water year 2014 and a 9.00 MAF release in water year 2015)

Based on Reclamation’s April 2014 CRSS Model Run
2016 Level 1 Shortage

- **Ag Pool (Shorted):** 245,000
  - **Ag Pool:** 155,000
  - **NIA Priority:** 215,000
  - **Indian Priority:** 317,000
  - **M&I Priority:** 465,000

- **Other Excess (Shorted):** 75,000

- **Priority 3:** 68,400
Lake Powell End of Month Elevations
Historic and Projected based on April modeling

Source: United States Bureau of Reclamation
Lake Mead End of Month Elevations
Projections from April 2014 24-Month Study Inflow Scenarios

Source: United States Bureau of Reclamation

1,078.82 Feet
Colorado River Basin Water Supply Outlook

Total Reservoir System Contents:
28.1 MAF or 47%
(As of May 5, 2014)

Total Reservoir System Contents Last Year:
31.1 MAF or 52%

This is a change of –3.0 MAF

Source: United States Bureau of Reclamation
LAKE POWELL
Capacity – 24.5 MAF
05/05/2014 - 40% full
Contents 9.92 MAF
Elevation – 3,579’

Source: United States Bureau of Reclamation
Colorado River Basin
Water Supply Outlook

LAKE MEAD
Capacity - 26 MAF
05/05/2014 - 43% full
Contents – 11.19 MAF
Elevation – 1,094’

Source: United States Bureau of Reclamation
Questions?