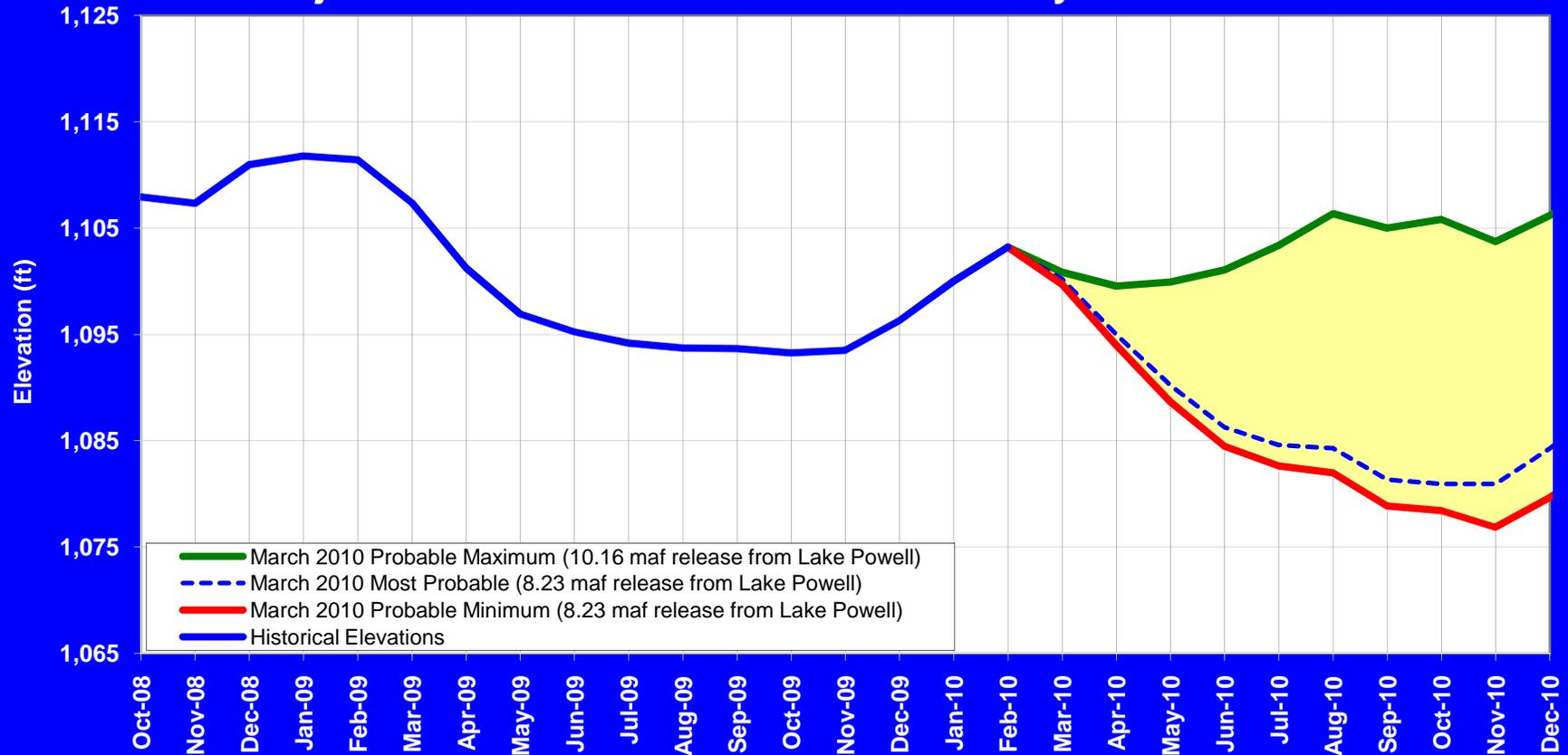


## Lake Mead End of Month Elevation Projections from March 2010 24-Month Study Inflow Scenarios\*



The projected elevations in this graph are based on reservoir modeling under three possible inflow scenarios: 1) The minimum probable inflow scenario reflects a dry hydrologic condition which statistically would be exceeded 90% of the time; 2) the most probable inflow scenario reflects a median inflow condition which statistically would be exceeded 50% of the time; and 3) the maximum probable inflow scenario reflects a wet hydrologic condition which statistically would be exceeded only 10% of the time. There is approximately an 80% probability that the future elevation will fall inside the shaded region. There are possible inflow scenarios that would result in reservoir elevations falling outside the range indicated in this graph.

\*See the attached page for a discussion on how Lake Powell releases were determined for each of these three inflow scenarios.

## **March 2010 Lake Mead End of Month Elevation Chart**

### **Explanation of projected Lake Powell water year releases and Lake Mead elevations in 2010**

#### March 2010 Most Probable Inflow Scenario

The official March 2010 24-Month Study (based on the Most Probable inflow scenario), with a water year release volume from Lake Powell of 8.23 million acre-feet (maf), projects that the Lake Powell end of water year 2010 elevation will be 3,631.88 feet above sea level, below the 2010 Equalization Elevation of 3,642 feet. For this reason, the March 2010 24-Month Study projects that an April adjustment to the Equalization Tier in 2010 is not likely to occur under the currently forecasted most probable hydrologic conditions and the water year release volume from Lake Powell is projected to be 8.23 maf.

#### March 2010 Probable Minimum Inflow Scenario

With a Lake Powell water year release volume of 8.23 maf, and probable minimum side inflows between Glen Canyon Dam and Lake Mead, the March 2010 Probable Minimum inflow scenario resulted in a projected Lake Mead elevation above 1,075 feet on September 30, 2010. The Interim Guidelines provide for an April adjustment to Lake Powell operations when the April 24-Month Study projects the Lake Mead elevation to be at or below 1,075 feet on September 30. Under this month's Probable Minimum inflow scenario, however, the Lake Mead end of water year 2010 elevation is projected to be 1,078.86 feet and the annual release from Glen Canyon Dam would remain 8.23 maf.

#### March 2010 Probable Maximum Inflow Scenario

With a Lake Powell water year release volume of 8.23 maf, the March 2010 Probable Maximum inflow scenario projects Lake Powell's 2010 end of water year elevation to be above the 2010 Equalization Elevation of 3,642 feet. Pursuant to the Interim Guidelines, the Probable Maximum inflow scenario projects an April adjustment to the Equalization Tier in 2010. Under this scenario, the annual release from Glen Canyon Dam is projected to be 10.16 maf.

Basin hydrology can vary significantly through the winter and there is uncertainty in forecasting snow pack conditions. An April adjustment to the Equalization Tier is not likely unless forecasted runoff conditions improve significantly by April 1. Reclamation estimates that an April adjustment to the Equalization Tier could only occur if the 2010 April-July inflow forecast volume were to increase by approximately 1.2 maf above the current forecast of 5.4 maf. In the past 31 years, only once has the forecast increased by at least this volume from one month to the next. For this reason, Reclamation estimates the probability of an April adjustment to the Equalization Tier in 2010 to be approximately 3 percent.