Glen Canyon Dam Adaptive Management Work Group
Agenda Item Information
August 29-30, 2007

Agenda Item

Basin Hydrology

Action Requested

√ Information item only; we will answer questions but no action is requested.

Presenter

Heather Patno, Regional Hydrologist, Upper Colorado Region, Bureau of Reclamation

Previous Action Taken

√ N/A

Relevant Science

√ N/A

Background Information

The presentation is intended to provide pertinent information to AMWG members on the hydrology of the Upper Colorado River Basin and projected reservoir operations at Lake Powell/Glen Canyon Dam. Such information is provided to assist the AMWG in developing recommendations to the Secretary on the operation of Glen Canyon Dam, particularly when such recommendations are near-term in nature.

The presentation will cover current reservoir storage conditions in the Upper Colorado River Basin and drought status. The presentation will discuss the exceptional precipitation events that occurred in the Four Corners region in October 2006 and how it applies to the current reservoir storage based on 2007 hydrology. The forecast will be applied to projected reservoir storage conditions in the Upper Colorado River Basin and Glen Canyon Dam operations for 2008. The presentation will also discuss the probability of equalization releases (releases greater than 8.23 million acre-feet) from Lake Powell in 2008 and 2009.

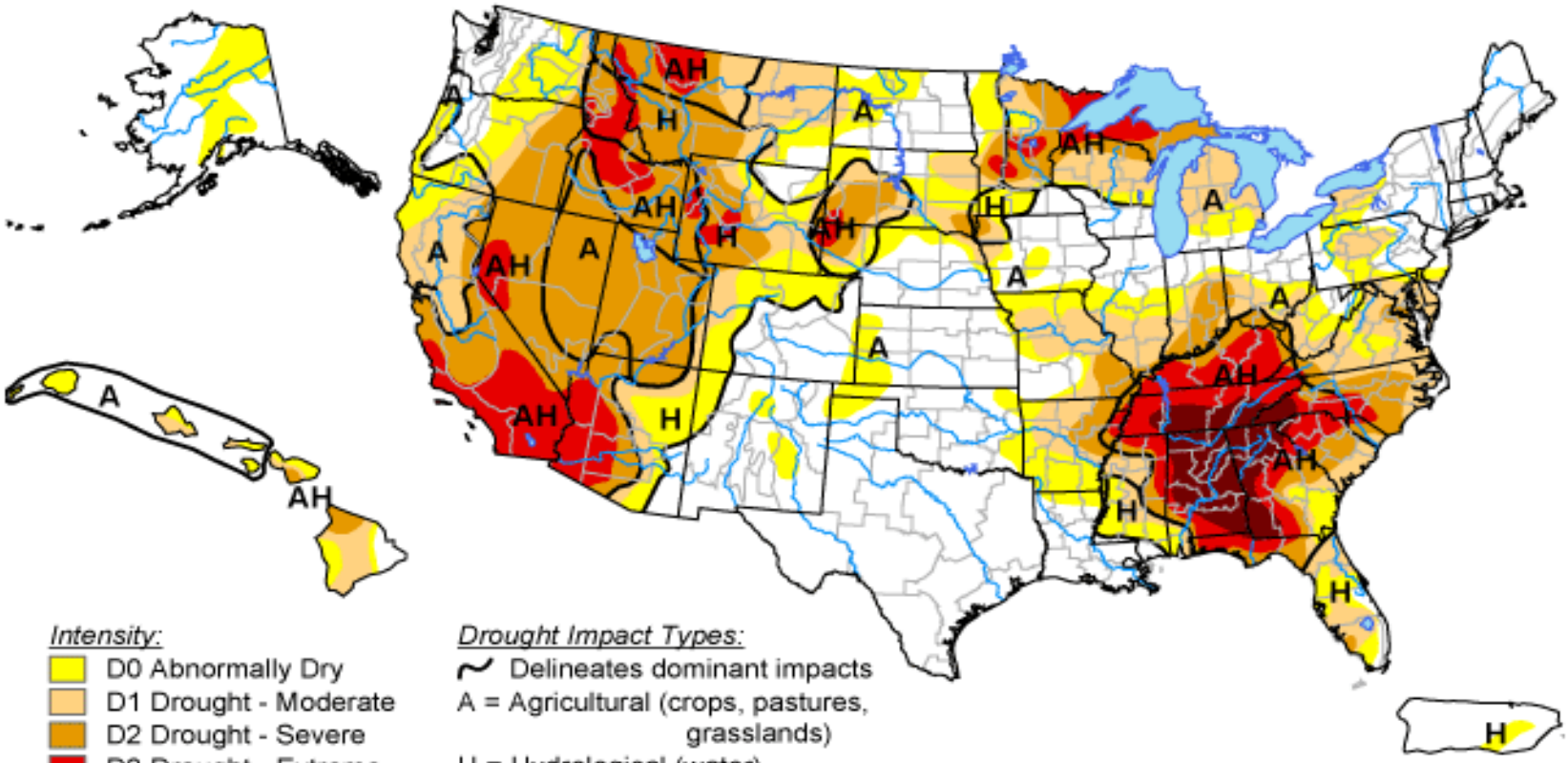
RECLAMATION
Managing Water in the West

Upper Basin Hydrology And Operations

Adaptive Management Work Group
August 30, 2007
Flagstaff, Arizona

U.S. Drought Monitor

August 21, 2007
Valid 8 a.m. EDT



Intensity:
- D0 Abnormally Dry
- D1 Drought - Moderate
- D2 Drought - Severe
- D3 Drought - Extreme
- D4 Drought - Exceptional

Drought Impact Types:
- Delineates dominant impacts
- A = Agricultural (crops, pastures, grasslands)
- H = Hydrological (water)

The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements.

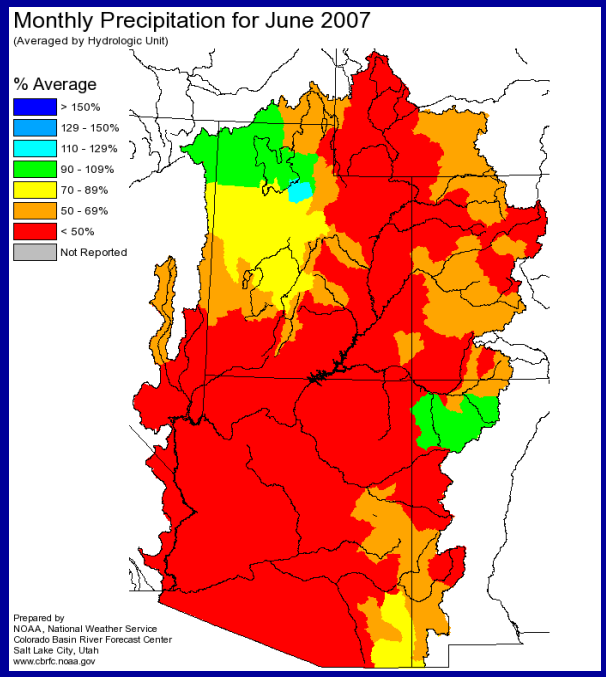
http://drought.unl.edu/dm

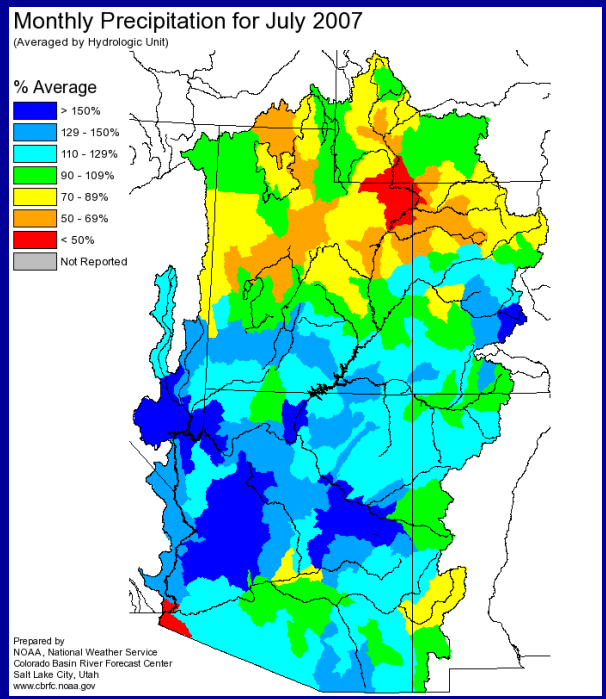
USDA National Drought Mitigation Center

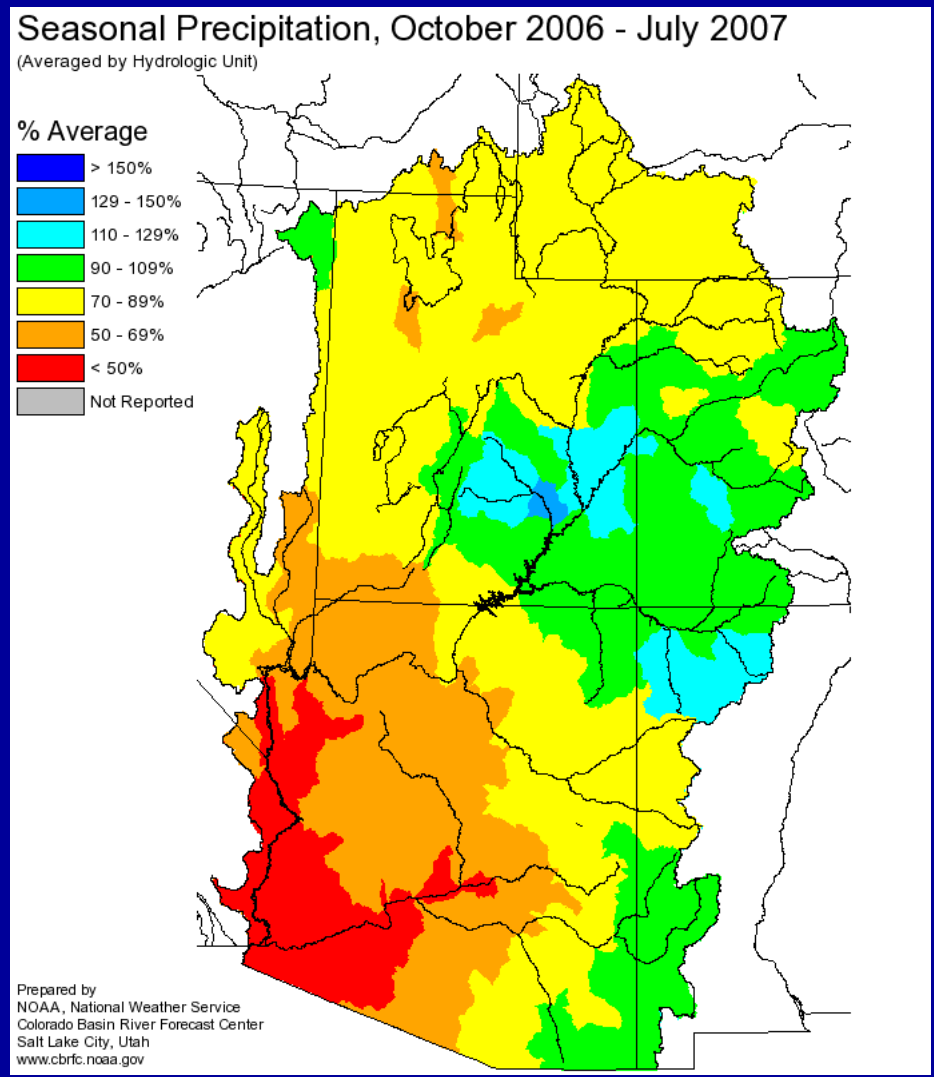
Released Thursday, August 23, 2007

Author: Richard Heim/Jay Lawrimore/Liz Love-Brotak, NOAA/NESDIS/NCDC

RECLAMATION

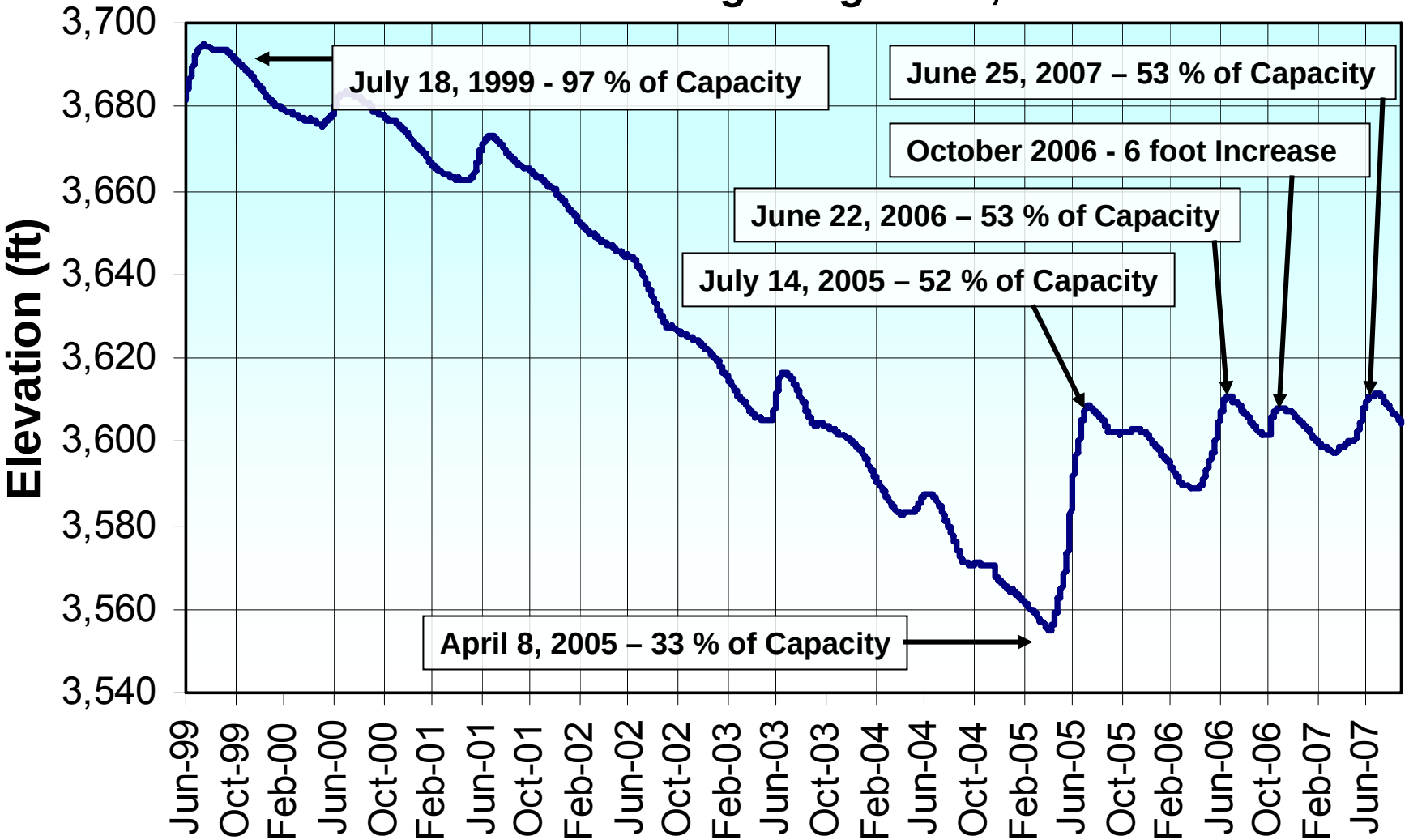






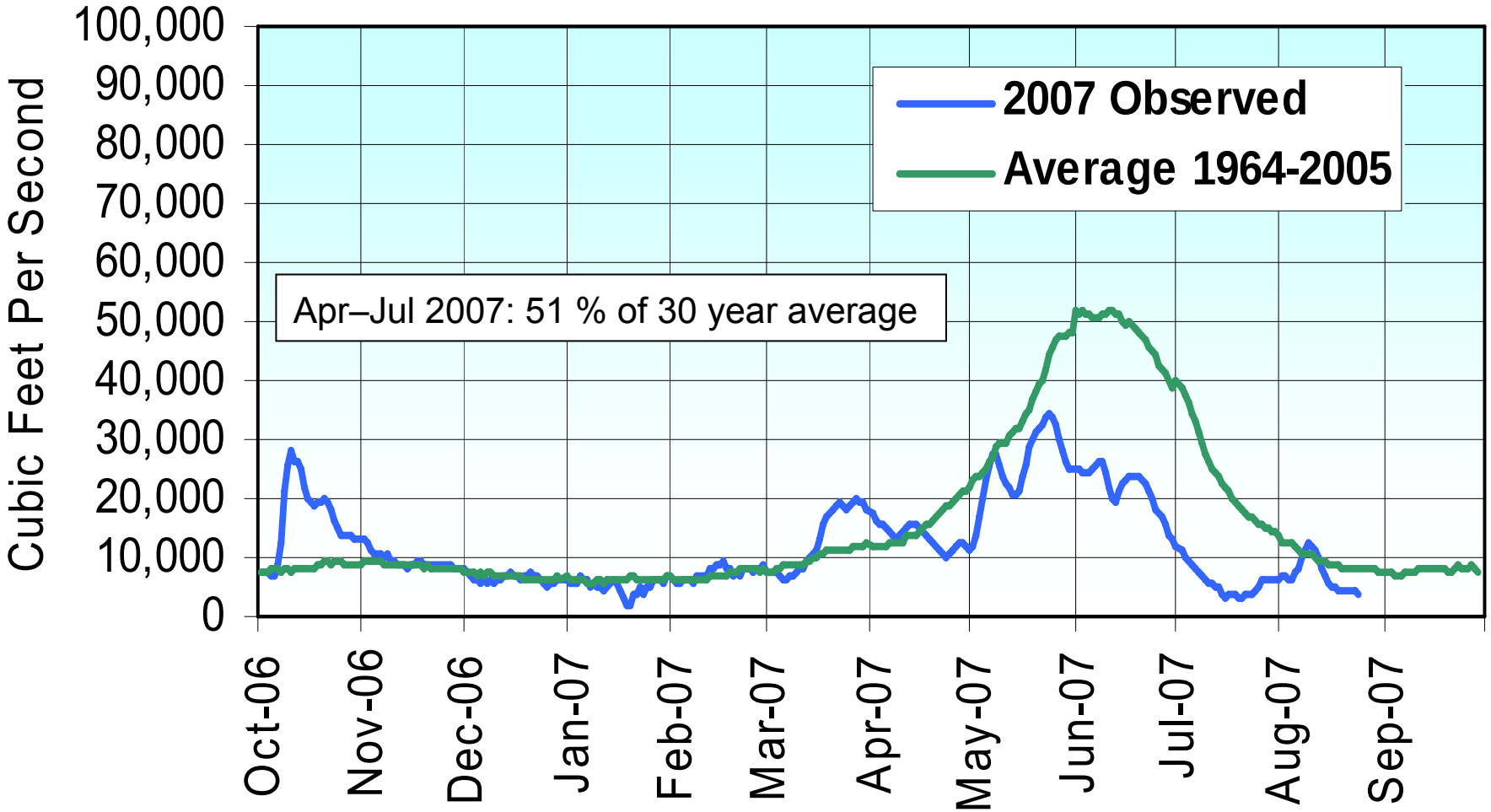
RECLAMATION

Lake Powell Water Surface Elevations
October 1998 through August 24, 2007



RECLAMATION

Lake Powell Unregulated Inflow
Water year 2007



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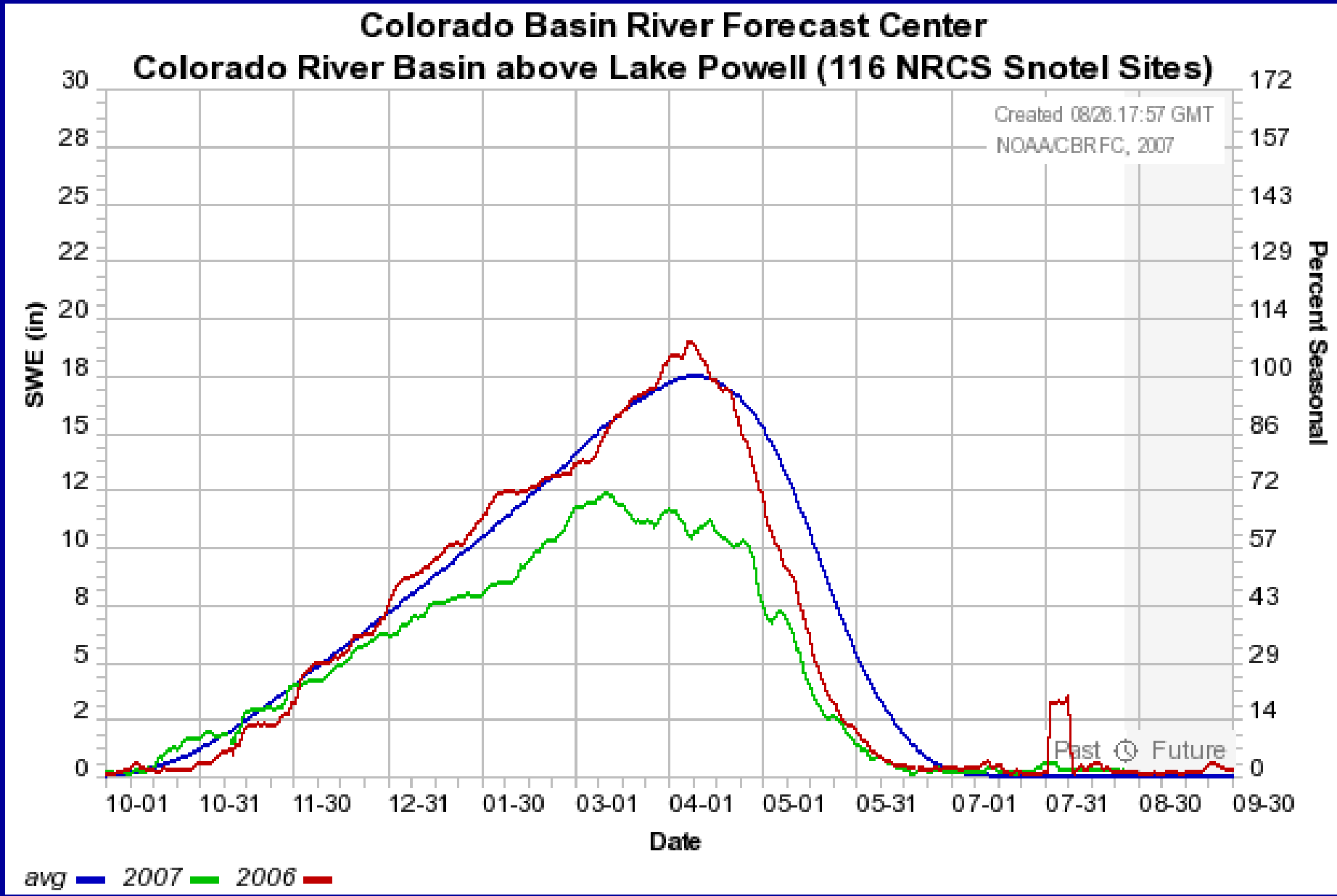


August 26, 2006

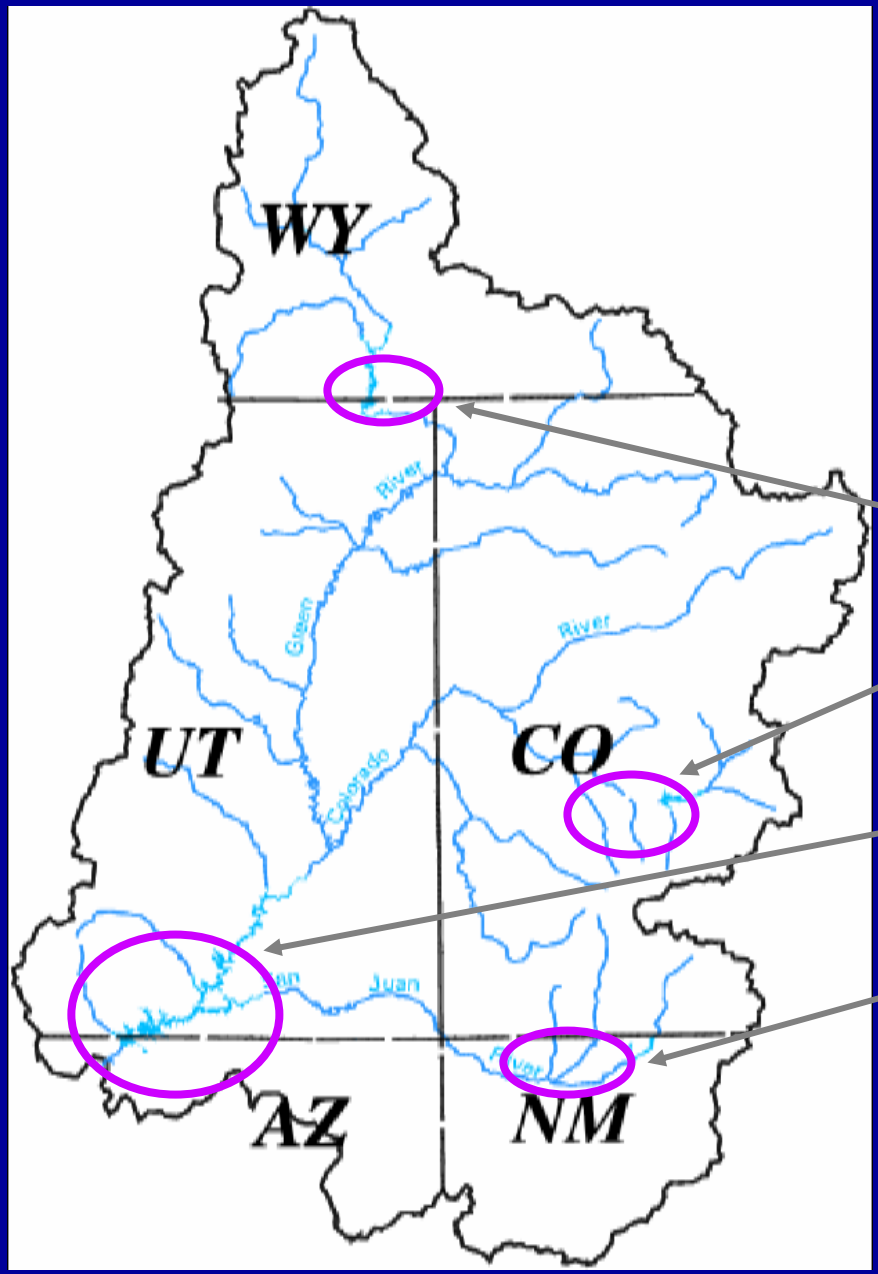
RECLAMATION

Lowest Consecutive Years of Natural Flow Lees Ferry, Arizona (average is 15.0 maf)

1906-2006

Consecutive Years	Driest Period (Natural flow)
2	2002-2003 (8.2 maf)
3	2002-2004 (8.8 maf)
4	2001-2004 (9.4 maf)
5	2000-2004 (9.7 maf)
6	1999-2004 (10.9 maf)
7	2000-2006 (11.2 maf)
8	1954-1961 (12.1 maf)*

* With an average or below average year in 2007, this will be replaced by 2000-2007



Projected CRSP Storage

September 30, 2007

(Percent of Live Capacity)

Based on August 2007 Final Forecast

Flaming Gorge — 83%

Blue Mesa — 76%

Lake Powell — 49%

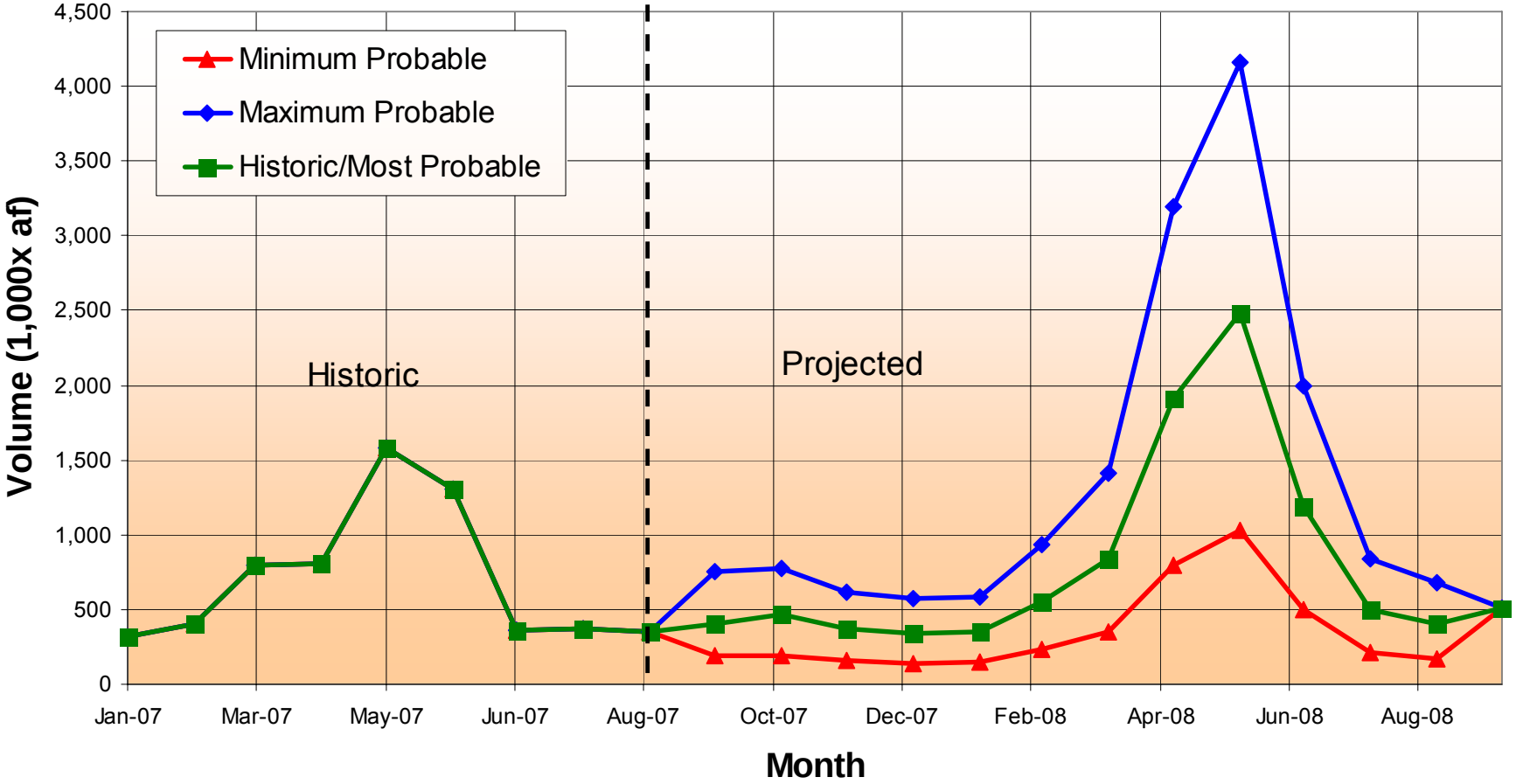
Navajo — 89%

RECLAMATION

Annual Operating Plan
Lake Powell Inflow Scenarios

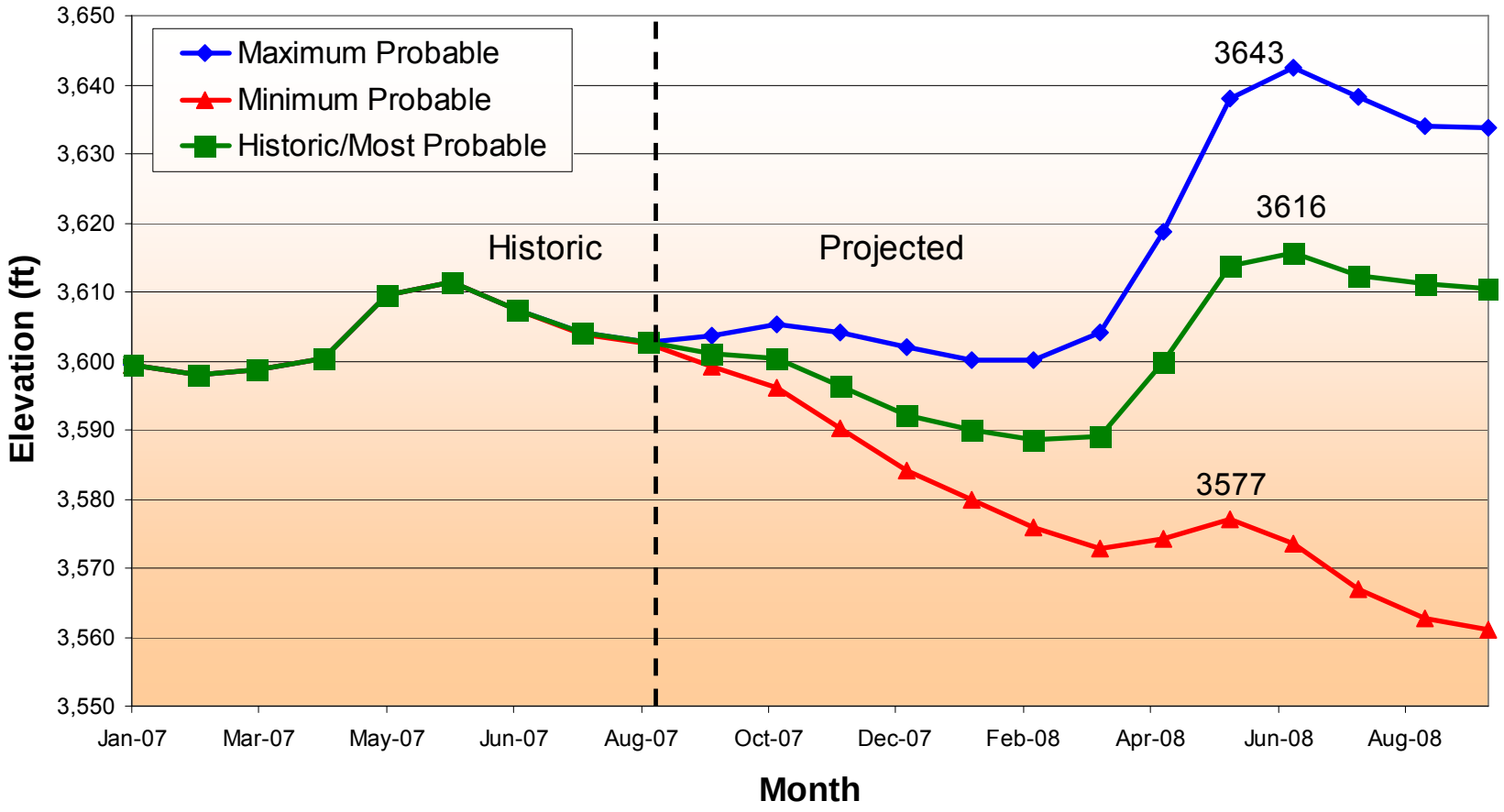
Scenario	2007 AOP WY 2007	2008 AOP WY 2008 Developed August 2008
Minimum Probable	4.80 maf (40 %)	4.10 maf (34 %)
Most Probable	10.93 maf (91 %)	9.81 maf (81 %)
Maximum Probable	19.00 maf (158 %)	16.50 maf (137 %)

Lake Powell
Unregulated Inflow Volumes
Based on August, 2007 Inflow Projections



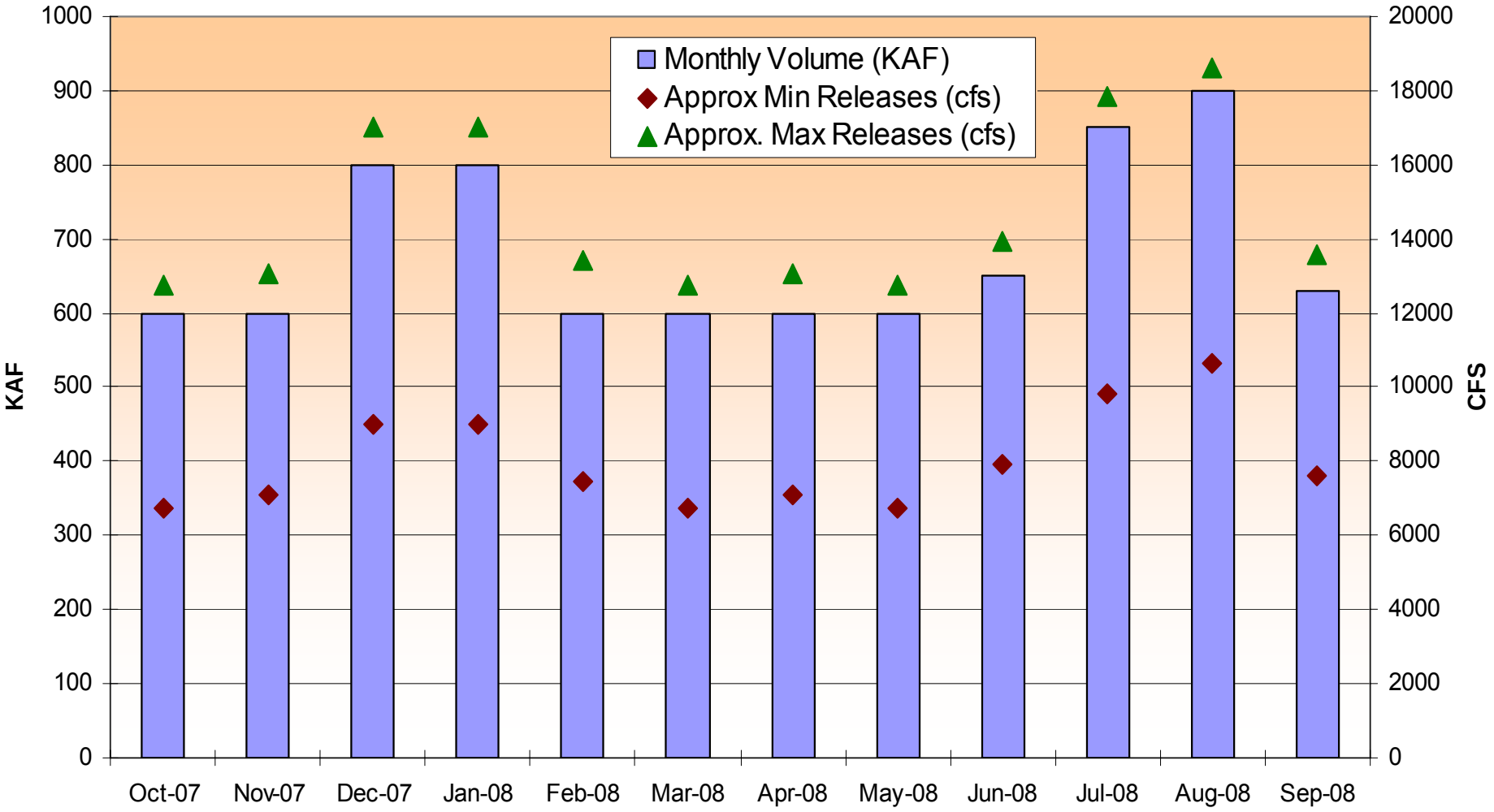
RECLAMATION

Lake Powell
EOM Elevation
Based on August, 2007 Inflow Projections



RECLAMATION

WY 2008 Scheduled Releases from Lake Powell



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