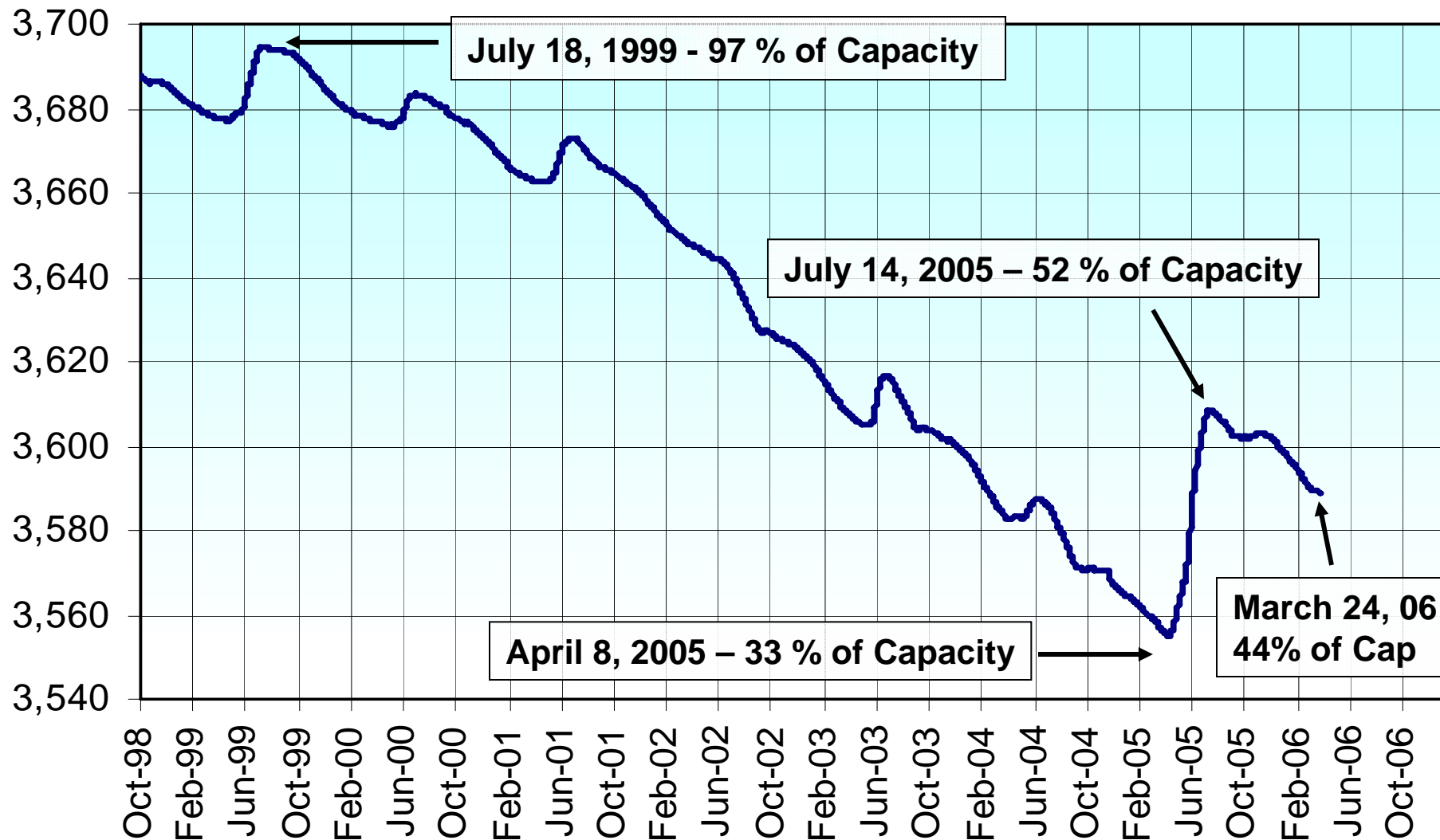


**RECLAMATION**  
*Managing Water in the West*

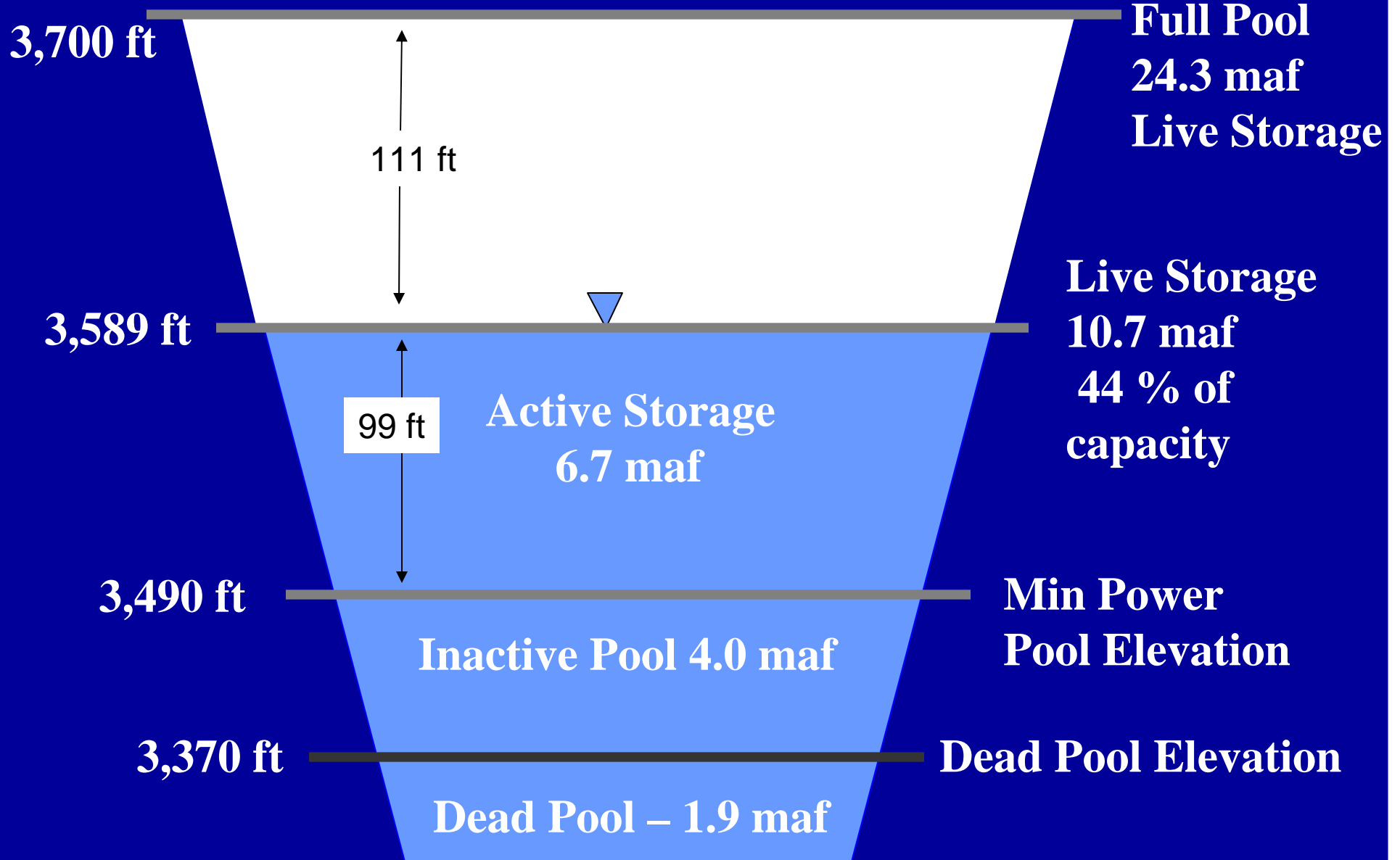
**Upper Basin Hydrology  
And  
Glen Canyon Dam  
Operations**

**Guides Training Seminar  
March 25, 2006  
Marble Canyon, Arizona**

# Lake Powell Water Surface Elevations October 1998 through March 24, 2006



# Lake Powell Capacity

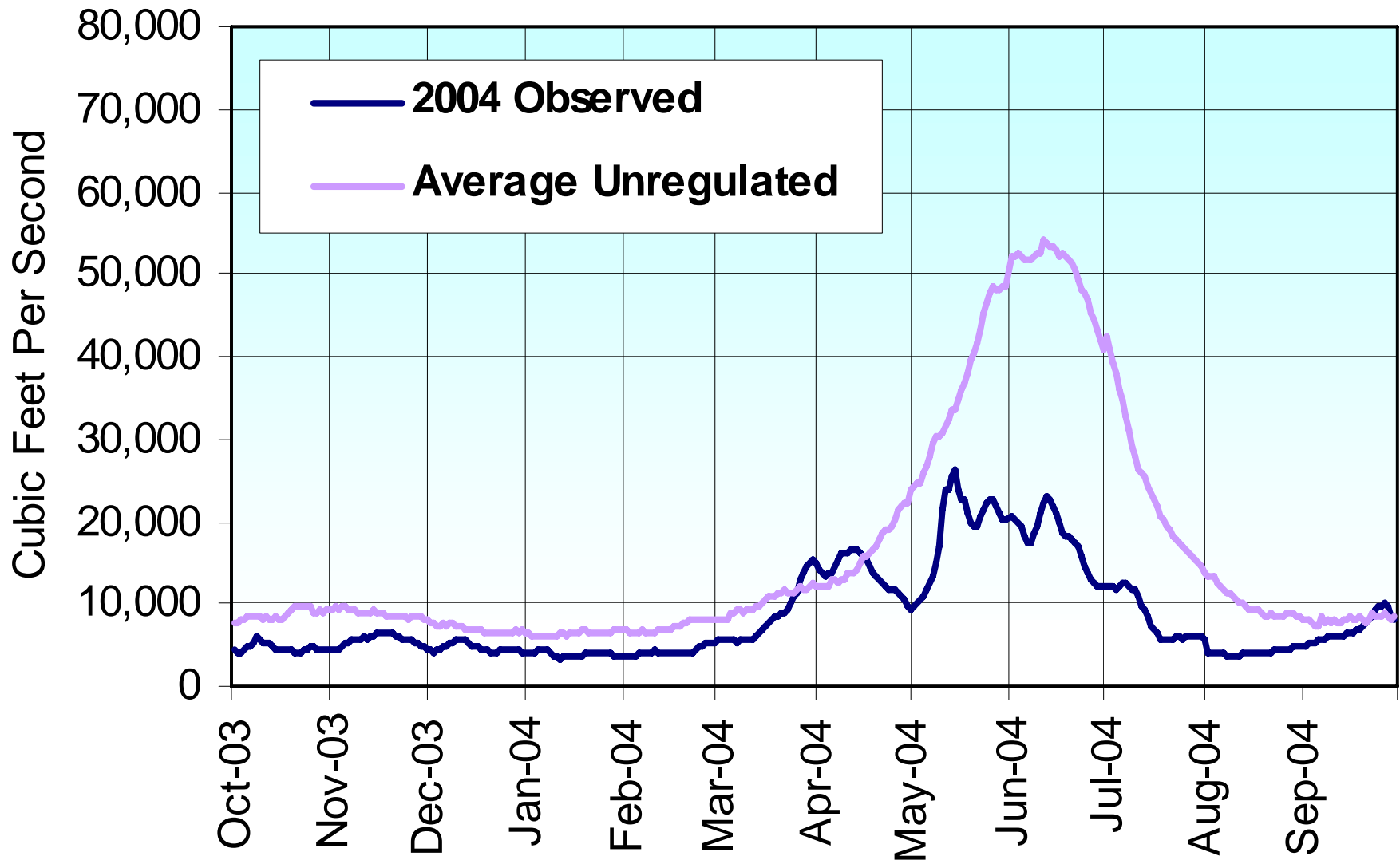


Not to scale

March 24, 2005

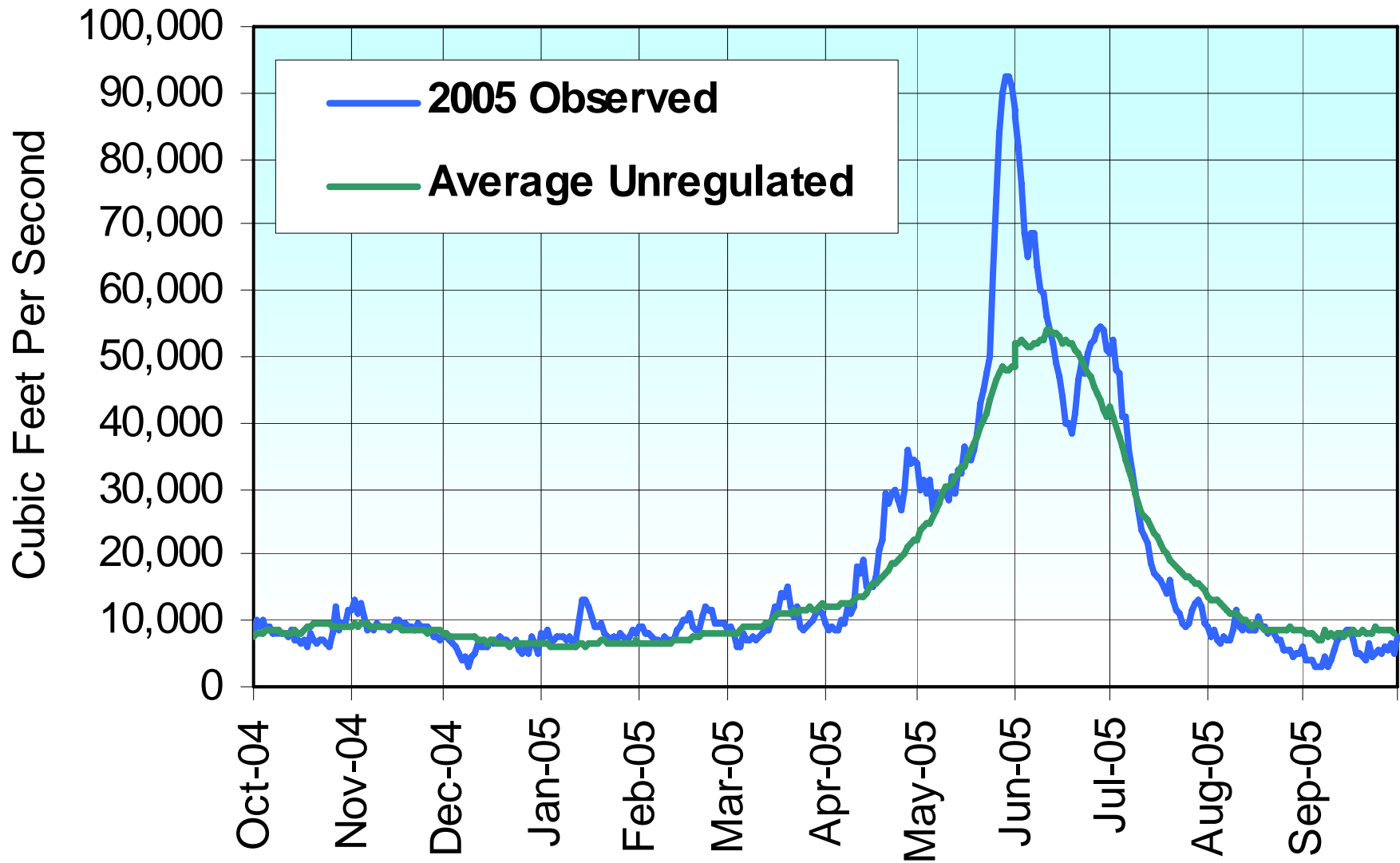
**RECLAMATION**

## Lake Powell Unregulated Inflow Water year 2004



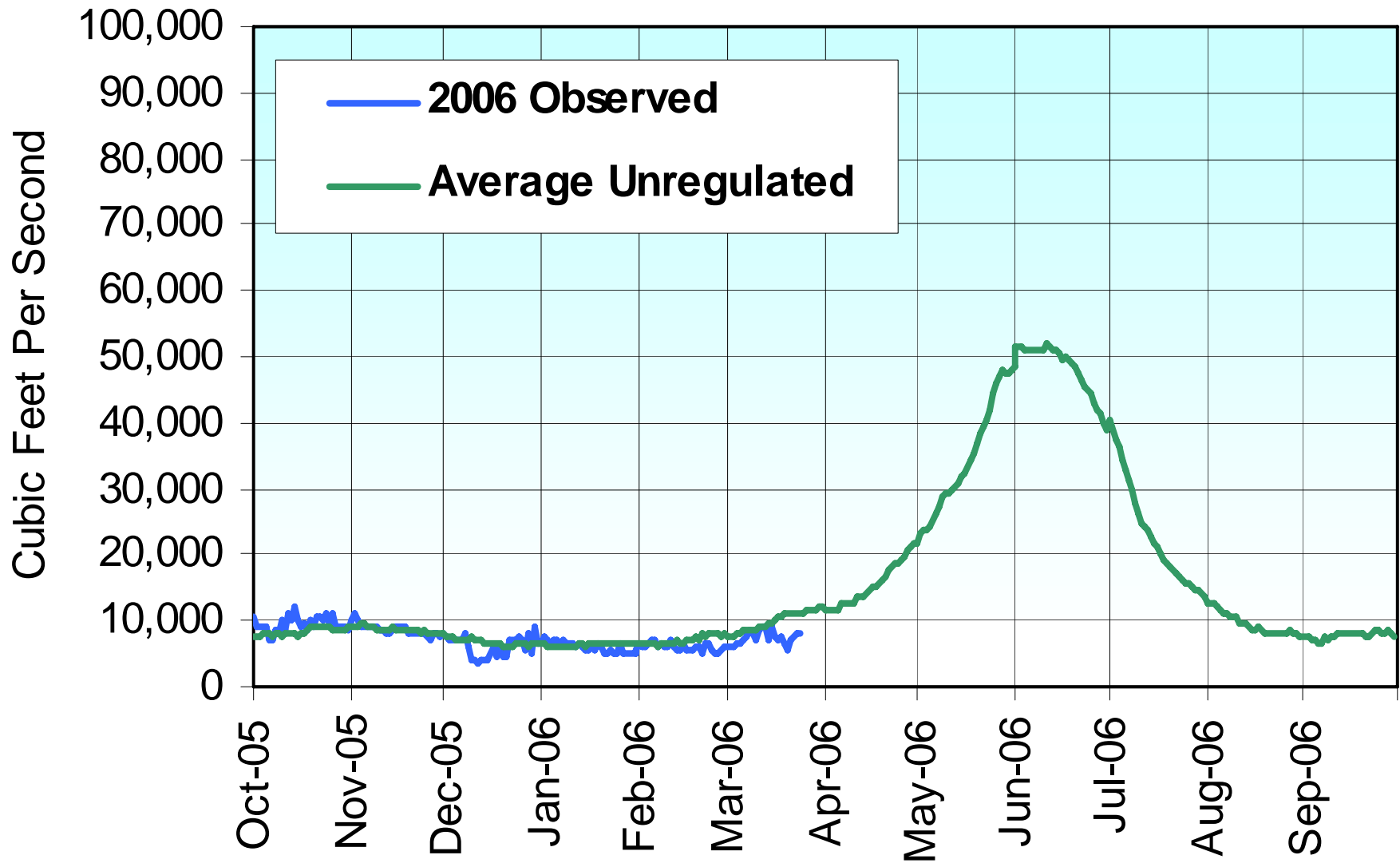
**RECLAMATION**

## Lake Powell Unregulated Inflow Water year 2005



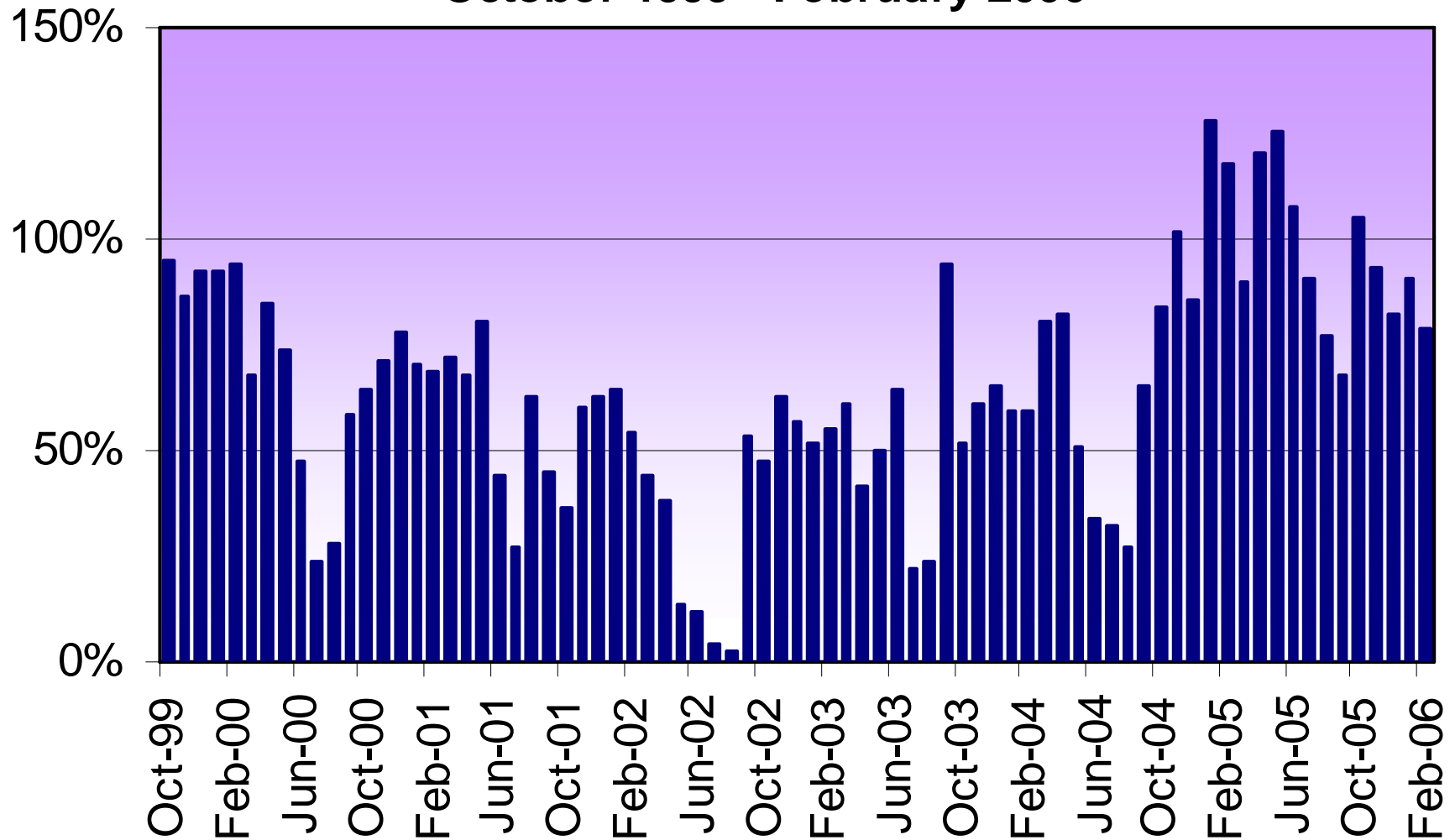
RECLAMATION

## Lake Powell Unregulated Inflow Water year 2006



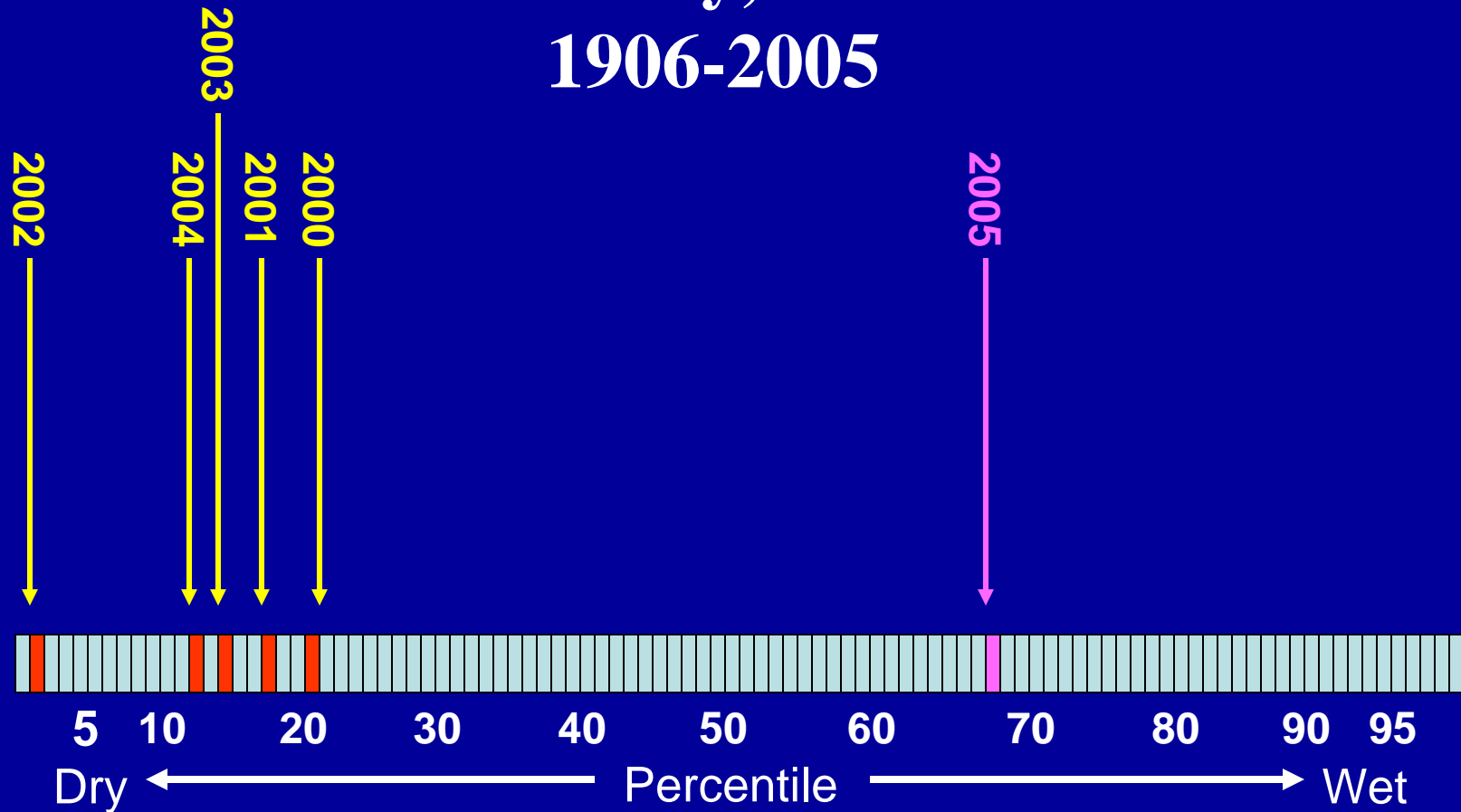
**RECLAMATION**

# Unregulated Inflow to Lake Powell as a Percentage of Average October 1999 - February 2006



RECLAMATION

# 100 Years of Natural Flow Lees Ferry, Arizona 1906-2005



Note: 2004 and 2005 are estimated values

RECLAMATION



# Lowest Consecutive Years of Natural Flow Lees Ferry, Arizona (average is 15.1 maf) 1906-2005

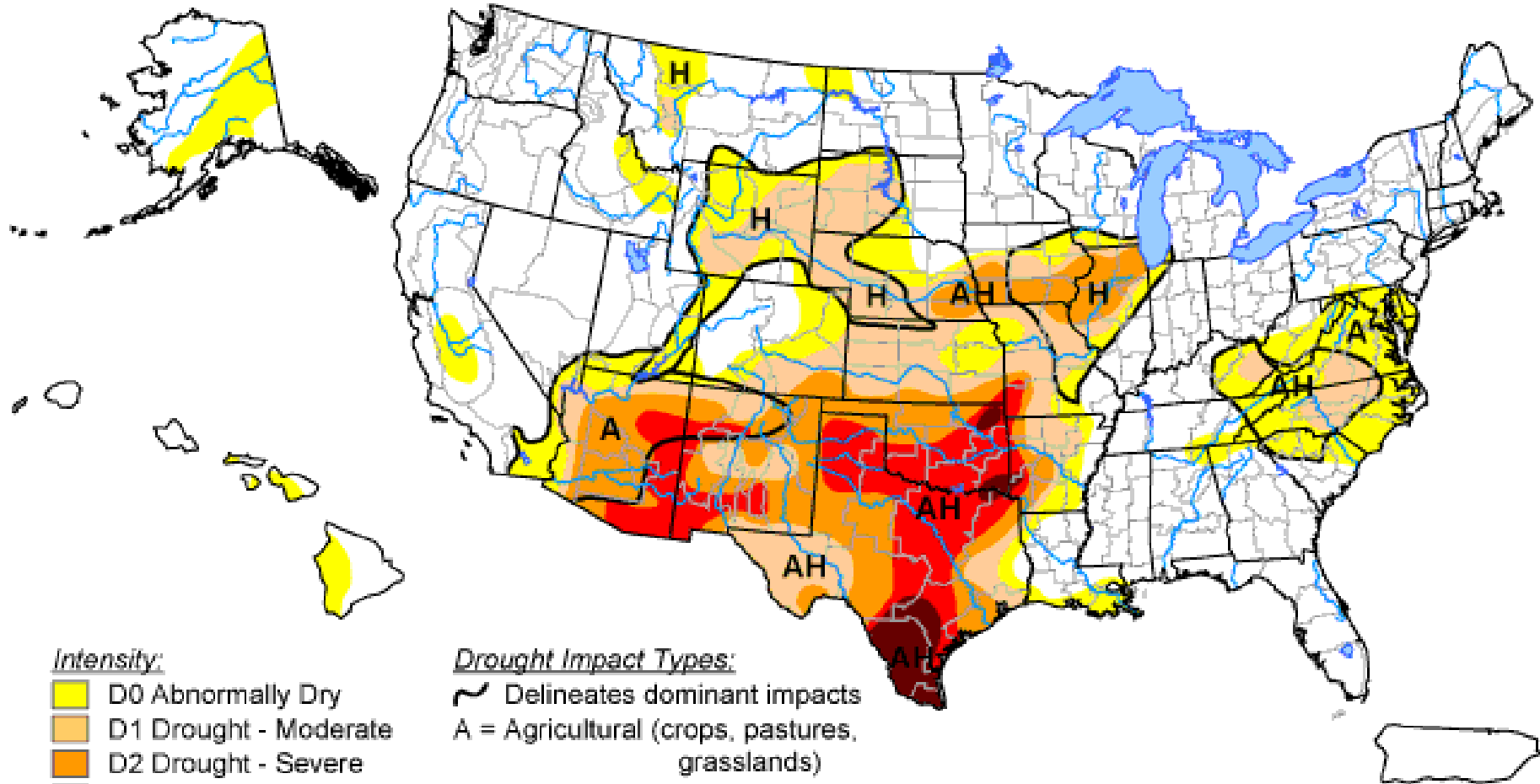
Consecutive Years	Driest Period (Natural flow)
2	2002-2003 (8.2 maf)
3	2002-2004 (8.8 maf)
4	2001-2004 (9.4 maf)
5	2000-2004 (9.7 maf)
6	1999-2004 (10.9 maf)
7	1998-2004 (11.8 maf)
8	1954-1961 (12.1 maf)*

\* With a below average year in 2006, this could be replaced by 1999-2006






**RECLAMATION**

# U.S. Drought Monitor


March 14, 2006  
Valid 7 a.m. EST



Intensity:

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

Drought Impact Types:

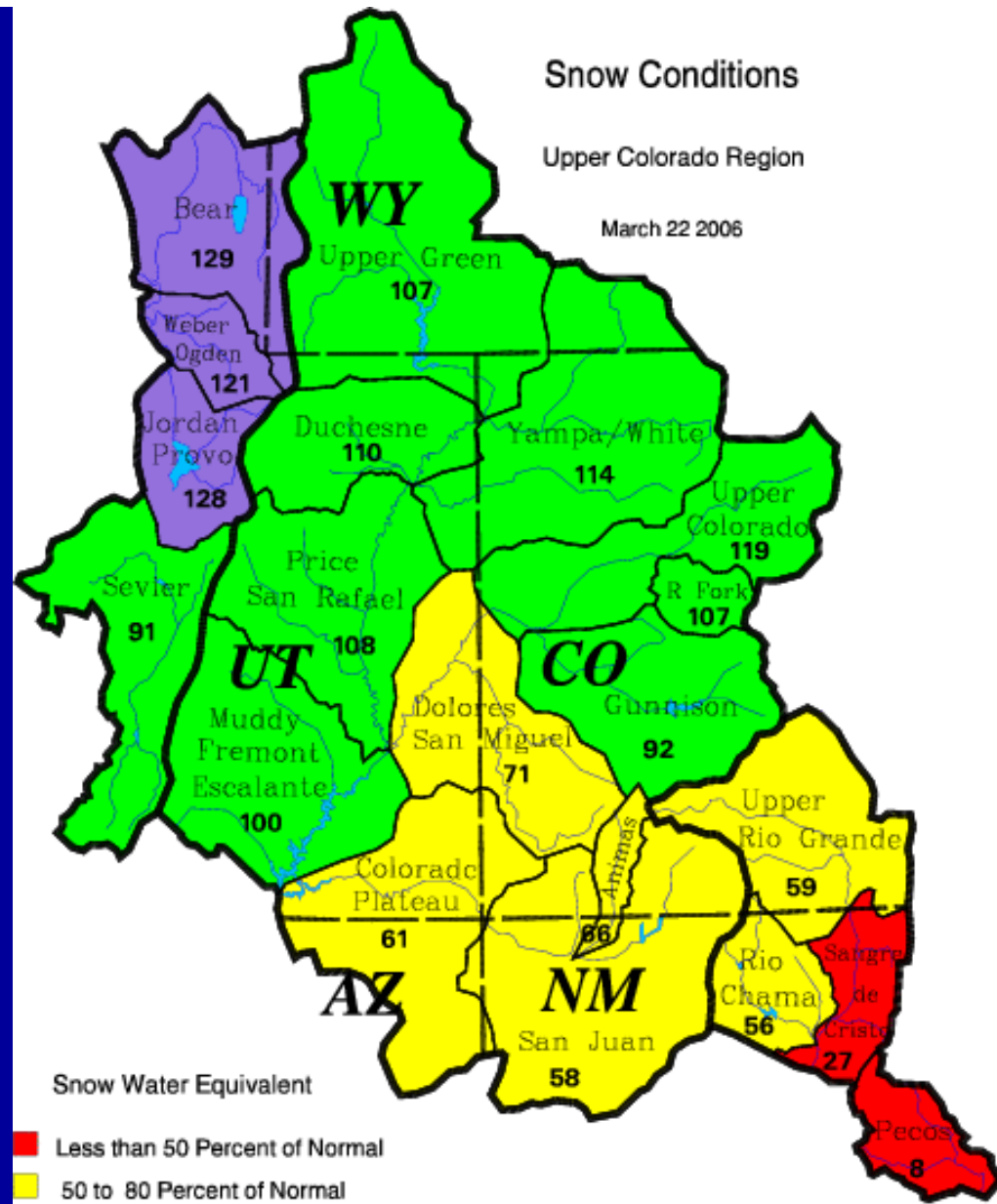
-  Delineates dominant impacts
- A = Agricultural (crops, pastures, grasslands)
- H = Hydrological (water)

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

<http://drought.unl.edu/dm>



Released Thursday, March 16, 2006  
Author: Rich Tinker, CPC/NCEP/NWS/NOAA



- Snow Water Equivalent**
- Less than 50 Percent of Normal
  - 50 to 80 Percent of Normal
  - 80 to 120 Percent of Normal
  - 120 to 150 Percent of Normal
  - Greater than 150 Percent of Normal

Data Provided by the Natural Resource Conservation Service

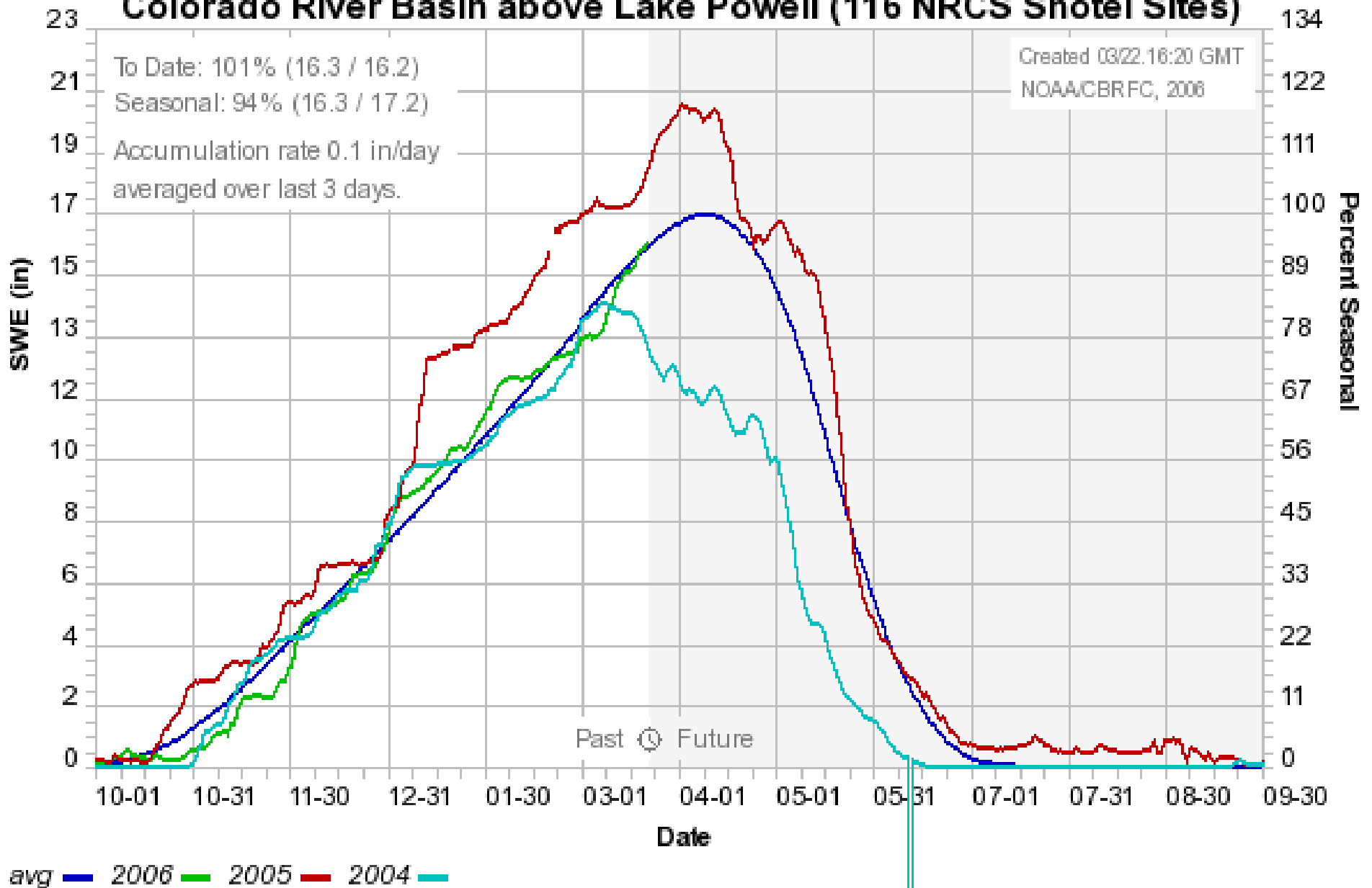
Upper Colorado  
**GIS**  
Region

Basinwide  
Snowpack  
in the  
Upper  
Colorado  
River Basin  
Is Currently  
99 %  
of Average  
(March 22, 2006)

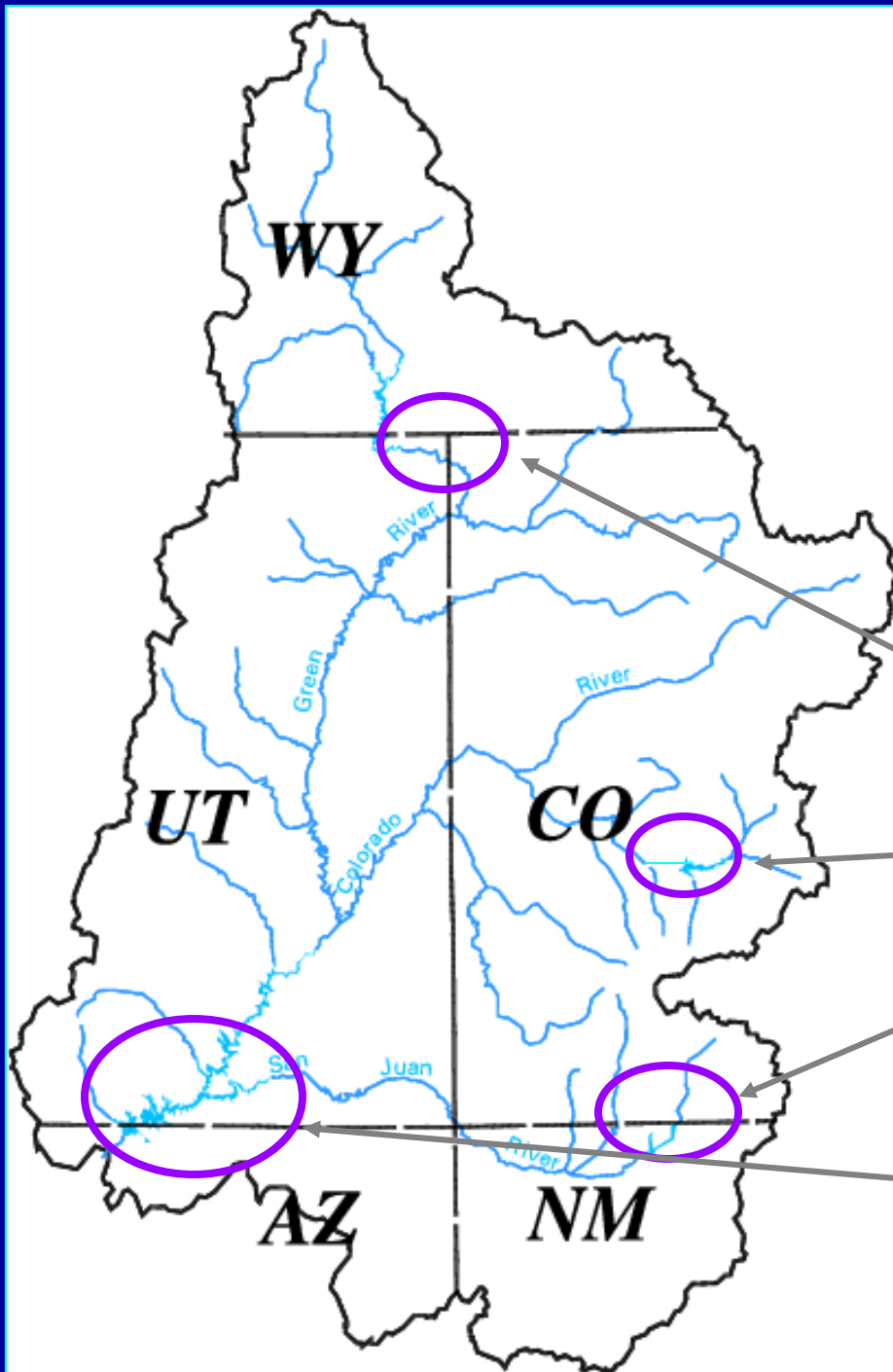
**RECLAMATION**

# Colorado Basin River Forecast Center

## Colorado River Basin above Lake Powell (116 NRCS Snotel Sites)



RECLAMATION



# Forecasted April–July Unregulated Inflow

(March mid-month  
2006 Forecasts)

Flaming Gorge – 102 %

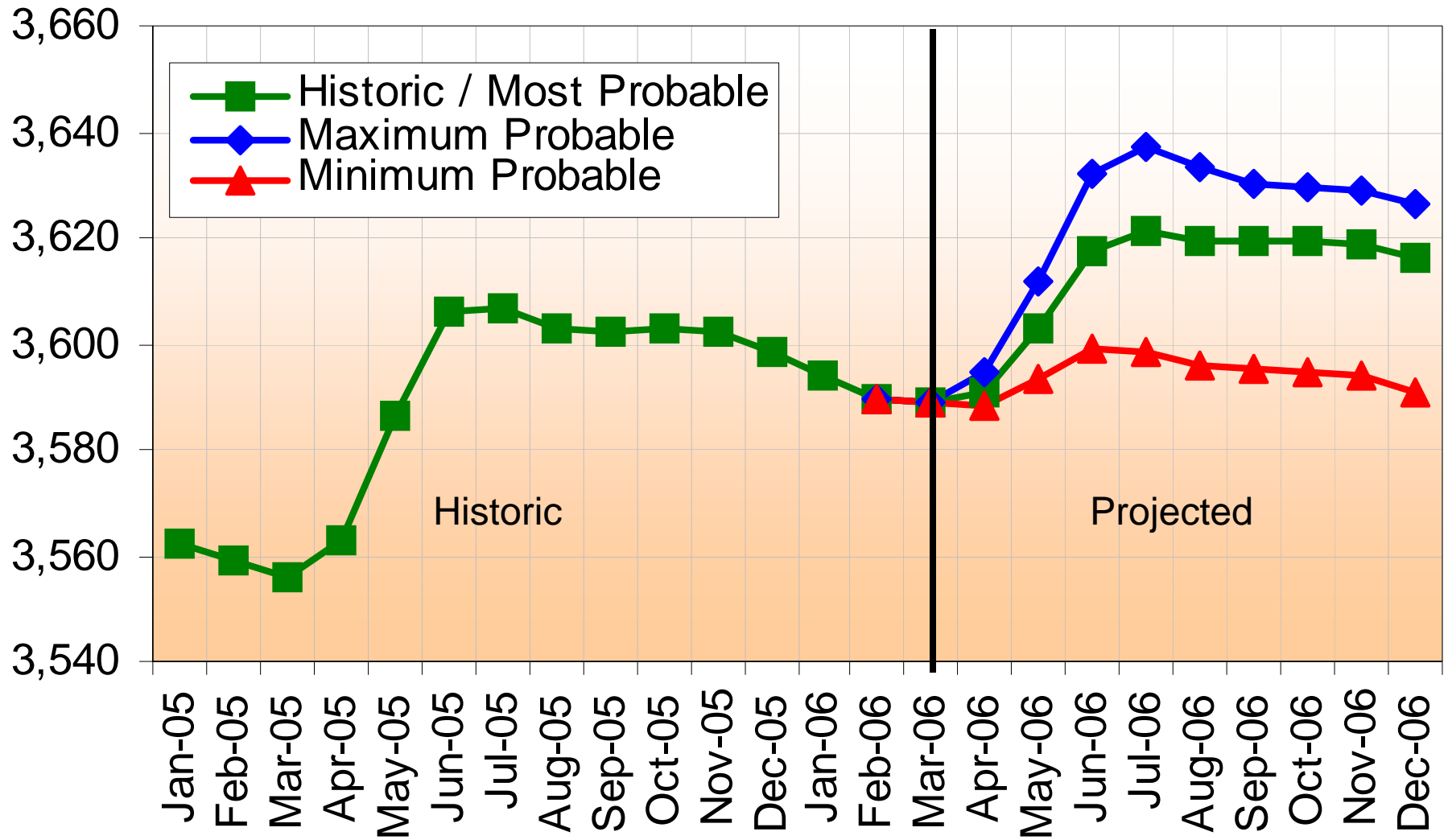
Blue Mesa – 97 %

Navajo – 44 %

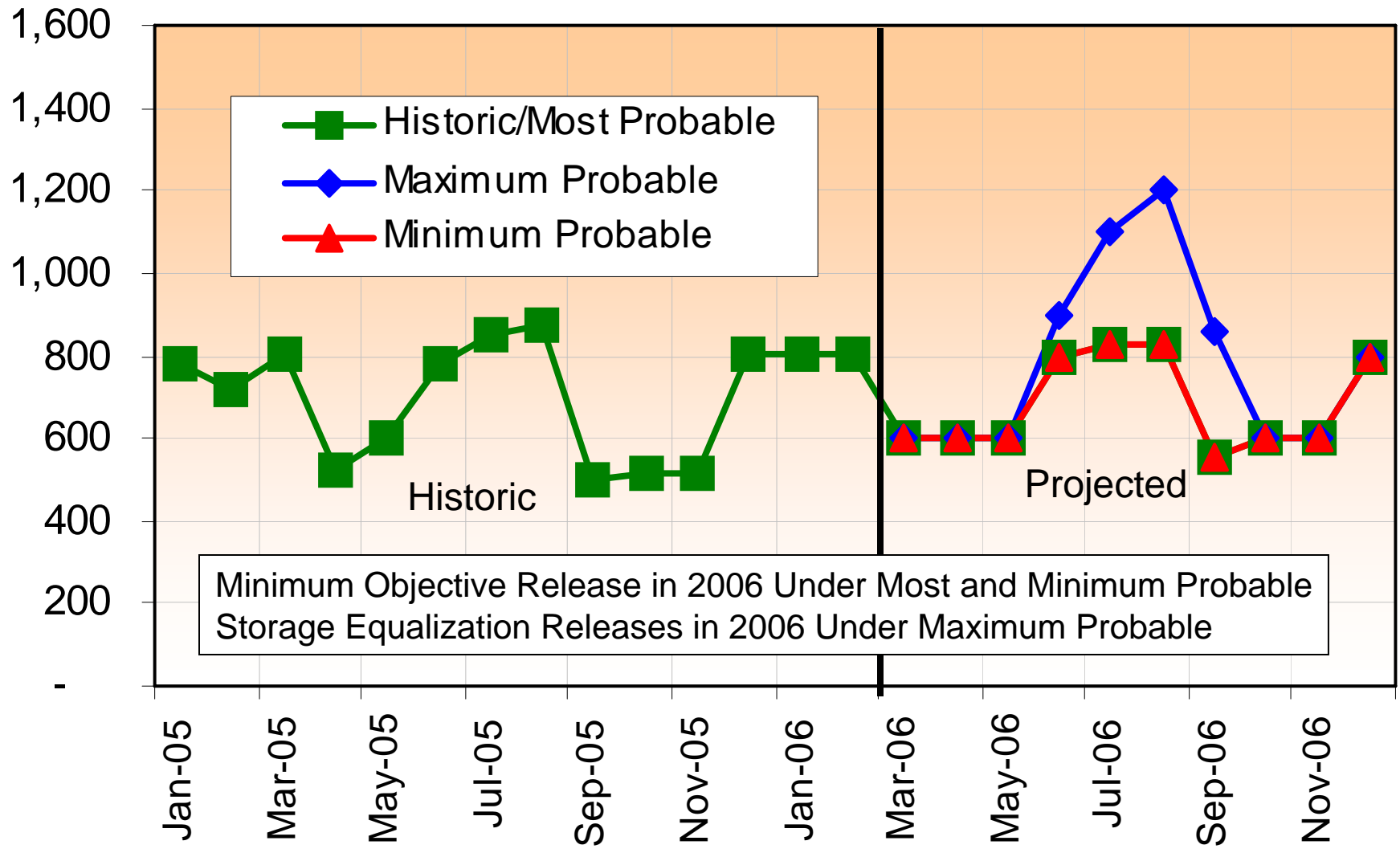
Lake Powell – 93 %

**RECLAMATION**

# Lake Powell End of Month Elevation (Feet) Based on March 2006 Inflow Projections



# Lake Powell Releases (Thousand Acre-Feet) Based on March 2006 Inflow Projections



## Preliminary 2006 Glen Canyon Dam Release Schedule (March 2006)

Month (in year 2006)	Release Volume (TAF)	Average Daily Flow (cfs)	Approximate Daily Min Flow (cfs)	Approximate Daily Max Flow (cfs)
April	600	10,000	6,500	12,500
May	600	9,800	6,500	12,500
June	800	13,400	9,000	17,000
July	825	13,400	9,000	17,000
August	825	13,400	9,000	17,000
September	551	9,300	6,000	11,000
October	600	9,800	6,500	12,500
November	600	10,000	6,500	12,500
December	800	13,000	9,000	17,000

Important! Values listed are subject to change.

Releases can change rapidly and suddenly for power emergencies or other reasons

Additionally, monthly releases in July, August and September could increase

if Lake Powell reaches elevation 3,630 feet.

**RECLAMATION**



# Information on Glen Canyon Operations and Upper Basin Hydrology

- [www.usbr.gov/uc/water/crsp/cs/gcd.html](http://www.usbr.gov/uc/water/crsp/cs/gcd.html)
  - updated monthly or as significant changes occur
- Monthly email – contact [tryan@uc.usbr.gov](mailto:tryan@uc.usbr.gov) to subscribe

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