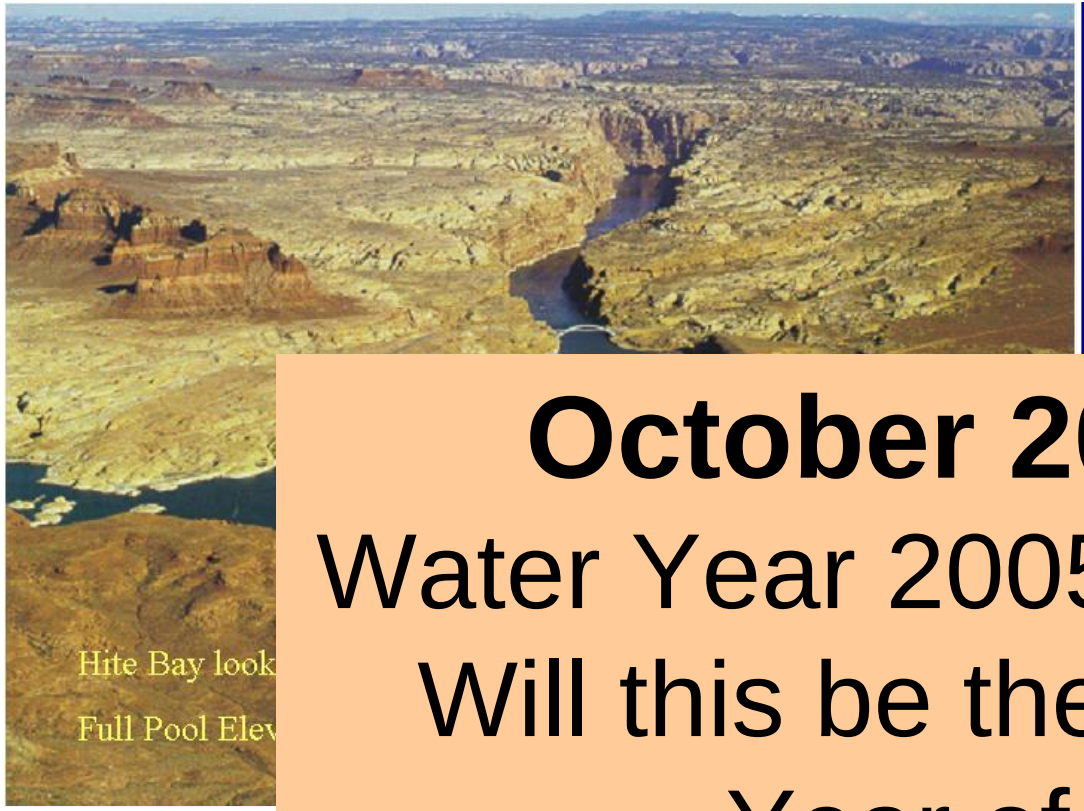
RECLAMATION
Managing Water in the West

Colorado River Basin Hydrology

Glen Canyon Adaptive Management Work Group Meeting
October 2004
Phoenix, Arizona



Colorado River

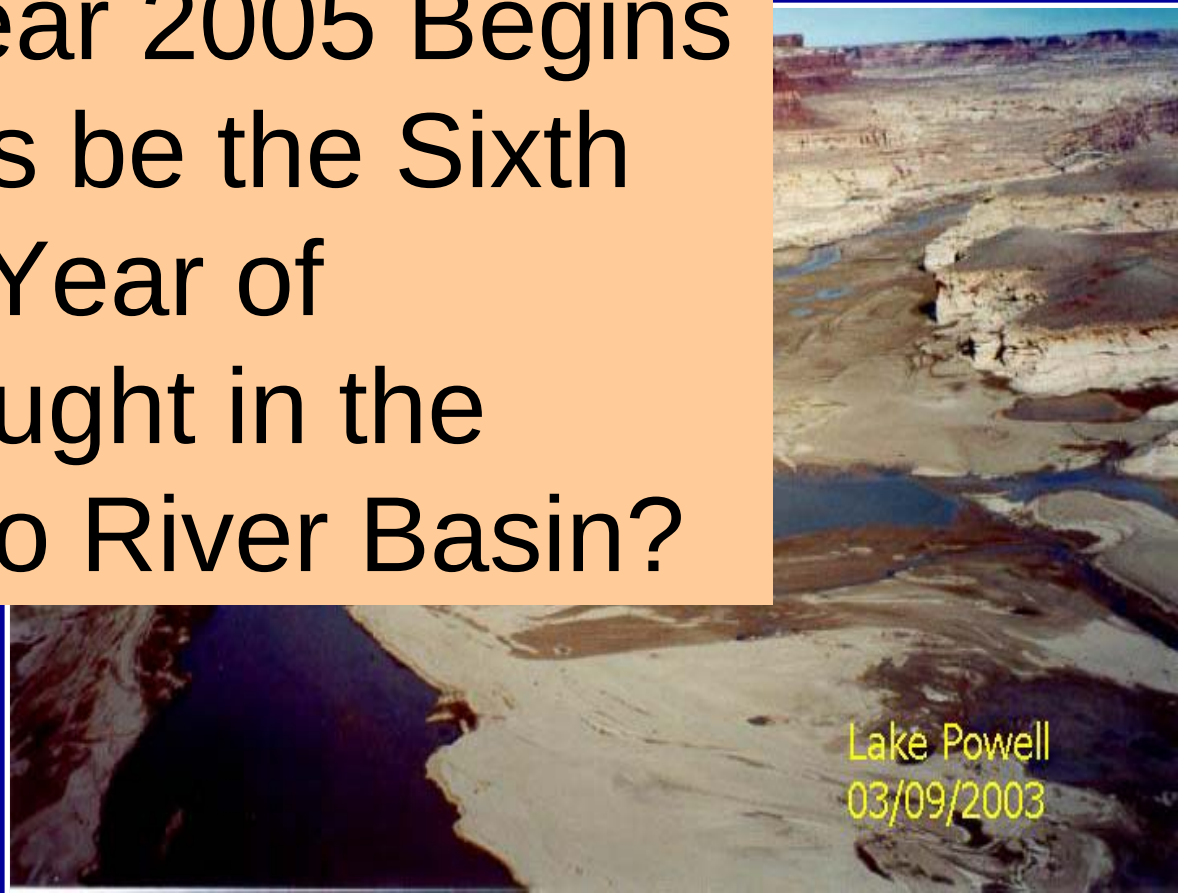
October 2004

Water Year 2005 Begins

Will this be the Sixth Year of Drought in the Colorado River Basin?

Fiv Drought

2000 - 2004



Some Changes

The Summer of 2004 was drier than average but also cooler than average in the Upper Colorado River Basin. This after a series of extremely hot summers.

Precipitation in the basin has been above average in September and October 2004

Base flows are considerably higher today than a year ago. 85 % of average vs 50 % of average

Early stages of an El Nino

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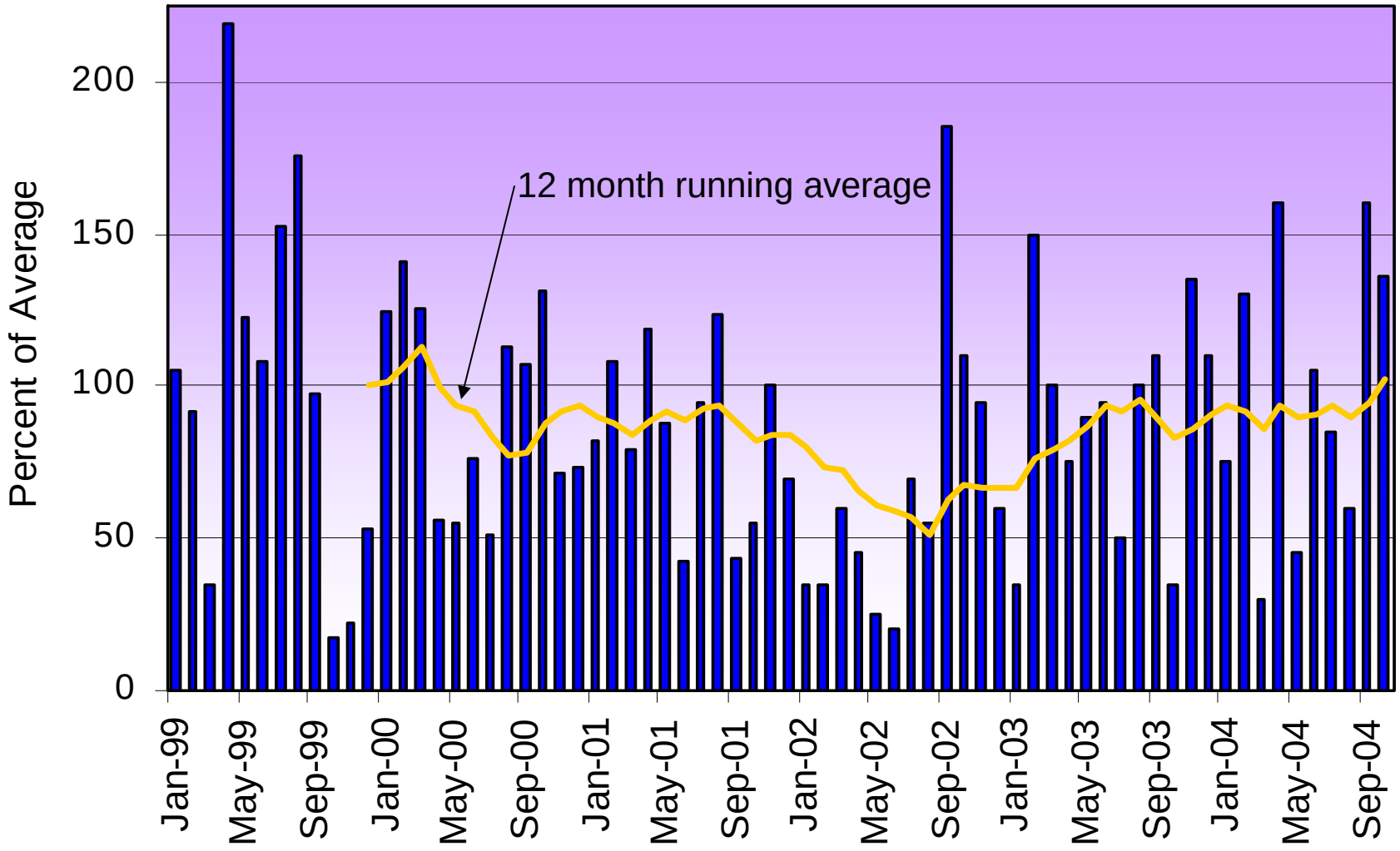
Upper Colorado River Basin Precipitation
January 1999- October 2004



October 2004 through 10/25/2004

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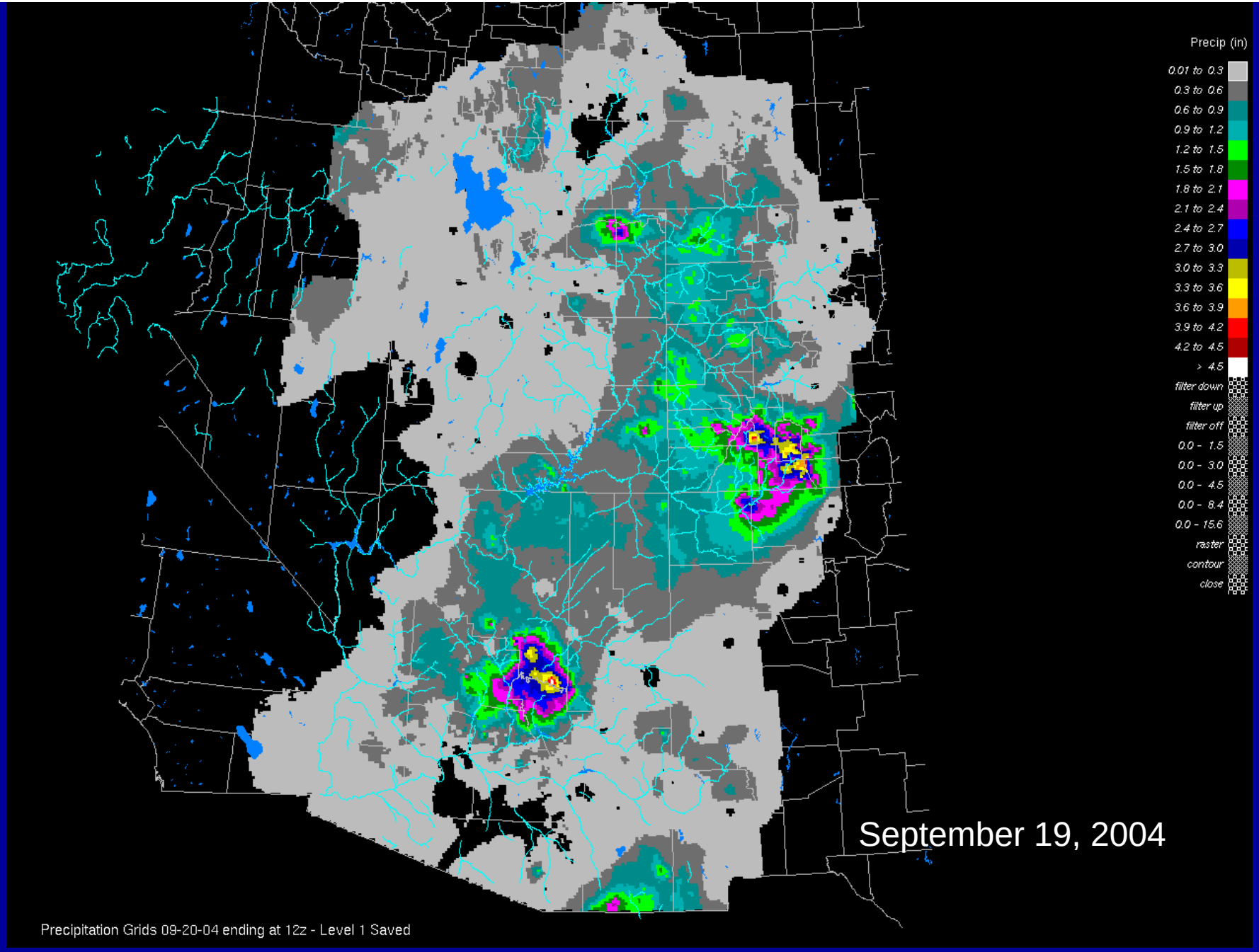

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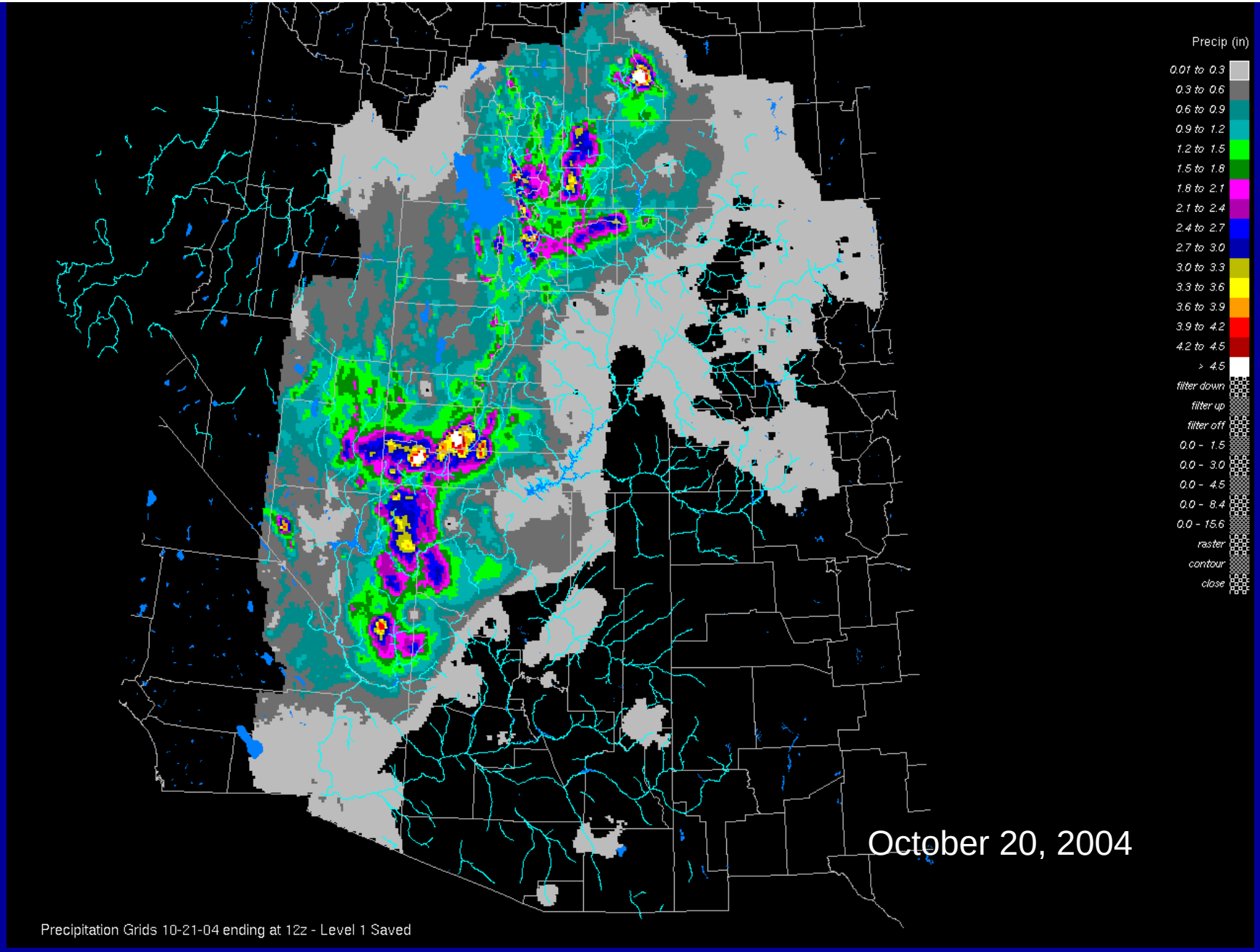

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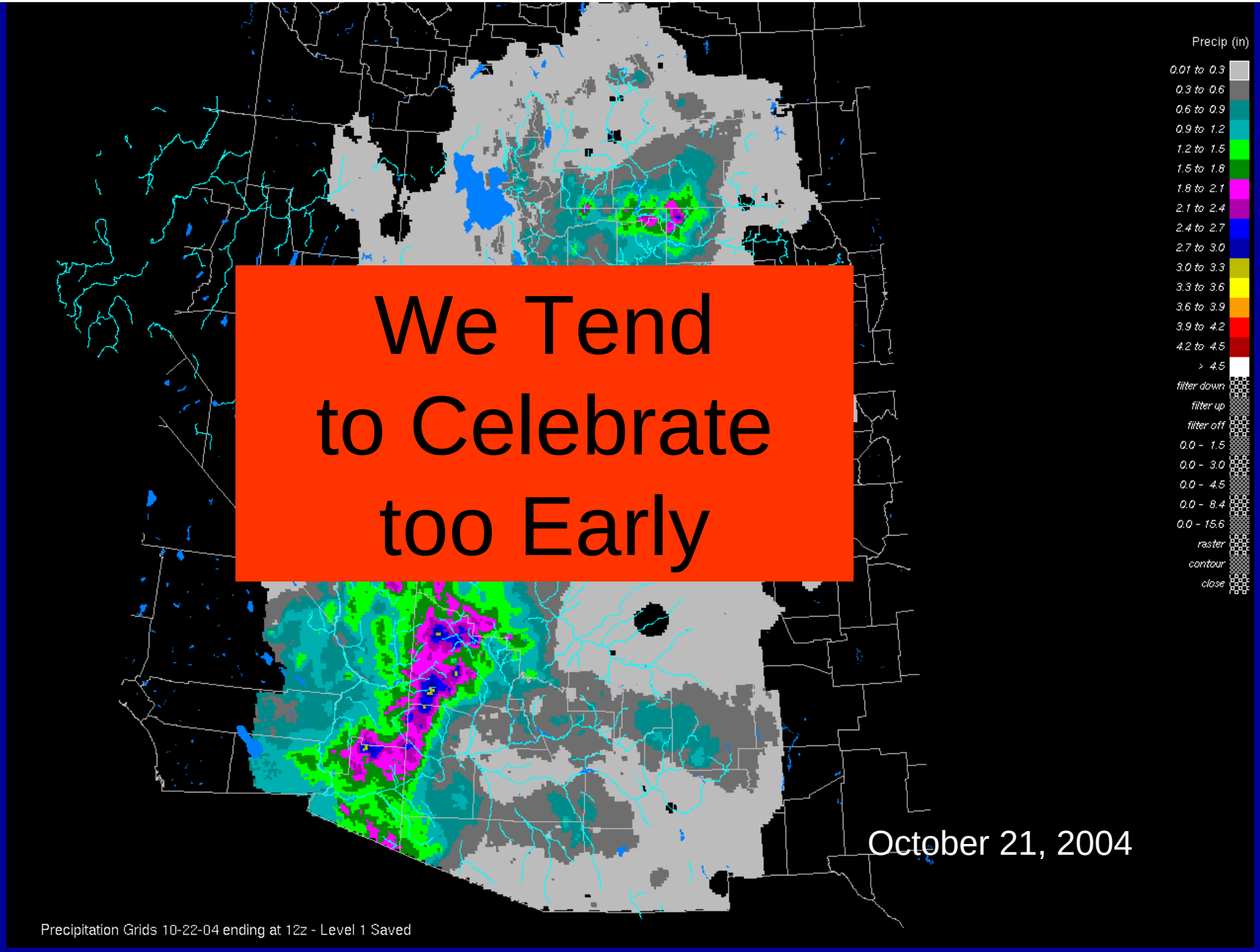

We Tend to Celebrate too Early

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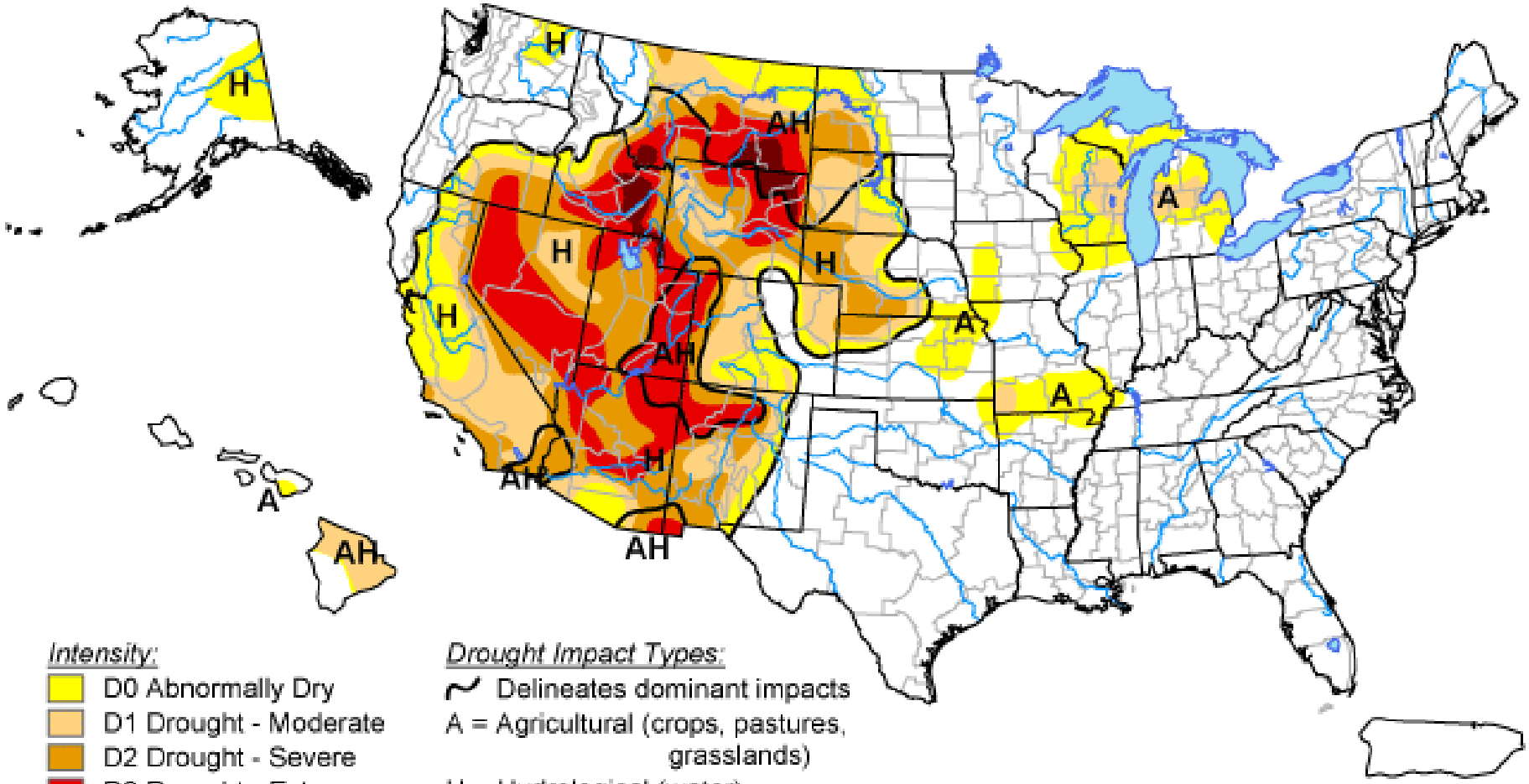
U.S. Drought Monitor

October 19, 2004
Valid 8 a.m. EDT



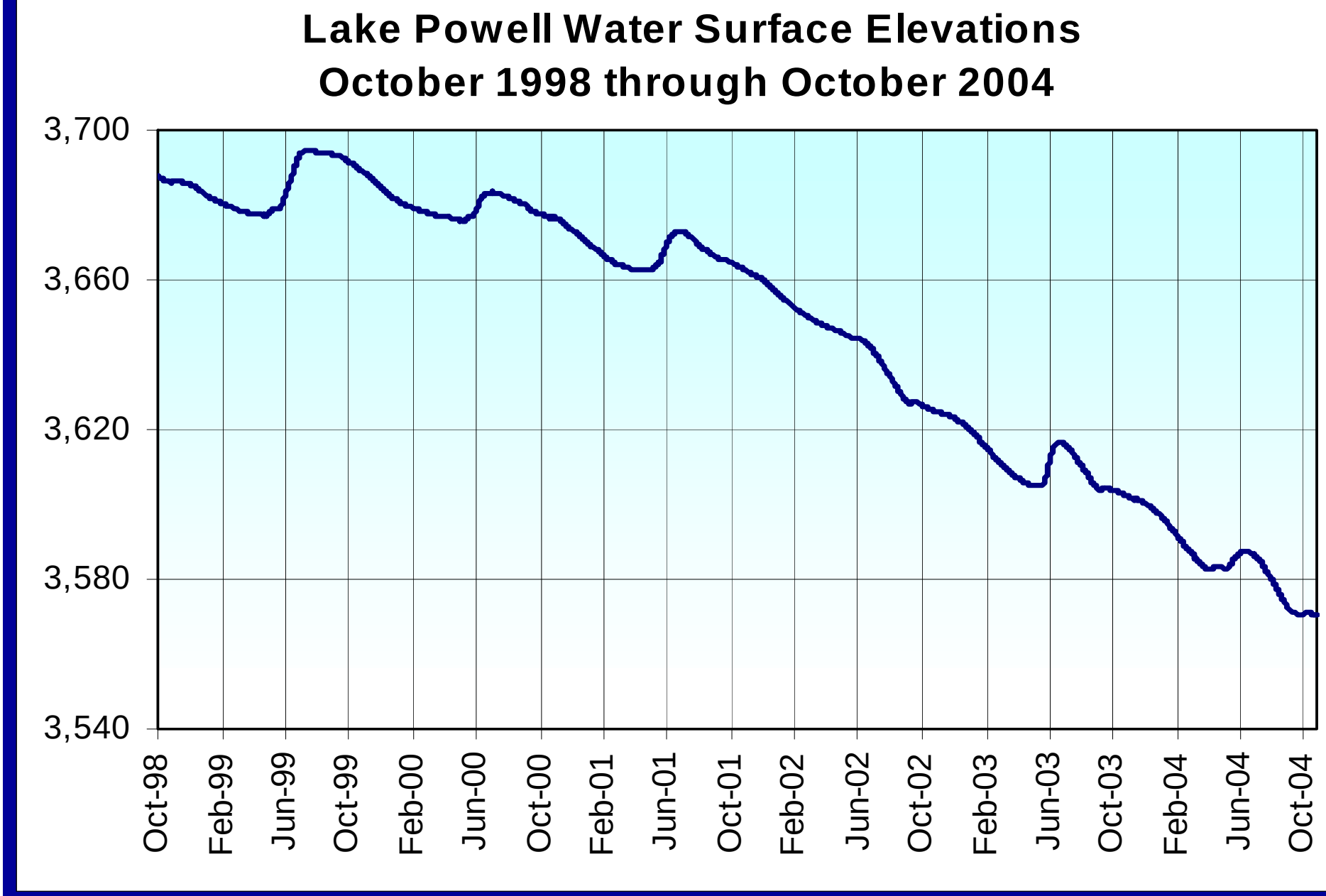
Intensity:
- D0 Abnormally Dry
- D1 Drought - Moderate
- D2 Drought - Severe
- D3 Drought - Extreme
- D4 Drought - Exceptional

Drought Impact Types:
- Delineates dominant impacts
- A = Agricultural (crops, pastures, grasslands)
- H = Hydrological (water)
- (No type = Both impacts)

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, October 21, 2004
Author: Rich Tinker, CPC/NCEP/NWS/NOAA



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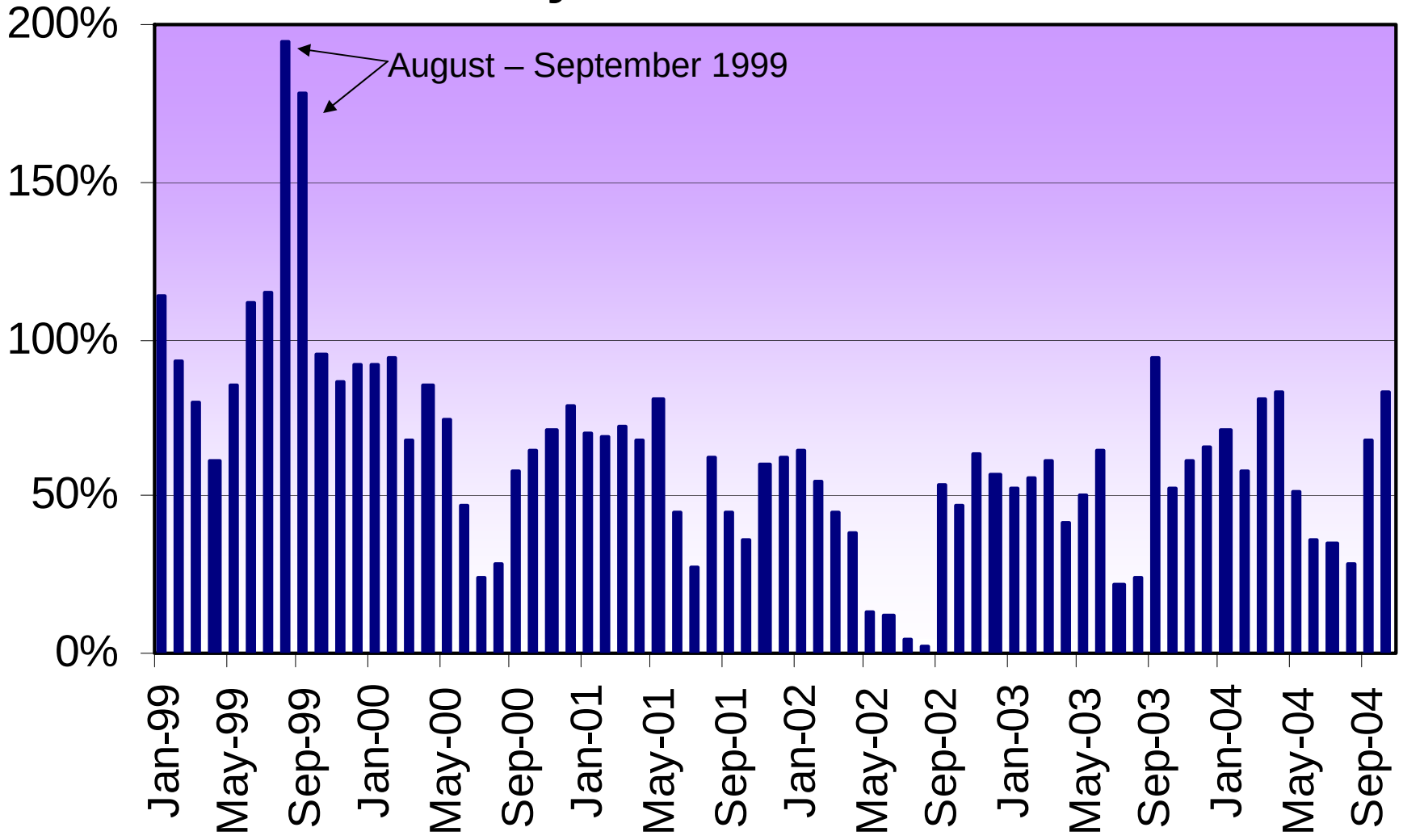
Unregulated Inflow to Lake Powell
January 1999 - October 2004



October 2004 is estimated as of 10/25/2004

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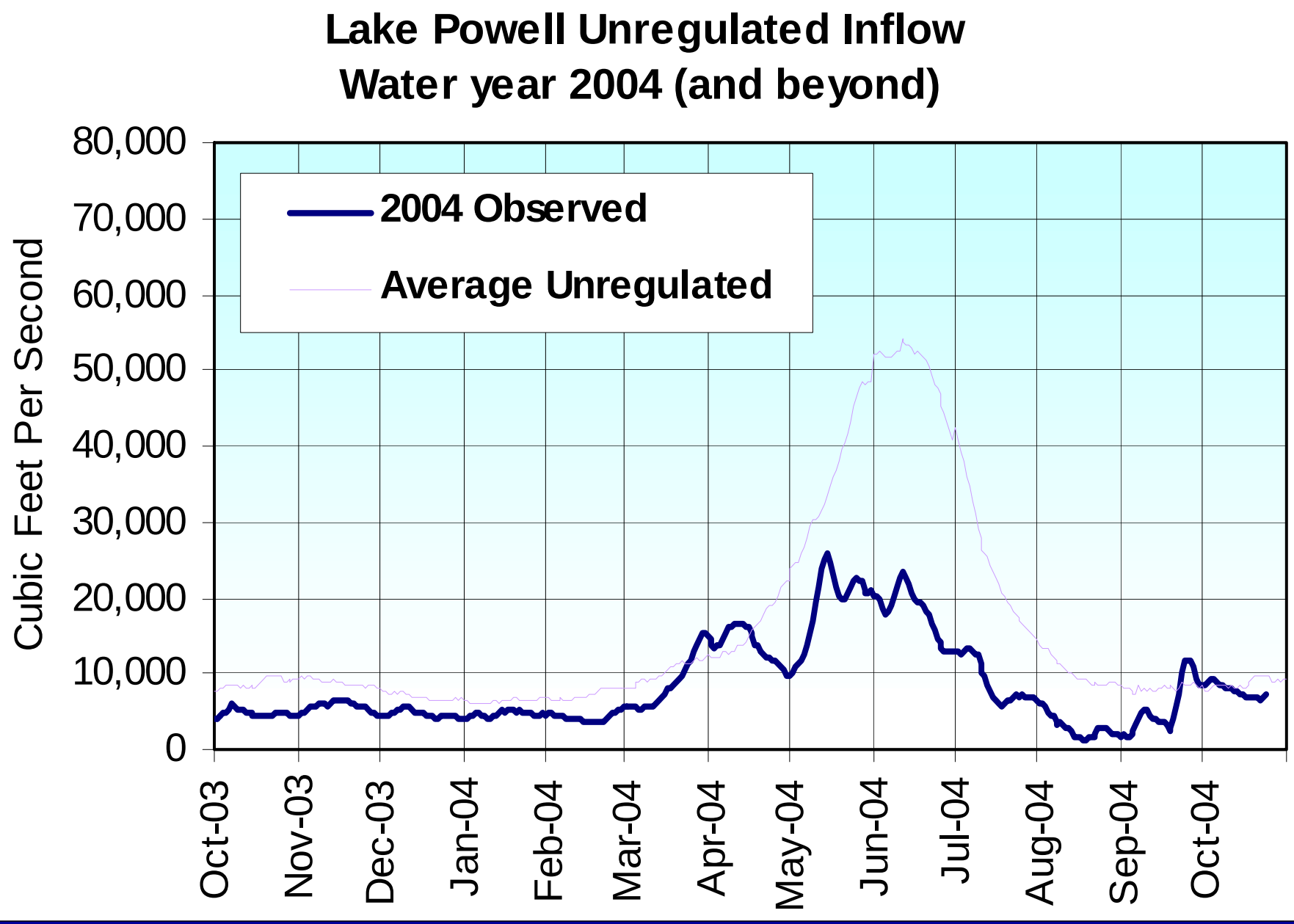

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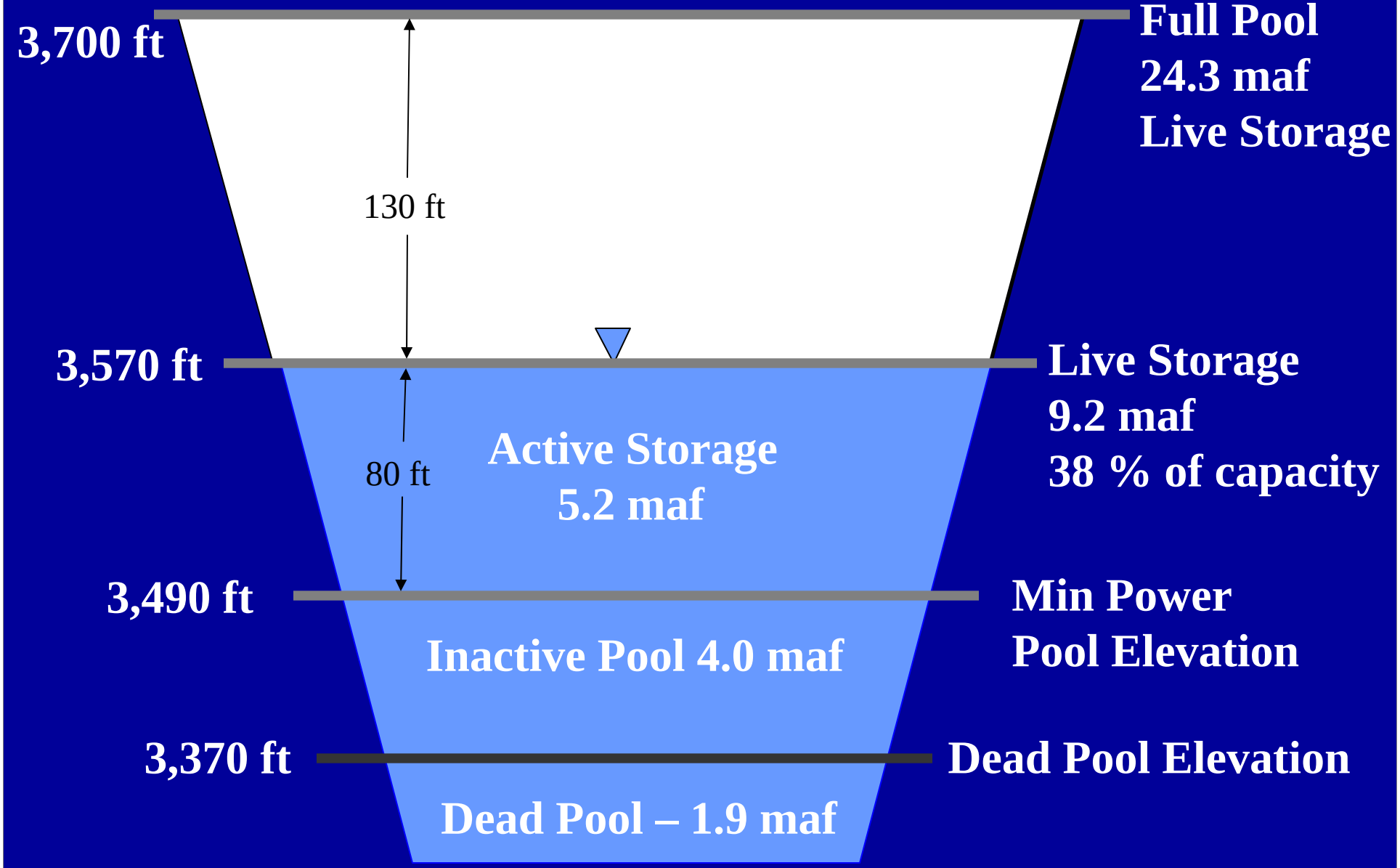
Lake Powell Capacity



Not to scale

October 25, 2004

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Glen Canyon Dam WY 2005 Releases in TAF

	Current Operation October 24 month Study	AMWG Aug 11 Experimental Flow Proposal	AMWG Aug 11 Experimental Flow Proposal
	no fish flows BHBF January	fish flows with sediment trigger 2 day November high flow event	fish flows without sediment trigger no November high flow event
Oct-04	492	492	492
Nov-04	476	684	476
Dec-04	492	600	600
Jan-05	850	792	792
Feb-05	650	723	723
Mar-05	600	807	807
Apr-05	600	500	600
May-05	650	600	600
Jun-05	800	800	800
Jul-05	910	866	920
Aug-05	910	866	920
Sep-05	800	500	500
WY Volume	8230	8230	8230

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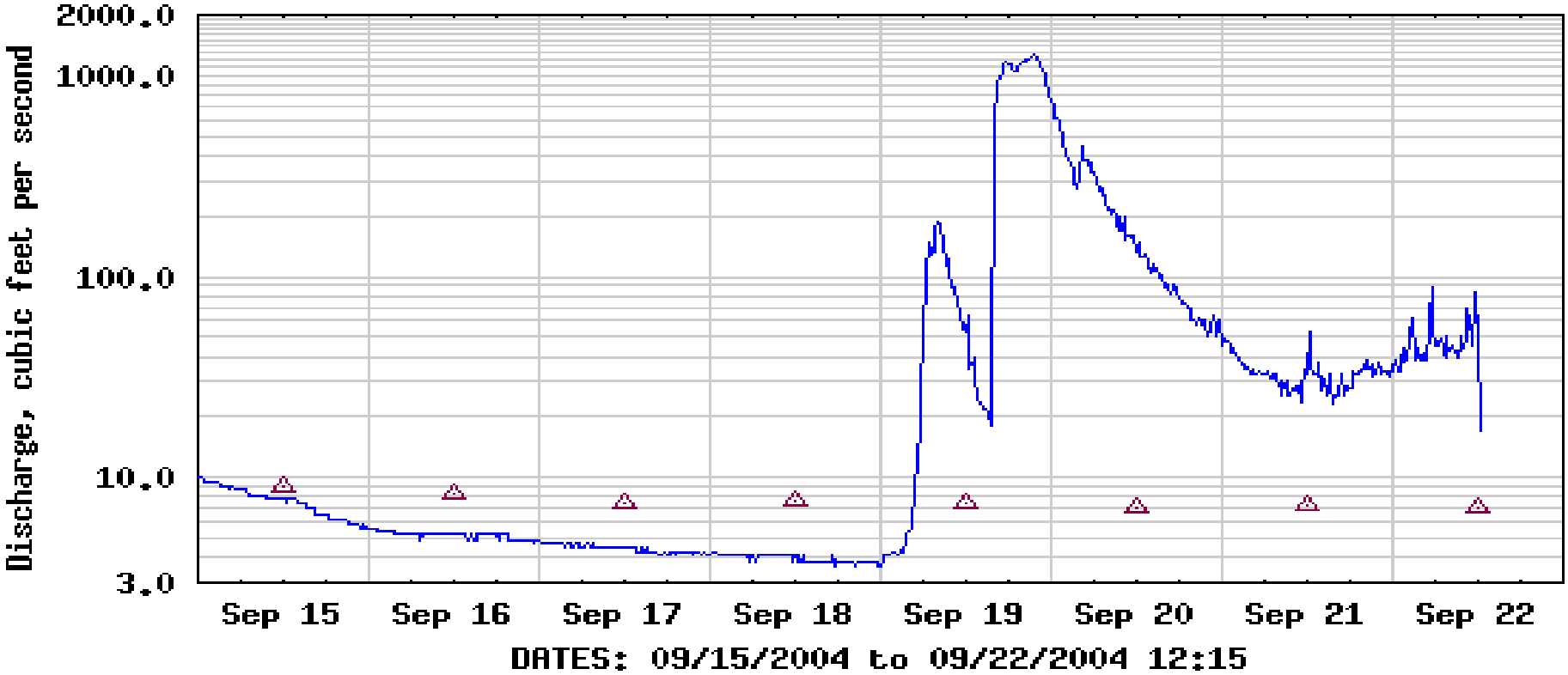
USGS

USGS 09382000 PARIA RIVER AT LEES FERRY, AZ



EXPLANATION

DISCHARGE

MEDIAN DAILY STREAMFLOW BASED ON 80 YEARS OF RECORD

Provisional Data Subject to Revision

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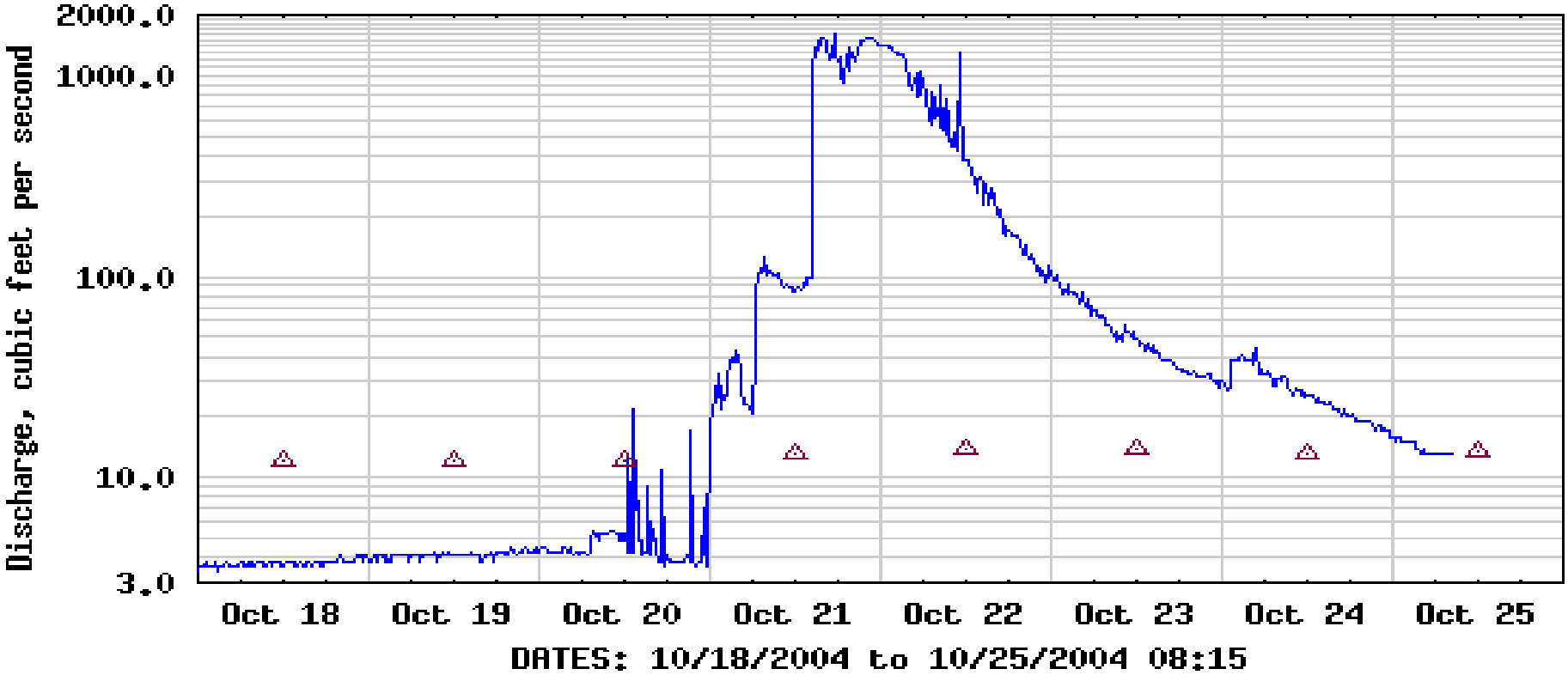
USGS

USGS 09382000 PARIA RIVER AT LEES FERRY, AZ



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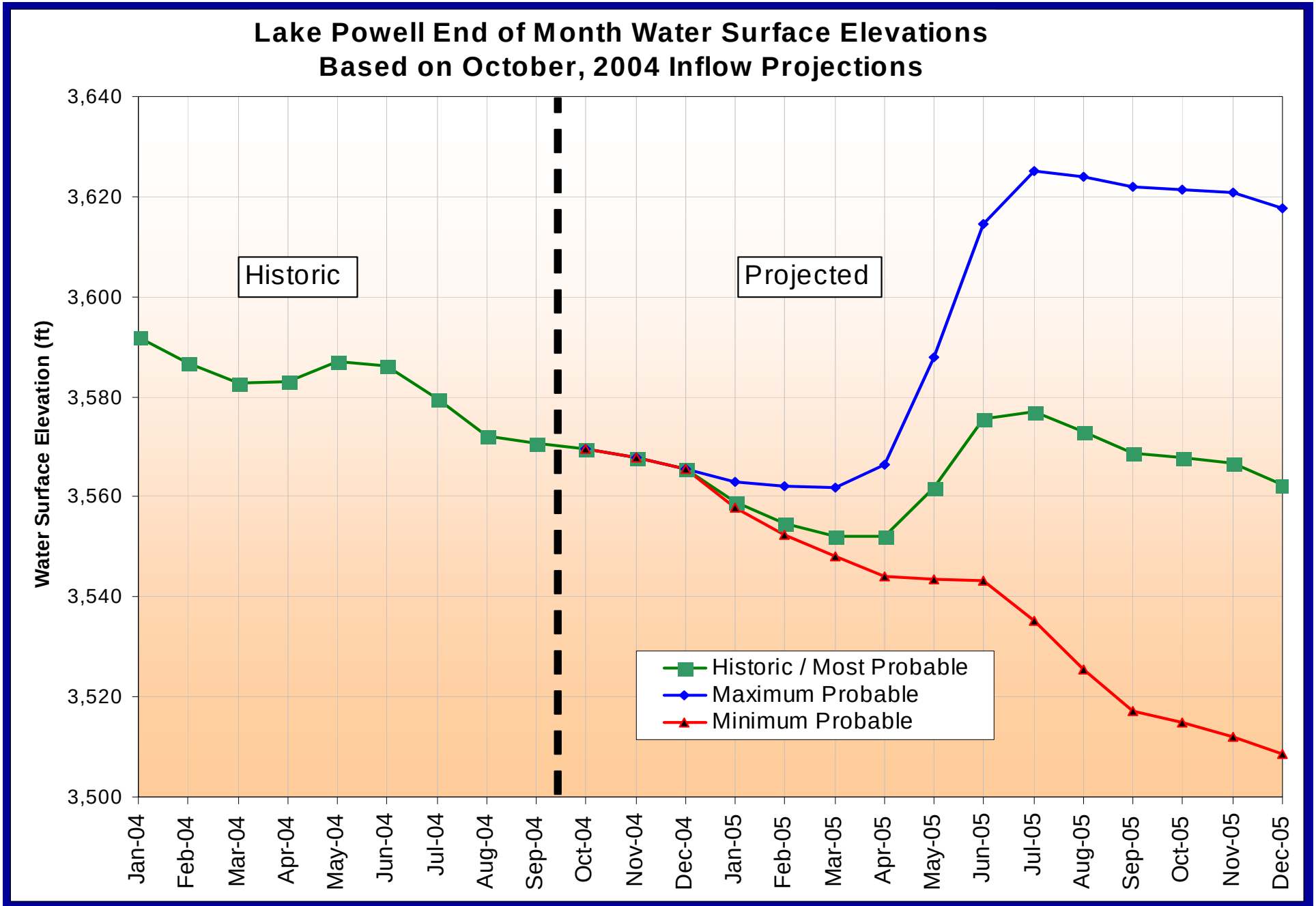

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