Colorado River Commission of Nevada

Natural Resources Group
Hydrologic Update
August 13, 2013

Hydrologic Conditions

Unregulated Inflow Into Lake Powell

As of August 12, 2013

	MAF*	% Avg**
• WY 2013 (projected):	4.33	40%
• April-July 2013 (observed):	2.56	36%
• Jul 2013 (observed):	0.14	13%
• Aug 2013 (projected):	0.16	32%

***MAF=Million Acre-Feet**

****30-year average, from 1981-2010 (current normal)**

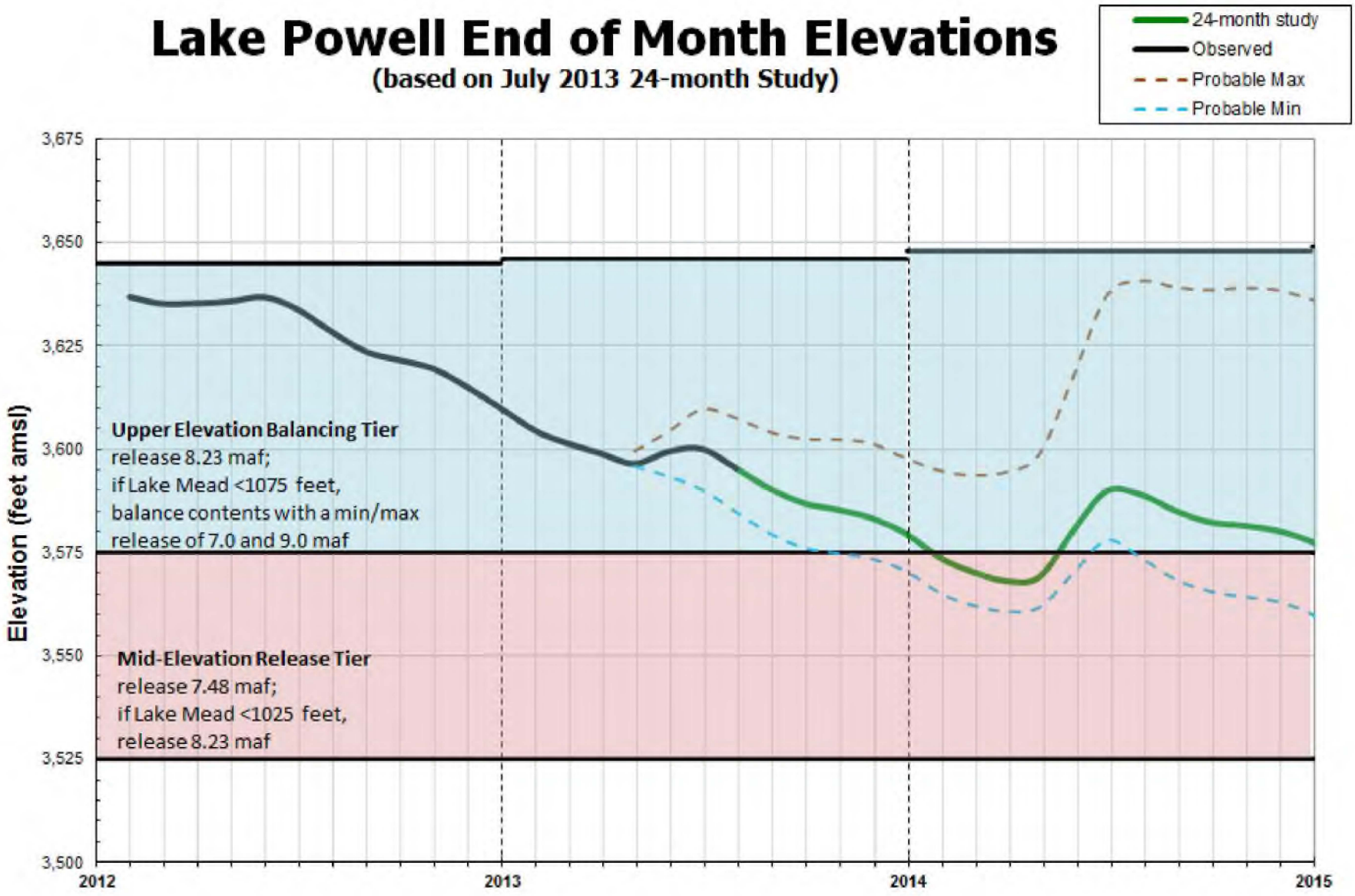
Storage Conditions

As of Aug 12, 2013

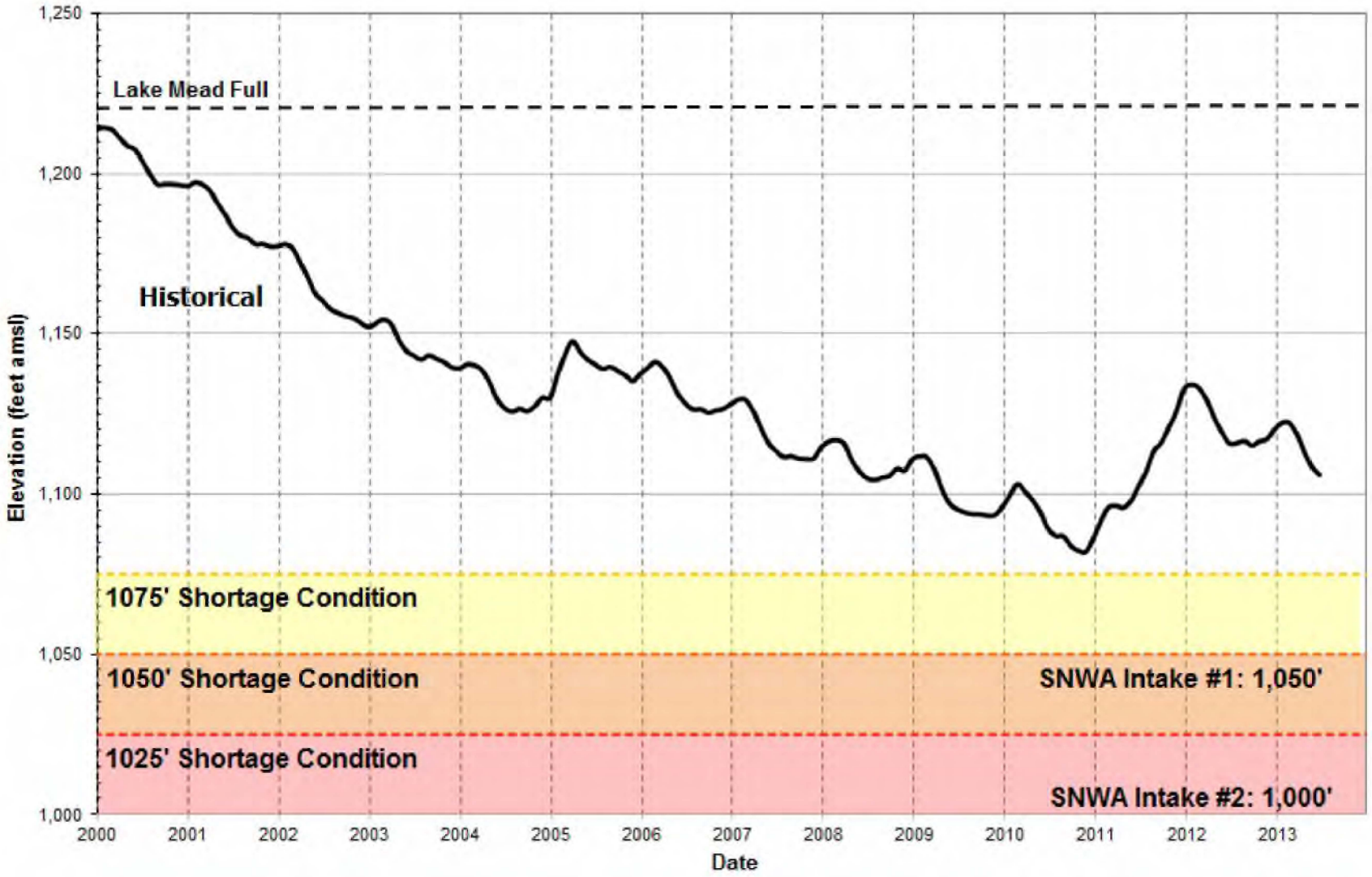
		Percent of Capacity	Δ from last year
Lake Mead elev.	1,106.20 ft	47%	↓ 10.08 ft
Lake Powell elev.	3,592.53 ft	45%	↓ 33.96 ft
Total System Storage (8/2013)	30.09 maf	50%	↓ 5.03 maf
Total System Storage (8/2012)	35.12 maf	59%	

Lake Powell End of Month Elevations

(based on July 2013 24-month Study)

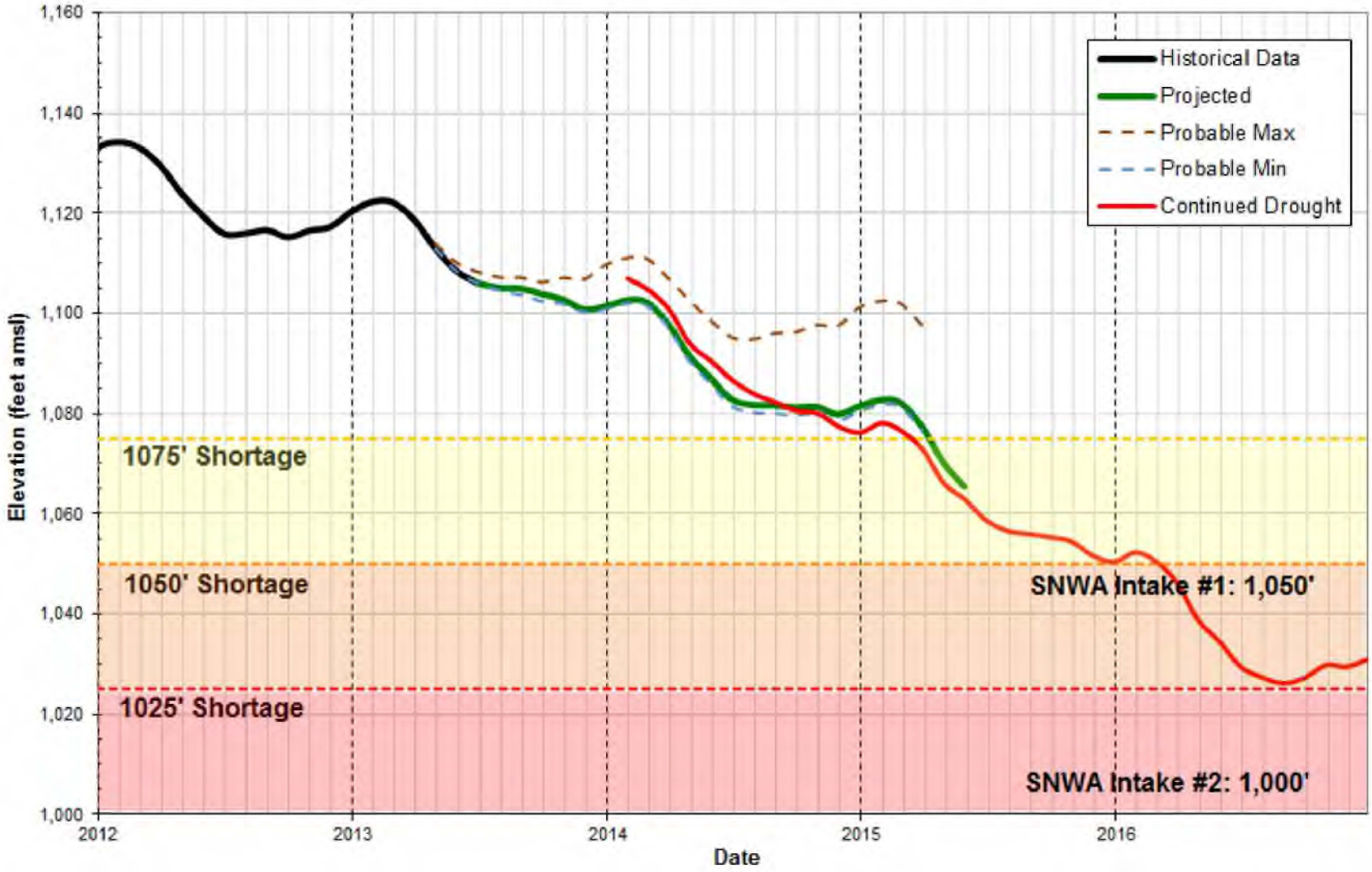


Lake Mead Elevation 2000-2013



Lake Mead End of Month Elevation Projections

(based on the July 2013 24-month study)



Precipitation - Colorado River Basin

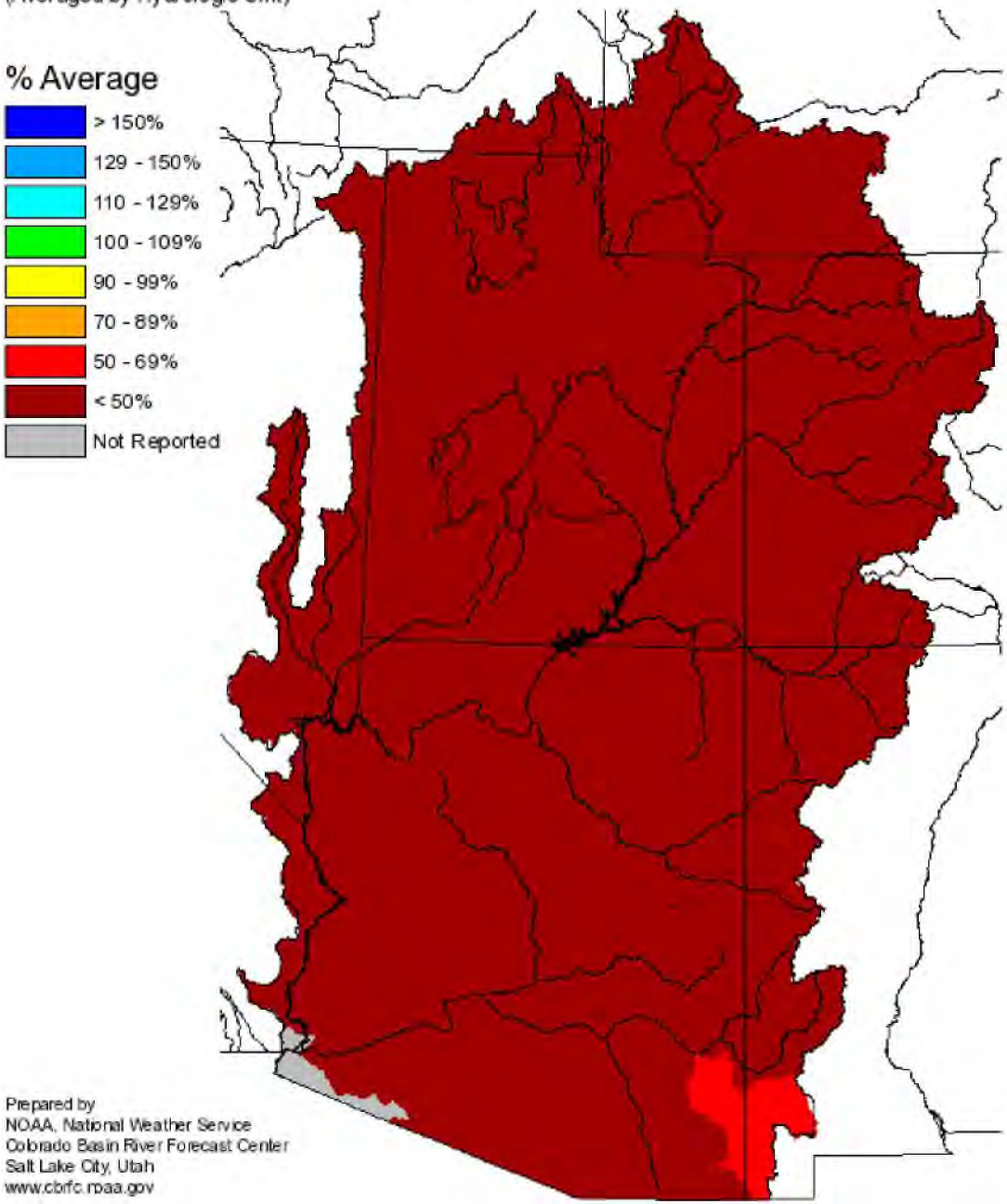
As of Aug 12, 2013

	Upper Colorado Basin
WY Precip to Date	81% (22.5″)
Current Basin Snowpack	NA% (NA″)

(Avg 1981-2010)

Monthly Precipitation for June 2013

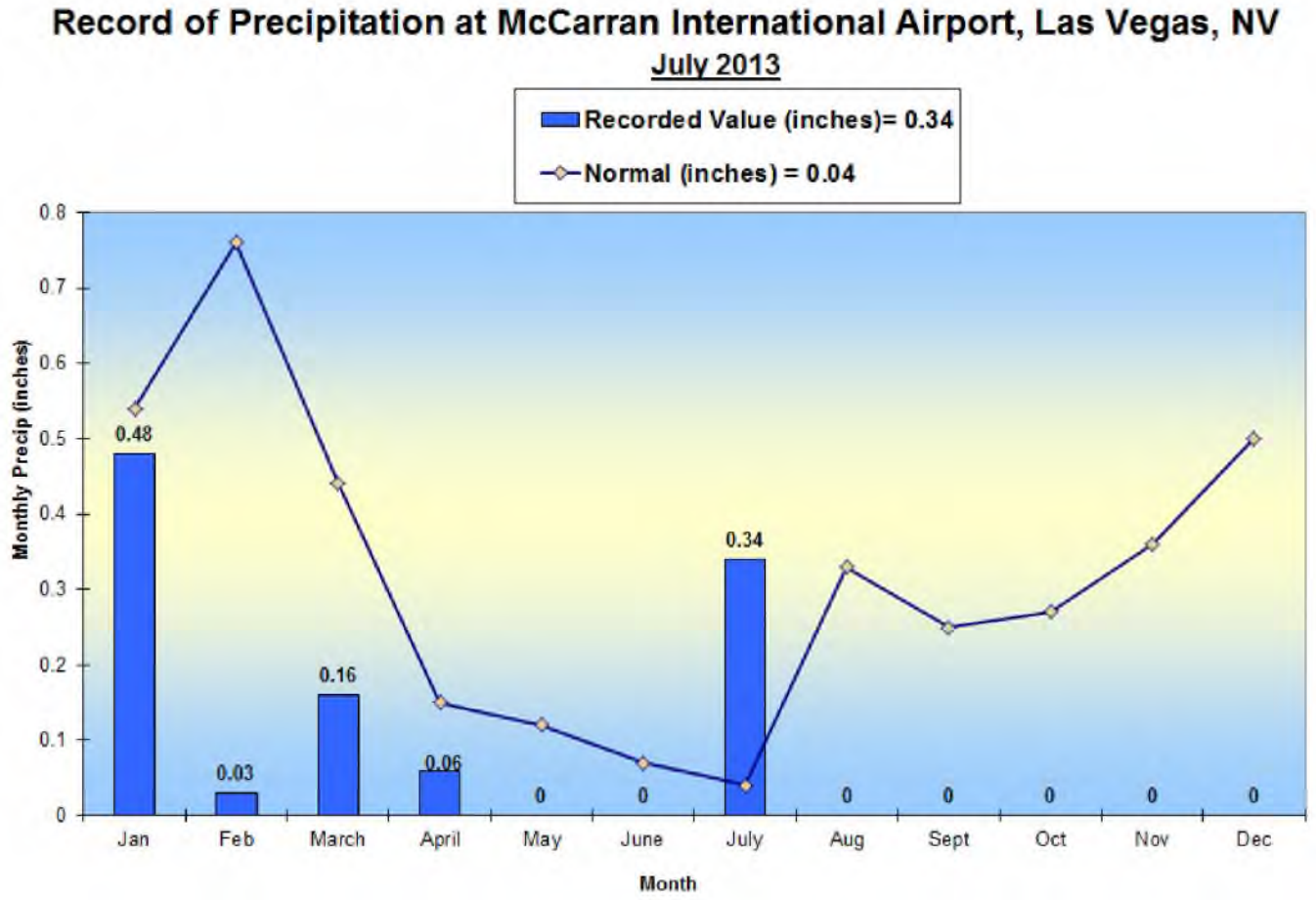
(Averaged by Hydrologic Unit)



Prepared by
NOAA, National Weather Service
Colorado Basin River Forecast Center
Salt Lake City, Utah
www.cbrfc.noaa.gov

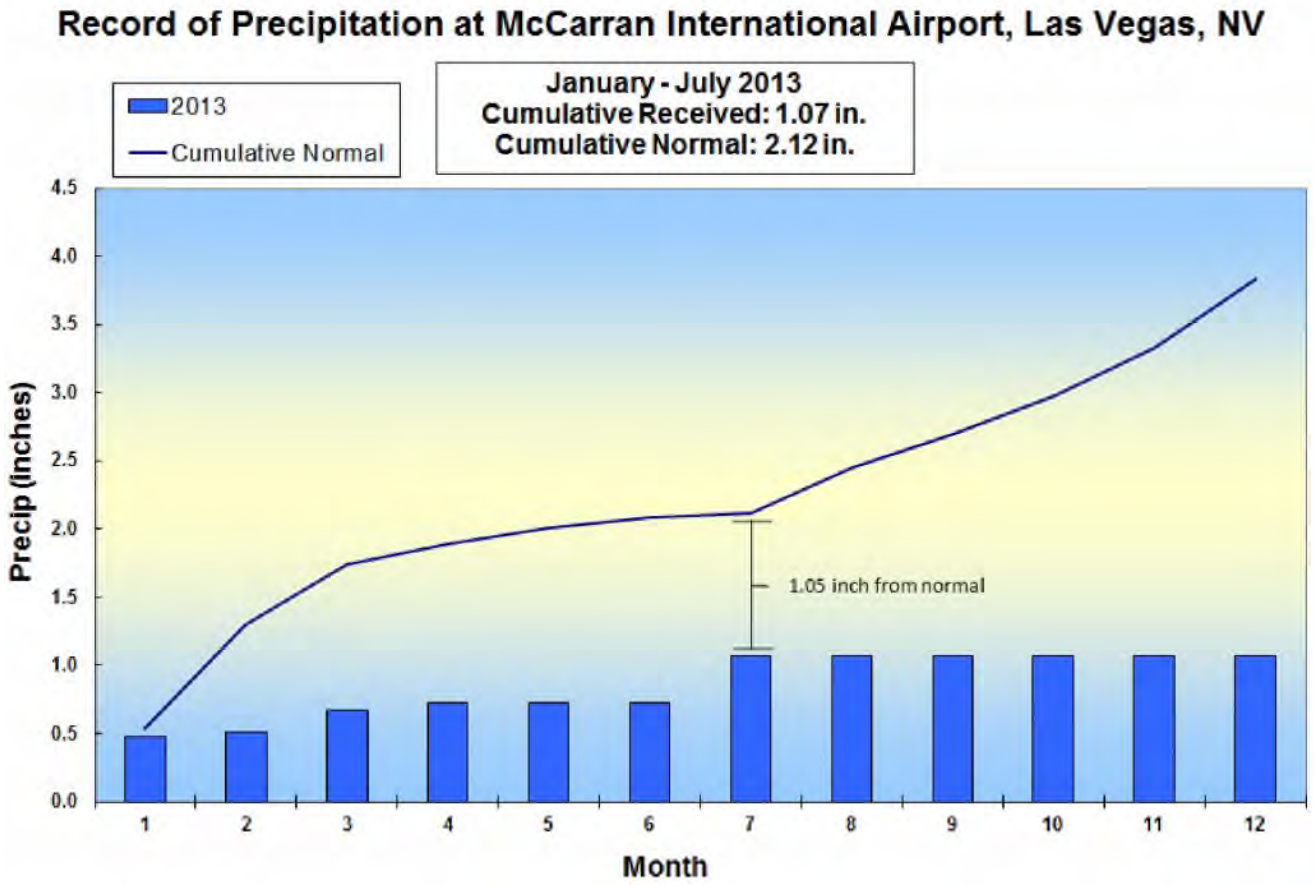
Record of Precipitation, Las Vegas, NV

As of July 31, 2013



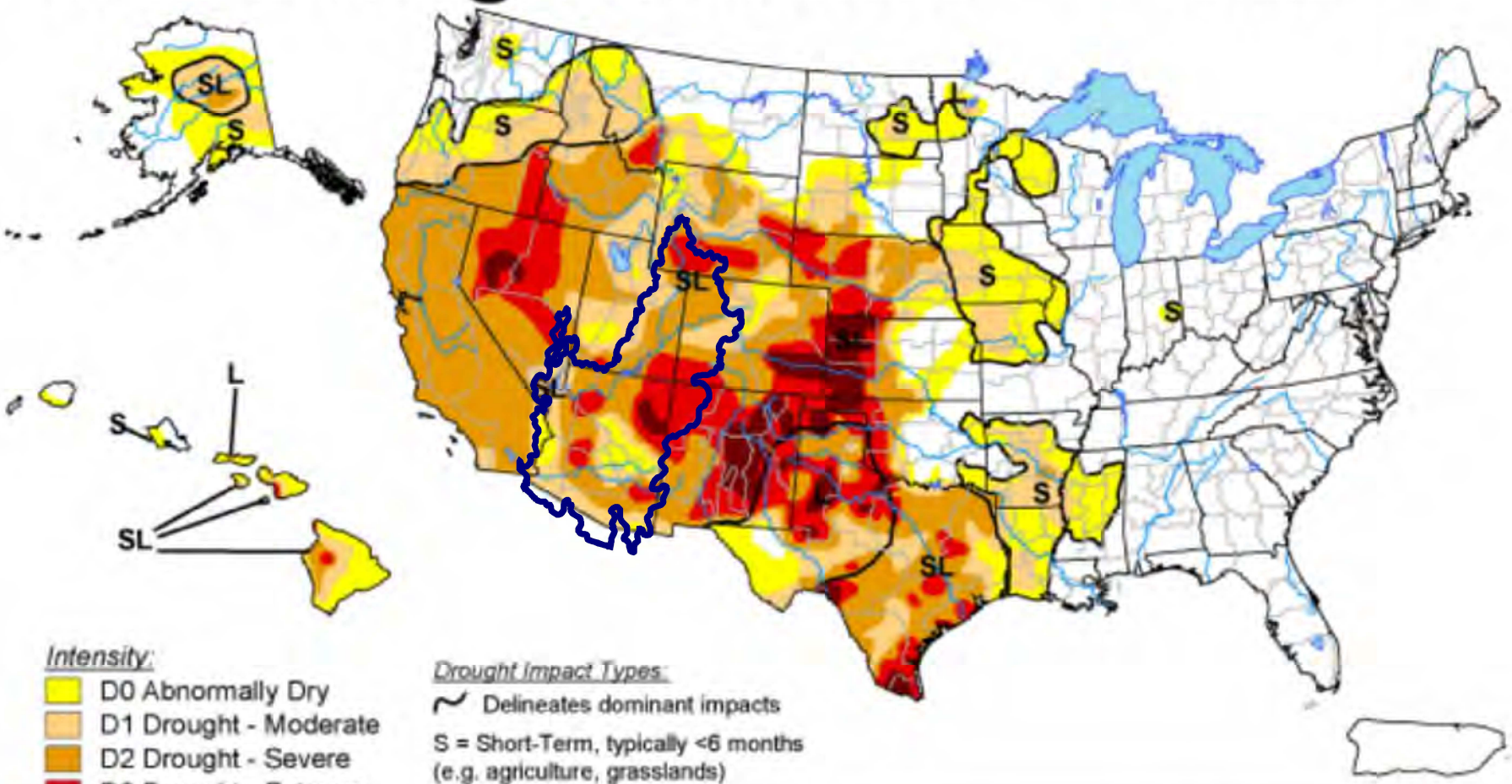
Record of Precipitation, Las Vegas, NV

As of July 31, 2013



U.S. Drought Monitor

August 6, 2013
Valid 7 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

S = Short-Term, typically <6 months (e.g. agriculture, grasslands)

L = Long-Term, typically >6 months (e.g. hydrology, ecology)

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

http://droughtmonitor.unl.edu/

Released Thursday, August 8, 2013

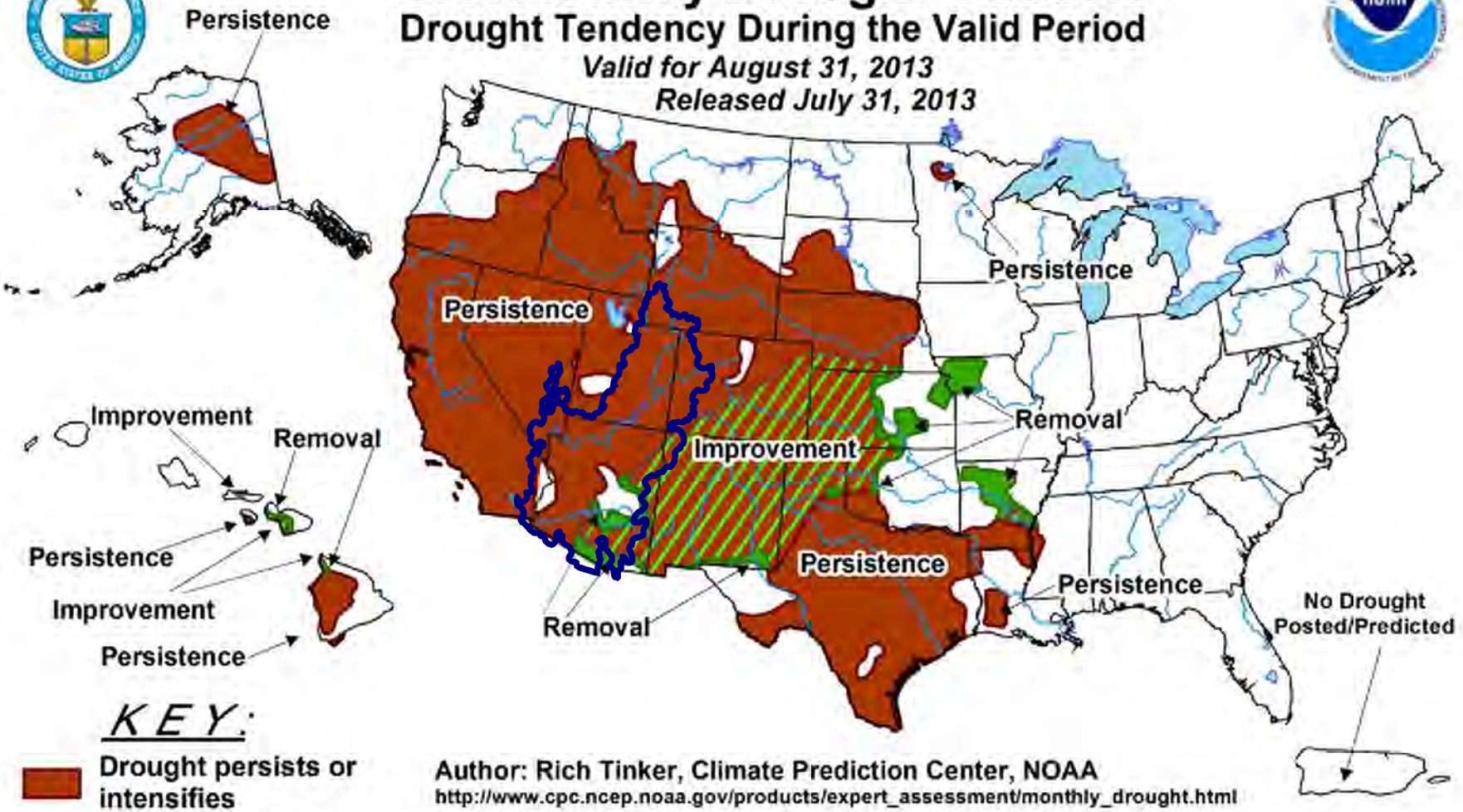
Author: Brian Fuchs, National Drought Mitigation Center

U.S. Monthly Drought Outlook

Drought Tendency During the Valid Period

Valid for August 31, 2013

Released July 31, 2013



KEY:

- Drought persists or intensifies
- Drought remains but improves
- Drought removal likely
- Drought development likely

Author: Rich Tinker, Climate Prediction Center, NOAA
http://www.cpc.ncep.noaa.gov/products/expert_assessment/monthly_drought.html

Depicts large-scale trends based on subjectively derived probabilities guided by short- and long-range statistical and dynamical forecasts. Short-term events -- such as individual storms -- cannot be accurately forecast more than a few days in advance. Use caution for applications -- such as crops -- that can be affected by such events. "Ongoing" drought areas are approximated from the Drought Monitor (D1 to D4 intensity). For weekly drought updates, see the latest U.S. Drought Monitor.

NOTE: The Green and Brown hatched areas imply at least a 1-category improvement in the Drought Monitor intensity levels by the end of the period although drought will remain. The Green areas imply drought removal by the end of the period (D0 or none)

Water Use in Southern Nevada

Water Use in Southern Nevada
January - June

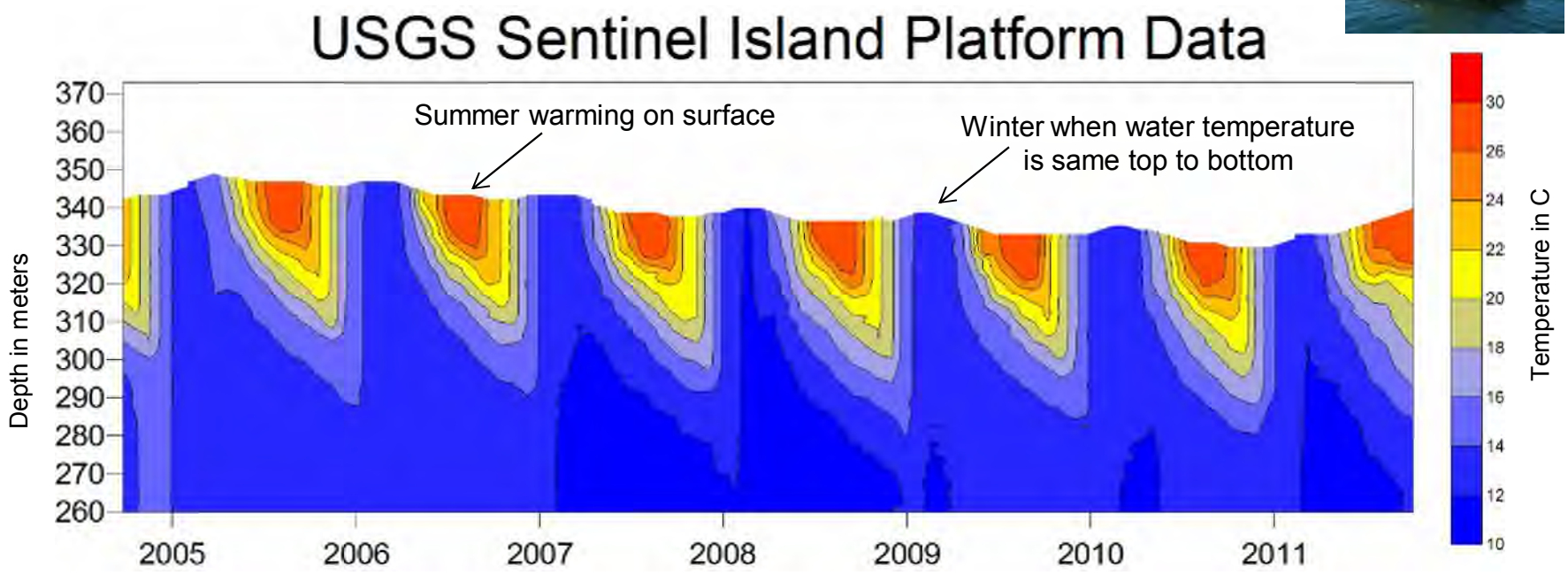
2013*:	Consumptive Use =	110,193
	CR Water Banked =	0
		110,193
2012:	Consumptive Use =	116,991
	CR Water Banked =	0
		116,991

Difference = - 6,798 af

*Subject to final accounting.

Lake Mead Temperature

Lake Mead Temperature



In the Boulder Basin of Lake Mead the temperatures have a normal surface summer peak around 30 ºC and the lower layer remains around 11 ºC. The lake stratification has remained similar during lowering lake elevations, but the proportion of cold water in the lower layers has decreased with elevation. A trend of the data would suggest increasing temperatures, but it is due to the volume of cold water that has decreased.

Thanks to SNWA for providing technical assistance

Colorado River Commission of Nevada

Natural Resources Group
Hydrologic Update
August 13, 2013