

Colorado River Commission of Nevada

Natural Resources Group Hydrologic Update August 12, 2014



Unregulated Inflow



Unregulated Inflow Into Lake Powell

As of August 11, 2014

	MAF*	% Avg**
• WY 2014 (forecasted):	10.15	94%
• April-July 2014 (forecasted):	6.92	97%
• July (observed):	.84	77%
• August (forecasted):	.45	90%

***MAF=Million Acre-Feet**

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



Storage Conditions


As of August 11, 2014

Percent of
Capacity

Δ from last year

Lake Mead elev. 1080.28 ft 38%  25.92 ft

Lake Powell elev. 3,607.56 ft 51%  15.03 ft

Total System
Storage (8/2014) 30.40 maf 51%  .30 maf

Total System
Storage (8/2013) 30.10 maf 51%



Reservoir Storage

As of August 11, 2014

Colorado River Reservoir Storages

Basin	Reservoir	Max Storage	*Current Storage	Percentage	Current Storage subtotals
Upper Basin	Crystal Reservoir	17,356	15,774	91%	5,551,152
	Flaming Gorge	3,749,000	3,296,453	88%	
	Fontenelle	344,800	343,584	100%	
	Morrow Point	117,190	112,215	96%	
	Blue Mesa	829,500	658,061	79%	
	Navajo	1,696,000	1,125,065	66%	
	Lake Powell	24,322,000	12,486,264	51%	2,337,100
Lower Basin	Lake Mead	26,120,000	10,034,000	38%	
	Lake Mohave	1,809,800	1,746,900	97%	
	Lake Havasu	619,400	590,200	95%	
	TOTAL	59,625,046	30,408,516	51%	

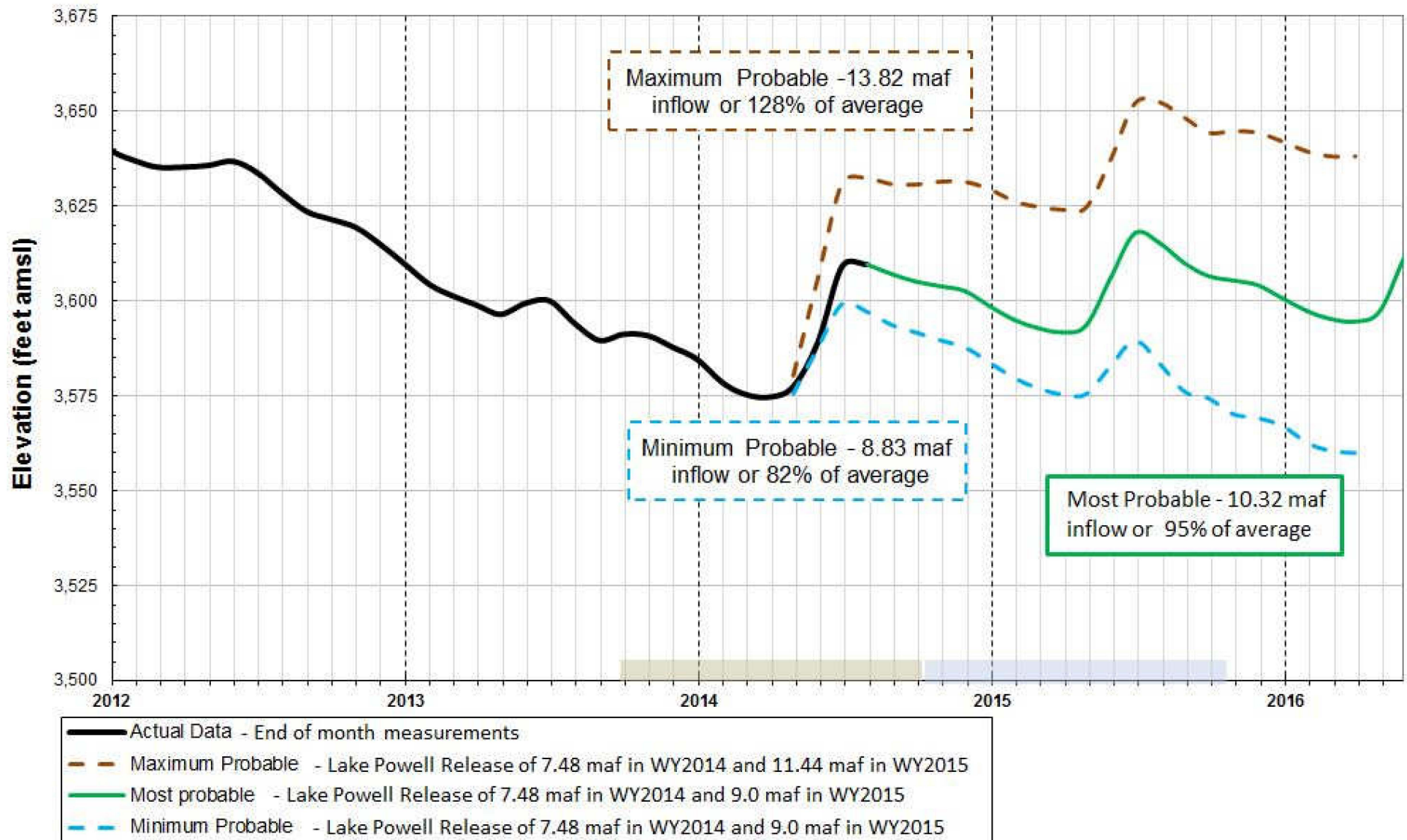
**Data current as 8/10/2014*

<http://www.usbr.gov/lc/region/g4000/hourly/levels.html>

<http://www.usbr.gov/uc/water/rsvrs/ops/r40day.html>

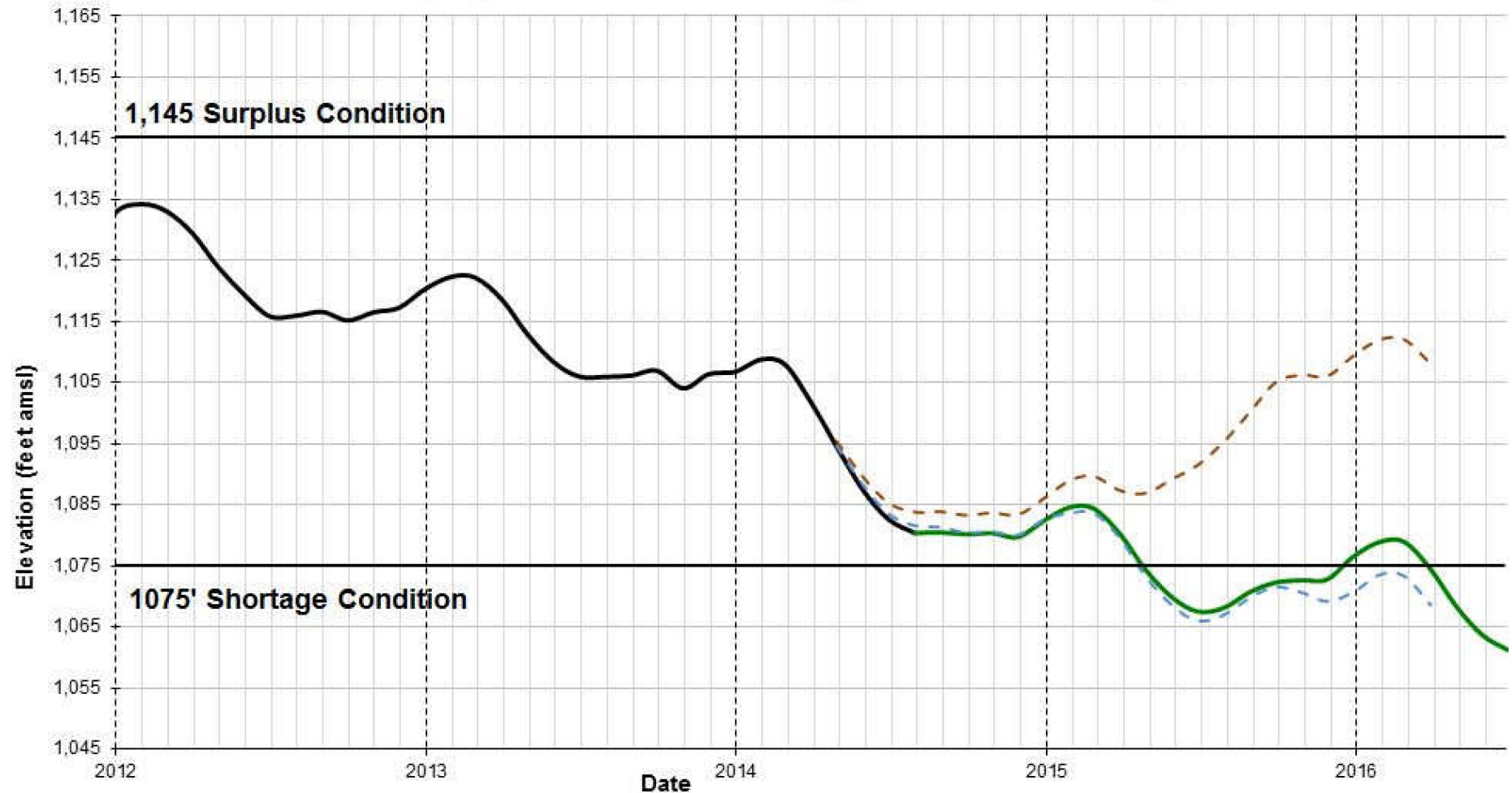
Lake Powell End of Month Elevations

(based on July 2014 24-month Study)



Lake Mead End of Month Elevation Projections

(Projections based on the July 2014 24-month study)



- Actual Data - End of month measurements
- - - Maximum Probable - Lake Powell Release of 7.48 maf in WY2014 and 11.44 maf in WY2015
- Most probable - Lake Powell Release of 7.48 maf in WY2014 and 9.0 maf in WY2015
- - - Minimum Probable - Lake Powell Release of 7.48 maf in WY2014 and 9.0 maf in WY2015

Drought and Precipitation



Precipitation – Colorado River Basin

As of August 11, 2014

Upper Colorado Basin

WY Precip to Date

99% (27.1")

Current Basin Snowpack

NA

(Avg 1981-2010)



U.S. Drought Monitor






West

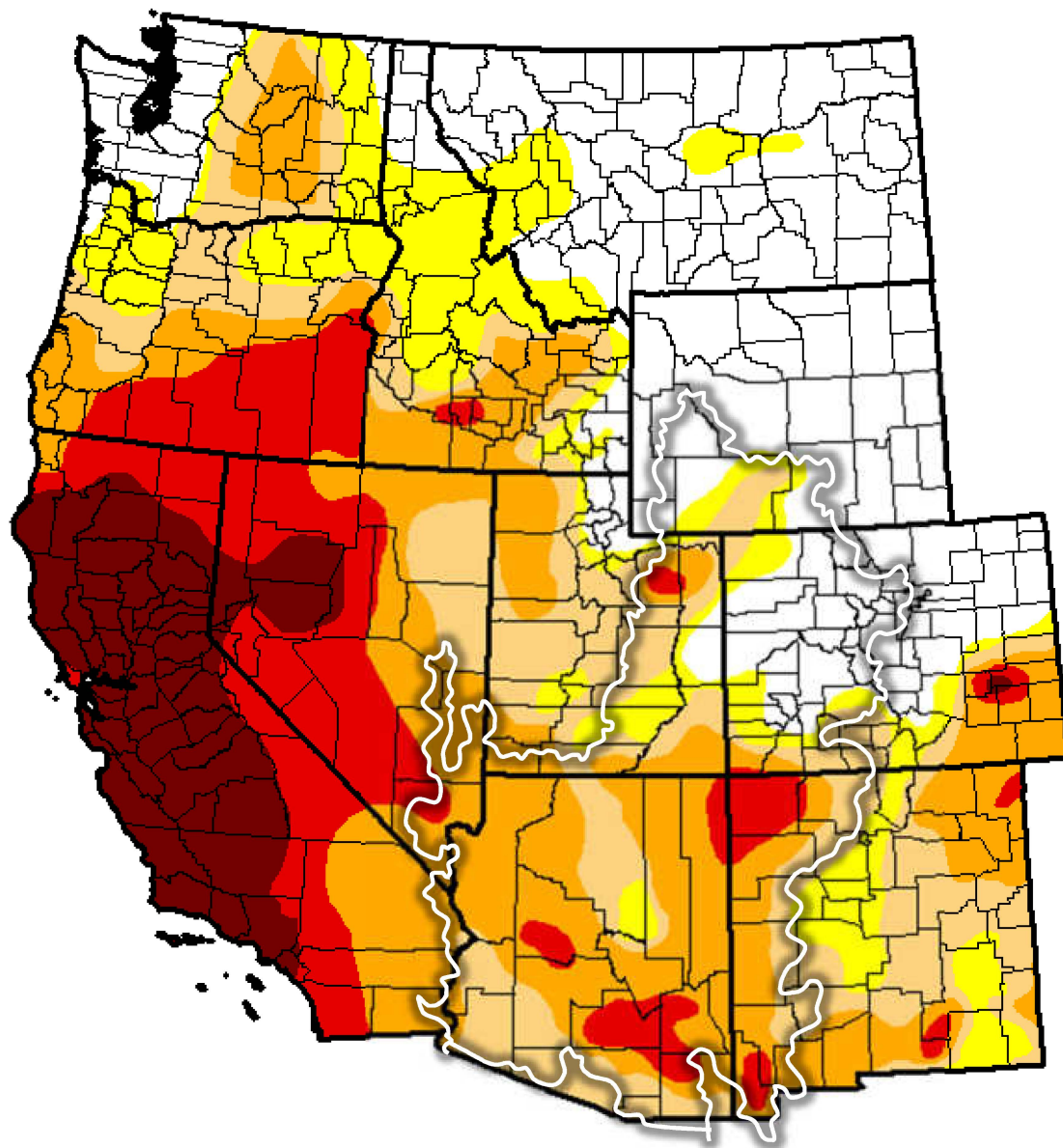
August 5, 2014

(Released Thursday, Aug. 7, 2014)

Valid 8 a.m. EDT

Intensity:

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



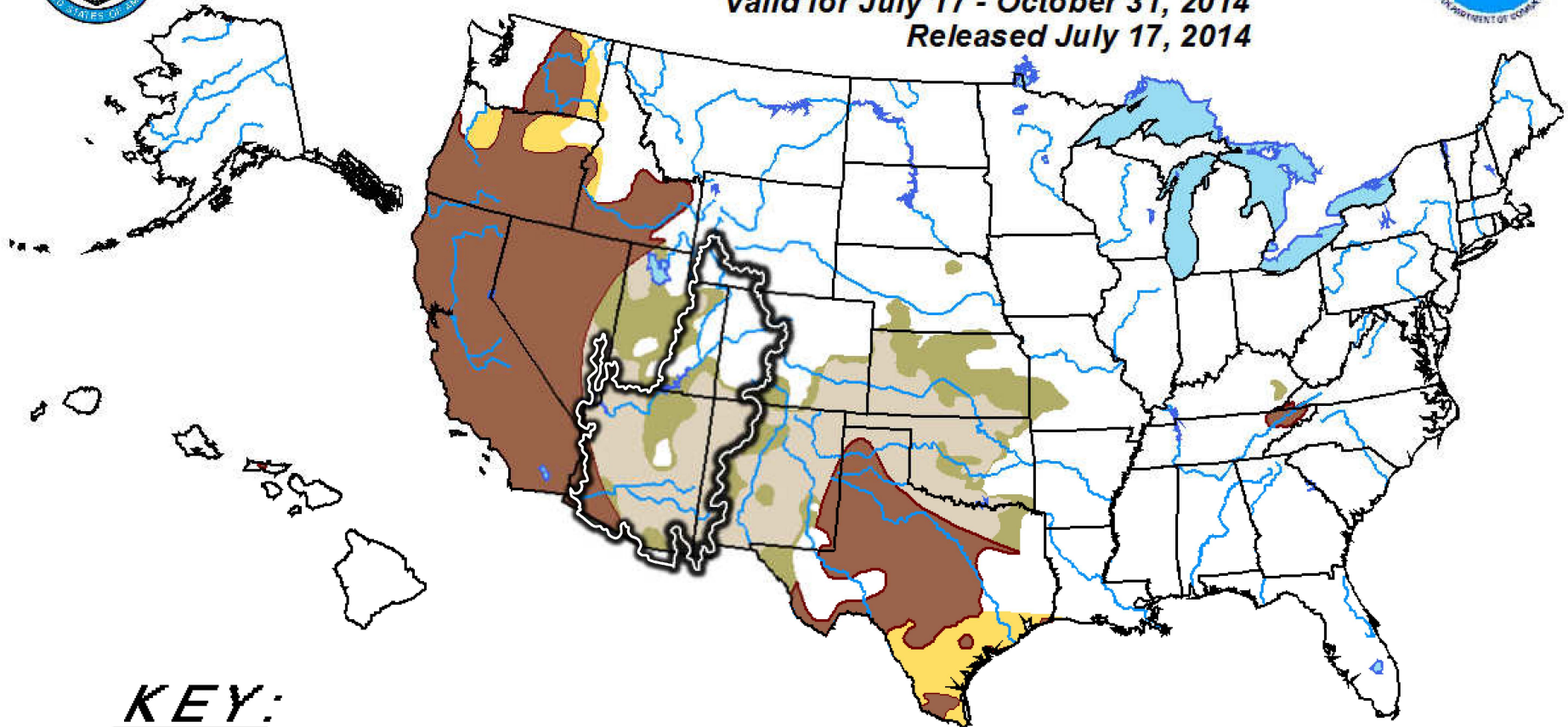


U.S. Seasonal Drought Outlook

Drought Tendency During the Valid Period

Valid for July 17 - October 31, 2014

Released July 17, 2014



KEY:



Drought persists or intensifies



Drought remains but improves



Drought removal likely



Drought development likely

Author: Adam Allgood, Climate Prediction Center, NOAA

http://www.cpc.ncep.noaa.gov/products/expert_assessment/season_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 tan area areas imply at least a 1-category improvement in the Drought Monitor intensity levels by the end of the period although drought will remain.

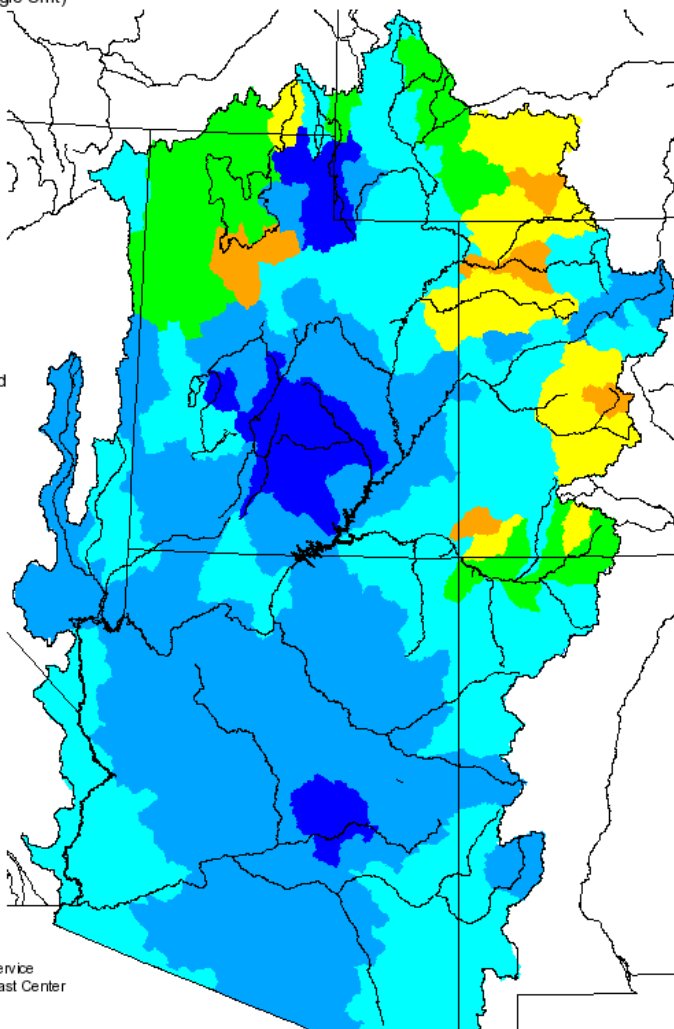
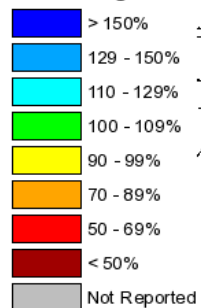
The Green areas imply drought removal by the end of the period (D0 or none)



Monthly Precipitation for July 2014

(Averaged by Hydrologic Unit)

% Average

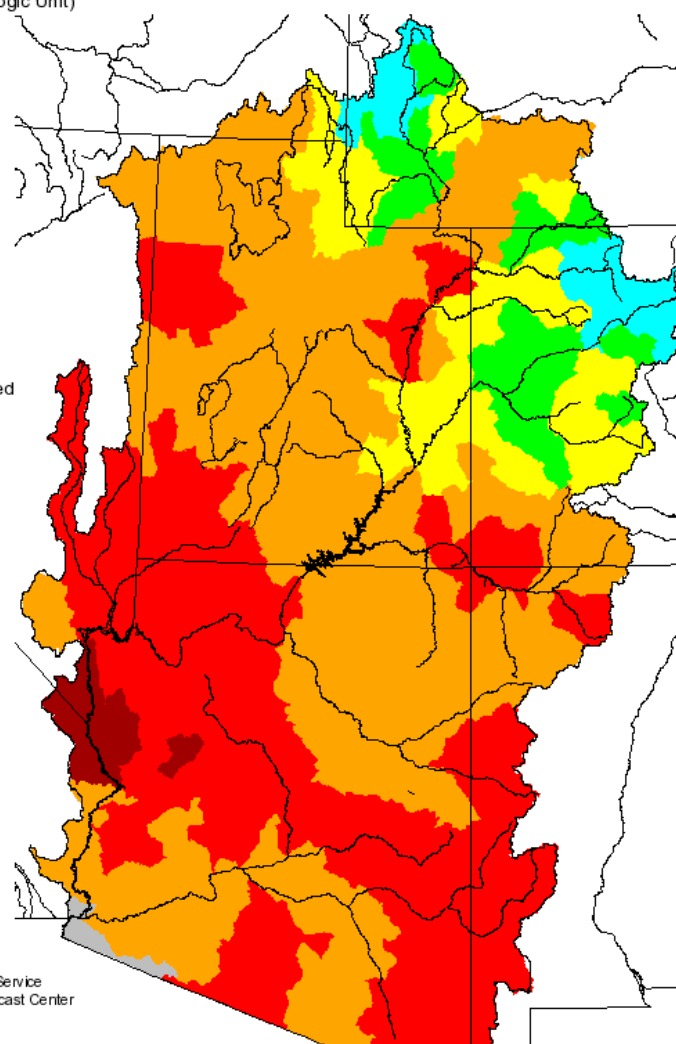
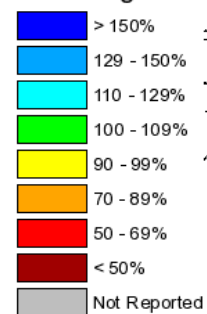


Prepared by
NOAA, National Weather Service
Colorado Basin River Forecast Center
Salt Lake City, Utah
www.cbrfc.noaa.gov

Seasonal Precipitation, October 2013 - July 2014

(Averaged by Hydrologic Unit)

% Average

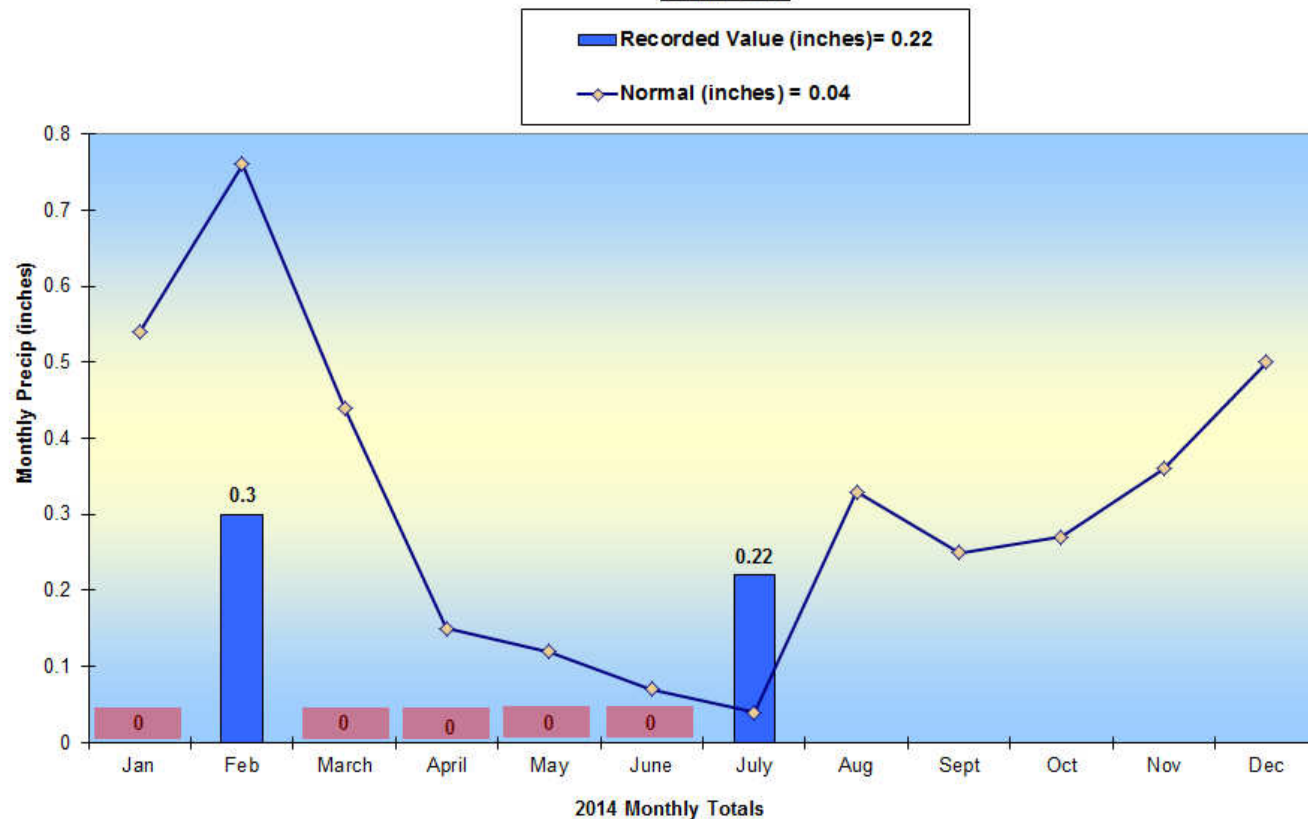


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Salt Lake City, Utah
www.cbrfc.noaa.gov

Monthly Precipitation, Las Vegas, NV

As of July 31, 2014

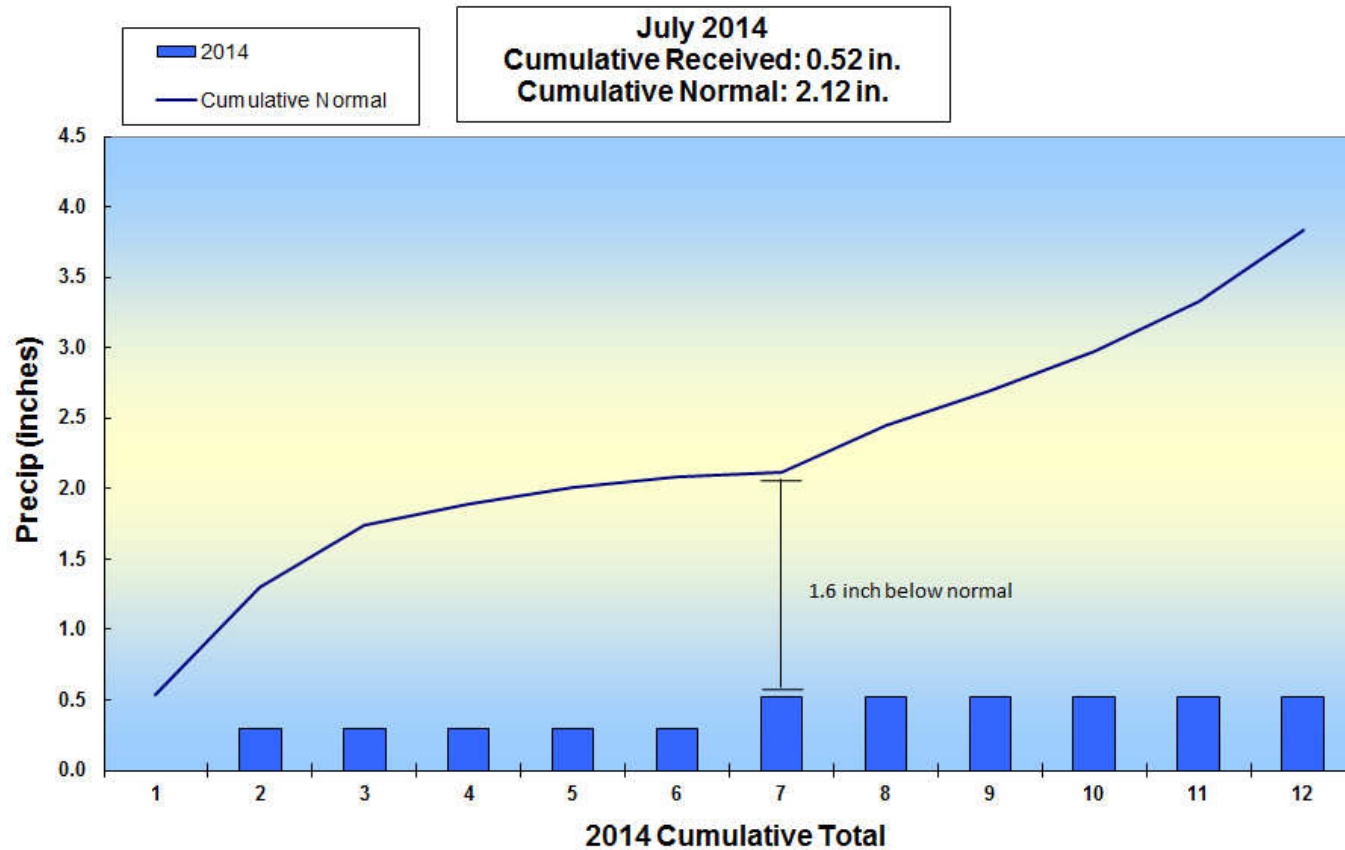
Record of Precipitation at McCarran International Airport, Las Vegas, NV
July 2014



Cumulative Precipitation, Las Vegas, NV

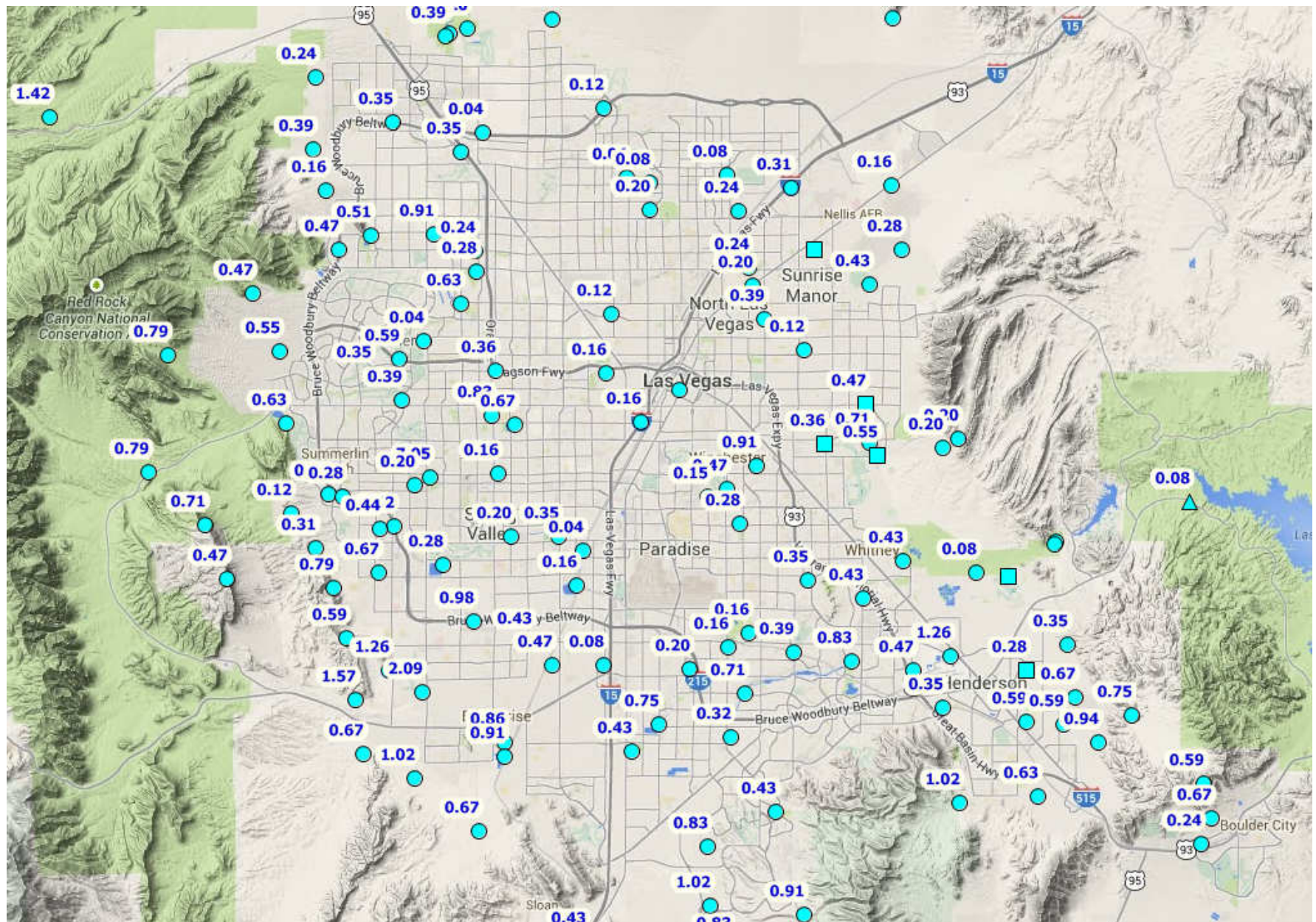
As of July 31, 2014

Record of Precipitation at McCarran International Airport, Las Vegas, NV



Clark County Regional Flood Control District Rain Gages

July Totals



Water Use in Southern Nevada



Water Use in Southern Nevada

January – June 2014

2014*: Consumptive Use = 109,285
 CR Water Banked = 0

109,285

2013: Consumptive Use = 110,193
 CR Water Banked = 0

110,193

Difference = - 908 af

*Subject to final accounting.



Water Use Comparison

January – June 2014

Water Use	2013 Acre Feet	2014 Acre Feet	Difference	% Change
Las Vegas Wash Gauged Flow	101,012	104,342	3,330	3.3%
Diversions	213,096	215,699	2,603	1.2%
Return Flow Credit	102,903	106,413	3,510	3.4%
Consumptive Use	110,193	109,285	-908	-0.8%



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