

Colorado River Commission of Nevada

Natural Resources Group Hydrologic Update July 8, 2014



Unregulated Inflow



Unregulated Inflow Into Lake Powell

As of July 7, 2014

	MAF*	% Avg**
• WY 2014 (forecasted):	10.31	95%
• April-July 2014 (forecasted):	7.09	99%
• June (observed):	3.04	114%
• July (forecasted):	1.00	92%

*MAF=Million Acre-Feet

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



Storage Conditions

As of July 7, 2014

		<u>Percent of Capacity</u>	<u>Δ from last year</u>
Lake Mead elev.	1082.12 ft	39%	↓ 23.55 ft
Lake Powell elev.	3,609.58 ft	52%	↑ 10.69 ft
Total System Storage (7/2014)	30.68 maf	51%	↓ .16 maf
Total System Storage (7/2013)	30.84 maf	52%	



Reservoir Storage

As of July 4, 2014

Colorado River Reservoir Storages

Basin	Reservoir	Max Storage	*Current Storage	Percentage	Current Storage subtotals
Upper Basin	Crystal Reservoir	17,356	15,432	89%	5,498,715
	Flaming Gorge	3,749,000	3,290,357	88%	
	Fontenelle	344,800	259,174	75%	
	Morrow Point	117,190	106,679	91%	
	Blue Mesa	829,500	657,732	79%	
	Navajo	1,696,000	1,169,341	69%	
	Lake Powell	24,322,000	12,663,981	52%	
Lower Basin	Lake Mead	26,120,000	10,206,000	39%	2,268,100
	Lake Mohave	1,809,800	1,690,900	93%	
	Lake Havasu	619,400	577,200	93%	
	TOTAL	59,625,046	30,636,796	51%	

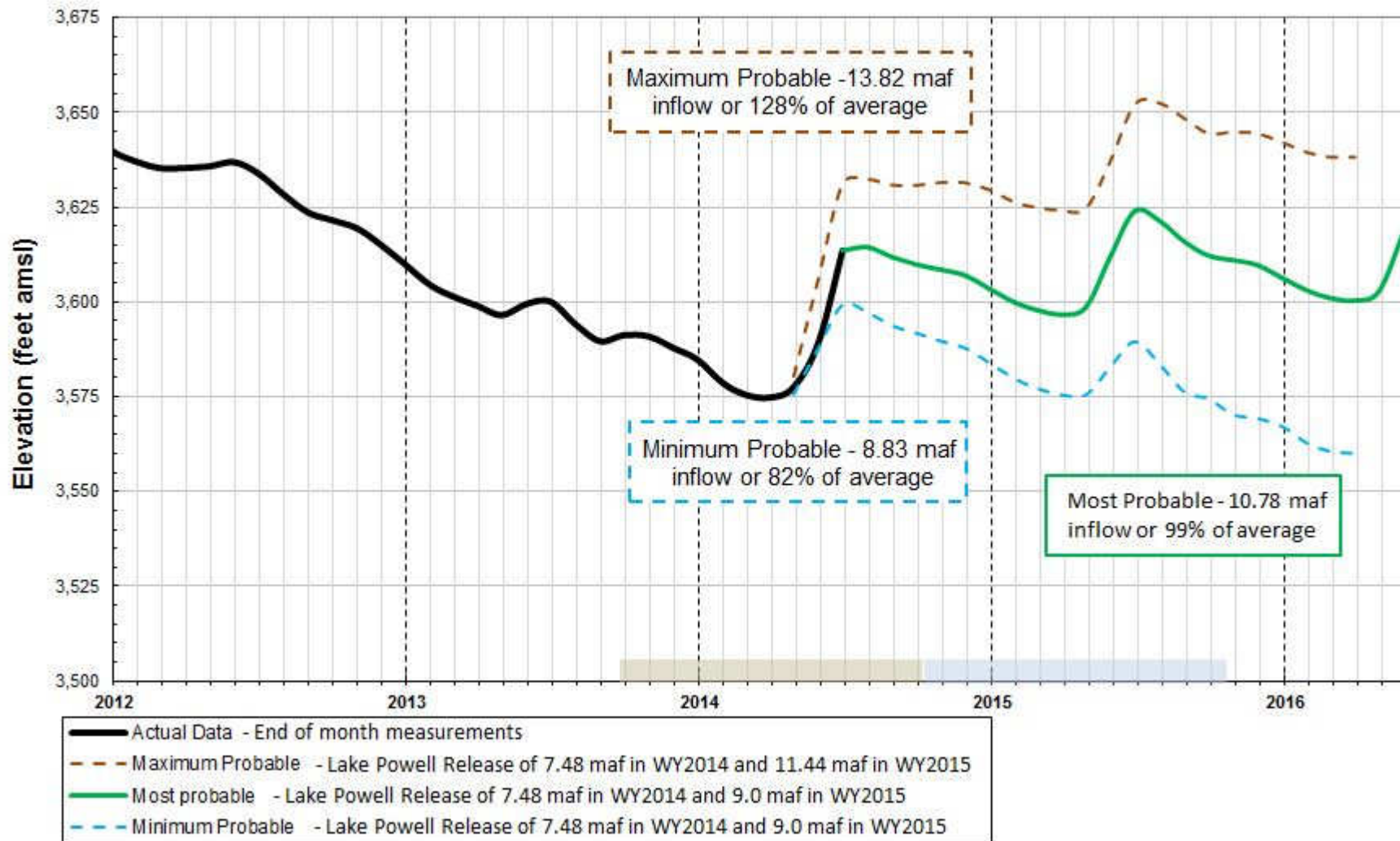
*Data current as 7/4/2014

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

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

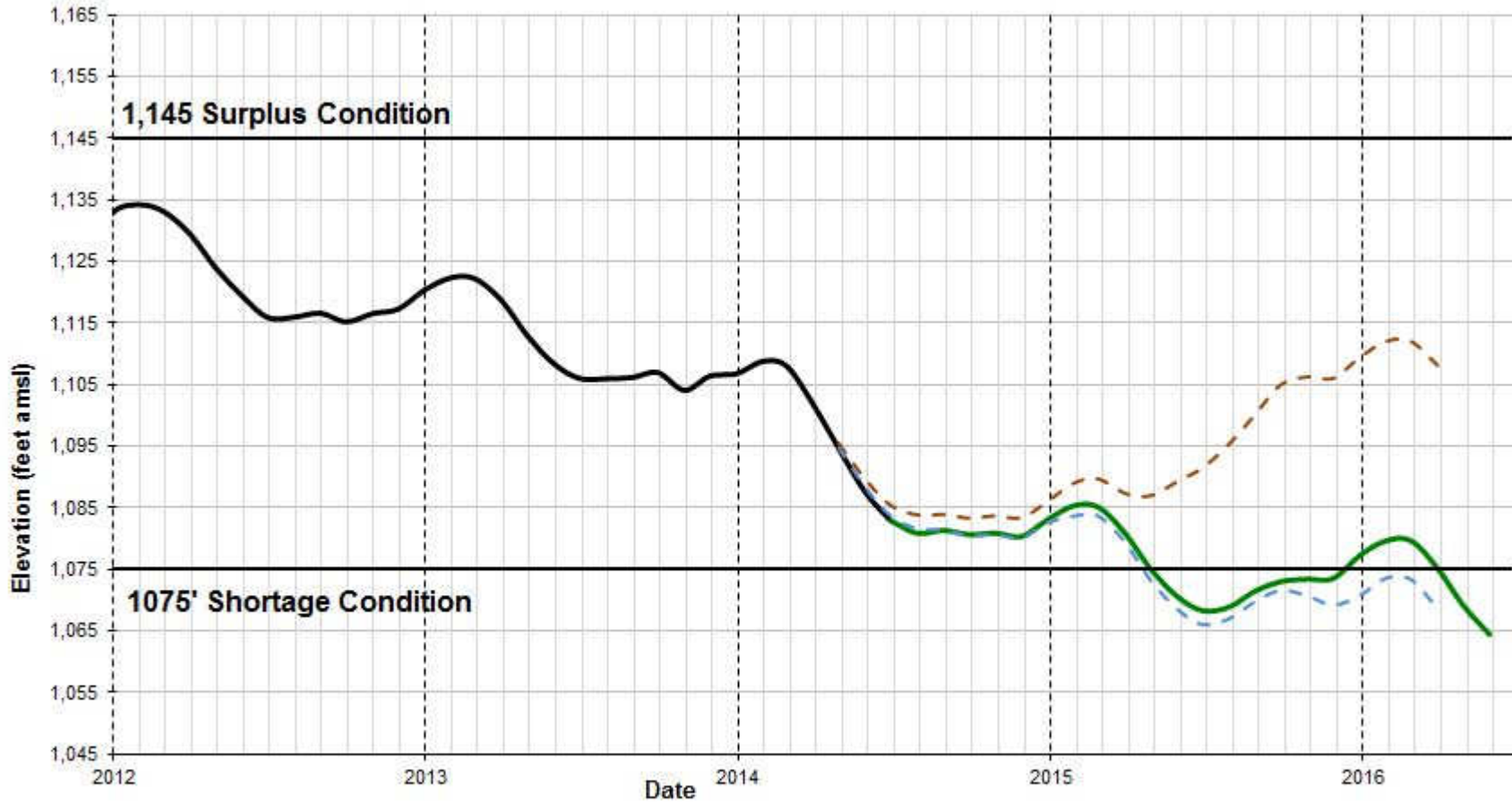
Lake Powell End of Month Elevations

(based on June 2014 24-month Study)



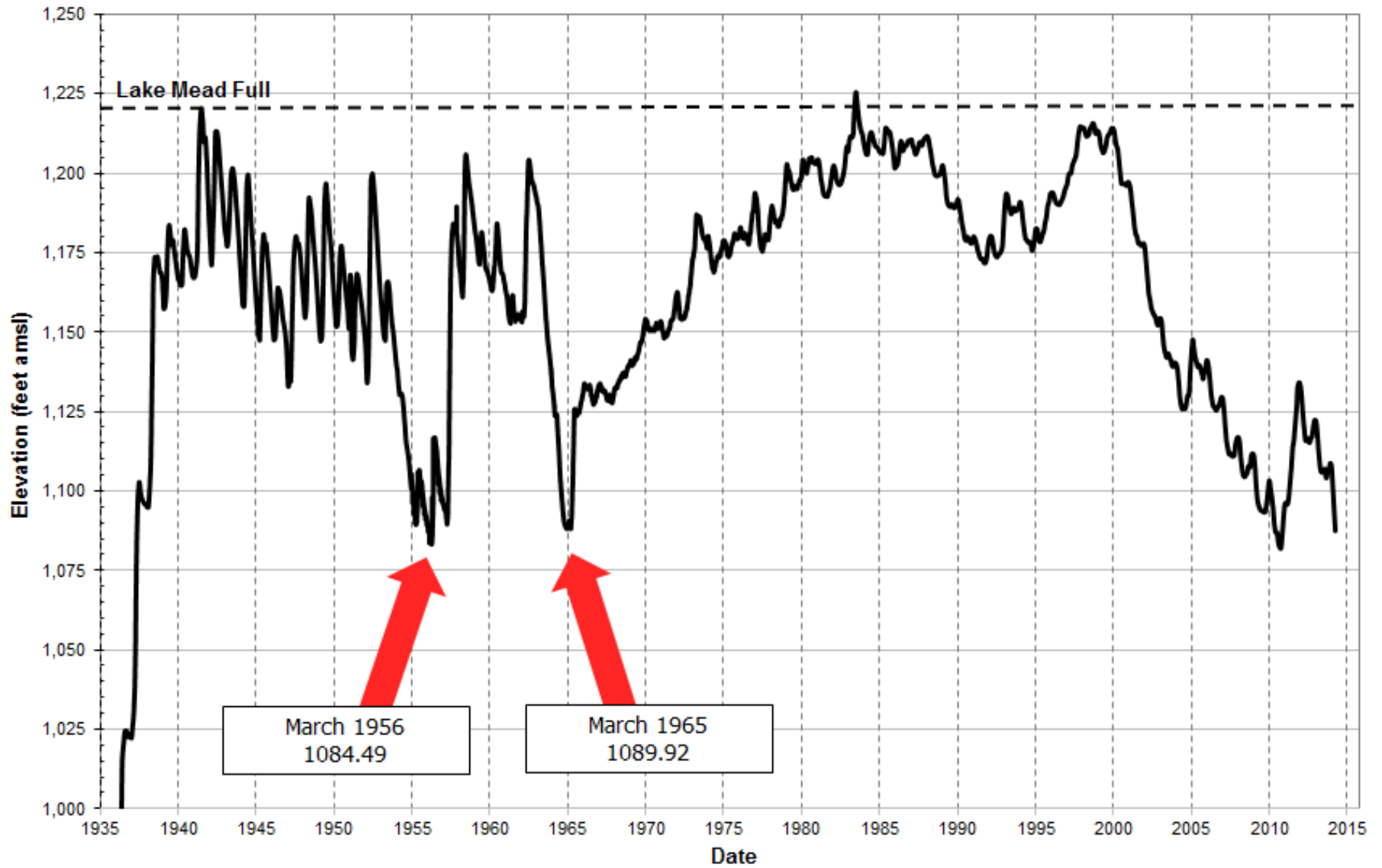
Lake Mead End of Month Elevation Projections

(Projections based on the June 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

Lake Mead Elevations



Lake Mead Elevations



Drought and Precipitation



Precipitation – Colorado River Basin

As of July 7, 2014

Upper Colorado Basin

WY Precip to Date

96% (24.2")

Current Basin Snowpack

NA

(Avg 1981-2010)

U.S. Drought Monitor






West

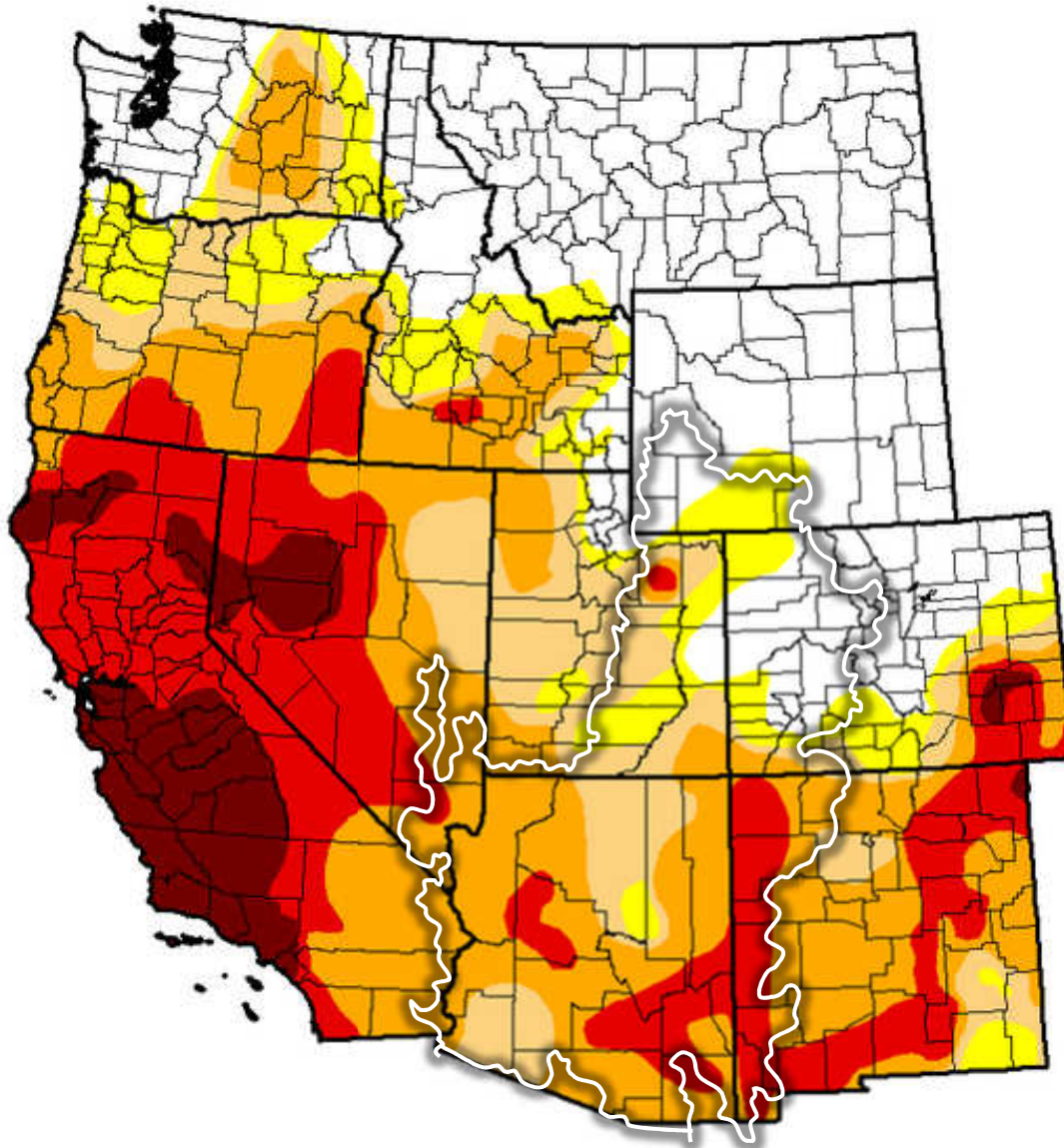
July 1, 2014

(Released Thursday July 3, 2014)

Valid 8 a.m. EDT

Intensity:

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



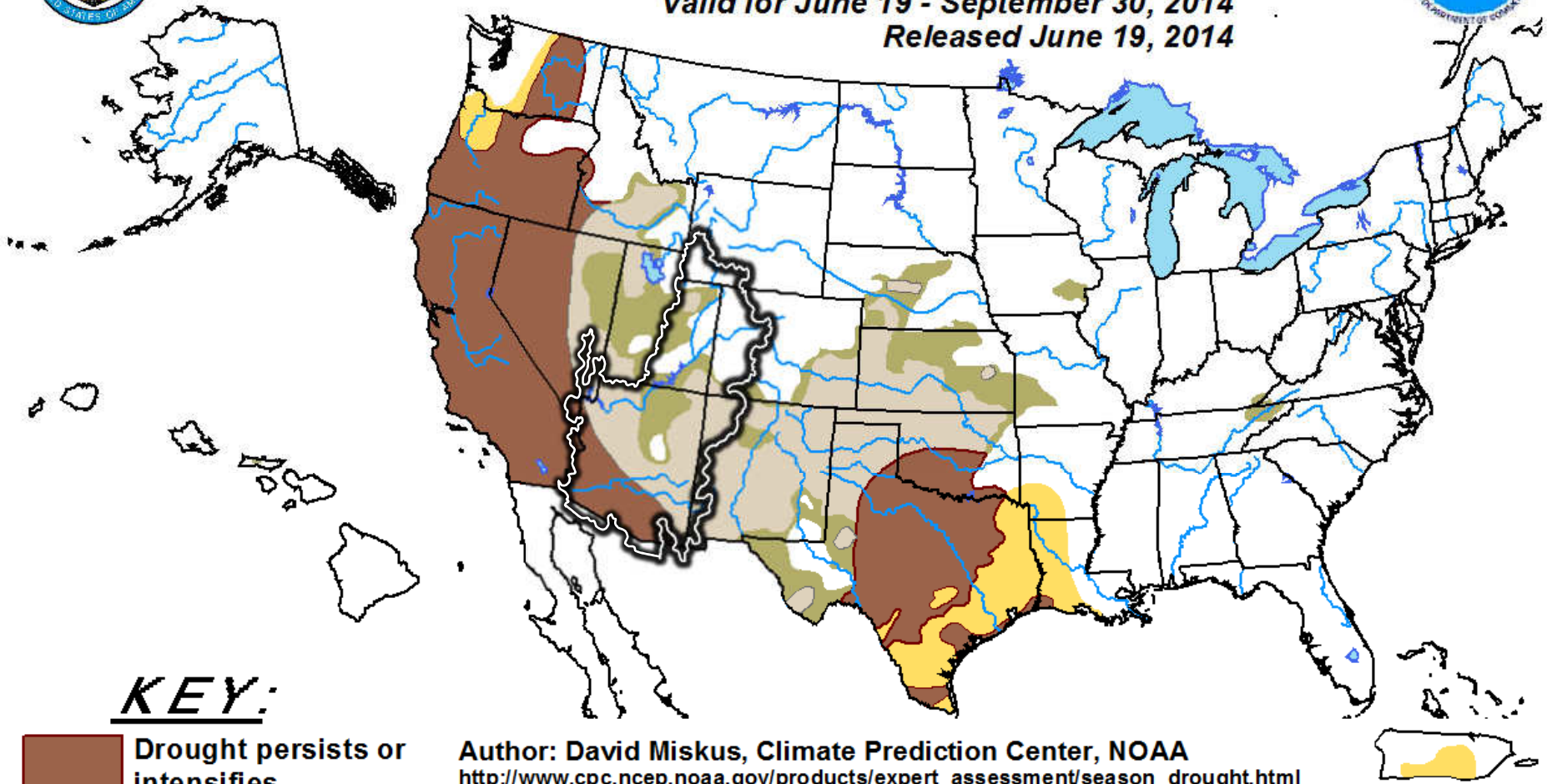


U.S. Seasonal Drought Outlook

Drought Tendency During the Valid Period

Valid for June 19 - September 30, 2014

Released June 19, 2014



KEY:



Drought persists or intensifies



Drought remains but improves



Drought removal likely



Drought development likely

Author: David Miskus, 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.

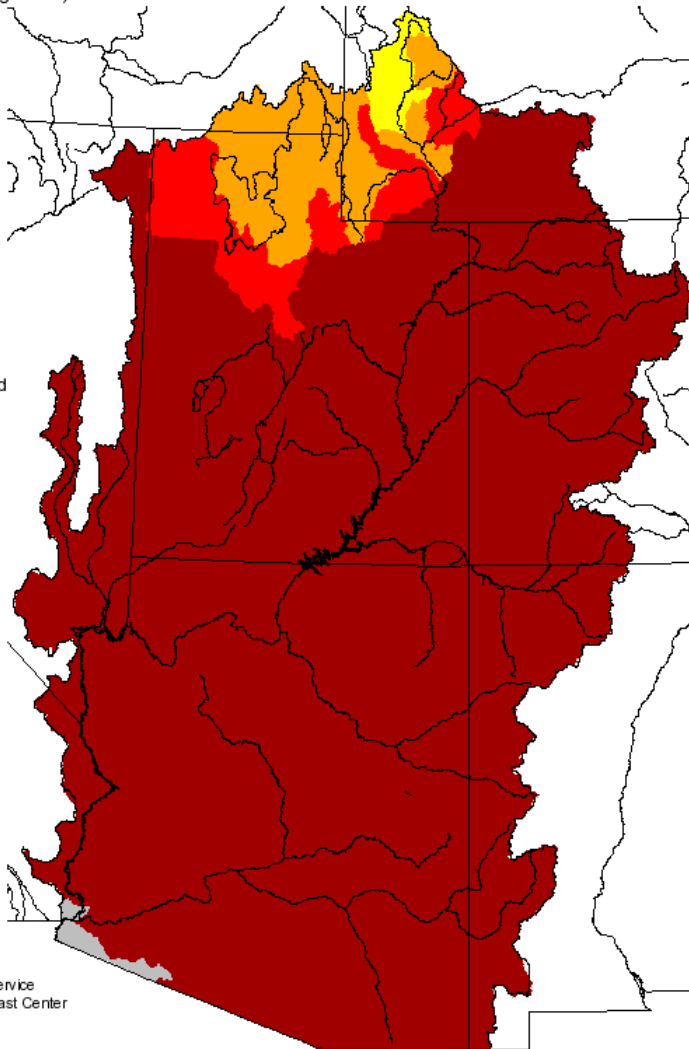
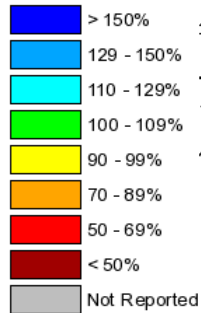
NOTE: The tan area areas imply at least a 1-category improvement in the Drought Monitor intensity levels by the end of the period although drought will remain.

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

Monthly Precipitation for June 2014

(Averaged by Hydrologic Unit)

% Average

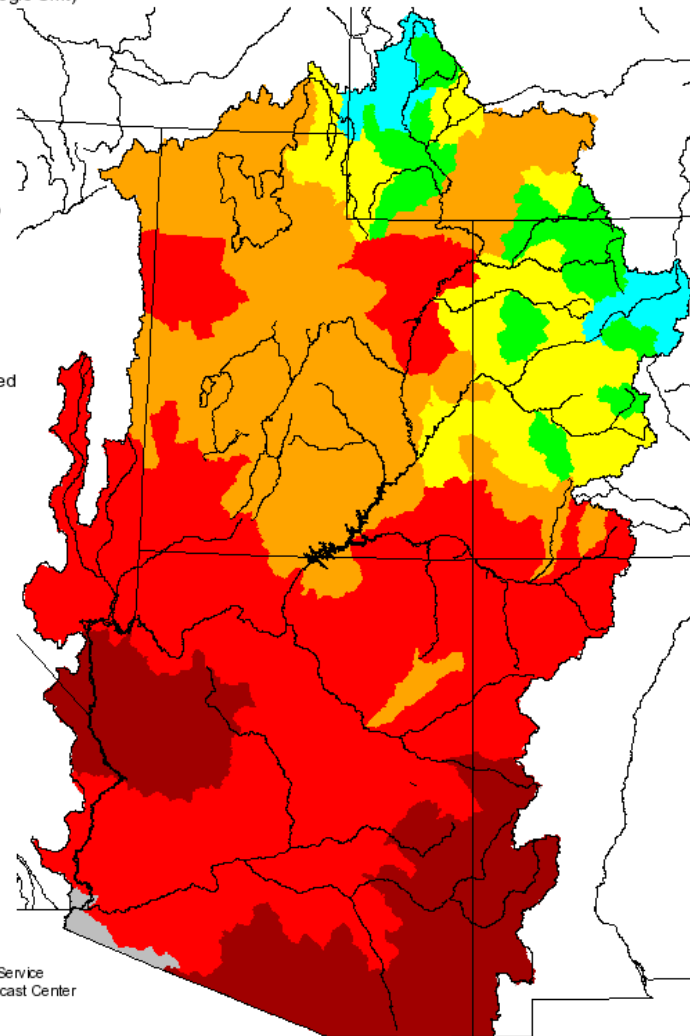
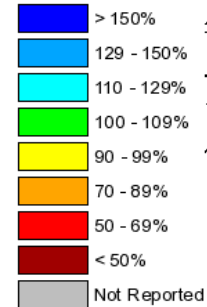


Prepared by
NOAA, National Weather Service
Colorado Basin River Forecast Center
Salt Lake City, Utah
www.cbrfc.noaa.gov

Seasonal Precipitation, October 2013 - June 2014

(Averaged by Hydrologic Unit)

% Average

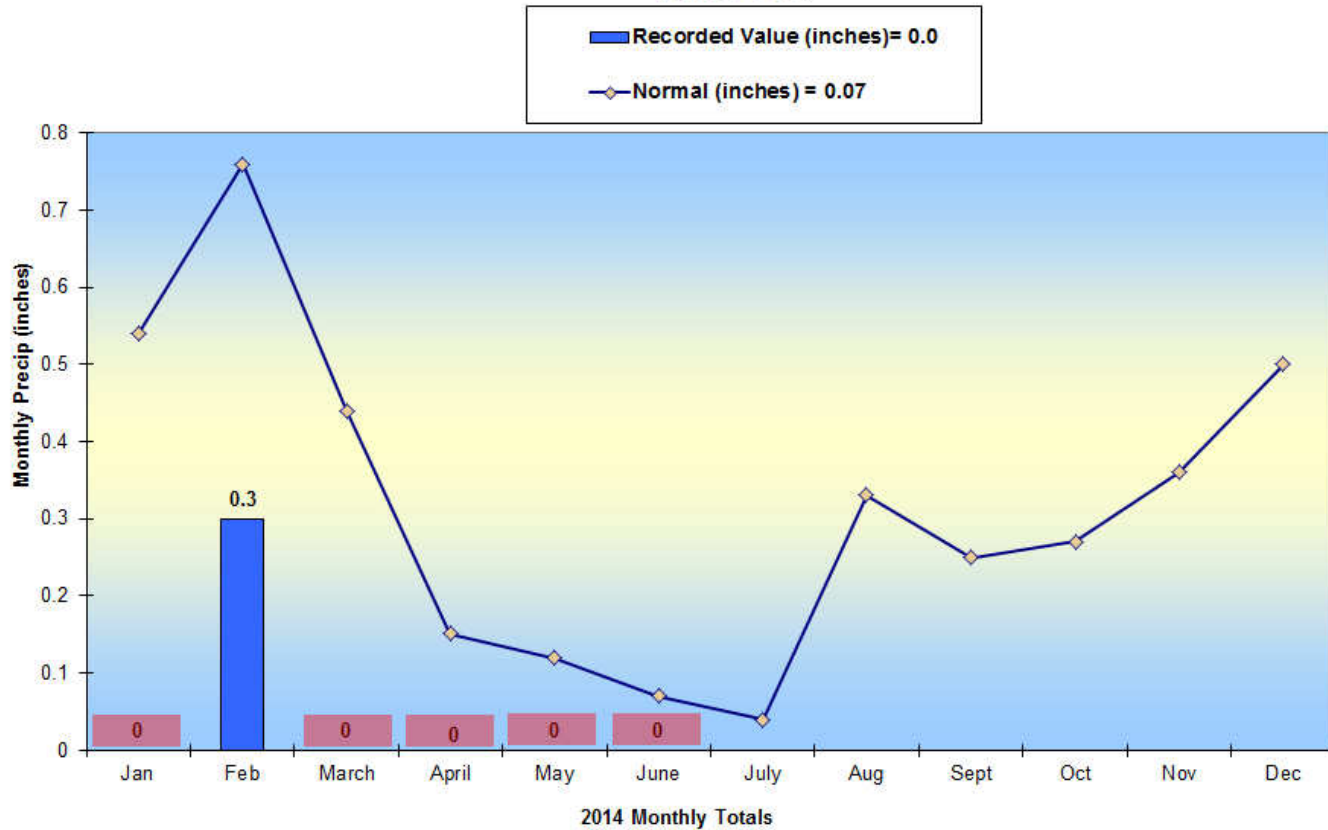


Prepared by
NOAA, National Weather Service
Colorado Basin River Forecast Center
Salt Lake City, Utah
www.cbrfc.noaa.gov

Monthly Precipitation, Las Vegas, NV

As of June 30, 2014

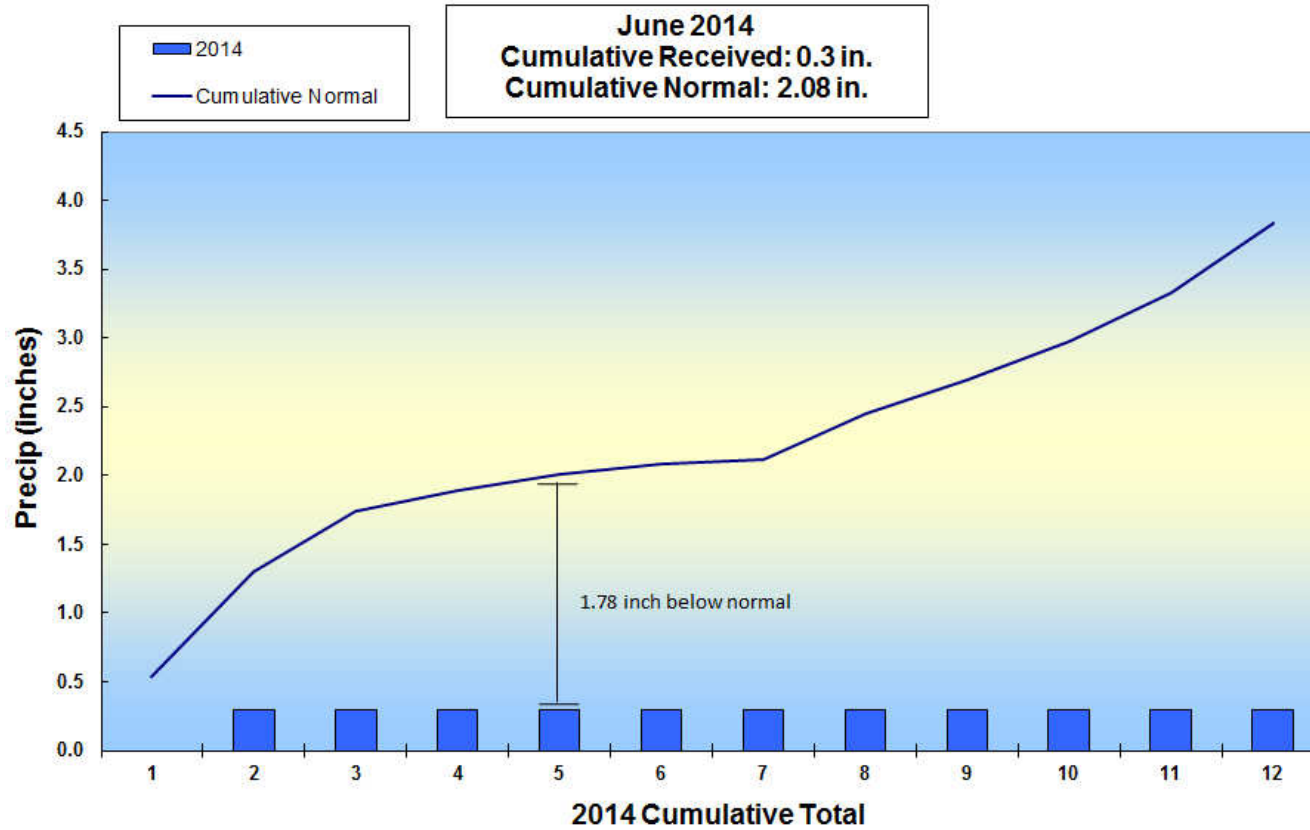
Record of Precipitation at McCarran International Airport, Las Vegas, NV
June 2014



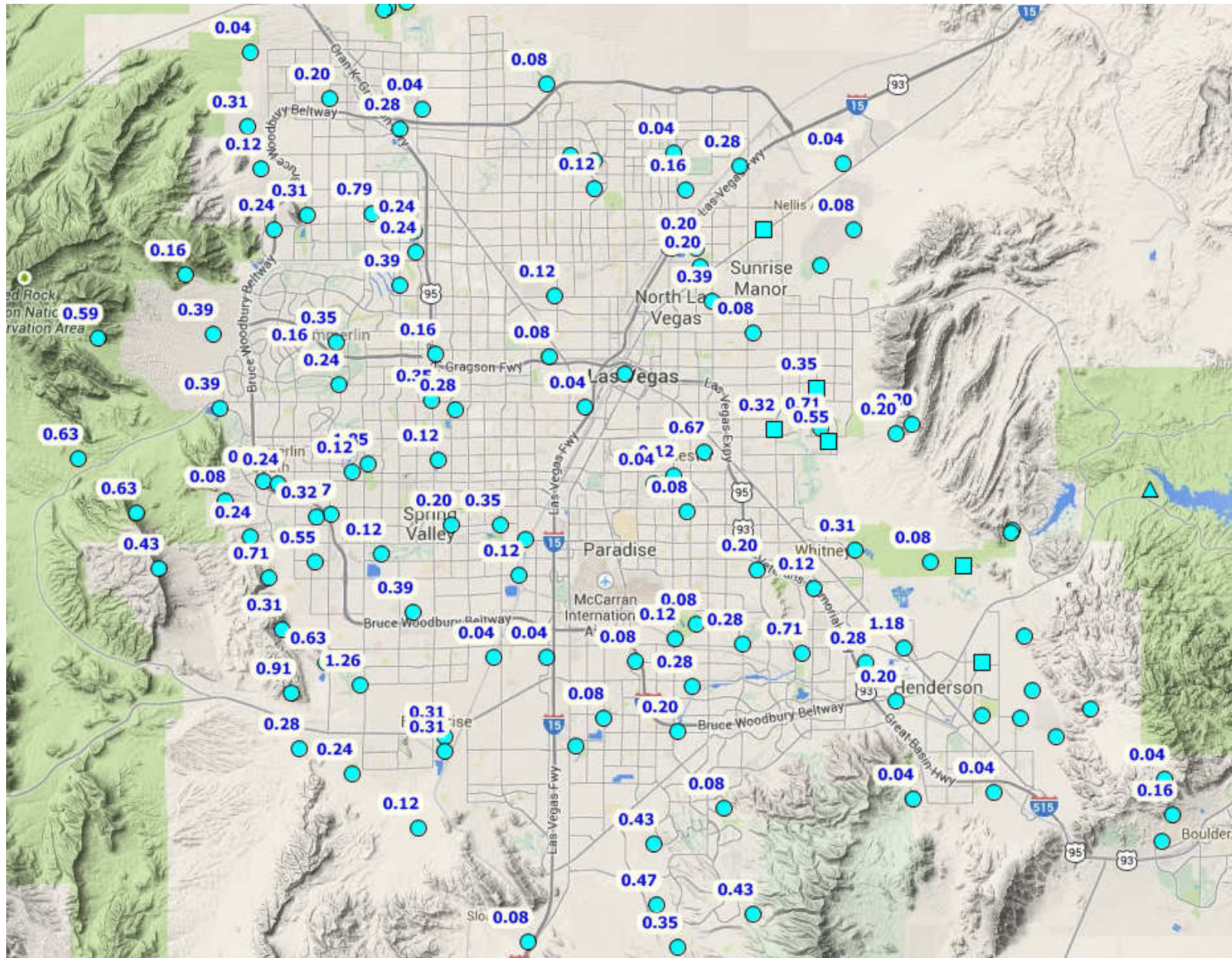
Cumulative Precipitation, Las Vegas, NV

As of June 30, 2014

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



Clark County Regional Flood Control District Rain Gages Past 8 Days



Water Use in Southern Nevada



Water Use in Southern Nevada

January – May 2014

2014*: Consumptive Use = 81,207

CR Water Banked = 0

81,207

2013: Consumptive Use = 81,551

CR Water Banked = 0

81,551

Difference = - 344 af

*Subject to final accounting.



Water Use Comparison

January – May 2014

Water Use	2013 Acre Feet	2014 Acre Feet	Difference	% Change
Las Vegas Wash Gauged Flow	85,550	88,651	3,101	3.6%
Diversions	168,458	171,510	3,052	1.8%
Return Flow Credit	86,907	90,303	3,396	3.9%
Consumptive Use	81,551	81,207	-344	-0.4%



Colorado River Commission of Nevada

Natural Resources Group Hydrologic Update July 8, 2014

