

# Colorado River Commission of Nevada

## Natural Resources Group Hydrologic Update August 11, 2015



# Unregulated Inflow Into Lake Powell

As of August 10, 2015

	MAF*	% Avg**
• WY 2015 (forecast):	10.34	95%
• April-July 2015 (forecast):	6.71	94%
• July (observed):	1.07	98%
• August (forecasted):	0.40	80%

\*MAF=Million Acre-Feet

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



# Storage Conditions

As of August 10, 2015

		<u>Percent of Capacity</u>	<u>Δ from last year</u>
Lake Mead elev.	1078.29 ft	38%	↓ 1.99 ft
Lake Powell elev.	3,612.02 ft	53%	↑ 4.46 ft
Total System Storage (8/2015)	31.28 maf	53%	↑ 0.87 maf
Total System Storage (8/2014)	30.41 maf	51%	



# Reservoir Storage

As of August 2, 2015

## Colorado River Reservoir Storages

Basin	Reservoir	Max Storage	*Current Storage	Percentage	Current Storage subtotals
Upper Basin	Crystal Reservoir	17,356	16,234	94%	6,240,191
	Flaming Gorge	3,749,000	3,529,706	94%	
	Fontenelle	344,800	313,532	91%	
	Morrow Point	117,190	113,337	97%	
	Blue Mesa	829,500	805,014	97%	
	Navajo	1,696,000	1,462,368	86%	
	Lake Powell	24,322,000	13,033,624	54%	
Lower Basin	Lake Mead	26,120,000	9,870,000	38%	2,277,000
	Lake Mohave	1,809,800	1,694,900	94%	
	Lake Havasu	619,400	582,100	94%	
	<b>TOTAL</b>	<b>59,625,046</b>	<b>31,420,815</b>	<b>53%</b>	

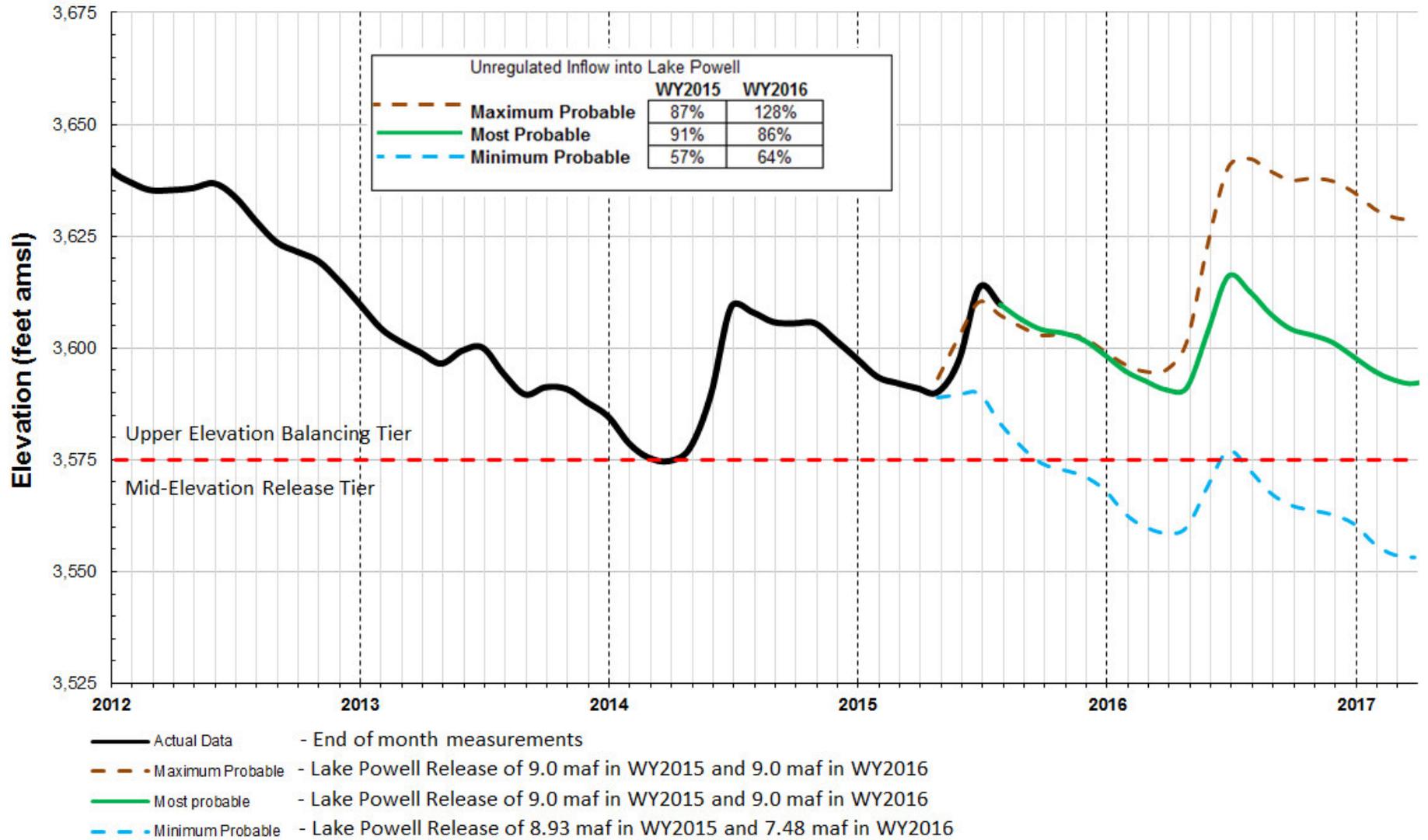
\*Data current as 8/2/2015

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

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

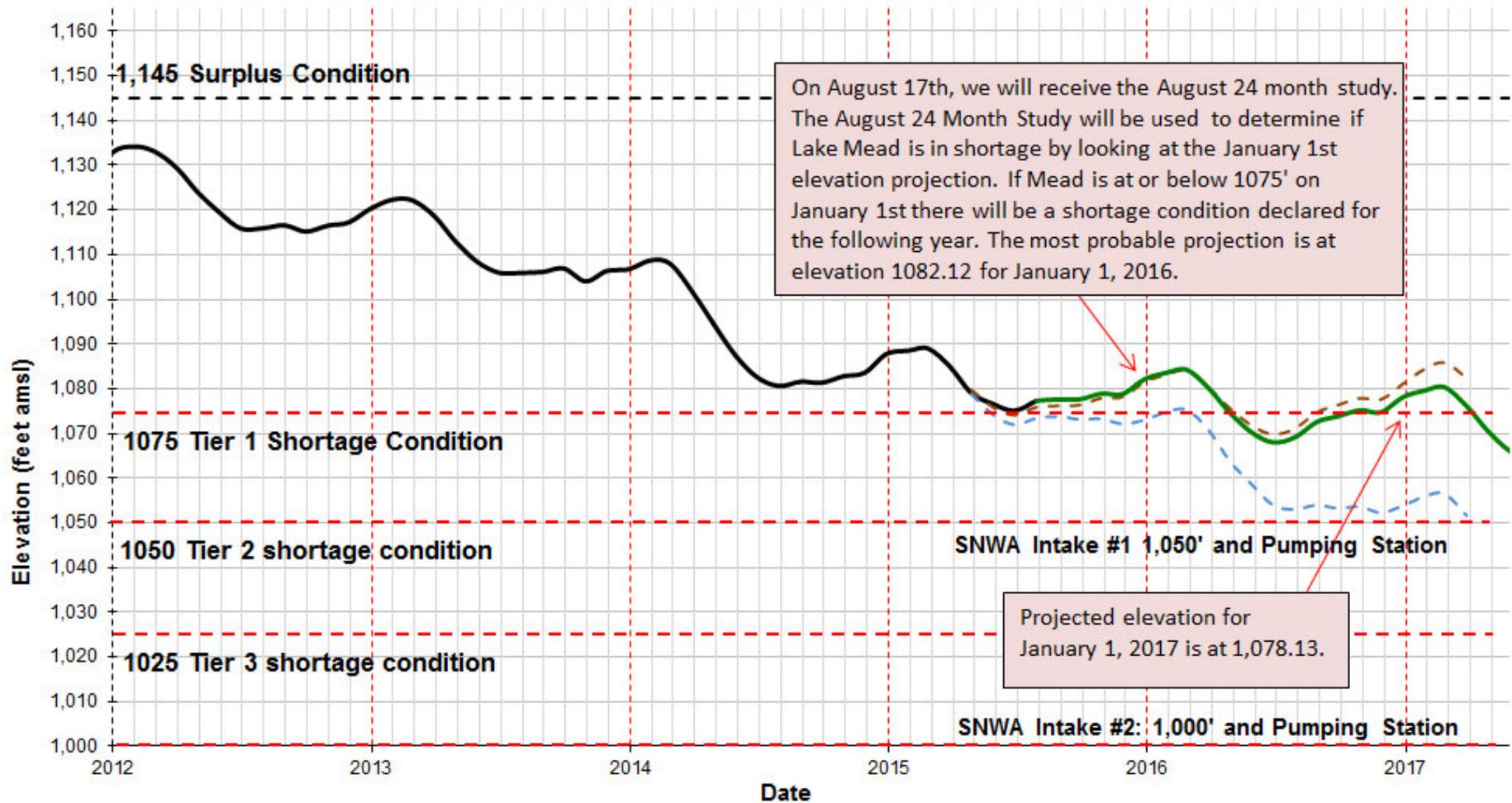
# Lake Powell End of Month Elevations

(based on July 2015 24-month Study)



# Lake Mead End of Month Elevation Projections

(Projections based on the July 2015 24-month study)



- Actual Data - End of month measurements
- - - Maximum Probable - Lake Powell Release of 9.0 maf in WY2015 and 9.0 maf in WY2016
- Most Probable - Lake Powell Release of 9.0 maf in WY2015 and 9.0 maf in WY2016
- - - Minimum Probable - Lake Powell Release of 8.93 maf in WY2015 and 7.48 maf in WY2016

# U.S. Drought Monitor

## West

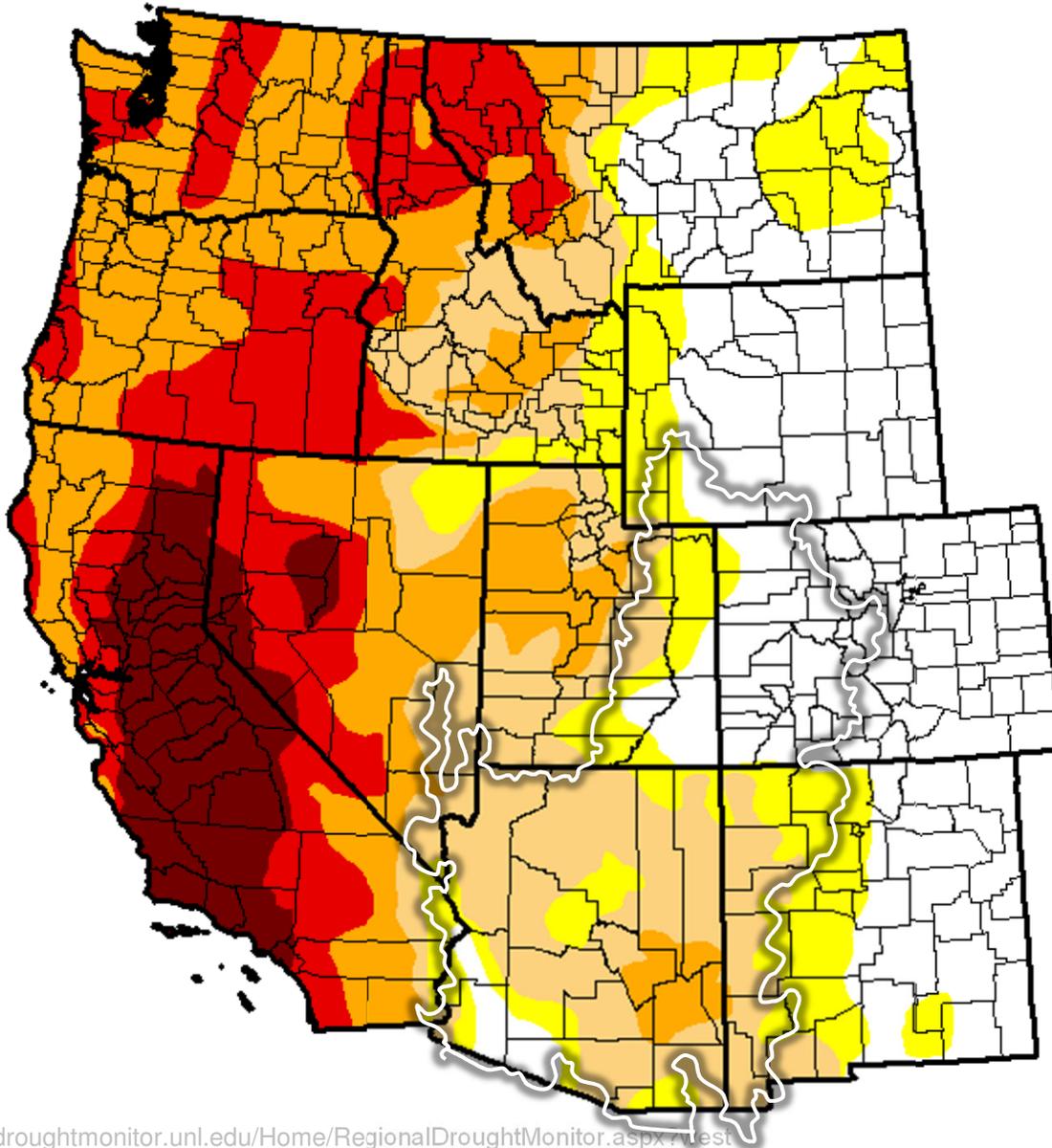
**August 4, 2015**

*(Released Thursday, Aug. 6, 2015)*

Valid 8 a.m. EDT

### Intensity:

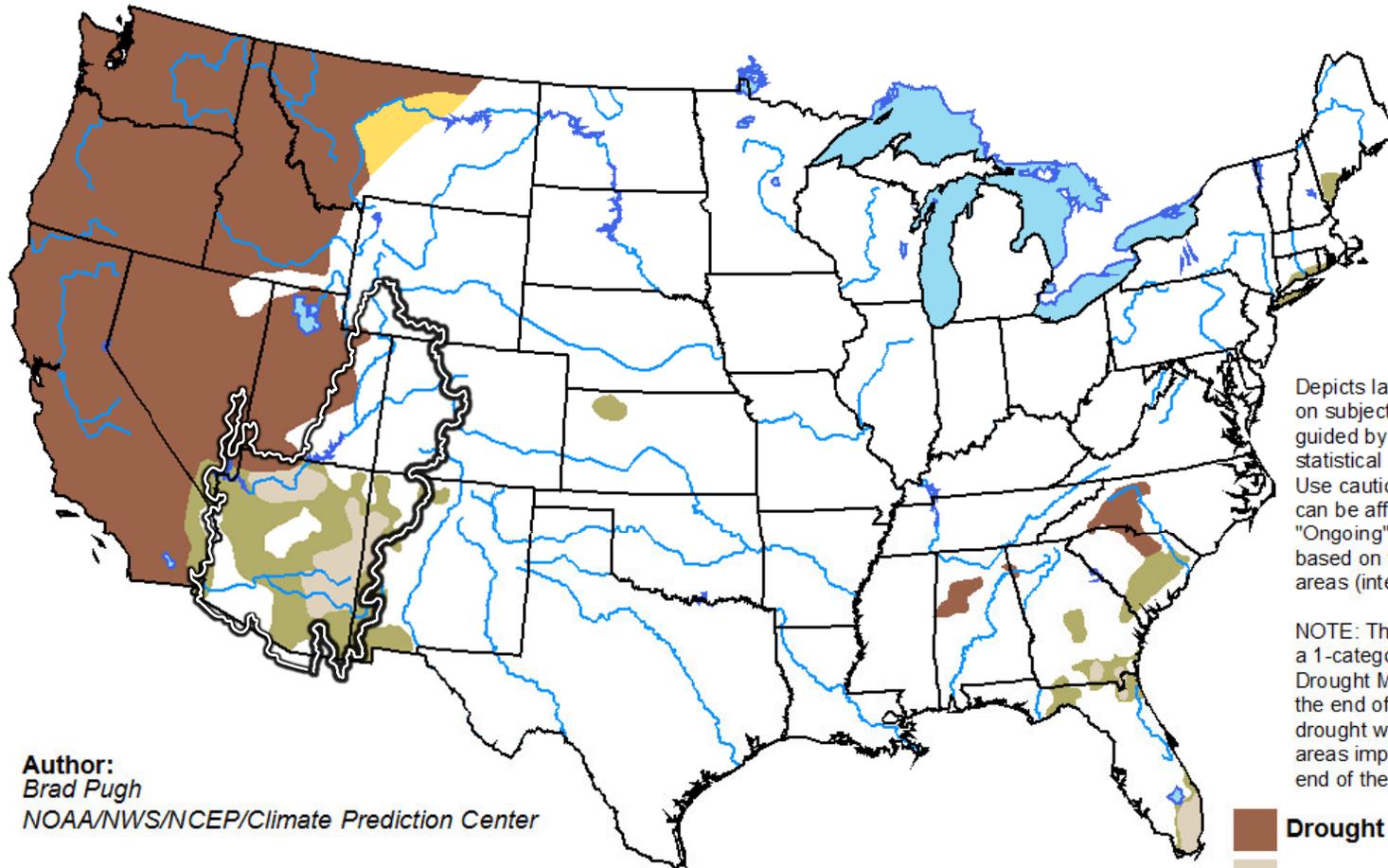
-  D0 - Abnormally Dry
-  D1 - Moderate Drought
-  D2 - Severe Drought
-  D3 - Extreme Drought
-  D4 - Exceptional Drought



# U.S. Seasonal Drought Outlook

## Drought Tendency During the Valid Period

Valid for July 16 - October 31, 2015  
Released July 16, 2015

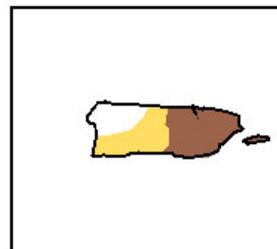
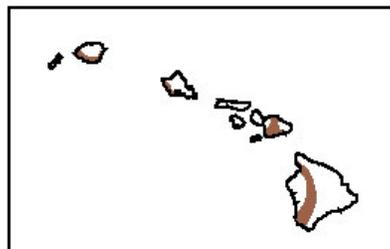
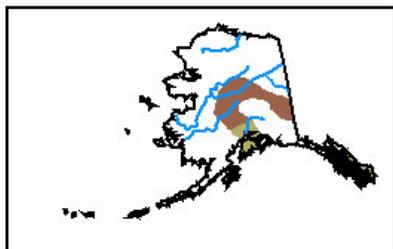


Depicts large-scale trends based on subjectively derived probabilities guided by short- and long-range statistical and dynamical forecasts. Use caution for applications that can be affected by short lived events. "Ongoing" drought areas are based on the U.S. Drought Monitor areas (intensities of D1 to D4).

NOTE: The tan 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).

Author:  
Brad Pugh  
NOAA/NWS/NCEP/Climate Prediction Center

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



<http://go.usa.gov/hHTe>

# Precipitation – Colorado River Basin

As of August 10, 2015

## Upper Colorado Basin

WY Precip to Date

94% (25.9")

Current Basin Snowpack

NA

(Avg 1981-2010)

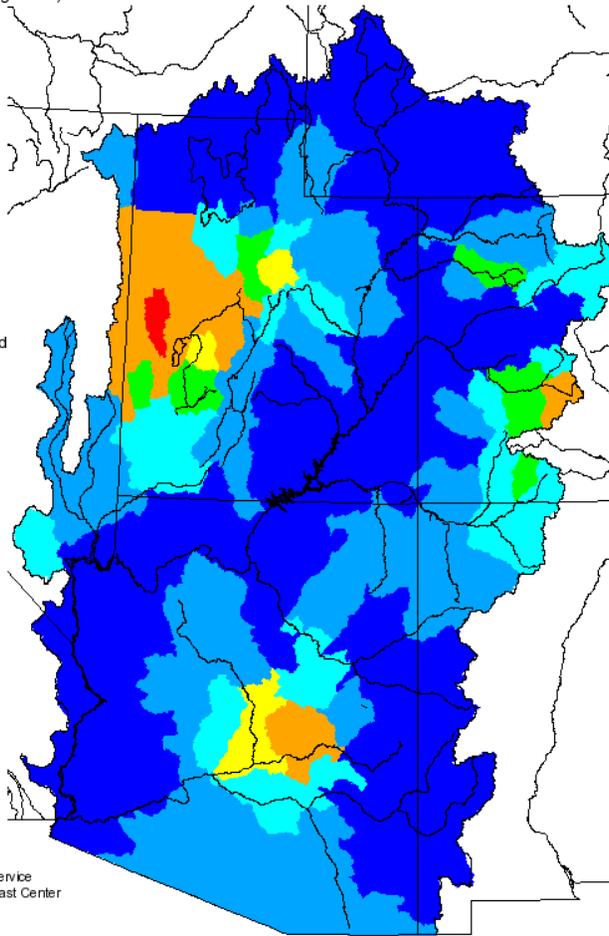
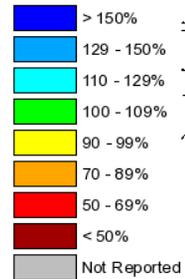


# Precipitation

## Monthly Precipitation for July 2015

(Averaged by Hydrologic Unit)

### % Average

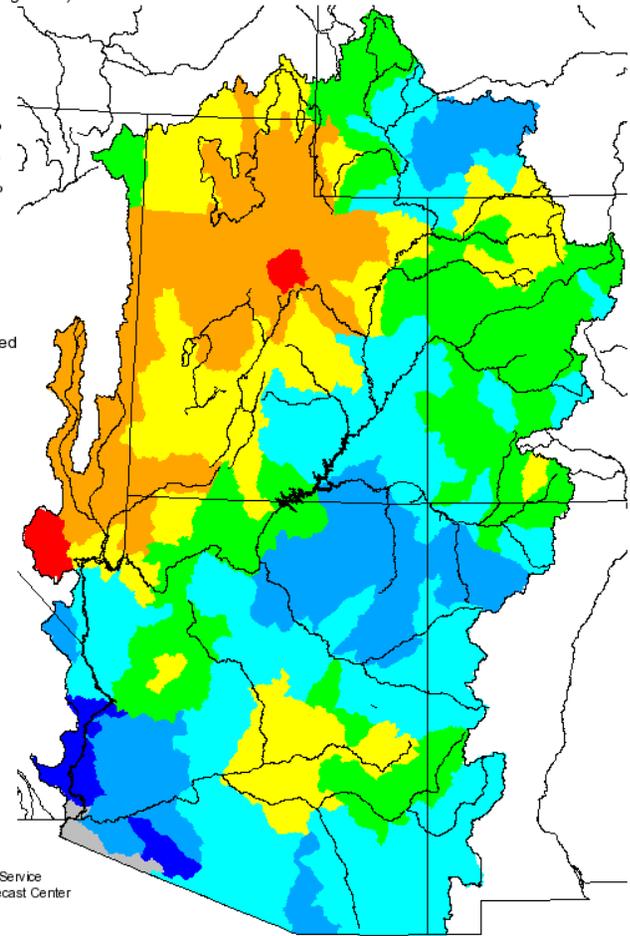
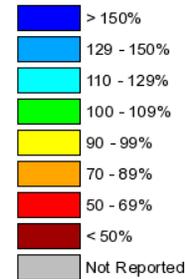


Prepared by  
NOAA, National Weather Service  
Colorado Basin River Forecast Center  
Salt Lake City, Utah  
[www.cbafc.noaa.gov](http://www.cbafc.noaa.gov)

## Seasonal Precipitation, October 2014 - July 2015

(Averaged by Hydrologic Unit)

### % Average

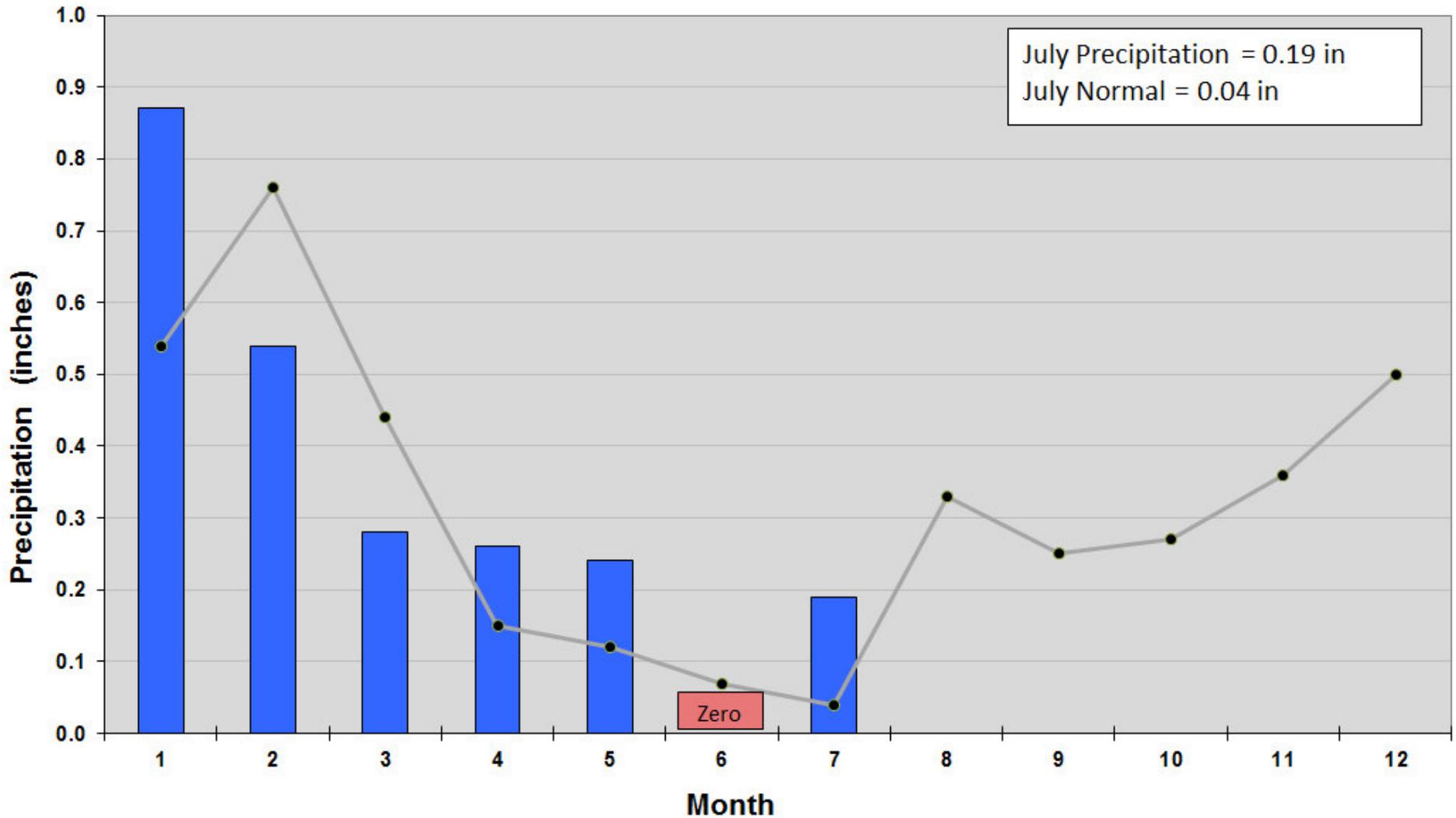


Prepared by  
NOAA, National Weather Service  
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# Monthly Precipitation at McCarran International Airport, Las Vegas, NV

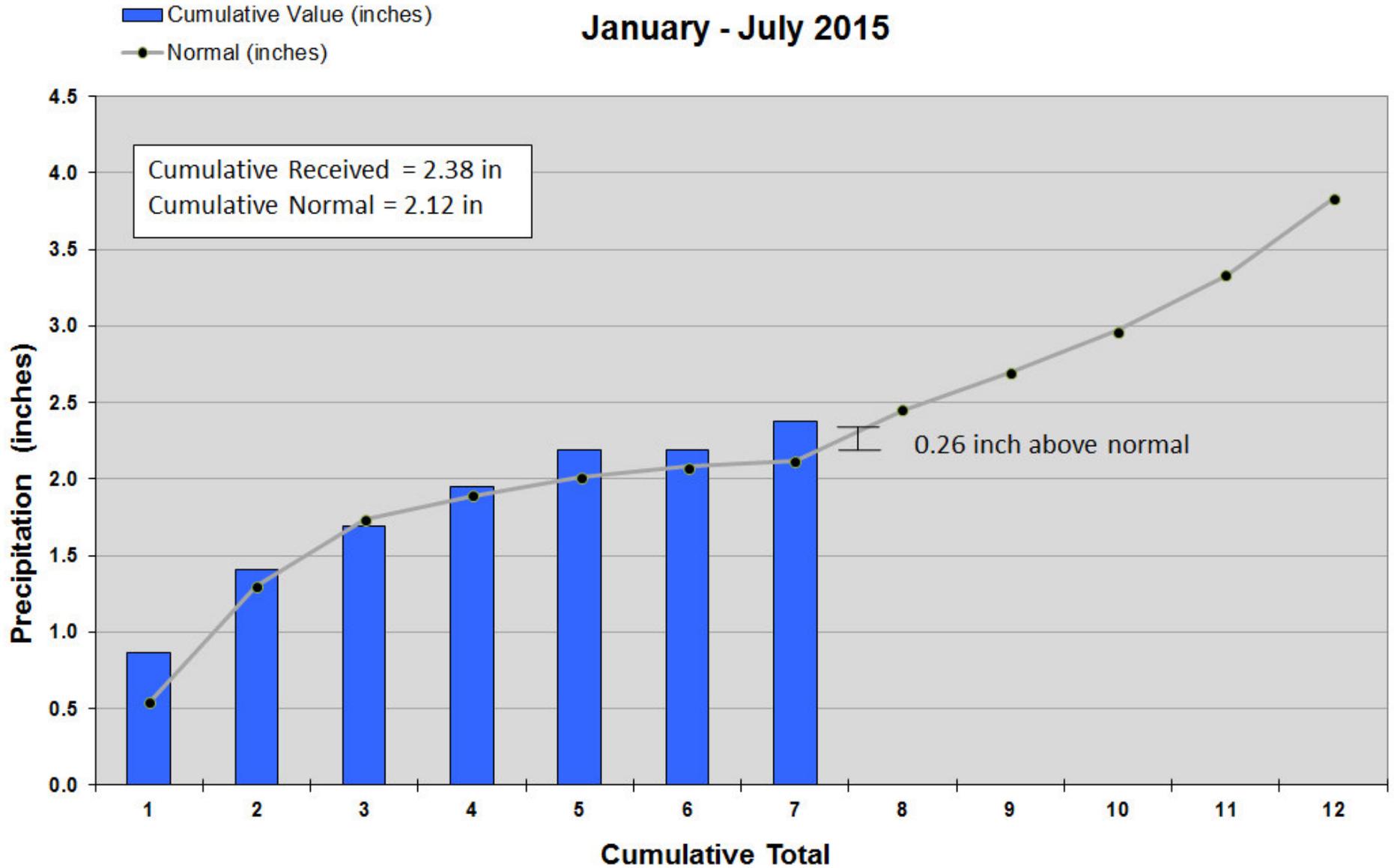
## January - July 2015

Recorded Value (inches)  
Normal (inches)



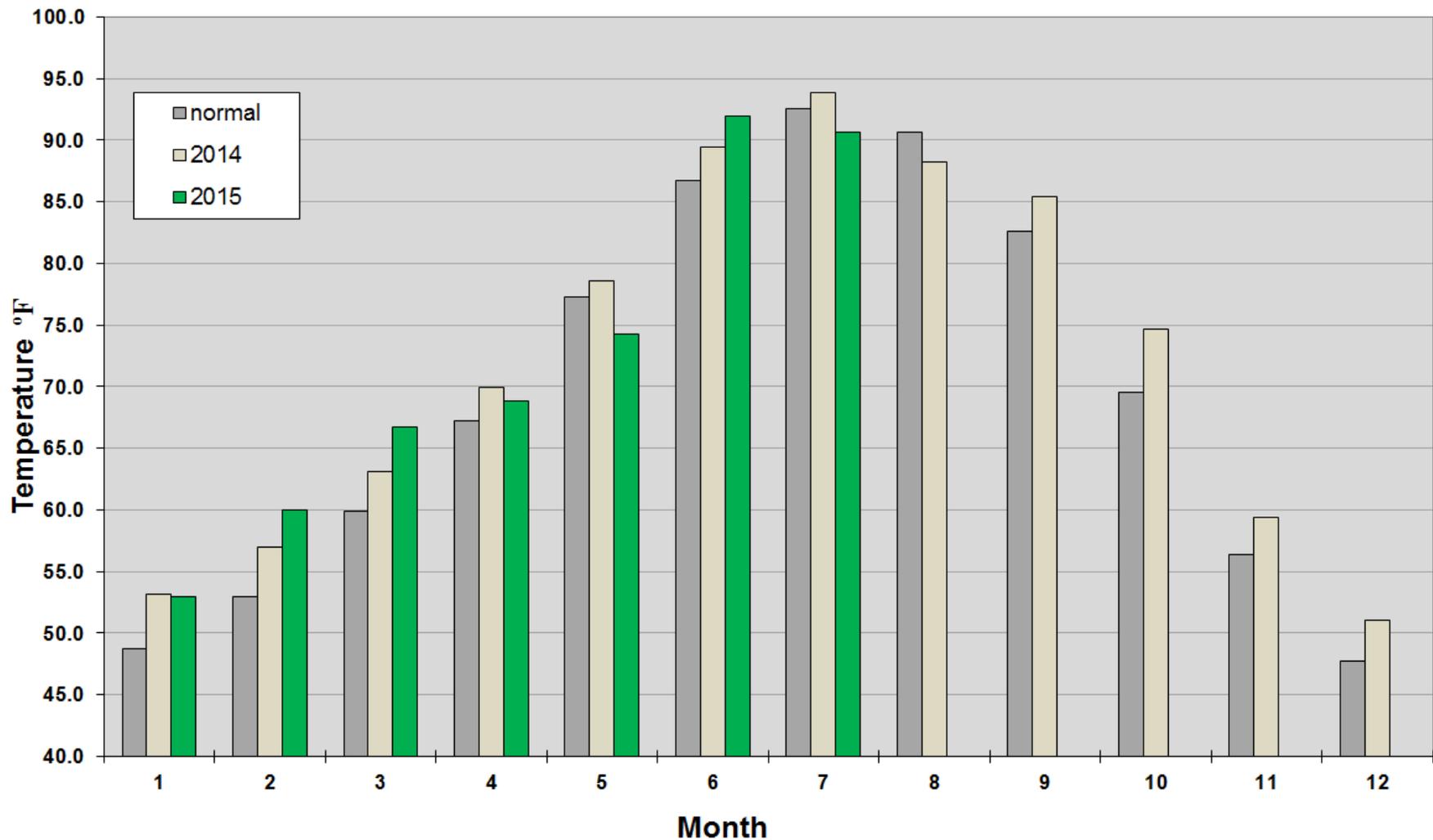
# Cumulative Precipitation at McCarran International Airport, Las Vegas, NV

January - July 2015



# Las Vegas Average Temperature

Average Monthly Temperature at McCarran Airport, Las Vegas, NV



# Water Use in Southern Nevada



# Water Use in Southern Nevada

January – June 2015

2015\*: Consumptive Use = 100,338 af

2014\*: Consumptive Use = 109,285 af

**Difference = -8,947 af**

\*Subject to final accounting.



# Colorado River Commission of Nevada

## Questions?

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