

# Colorado River Commission of Nevada

## Natural Resources Group Hydrologic Update September 8, 2015



# Unregulated Inflow Into Lake Powell

As of August 31, 2015

	MAF*	% Avg**
• WY 2015 (forecast):	10.19	94%
• April-July 2015 (observed):	6.71	94%
• August (observed):	0.31	62%
• September (forecasted):	0.30	74%

\*MAF=Million Acre-Feet

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



# Storage Conditions

As of August 31, 2015

		<u>Percent of Capacity</u>	<u>Δ from last year</u>
Lake Mead elev.	1078.24 ft	38%	↓ 3.31 ft
Lake Powell elev.	3,609.16 ft	52%	↑ 3.34 ft
Total System Storage (8/2015)	30.88 maf	52%	↑ 0.65 maf
Total System Storage (8/2014)	30.23 maf	51%	



# Reservoir Storage

As of August 31, 2015

## Colorado River Reservoir Storages

Basin	Reservoir	Max Storage	*Current Storage	Percentage	Current Storage subtotals
Upper Basin	Crystal Reservoir	17,356	15,928	92%	6,099,332
	Flaming Gorge	3,749,000	3,498,487	93%	
	Fontenelle	344,800	279,446	81%	
	Morrow Point	117,190	112,009	96%	
	Blue Mesa	829,500	773,539	93%	
	Navajo	1,696,000	1,419,923	84%	
	Lake Powell	24,322,000	12,645,933	52%	
Lower Basin	Lake Mead	26,120,000	9,871,000	38%	2,260,500
	Lake Mohave	1,809,800	1,674,700	93%	
	Lake Havasu	619,400	585,800	95%	
	<b>TOTAL</b>	<b>59,625,046</b>	<b>30,876,765</b>	<b>52%</b>	

\*Data current as 9/1/2015

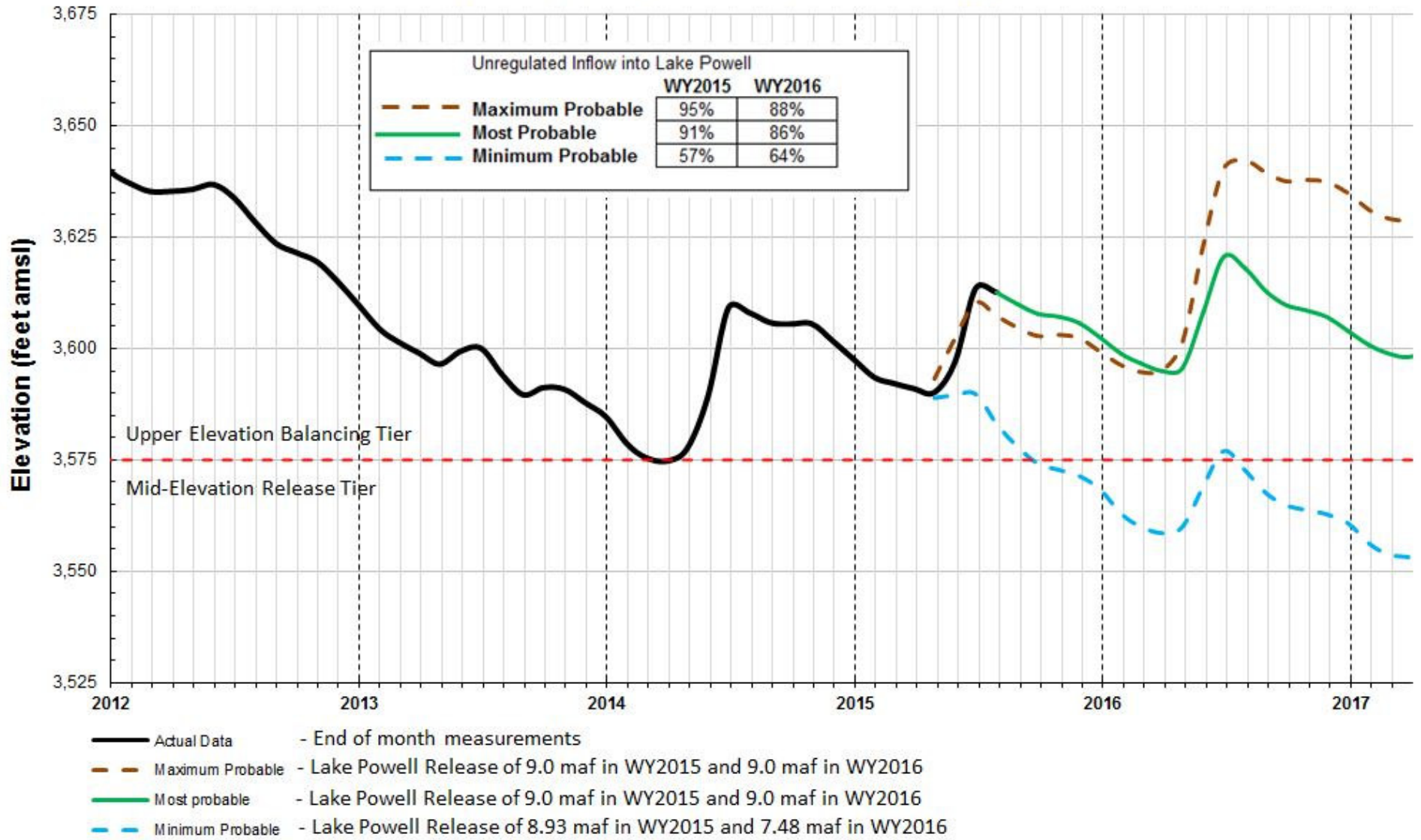
<http://www.usbr.gov/lc/region/g4000/hourly/levels.html>

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



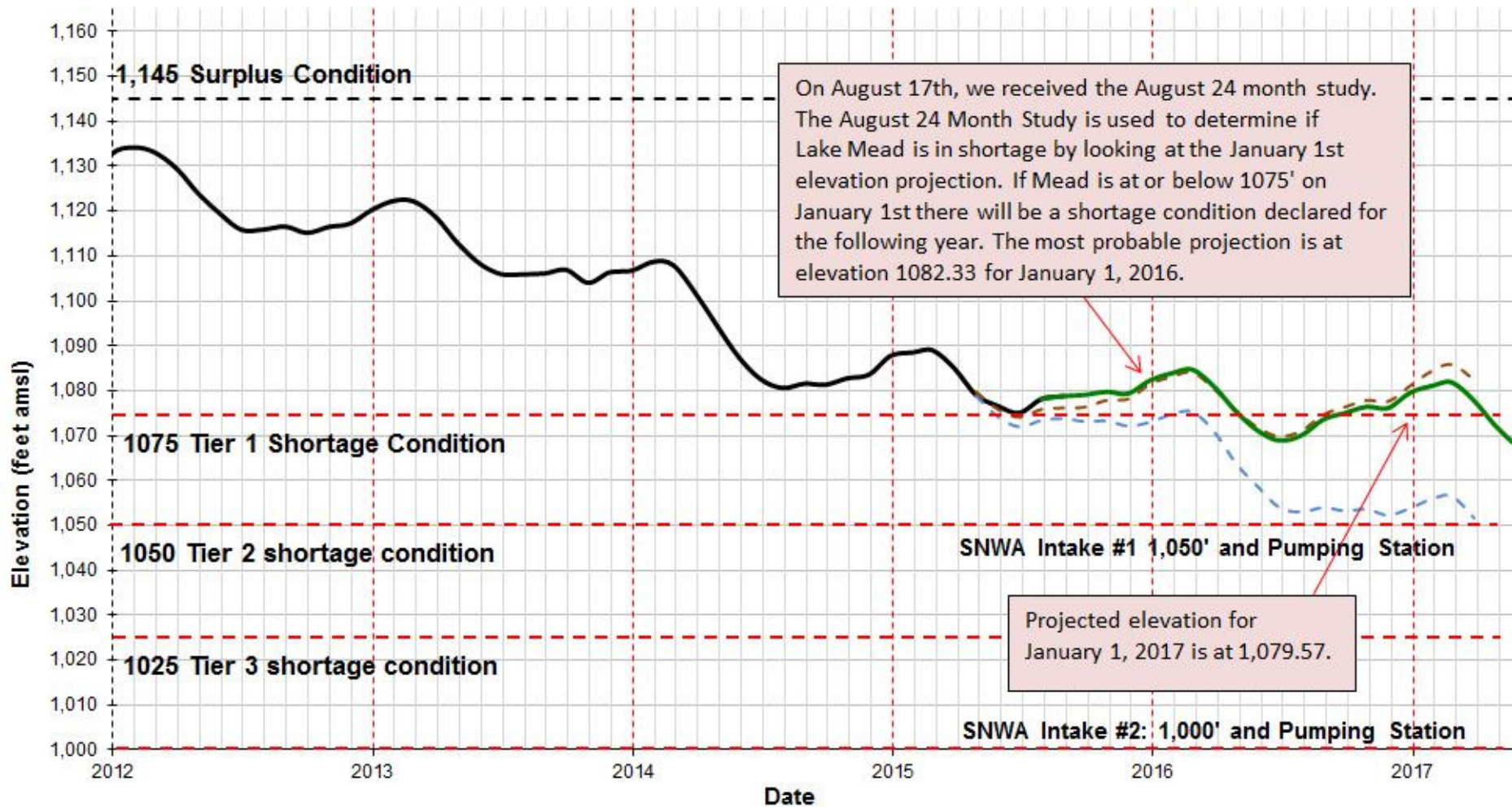
# Lake Powell End of Month Elevations

(based on August 2015 24-month Study)



# Lake Mead End of Month Elevation Projections

(Projections based on the August 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

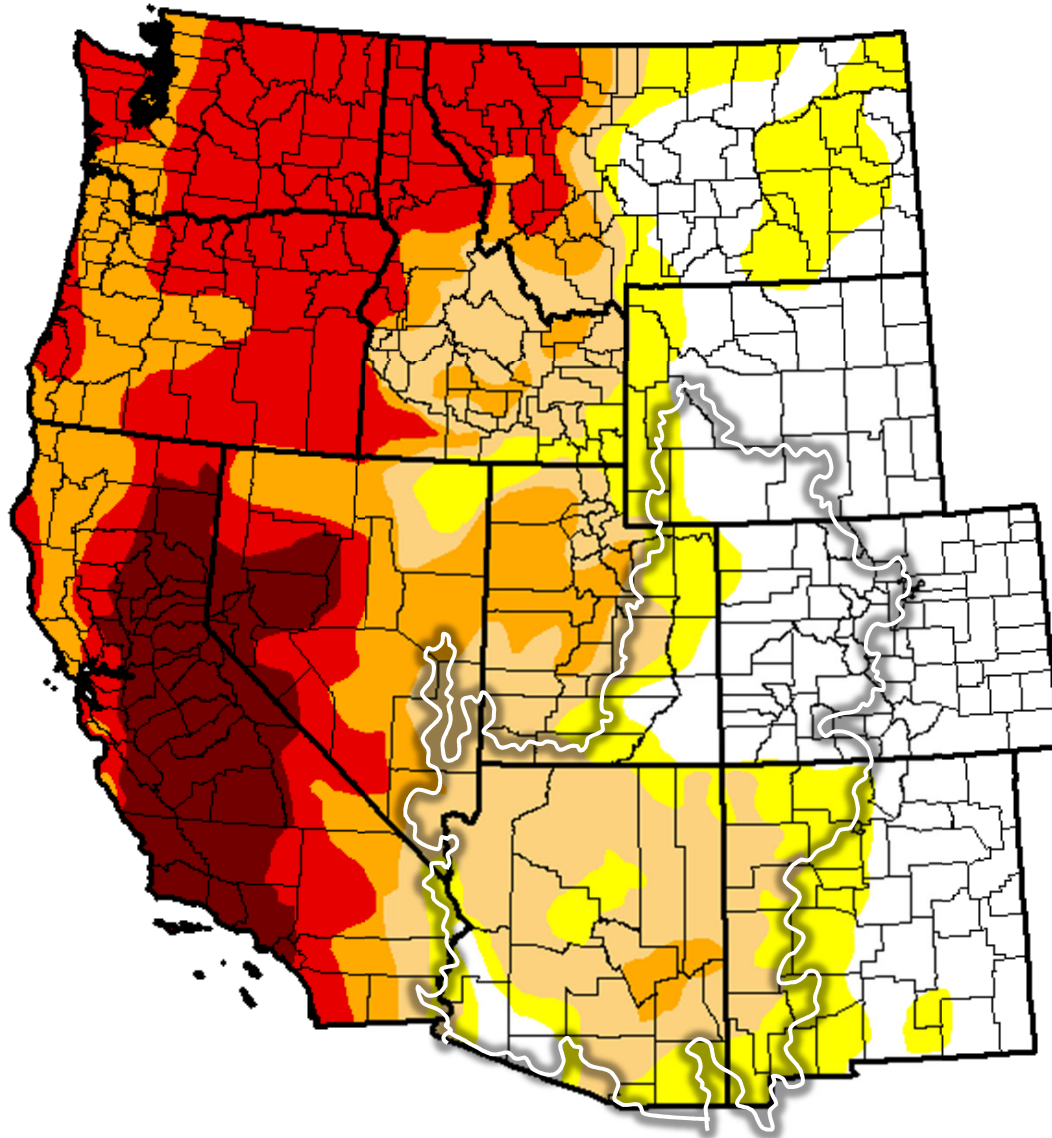
**August 25, 2015**

*(Released Thursday, Aug. 27, 2015)*

Valid 8 a.m. EDT

### Intensity:

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



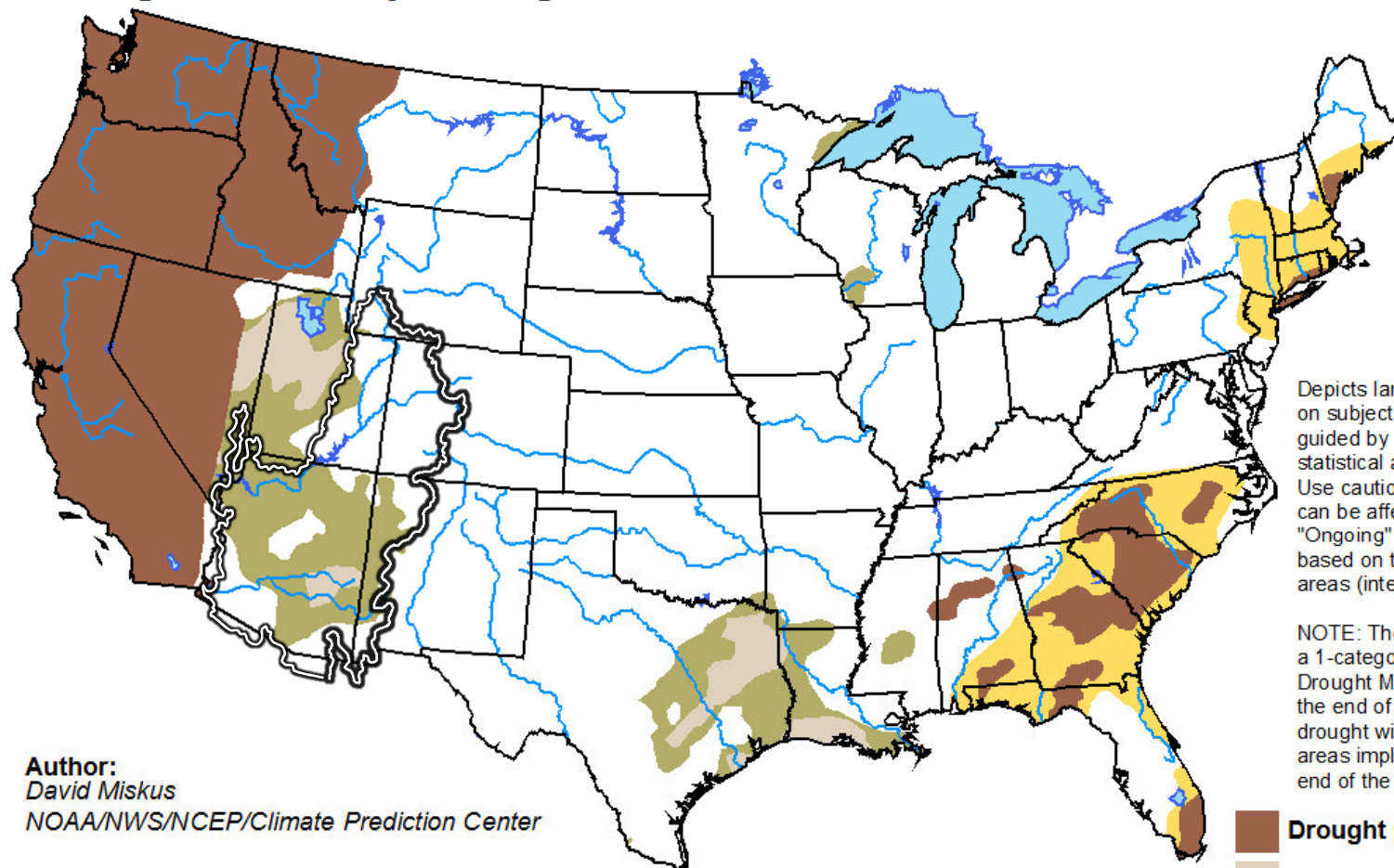


# U.S. Seasonal Drought Outlook

## Drought Tendency During the Valid Period

Valid for August 20 - November 30, 2015





Released August 20, 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).

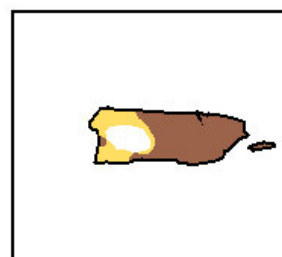
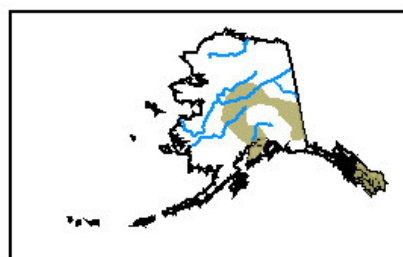
NOTE: The tan areas imply at least a 1-category improvement in the Drought Monitor intensity levels by the end of the period, although drought will remain. The green areas imply drought removal by the end of the period (D0 or none).

**Author:**  
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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 31, 2015

## Upper Colorado Basin

WY Precip to Date

92% (26.7")

Current Basin Snowpack

NA

(Avg 1981-2010)

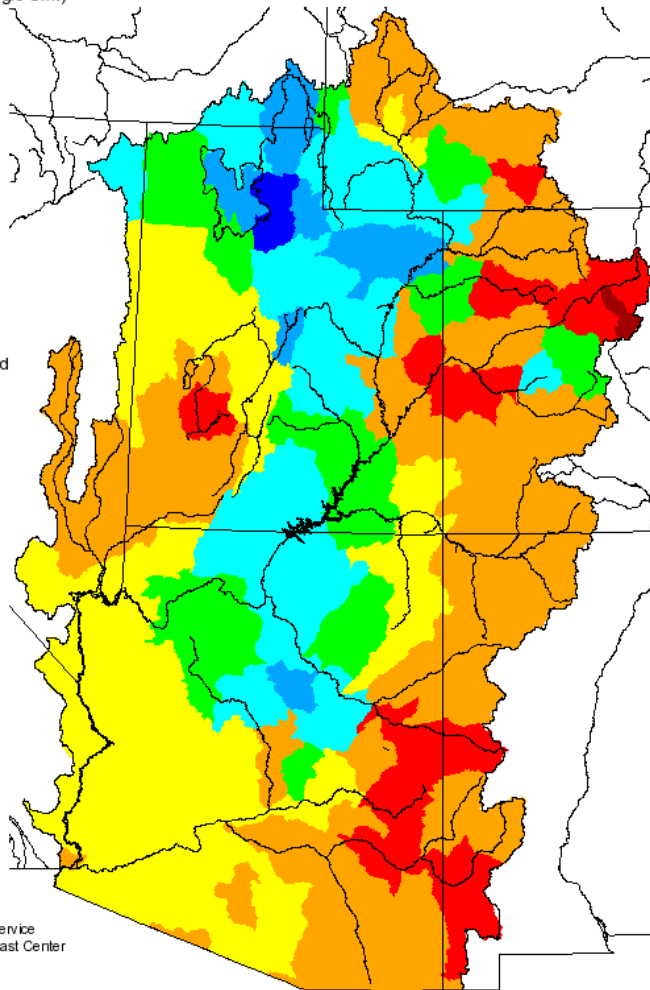
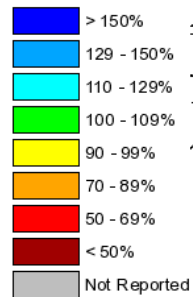


# Precipitation

## Monthly Precipitation for August 2015

(Averaged by Hydrologic Unit)

### % Average

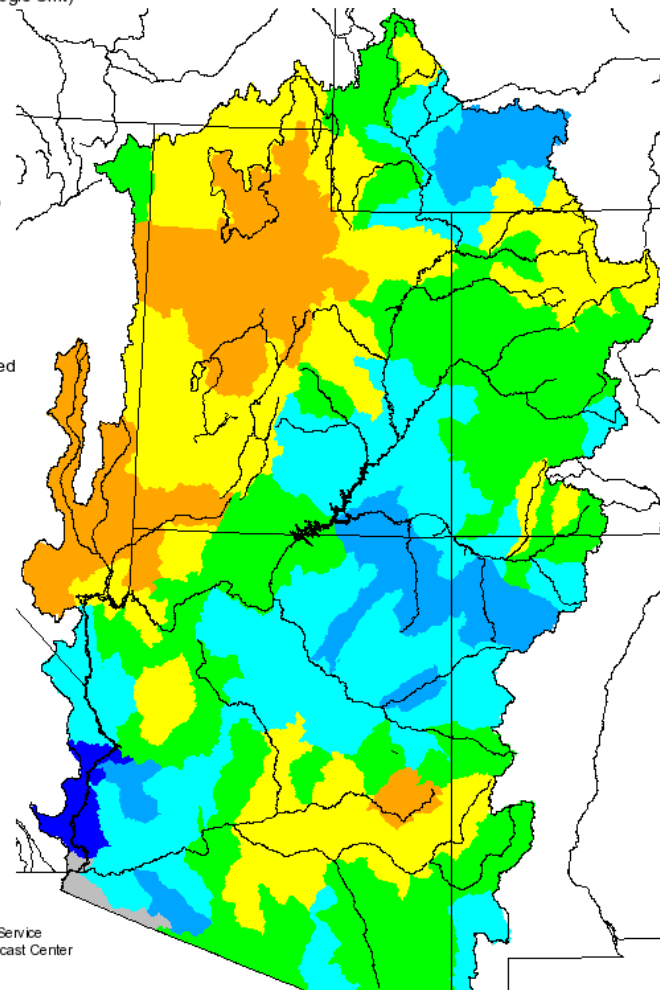
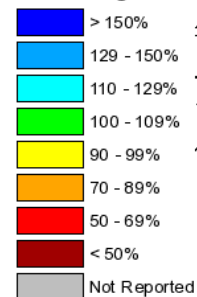


Prepared by  
NOAA, National Weather Service  
Colorado Basin River Forecast Center  
Salt Lake City, Utah  
www.cbrfc.noaa.gov

## Seasonal Precipitation, October 2014 - August 2015

(Averaged by Hydrologic Unit)

### % Average

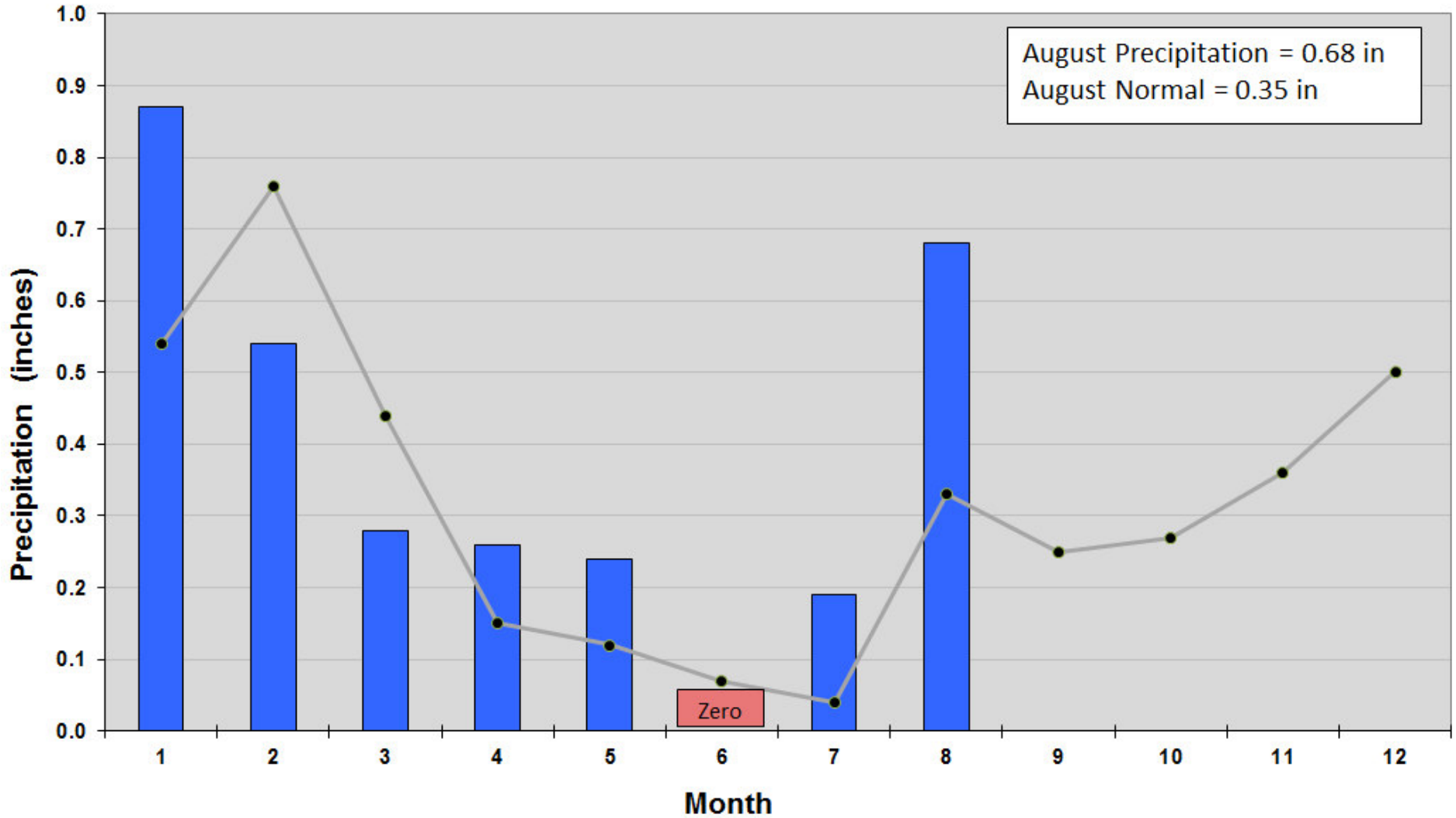


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# Monthly Precipitation at McCarran International Airport, Las Vegas, NV

## January - August 2015

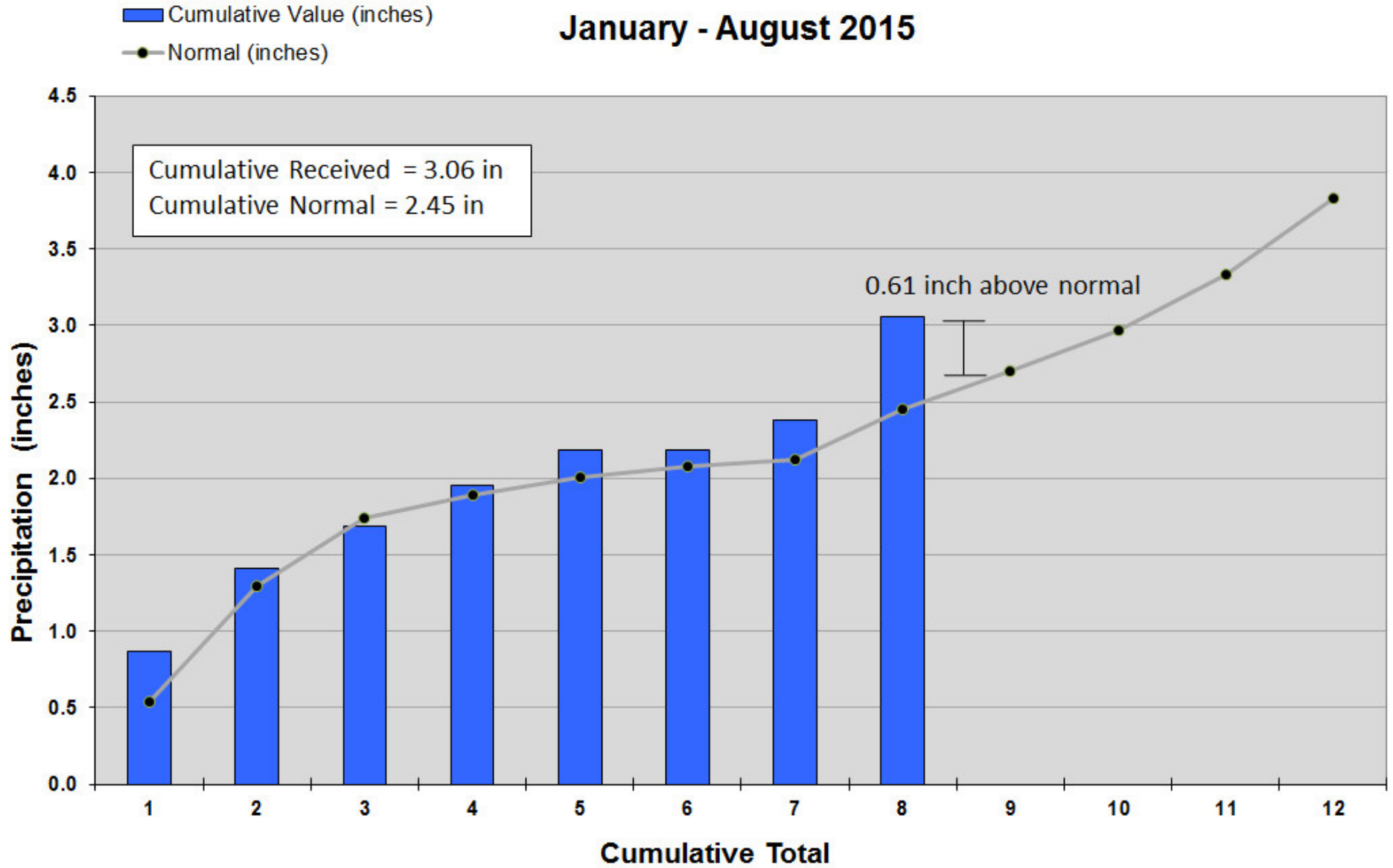
Recorded Value (inches)  
Normal (inches)





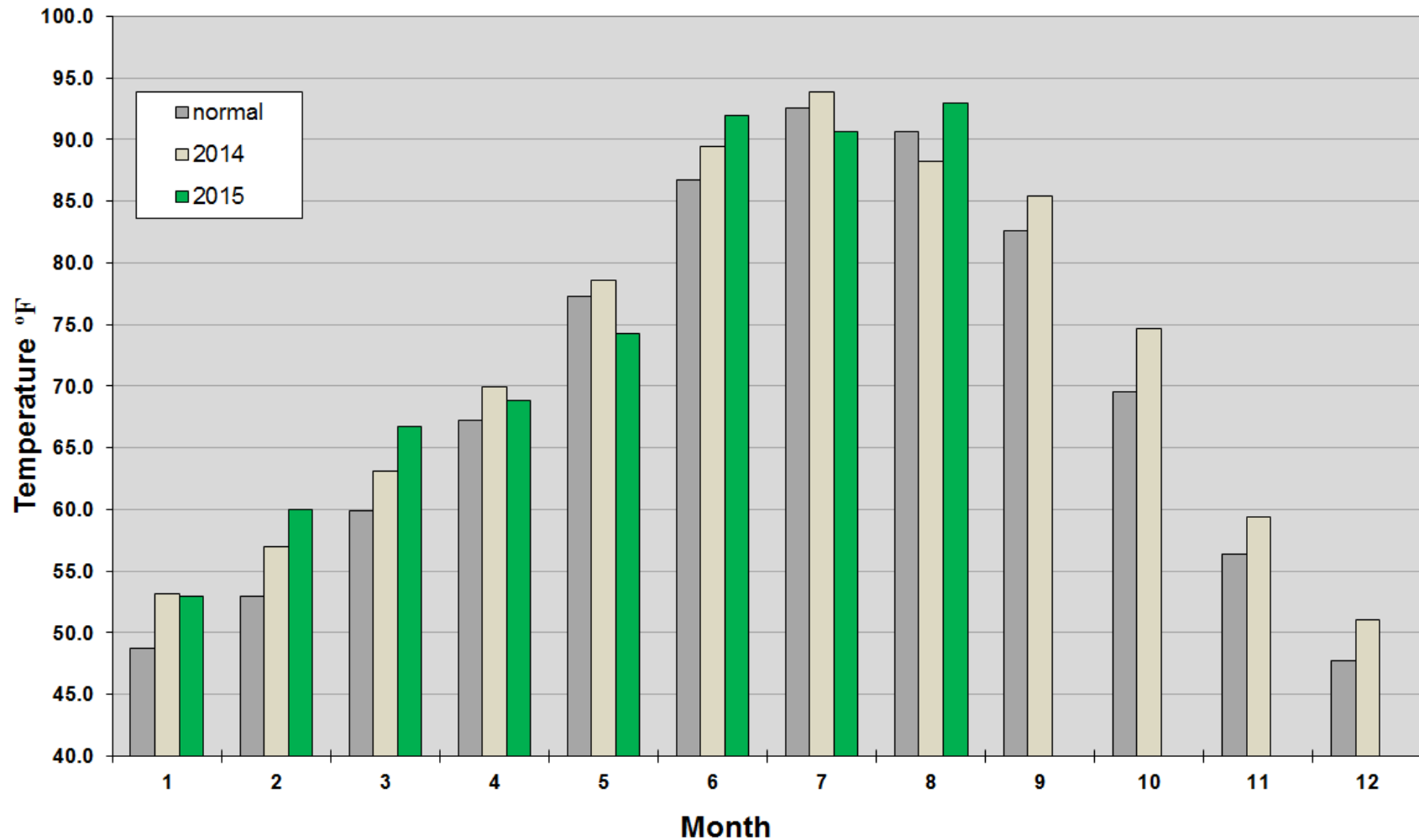
# Cumulative Precipitation at McCarran International Airport, Las Vegas, NV

January - August 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 – July 2015

2015\*: Consumptive Use = 129,307 af

2014\*: Consumptive Use = 136,971 af

**Difference = -7,664 af**

\*Subject to final accounting.



# Colorado River Commission of Nevada

## Questions?

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