

Colorado River Commission of Nevada

Natural Resources Group Hydrologic Update July 12, 2016



Unregulated Inflow Into Lake Powell

As of July 11, 2016

	MAF*	% Avg**
• WY 2016 (Projected):	9.9	92%
• April-July 2016 (Projected):	6.7	94%
• June (Observed):	2.9	109%
• July (Forecasted):	0.7	64%

***MAF=Million Acre-Feet**

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



Storage Conditions

As of July 11, 2016

Percent of
Capacity

Δ from last year

Lake Mead elev. 1,071.79 ft 36%  3.95 ft

Lake Powell elev. 3,621.44 ft 57%  7.27 ft

Total System
Storage (7/2016) 31.55 maf 53%  0.46 maf

Total System
Storage (7/2015) 31.37 maf 52%

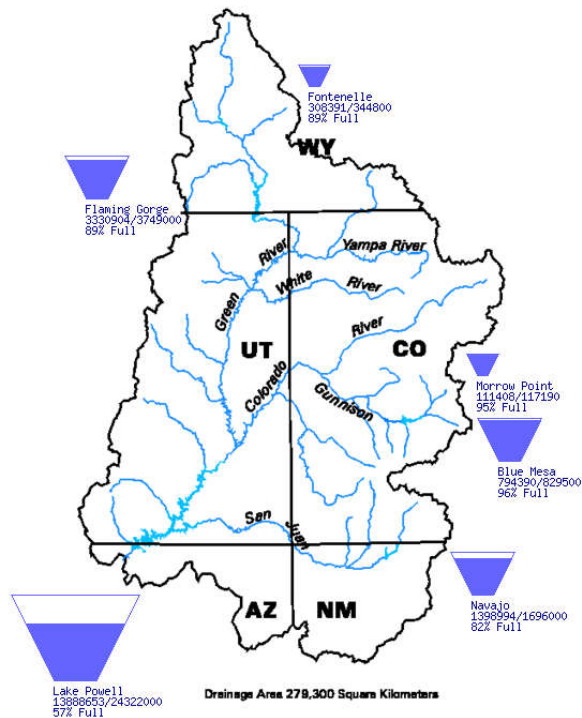


Reservoir Storage

As of July 13, 2016

Data Current as of:
07/13/2016

Upper Colorado River Drainage Basin



Colorado River Reservoir Storages

Basin	Reservoir	Max Storage (af)	*Current Storage (af)	Percentage
Upper Basin	Crystal Reservoir	17,356	16,588	96%
	Flaming Gorge	3,749,000	3,330,904	89%
	Fontenelle	344,800	308,391	89%
	Morrow Point	117,190	111,408	95%
	Blue Mesa	829,500	794,390	96%
	Navajo	1,696,000	1,398,994	82%
	Lake Powell	24,322,000	13,888,653	57%
Lower Basin	Lake Mead	26,120,000	9,357,000	36%
	Lake Mohave	1,809,800	1,718,100	95%
	Lake Havasu	619,400	577,900	93%
	TOTAL	59,625,046	31,502,328	53%

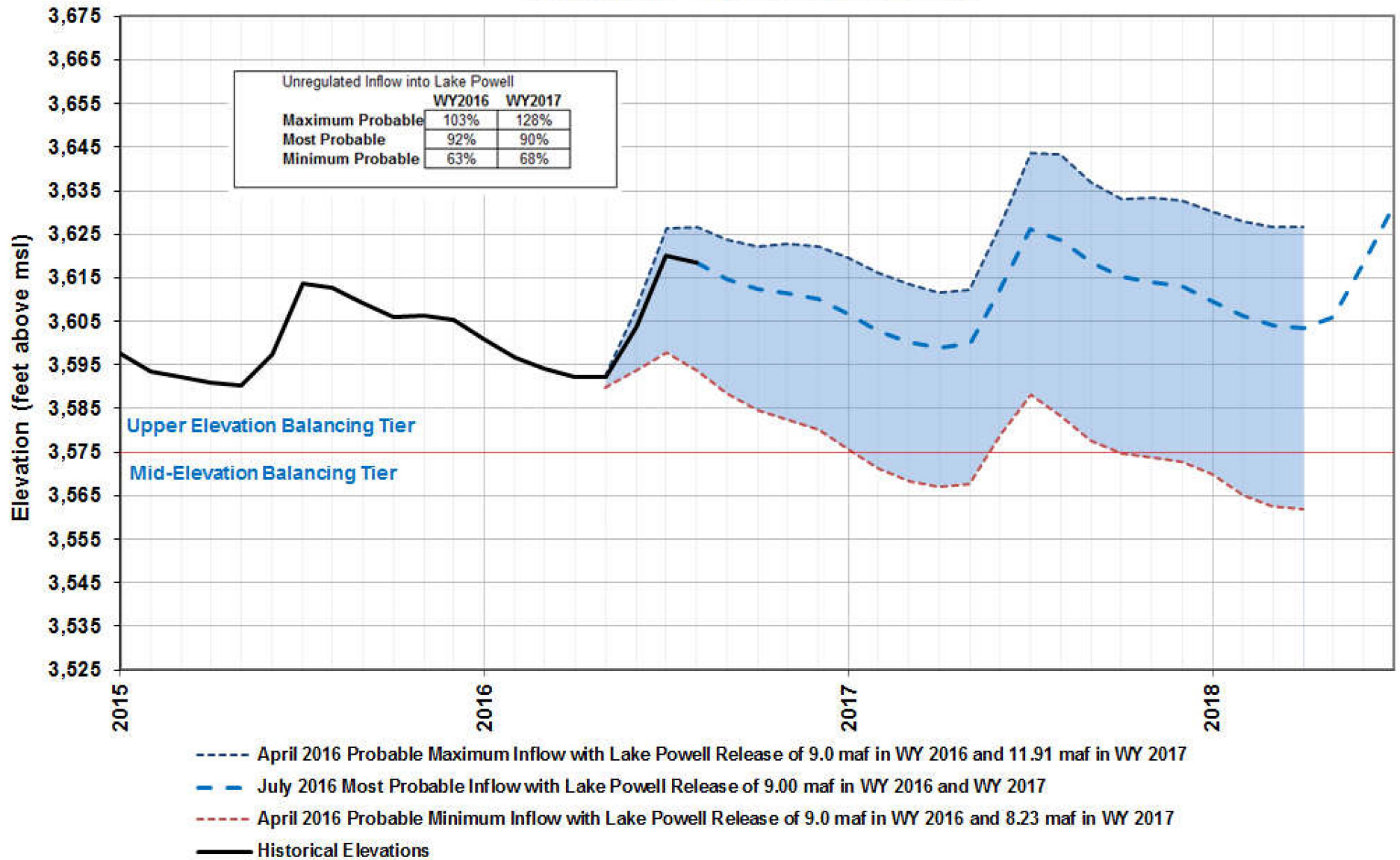
*Data current as 7/13/2016

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

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

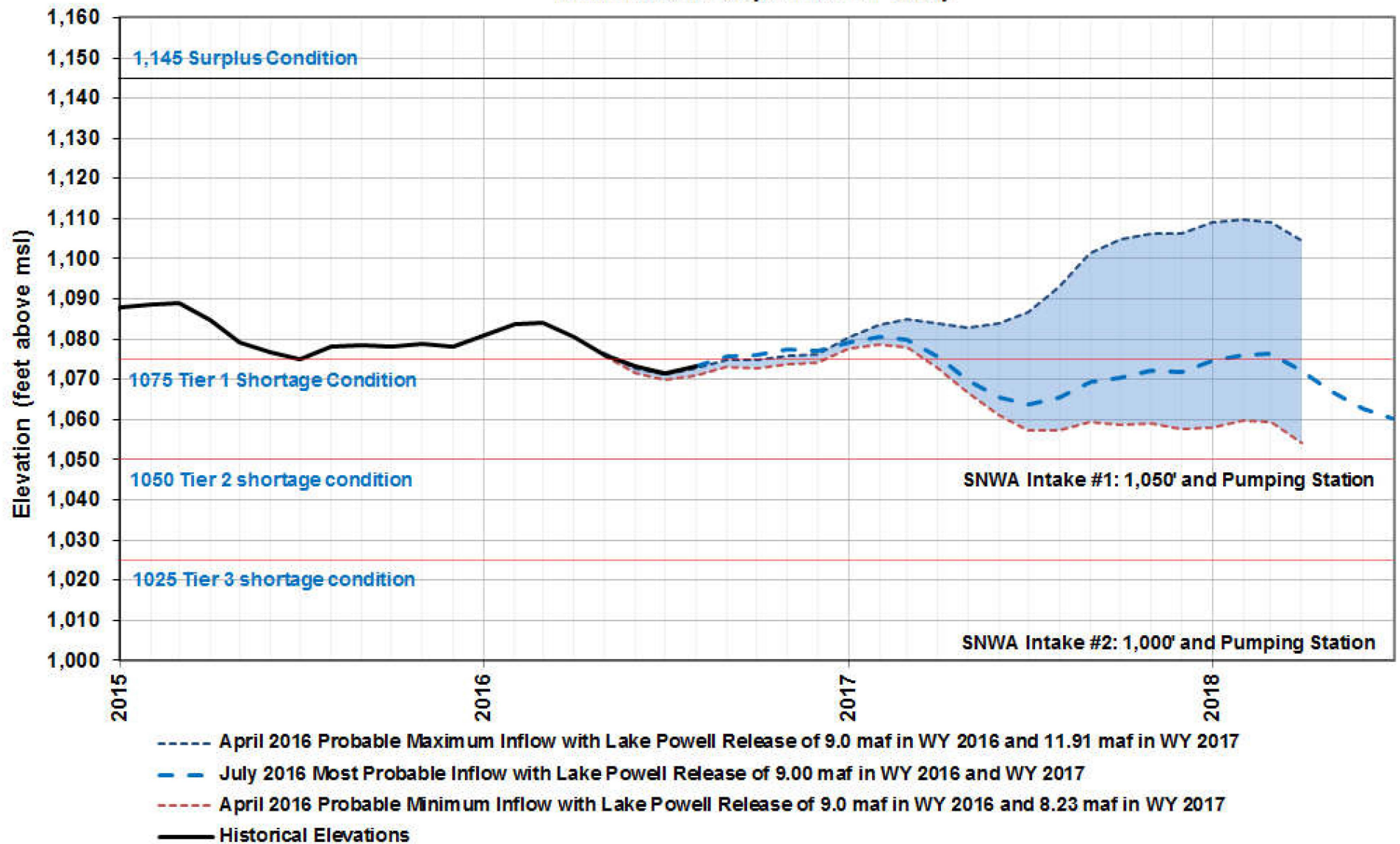
Lake Powell Projections

Reclamation's July 2016 24-Month Study



Lake Mead Projections

Reclamation's July 24-Month Study



U.S. Drought Monitor

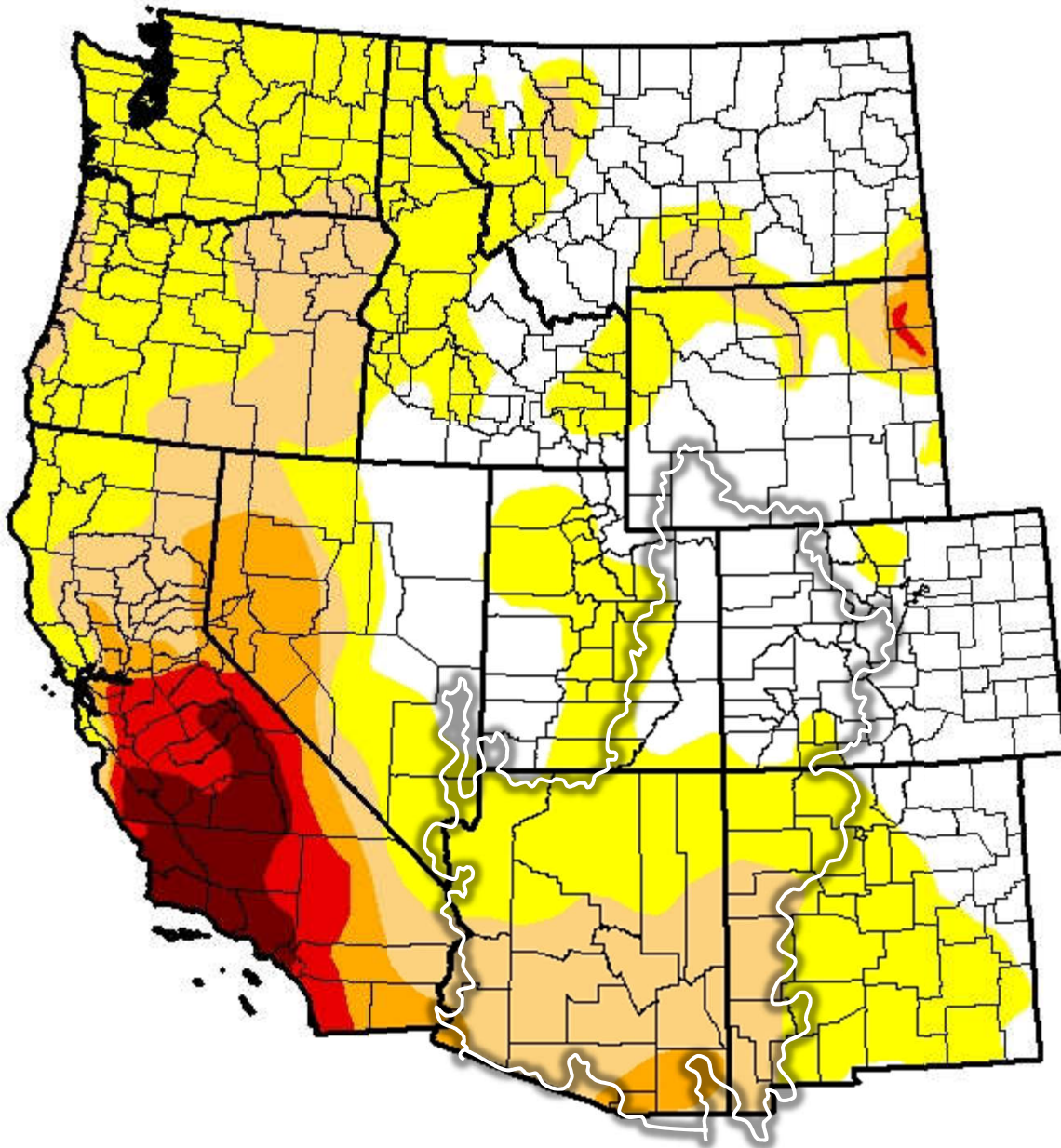
July 12, 2016

(Released Thursday, Jul. 14, 2016)

Valid 8 a.m. EDT

Intensity:

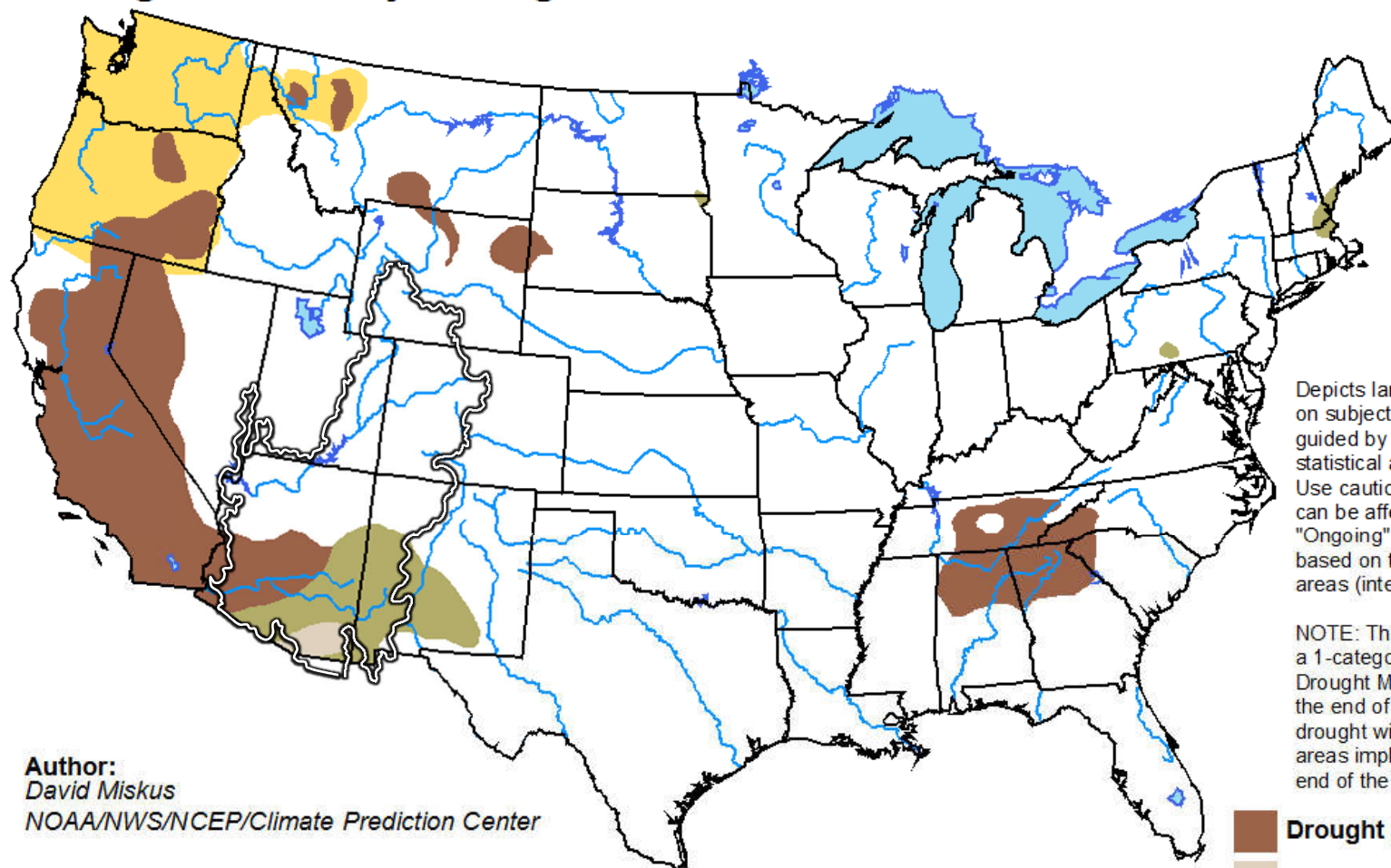
-  D0 - Abnormally Dry
-  D1 - Moderate Drought
-  D2 - Severe Drought
-  D3 - Extreme Drought
-  D4 - Exceptional Drought



U.S. Seasonal Drought Outlook

Drought Tendency During the Valid Period

Valid for June 16 - September 30, 2016
Released June 16, 2016

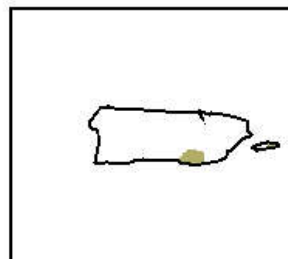
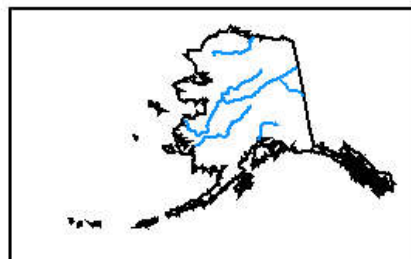


Depicts large-scale trends based on subjectively derived probabilities guided by short- and long-range statistical and dynamical forecasts. Use caution for applications that can be affected by short lived events. "Ongoing" drought areas are based on the U.S. Drought Monitor areas (intensities of D1 to 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:
David Miskus
NOAA/NWS/NCEP/Climate Prediction Center

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



<http://go.usa.gov/3eZ73>

Precipitation – Colorado River Basin

As of July 11, 2016

Upper Colorado Basin

WY Precip to Date

98% (25.1")

Current Basin Snowpack

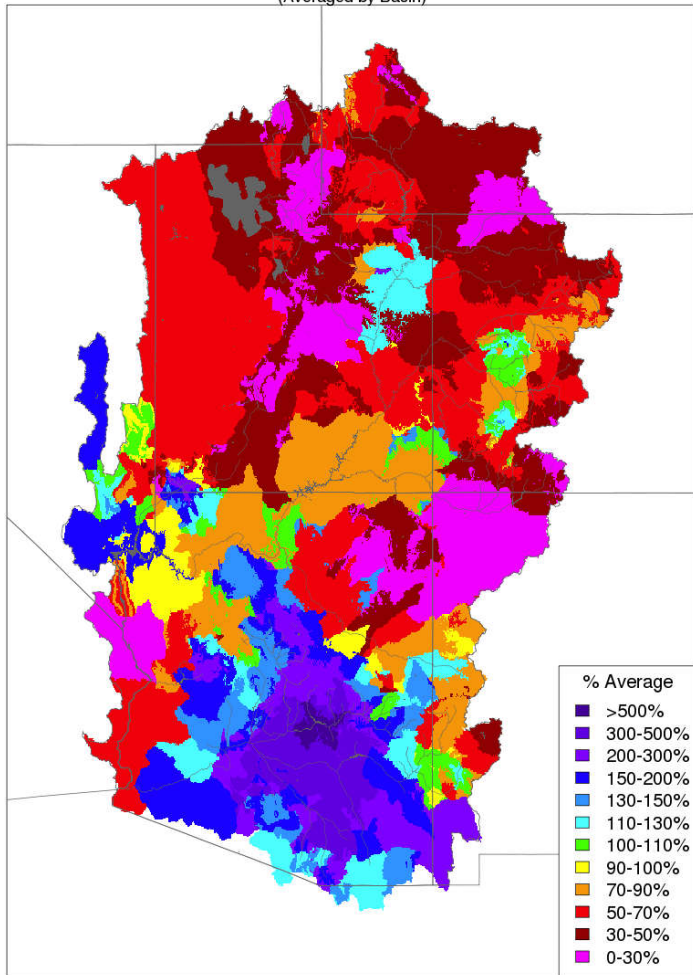
NA

(Avg 1981-2010)



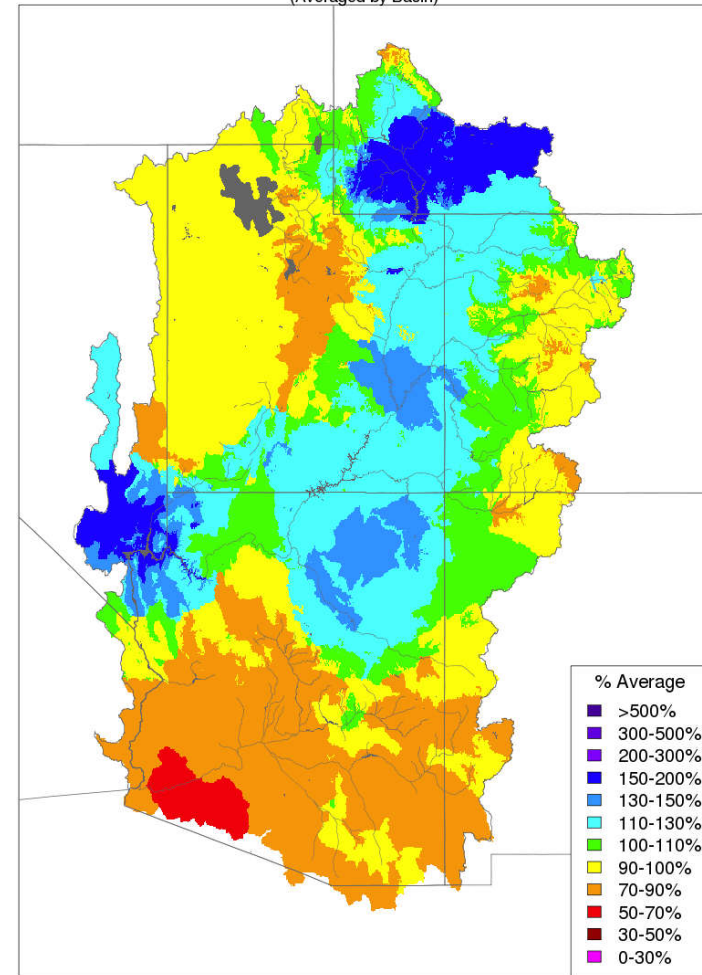
Precipitation

Monthly Precipitation - June 2016
(Averaged by Basin)



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

Water Year Precipitation, October 2015 - June 2016
(Averaged by Basin)



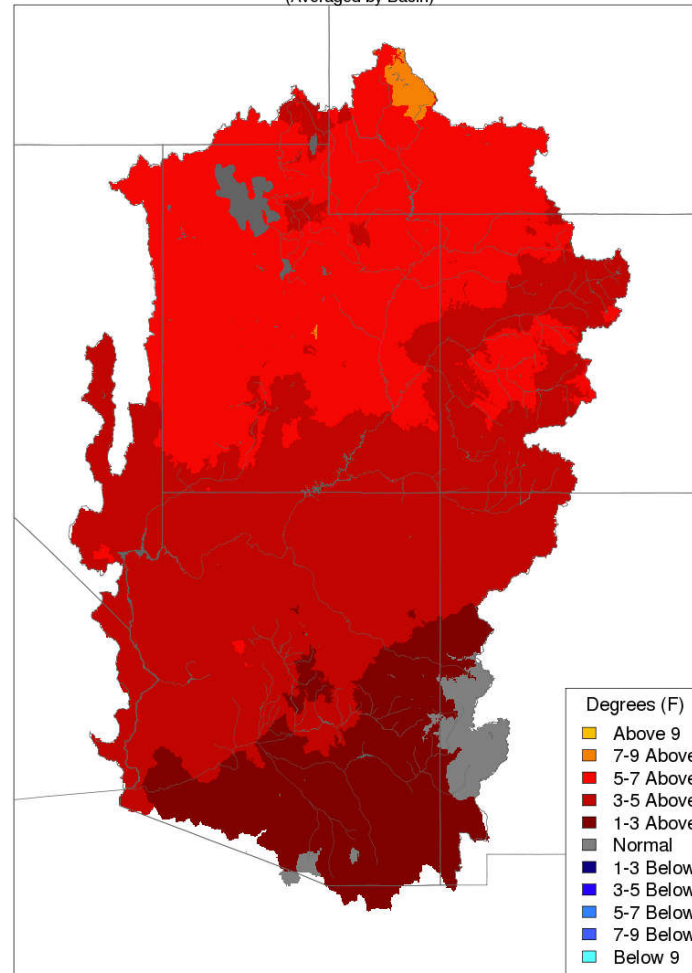
Prepared by NOAA, Colorado Basin River Forecast Center
Salt Lake City, Utah, www.cbrfc.noaa.gov

Temperature Deviations

Monthly Averaged Temperature Anomaly

Max Temp - Monthly Deviation - June 2016

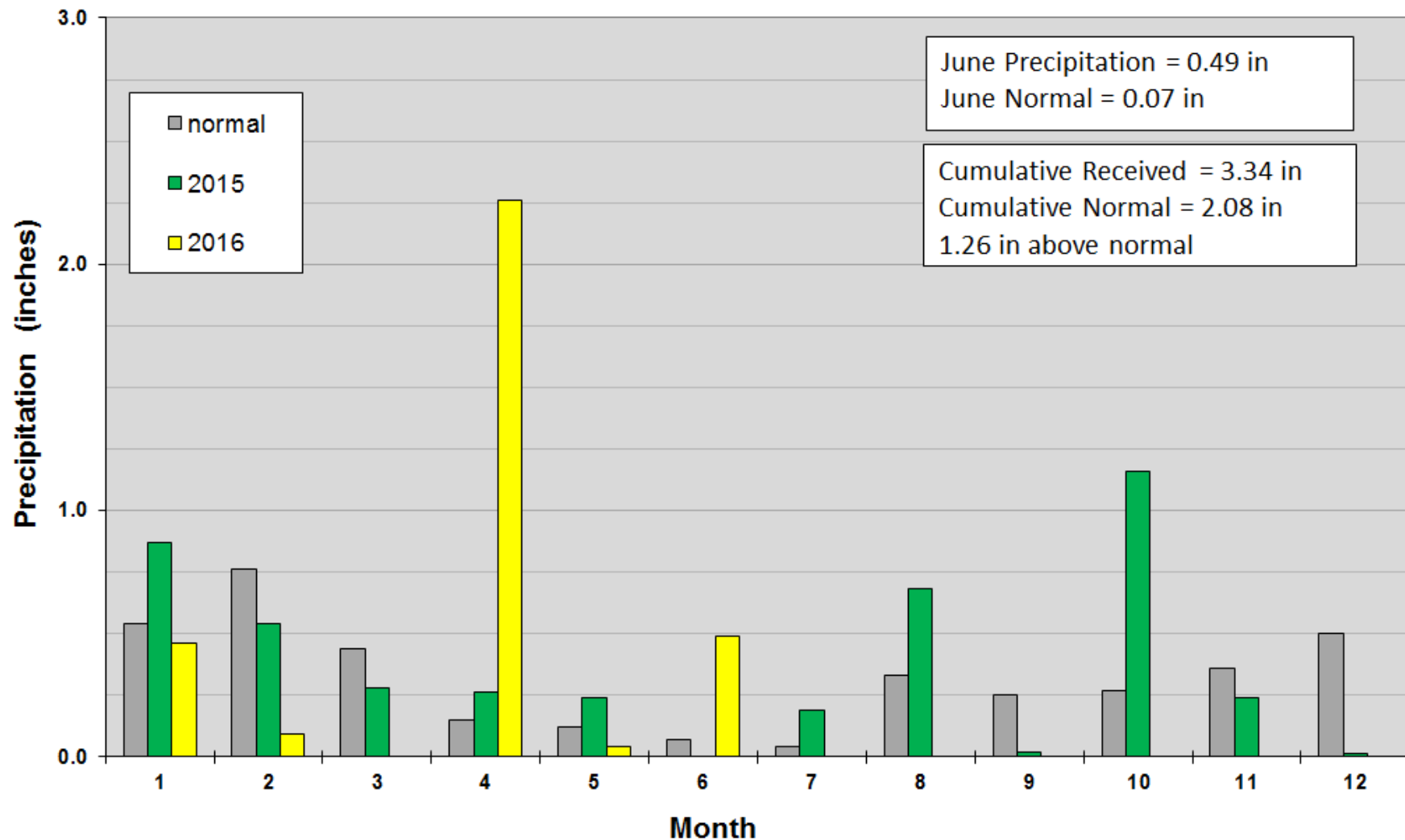
(Averaged by Basin)



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

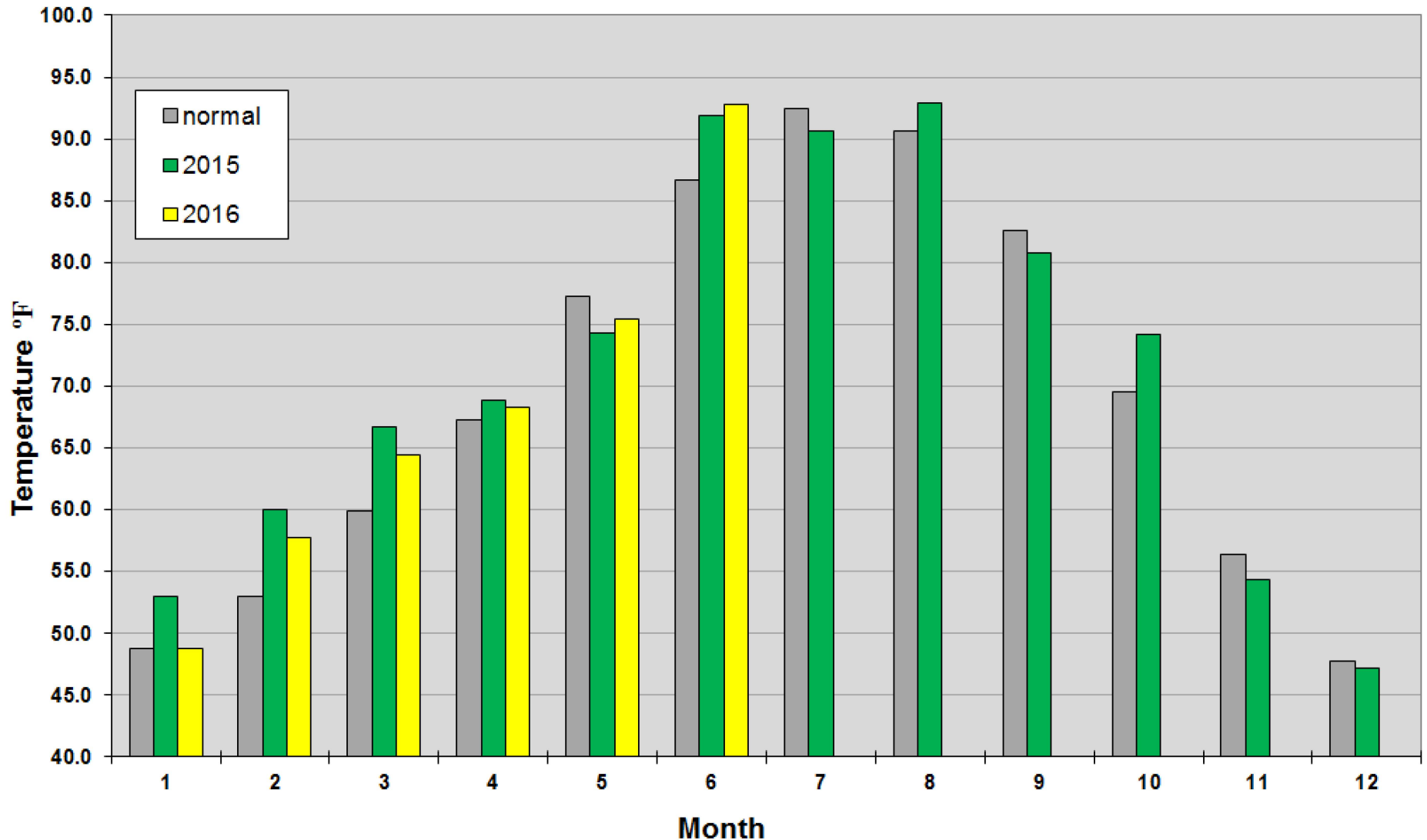
Las Vegas Precipitation

Monthly Precipitation at McCarran Airport, Las Vegas, NV



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 2016

2016: Consumptive Use = 105,818* af

2015: Consumptive Use = 100,338 af

Difference = 5,480 af

*Subject to final accounting.



Water Use Comparison

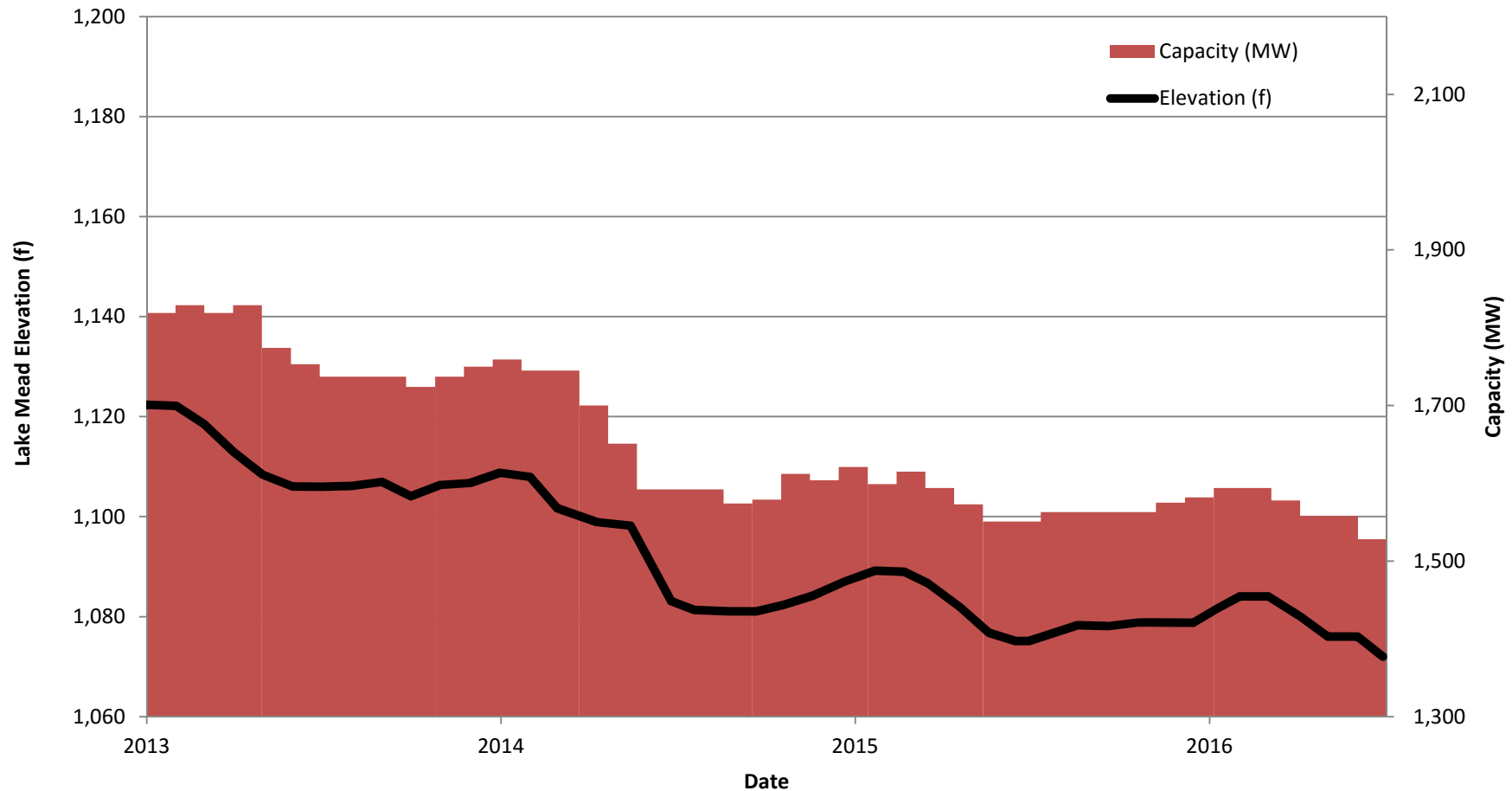
January - June

Water Use	2015 Acre Feet	2016 Acre Feet	Difference Acre Feet	% Change
Las Vegas Wash Gauged Flow	110,392	112,970	2,578	2.3%
Diversions	210,807	214,438	3,631	1.7%
Return Flow Credit	110,469	108,620	-1,849	-1.7%
Consumptive Use	100,338	105,818	5,480	5.5%



Hydropower Capacity

Lake Mead Elevation and Hoover Powerplant Generation Capacity



- On July 1, 2016 capacity was decreased 30 MW to 1,528 MW.

Colorado River Commission of Nevada

Questions?

Warren Turkett, Ph.D.
wturkett@crc.nv.gov

