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)**

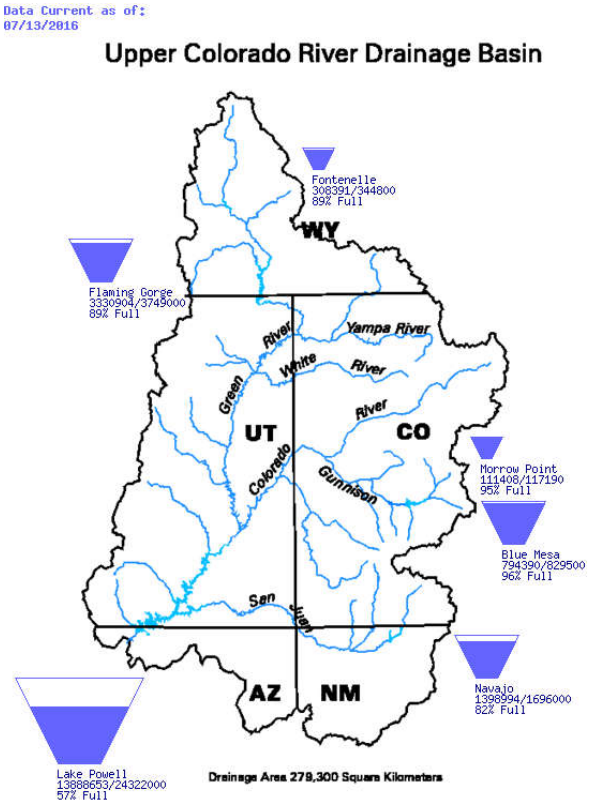
Storage Conditions

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



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%

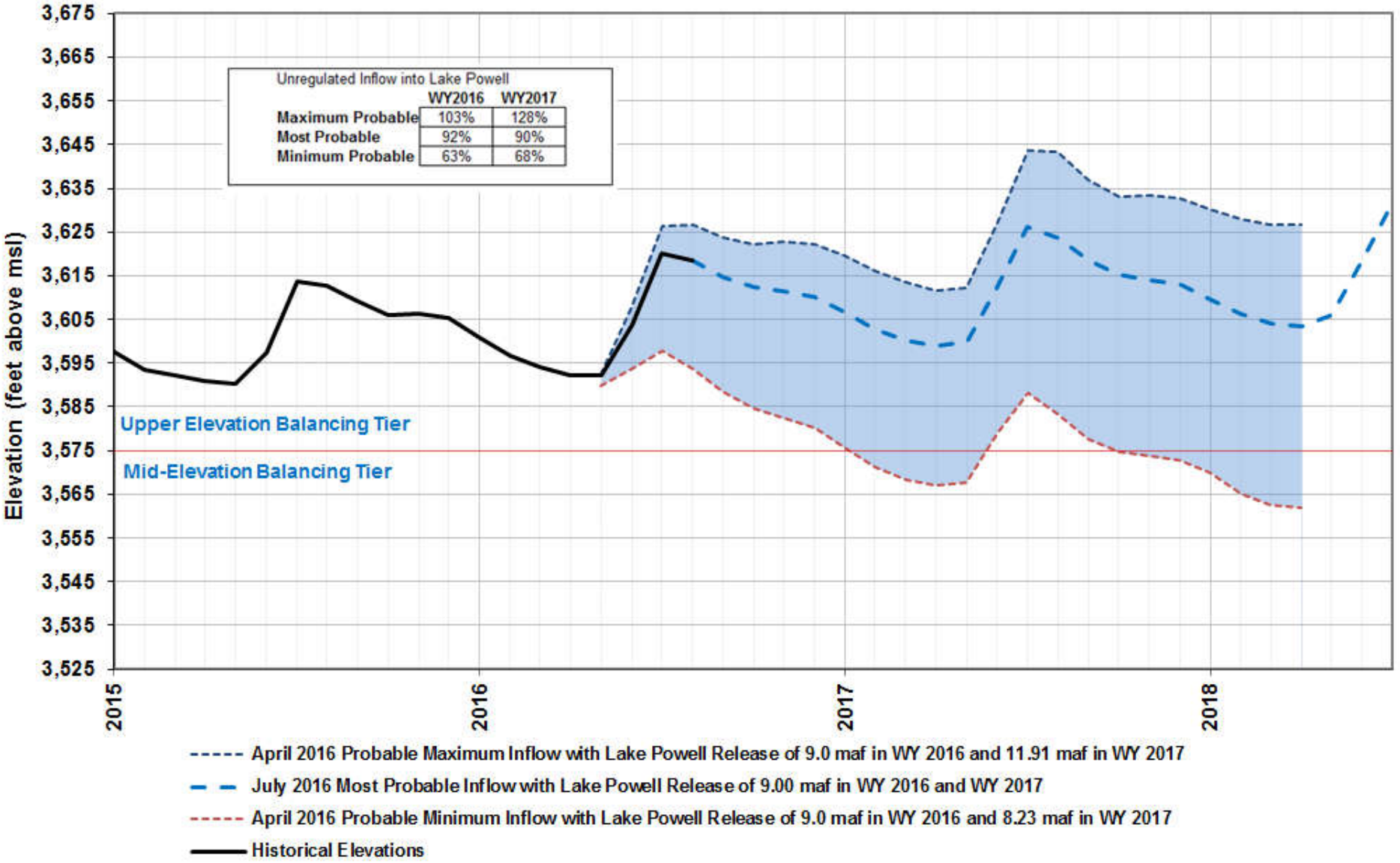
**Data current as 7/13/2016*

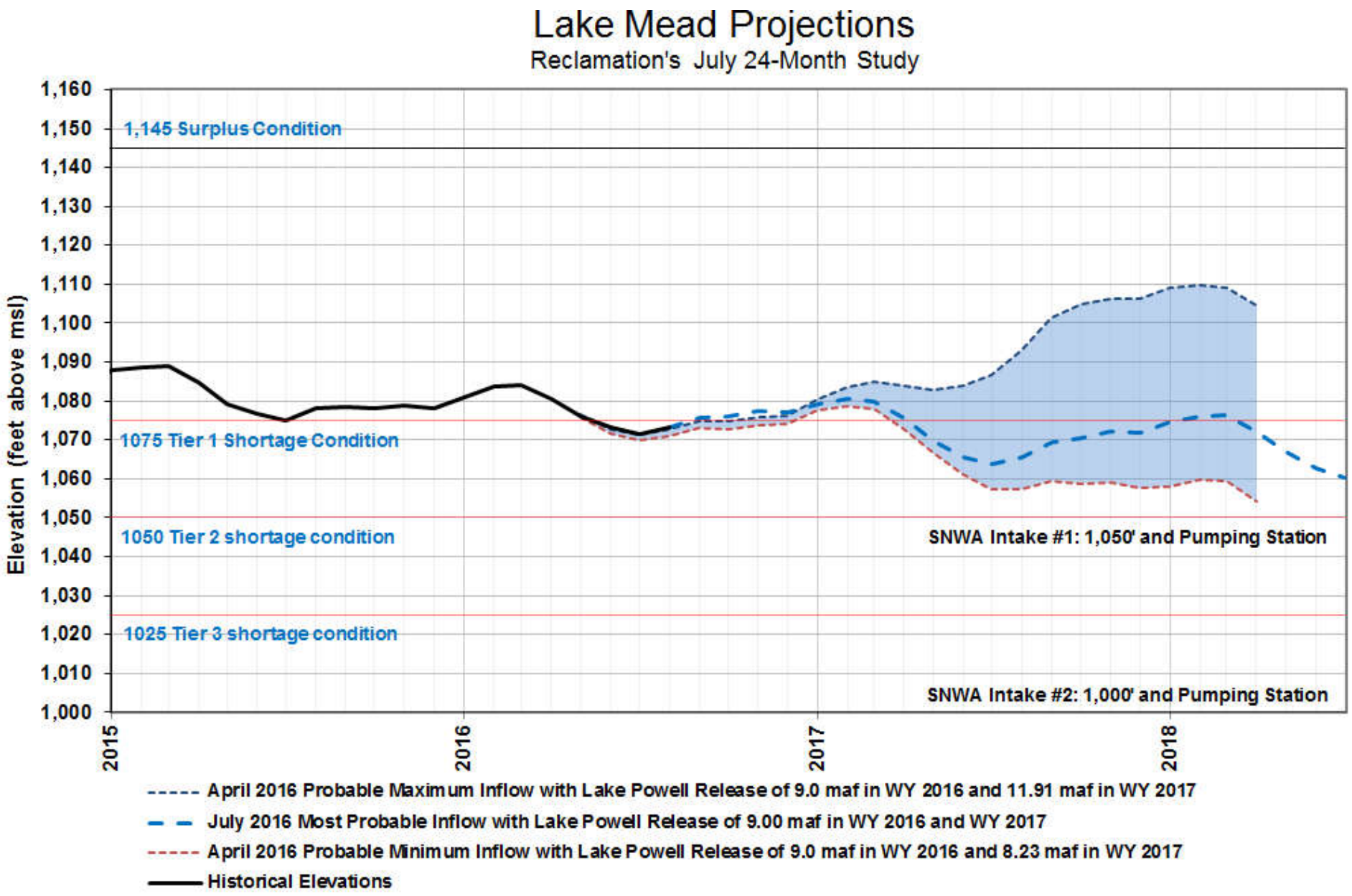
http://www.usbr.gov/lc/region/g4000/hourly/levels.html

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

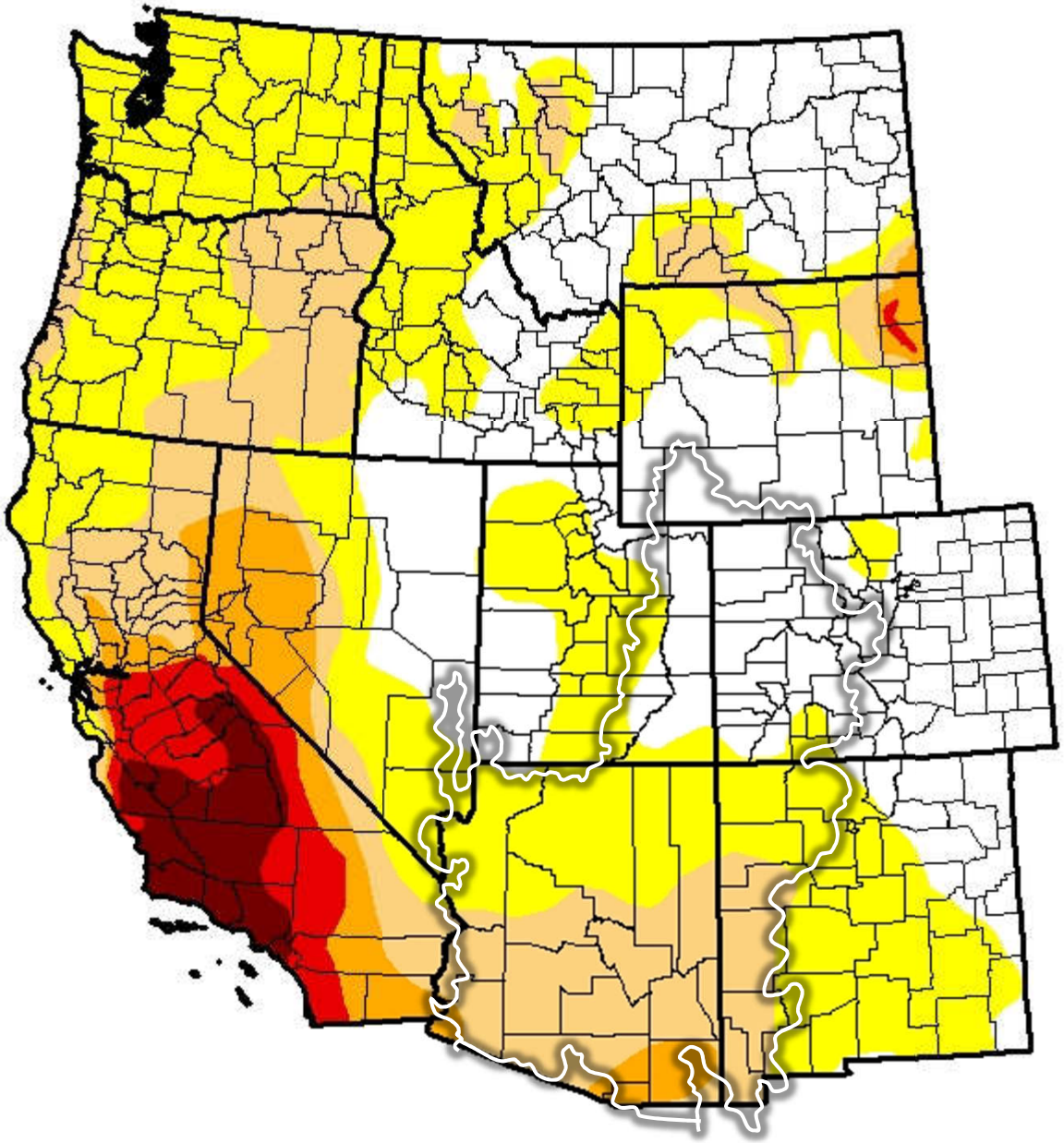
Lake Powell Projections

Reclamation's July 2016 24-Month Study




Lake Mead Projections
Reclamation's July 24-Month Study
Elevation (feet above msl)
1,160
1,150
1,140
1,130
1,120
1,110
1,100
1,090
1,080
1,070
1,060
1,050
1,040
1,030
1,020
1,010
1,000
1,145 Surplus Condition
1075 Tier 1 Shortage Condition
1050 Tier 2 shortage condition
1025 Tier 3 shortage condition
SNWA Intake #1: 1,050' and Pumping Station
SNWA Intake #2: 1,000' and Pumping Station
2015
2016
2017
2018
April 2016 Probable Maximum Inflow with Lake Powell Release of 9.0 maf in WY 2016 and 11.91 maf in WY 2017
July 2016 Most Probable Inflow with Lake Powell Release of 9.00 maf in WY 2016 and WY 2017
April 2016 Probable Minimum Inflow with Lake Powell Release of 9.0 maf in WY 2016 and 8.23 maf in WY 2017
Historical Elevations

U.S. Drought Monitor



July 12, 2016

(Released Thursday, Jul. 14, 2016)

Valid 8 a.m. EDT

Intensity:

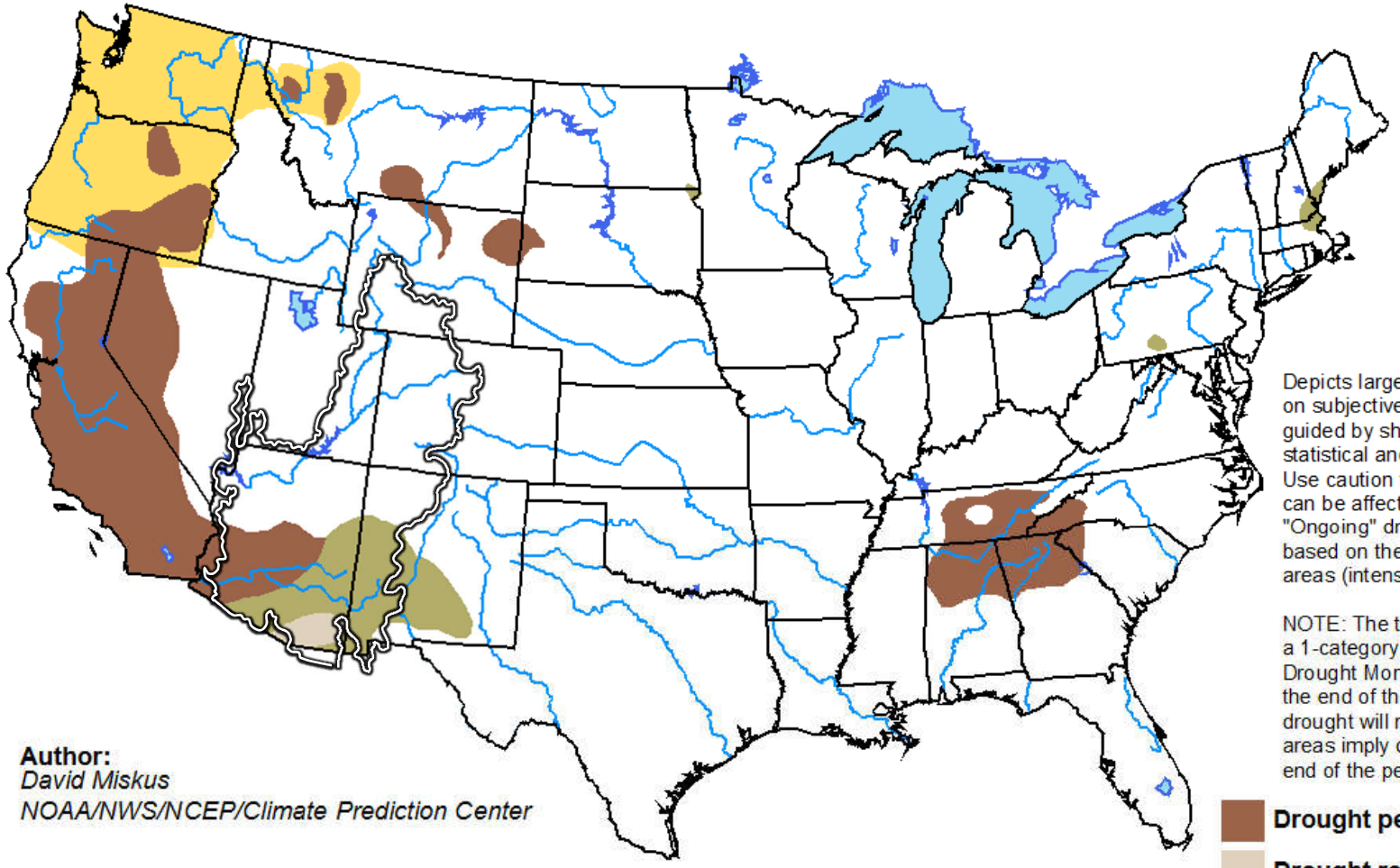
- D0 - Abnormally Dry
- D1 - Moderate Drought
- D2 - Severe Drought
- D3 - Extreme Drought
- D4 - Exceptional Drought

http://droughtmonitor.unl.edu/Home/RegionalDroughtMonitor.aspx?west

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).

Drought persists

Drought remains but improves

Drought removal likely

Drought development likely

Author:
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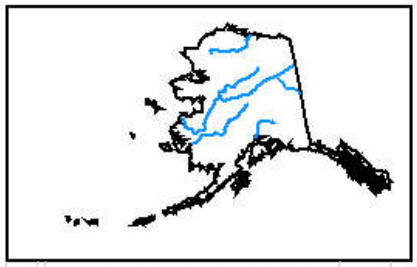
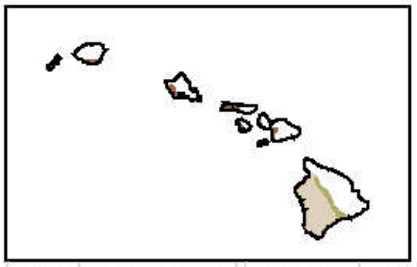
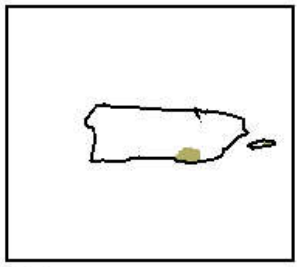






http://go.usa.gov/3eZ73

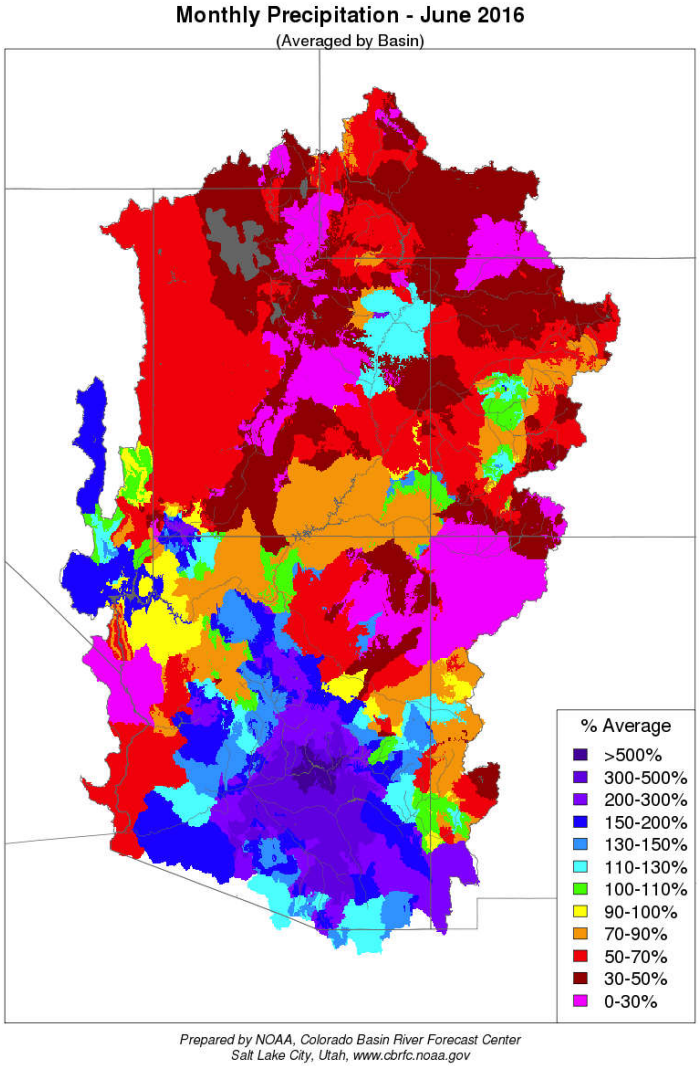
Precipitation – Colorado River Basin

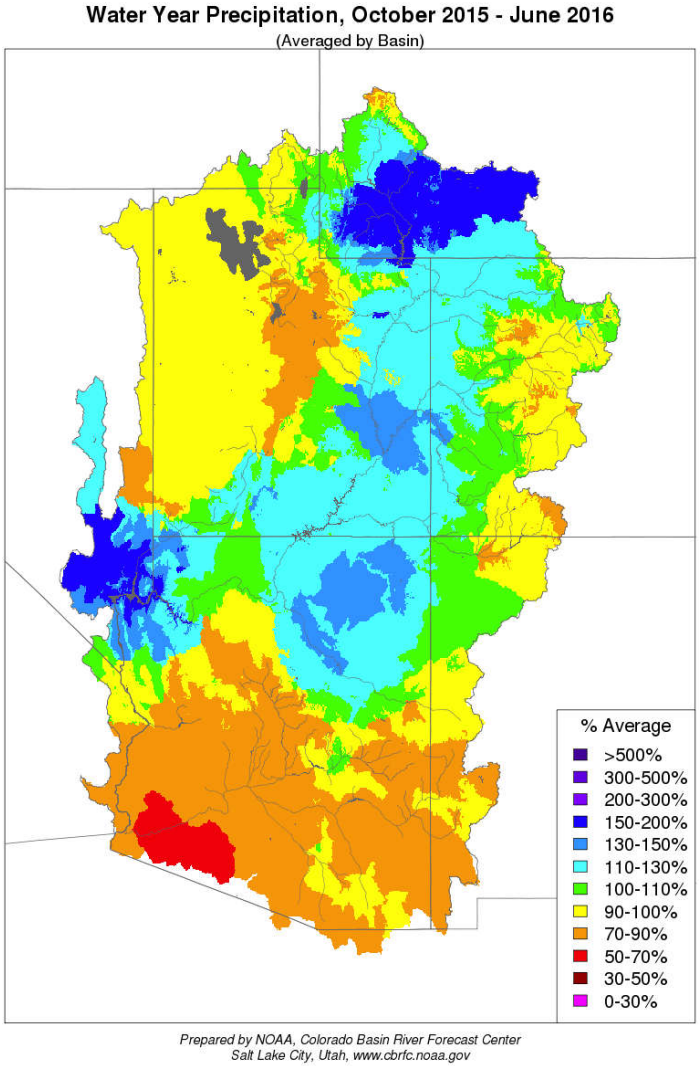
As of July 11, 2016

	Upper Colorado Basin
WY Precip to Date	98% (25.1”)
Current Basin Snowpack	NA

(Avg 1981-2010)

Precipitation

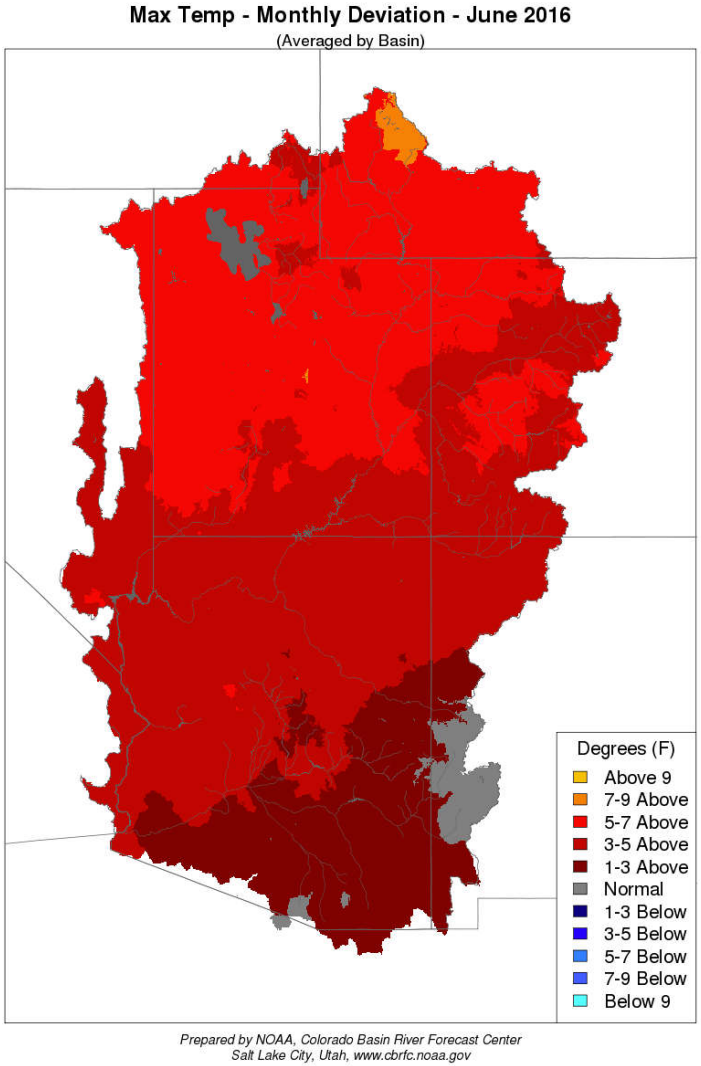




http://www.cbrfc.noaa.gov/product/mapsum/mapsum.php?area=cbrfc

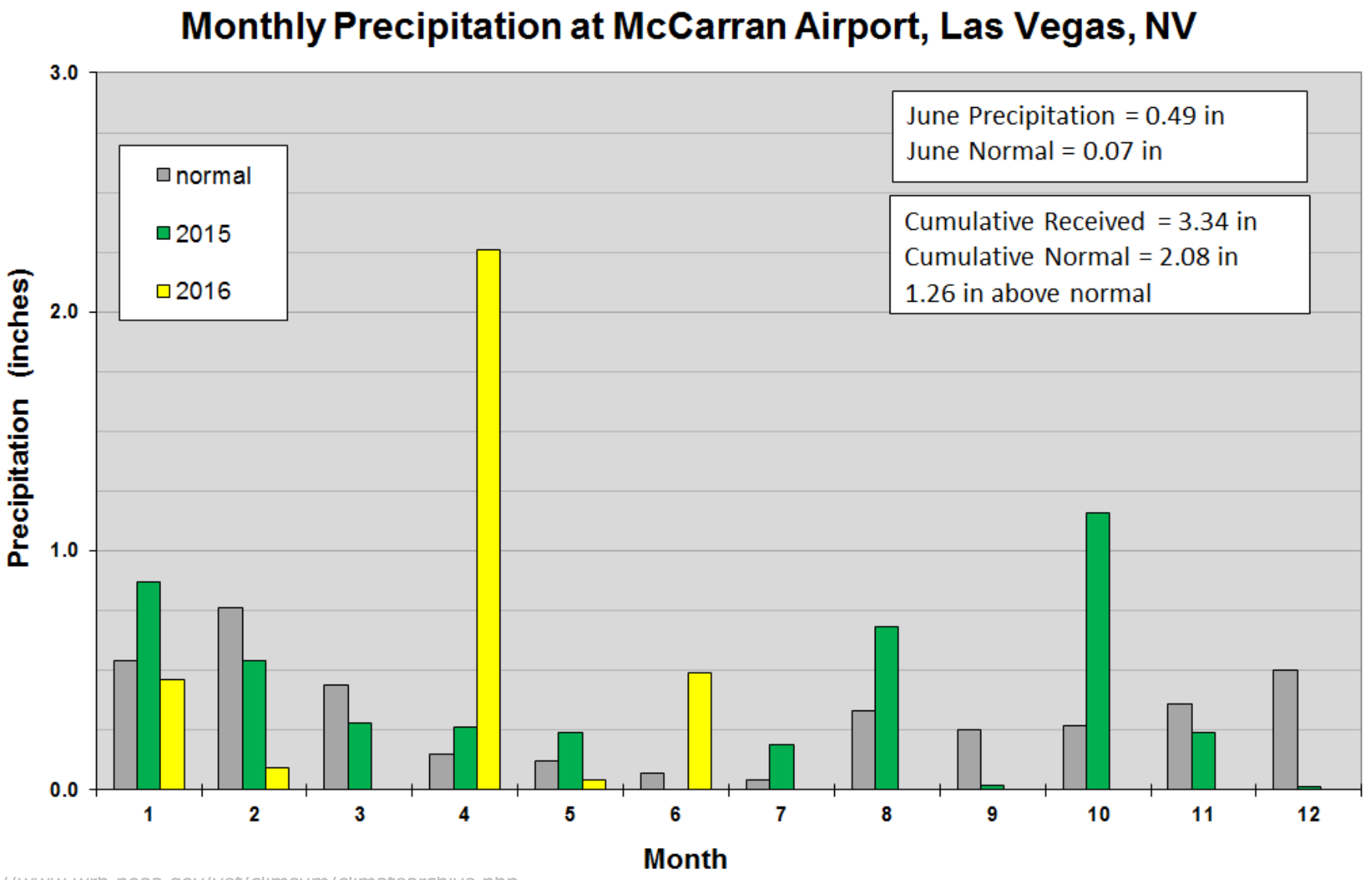
Temperature Deviations

Monthly Averaged Temperature Anomaly



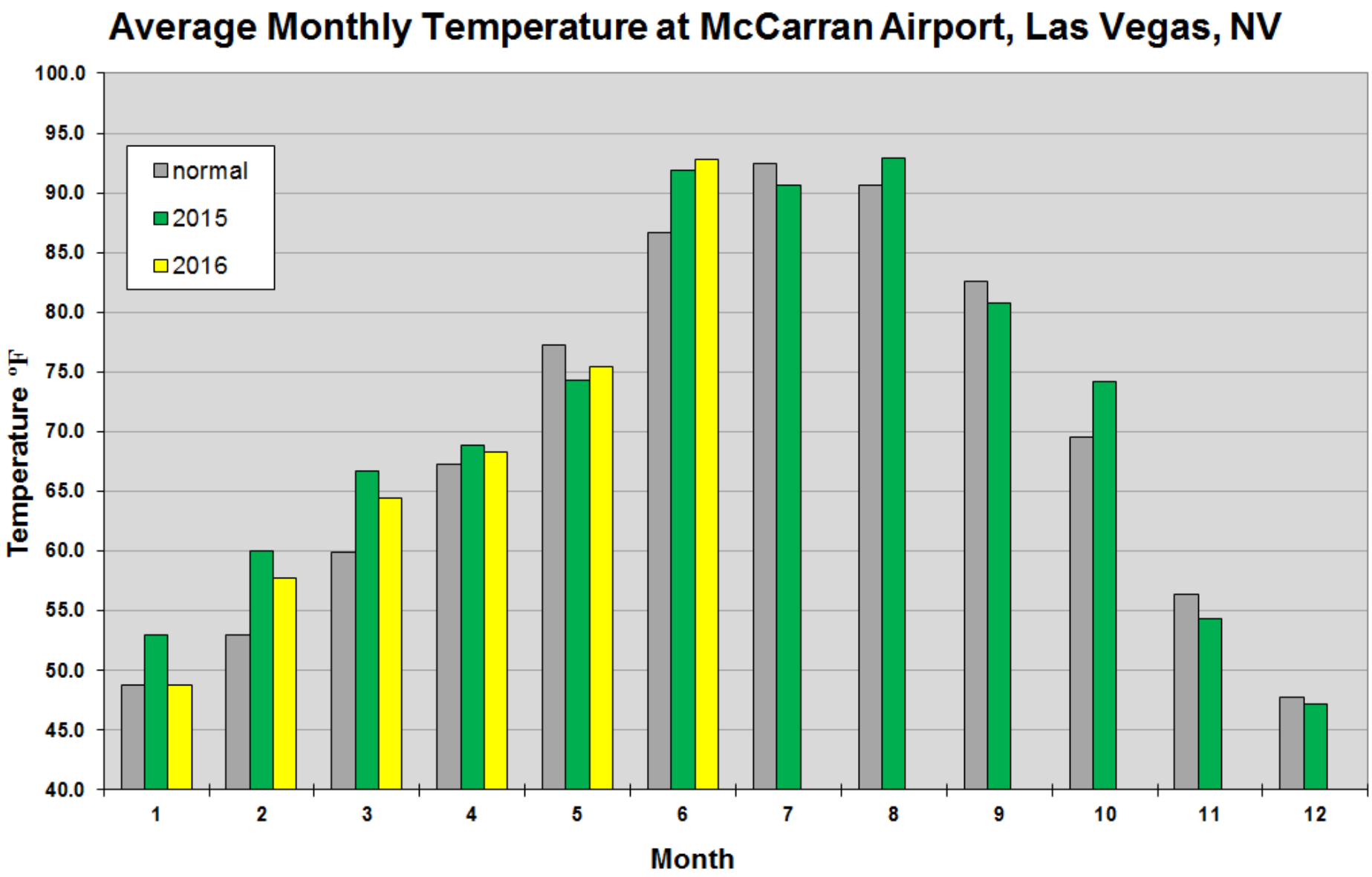
http://http://www.cbrfc.noaa.gov/rmap/grid800/asc/monthlyt/max.032016_cbrfc_.png

Las Vegas Precipitation



http://www.wrn.noaa.gov/ver/climsum/climatearchive.php

Las Vegas Average Temperature



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

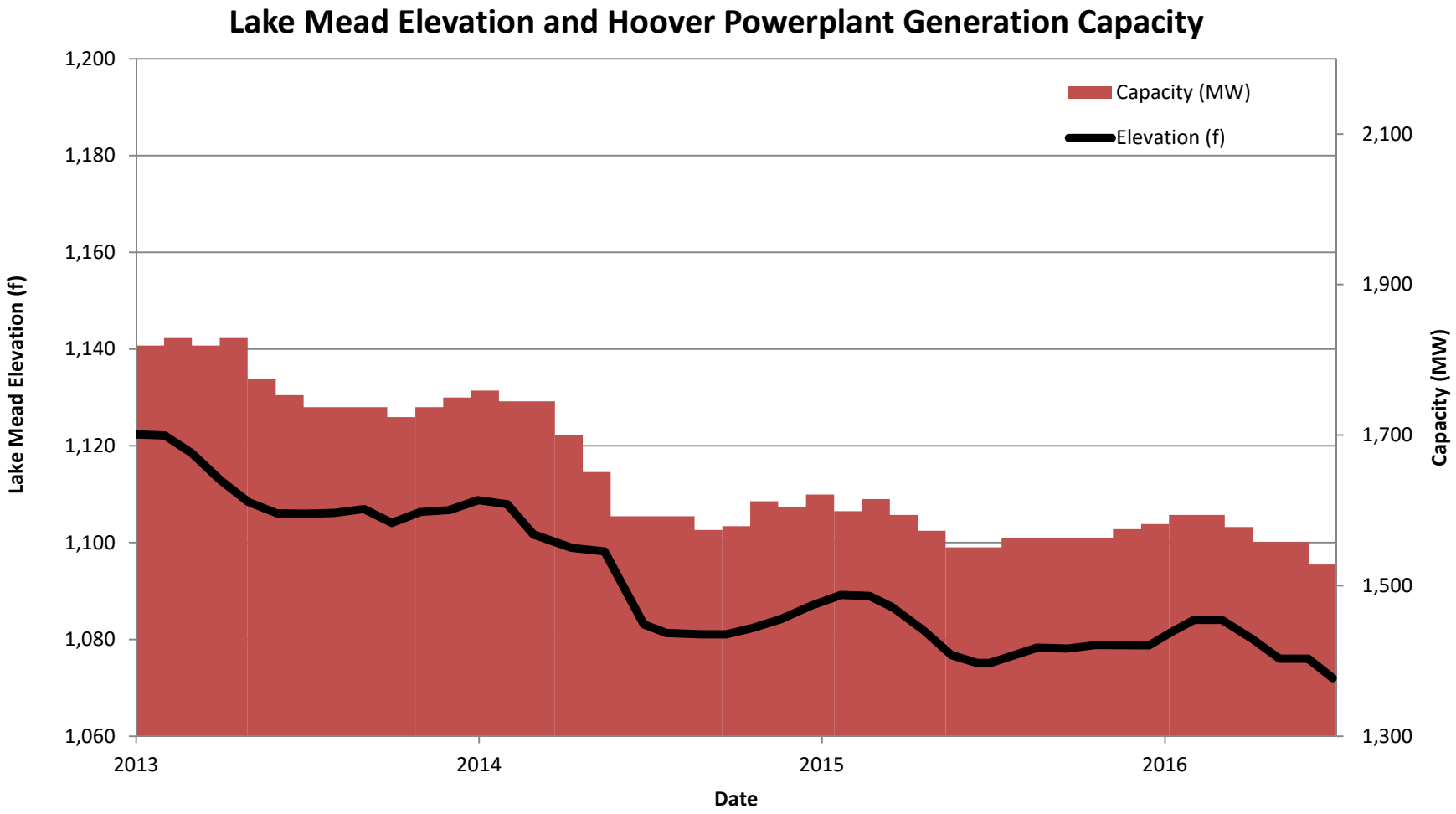
*Subject to final accounting.

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



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

Colorado River Commission of Nevada

Questions?

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