

Colorado River Commission of Nevada

Natural Resources Group Hydrologic Update January 12, 2016



Unregulated Inflow Into Lake Powell

As of January 5, 2016

	MAF*	% Avg**
• WY 2016 (Projected):	9.65	89%
• April-July 2016 (Projected):	6.40	89%
• December (observed):	0.30	81%
• January (forecasted):	0.31	86%

***MAF=Million Acre-Feet**

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



Storage Conditions

As of January 5, 2016

		<u>Percent of Capacity</u>	<u>Δ from last year</u>
Lake Mead elev.	1081.26 ft	39%	↓ 6.82 ft
Lake Powell elev.	3,600.10 ft	48%	↑ 3.27 ft
Total System Storage (1/2016)	29.58 maf	50%	0.00 maf
Total System Storage (1/2015)	29.58 maf	50%	

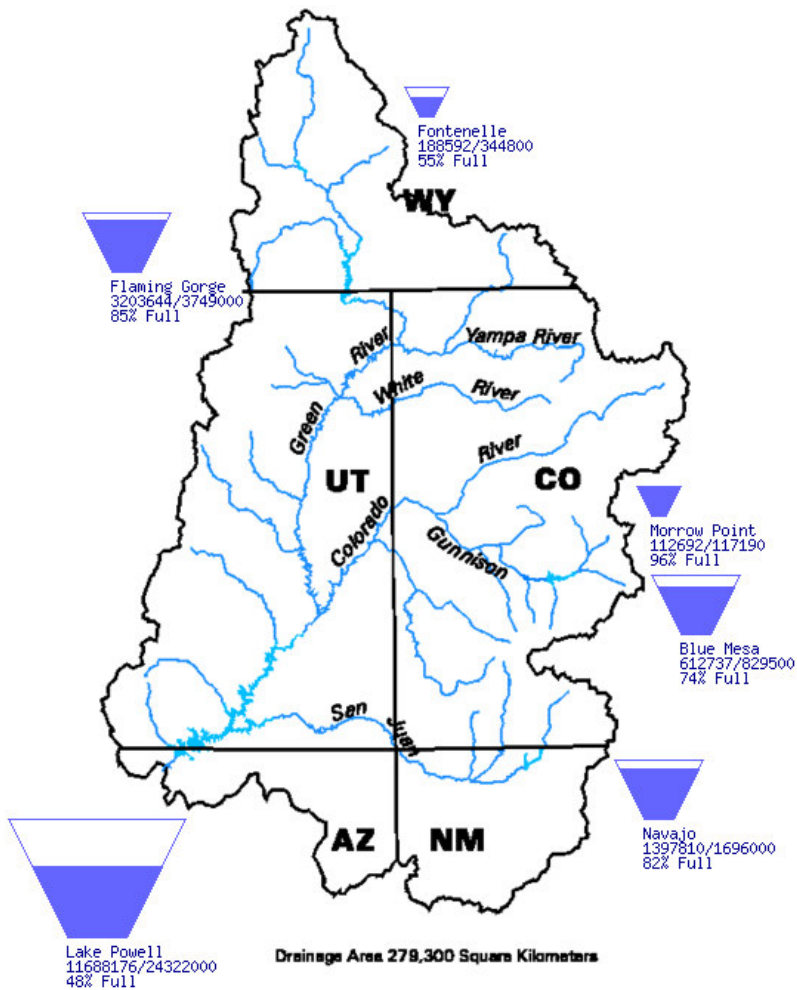


Reservoir Storage

As of January 10, 2016

Data Current as of:
01/10/2016

Upper Colorado River Drainage Basin



Basin	Reservoir	Max Storage	*Current Storage	Percentage
Upper Basin	Crystal Reservoir	17,356	15,356	88%
	Flaming Gorge	3,749,000	3,203,644	85%
	Fontenelle	344,800	188,592	55%
	Morrow Point	117,190	112,692	96%
	Blue Mesa	829,500	612,737	74%
	Navajo	1,696,000	1,397,810	82%
	Lake Powell	24,322,000	11,688,176	48%
Lower Basin	Lake Mead	26,120,000	10,148,000	39%
	Lake Mohave	1,809,800	1,643,700	91%
	Lake Havasu	619,400	577,500	93%
TOTAL		59,625,046	29,588,207	50%

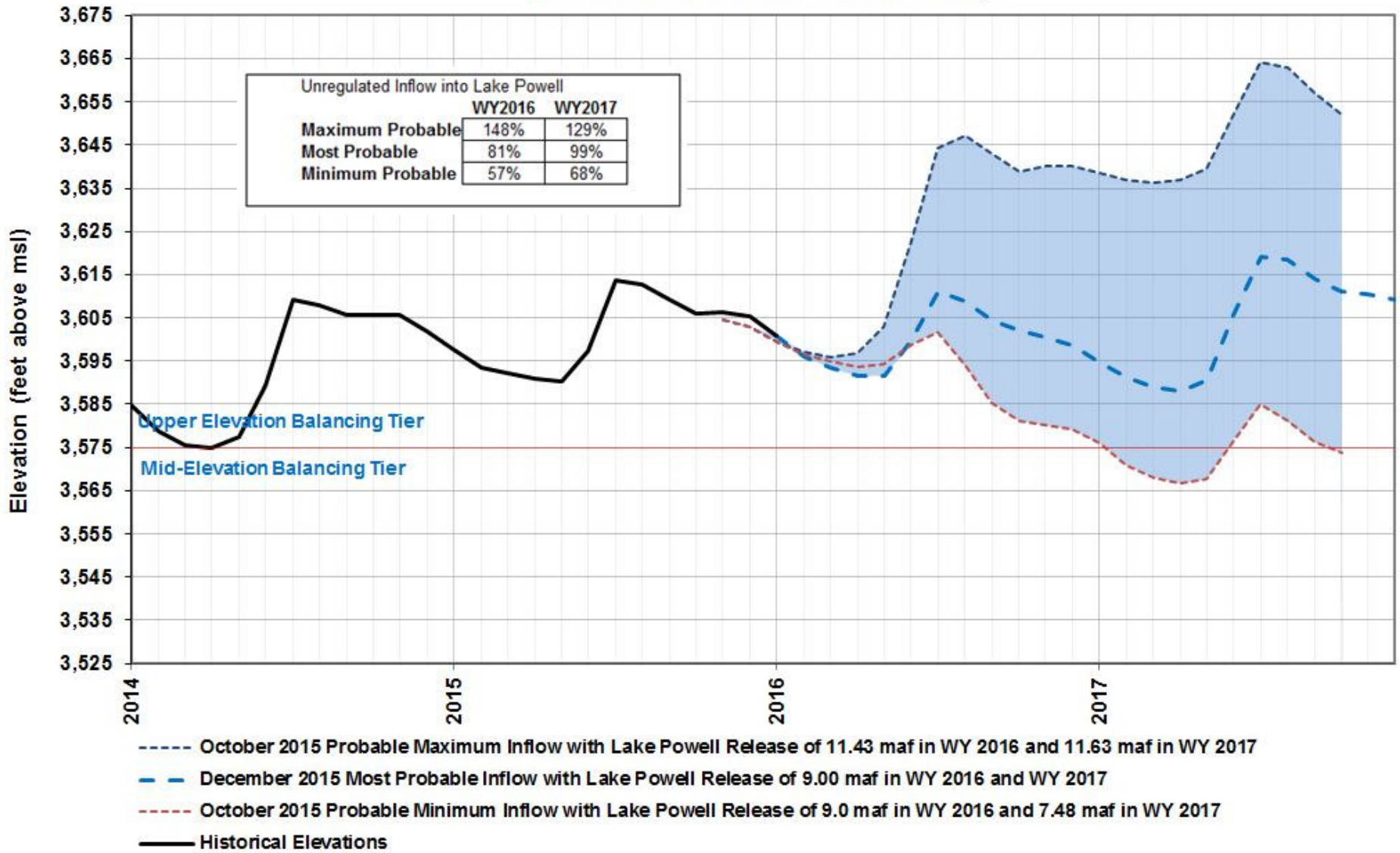
*Data current as 1/10/2016

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

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

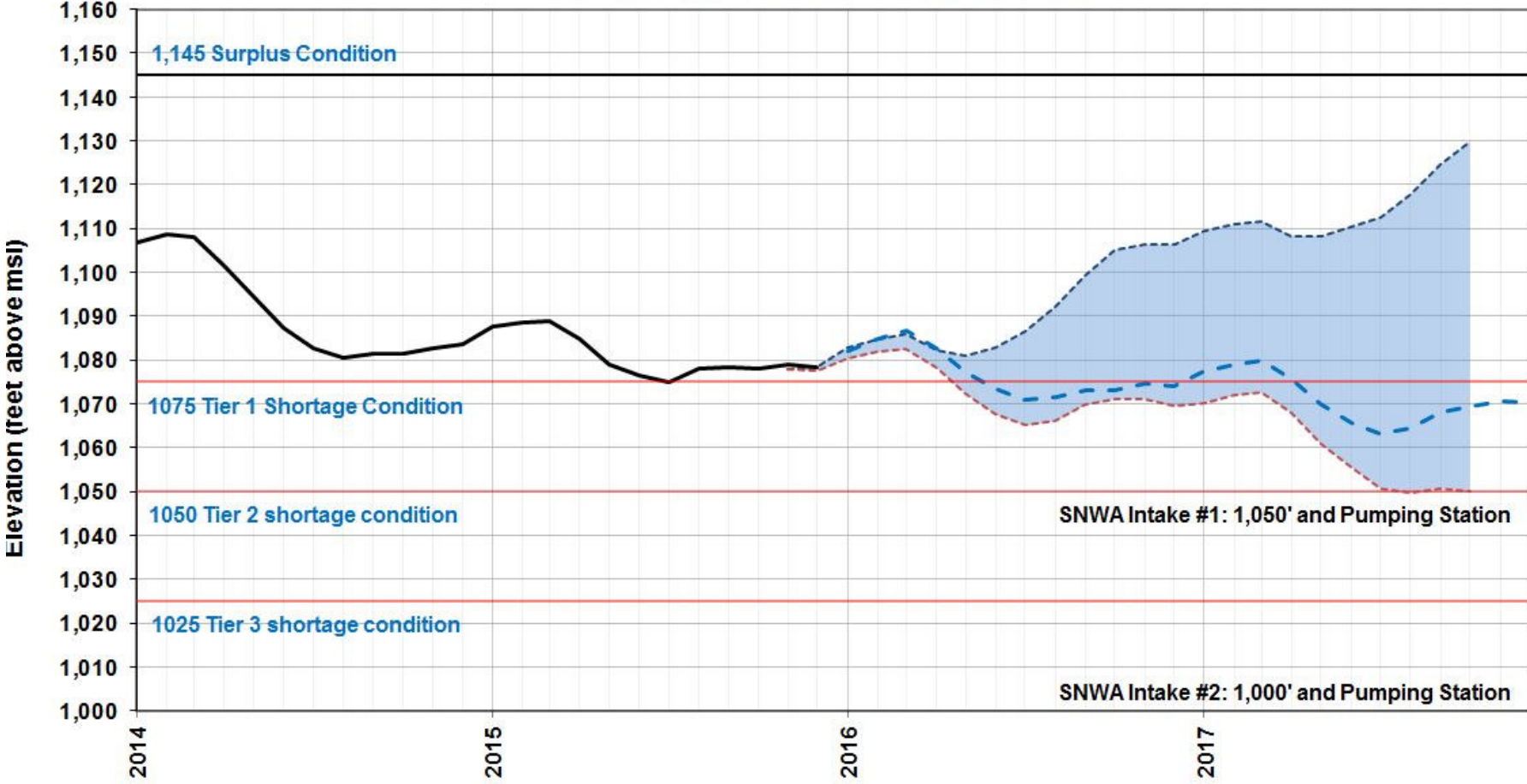
Lake Powell Projections

Reclamation's December 24-Month Study



Lake Mead Projections

Reclamation's December 24-Month Study



- October 2015 Probable Maximum Inflow with Lake Powell Release of 11.43 maf in WY 2016 and 11.63 maf in WY 2017
- - - - December 2015 Most Probable Inflow with Lake Powell Release of 9.00 maf in WY 2016 and WY 2017
- October 2015 Probable Minimum Inflow with Lake Powell Release of 9.0 maf in WY 2016 and 7.48 maf in WY 2017
- Historical Elevations

U.S. Drought Monitor






West

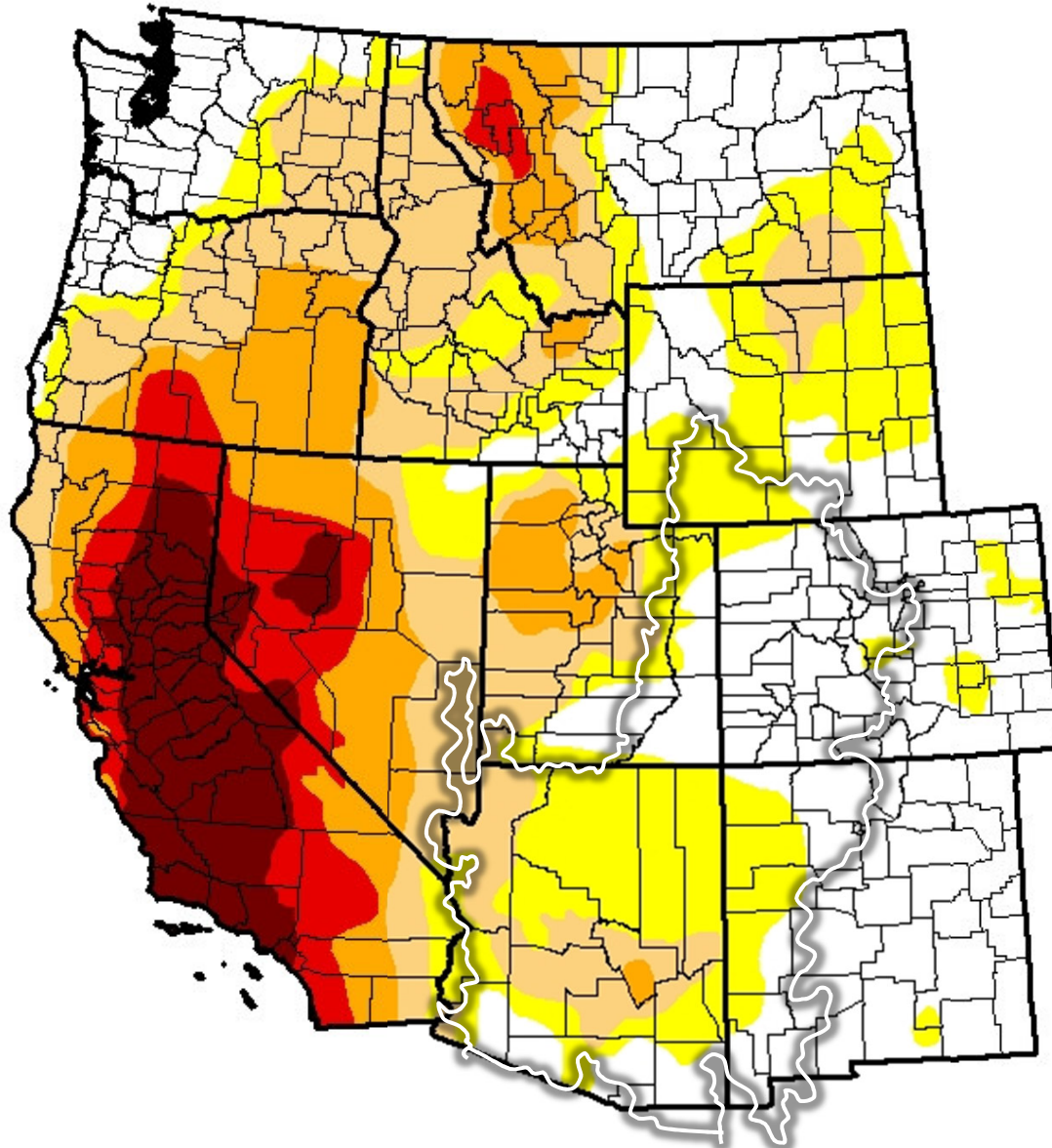
January 5, 2016

(Released Thursday, Jan. 7, 2016)

Valid 7 a.m. EST

Intensity:

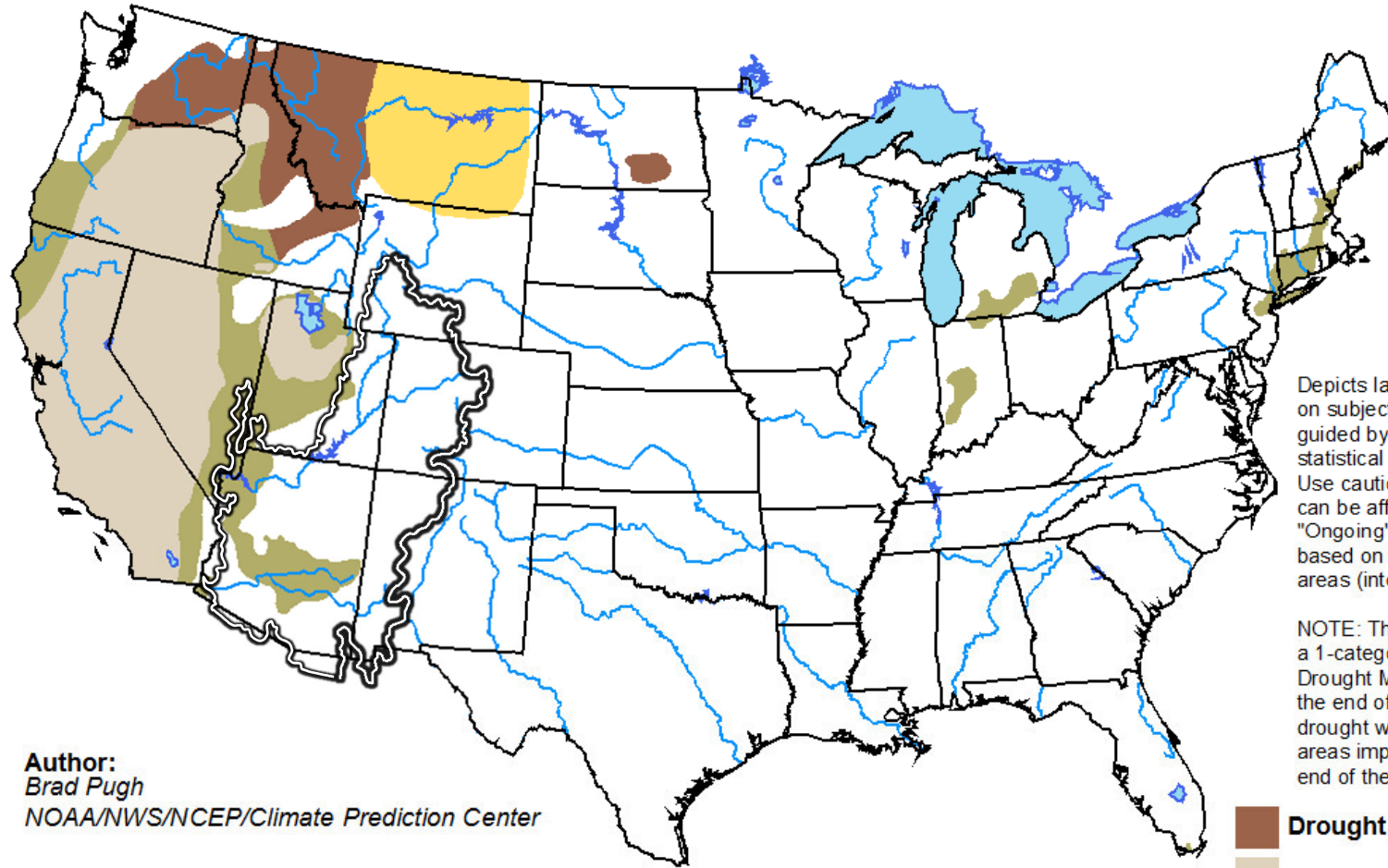
-  D0 - Abnormally Dry
-  D1 - Moderate Drought
-  D2 - Severe Drought
-  D3 - Extreme Drought
-  D4 - Exceptional Drought



U.S. Seasonal Drought Outlook

Drought Tendency During the Valid Period

Valid for December 17 - March 31, 2016
Released December 17, 2015

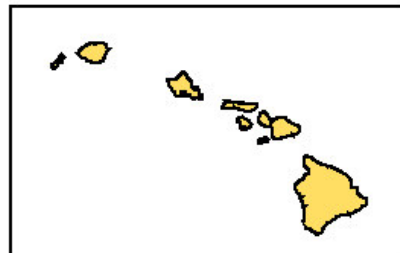
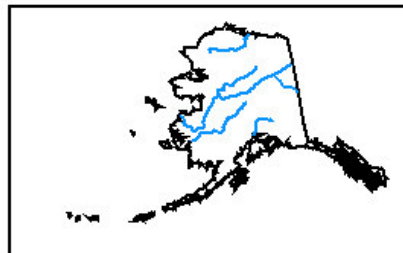


Depicts large-scale trends based on subjectively derived probabilities guided by short- and long-range statistical and dynamical forecasts. Use caution for applications that can be affected by short lived events. "Ongoing" drought areas are based on the U.S. Drought Monitor areas (intensities of D1 to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

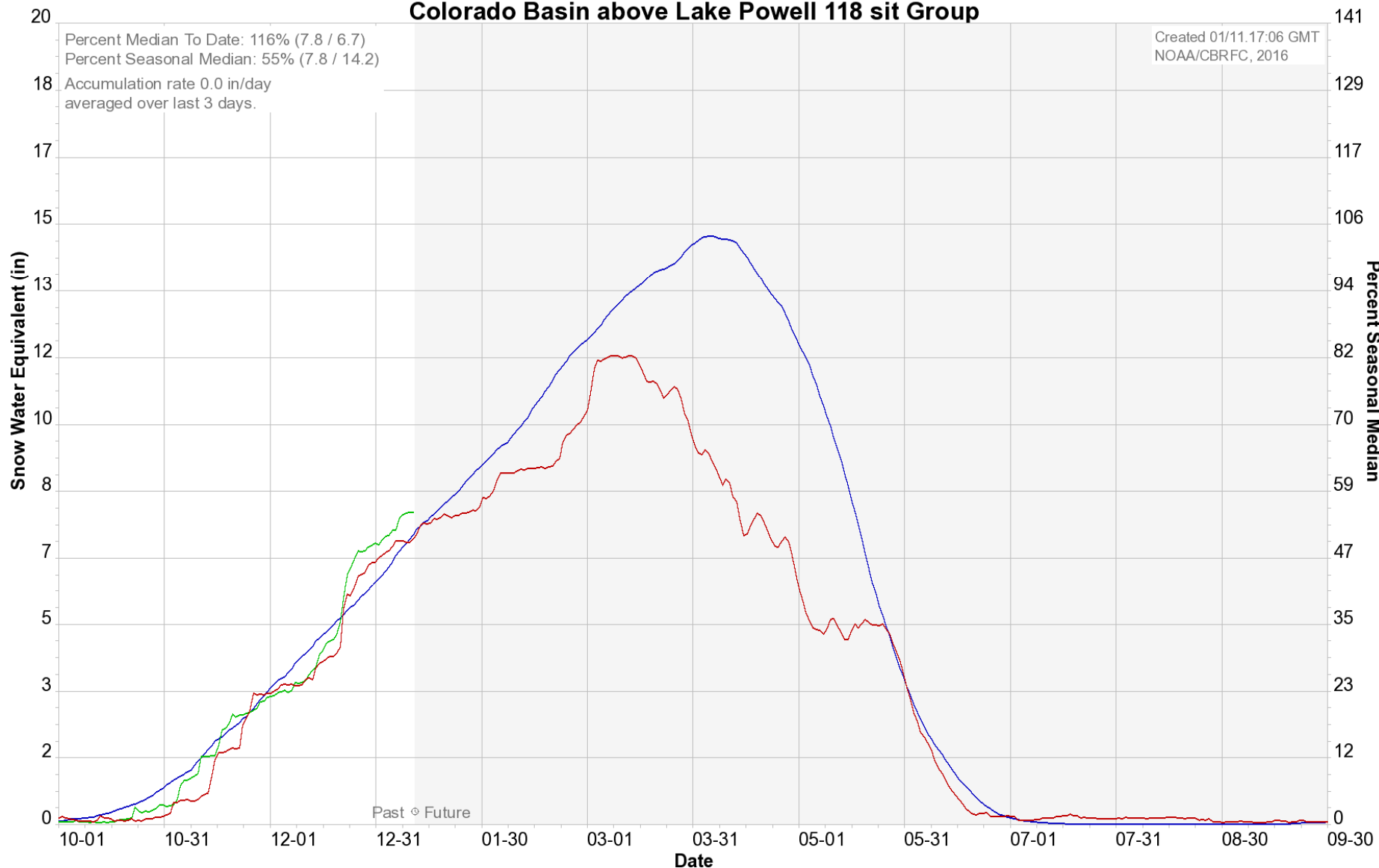
Author:
Brad Pugh
NOAA/NWS/NCEP/Climate Prediction Center

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



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

Colorado Basin River Forecast Center Colorado Basin above Lake Powell 118 sit Group



Average 1981-2010 — 2016 — 2015 —

Precipitation – Colorado River Basin

As of January 5, 2016

Upper Colorado Basin

WY Precip to Date

104% (9.5")

Current Basin Snowpack

107% (7.5")

(Avg 1981-2010)

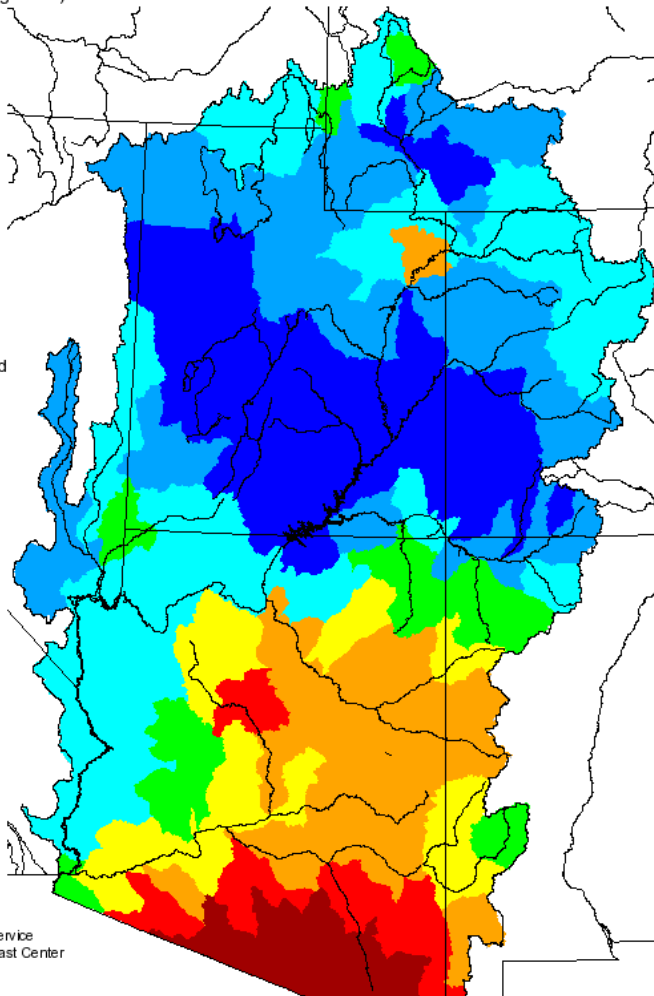
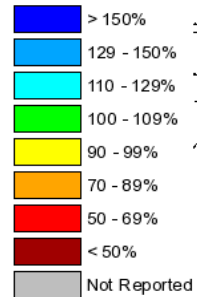


Precipitation

Monthly Precipitation for December 2015

(Averaged by Hydrologic Unit)

% Average

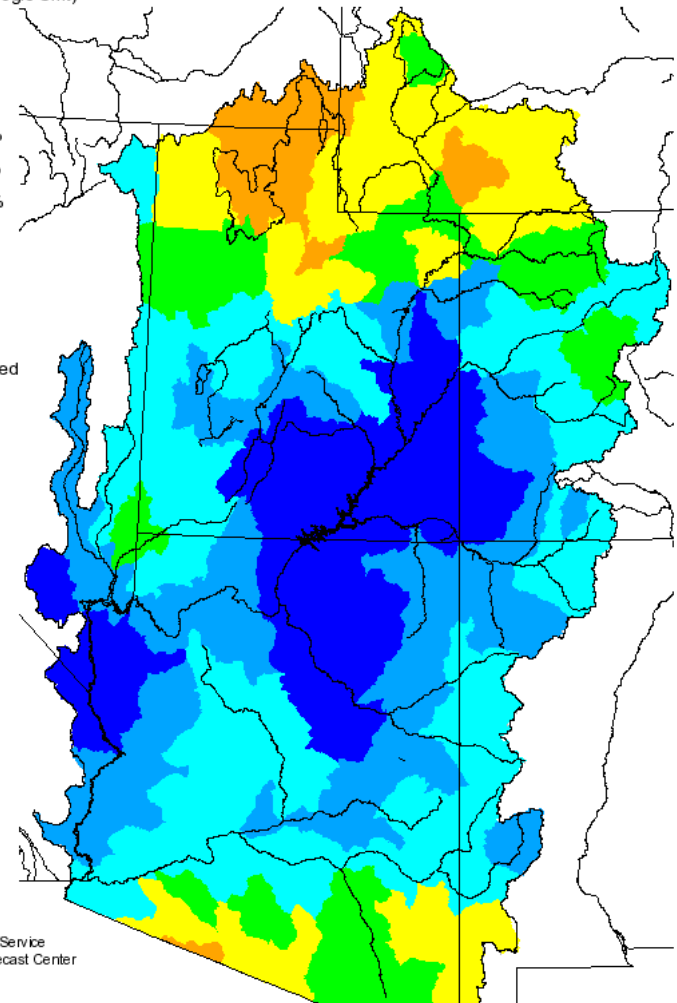
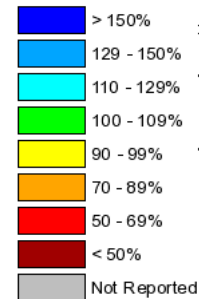


Prepared by
NOAA, National Weather Service
Colorado Basin River Forecast Center
Salt Lake City, Utah
www.cbffc.noaa.gov

Seasonal Precipitation, October 2015 - December 2015

(Averaged by Hydrologic Unit)

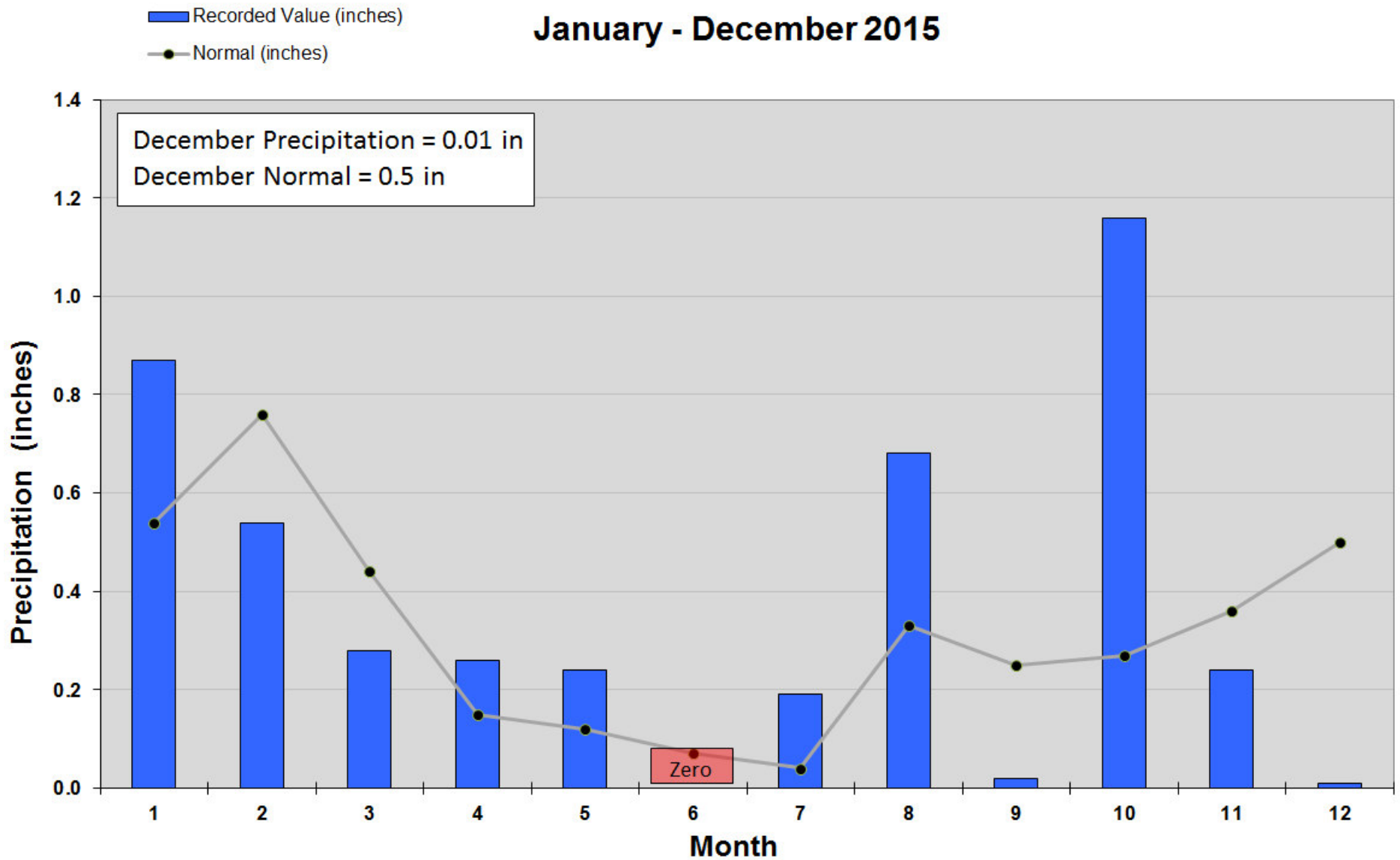
% Average



Prepared by
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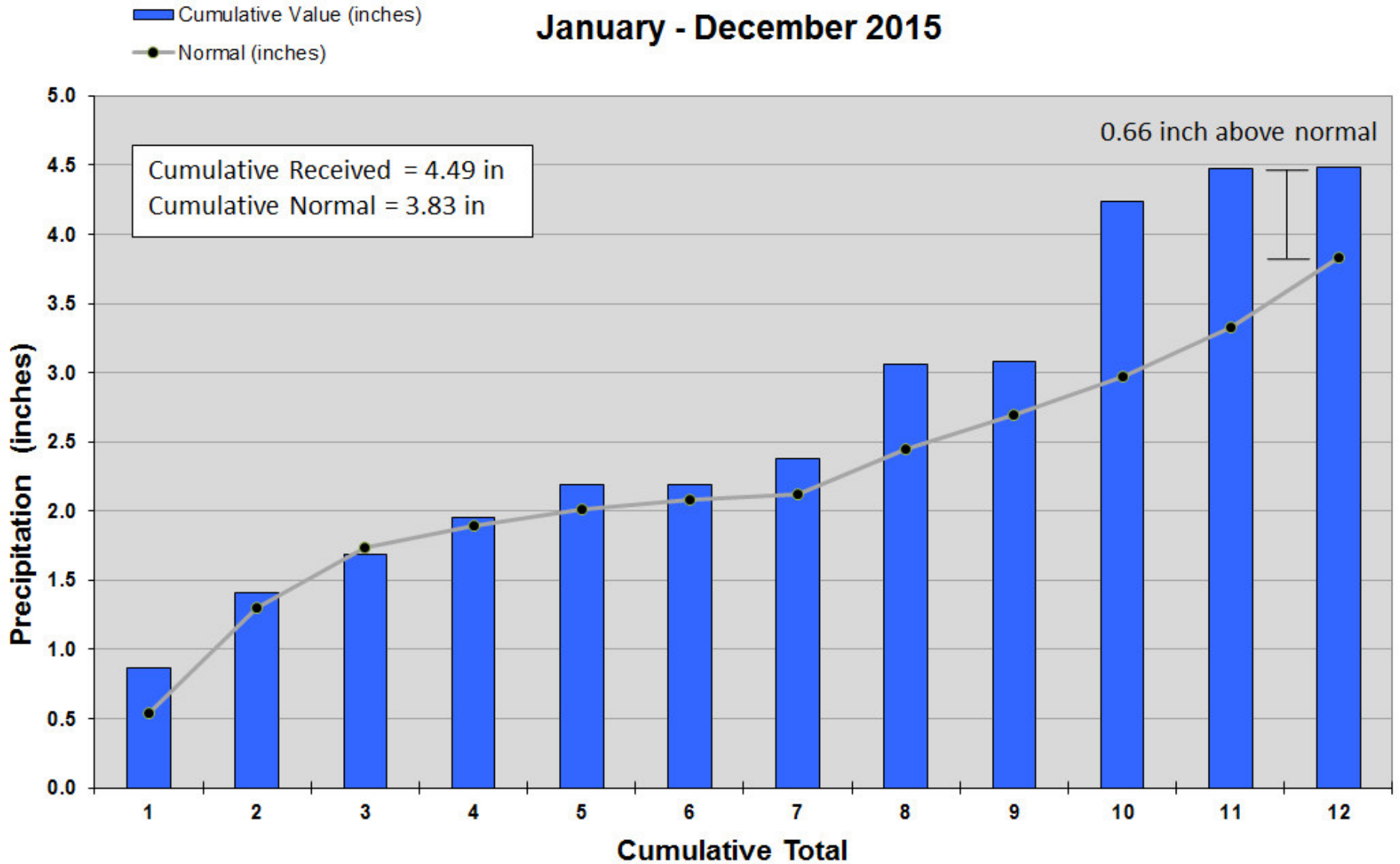
Monthly Precipitation at McCarran International Airport, Las Vegas, NV

January - December 2015



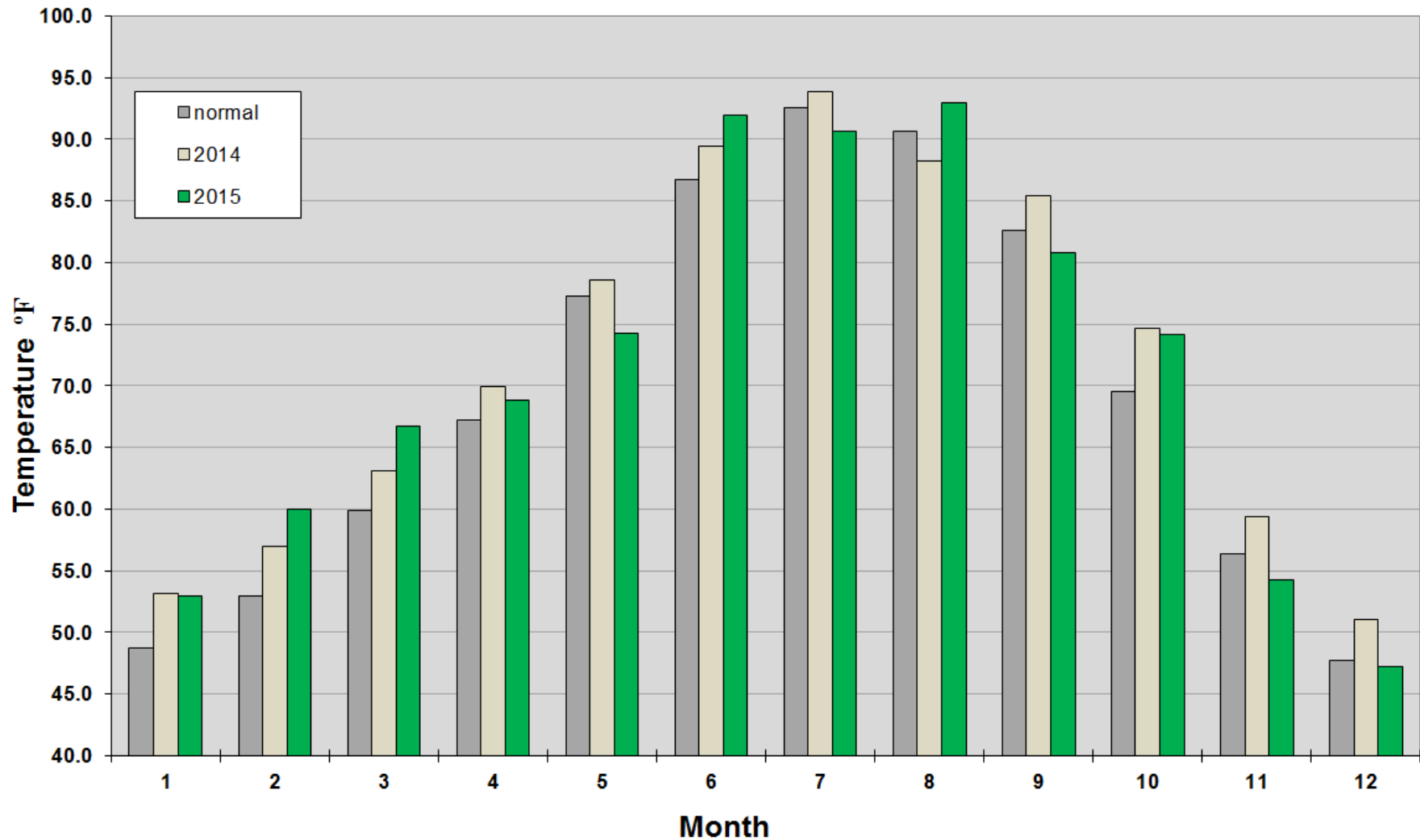
Cumulative Precipitation at McCarran International Airport, Las Vegas, NV

January - December 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 – November 2015

2015*: Consumptive Use = 213,840 af

2014: Consumptive Use = 215,926 af

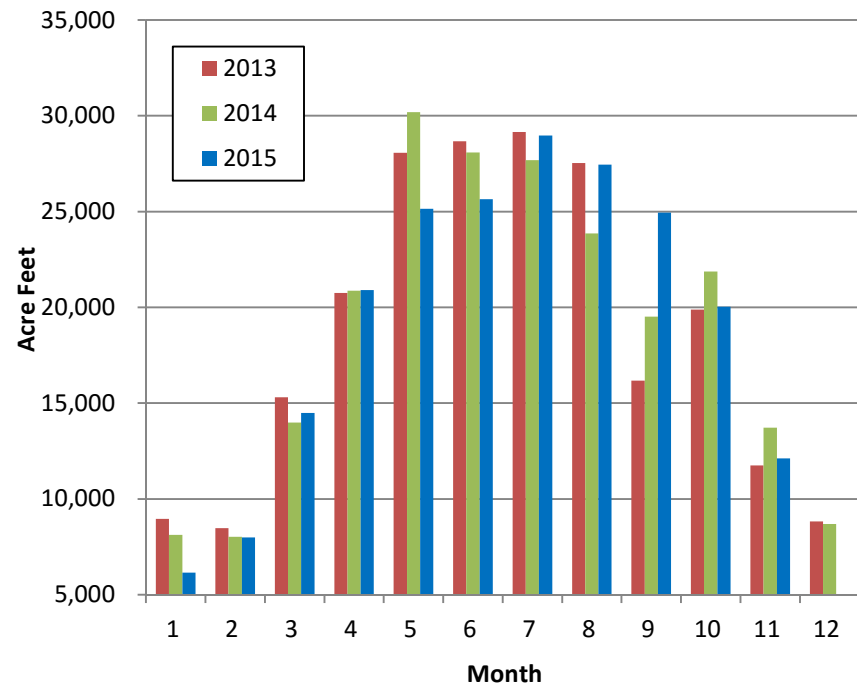
Difference = - 2,085 af

*Subject to final accounting.



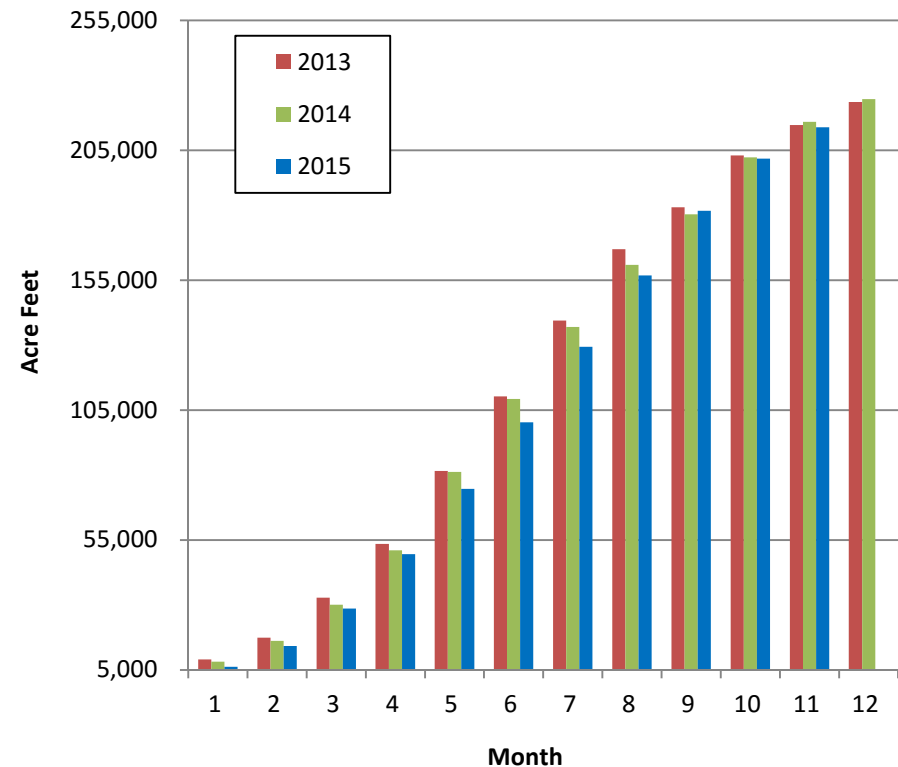
Monthly Consumptive Use Comparison

	2013	2014	2015
Jan	8,965	8,128	6,146
Feb	8,470	8,027	7,994
Mar	15,300	13,981	14,490
Apr	20,750	20,871	20,902
May	28,076	30,199	25,153
Jun	28,679	28,079	25,653
Jul	29,150	27,686	28,968
Aug	27,538	23,856	27,450
Sep	16,179	19,514	24,940
Oct	19,884	21,871	20,026
Nov	11,754	13,714	12,117
Dec	8,818	8,697	
Total	223,563	224,622	



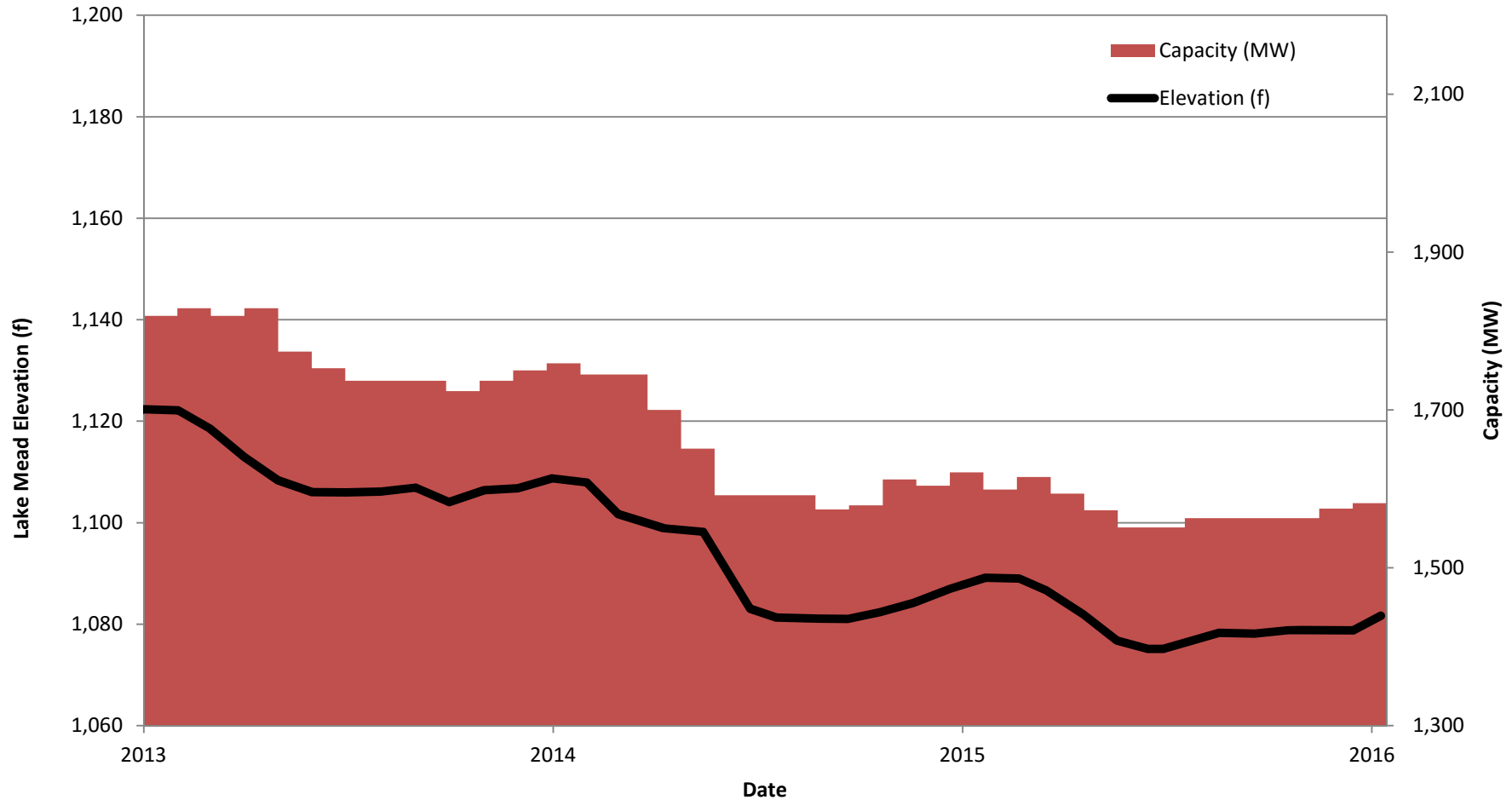
Cumulative Consumptive Use Comparison

	2013	2014	2015
Jan	8,965	8,128	6,146
Feb	17,435	16,155	14,140
Mar	32,735	30,136	28,630
Apr	53,485	51,006	49,532
May	81,561	81,206	74,685
Jun	110,240	109,285	100,338
Jul	139,390	136,971	129,307
Aug	166,928	160,827	156,757
Sep	183,107	180,341	181,697
Oct	202,991	202,212	201,723
Nov	214,745	215,926	213,840
Dec	223,563	224,622	
Total	223,563	224,622	



Hydropower Capacity

Lake Mead Elevation and Hoover Powerplant Generation Capacity



- Capacity was rated 7 MW higher January 12, 2016 to 1,582 MW.

Colorado River Commission of Nevada

Questions?

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