Colorado River Commission of Nevada

Natural Resources Group Hydrologic Update April 21, 2016





Unregulated Inflow Into Lake Powell

As of April 18, 2016

	MAF*	% Avg**
• WY 2016 (Projected):	8.44	78%
April-July 2016 (Projected):	5.3	74%
March (observed):	0.55	83%
April (forecasted):	0.65	62%

*MAF=Million Acre-Feet

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



Storage Conditions

As of April 18, 2016

Percent of **Capacity**

<u>Δ from last year</u>

Lake Mead elev.

1,078.22 ft

38%

3.18 ft

Lake Powell elev.

3,591.22 ft

45%

0.57 ft

Total System Storage (4/2016) 28.61 maf

48%

0.04 maf

Total System Storage (4/2015) 28.57 maf

48%







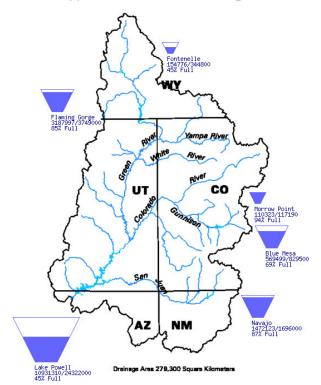


Reservoir Storage

As of April 16, 2016

Data Current as of: 04/17/2016

Upper Colorado River Drainage Basin



Colorado River Reservoir Storages

Colorado	Colorado River Reservoir Storages							
Basin	Reservoir	Max Storage	*Current Storage	Percentage	Current Storage subtotals			
Upper Basin	Crystal Reservoir	17,356	16,737	96%	5,505,918			
	Flaming Gorge	3,749,000	3,186,510	85%				
	Fontenelle	344,800	153,407	44%				
	Morrow Point	117,190	110,214	94%				
	Blue Mesa	829,500	569,268	69%				
	Navajo	1,696,000	1,469,782	87%				
	Lake Powell	24,322,000	10,930,398	45%				
Lower Basin	Lake Mead	26,120,000	9,871,000	38%				
	Lake Mohave	1,809,800	1,725,500	95%	2,313,500			
	Lake Havasu	619,400	588,000	95%				
	TOTAL	59,625,046	28,620,816	48%				

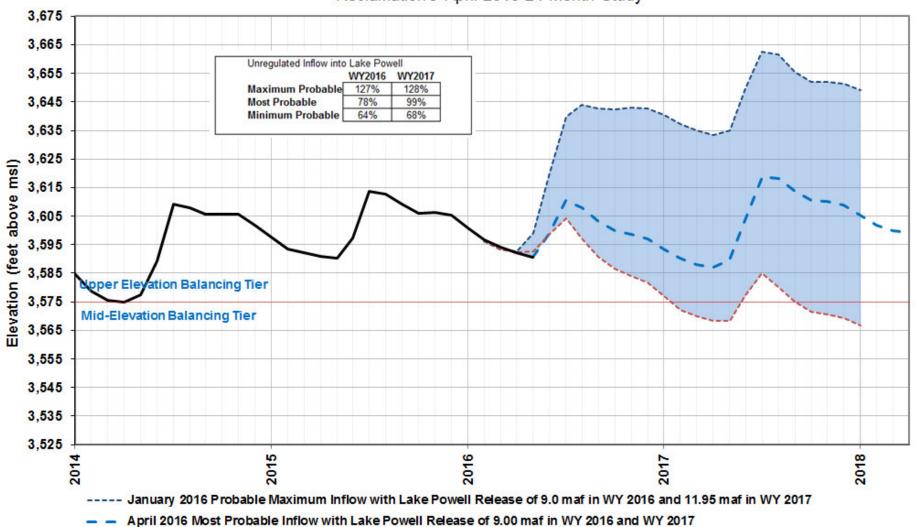
^{*}Data current as 4/16/2016

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 April 2016 24-Month Study

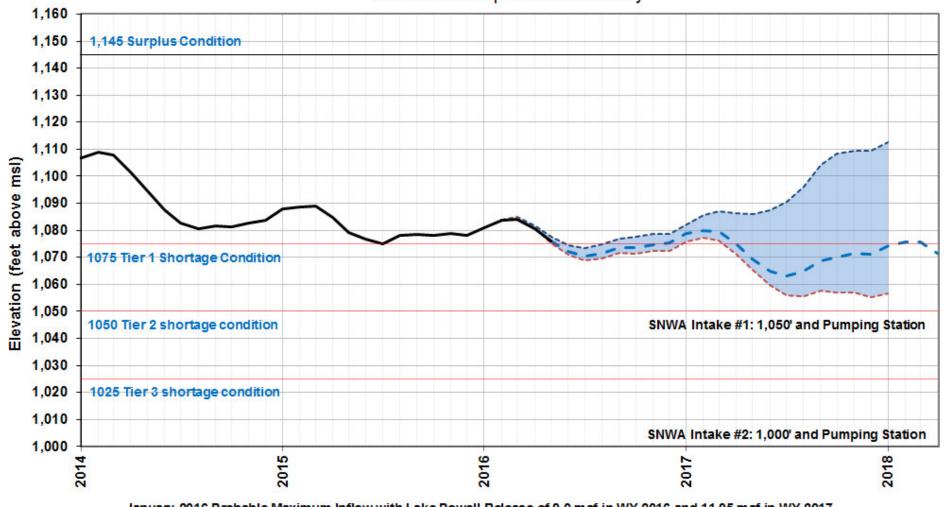


-- January 2016 Probable Minimum Inflow with Lake Powell Release of 9.0 maf in WY 2016 and 8.23 maf in WY 2017

Historical Elevations

Lake Mead Projections

Reclamation's April 24-Month Study



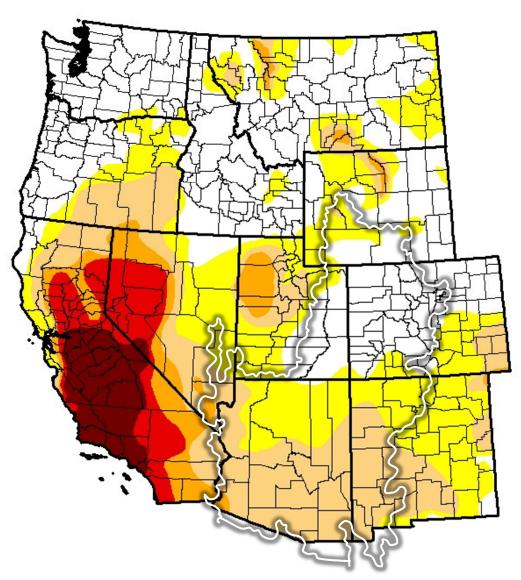
----- January 2016 Probable Maximum Inflow with Lake Powell Release of 9.0 maf in WY 2016 and 11.95 maf in WY 2017

April 2016 Most Probable Inflow with Lake Powell Release of 9.00 maf in WY 2016 and WY 2017

---- January 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 West



April 12, 2016

(Released Thursday, Apr. 14, 2016) Valid 8 a.m. EDT

Intensity:

D0 - Abnormally Dry

D1 - Moderate Drought

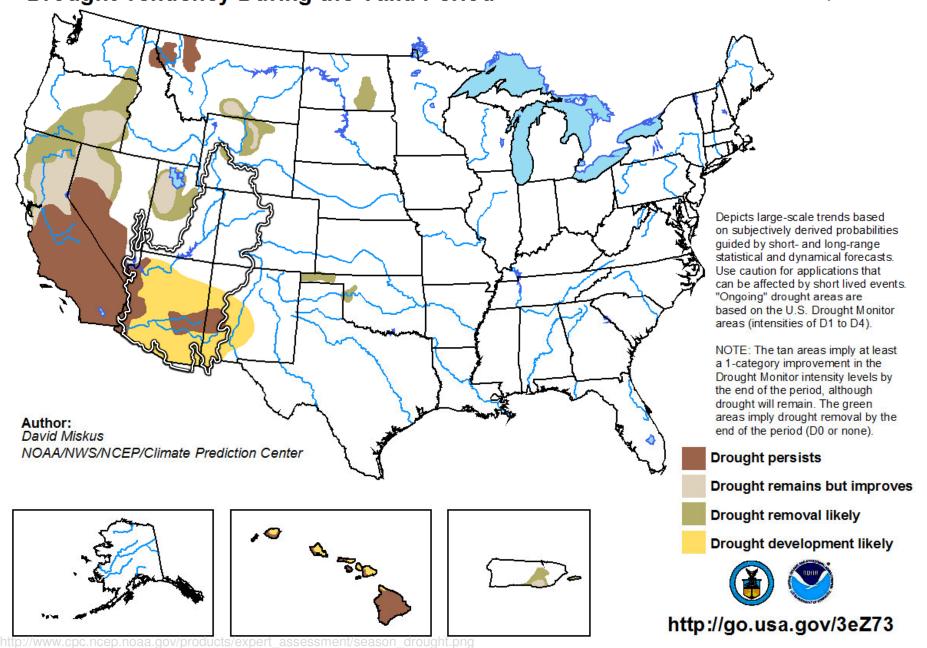
D2 - Severe Drought

D3 - Extreme Drought

D4 - Exceptional Drought

U.S. Seasonal Drought Outlook Drought Tendency During the Valid Period

Valid for March 17 - June 30, 2016 Released March 17, 2016



Precipitation – Colorado River Basin

As of April 18, 2016

Upper Colorado

Basin

WY Precip to Date

94% (18.5")

Current Basin Snowpack

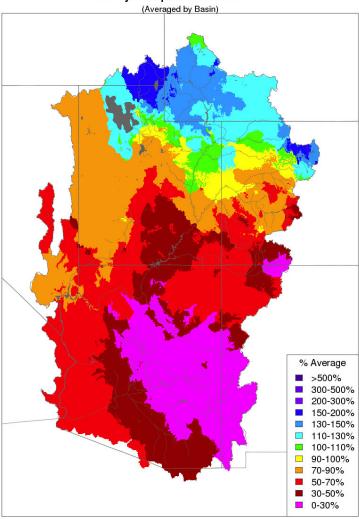
88% (12.7")

(Avg 1981-2010)



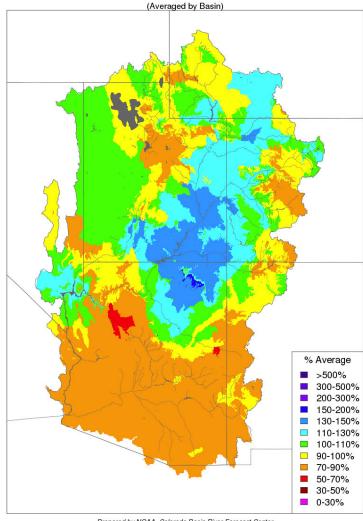
Precipitation



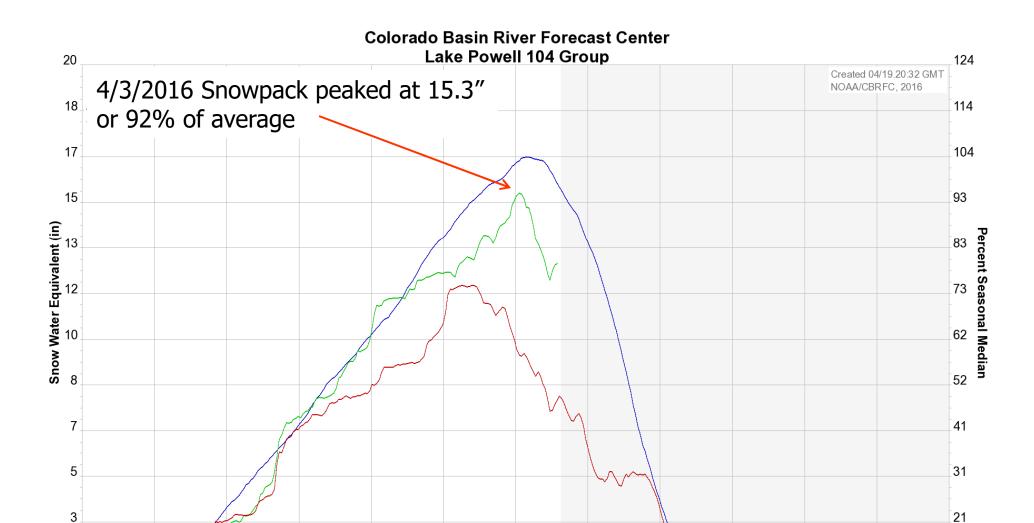


Prepared by NOAA, Colorado Basin River Forecast Center Salt Lake City, Utah, www.cbrfc.noaa.gov

Water Year Precipitation, October 2015 - March 2016



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



Past

Future

05-01

05-31

07-01

07-31

08-30

03-31

Date

10

09-30

Average 1981-2010 _ 2016 _ 2015 _

10-31

12-01

12-31

01-30

03-01

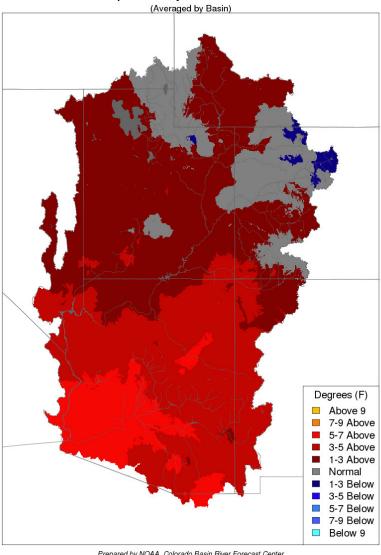
2

10-01

Temperature Deviations

Monthly Averaged Temperature Anomaly





Water Use in Southern Nevada



Water Use in Southern Nevada

January – March 2016

2016*: Consumptive Use = 36,914 af

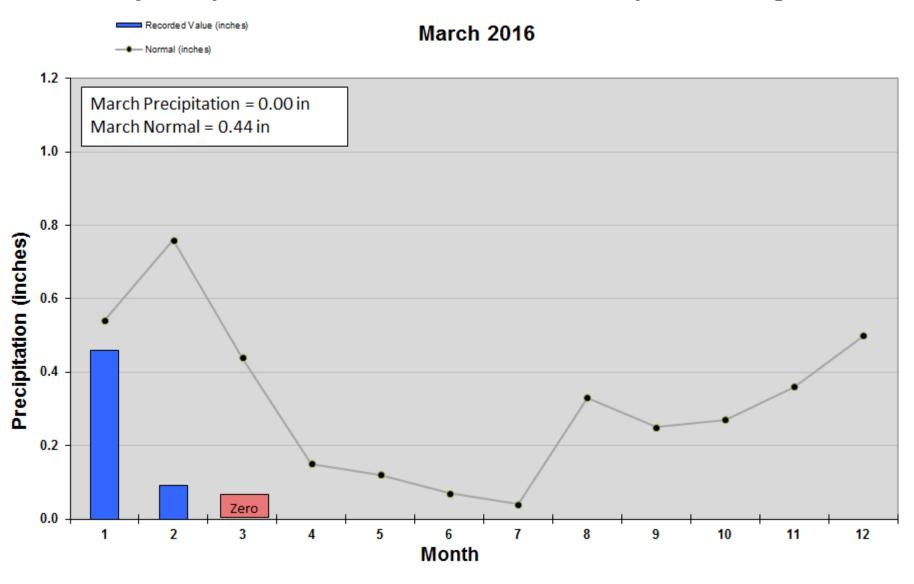
2015*: Consumptive Use = 28,630 af

Difference = 8,284 af

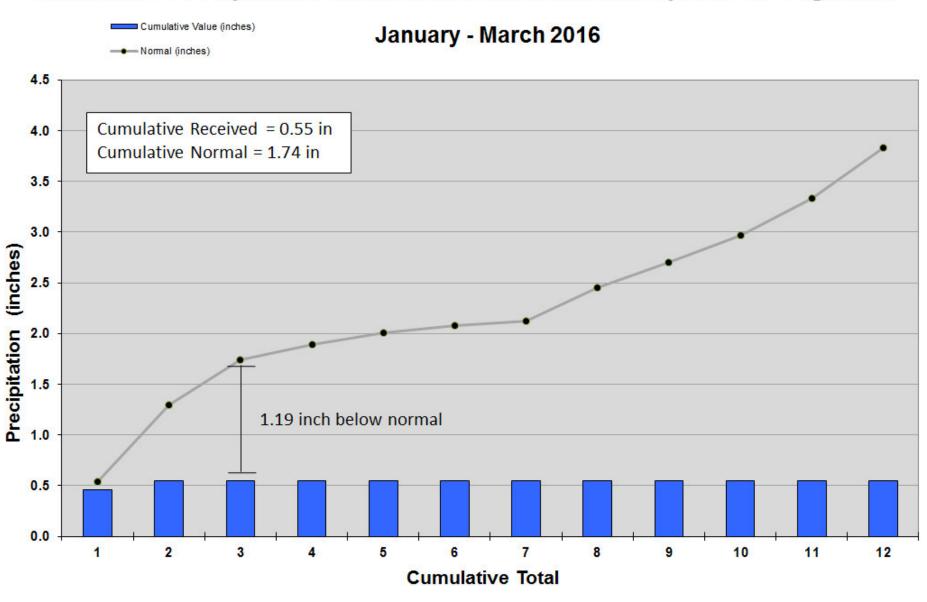
*Subject to final accounting.



Monthly Precipitation at McCarran International Airport, Las Vegas, NV

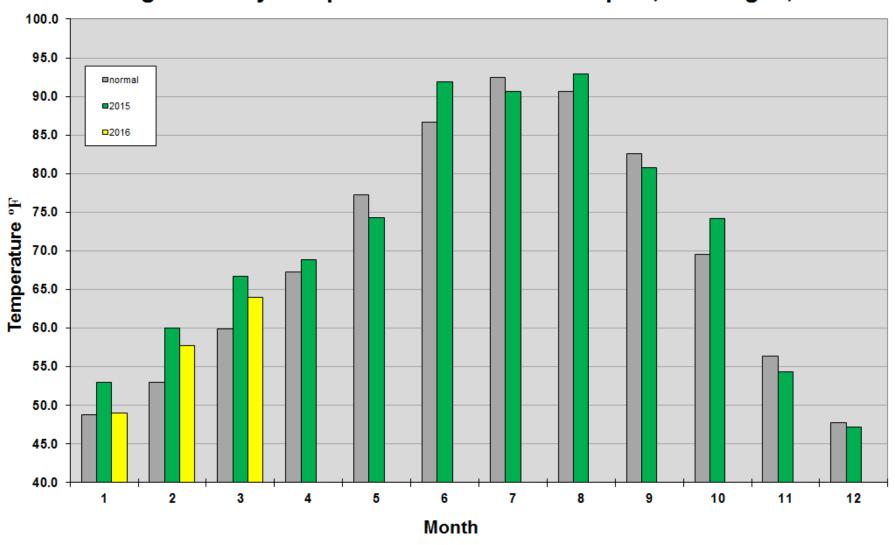


Cumulative Precipitation at McCarran International Airport, Las Vegas, NV



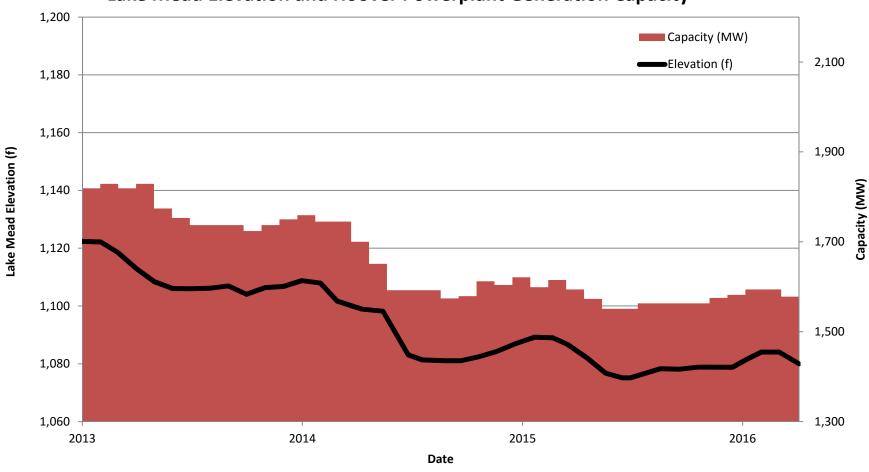
Las Vegas Average Temperature

Average Monthly Temperature at McCarran Airport, Las Vegas, NV



Hydropower Capacity

Lake Mead Elevation and Hoover Powerplant Generation Capacity



On April 7, 2016 capacity was decreased 16 MW to 1,578 MW.

Colorado River Commission of Nevada

Questions?

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



