Colorado River Commission of Nevada

Natural Resources Group
Hydrologic Update
March 10, 2015

Unregulated Inflow

Unregulated Inflow Into Lake Powell

As of March 9, 2015

	MAF*	% Avg**
• WY 2015 (forecast):	8.61	79%
• April-July 2015 (forecast):	5.10	71%
• February (observed):	0.42	108%
• March (forecasted):	0.53	80%

***MAF=Million Acre-Feet**

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

Storage Conditions

As of March 9, 2015

		Percent of Capacity	Δ from last year
Lake Mead elev.	1087.98 ft	41%	↓ 18.63 ft
Lake Powell elev.	3,592.11 ft	45%	↑ 16.58 ft
Total System Storage (3/2015)	29.20 maf	49%	↑ 0.48 maf
Total System Storage (3/2014)	28.72 maf	48%	

Reservoir Storage

As of March 9, 2015

Colorado River Reservoir Storages

Basin	Reservoir	Max Storage	*Current Storage	Percentage	Current Storage subtotals
Upper Basin	Crystal Reservoir	17,356	16,743	96%	5,172,251
	Flaming Gorge	3,749,000	3,198,422	85%	
	Fontenelle	344,800	202,238	59%	
	Morrow Point	117,190	109,635	94%	
	Blue Mesa	829,500	546,604	66%	
	Navajo	1,696,000	1,098,609	65%	
	Lake Powell	24,322,000	11,015,346	45%	
Lower Basin	Lake Mead	26,120,000	10,683,000	41%	
	Lake Mohave	1,809,800	1,740,300	96%	2,330,000
	Lake Havasu	619,400	589,700	95%	
	TOTAL	59,625,046	29,200,597	49%	

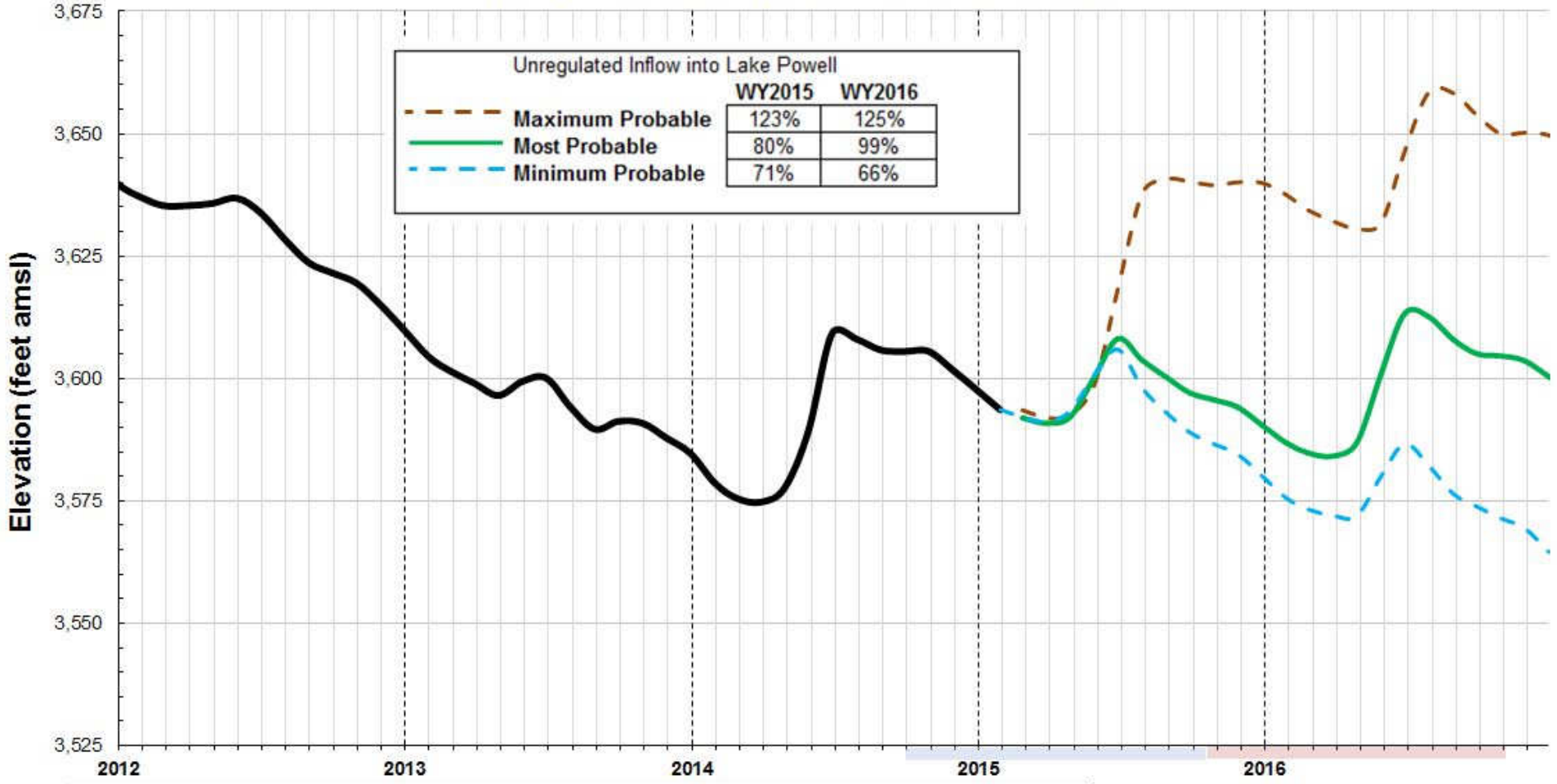
**Data current as 3/9/2015*

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 February 2015 24-month Study)



Actual Data - End of month measurements

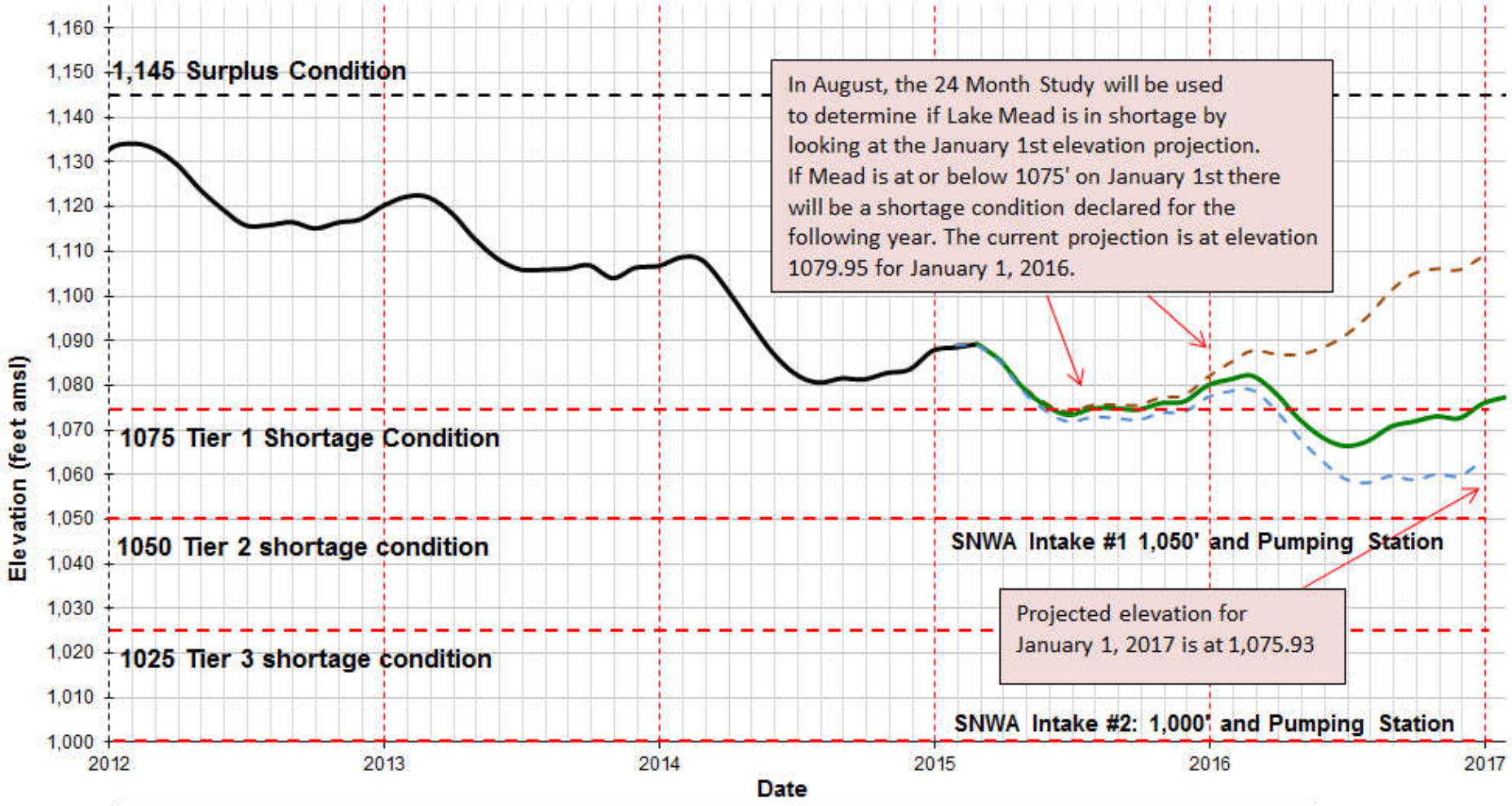
Maximum Probable - Lake Powell Release of 9.0 maf in WY2015 and 11.66 maf in WY2016

Most probable - Lake Powell Release of 9.0 maf in WY2015 and 9.0 maf in WY2016

Minimum Probable - Lake Powell Release of 9.0 maf in WY2015 and 8.23 maf in WY2016

Lake Mead End of Month Elevation Projections

(Projections based on the February 2015 24-month study)



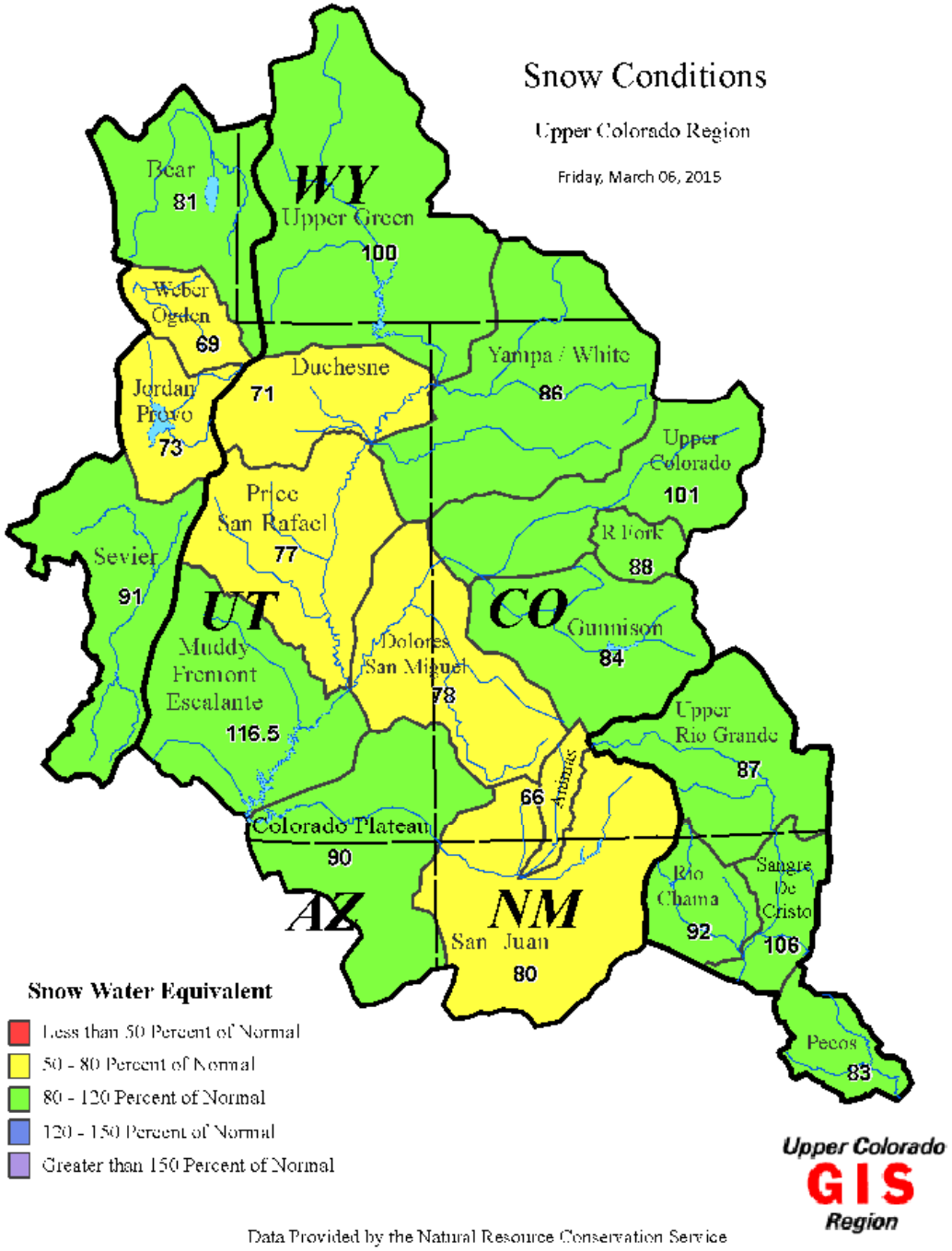
Drought and Precipitation

Precipitation – Colorado River Basin

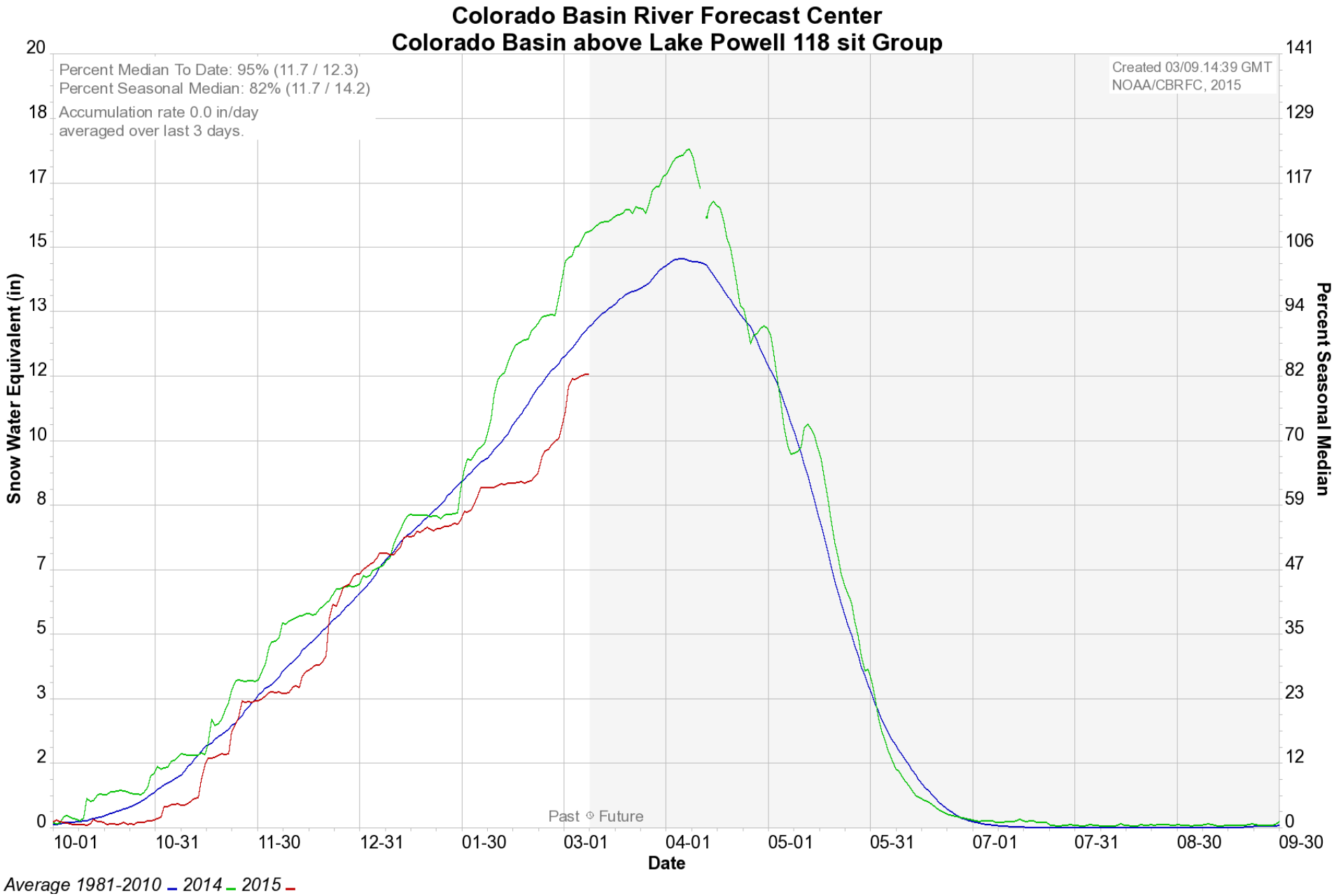
As of March 9, 2015

	Upper Colorado Basin
WY 2015 Precip to Date	83% (12.8″)
Current Basin Snowpack	87% (11.8″)

(Avg 1981-2010)

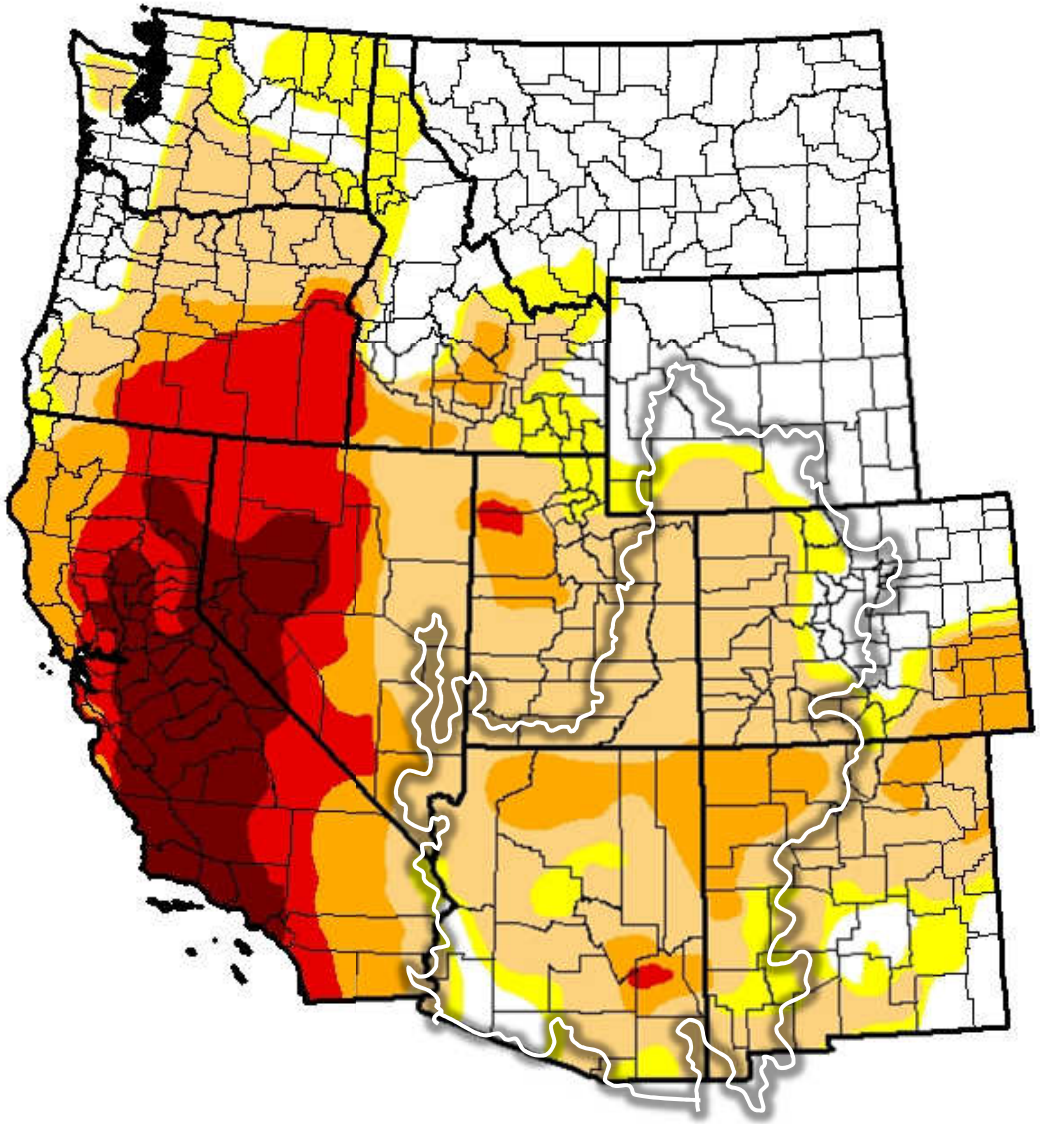


http://www.usbr.gov/uc/water/notice/snowpack.html


Colorado Basin River Forecast Center
Colorado Basin above Lake Powell 118 sit Group
Percent Median To Date: 95% (11.7 / 12.3)
Percent Seasonal Median: 82% (11.7 / 14.2)
Accumulation rate 0.0 in/day
averaged over last 3 days.
Created 03/09.14:39 GMT
NOAA/CBRFC, 2015
Snow Water Equivalent (in)
Percent Seasonal Median
Past
Future
Date
10-01
10-31
11-30
12-31
01-30
03-01
04-01
05-01
05-31
07-01
07-31
08-30
09-30
Average 1981-2010
2014
2015

U.S. Drought Monitor

West



March 3, 2015

(Released Thursday March 5, 2015)

Valid 7 a.m. EST

Intensity:

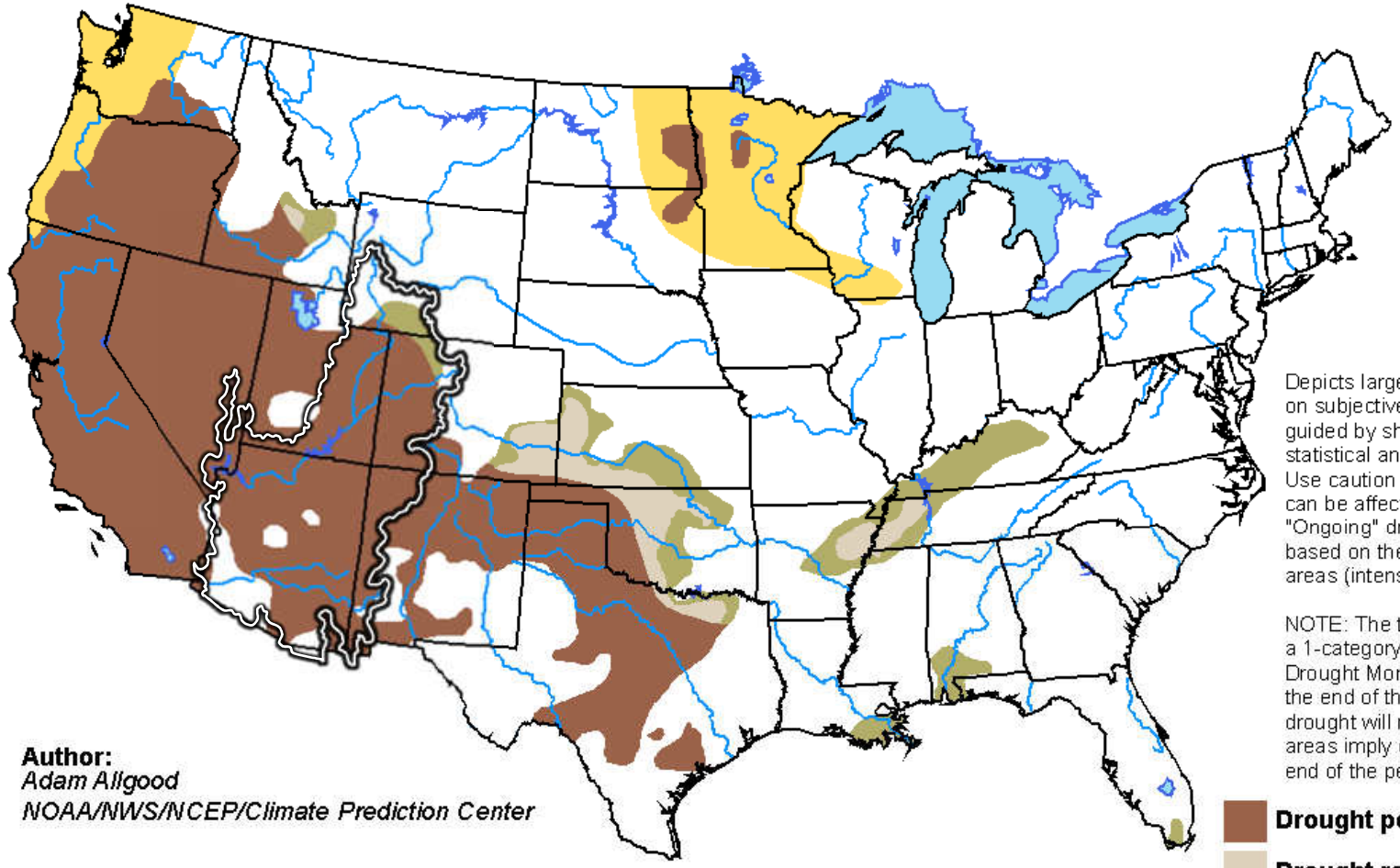
- D0 - Abnormally Dry
- D1 - Moderate Drought
- D2 - Severe Drought
- D3 - Extreme Drought
- D4 - Exceptional Drought

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

U.S. Seasonal Drought Outlook

Drought Tendency During the Valid Period

Valid for February 19 - May 31, 2015
Released February 19, 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).

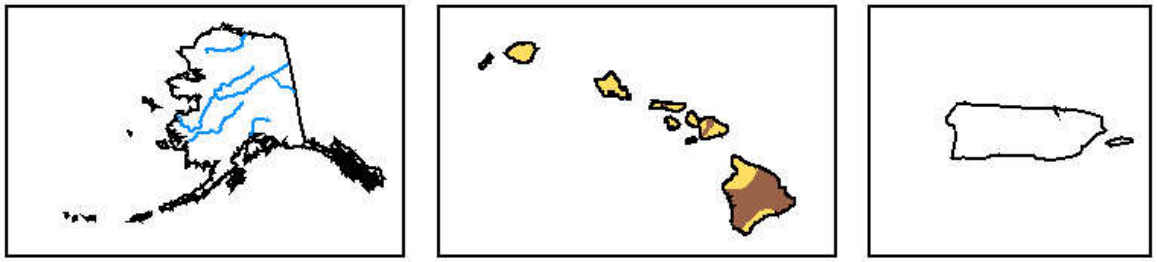
Drought persists/intensifies

Drought remains but improves

Drought removal likely

Drought development likely

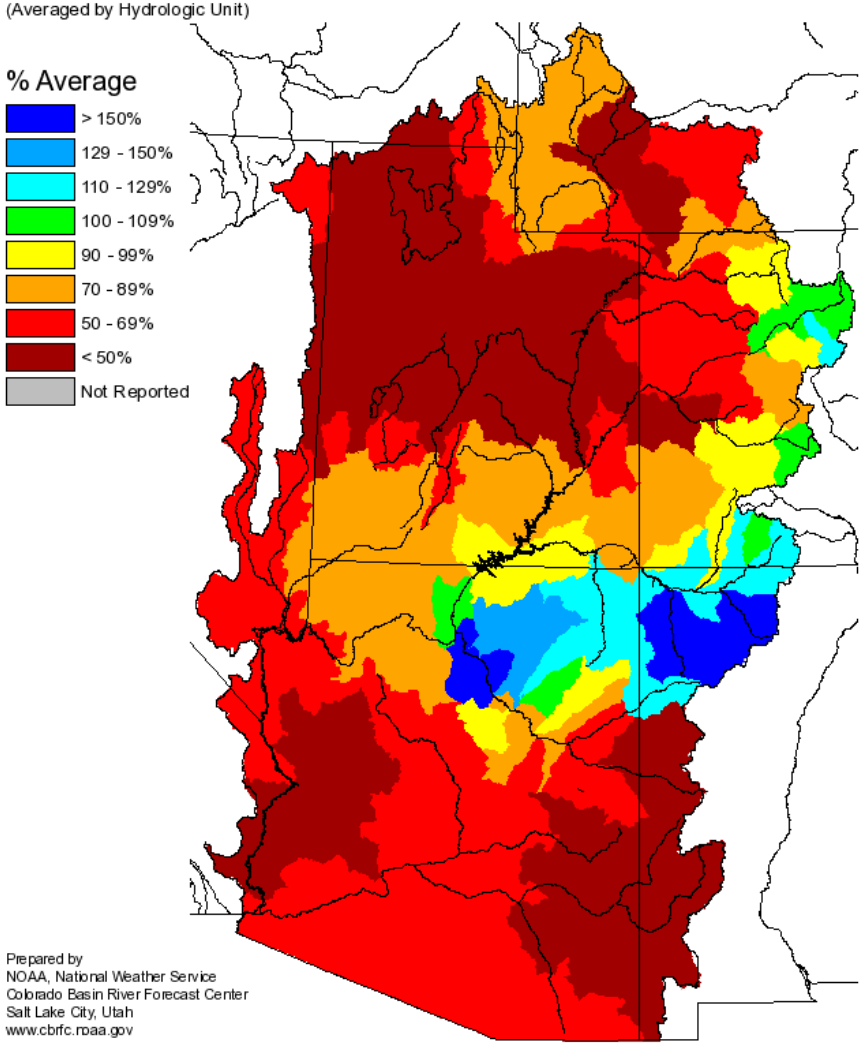
Author:
Adam Allgood
NOAA/NWS/NCEP/Climate Prediction Center



http://go.usa.gov/hHTe

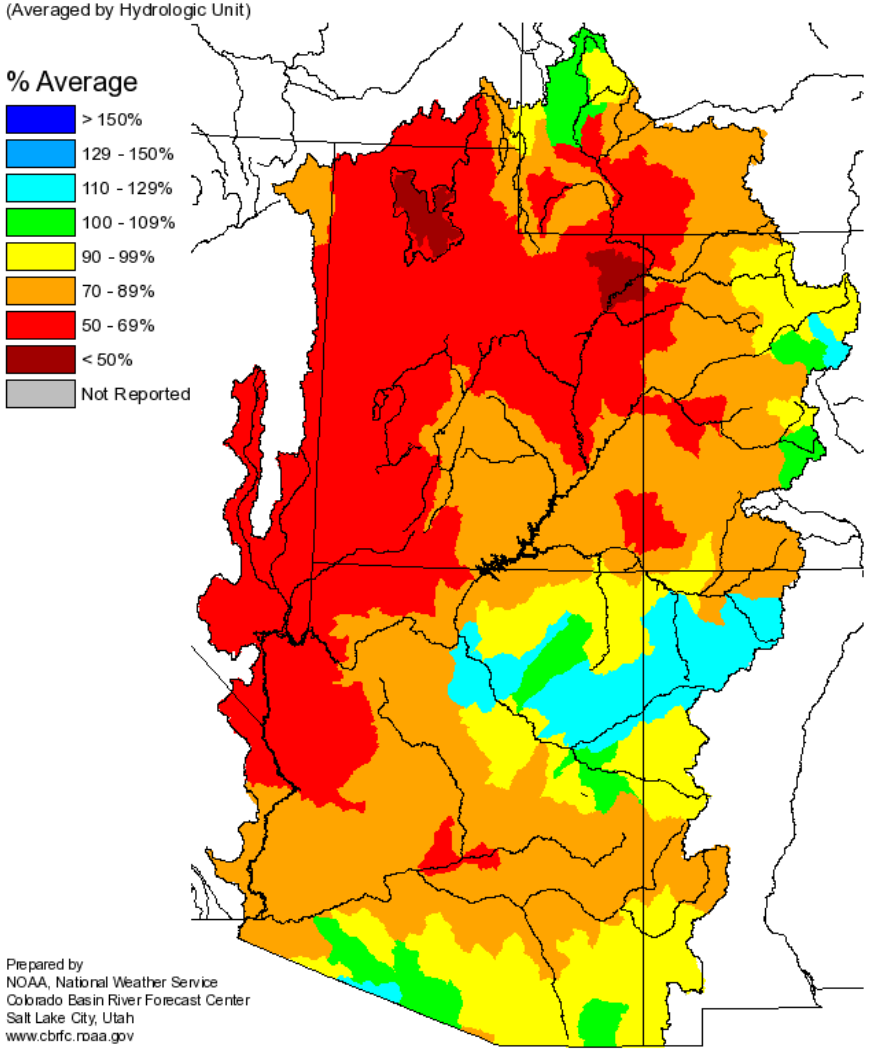
Monthly Precipitation for February 2015

(Averaged by Hydrologic Unit)



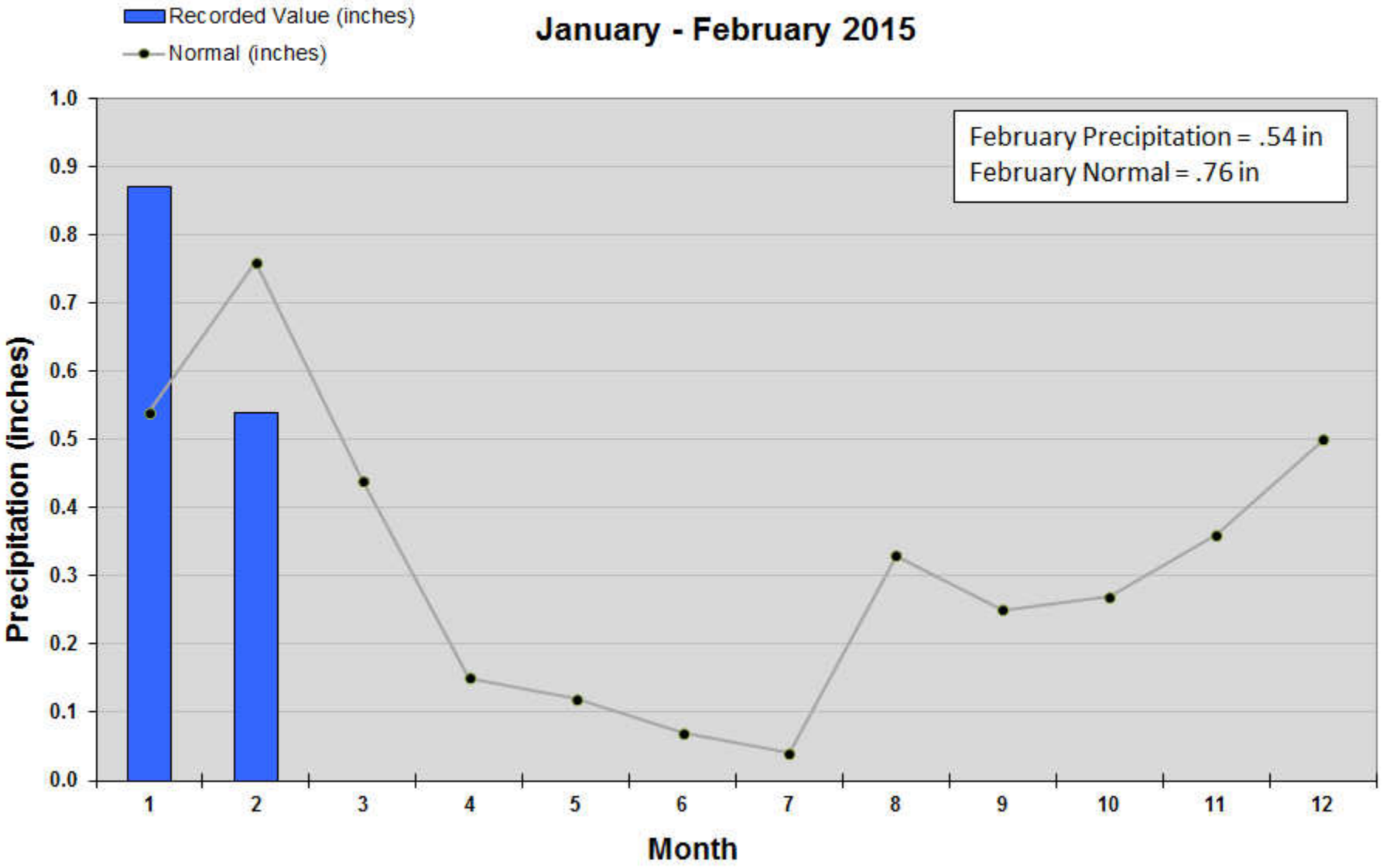
Seasonal Precipitation, October 2014 - February 2015

(Averaged by Hydrologic Unit)

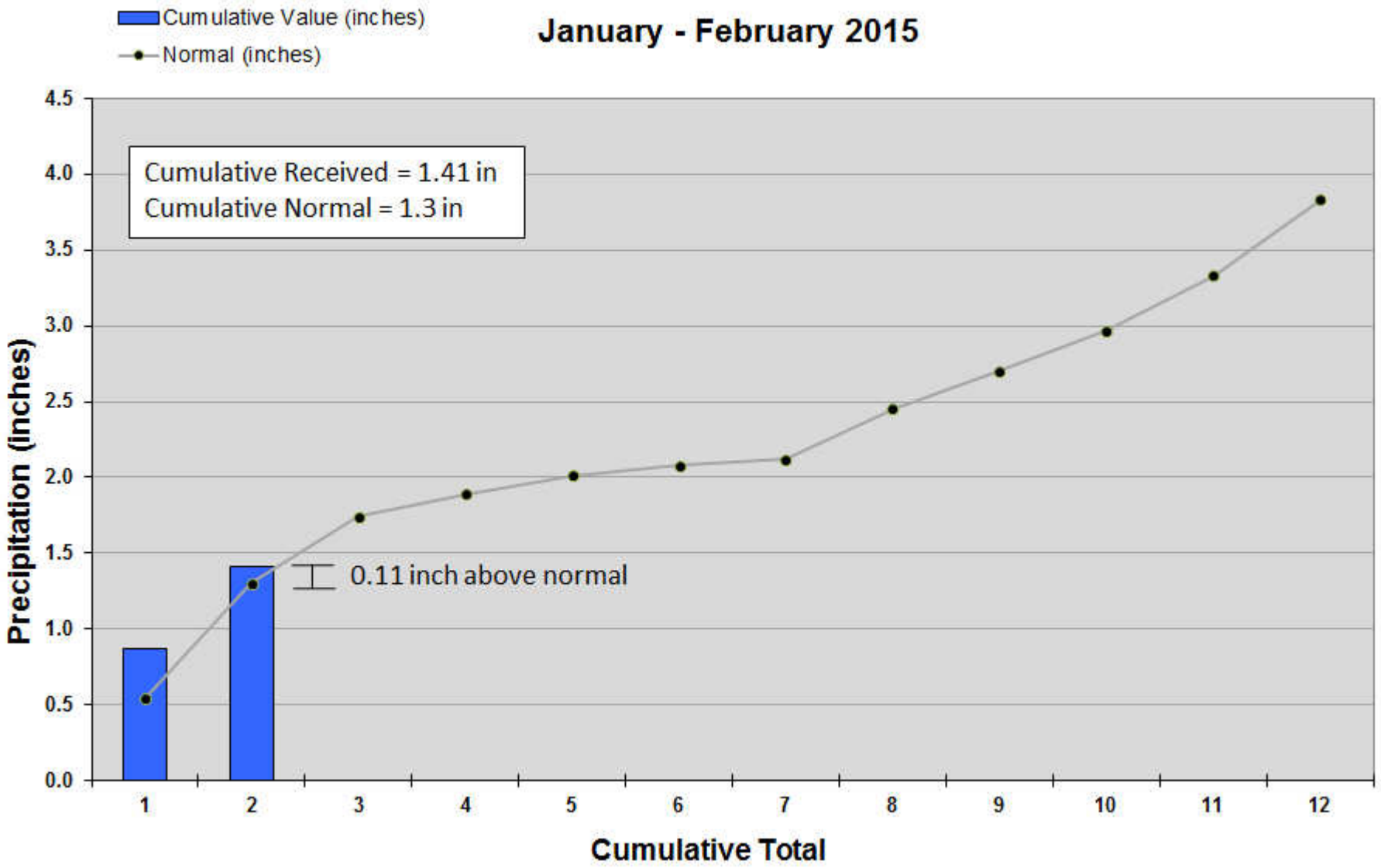


http://www.cbrfc.noaa.gov/product/mapsum/mapsum.php?area=cbrfc

Monthly Precipitation at McCarran International Airport, Las Vegas, NV



Cumulative Precipitation at McCarran International Airport, Las Vegas, NV



Water Use in Southern Nevada

Water Use in Southern Nevada

January 2015

2015*: Consumptive Use = 6,146 af

2014*: Consumptive Use = 8,129 af

Difference = -1,983 af

*Subject to final accounting.

Colorado River Commission of Nevada

Questions?

Warren Turkett
wturkett@crc.nv.gov