

Colorado River Commission of Nevada

Natural Resources Group Hydrologic Update January 13, 2015



Unregulated Inflow



Unregulated Inflow Into Lake Powell

As of January 12, 2015

	MAF*	% Avg**
• WY 2015 (forecast):	10.07	93%
• April-July 2015 (forecast):	6.5	91%
• December (observed):	0.40	109%
• January (forecasted):	0.34	94%

***MAF=Million Acre-Feet**

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



Storage Conditions

As of January 12, 2015

		Percent of <u>Capacity</u>	<u>Δ from last year</u>
Lake Mead elev.	1088.65 ft	41%	↓ 18.68 ft
Lake Powell elev.	3,595.89 ft	47%	↑ 13.74 ft
Total System Storage (1/2015)	29.53 maf	50%	↑ 0.32 maf
Total System Storage (1/2014)	29.20 maf	49%	



Reservoir Storage

As of January 7, 2015

Colorado River Reservoir Storages

Basin	Reservoir	Max Storage	*Current Storage	Percentage	Current Storage subtotals
Upper Basin	Crystal Reservoir	17,356	14,935	86%	5,291,276
	Flaming Gorge	3,749,000	3,251,687	87%	
	Fontenelle	344,800	257,057	75%	
	Morrow Point	117,190	109,753	94%	
	Blue Mesa	829,500	568,729	69%	
	Navajo	1,696,000	1,089,115	64%	
	Lake Powell	24,322,000	11,412,000	47%	
Lower Basin	Lake Mead	26,120,000	10,505,000	40%	2,133,800
	Lake Mohave	1,809,800	1,574,300	87%	
	Lake Havasu	619,400	559,500	90%	
	TOTAL	59,625,046	29,342,076	49%	

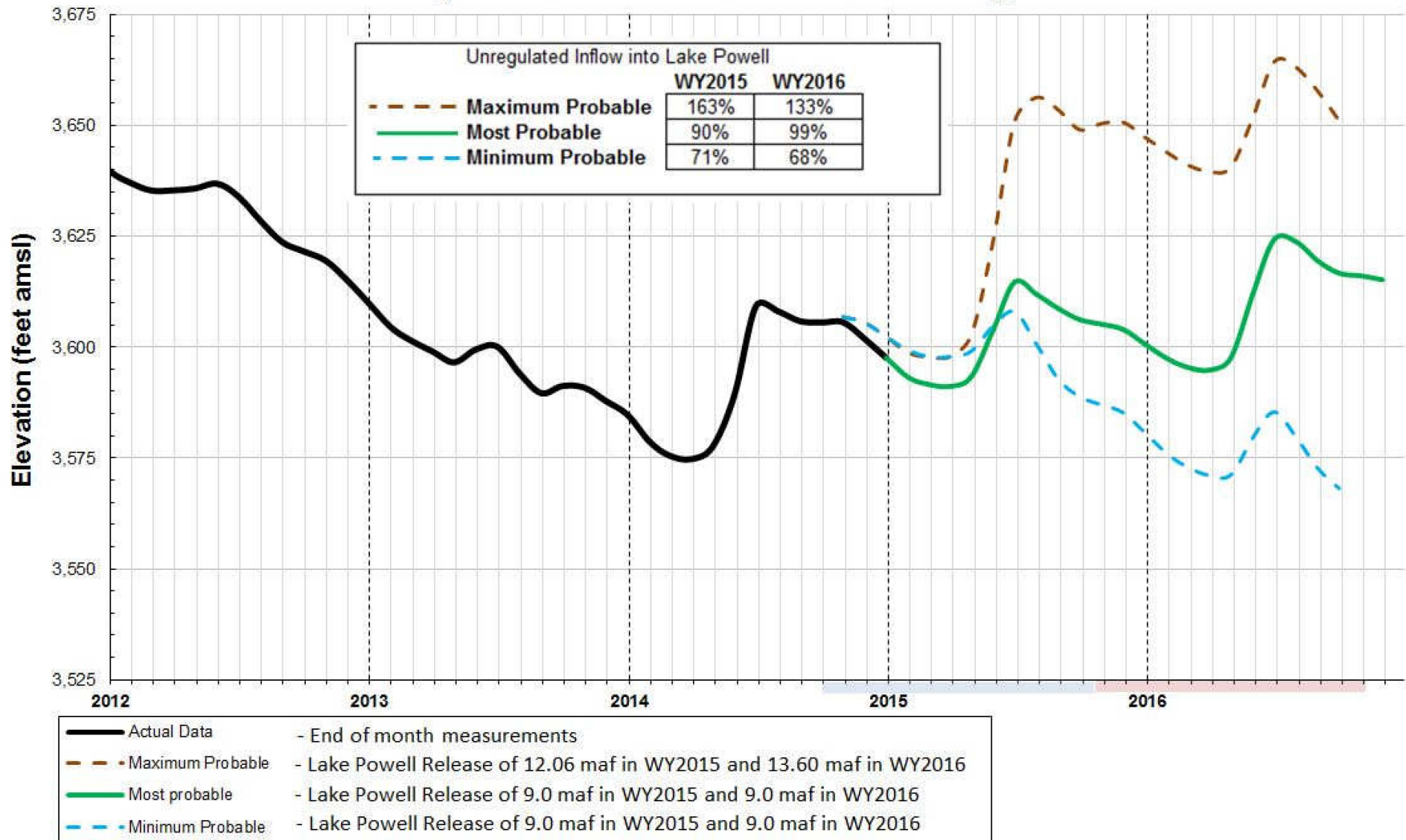
*Data current as 1/7/2015

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

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

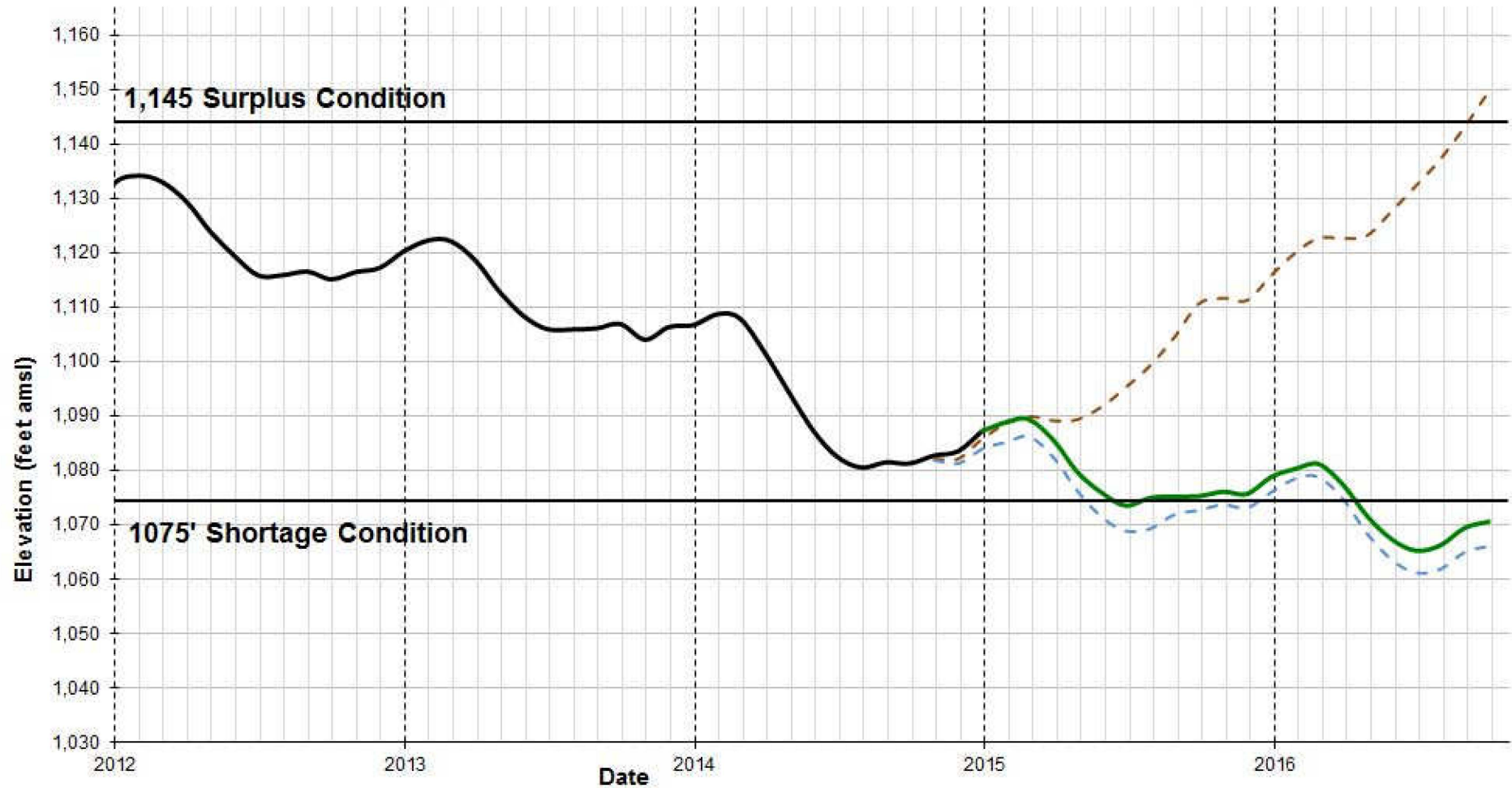
Lake Powell End of Month Elevations

(based on December 2014 24-month Study)



Lake Mead End of Month Elevation Projections

(Projections based on the December 2014 24-month study)



- | | |
|---|--|
| — Actual Data - End of month measurements | |
| - - - Maximum Probable | - Lake Powell Release of 12.06 maf in WY2015 and 13.60 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 9.0 maf in WY2016 |

Drought and Precipitation



Precipitation – Colorado River Basin

As of January 12, 2015

Upper Colorado Basin

WY 2015 Precip to Date

86% (8.6")

Current Basin Snowpack

96% (7.4")

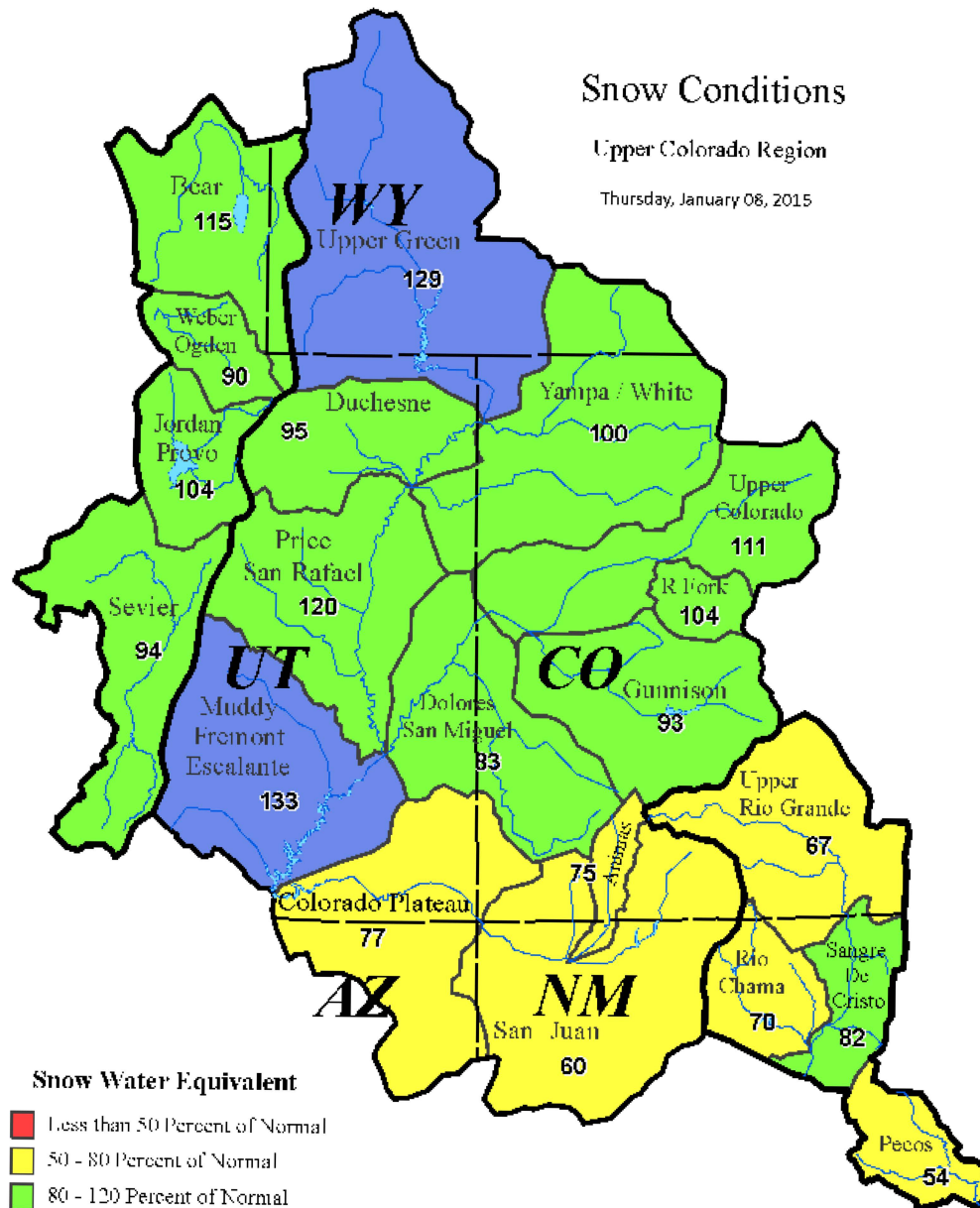
(Avg 1981-2010)



Snow Conditions

Upper Colorado Region

Thursday, January 08, 2015



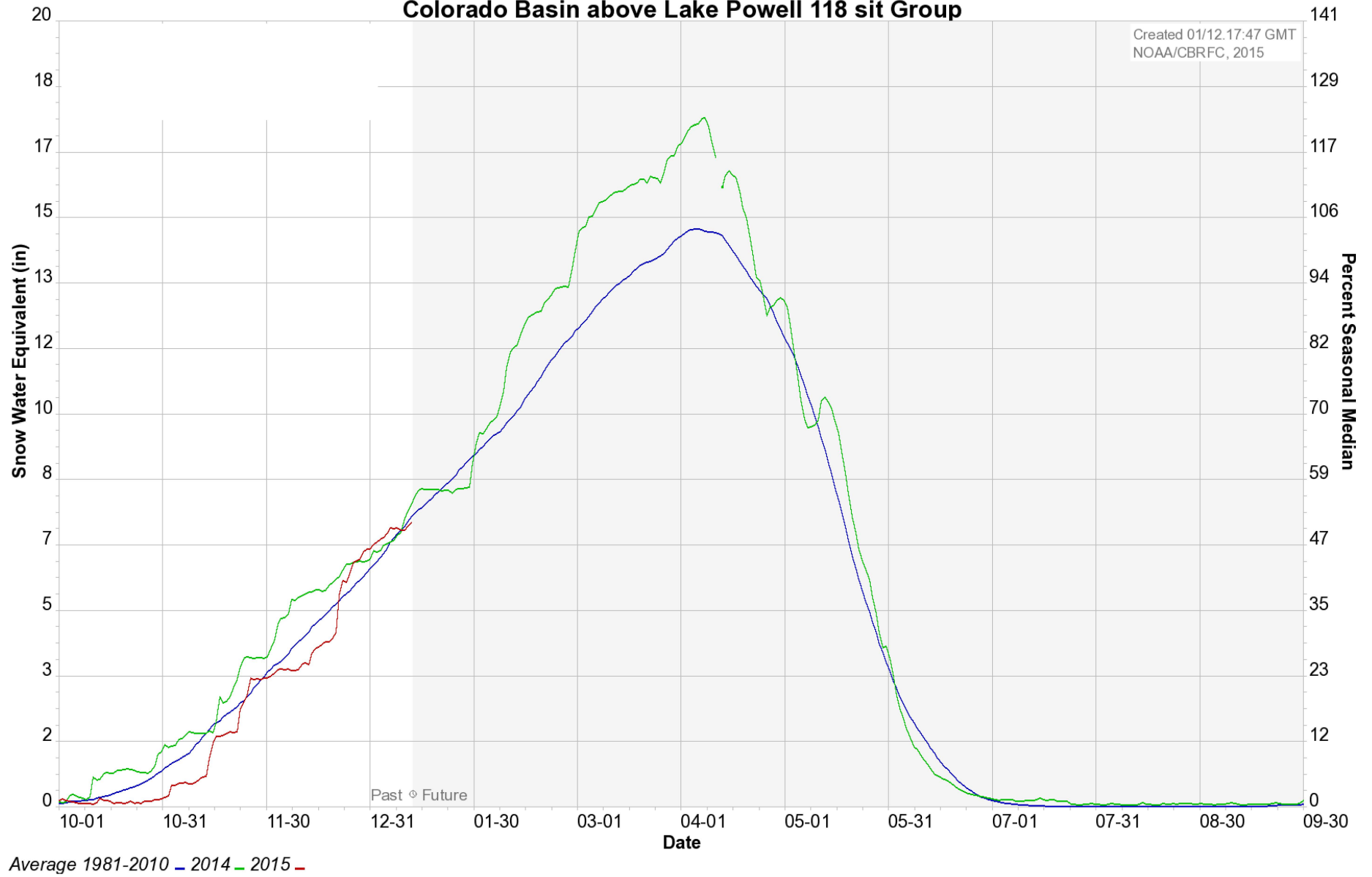
Snow Water Equivalent

- Less than 50 Percent of Normal
- 50 - 80 Percent of Normal
- 80 - 120 Percent of Normal
- 120 - 150 Percent of Normal
- Greater than 150 Percent of Normal

Data Provided by the Natural Resource Conservation Service

Upper Colorado
GIS
Region

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



U.S. Drought Monitor

West

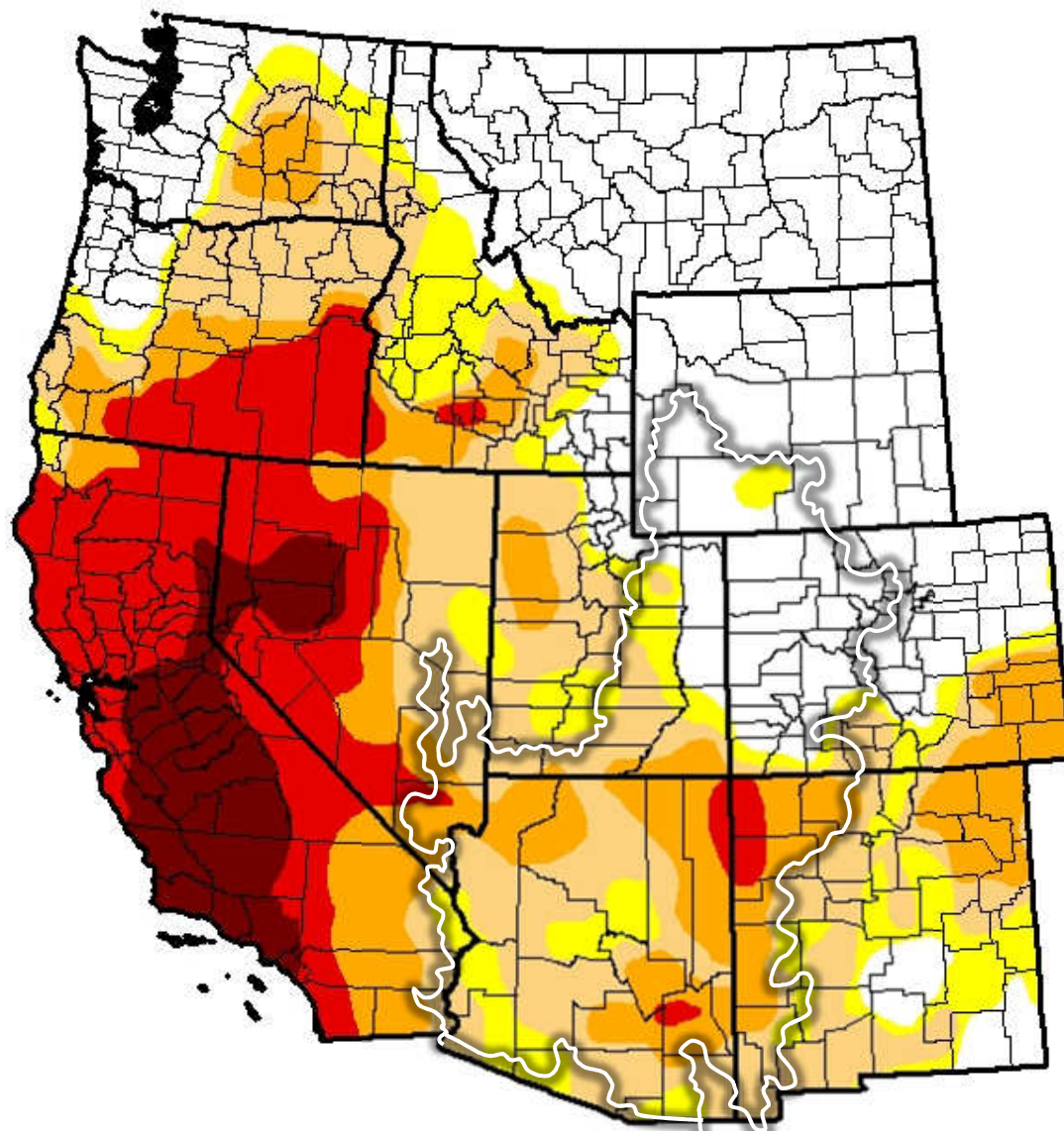
January 6, 2015

(Released Thursday, Jan. 8, 2015)

Valid 7 a.m. EST

Intensity:

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



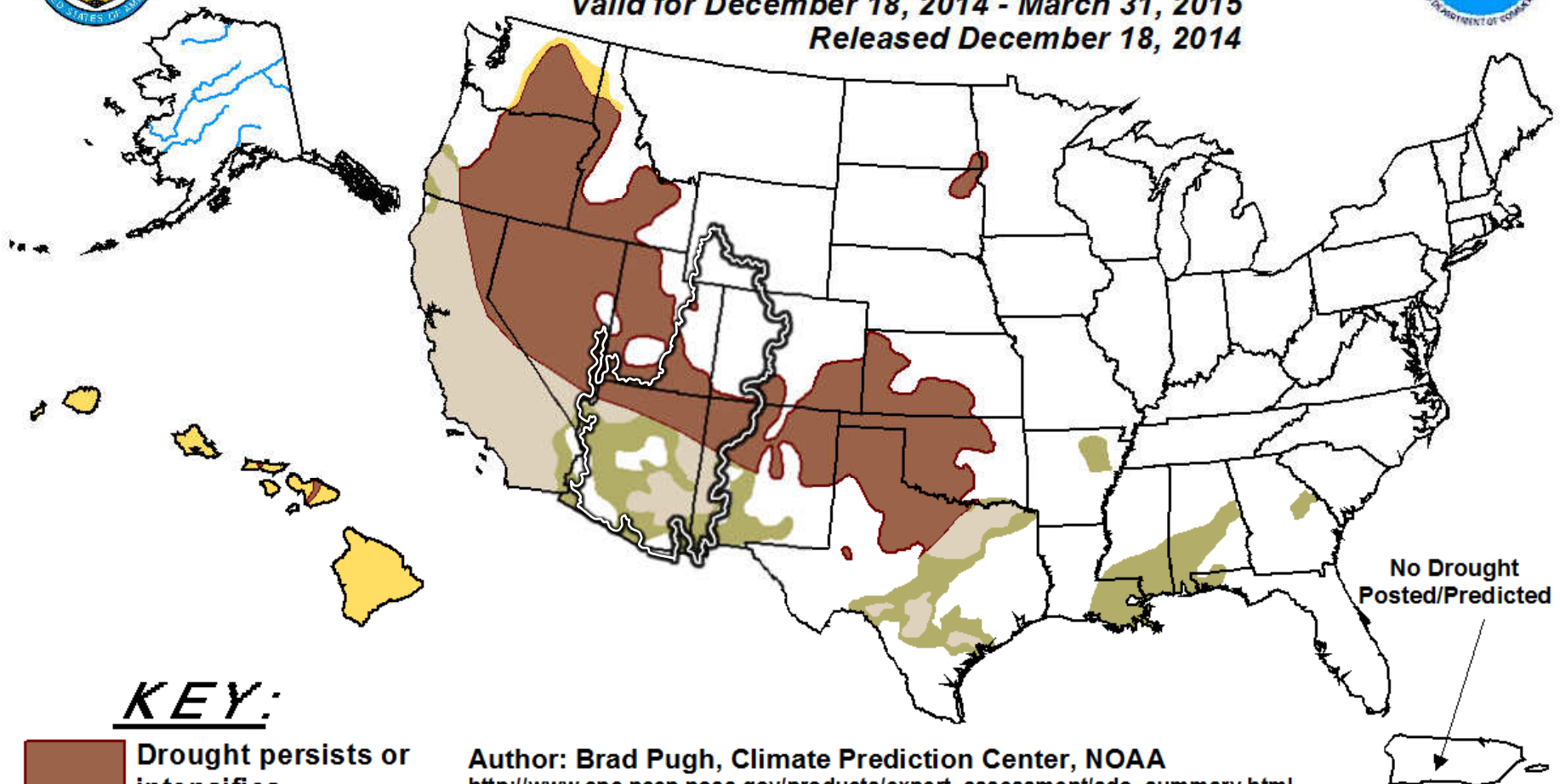


U.S. Seasonal Drought Outlook

Drought Tendency During the Valid Period

Valid for December 18, 2014 - March 31, 2015

Released December 18, 2014



KEY:



Drought persists or intensifies



Drought remains but improves



Drought removal likely



Drought development likely

Author: Brad Pugh, Climate Prediction Center, NOAA

http://www.cpc.ncep.noaa.gov/products/expert_assessment/sdo_summary.html

Depicts large-scale trends based on subjectively derived probabilities guided by short- and long-range statistical and dynamical forecasts. Short-term events -- such as individual storms -- cannot be accurately forecast more than a few days in advance. Use caution for applications -- such as crops -- that can be affected by such events. "Ongoing" drought areas are approximated from the Drought Monitor (D1 to D4 intensity).

For weekly drought updates, see the latest U.S. Drought Monitor.

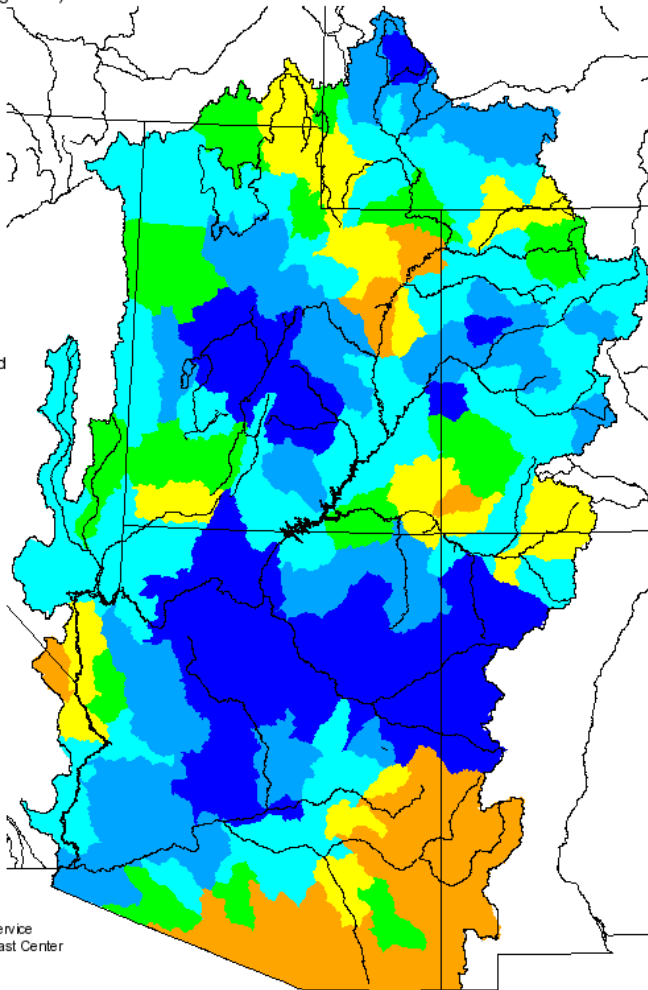
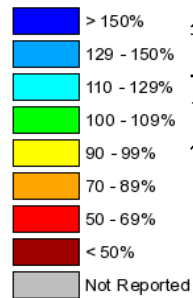
NOTE: The tan area areas imply at least a 1-category improvement in the Drought Monitor intensity levels by the end of the period although drought will remain.

The Green areas imply drought removal by the end of the period (D0 or none)

Monthly Precipitation for December 2014

(Averaged by Hydrologic Unit)

% Average

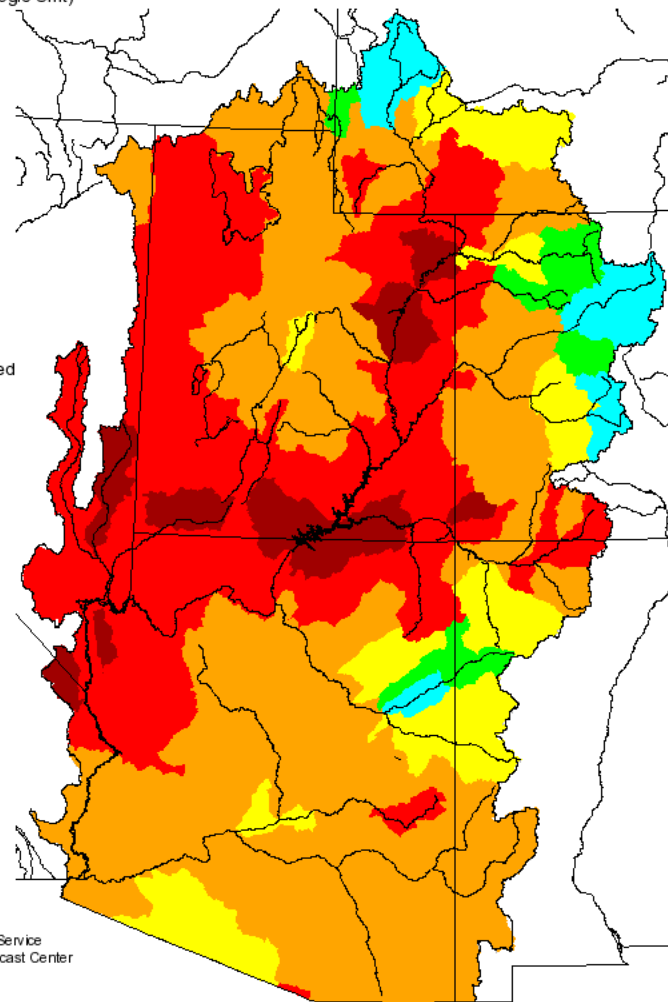
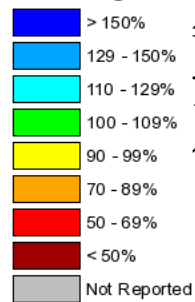


Prepared by
NOAA, National Weather Service
Colorado Basin River Forecast Center
Salt Lake City, Utah
www.cbrfc.noaa.gov

Seasonal Precipitation, October 2014 - December 2014

(Averaged by Hydrologic Unit)

% Average



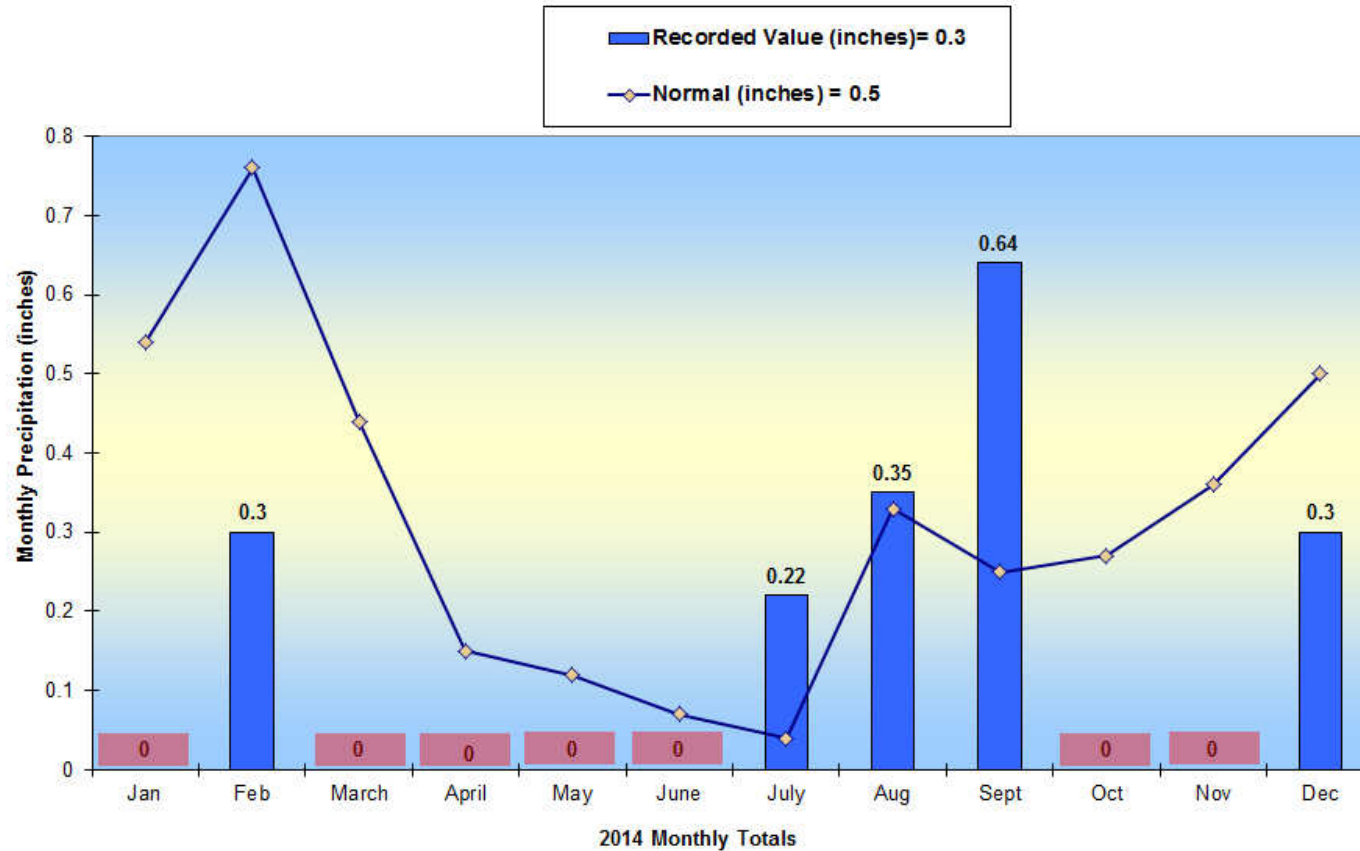
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Salt Lake City, Utah
www.cbrfc.noaa.gov

Monthly Precipitation, Las Vegas, NV

As of December 31, 2014

Record of Precipitation at McCarran International Airport, Las Vegas, NV

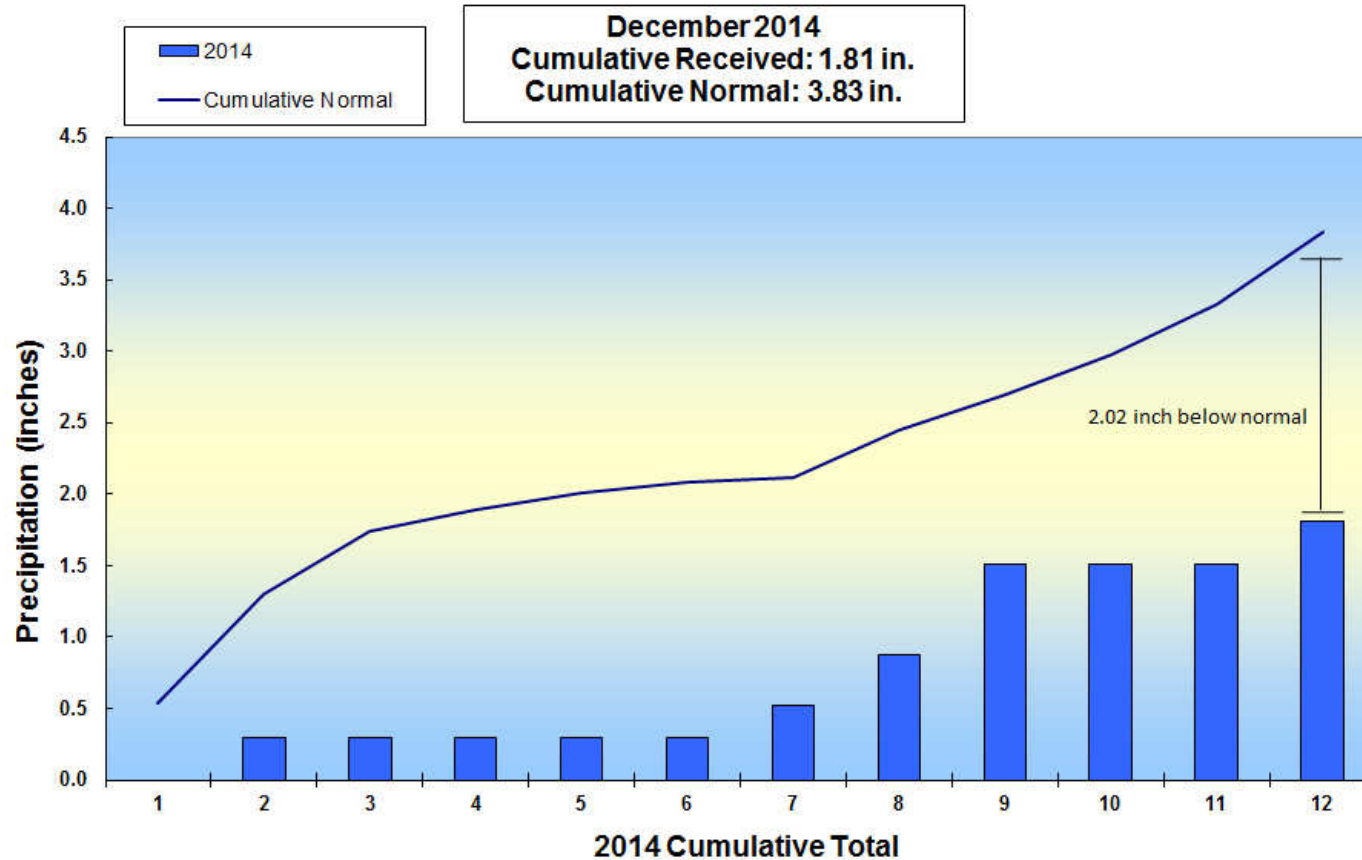
December 2014



Cumulative Precipitation, Las Vegas, NV

As of December 31, 2014

Record of Precipitation at McCarran International Airport, Las Vegas, NV



Water Use in Southern Nevada



Water Use in Southern Nevada

January – November 2014

2014*: Consumptive Use = 215,976 af

2013: Consumptive Use = 214,574 af

Difference = 1,402 af

*Subject to final accounting.



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