Colorado River Commission of Nevada

Natural Resources Group
Hydrologic Update
December 9, 2014

Unregulated Inflow

Unregulated Inflow Into Lake Powell

As of December 1, 2014

	MAF*	% Avg**
• WY 2014 (Observed):	10.38	96%
• April-July 2014 (Observed):	6.92	97%
• November (observed):	0.42	88%
• December (forecasted):	0.36	99%

***MAF=Million Acre-Feet**

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

Storage Conditions

As of December 1, 2014

		Percent of Capacity	Δ from last year
Lake Mead elev.	1083.57 ft	39%	↓ 21.73 ft
Lake Powell elev.	3,601.87 ft	49%	↑ 14.77 ft
Total System Storage (12/2014)	29.74 maf	50%	↑ 0.17 maf
Total System Storage (12/2013)	29.57 maf	50%	

Reservoir Storage

As of December 5, 2014

Colorado River Reservoir Storages

Basin	Reservoir	Max Storage	*Current Storage	Percentage	Current Storage subtotals
Upper Basin	Crystal Reservoir	17,356	15,260	88%	5,406,426
	Flaming Gorge	3,749,000	3,297,216	88%	
	Fontenelle	344,800	290,435	84%	
	Morrow Point	117,190	112,350	96%	
	Blue Mesa	829,500	595,656	72%	
	Navajo	1,696,000	1,095,509	65%	
	Lake Powell	24,322,000	11,875,000	49%	
Lower Basin	Lake Mead	26,120,000	10,309,000	39%	
	Lake Mohave	1,809,800	1,520,000	84%	2,096,700
	Lake Havasu	619,400	576,700	93%	
	TOTAL	59,625,046	29,687,126	50%	

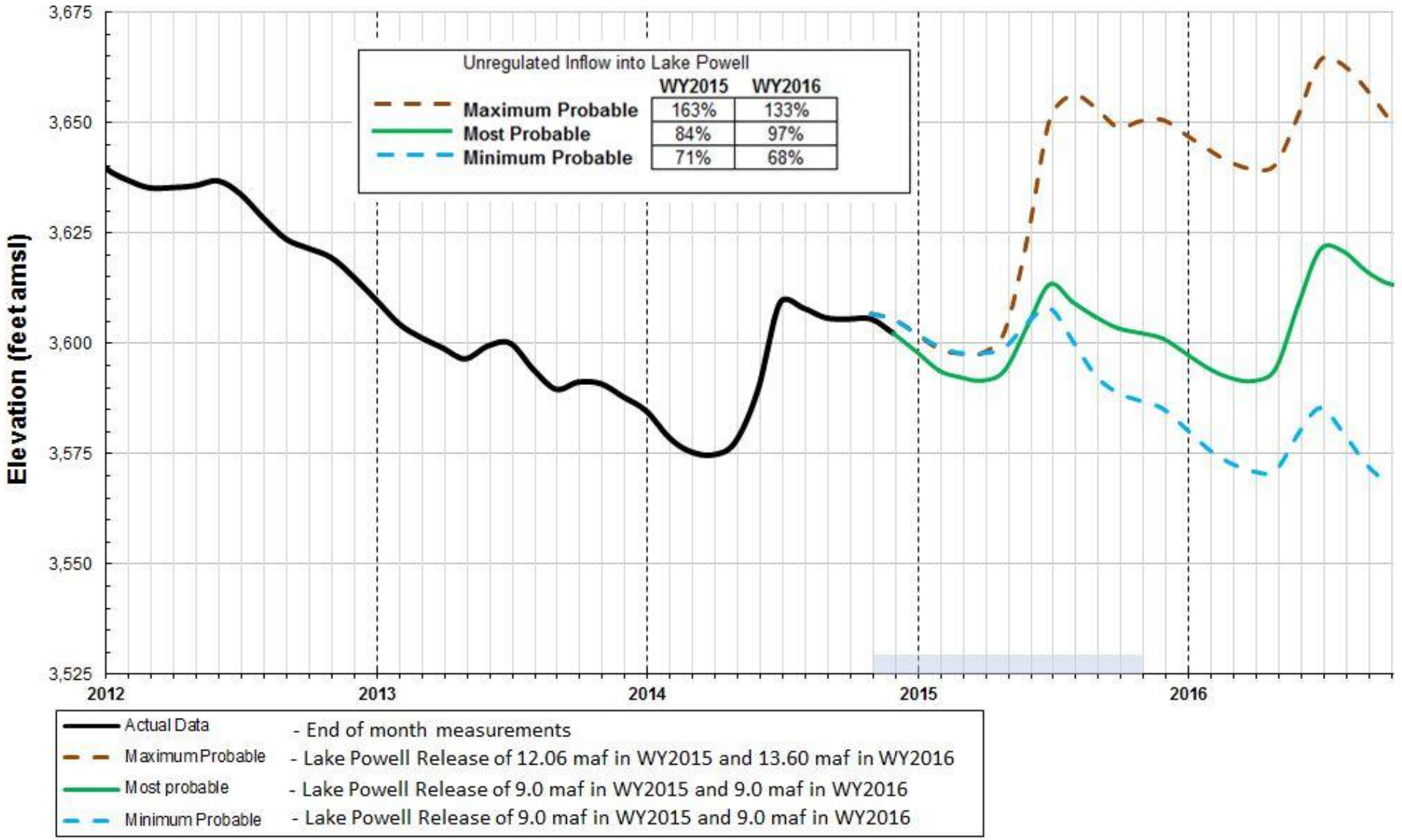
**Data current as 12/5/2014*

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

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

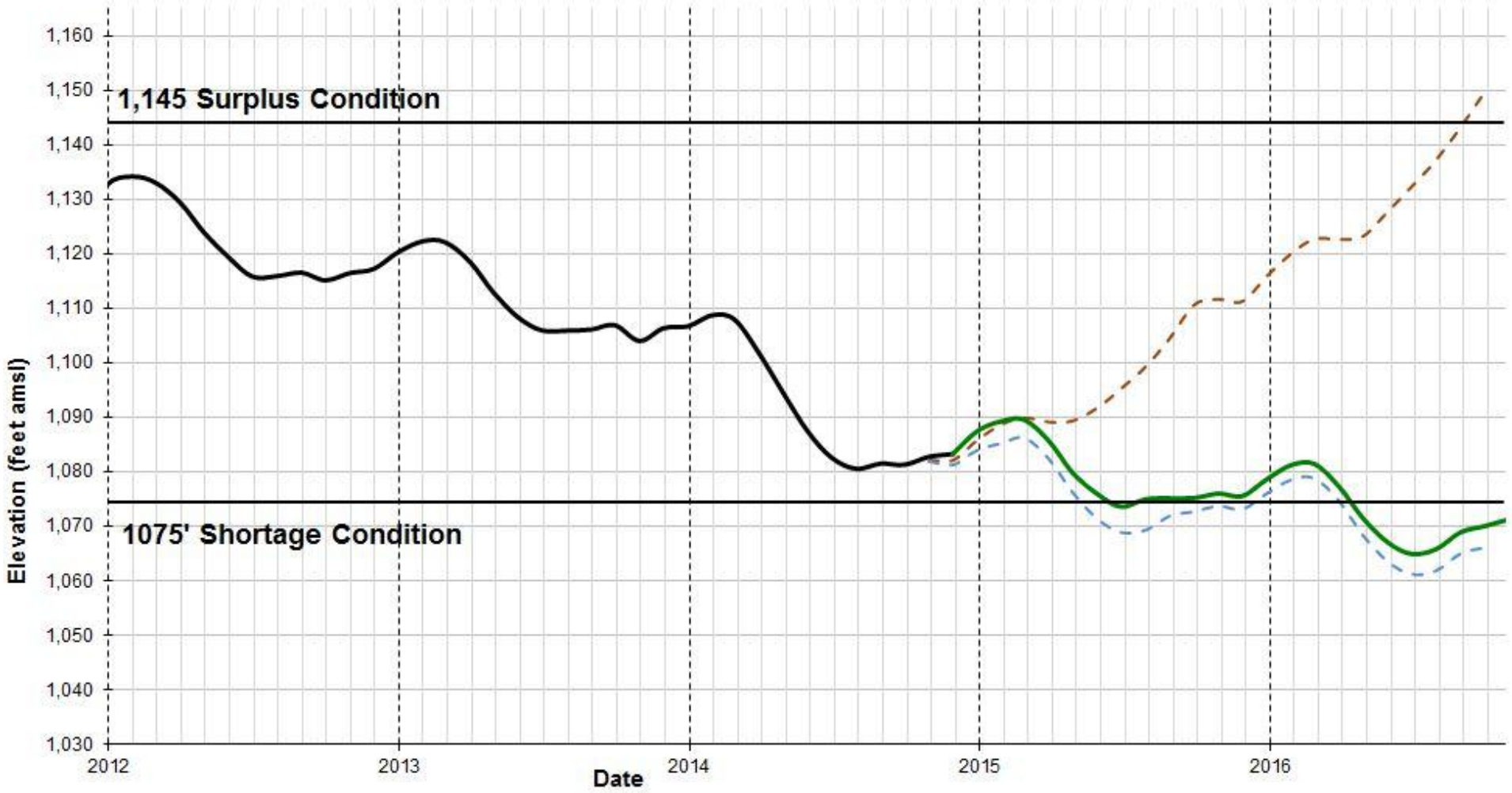
Lake Powell End of Month Elevations

(based on November 2014 24-month Study)



Lake Mead End of Month Elevation Projections

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



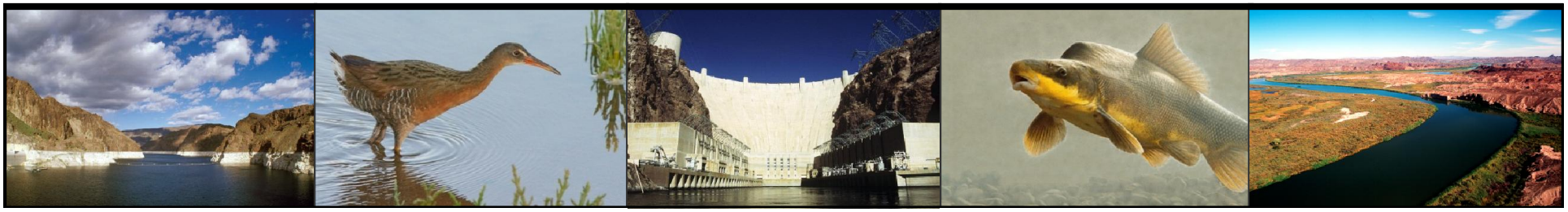
Actual Data - End of month measurements

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

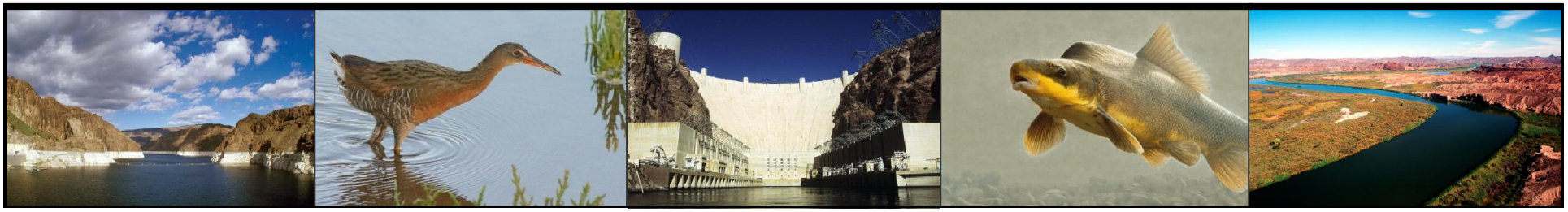


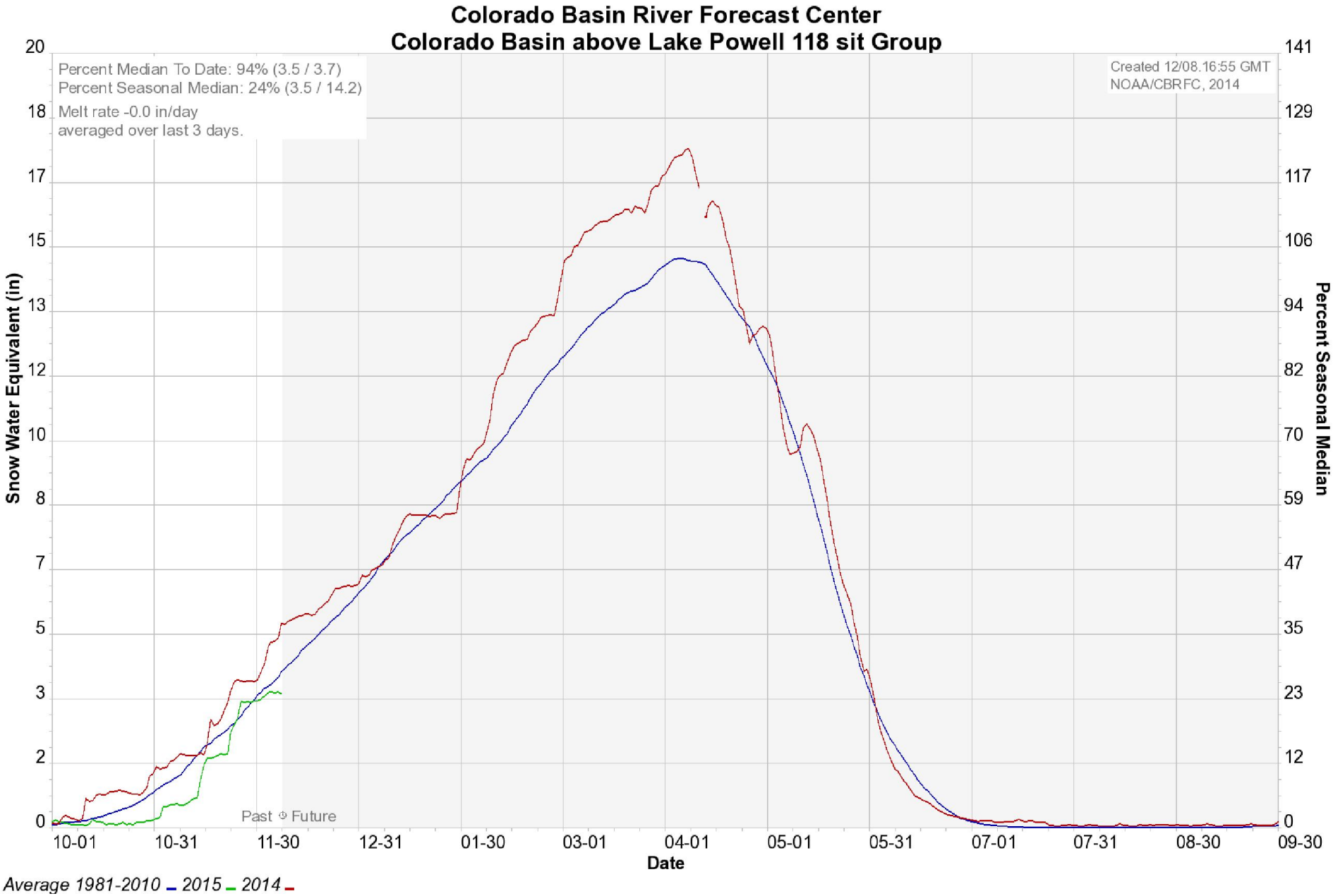
Precipitation – Colorado River Basin

As of December 1, 2014

	Upper Colorado Basin
WY 2015 Precip to Date	83% (4.7″)
Current Basin Snowpack	95% (3.3″)

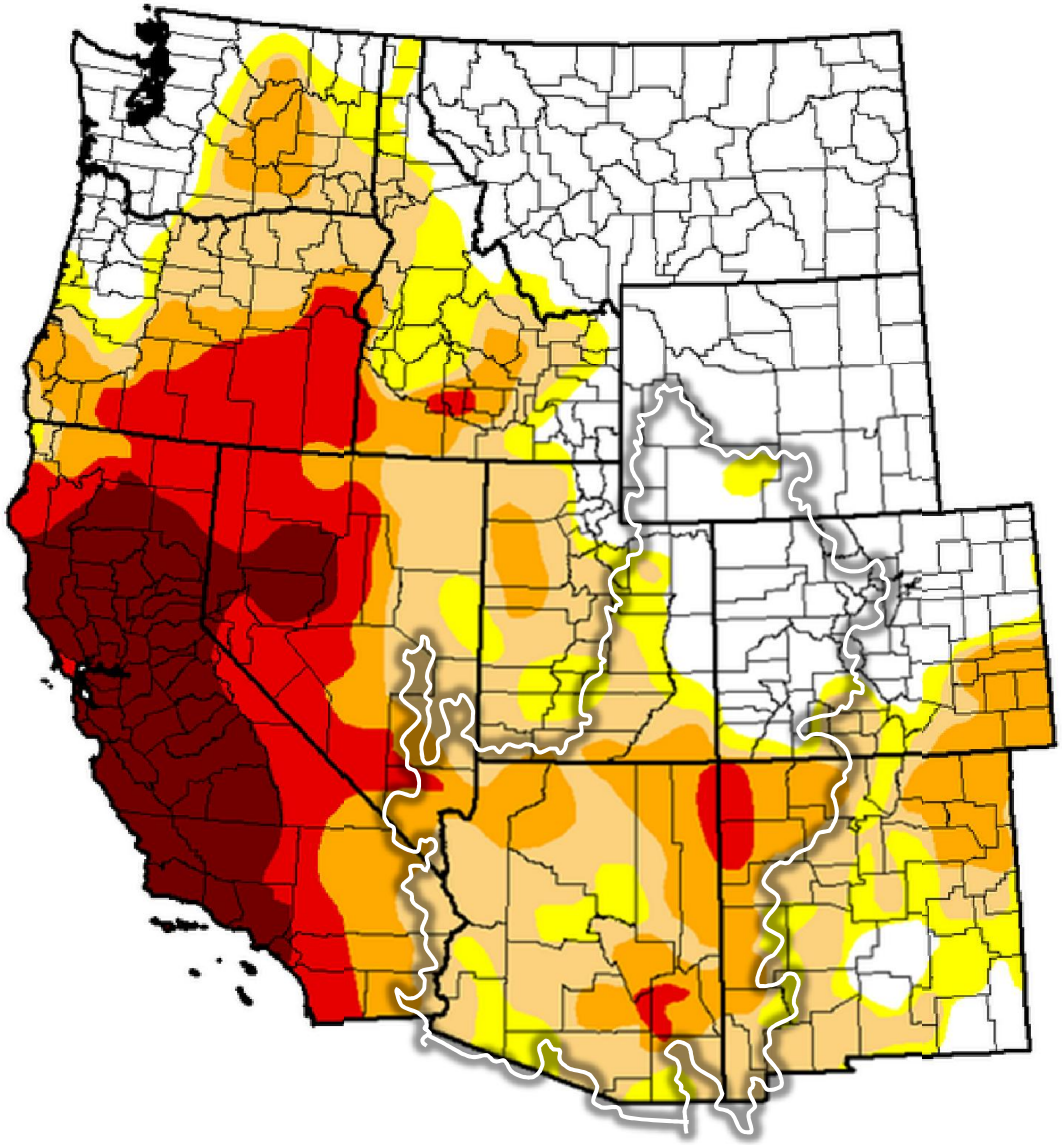
(Avg 1981-2010)




Colorado Basin River Forecast Center
Colorado Basin above Lake Powell 118 sit Group
Percent Median To Date: 94% (3.5 / 3.7)
Percent Seasonal Median: 24% (3.5 / 14.2)
Melt rate -0.0 in/day
averaged over last 3 days.
Created 12/08.16:55 GMT
NOAA/CBRFC, 2014
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
2015
2014

U.S. Drought Monitor

West



December 2, 2014

(Released Thursday December 4, 2014)

Valid 7 a.m. EST

Intensity:

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

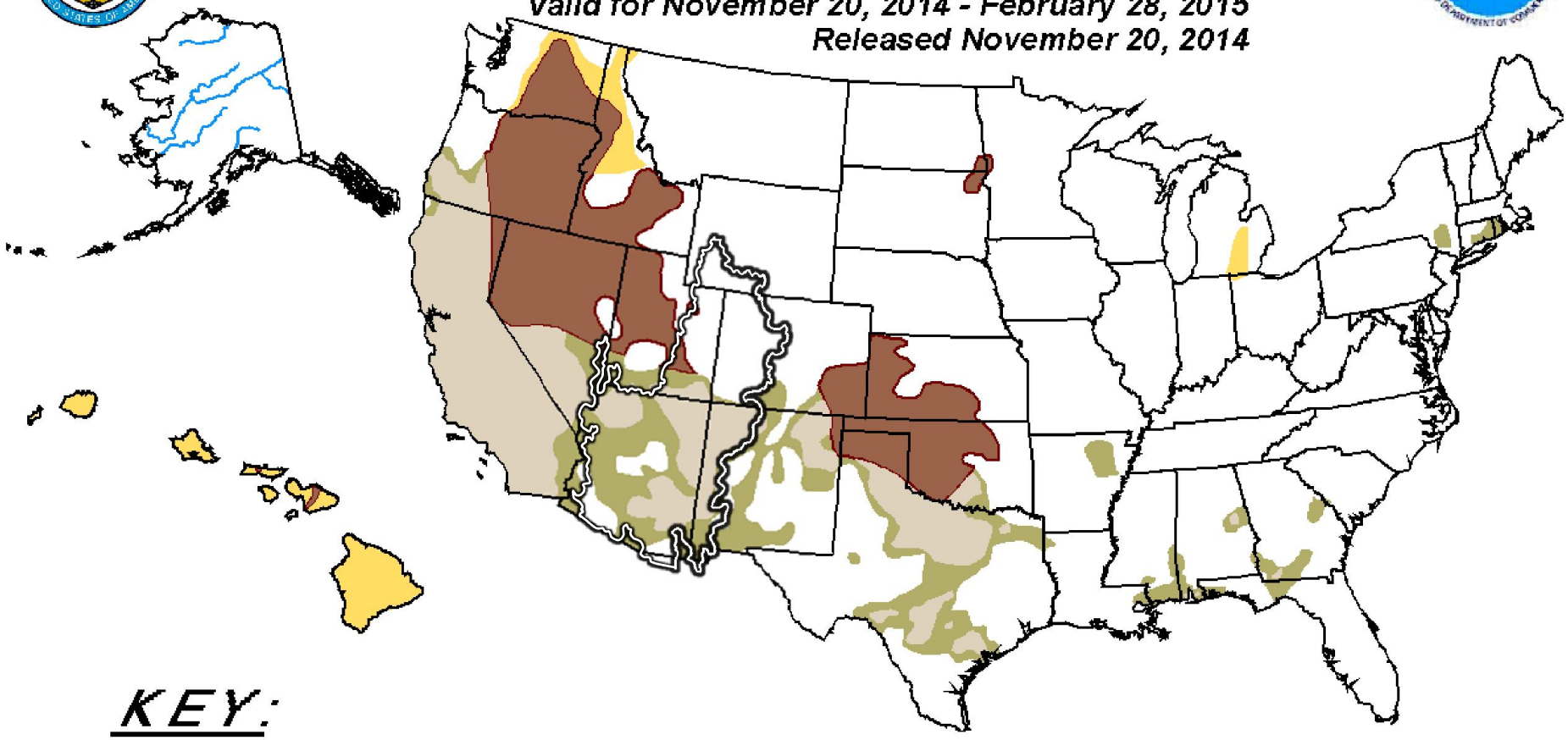
http://droughtmonitor.unl.edu/Home/RegionalDroughtMonitor.aspx?west

U.S. Seasonal Drought Outlook

Drought Tendency During the Valid Period

Valid for November 20, 2014 - February 28, 2015

Released November 20, 2014



KEY:

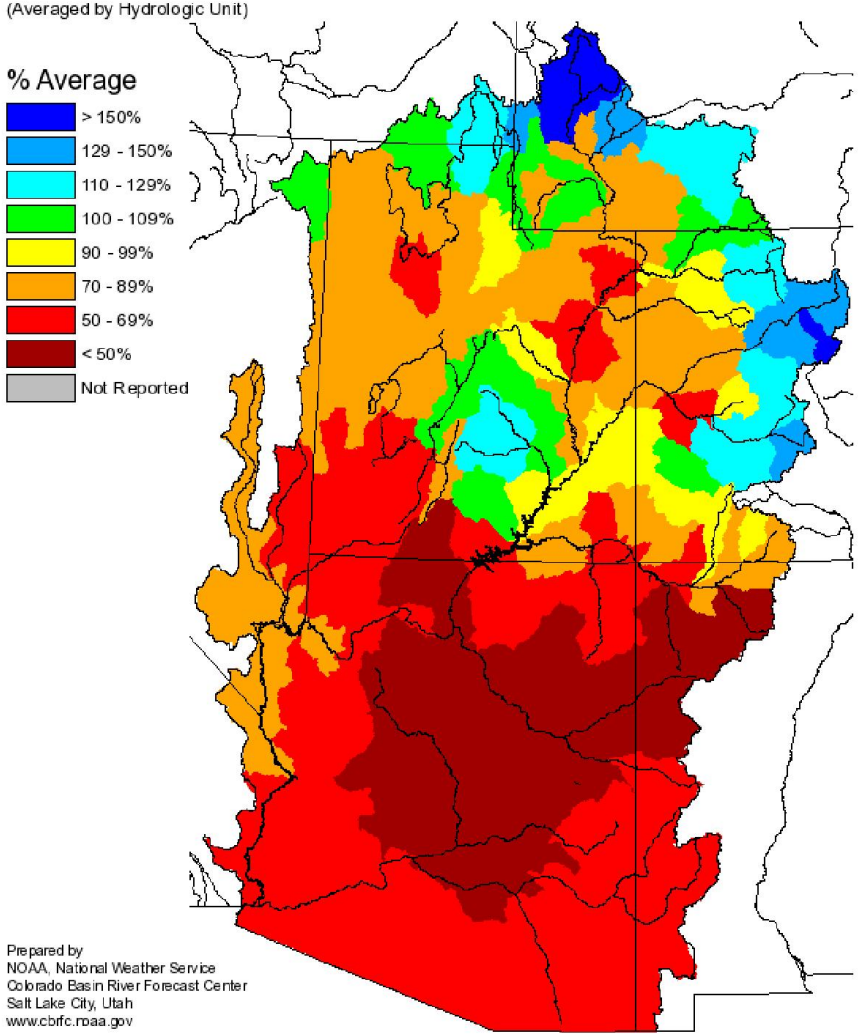
- Drought persists or intensifies
- Drought remains but improves
- Drought removal likely
- Drought development likely

Author: Rich Tinker, 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 November 2014

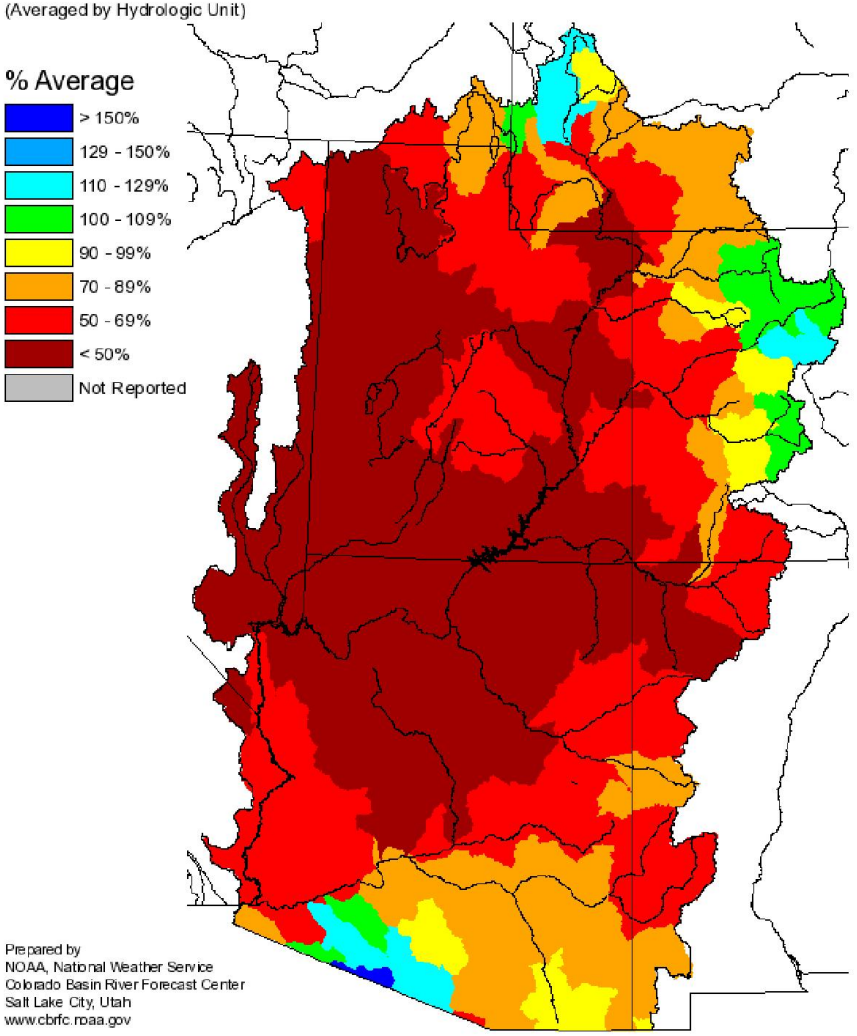
(Averaged by Hydrologic Unit)



http://www.cbrfc.noaa.gov/product/mapsum/map/cbrfcM201409.png

Seasonal Precipitation, October 2014 - November 2014

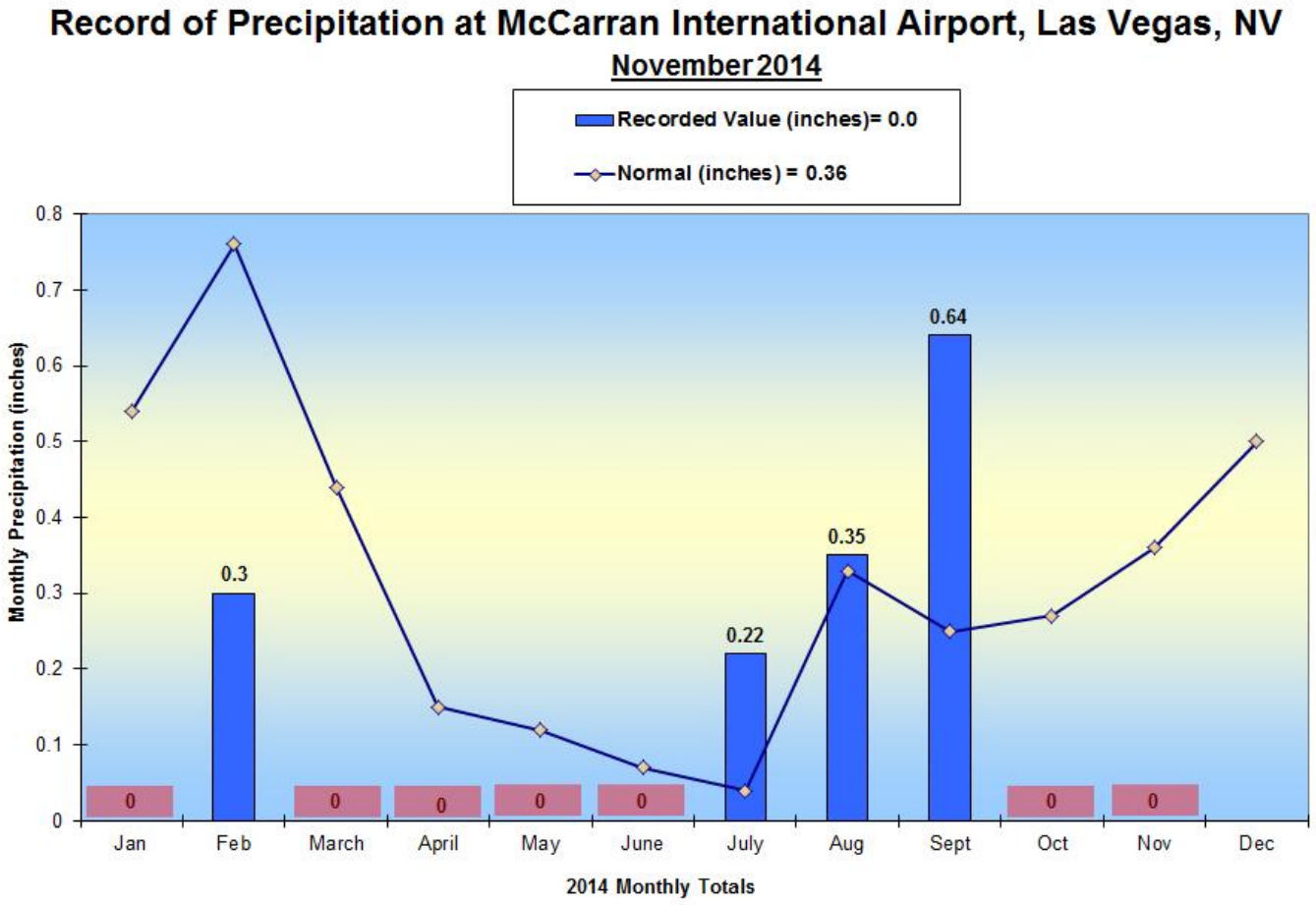
(Averaged by Hydrologic Unit)



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

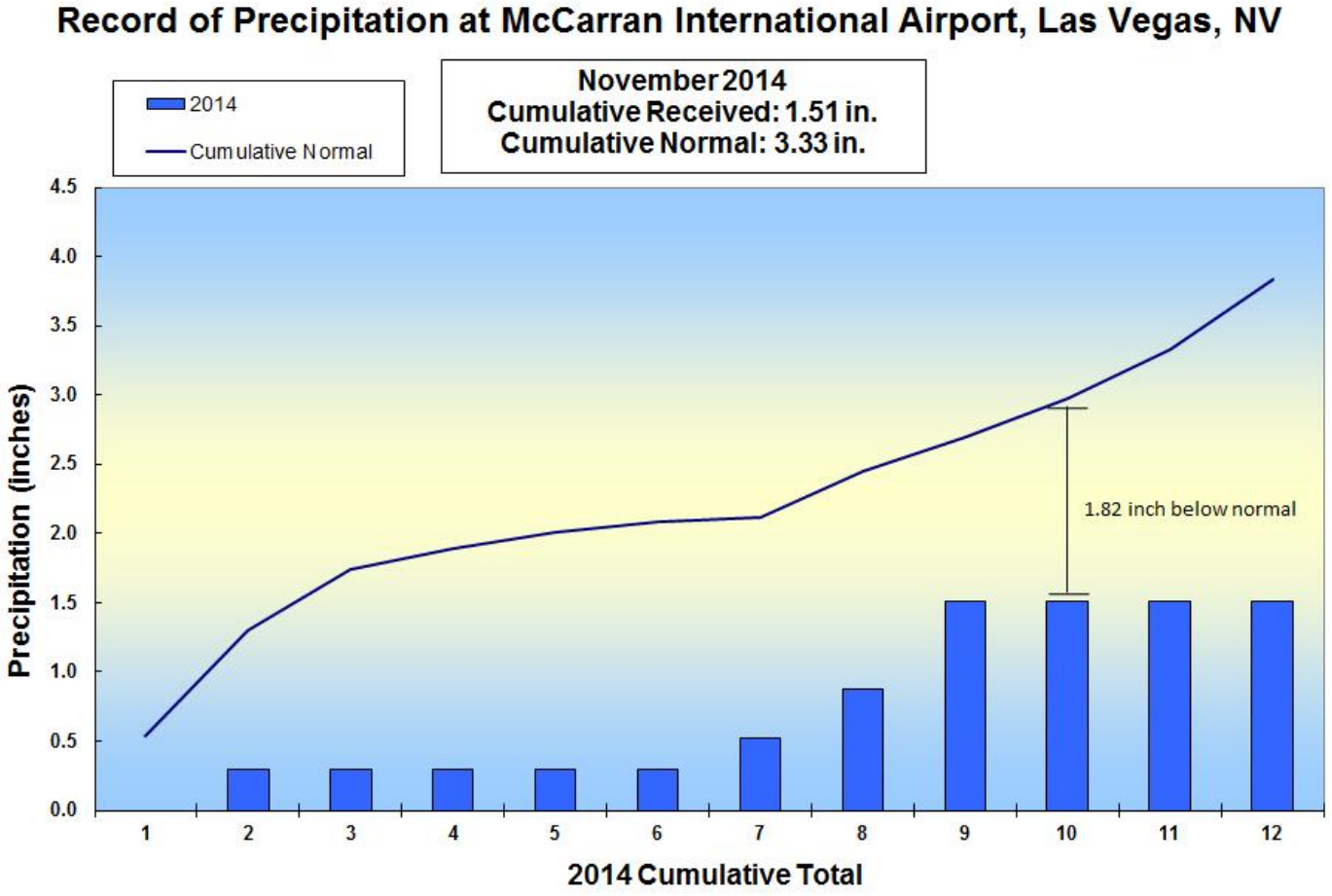
Monthly Precipitation, Las Vegas, NV

As of November 30, 2014



Cumulative Precipitation, Las Vegas, NV

As of November 30, 2014



Water Use in Southern Nevada

Water Use in Southern Nevada

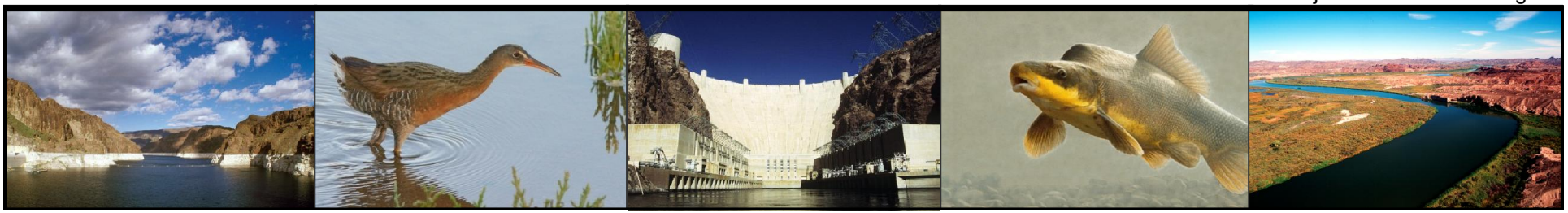
January – October 2014

2014*: Consumptive Use = 202,212 af

2013: Consumptive Use = 202,821 af

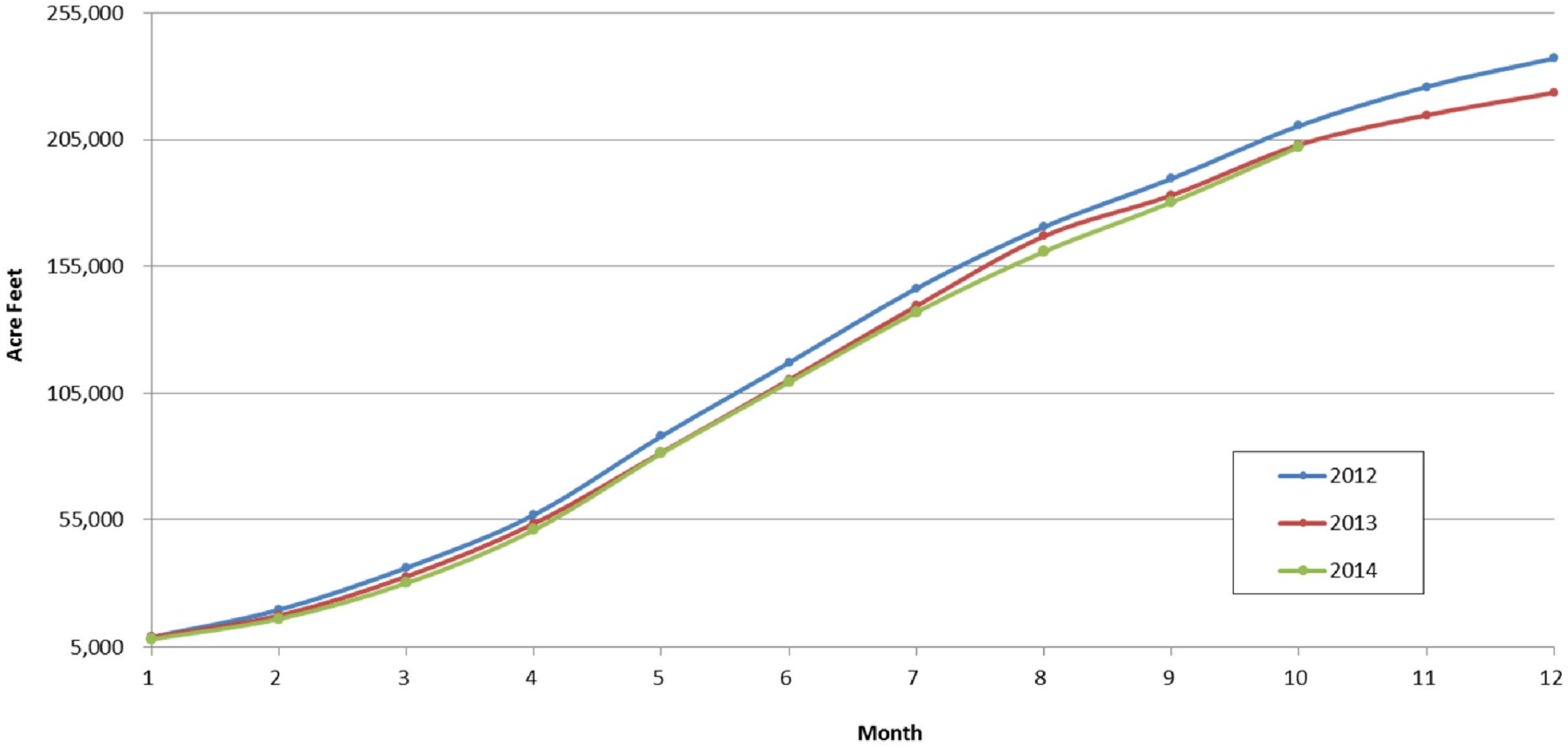
Difference = - 609 af

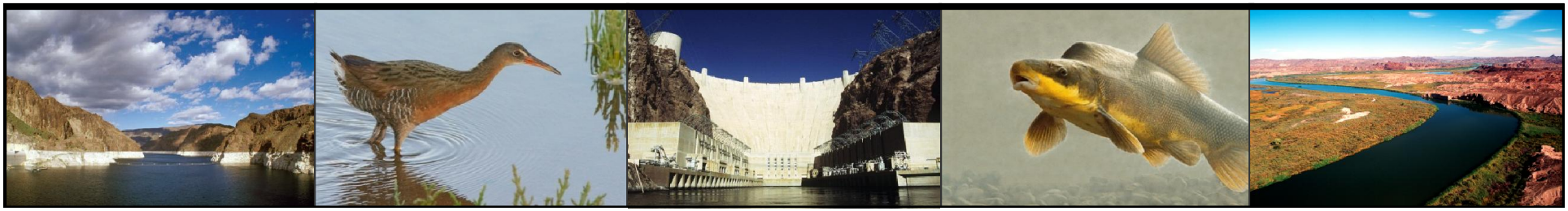
*Subject to final accounting.



Nevada Consumptive use

2012-2014





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