Colorado River Commission of Nevada

Natural Resources Group
Hydrologic Update
February 11, 2014

Unregulated Inflow

Unregulated Inflow Into Lake Powell

As of February 10, 2014

	MAF*	% Avg**
• WY 2014 (forecasted):	10.42	96%
• April-July 2014 (forecasted):	7.25	101%
• Jan (observed):	0.27	75%
• Feb (forecasted):	0.30	76%

***MAF=Million Acre-Feet**

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

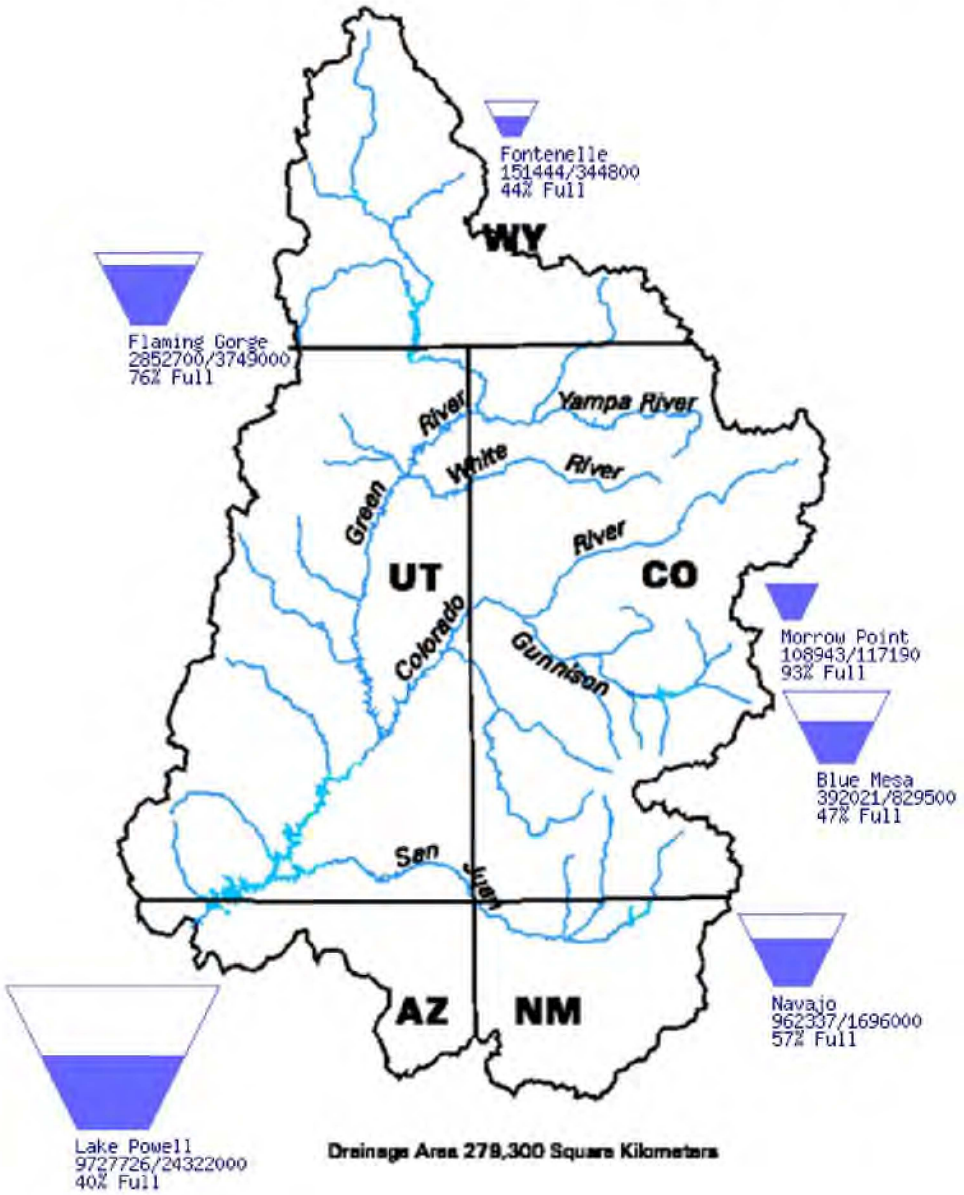
Storage Conditions

As of February 10, 2014

		Percent of Capacity	Δ from last year
Lake Mead elev.	1,108.26 ft	48%	↓ 14.25 ft
Lake Powell elev.	3,577.59 ft	40%	↓ 25.89 ft
Total System Storage (2/2014)	28.95 maf	49%	↓ 3.77 maf
Total System Storage (2/2013)	32.72 maf	55%	

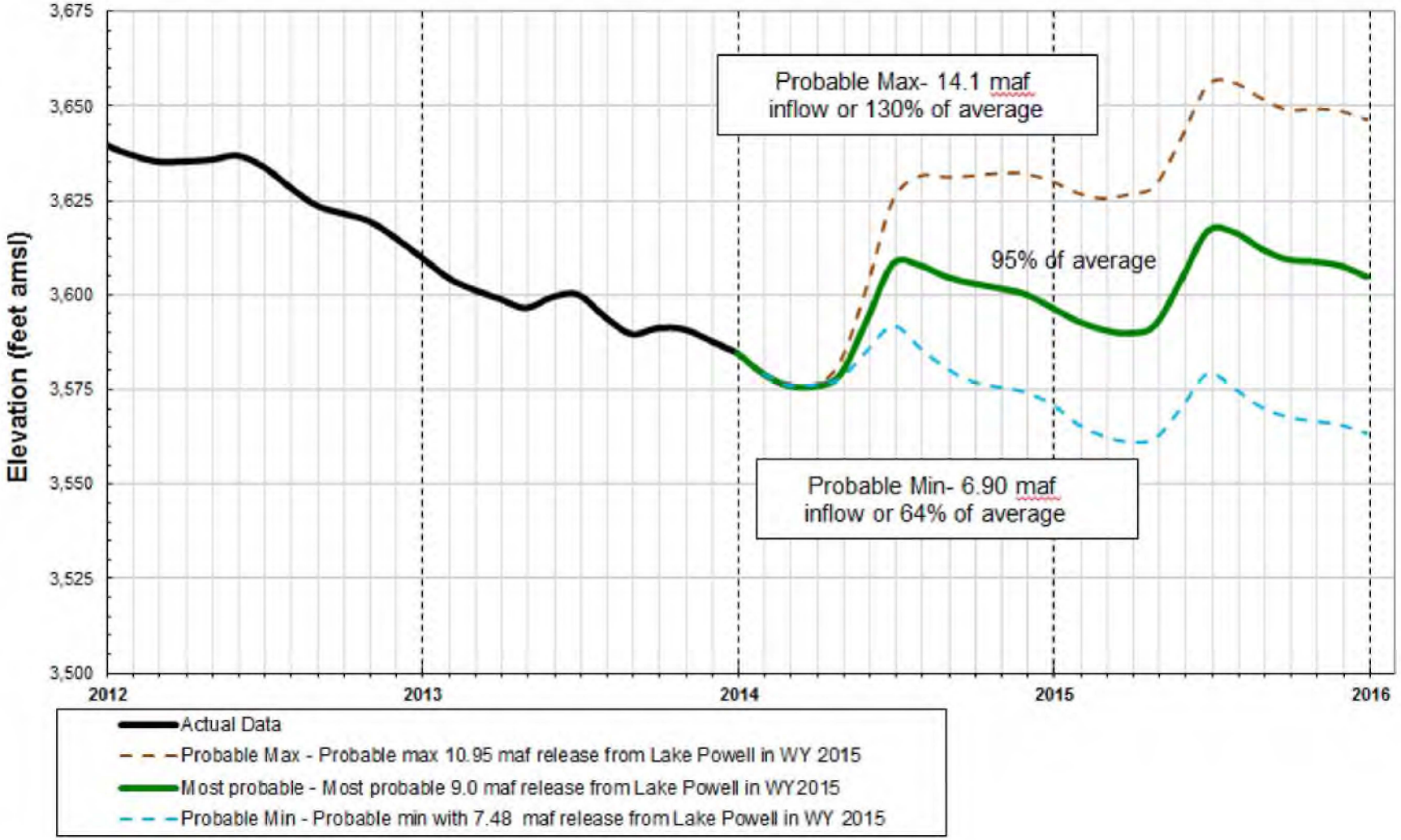
Data Current as of:
02/10/2014

Upper Colorado River Drainage Basin

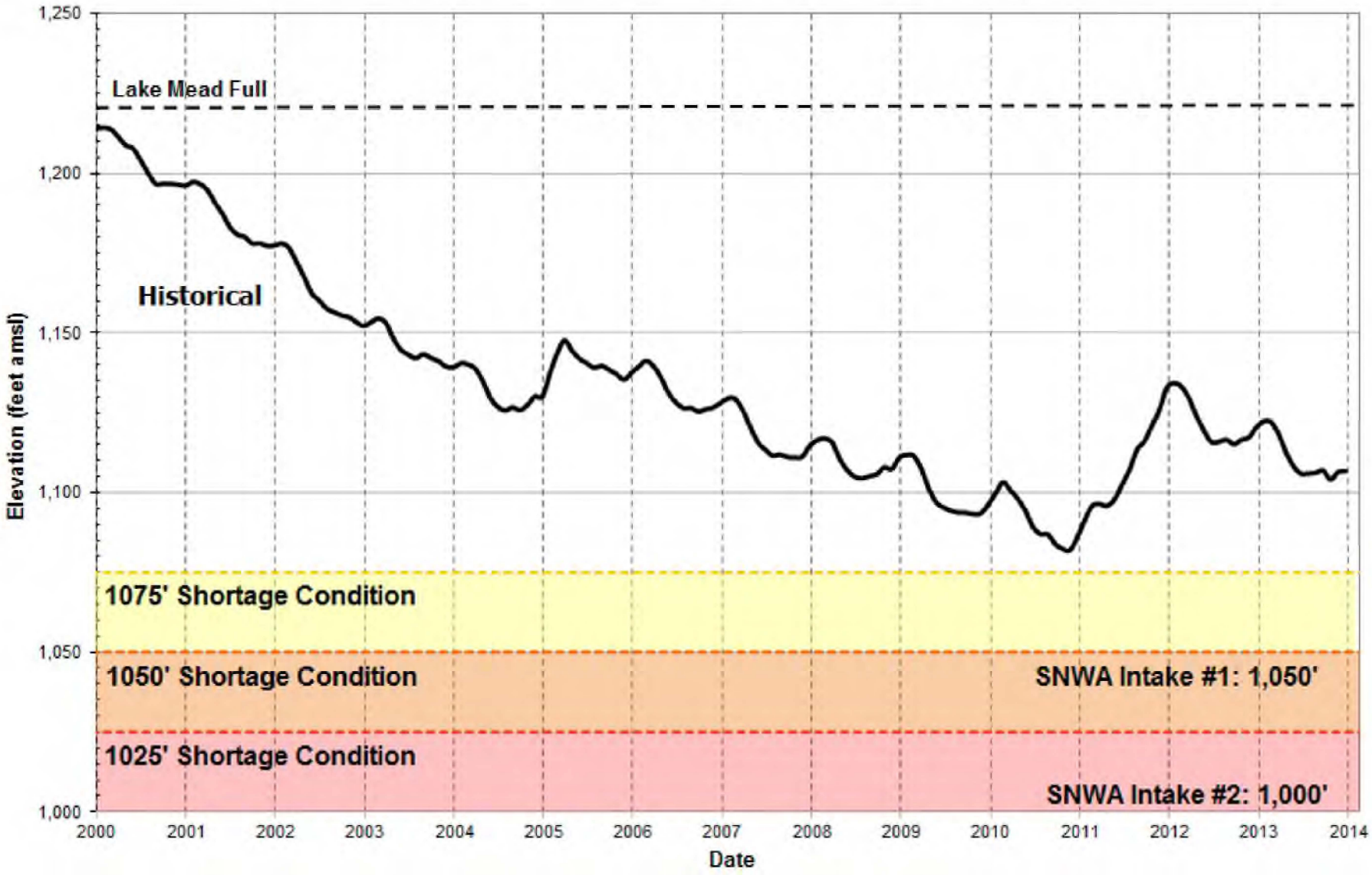


Lake Powell End of Month Elevations

(based on January 2014 24-month Study)

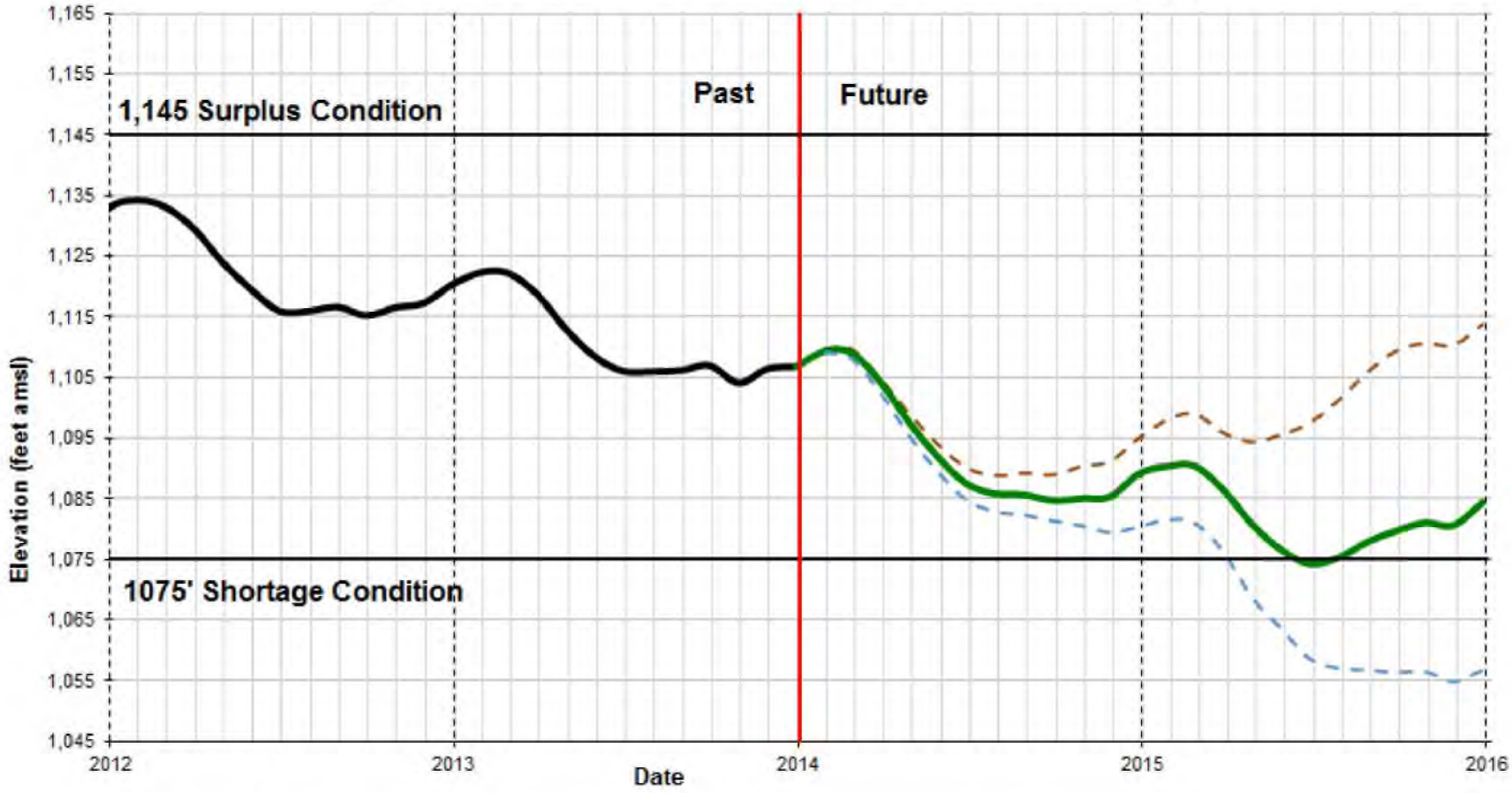


Lake Mead Elevation 2000-2014



Lake Mead End of Month Elevation Projections

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



Drought and Precipitation

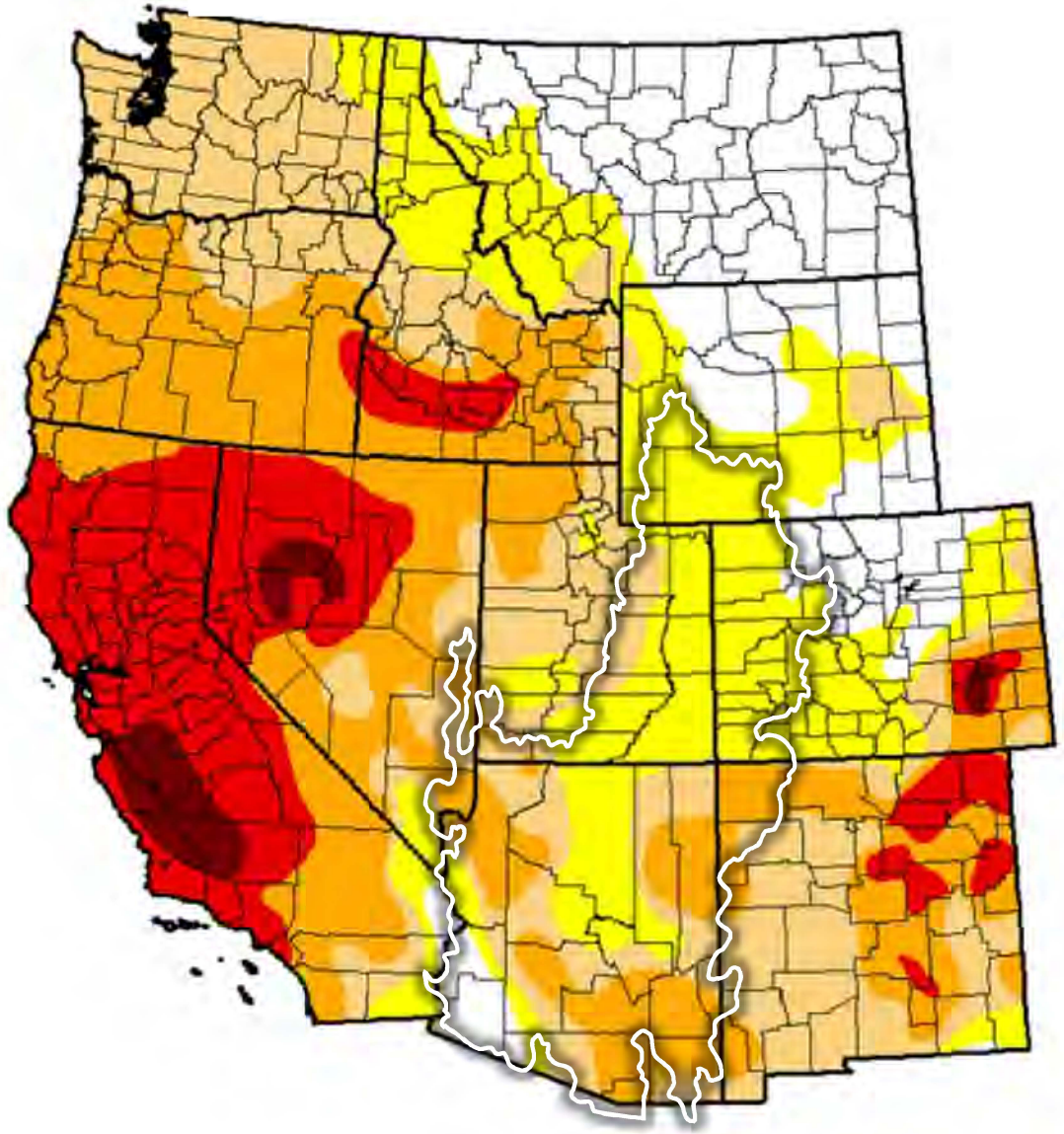
U.S. Drought Monitor

West

February 4, 2014

(Released Thursday February 6, 2014)

Valid 7 a.m. Eastern



Intensity:

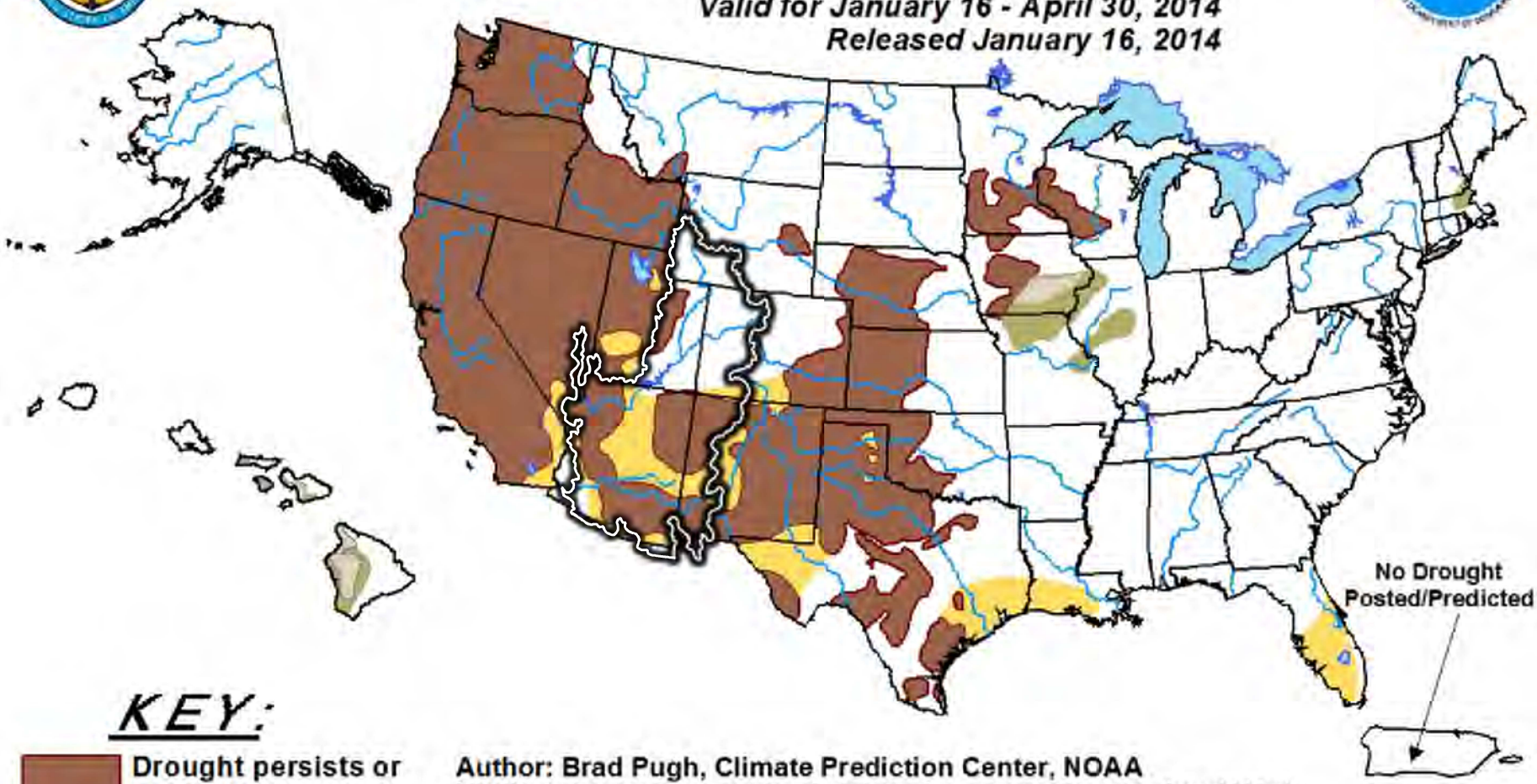
- D0 - Abnormally Dry
- D1 - Moderate Drought
- D2 - Severe Drought
- D3 - Extreme Drought
- D4 - Exceptional Drought

U.S. Seasonal Drought Outlook

Drought Tendency During the Valid Period

Valid for January 16 - April 30, 2014

Released January 16, 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/season_drought.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.

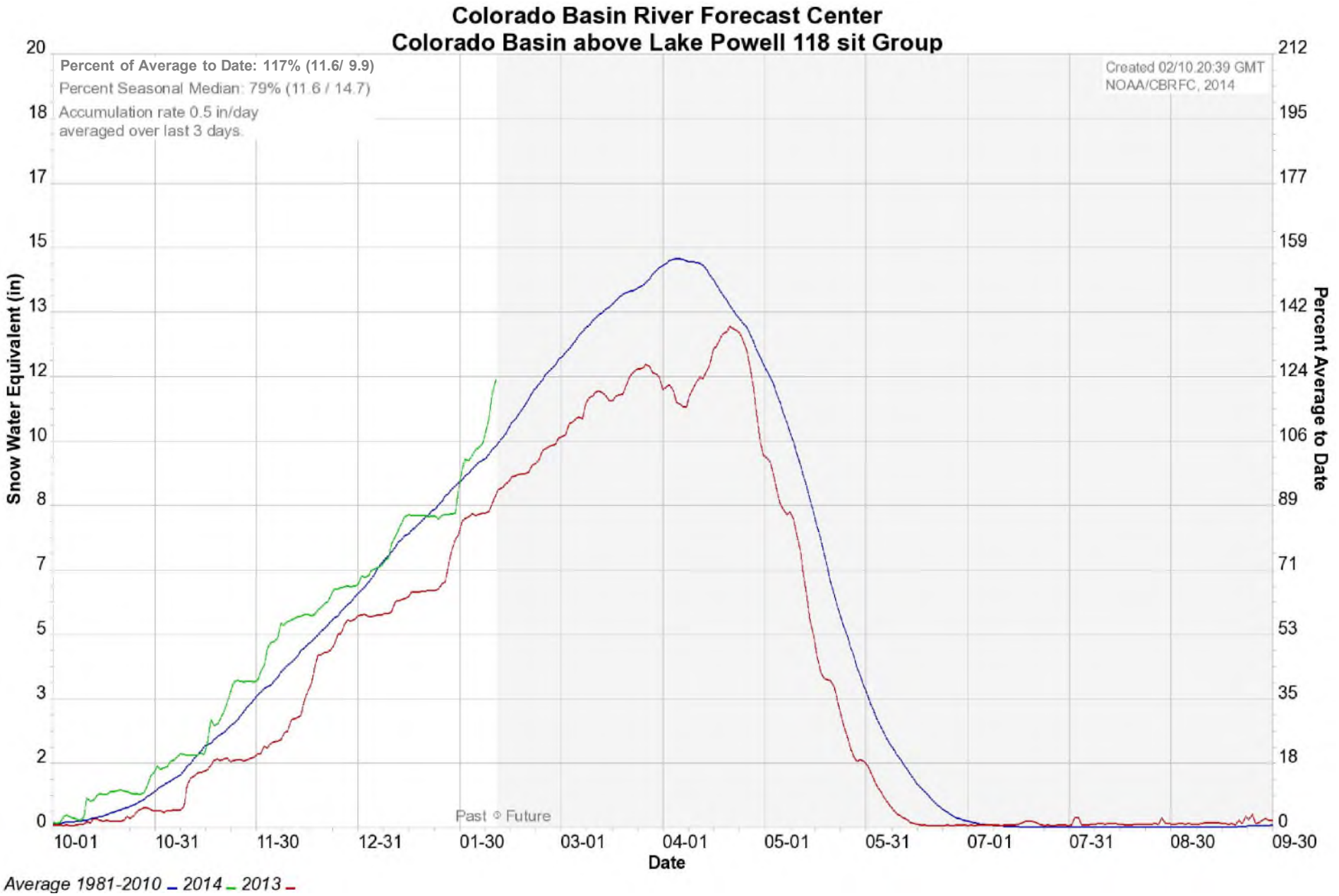
The Green areas imply drought removal by the end of the period (D0 or none)

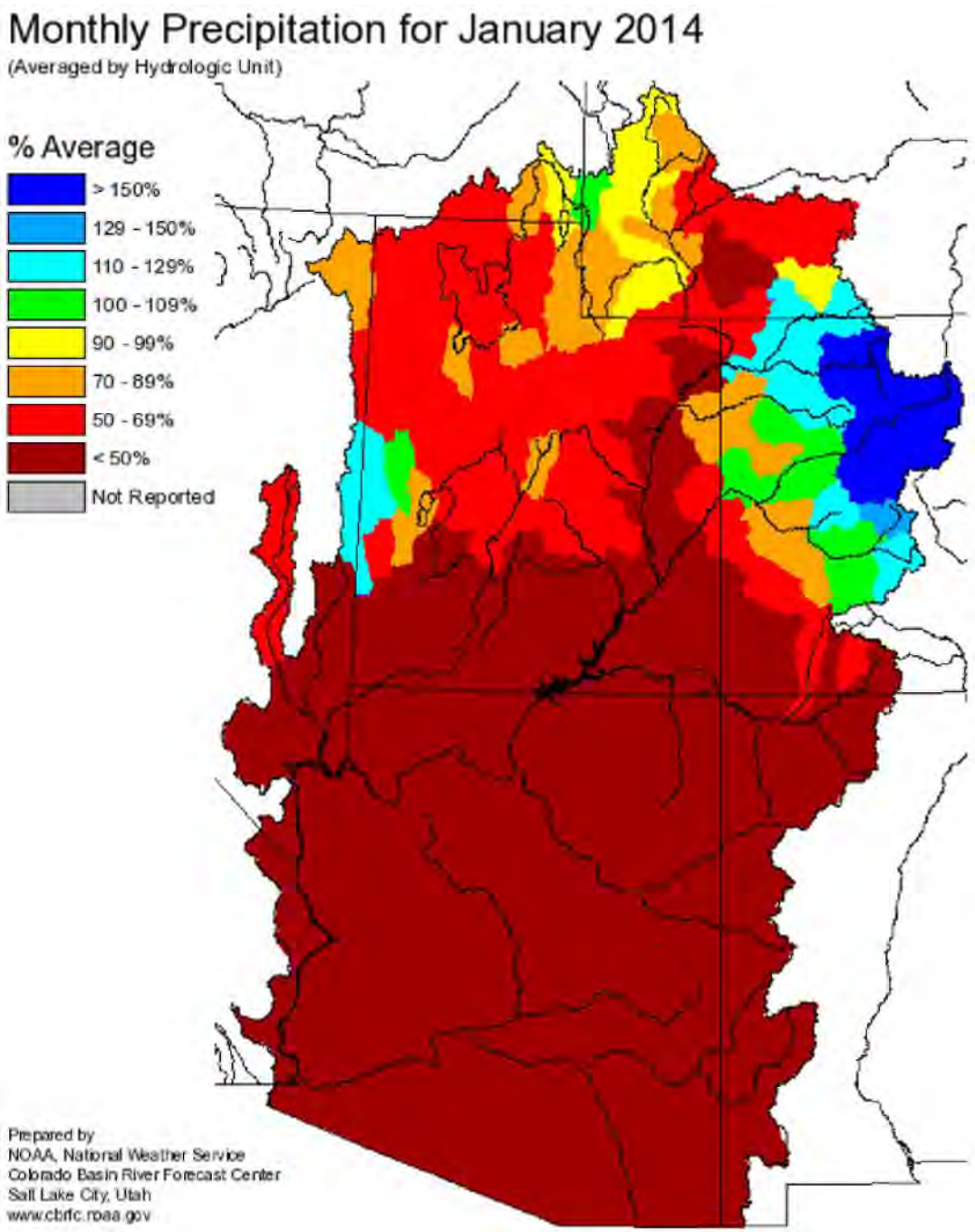
Precipitation – Colorado River Basin

As of February 10, 2014

	Upper Colorado Basin
WY Precip to Date	102% (12.7″)
Current Basin Snowpack	112% (11.8″)

(Avg 1981-2010)

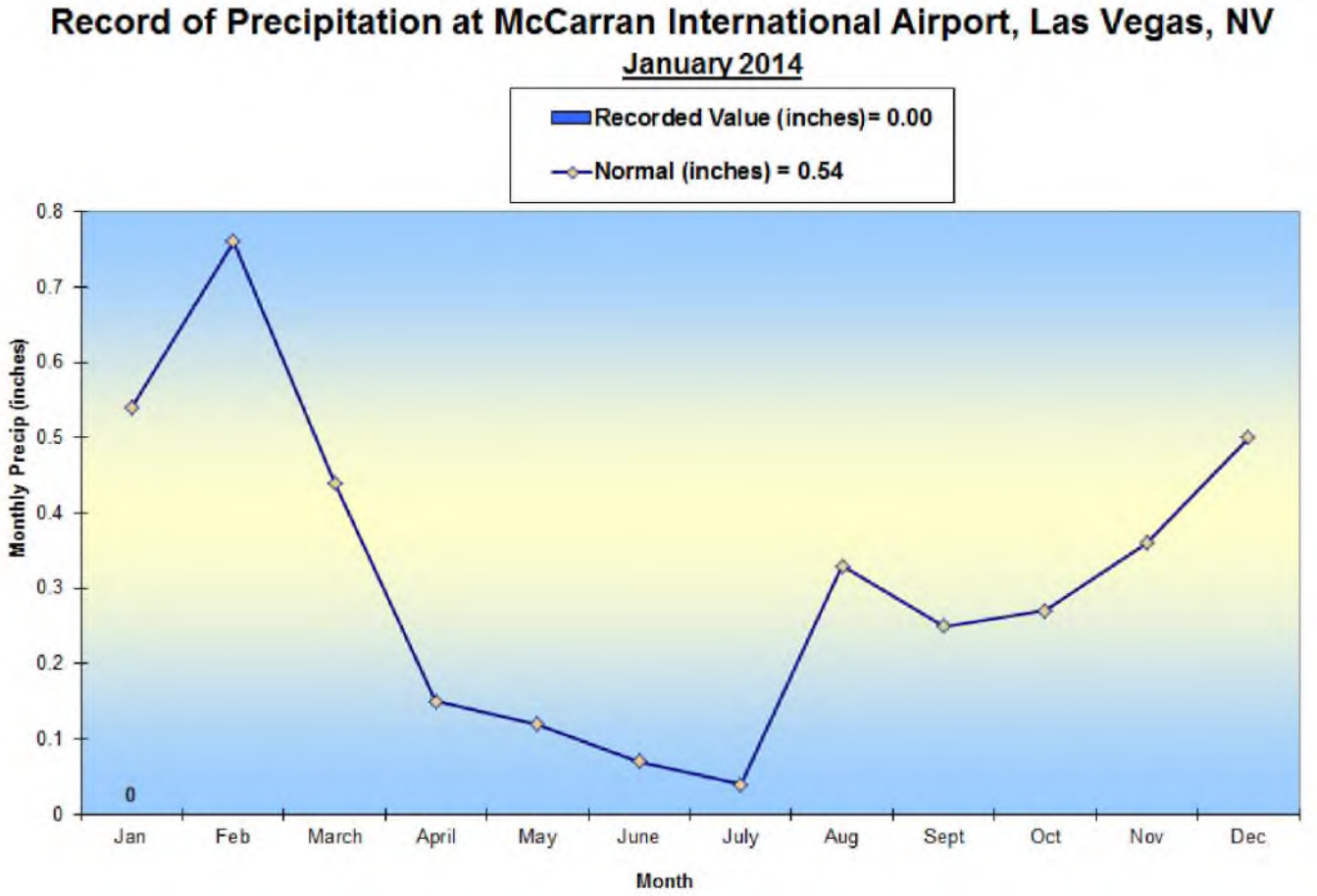

Colorado Basin River Forecast Center
Colorado Basin above Lake Powell 118 sit Group
Percent of Average to Date: 117% (11.6/ 9.9)
Percent Seasonal Median: 79% (11.6 / 14.7)
Accumulation rate 0.5 in/day
averaged over last 3 days.
Created 02/10.20:39 GMT
NOAA/CBRFC, 2014
Snow Water Equivalent (in)
Percent Average to Date
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
2013



http://www.cbrfc.noaa.gov/product/mapsum/map/cbrfcM201311.png

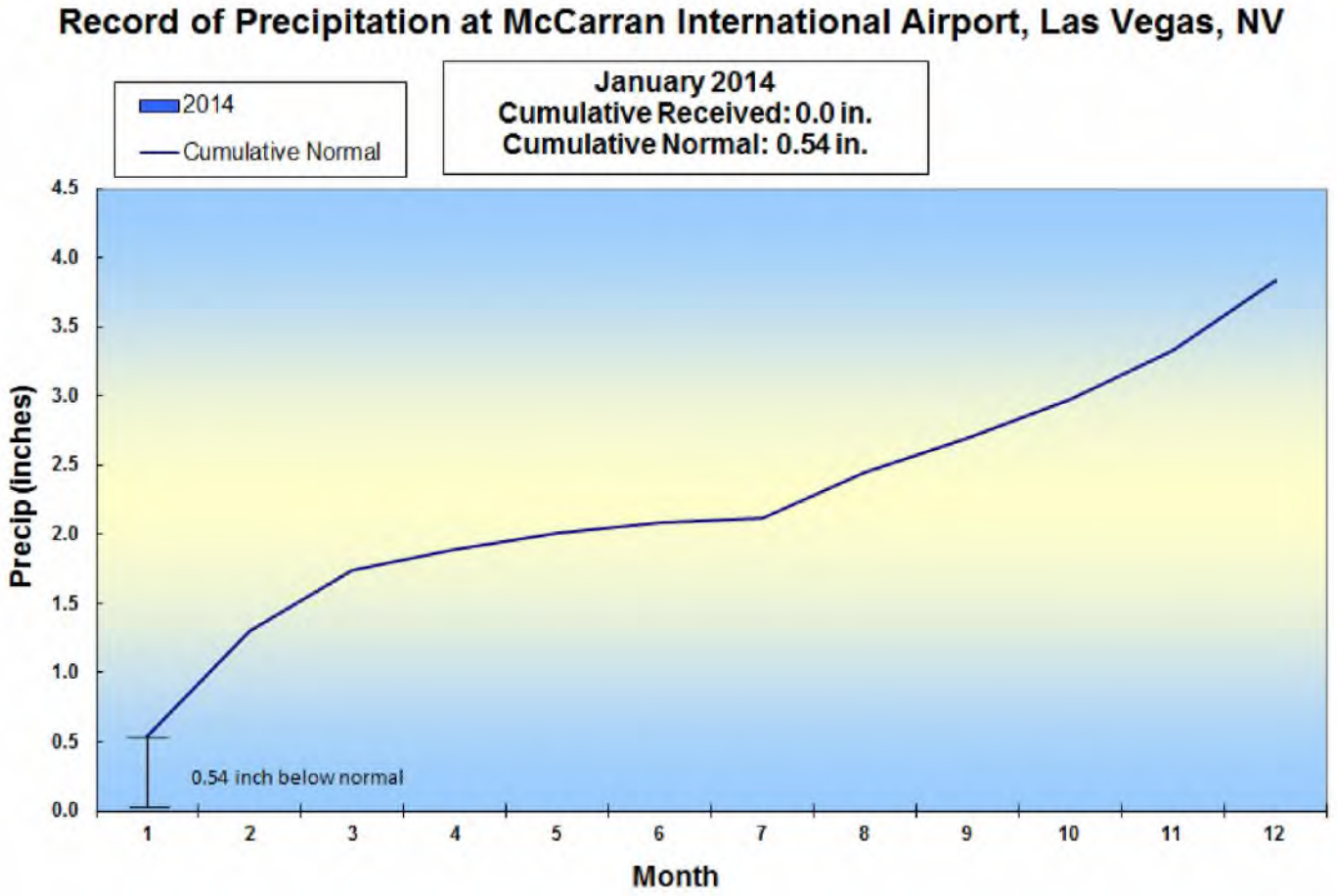
Record of Precipitation, Las Vegas, NV

As of January 31, 2014



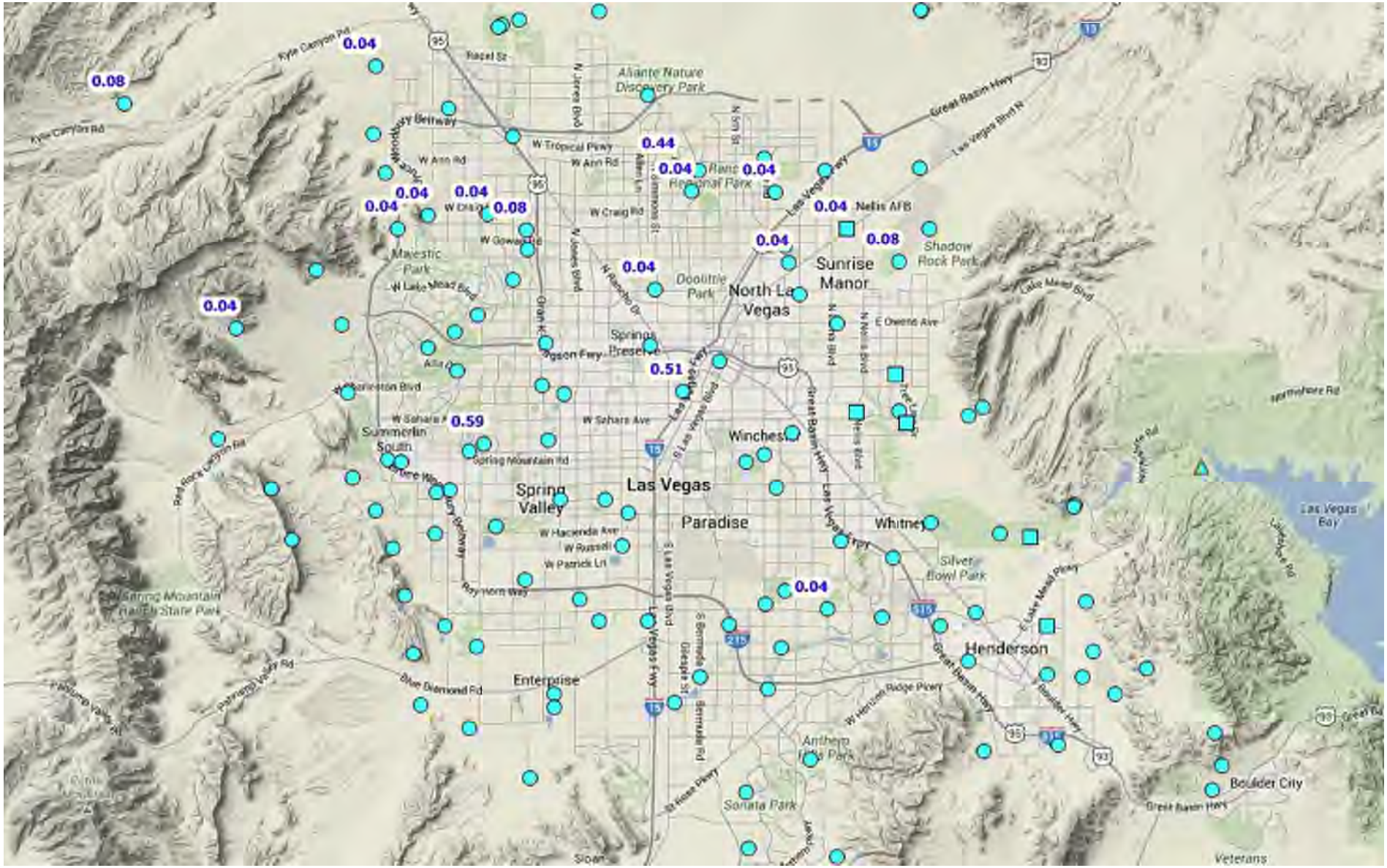
Record of Precipitation, Las Vegas, NV

As of January 31, 2014



Clark County Regional Flood Control District Rain Gages

January 2014 Totals



http://gustfront.ccrfcd.org/gagemapprimary/gagemap.html

Water Use in Southern Nevada

Water Use in Southern Nevada
January - December

2013*:	Consumptive Use =	223,457
	CR Water Banked =	0
		223,457
2012:	Consumptive Use =	237,167
	CR Water Banked =	0
		237,167

Difference = - 13,710 af

*Subject to final accounting.

Water Use Comparison

January - December

Water Use	2012 Acre Feet	2013 Acre Feet	Difference	% Change
Las Vegas Wash Gauged Flow	212,478	215,007	2,529	1.2%
Diversions	439,352	433,383	-5,969	-1.4%
Return Flow Credit	202,185	209,926	7,741	3.8%
Consumptive Use	237,167	223,457	-13,710	-5.8%

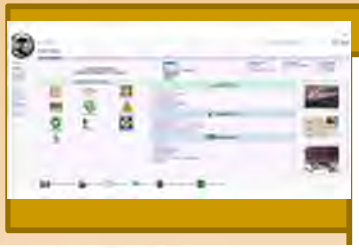
Intentionally Created Surplus (ICS)

Storage in Lake Mead as of December 31, 2012

State	**Storage** (AF)	**Feet***
Nevada	512,804	5.7
California	579,786	6.4
Arizona	103,050	1.1
Total	1,195,640	13.3

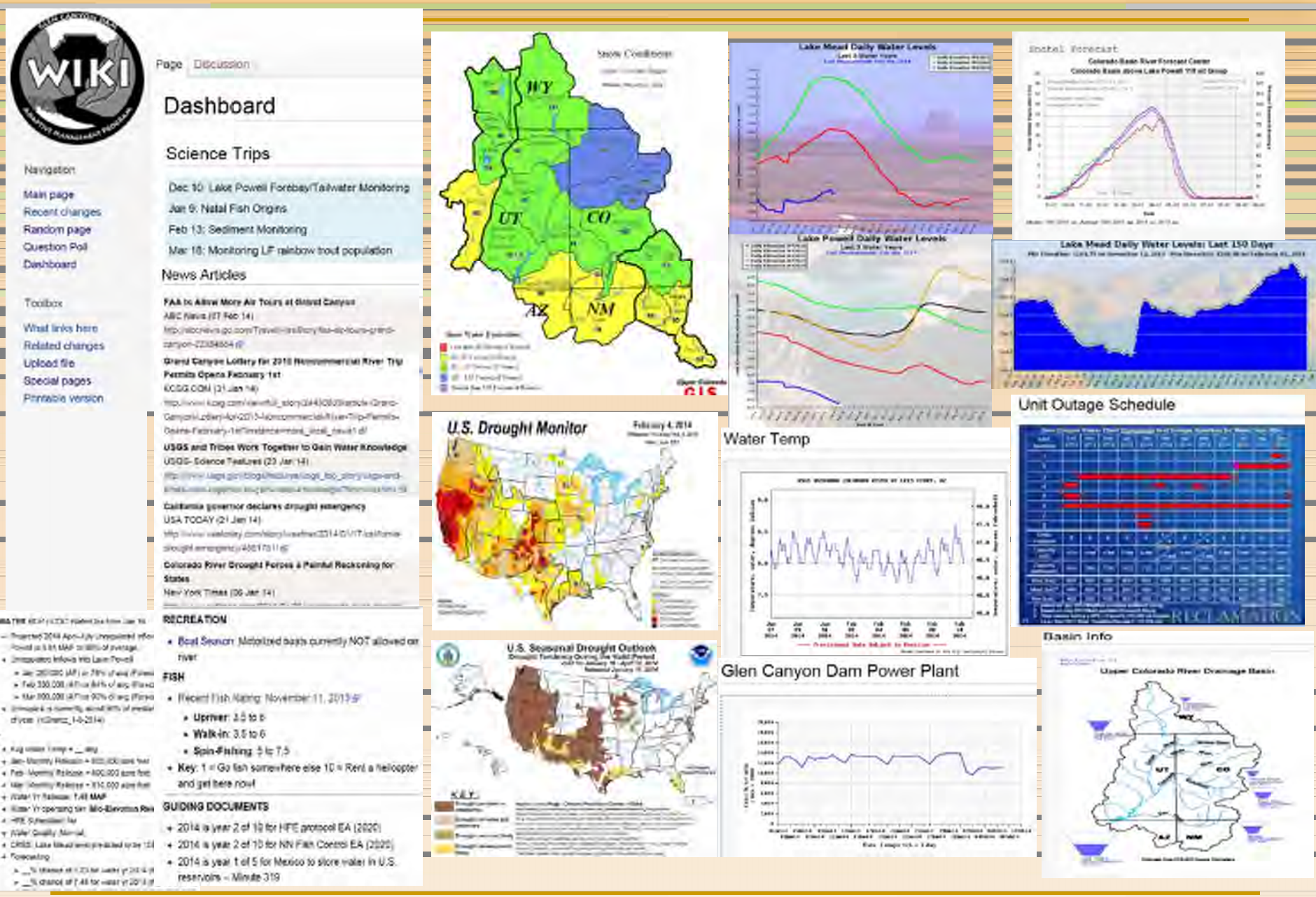
*90,000 acre feet storage per 1 foot of storage at elevation 1,100

GCDAMP-DASHBOARD



DASHBOARD: Can Address the Following Questions:

- **Q:** How many power units are online? maintenance season?
- **Q:** What are the snow pack conditions? Percentages?
- **Q:** What are the lake levels for Powell /Mead? (Compare 3 or 5 years?)
- **Q:** What are the latest news articles (specifically associated) with this program?
- **Q:** What science trips are going on right now? Last month? Next month?
- **Q:** What is the drought outlook right now? Seasonal outlook for the basin?
- **Q:** How much water is coming out of the dam right now? CFS?
- **Q:** What is the water temperature? How is it trending?
- **Q:** Recreation: Are there motorized boats on the river right now?
- **Q:** What does the hydrograph look like? Next few months? Year?
- **Q:** What do the upper basin lake levels look like? Navajo? Fontenelle?
- **Q:** What does the precipitation look like in the Basin?
- **Q:** What year are we in with the HFE protocol? Other guiding documents?
- **Q:** Fishery: What are the fishing conditions at Lees Ferry?
- **Q:** What are the sediment conditions? HFE?



GCDAMP-DASHBOARD

www.GCDAMP.com

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