

# Colorado River Commission of Nevada

## **Natural Resources Group Hydrologic Update October 8, 2013**



# Hydrologic Conditions



# Unregulated Inflow Into Lake Powell

As of September 17, 2013

	MAF*	% Avg**
• WY 2013 (projected):	5.00	46%
• April-July 2013 (observed):	2.56	36%
• Aug 2013 (observed):	0.27	55%
• Sept 2013 (projected):	0.74	181%

**\*MAF=Million Acre-Feet**

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



# Storage Conditions

As of September 30, 2013

		<u>Percent of Capacity</u>	<u>Δ from last year</u>
Lake Mead elev.	1,106.95 ft	47%	↓ 8.21 ft
Lake Powell elev.	3,591.32 ft	45%	↓ 32.03 ft
Total System Storage (9/2013)	29.95 maf	50%	↓ 4.09 maf
Total System Storage (9/2012)	34.04 maf	57%	

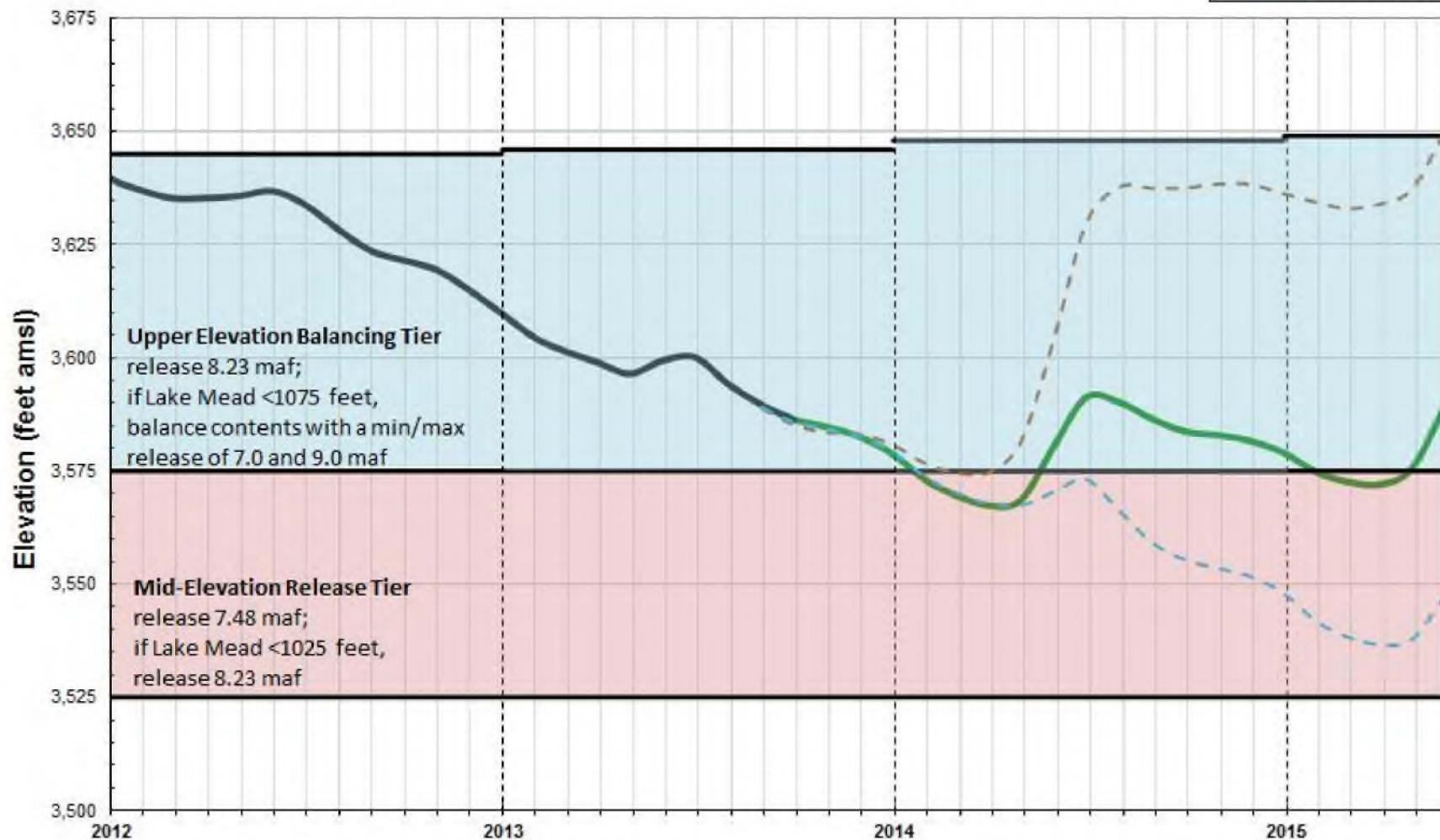




# Lake Powell End of Month Elevations

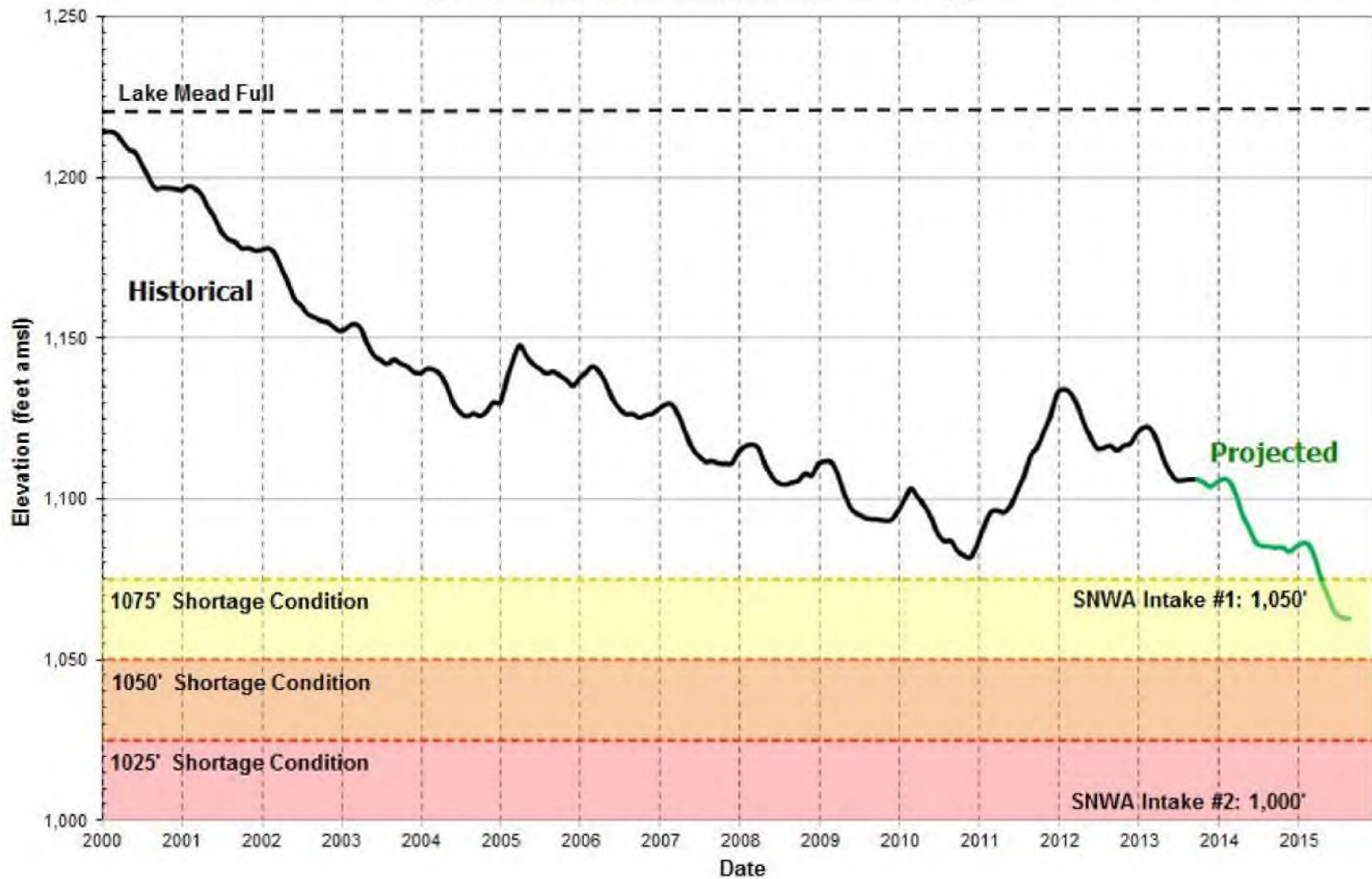
(based on SEP 2013 24-month Study)

- 24-month study
- Observed
- Probable Max
- Probable Min



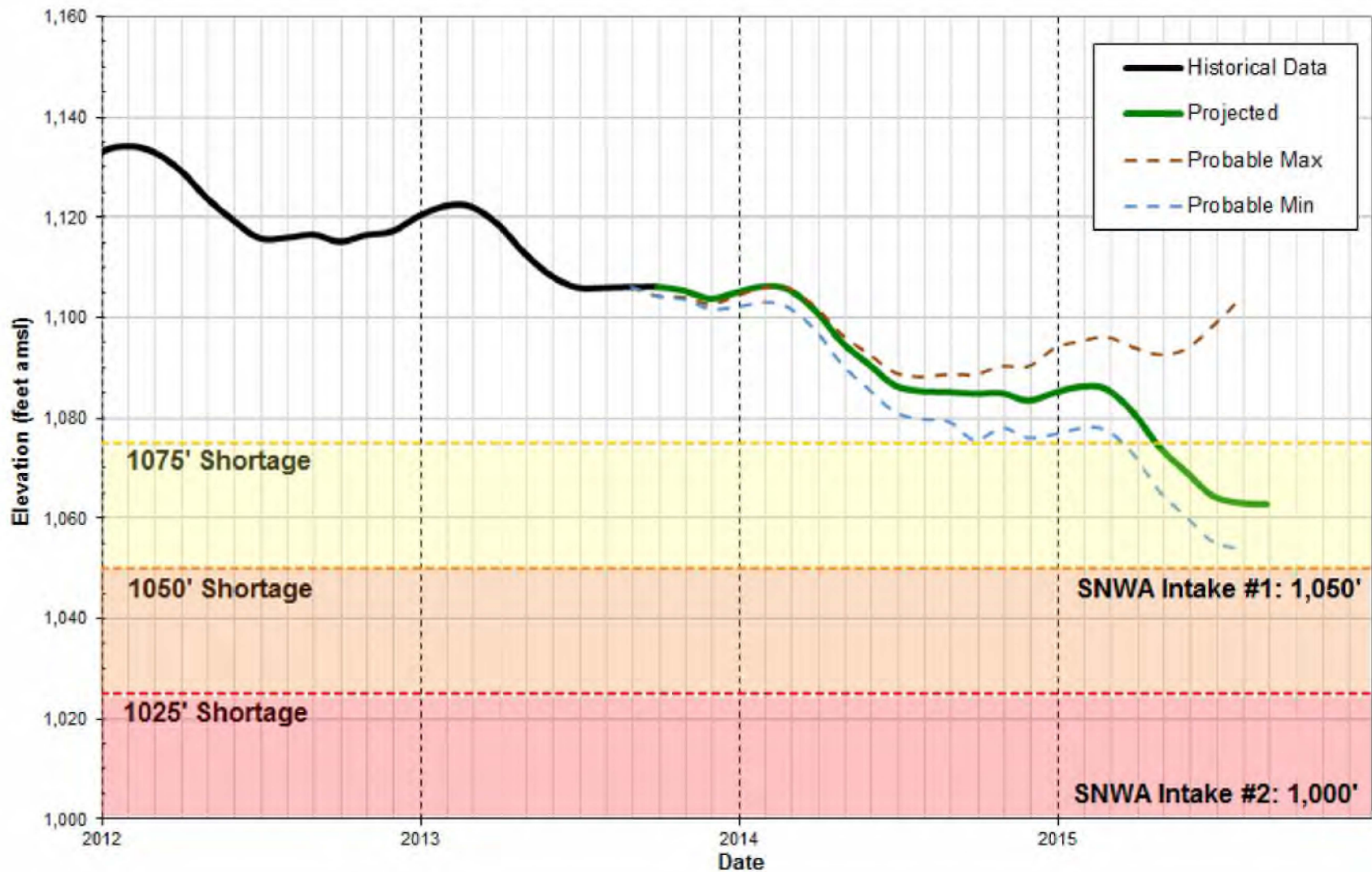
# Lake Mead End of Month Elevation Projections

(based on the SEP 2013 24-month study )



# Lake Mead End of Month Elevation Projections

(based on the SEP 2013 24-month study)



# Precipitation - Colorado River Basin

As of September 30, 2013

## Upper Colorado Basin

WY Precip to Date

91% (28.8")

Current Basin Snowpack

NA% (NA)

(Avg 1981-2010)





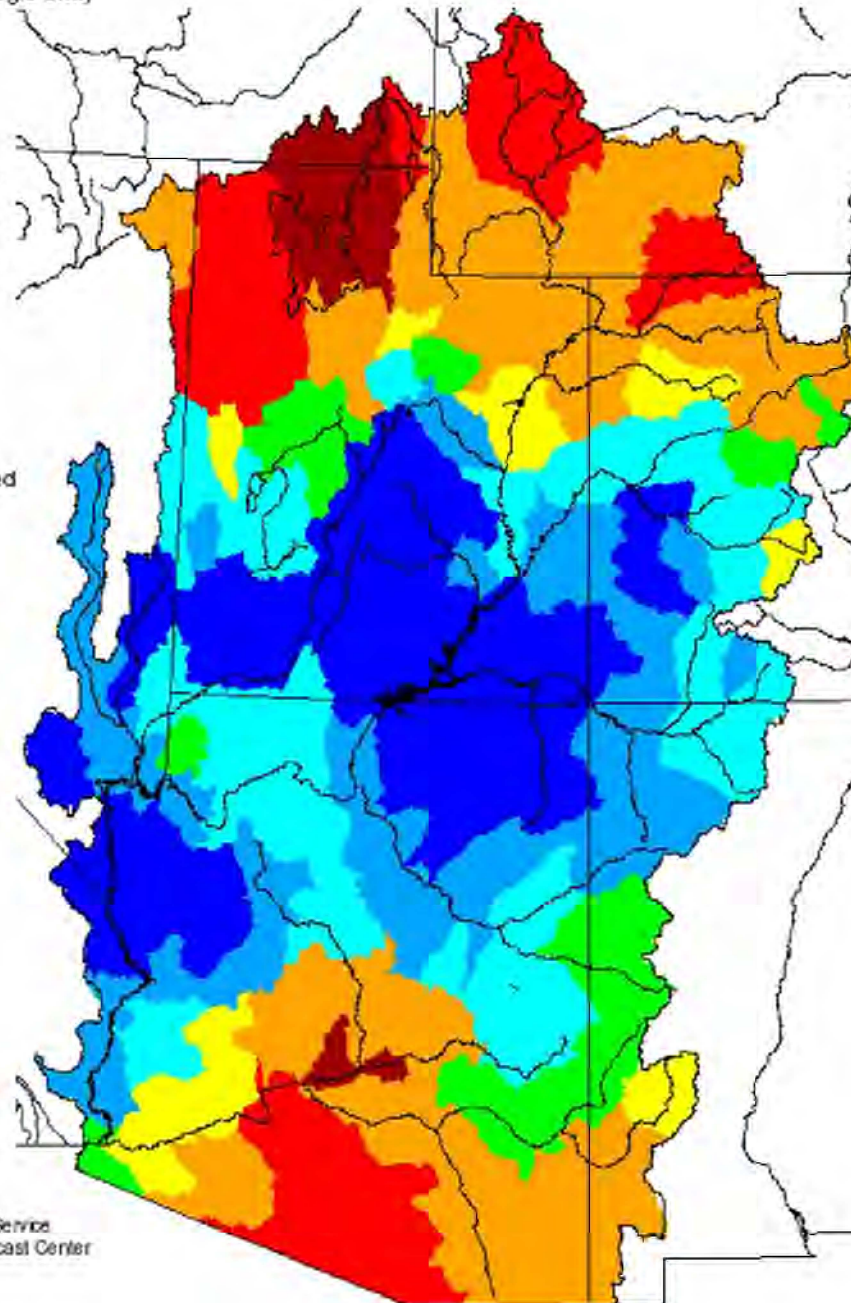
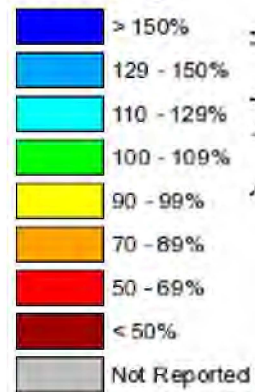
# Drought and Precipitation



# Monthly Precipitation for August 2013

(Averaged by Hydrologic Unit)

## % Average

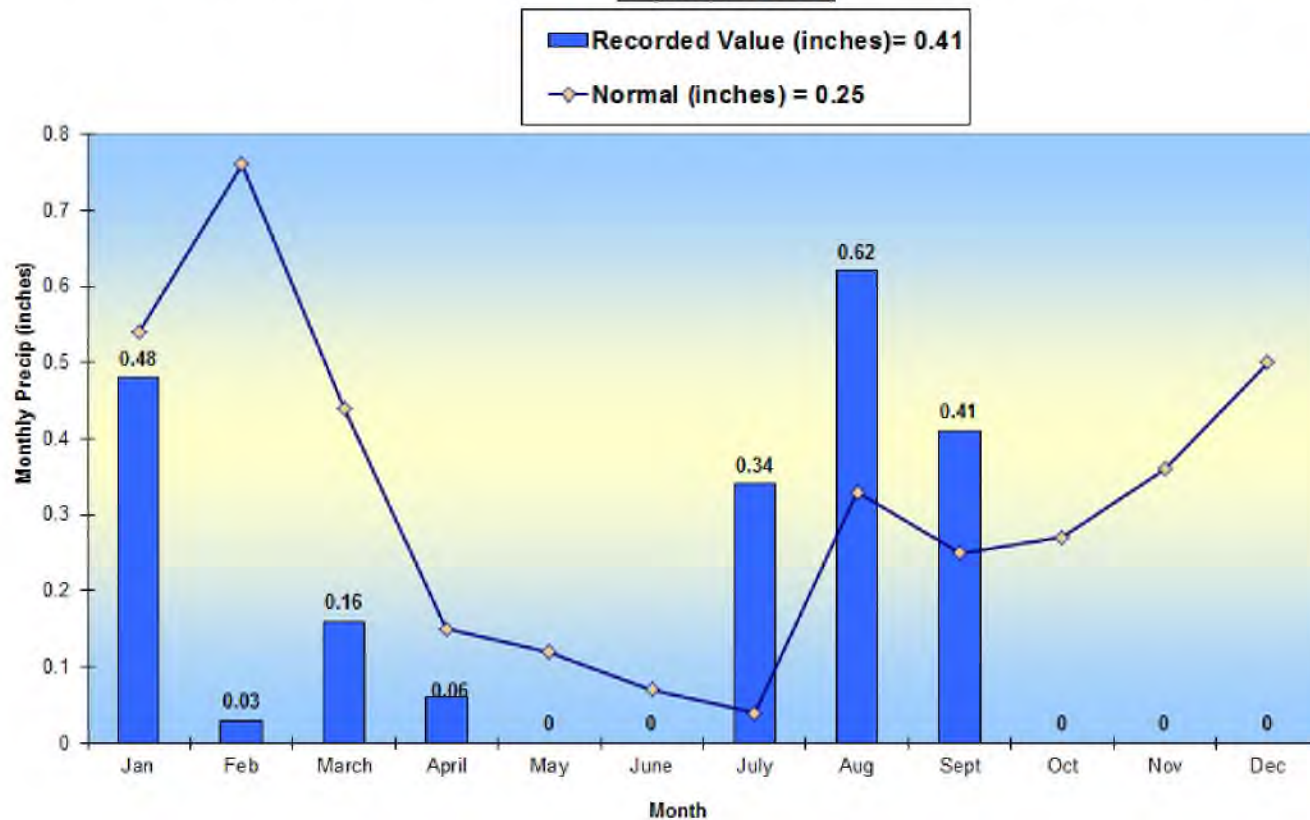


Prepared by  
NOAA, National Weather Service  
Colorado Basin River Forecast Center  
Salt Lake City, Utah  
[www.cbrfc.noaa.gov](http://www.cbrfc.noaa.gov)

# Record of Precipitation, Las Vegas, NV

As of September 30, 2013

**Record of Precipitation at McCarran International Airport, Las Vegas, NV**  
**September 2013**

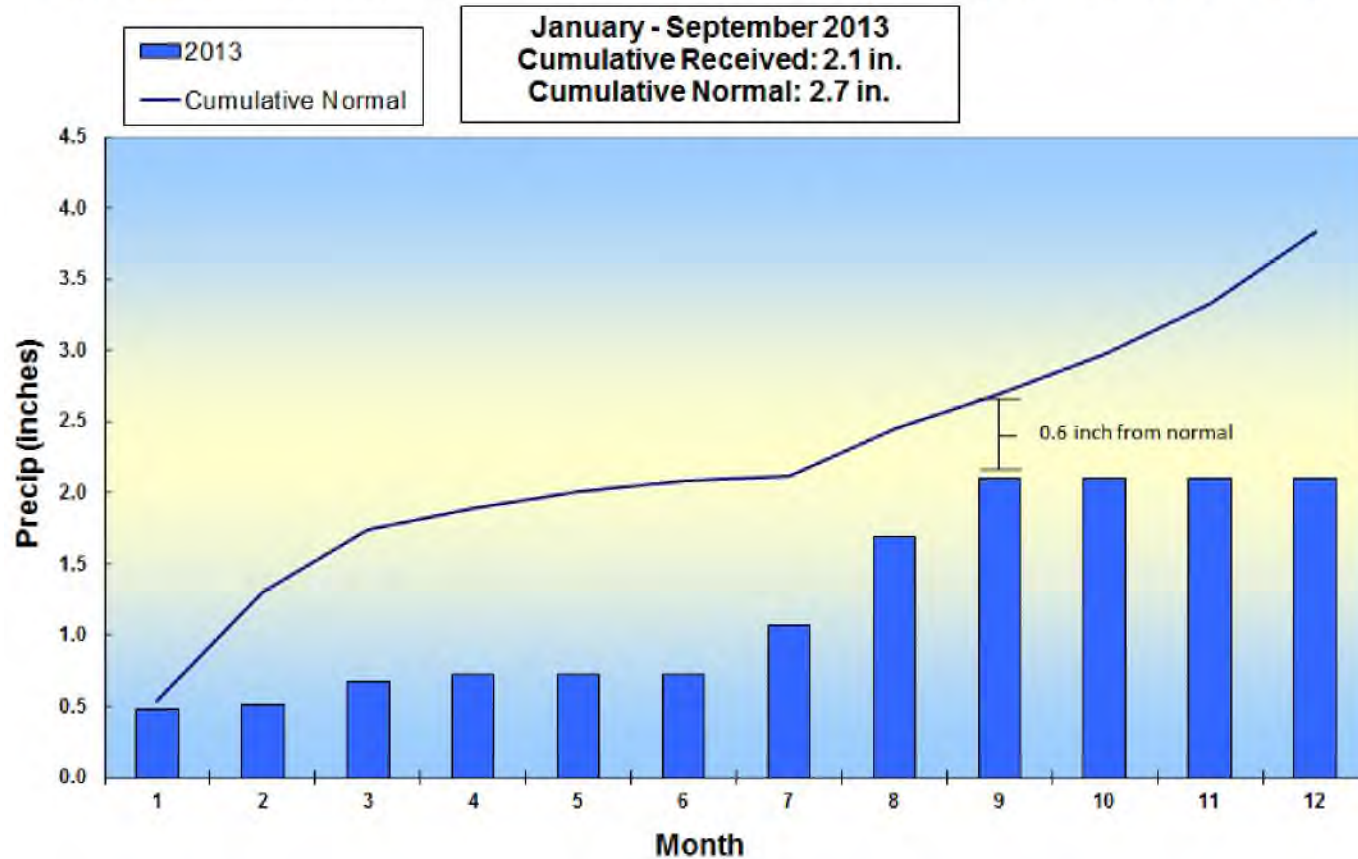




# Record of Precipitation, Las Vegas, NV

As of September 30, 2013

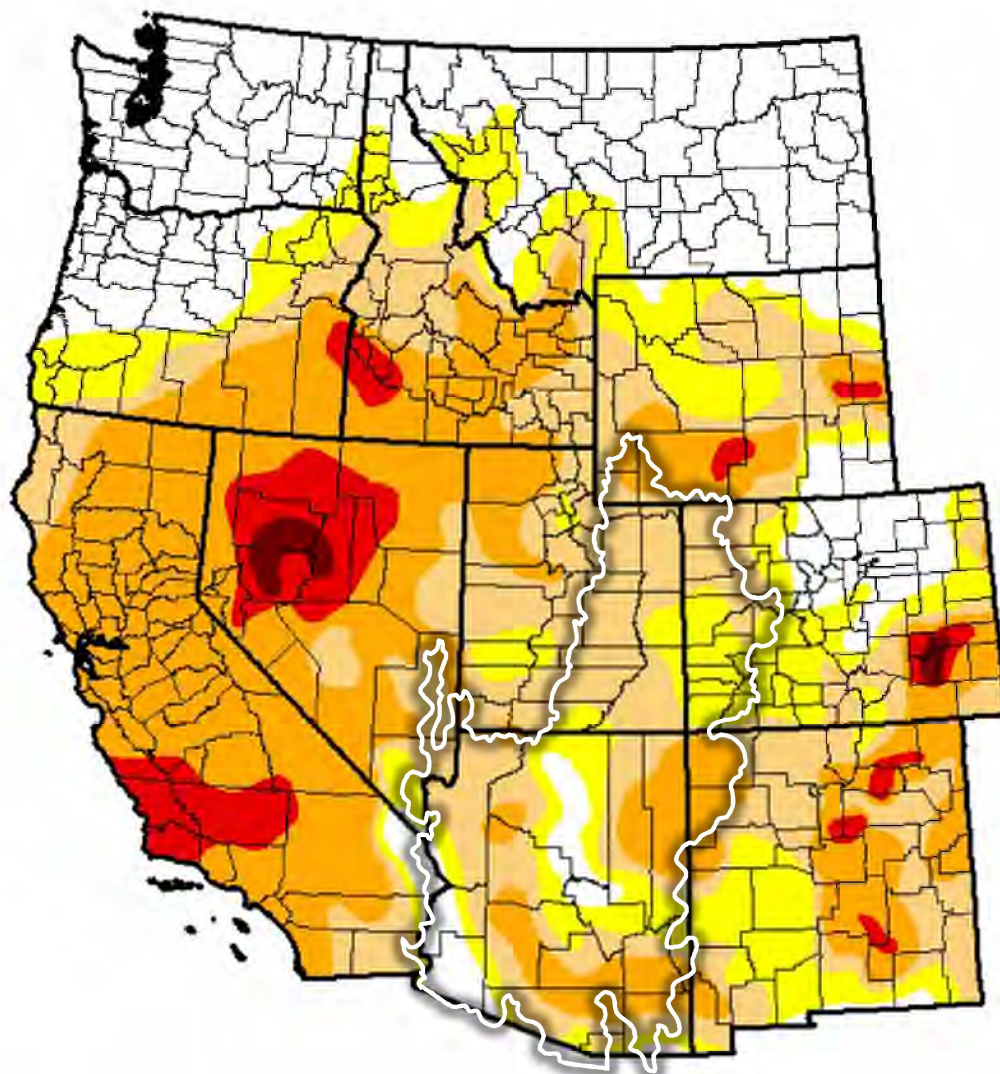
## Record of Precipitation at McCarran International Airport, Las Vegas, NV





# U.S. Drought Monitor West

**October 1, 2013**  
(Released Thursday, Oct. 3, 2013)  
Valid 7 a.m. EDT



## Intensity:

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

*The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements.*

**Author:**  
David Miskus  
NOAA/NWS/MCEP/CPC



<http://droughtmonitor.unl.edu/>



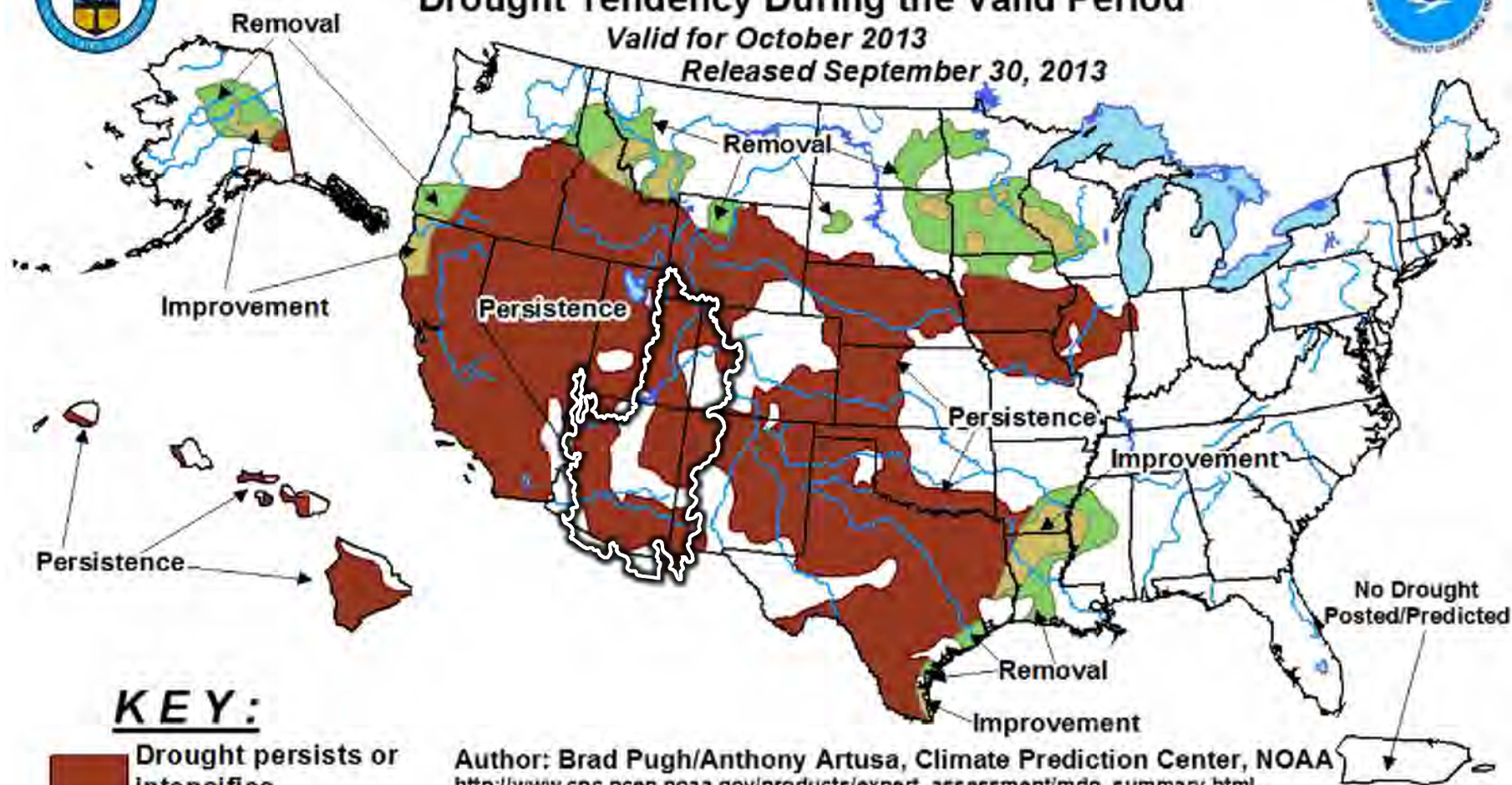


# U.S. Monthly Drought Outlook





## Drought Tendency During the Valid Period

Valid for October 2013

Released September 30, 2013



### KEY:

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

Author: Brad Pugh/Anthony Artusa, Climate Prediction Center, NOAA  
[http://www.cpc.ncep.noaa.gov/products/expert\\_assessment/mdo\\_summary.html](http://www.cpc.ncep.noaa.gov/products/expert_assessment/mdo_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 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)

# Water Use in Southern Nevada



# Water Use in Southern Nevada

## January - August

2013*:	Consumptive Use =	166,703
	<u>CR Water Banked =</u>	<u>0</u>
		166,703

2012:	Consumptive Use =	170,602
	<u>CR Water Banked =</u>	<u>0</u>
		170,602

**Difference = - 3,899 af**

\*Subject to final accounting.





# Water Use Comparison

Water Use	2012	2013	Difference	% Change
Las Vegas Wash Gauged Flow	135,263	140,904	5,641	4.2%
Diversions	304,764	305,729	965	0.3%
Return Flow Credit	134,162	139,025	4,863	3.6%
Consumptive Use	170,602	166,703	-3,899	-2.3%



# Colorado River Commission of Nevada

## **Natural Resources Group Hydrologic Update October 8, 2013**

