

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

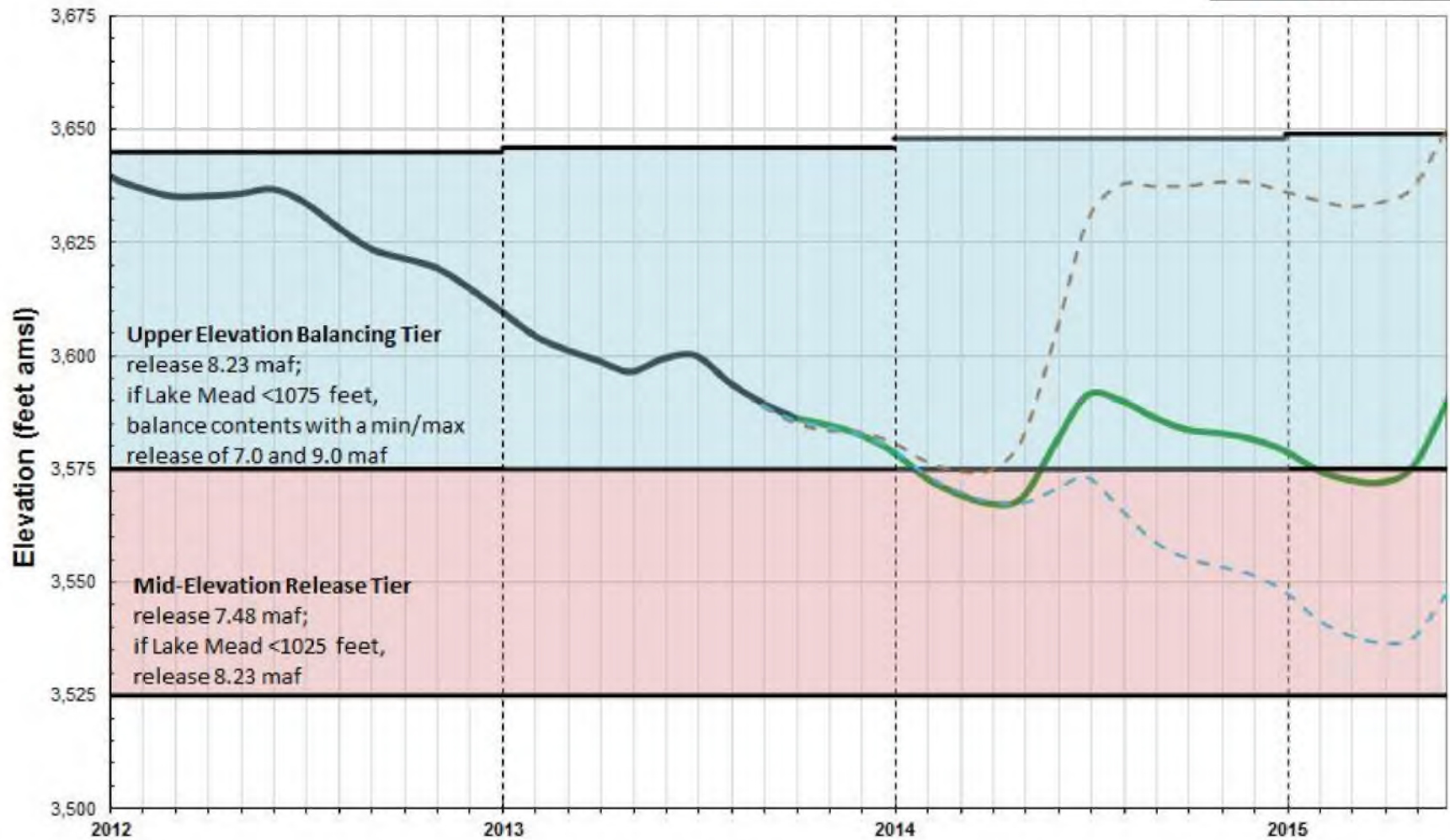
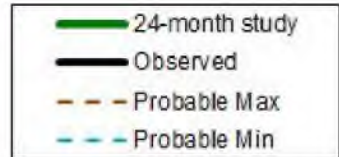
As of September 30, 2013

| | | <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% | |



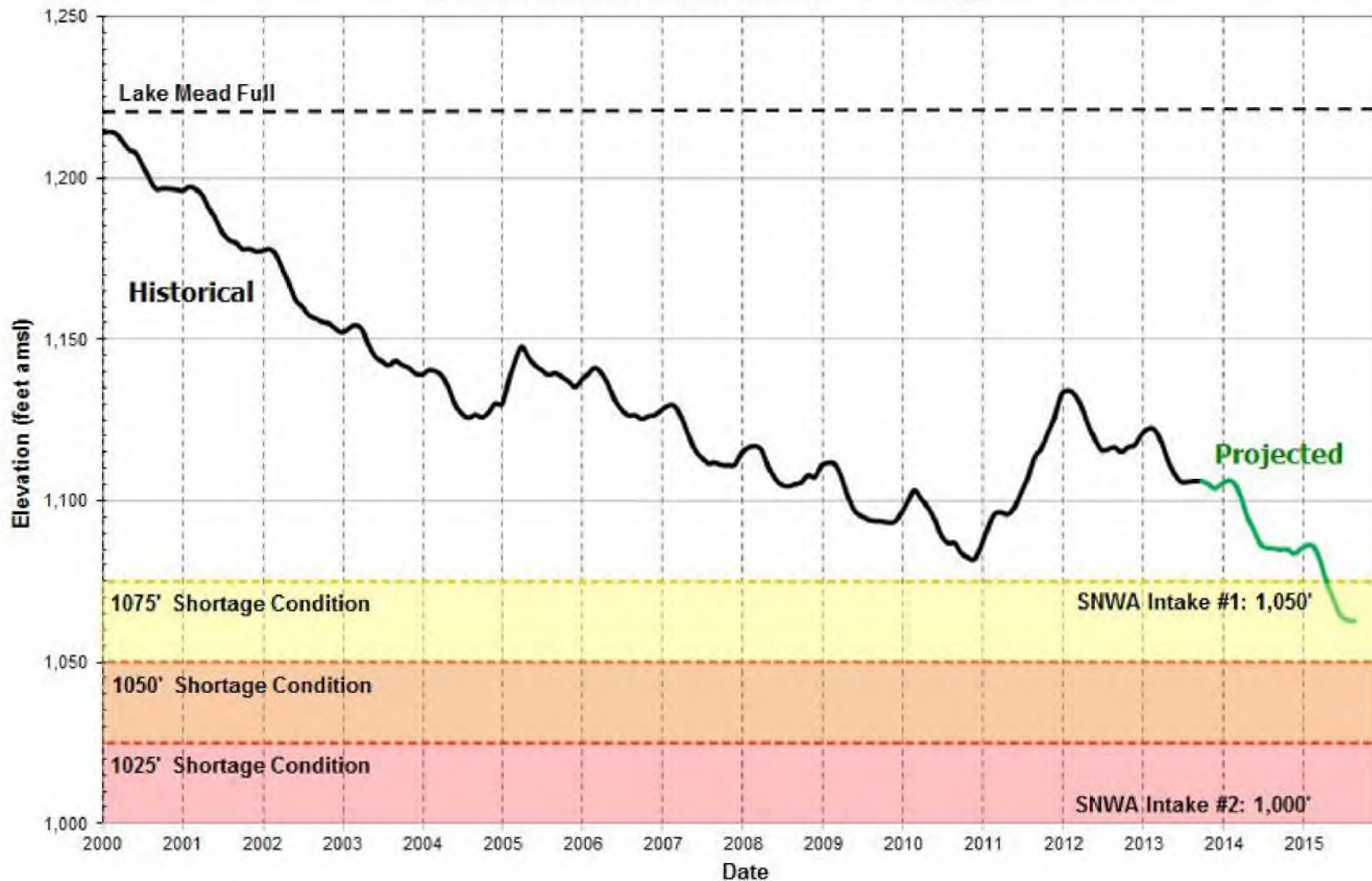
Lake Powell End of Month Elevations

(based on SEP 2013 24-month Study)



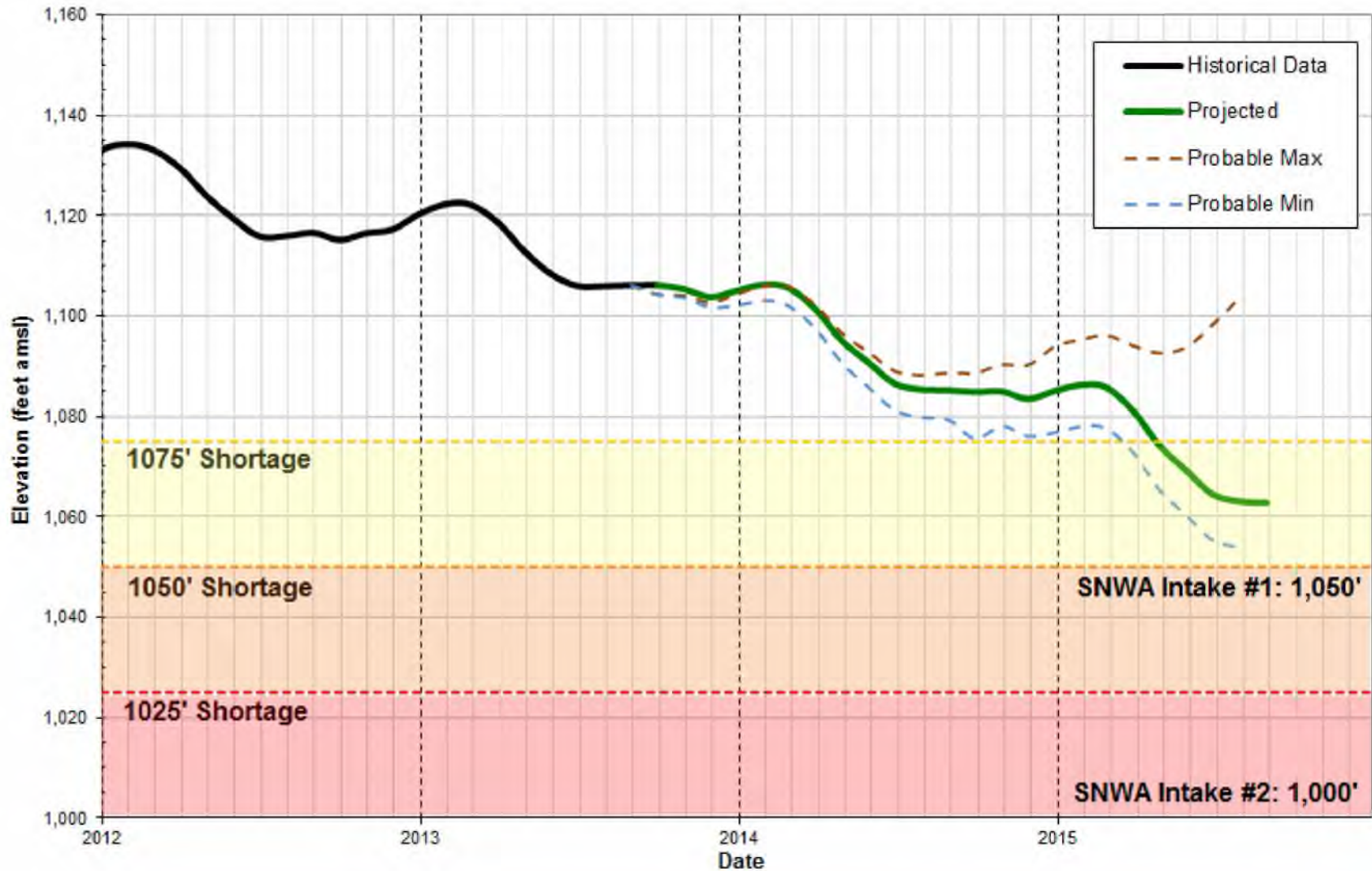
Lake Mead End of Month Elevation Projections

(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)



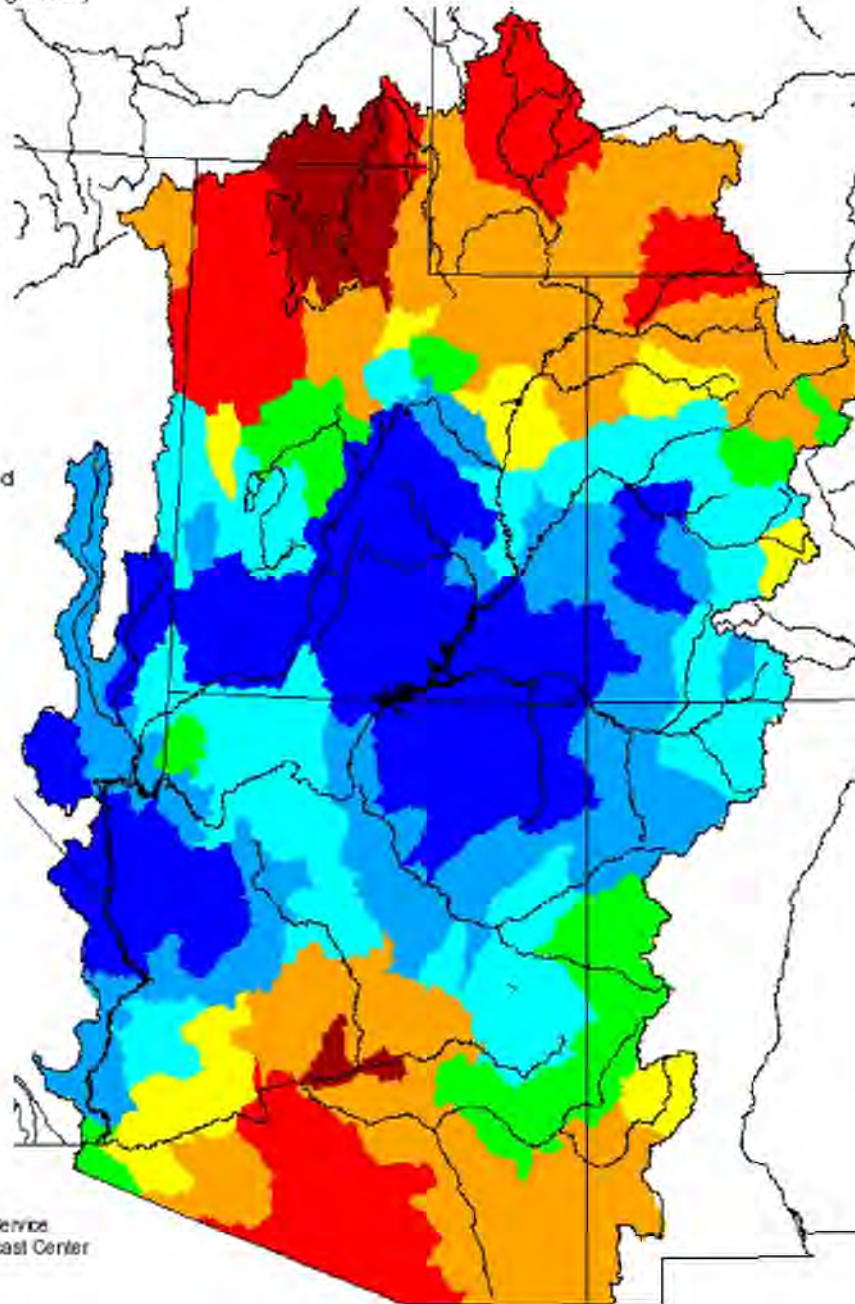
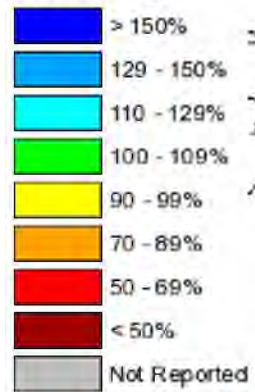
Drought and Precipitation



Monthly Precipitation for August 2013

(Averaged by Hydrologic Unit)

% Average

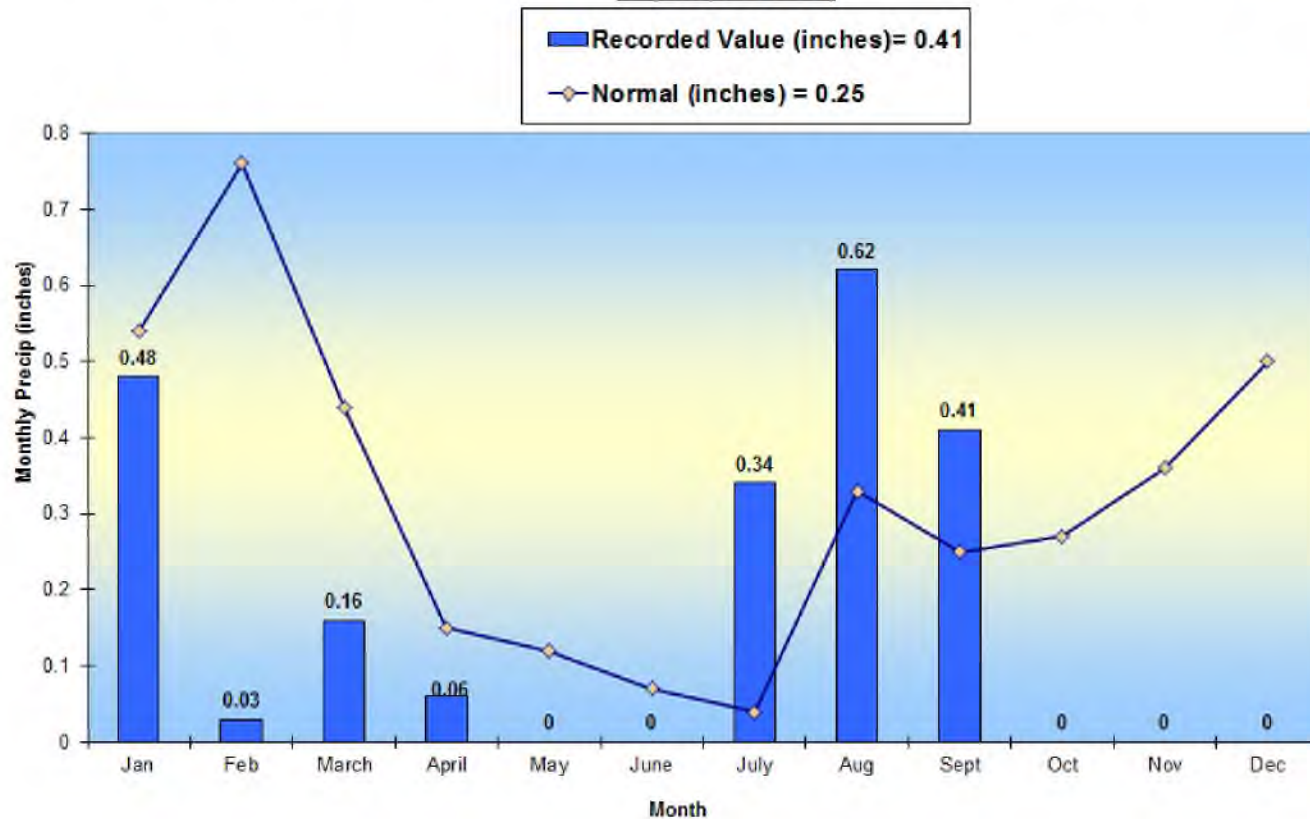


Prepared by
NOAA, National Weather Service
Colorado Basin River Forecast Center
Salt Lake City, Utah
www.cbafc.noaa.gov

Record of Precipitation, Las Vegas, NV

As of September 30, 2013

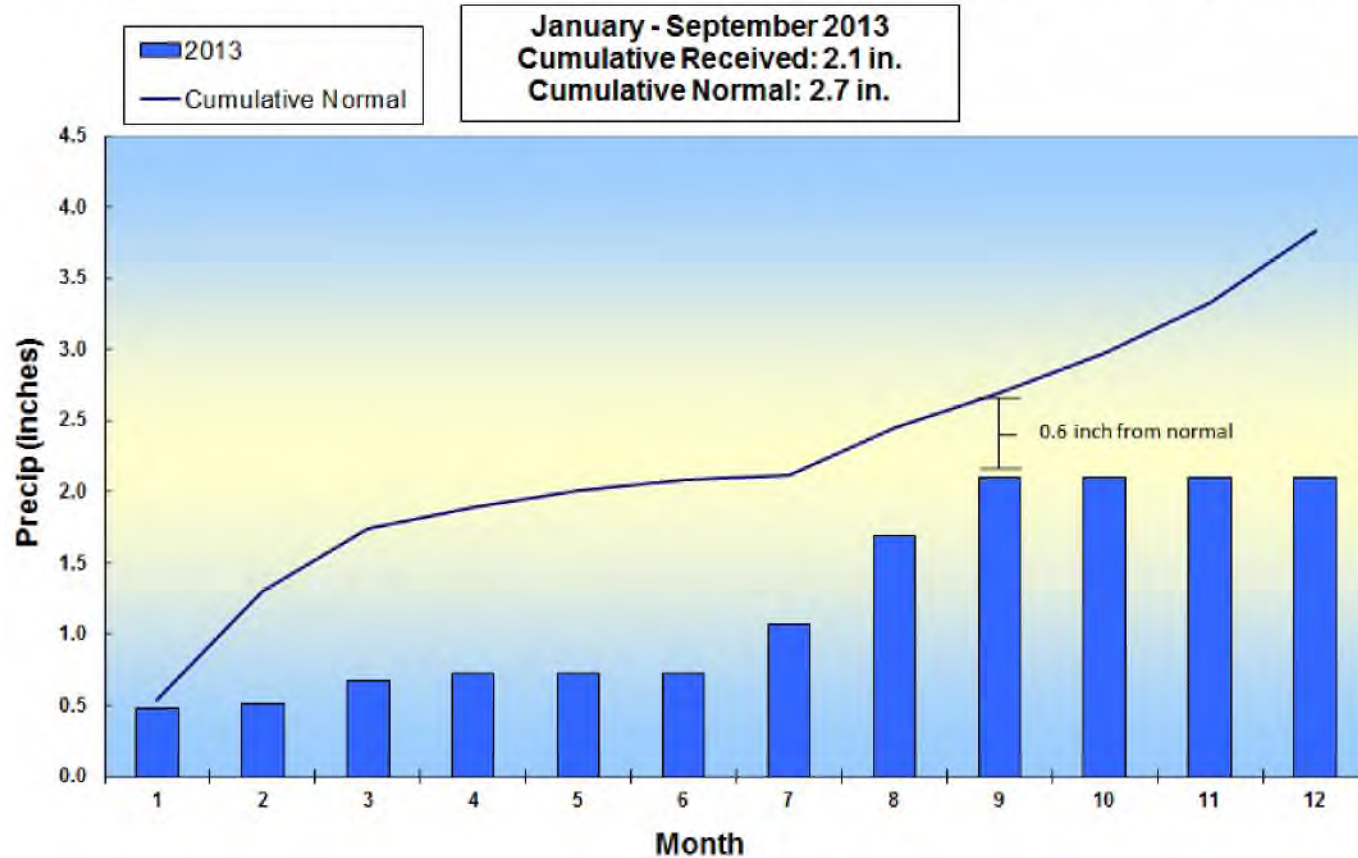
Record of Precipitation at McCarran International Airport, Las Vegas, NV
September 2013



Record of Precipitation, Las Vegas, NV

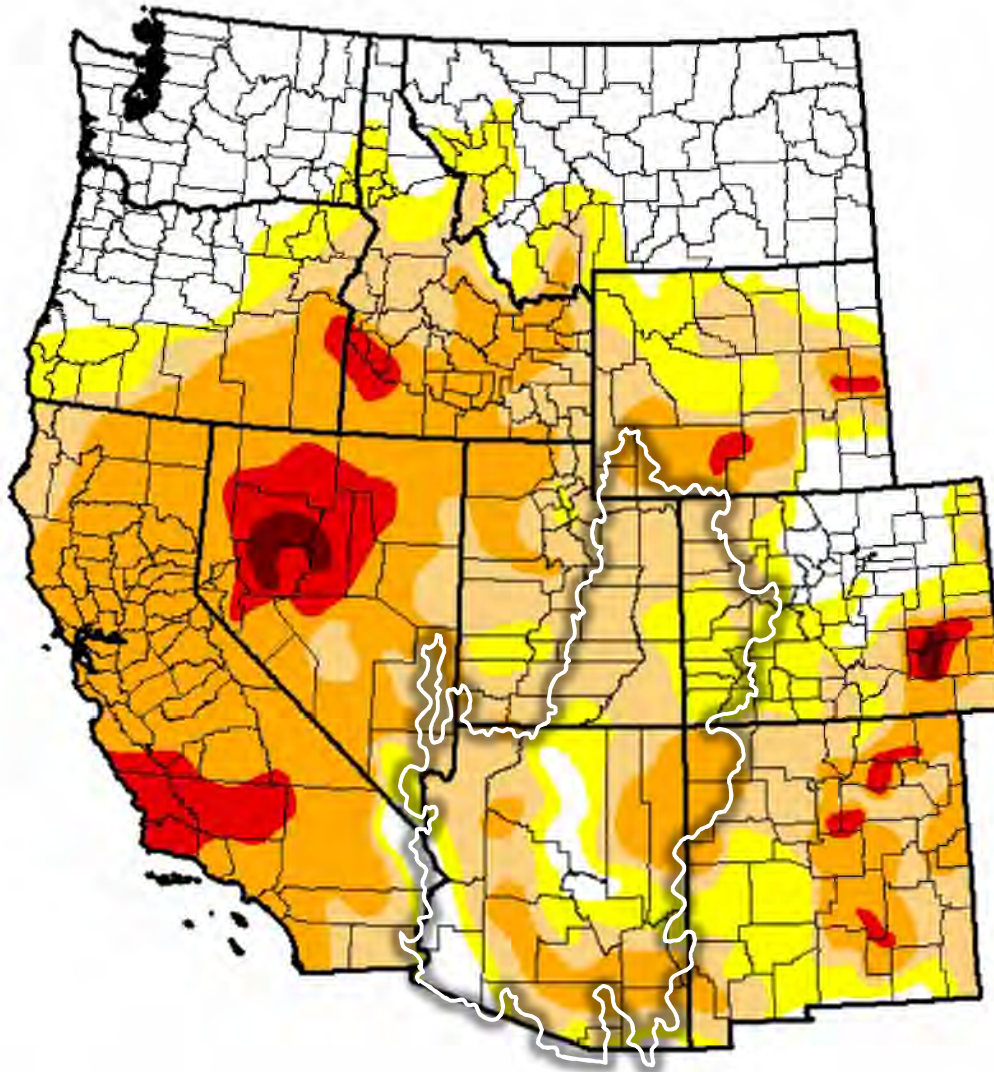
As of September 30, 2013

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/NCEP/CPC



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

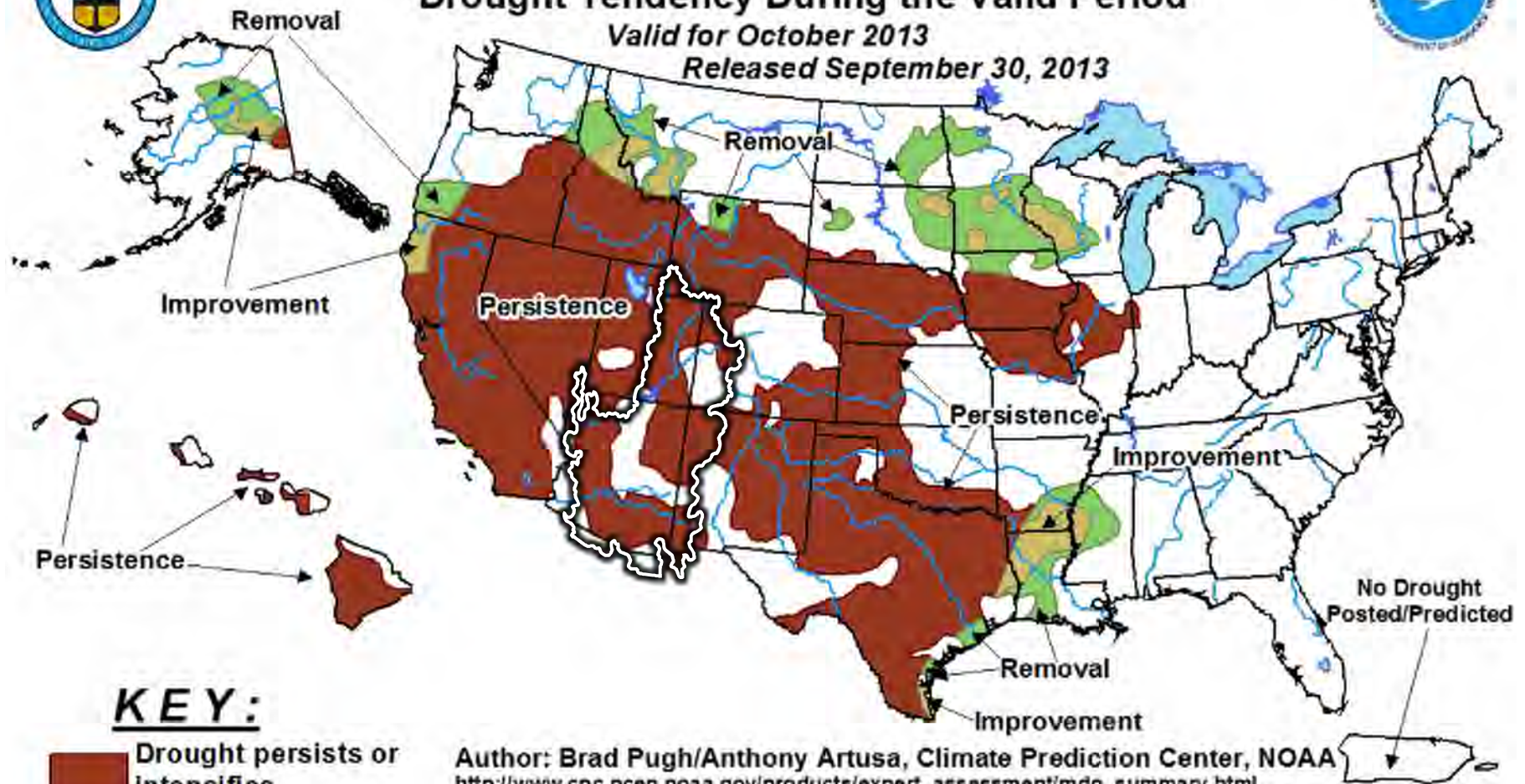


U.S. Monthly Drought Outlook





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

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% |



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