

Colorado River Commission of Nevada

Natural Resources Group Hydrologic Update December 10, 2013



Unregulated Inflow



Unregulated Inflow Into Lake Powell

As of December 2, 2013

	MAF*	% Avg**
• WY 2013 (observed):	5.12	47%
• April-July 2013 (observed):	2.56	36%
• Nov (observed):	0.38	79%
• Dec (projected):	0.30	83%

*MAF=Million Acre-Feet

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



Storage Conditions

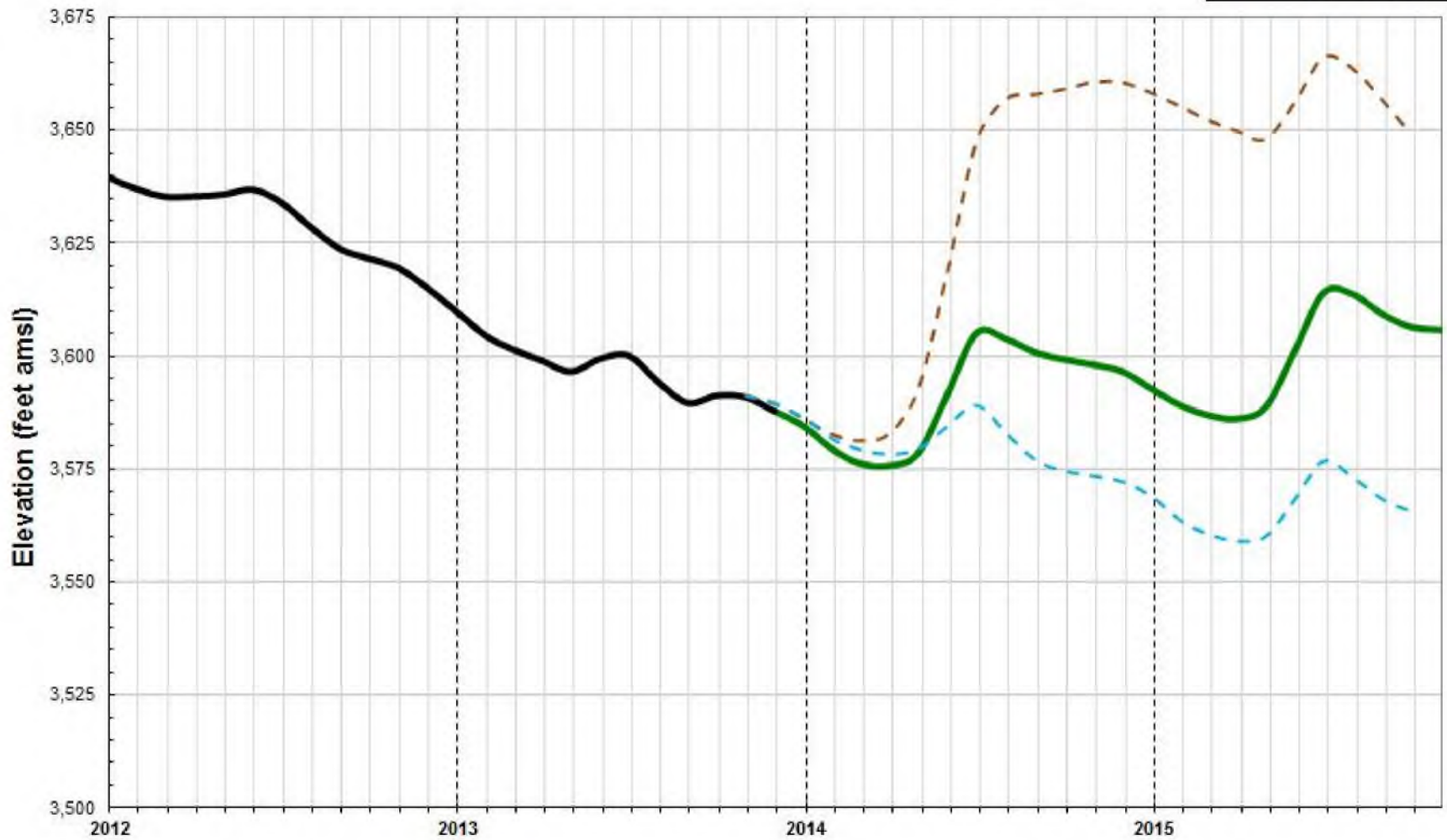
As of December 2, 2013

		<u>Percent of Capacity</u>	<u>Δ from last year</u>
Lake Mead elev.	1,106.40 ft	47%	↓ 11.02 ft
Lake Powell elev.	3,587.81 ft	44%	↓ 26.93 ft
Total System Storage (12/2013)	29.56 maf	50%	↓ 3.76 maf
Total System Storage (12/2012)	33.32 maf	56%	

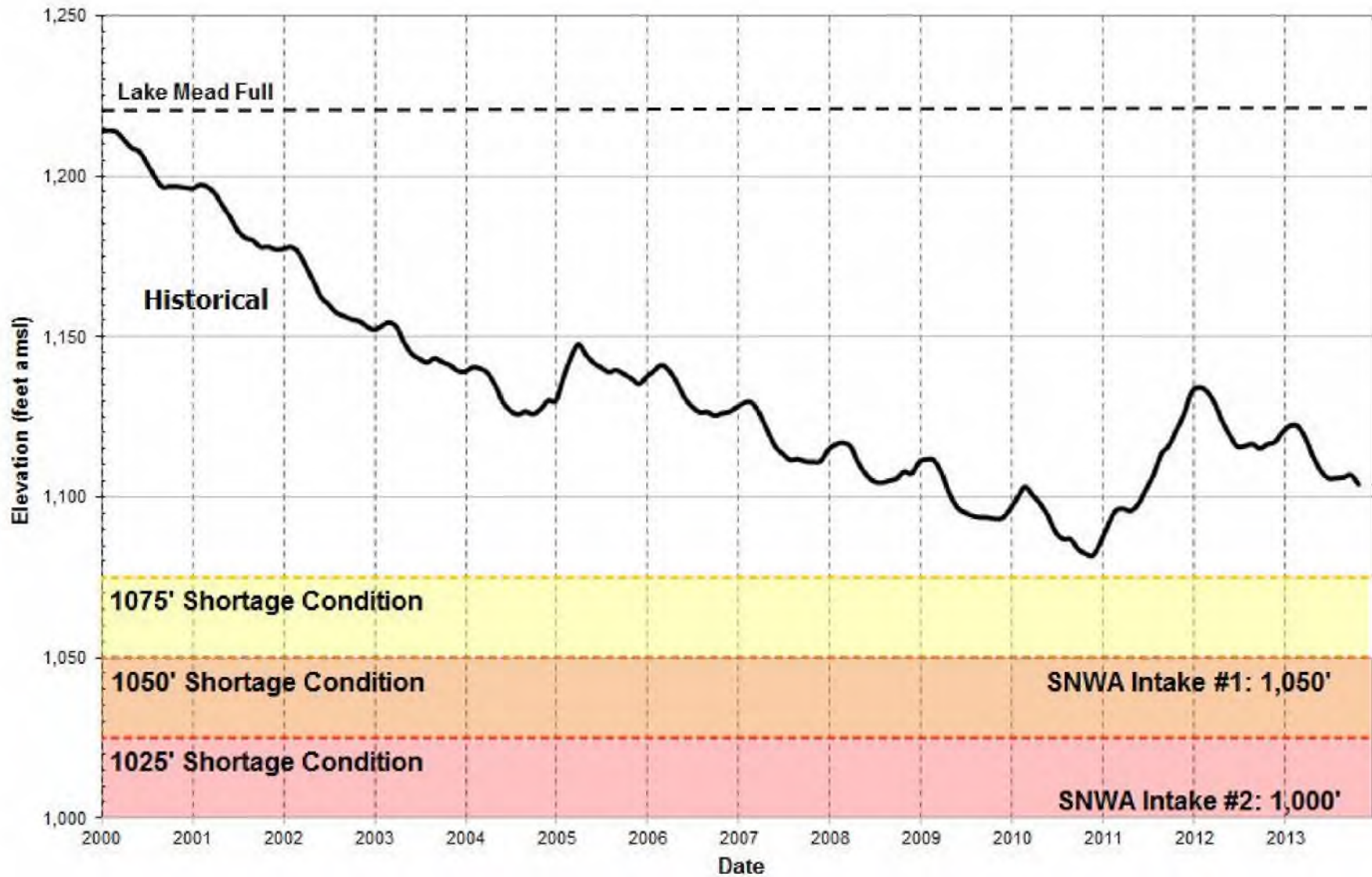


Lake Powell End of Month Elevations

(based on NOV 2013 24-month Study)

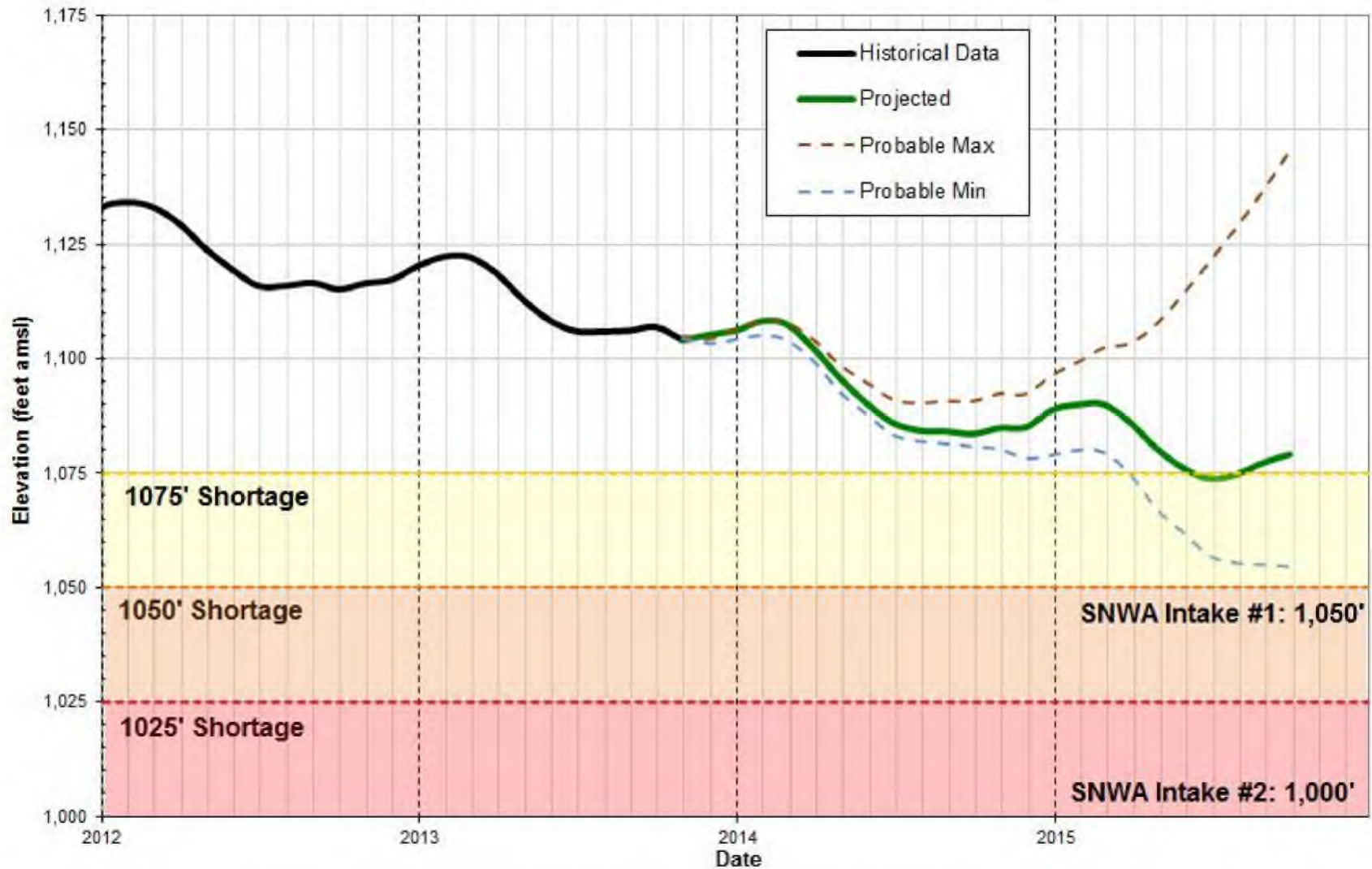


Lake Mead Elevation 2000-2014



Lake Mead End of Month Elevation Projections

(based on the NOV 2013 24-month study)



Drought and Precipitation



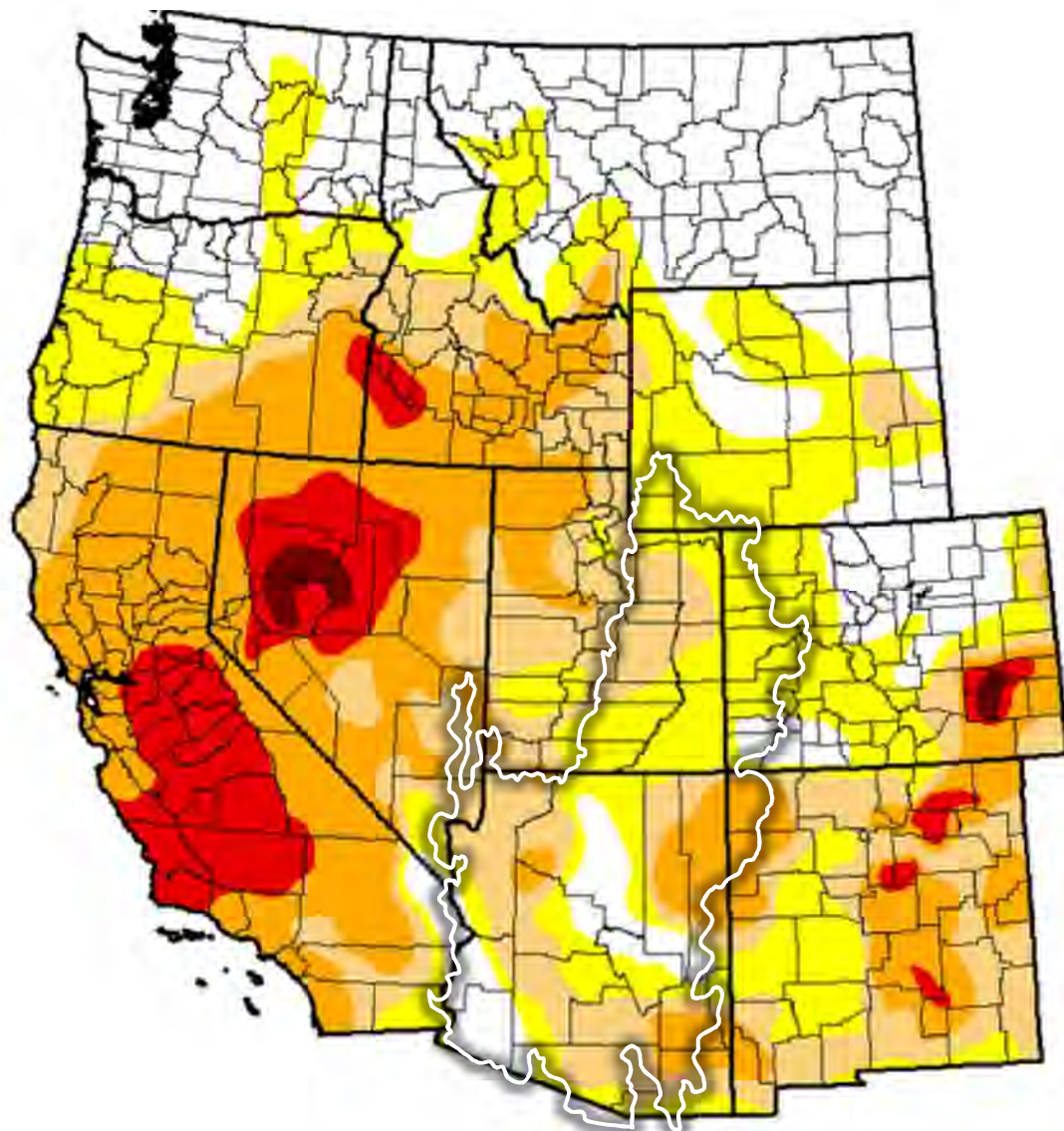
U.S. Drought Monitor

West






December 3, 2013

(Released Thursday December 5, 2013)

Valid 7 a.m. Eastern



Intensity:

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

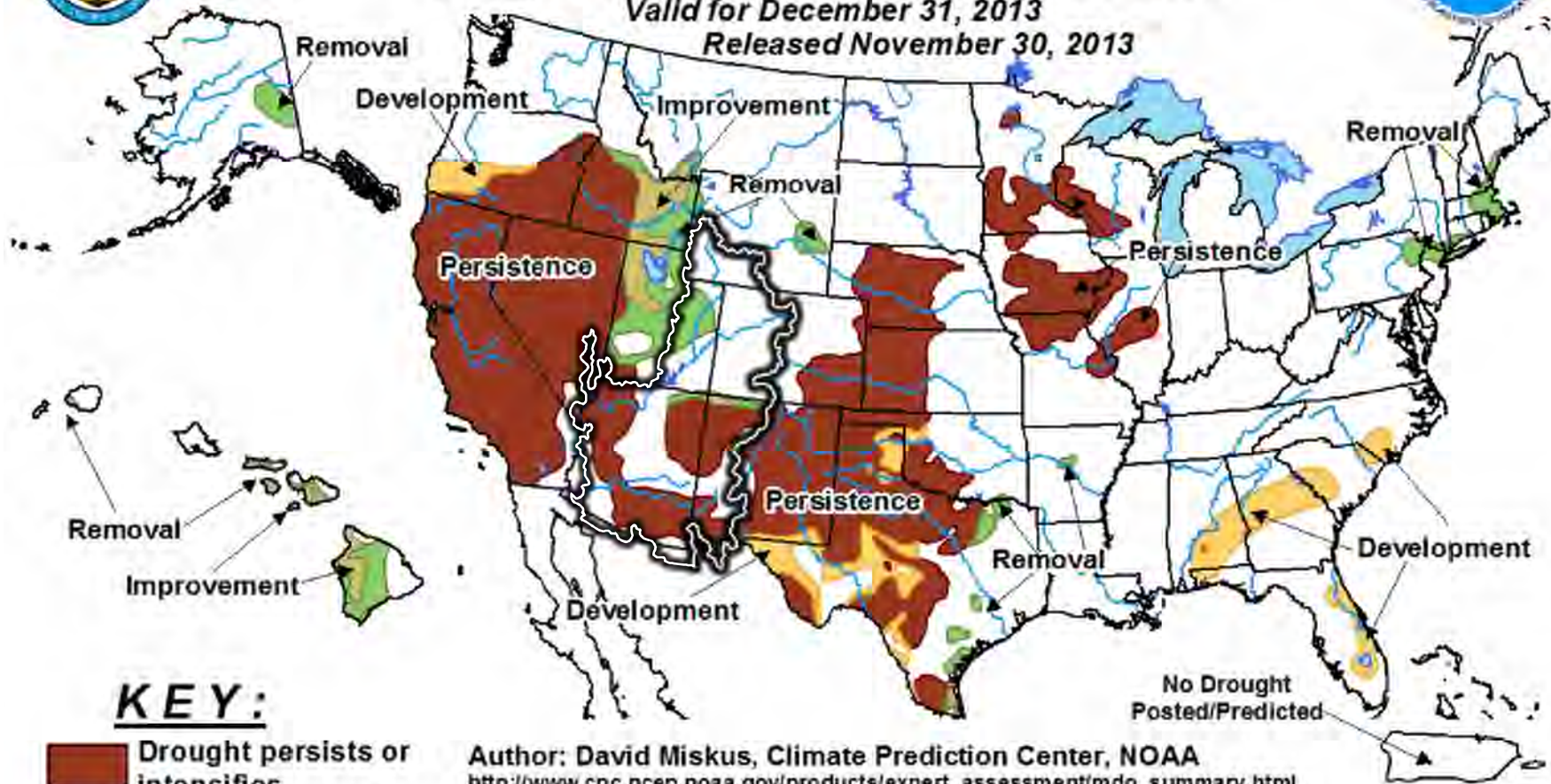


U.S. Monthly Drought Outlook





Drought Tendency During the Valid Period



Valid for December 31, 2013
Released November 30, 2013



KEY:

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

Author: David Miskus, 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)

Precipitation – Colorado River Basin

As of December 2, 2013

Upper Colorado Basin

WY Precip to Date

101% (5.7")

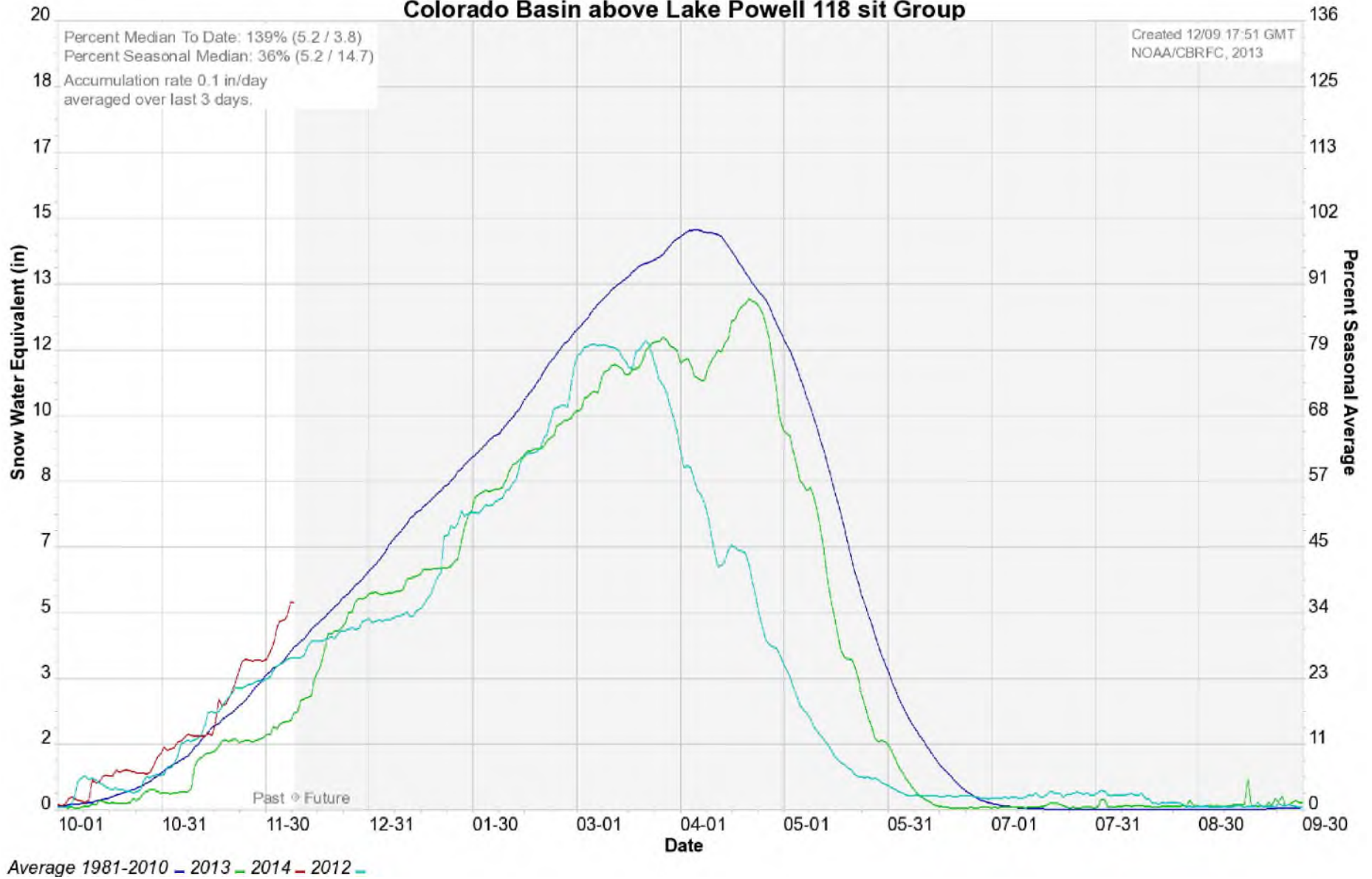
Current Basin Snowpack

115% (3.9")

(Avg 1981-2010)



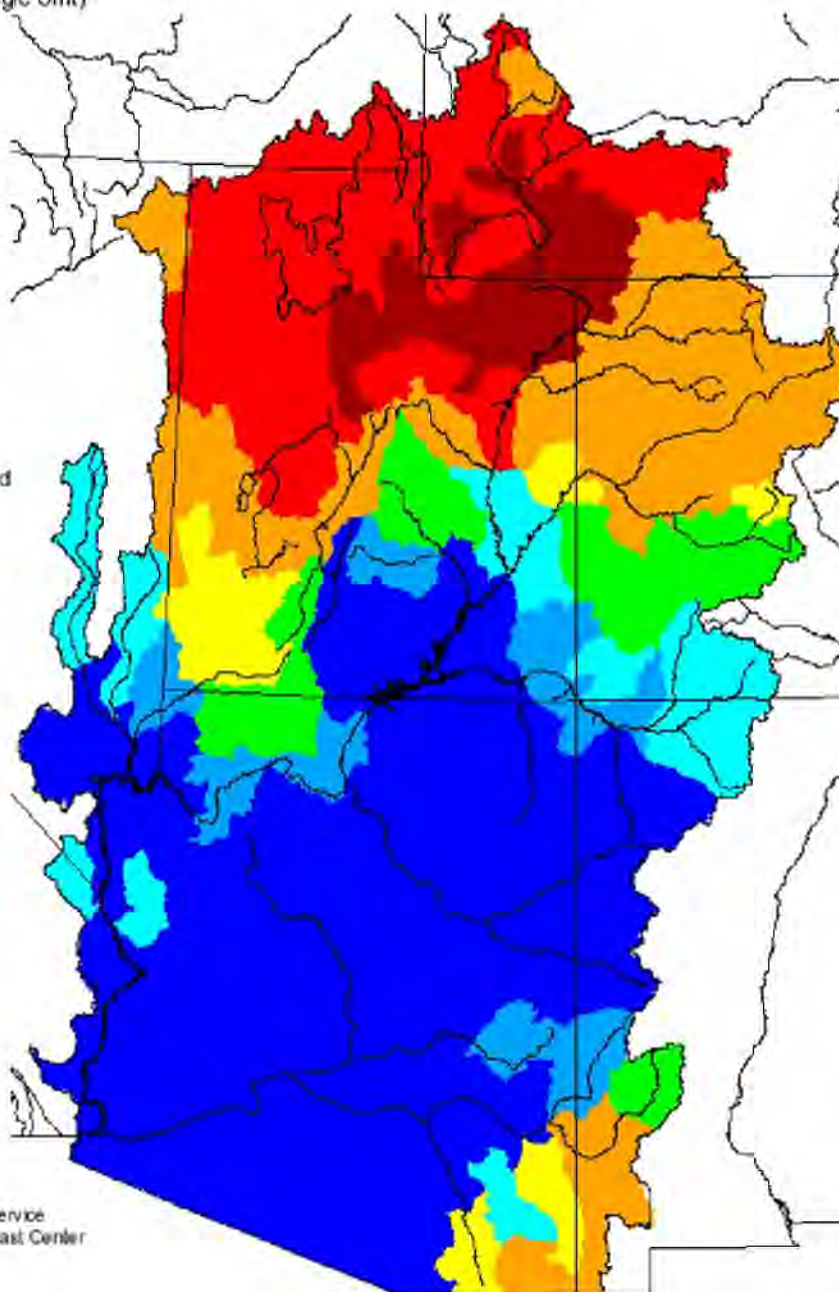
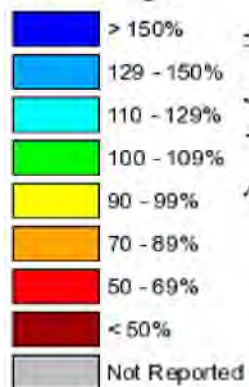
Colorado Basin River Forecast Center Colorado Basin above Lake Powell 118 sit Group



Monthly Precipitation for November 2013

(Averaged by Hydrologic Unit)

% Average

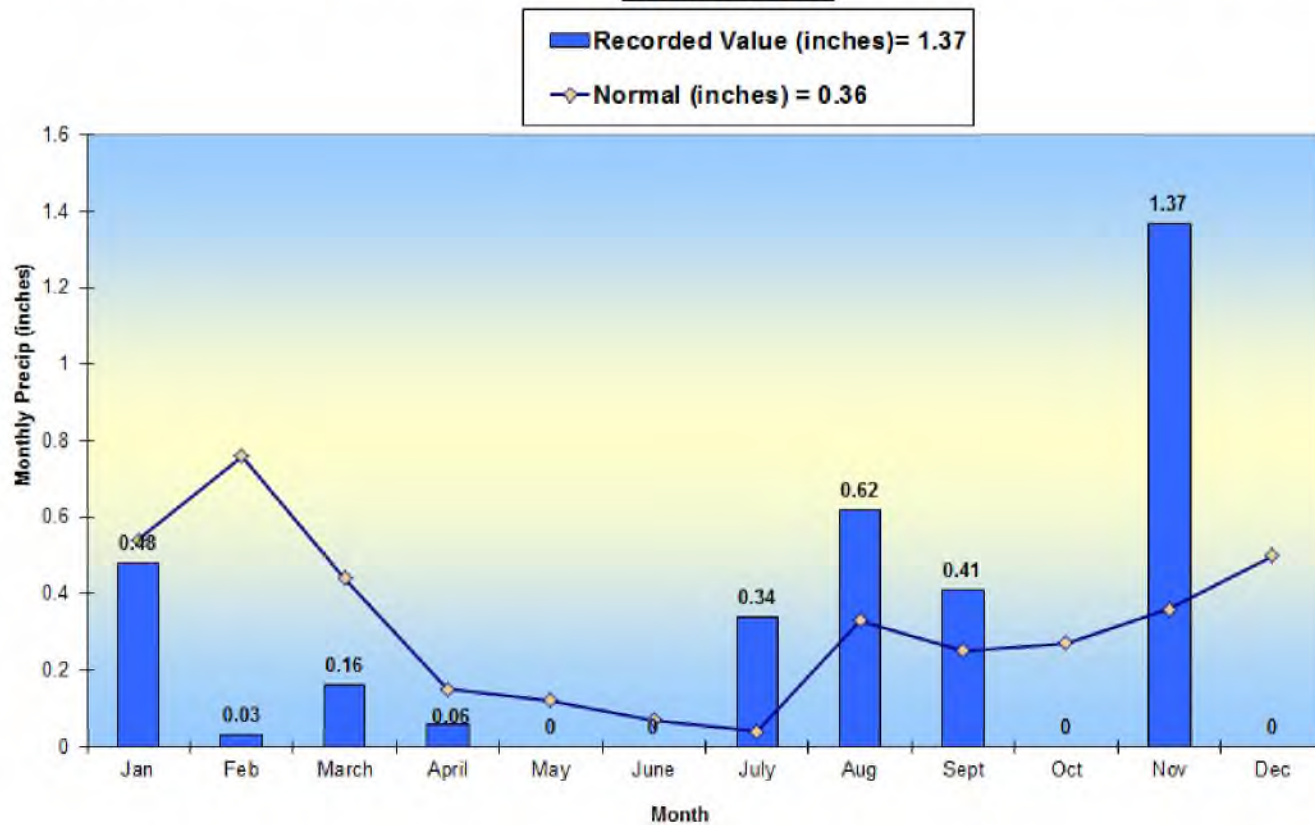


Prepared by
NOAA, National Weather Service
Colorado Basin River Forecast Center
Salt Lake City, Utah
www.cbrfc.noaa.gov

Record of Precipitation, Las Vegas, NV

As of November 30, 2013

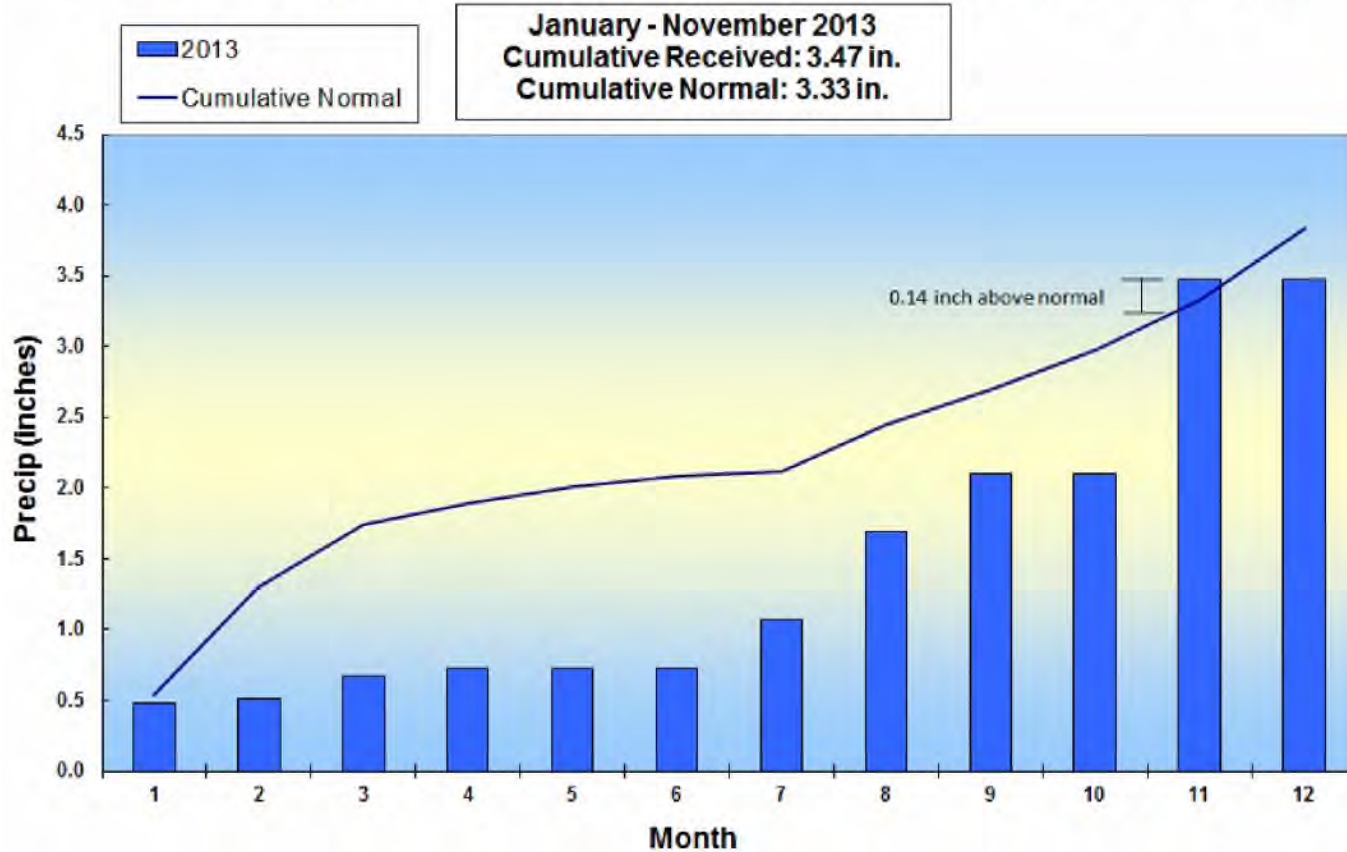
Record of Precipitation at McCarran International Airport, Las Vegas, NV
November 2013



Record of Precipitation, Las Vegas, NV

As of November 30, 2013

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



Water Use in Southern Nevada



Water Use in Southern Nevada

January - October

2013*:	Consumptive Use =	203,024
	<u>CR Water Banked =</u>	<u>0</u>
		203,024
2012:	Consumptive Use =	210,523
	<u>CR Water Banked =</u>	<u>0</u>
		210,523

Difference = - 7,499 af

*Subject to final accounting.



Water Use Comparison

January - October

Water Use	2012 Acre Feet	2013 Acre Feet	Difference	% Change
Las Vegas Wash Gauged Flow	179,560	177,920	-1,640	-0.9%
Diversions	379,456	378,503	-953	-0.3%
Return Flow Credit	168,933	175,479	6,546	3.9%
Consumptive Use	210,523	203,024	-7,499	-3.6%

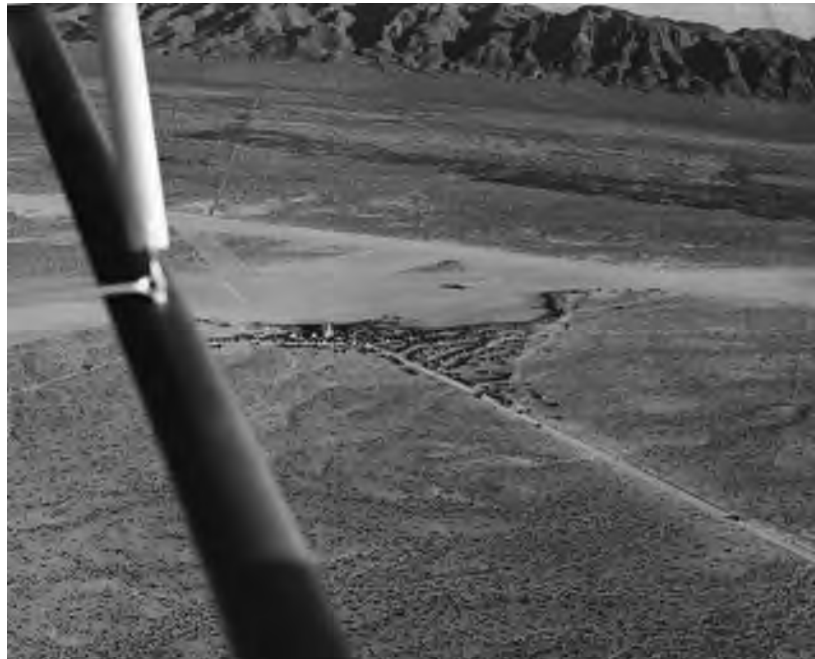


Nellis History

- The 1st Las Vegas airport was Anderson Field (1920), on SE corner of what is now Sahara & Paradise. It was renamed Rockwell Field in 1928 (close to current Nellis location).
- A new airfield opened in 1929, initially called Las Vegas Nevada Airport.
- It was purchased by Western Air Express in 1932. It was the primary passenger/mail stop on the LA - Salt Lake City route and helped grow the tourist industry.



Western Air Express Mail Plane



Western Field Nov 1940

- The City of Las Vegas purchased the field on Jan 2, 1941 for \$10.00 and the US Army leased the field on Jan 5, 1941. It was dual use - the civilian side was McCarran Airport. Military construction started March 1941 and Las Vegas Army Air Field was dedicated Oct 1941.
- The base portion was closed, except for a small force by early Feb 1947. McCarran Airport remained open for business

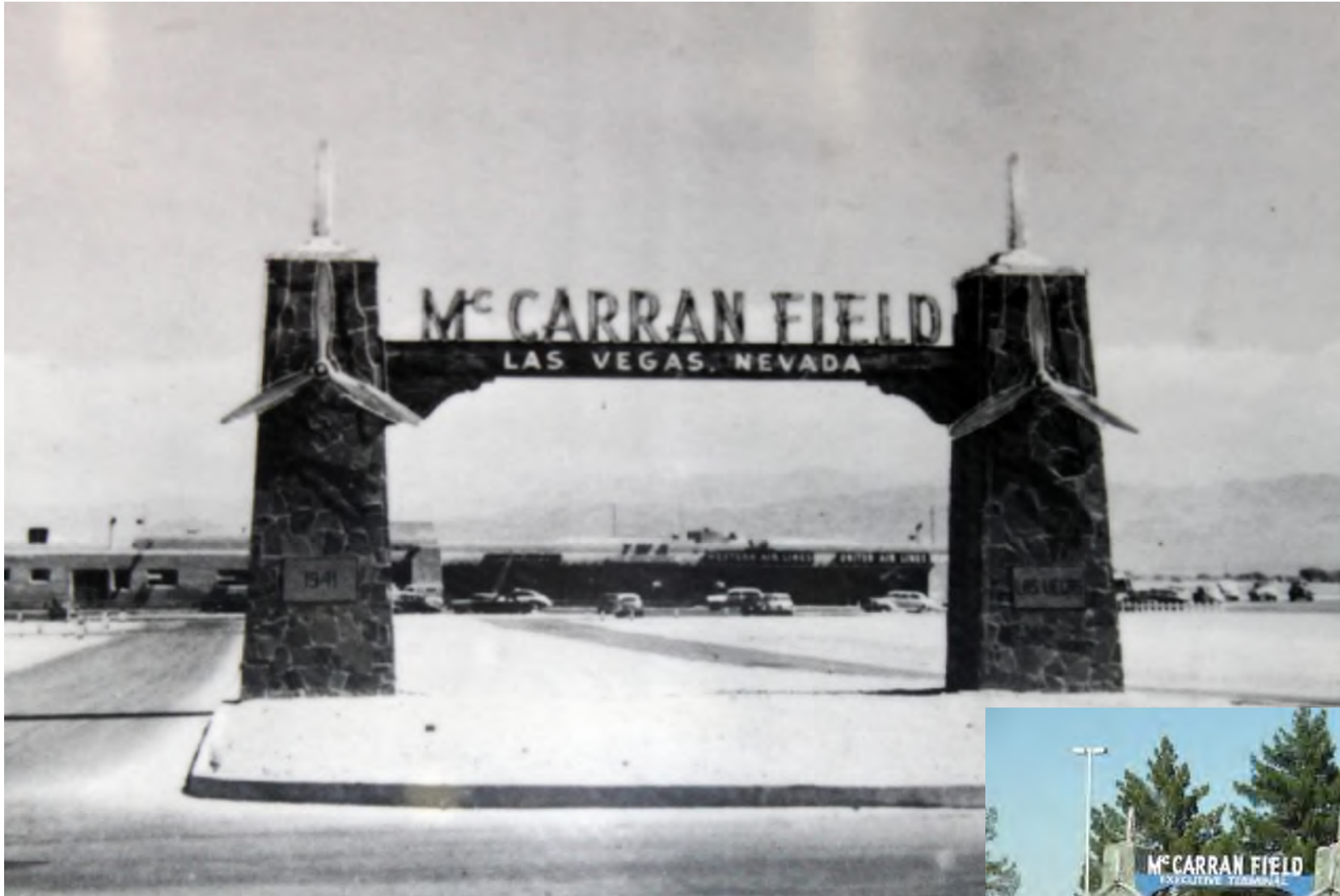


Las Vegas Oct 42

- In 1947, Clark County started purchase discussions with the owner of Alamo Field south of town and it was officially dedicated as McCarran Field (now McCarran International) on Dec 19, 1948. Military activity had been ramping up and the Las Vegas Air Force Base officially opened January 4.
- The stone pillars were moved to the first terminal which was on Las Vegas Blvd, just south of the current "Welcome to Las Vegas" sign. The pillars are still there but that is now the private aviation entrance for McCarran.



Senator Pat McCarran at McCarran Gate in 1942



McCarran Gate off Las Vegas Blvd



Colorado River Commission of Nevada

Natural Resources Group Hydrologic Update December 10, 2013

