

# RECLAMATION

*Managing Water in the West*

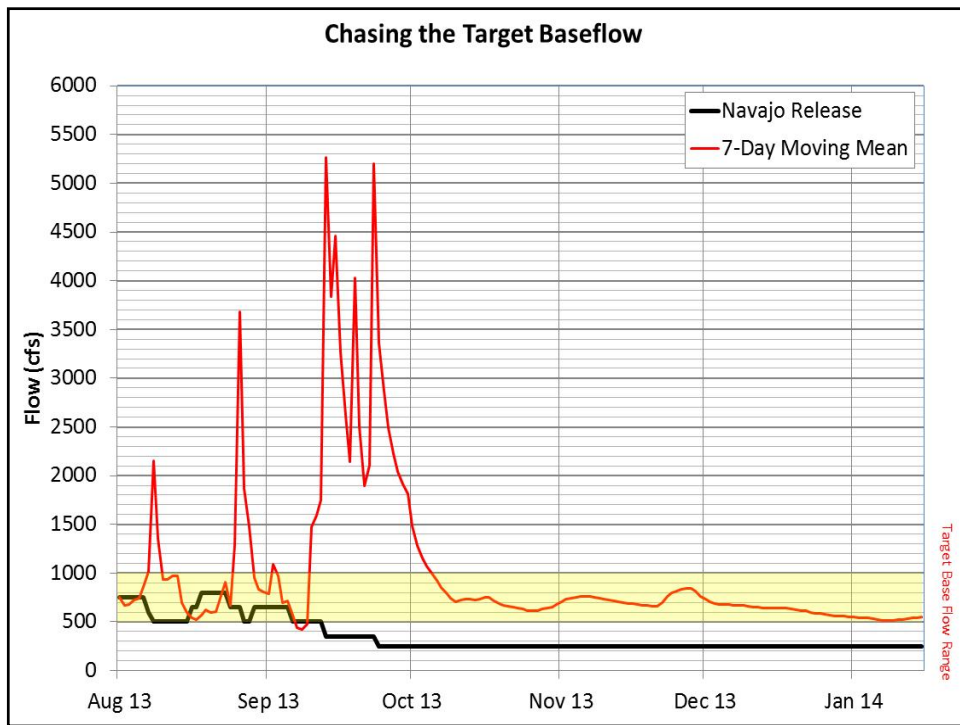
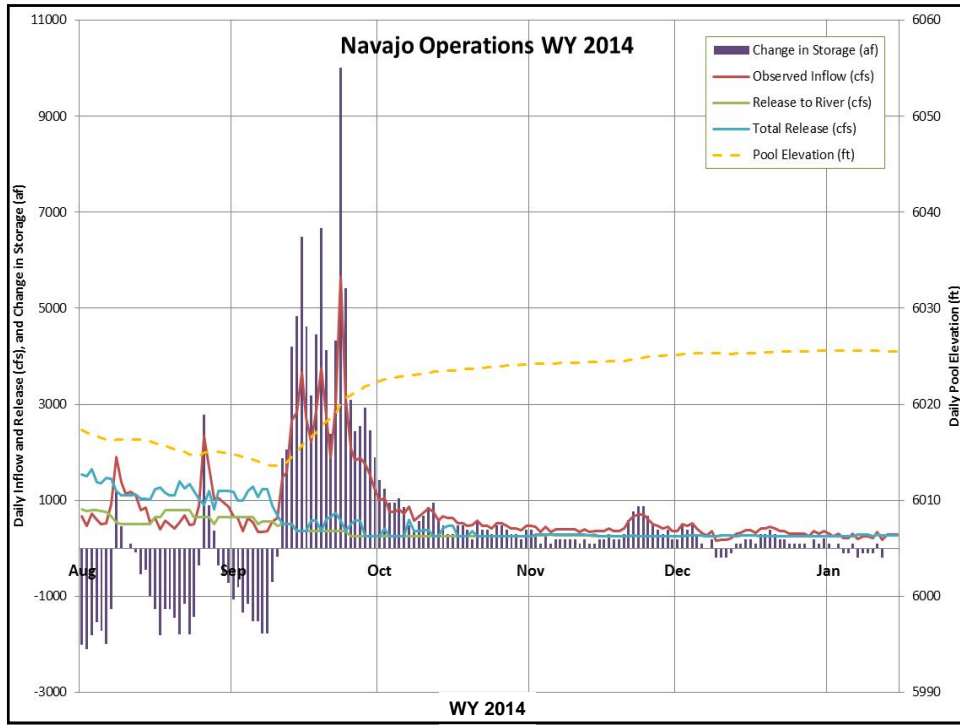


U.S. Department of the Interior  
Bureau of Reclamation

## **AGENDA**

- Review of operations since last meeting (Aug 2013)
- Current soil and snowpack conditions
- Current reservoir status
- Water Year 2014 Forecasts and Proposed Operations
- Navajo Dam Maintenance Activities
- Nearby Projects Update
- Reports from Other Agencies

Bureau of Reclamation: Navajo Operations  
Coordination Meeting

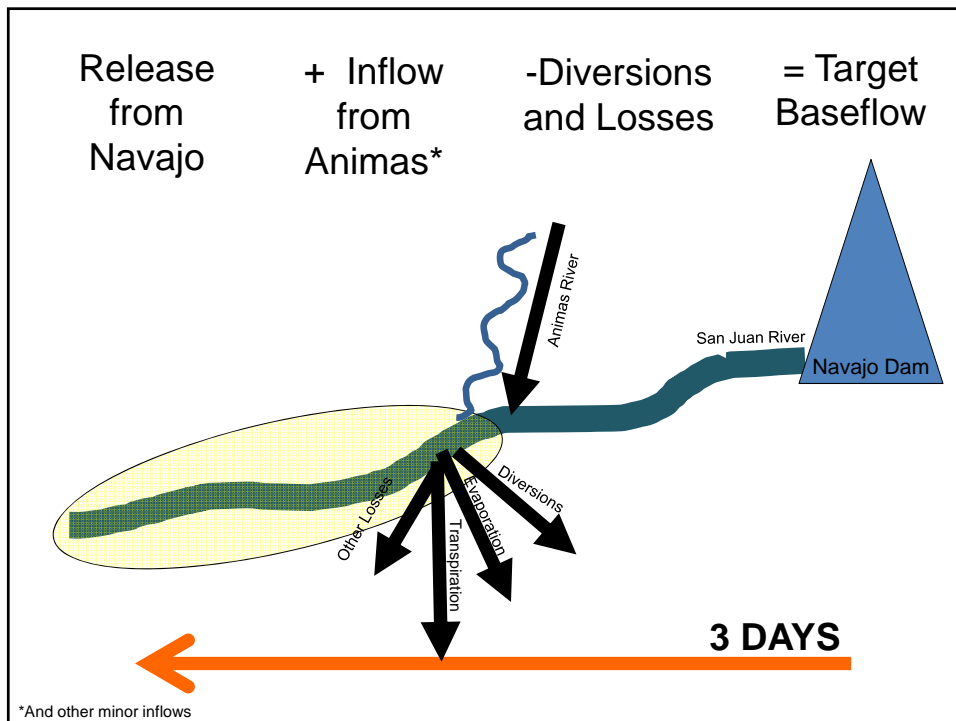


## Release vs. Target Baseflow

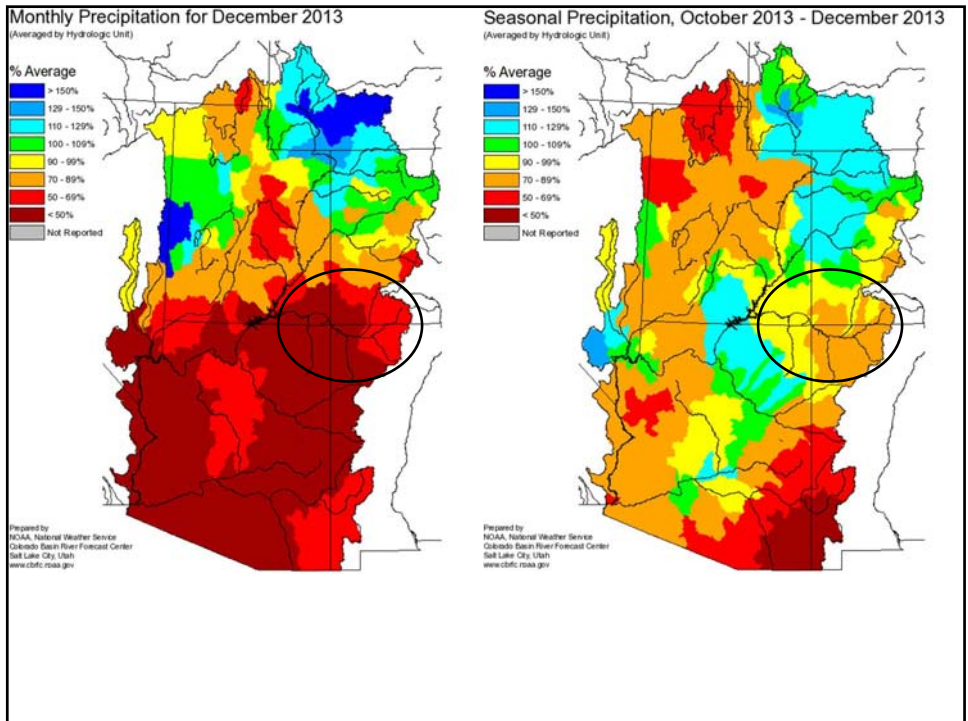
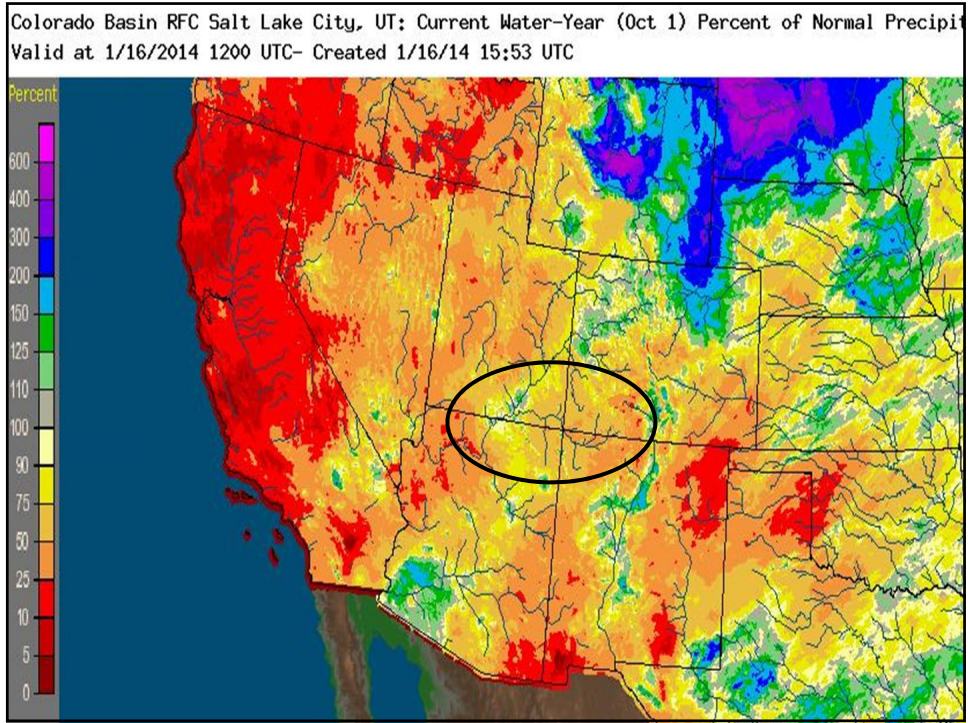
Release is directly from the outlet works of the dam.

Baseflow is the weekly average flow of the San Juan River from Farmington to Lake Powell. It includes the release from Navajo, as well as the inflow from the Animas.

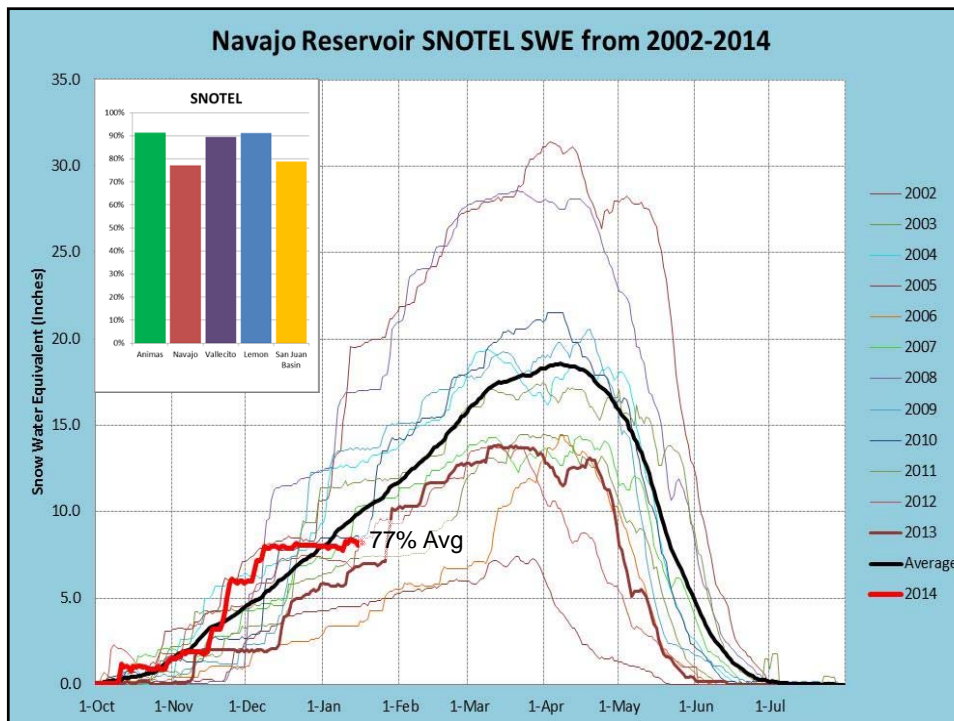
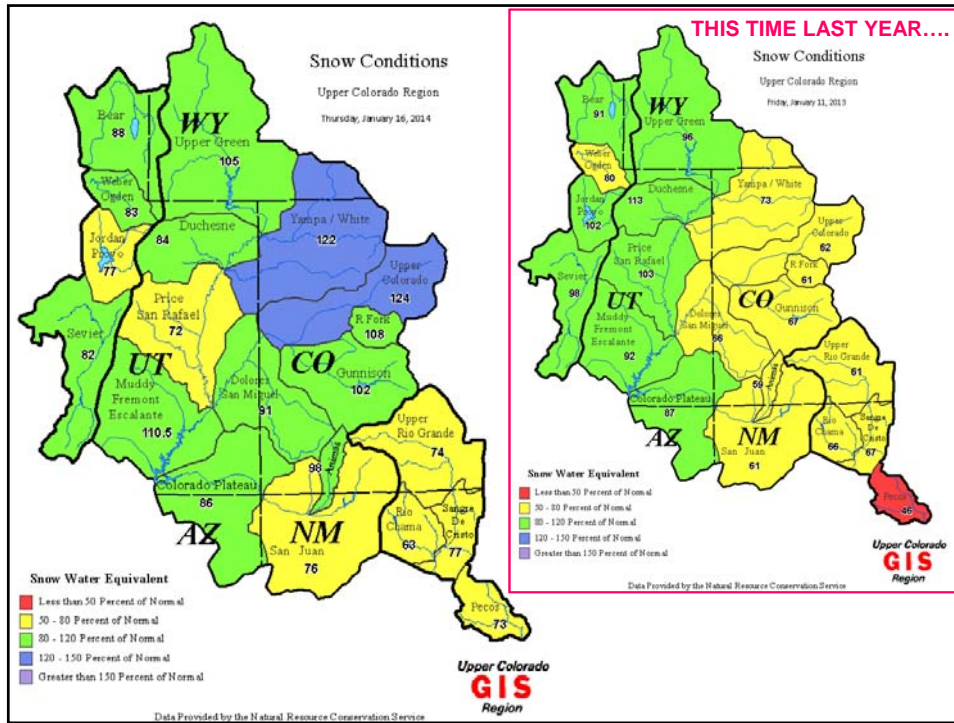
Our Target Baseflow is 500 -1000 cfs (SJRIP Flow Recommendations, 1999)

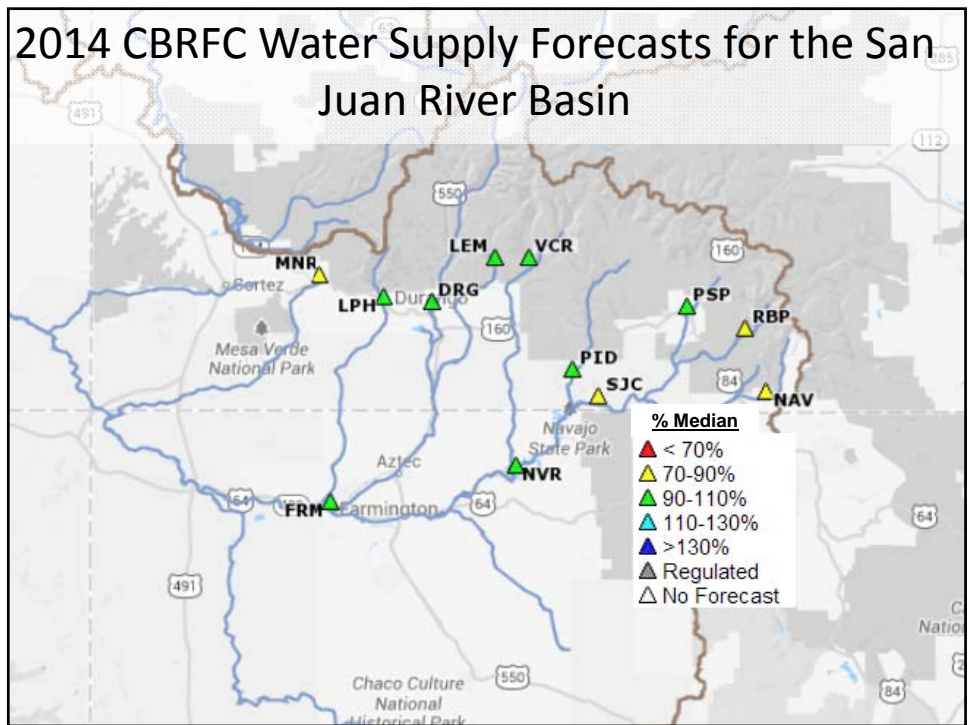
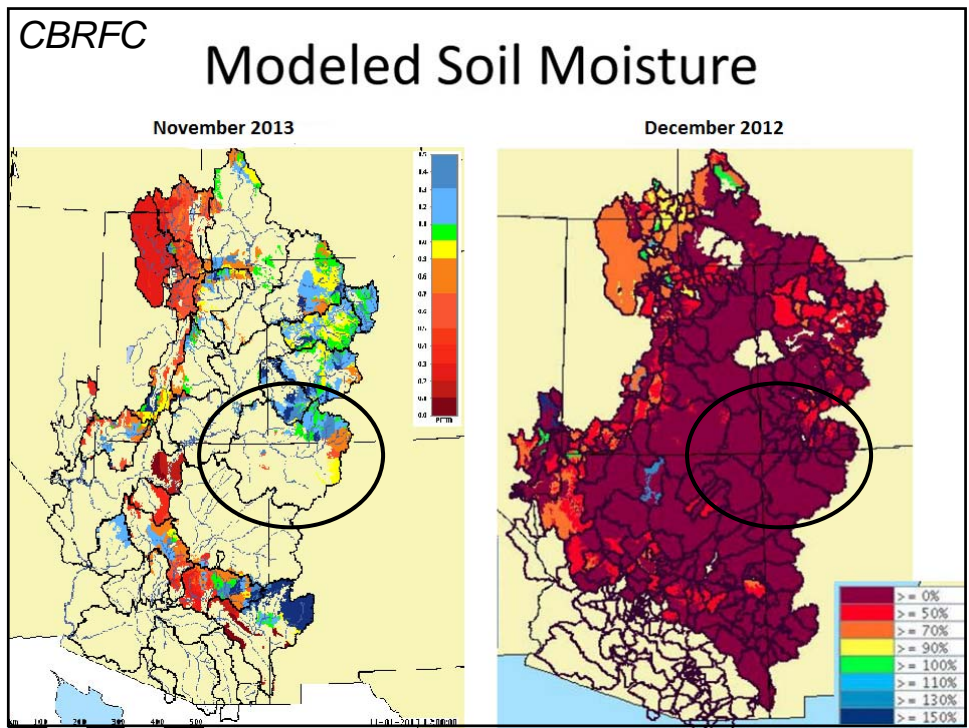


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 Coordination Meeting



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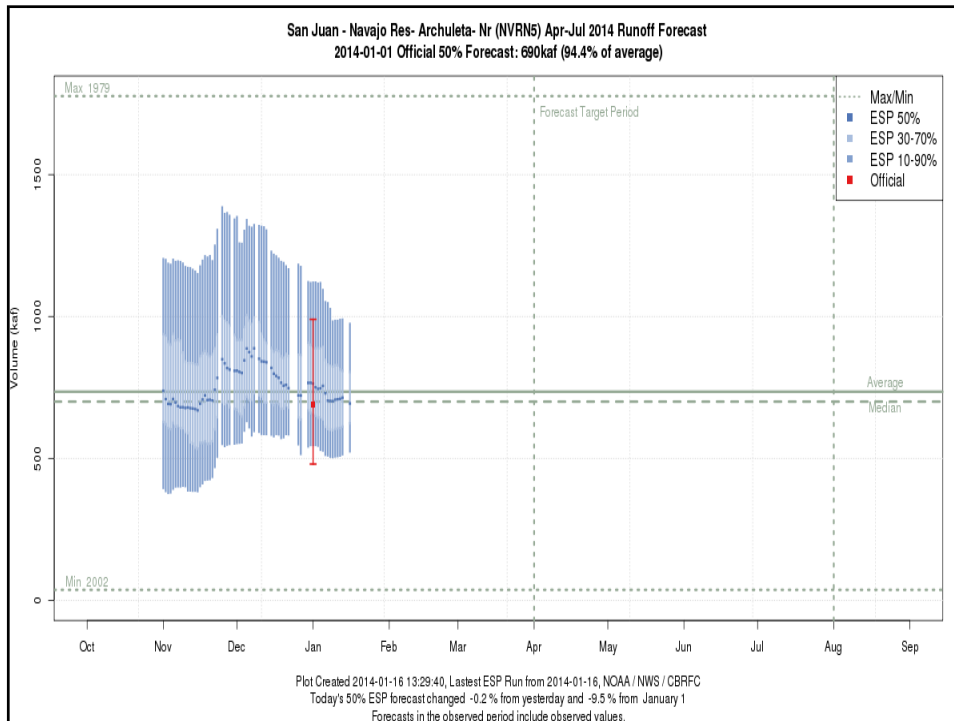


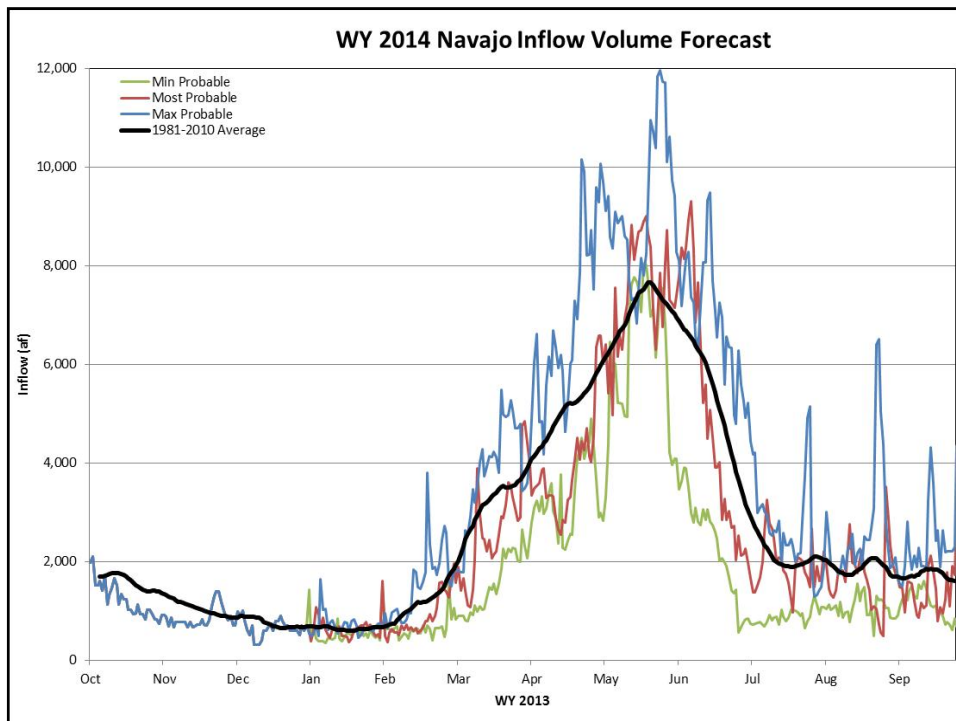
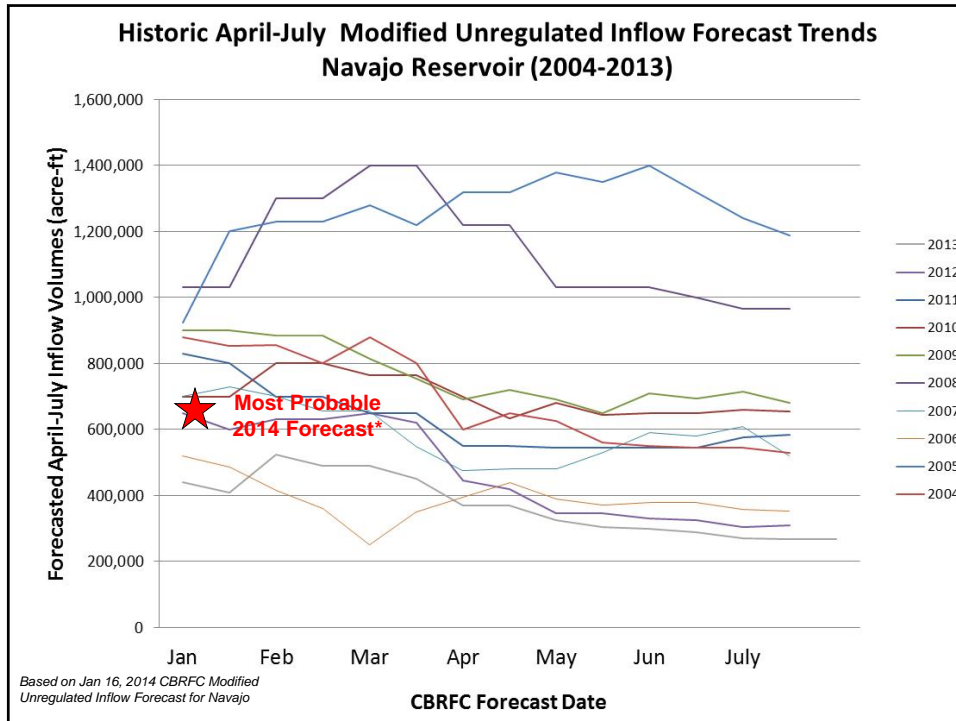


## 2014 CBRFC Forecasts

Issued Jan 16, 2014

Navajo Reservoir	Modified Unregulated Inflow Forecast (acre-ft) (percent of average)			
	Jan	Feb	Mar	A-J
<b>Min</b>	20,000 91%	20,000 66%	47,000 51%	<b>440,000</b> 60%
<b>Most</b>	<b>23,000</b> 105%	<b>26,000</b> 86%	<b>80,000</b> 87%	<b>650,000</b> 88%
<b>Max</b>	26,000 119%	47,000 155%	130,000 141%	<b>930,000</b> 126%







## El Niño/La Niña current status and forecast models

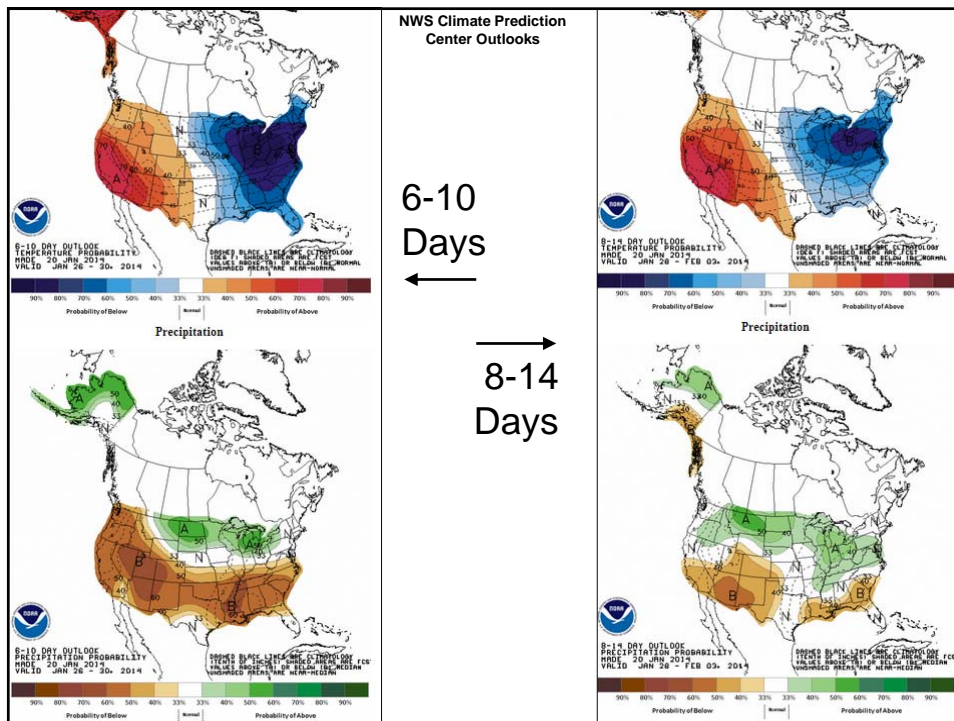


### Summary

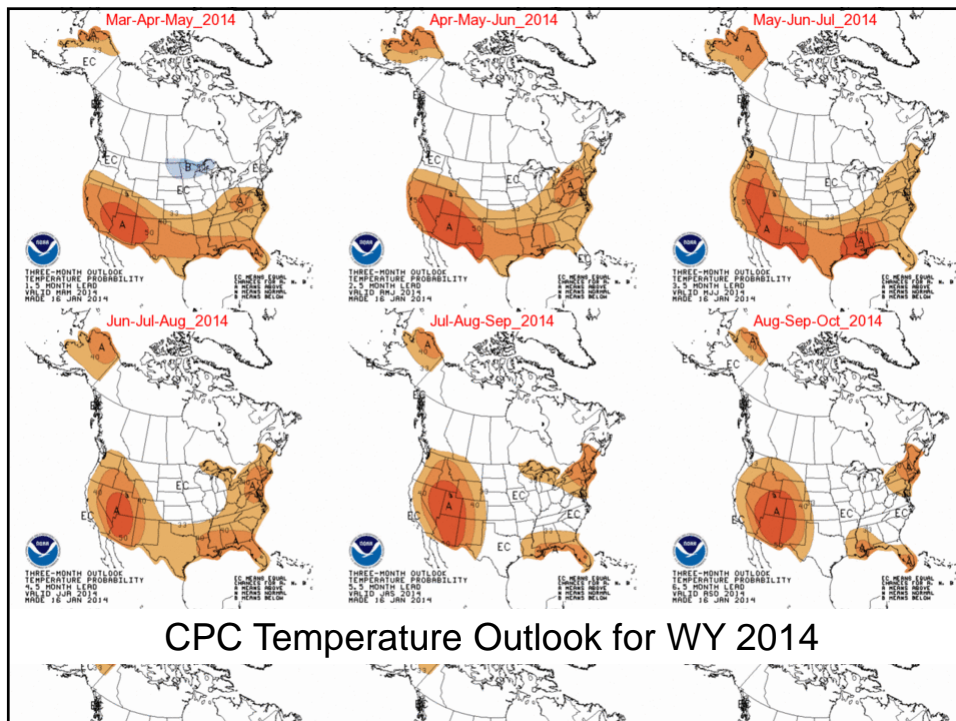
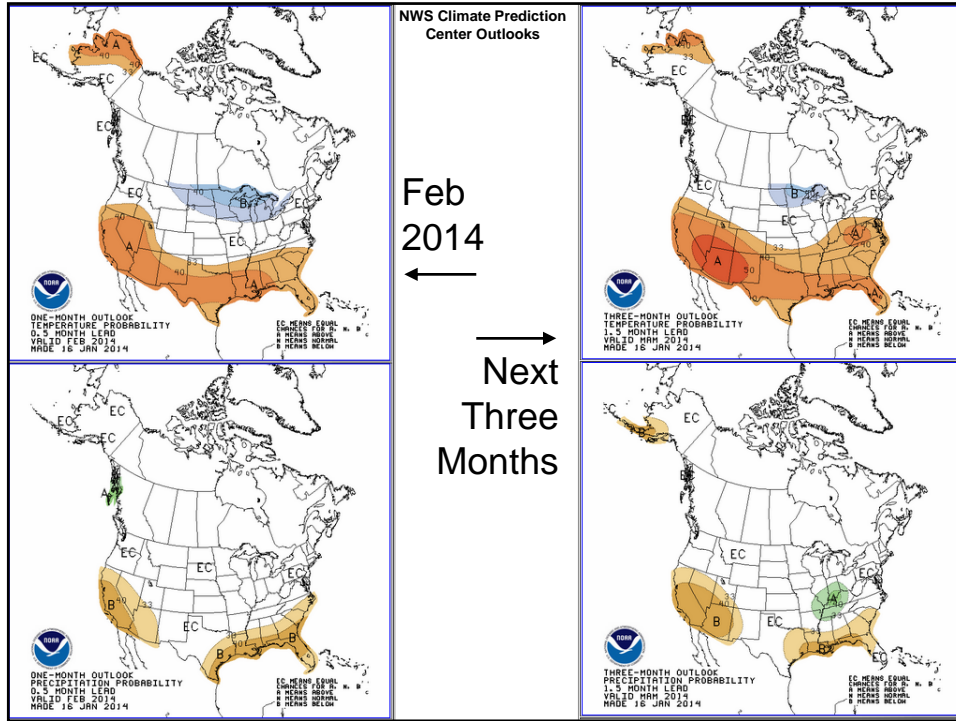
ENSO Alert System Status: Not Active

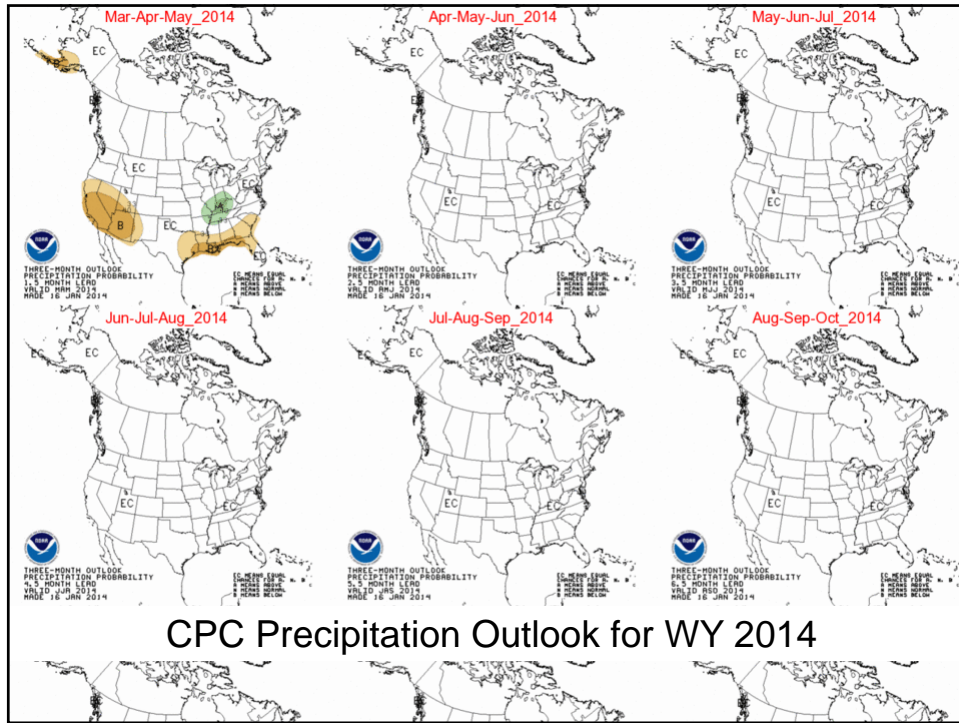
- ENSO-neutral conditions continue.\*
- Equatorial sea surface temperatures (SST) are near average across much of the Pacific Ocean.
- ENSO-neutral is expected to continue into the Northern Hemisphere summer 2014.\*

\* Note: These statements are updated once a month in association with the ENSO Diagnostics Discussion:  
[http://www.cpc.ncep.noaa.gov/products/analysis\\_monitoring/ens0\\_advisory](http://www.cpc.ncep.noaa.gov/products/analysis_monitoring/ens0_advisory)



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 Coordination Meeting





## Navajo Current Conditions

(as of 1/20/14)

Elevation = 6025.53 ft

Storage = 964,376 af (57% Full, 29% Active, 76% of Avg)

Inflow = 280 cfs

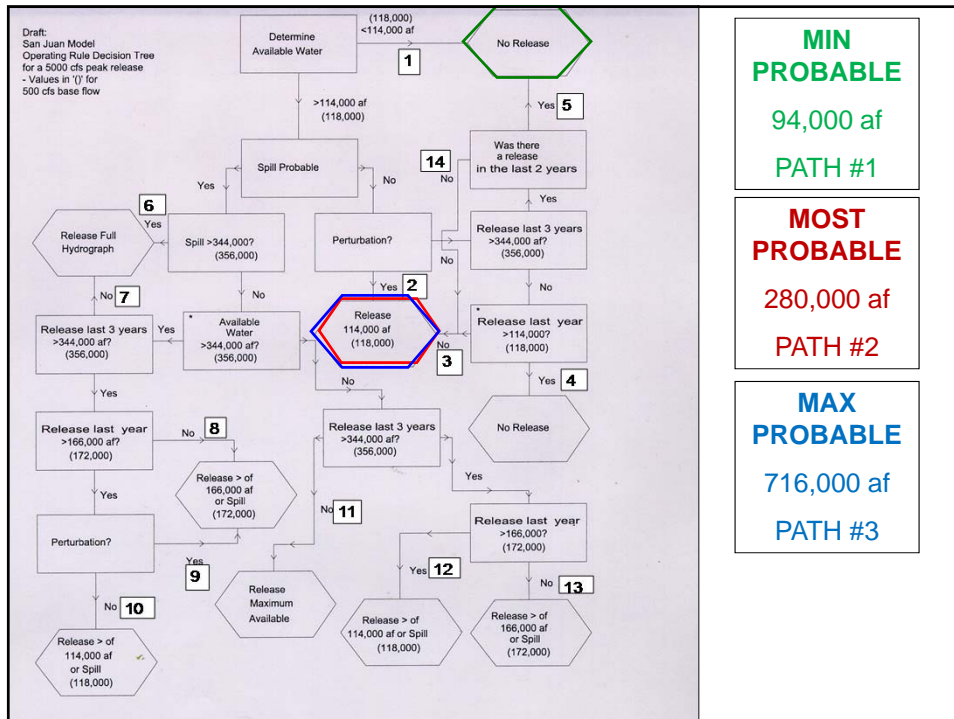
Release = 250 cfs

NIIP = 0 cfs

San Juan-Chama Diversion = 0 cfs

## WATER YEAR 2014 PROPOSED OPERATIONS SUMMARY

- WATER SAVING MODE
- Spring peak release is possible but unlikely.
- Minimum release will be 250 cfs



## 2014 Spring Peak Release

(Based on current forecast and the SJRIP Flow Recommendations)

### Most Probable

Water Available = 280,000 af

Peak Release = 1-week release at 5,000 cfs

### Minimum Probable

Water Available = 94,000 af

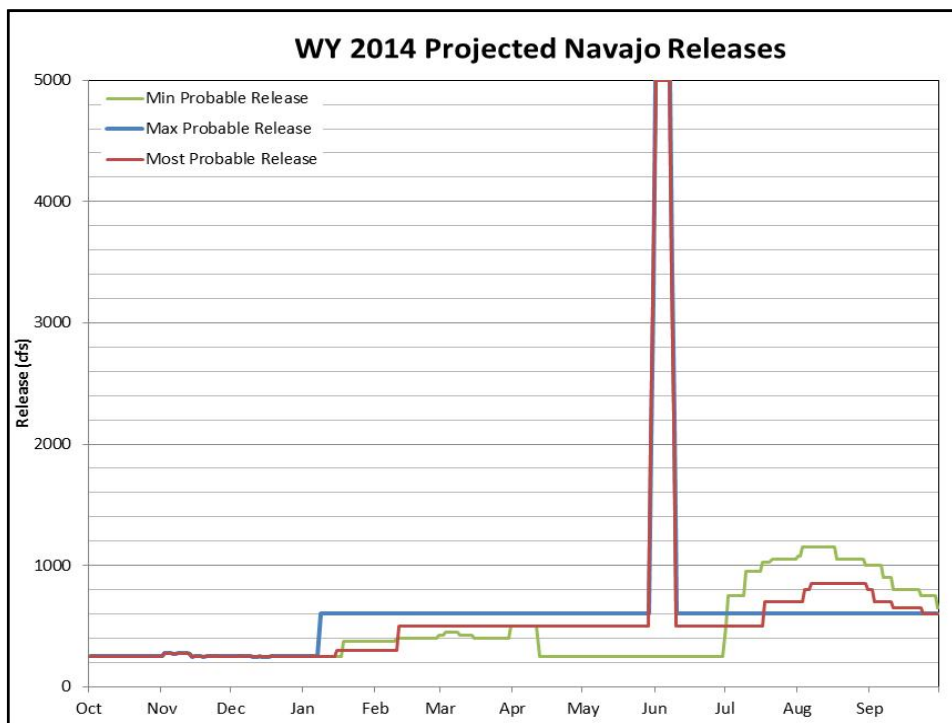
Peak Release = No Release

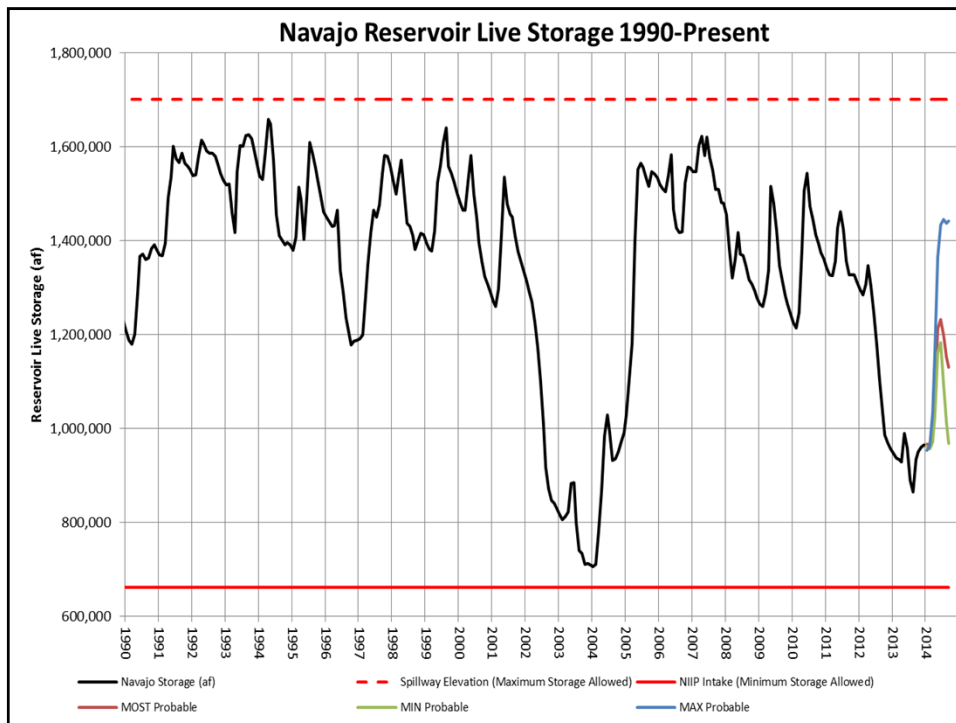
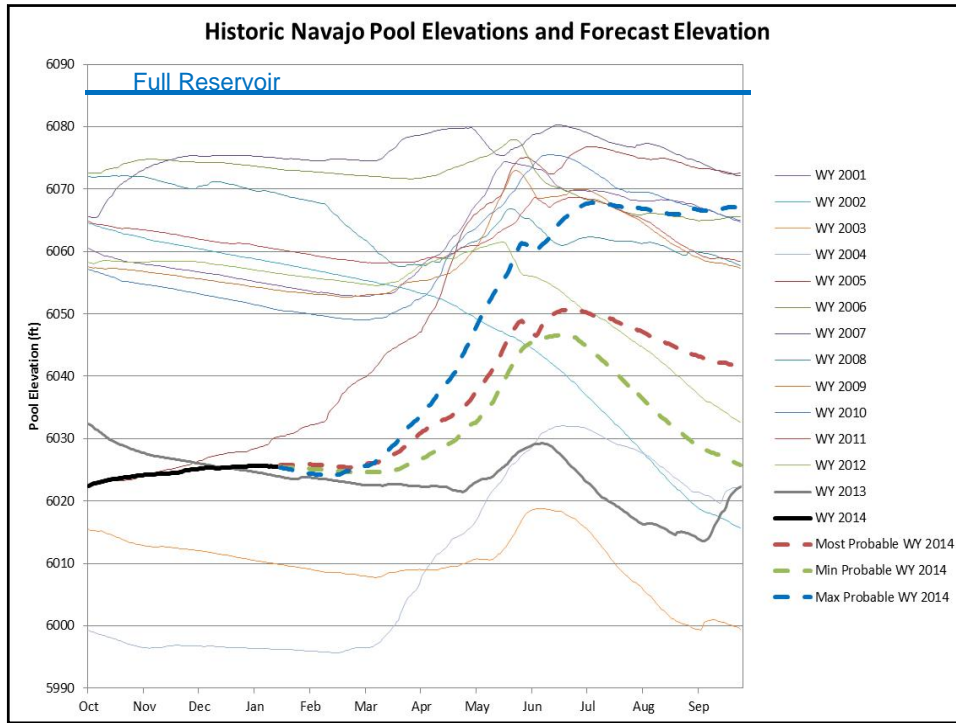
### Maximum Probable

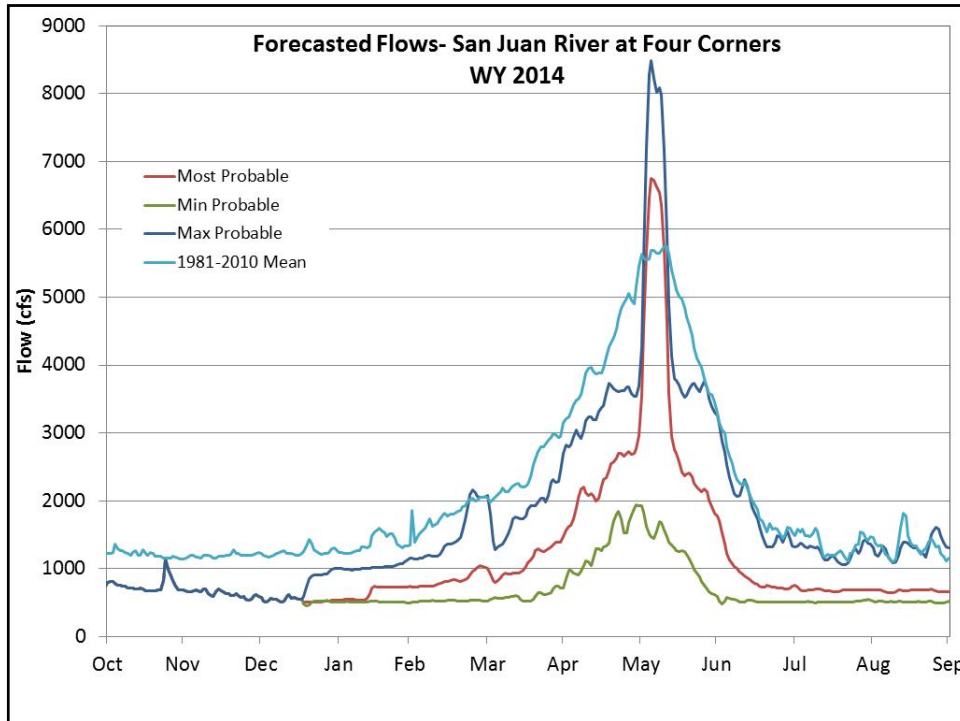
Water Available = 716,000 af

Peak Release = 1-week release at 5,000 cfs

Base release of 250 - 500 cfs for remainder of water year



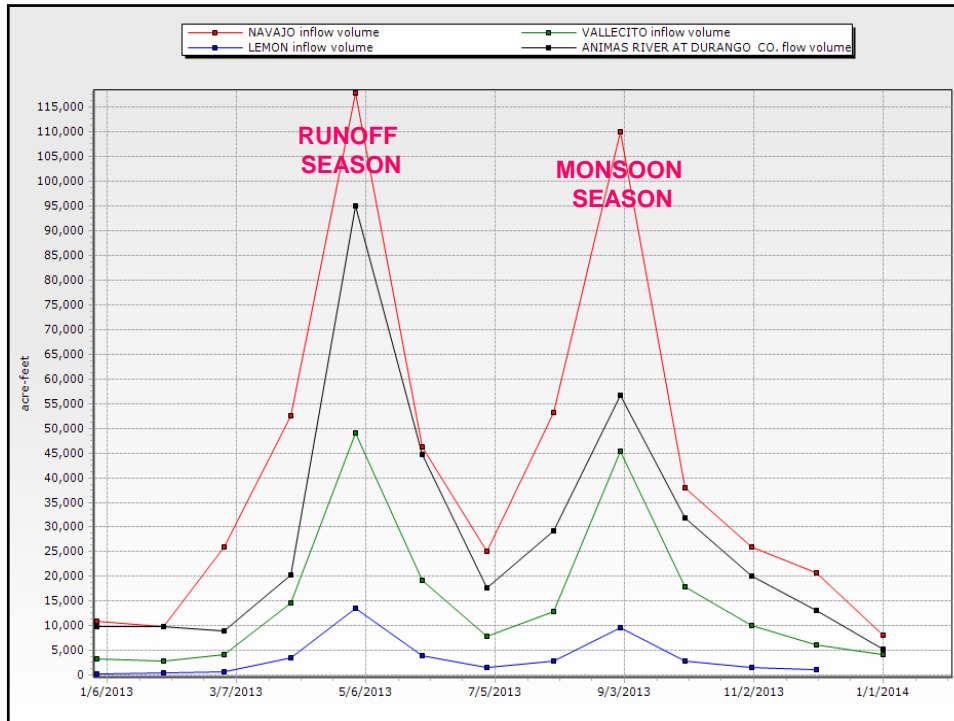




## Update on Shortage Sharing

Last meeting we were forecasting a potential shortage in the San Juan River Basin. What happened?

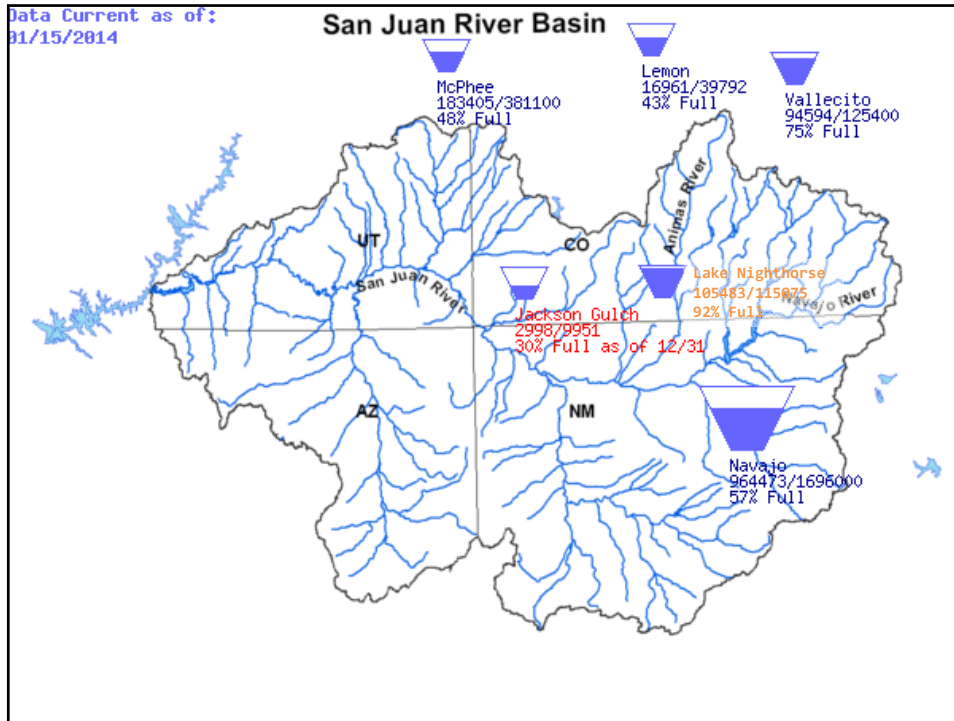
- Monsoon season of 2013
- Water savings at NIIP
- Tight operations at Navajo all through 2013
- Low releases from Navajo (250 cfs) since September
- Voluntary reductions and awareness



## Comparison to Conditions this time last year

- Reservoir Elevations are higher *(although still the lowest they've been since 2003)*
- SNOTEL sites are higher *(though still below-average)*
- Soil Moisture is higher
- Inflow Forecasts are higher *(though still below-average)*
- Public Awareness is higher





<b>Major San Juan River Basin Reservoirs</b> <small>(1/20/2014)</small>	<p><b>Nighthorse</b></p> <ul style="list-style-type: none"> <li>- Elevation = 6875.45</li> <li>- Storage = 105,498 af (92% full)</li> <li>- Release = 0 cfs</li> <li>- Pumping = 0 cfs</li> </ul>	<p>Lake Nighthorse is scheduled to be topped off May-June of this year</p>
	<p><b>Vallecito</b></p> <ul style="list-style-type: none"> <li>- Elevation = 7653.16 ft</li> <li>- Storage = 94,669 af (75% full, 178% avg)</li> <li>- Release = 76 cfs</li> <li>- Inflow = 178 cfs</li> </ul>	<p>Vallecito's new ice-preventing bubbler system is allowing higher storage levels than in previous winters.</p>
	<p><b>Lemon</b></p> <ul style="list-style-type: none"> <li>- Elevation = 8103.29 ft</li> <li>- Storage = 16,980 af (43% full, 86% avg)</li> <li>- Release = 11 cfs</li> <li>- Inflow = 13 cfs</li> </ul>	

## Navajo Maintenance Activities

- Right abutment rehabilitation will begin next fall.
- Rehab of hydraulic system and ring followers of 30" hollow jet valve

## How You Can Access Information

**Bureau of Reclamation**  
[www.usbr.gov/uc](http://www.usbr.gov/uc)

**USGS**  
<http://water.usgs.gov/nwis>

**Colorado Basin River Forecast Center**  
[www.cbrfc.noaa.gov](http://www.cbrfc.noaa.gov)



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## Summary

- The current snowpack is below average.
  - CPC outlook indicates greater chance of below average precipitation.
  - Most Probable April – July Inflow Forecast is 88% of average.
  - Based on the most probable forecast, a 1-week spring peak release is possible, although this outcome is unlikely.
  - Downstream river flows are anticipated to be at or below average.
  - Base will continue to be the minimum necessary to maintain environmental commitments (down to the minimum release of 250 cfs) to conserve water.
  - Shortage sharing is not currently forecasted, but conservation measures may be implemented to avoid a shortage.
- 
- Next Operations Meeting: Tuesday, April 22<sup>nd</sup> 2014