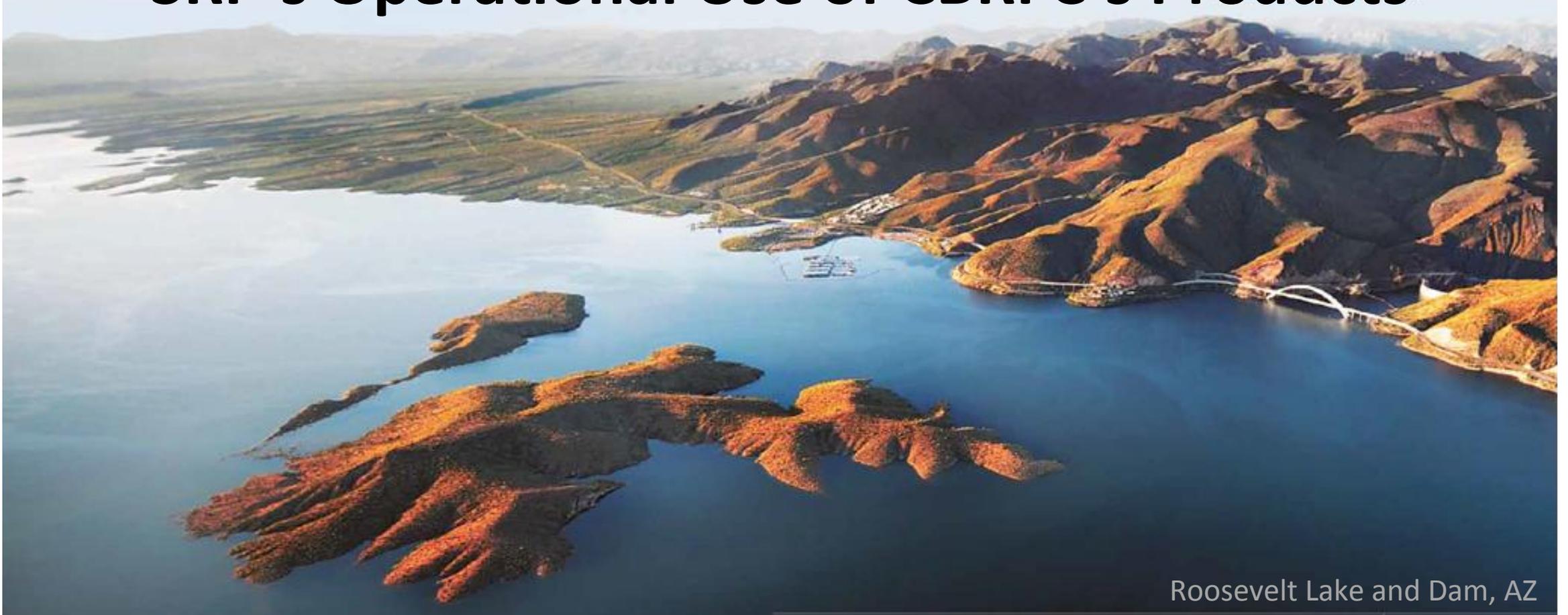


SRP's Operational Use of CBRFC's Products



Roosevelt Lake and Dam, AZ

CBRFC Stake Holder Meeting
October 18, 2016

James Walter
Surface Water Resources
Salt River Project

Salt River Project



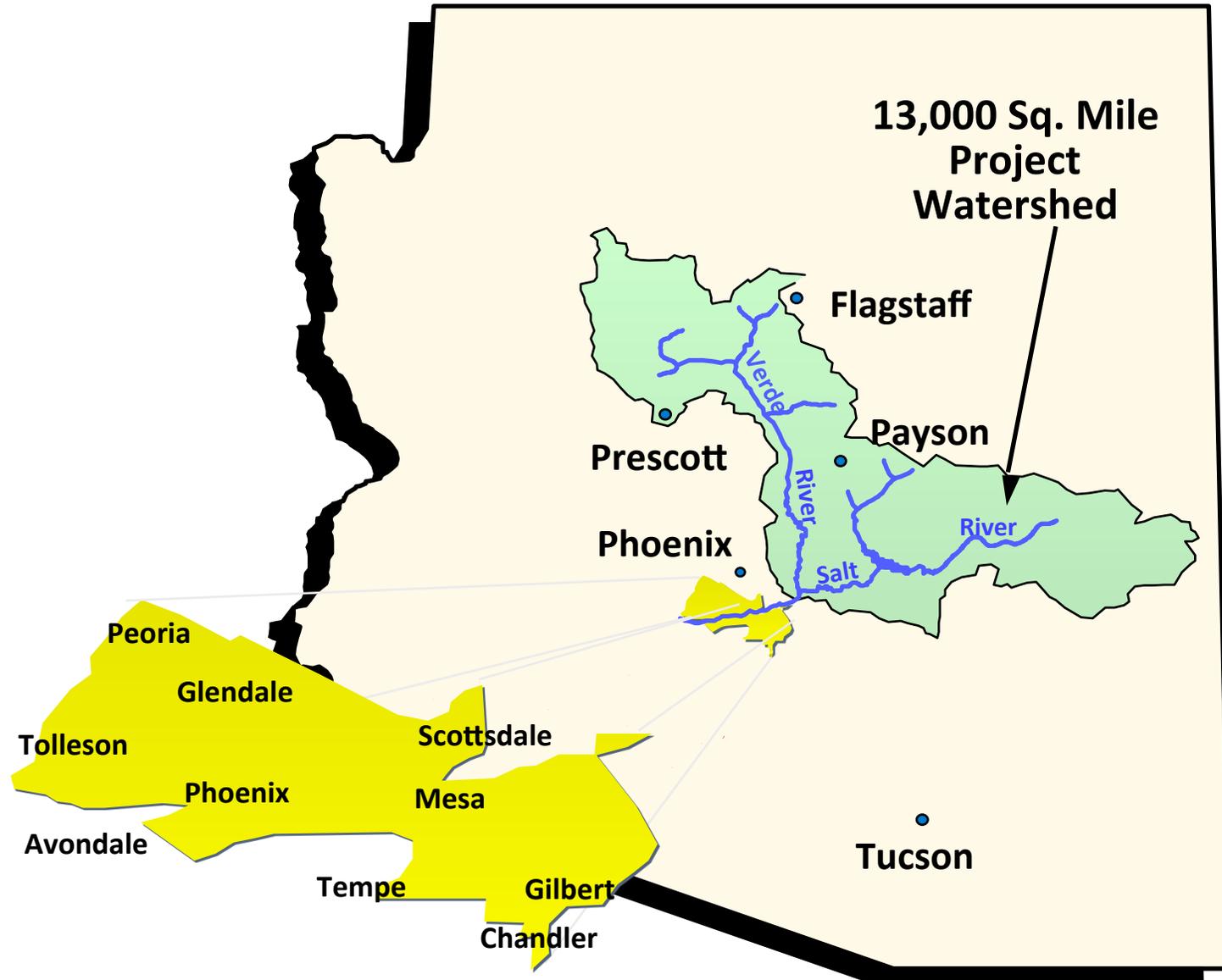
Salt River Valley Water Users Association

- Established 1903
- A Federal reclamation project
- A private corporation
- Delivers almost 1 million acre-feet per year

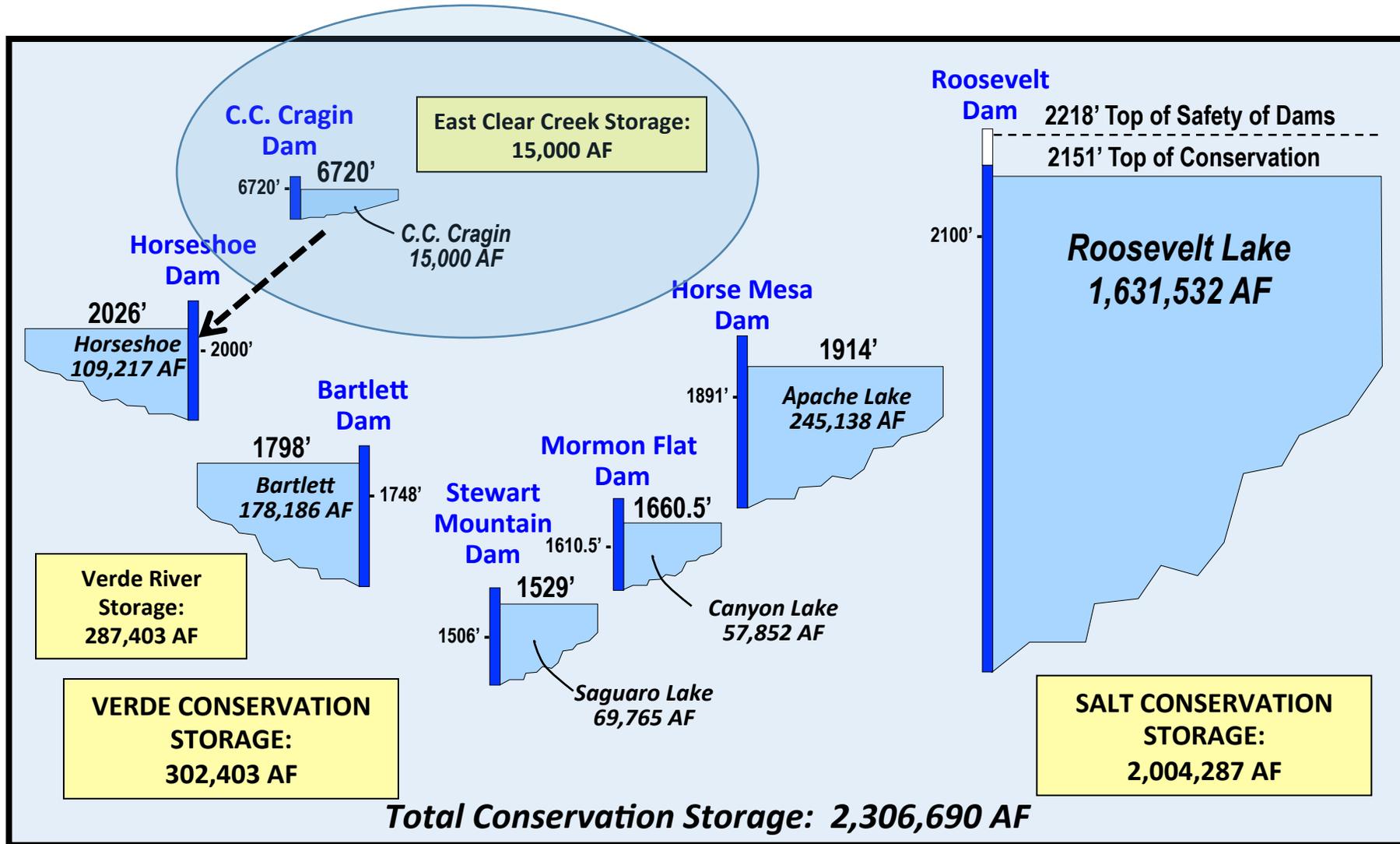
SRP Agricultural Improvement and Power District

- Established 1937 as a political subdivision of the state of Arizona
- 1 million customers in and around the Phoenix metro area

Salt River Project Water Service Area



Salt River Project Reservoir System



Salt River Project Reservoir System

Surface Water Resources

- **Coordinate emergency reservoir operations.**
- **Monitor and forecast weather for SRP operational facility management needs.**
- **Maintain historical database of hydrological and meteorological records.**
- **Provide hydrological and meteorological analysis for internal and external customers.**
- **Monitor and forecast water supplies and demands.**
- **Develop conjunctive water resource management plans for reservoir and pumping operations.**



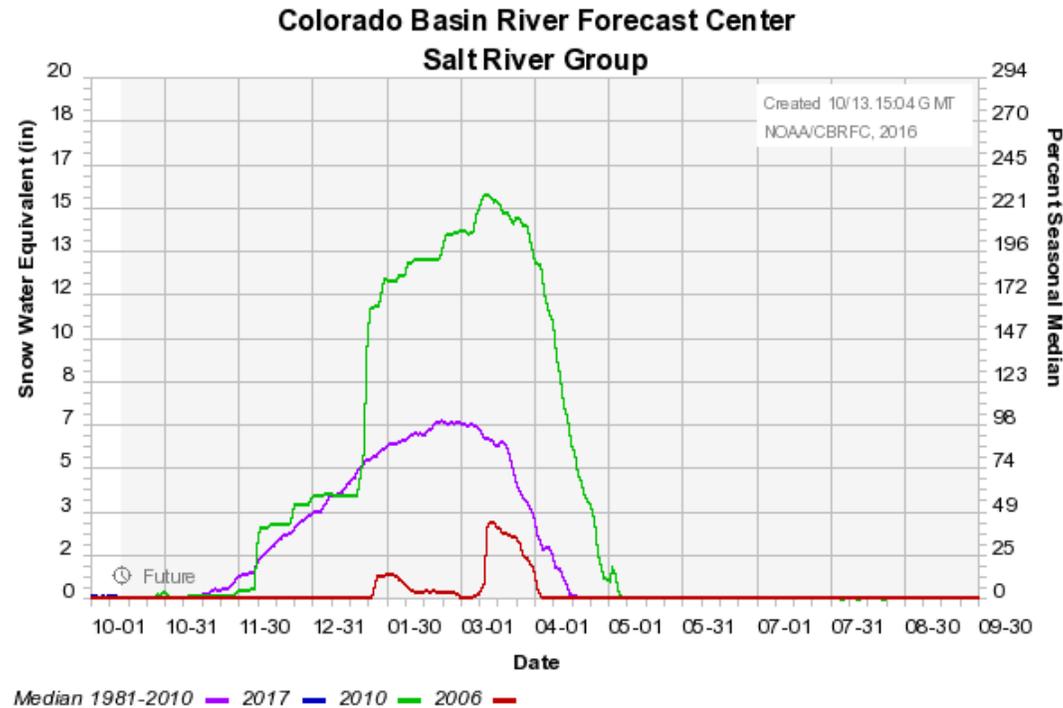
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Data

Salt River Snotel Group



Group plots show a simple average of the individual stations.
Select multiple years and/or stations. Be sure to use your systems key-click combination to avoid inadvertent deselection.

Years	Stations	Y axis	Station Links
median	BLDA3 BALDY	Percent Seasonal Median	BLDA3
2017	CNDA3 CORONADO TRAIL	Percent Median to Date	CNDA3
2010	HNMA3 HANNAGAN MEADOWS		HNMA3
2006	MVFA3 MAVERICK FORK		MVFA3
	WCTA3 WILDCAT		WCTA3
avg			
2016	AGUU1 AGUA CANYON		
2015	APSC2 APISHAPA		
2014	AROC2 ARROW		
2013	ARPC2 ARAPAHO RIDGE		
2012	ATAI1 ATLANTA SUMMIT		
2011	BAMN5 BATEMAN		
2009	BASI1 BANNER SUMMIT		
2008	BBSA3 BAKER BUTTE SUMMIT		
2007	BBSW4 BLIND BULL SUM		
2005	BCVC2 BEAVER CK VILLAGE		

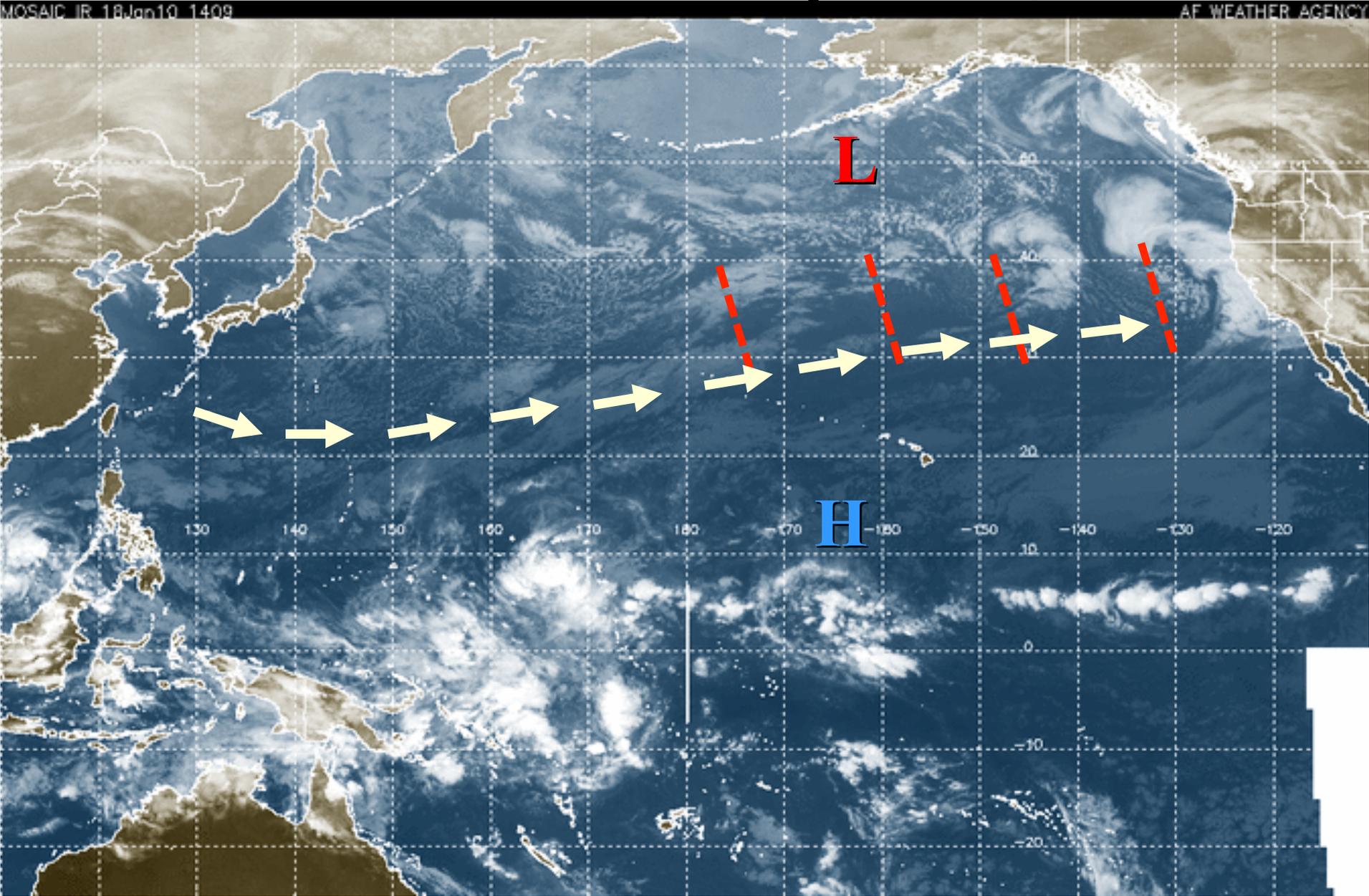
Similar/Historical Years

- Off
- Closest Pattern
- Peak to Date
- Current Observation
- Highest Year
- Lowest Year

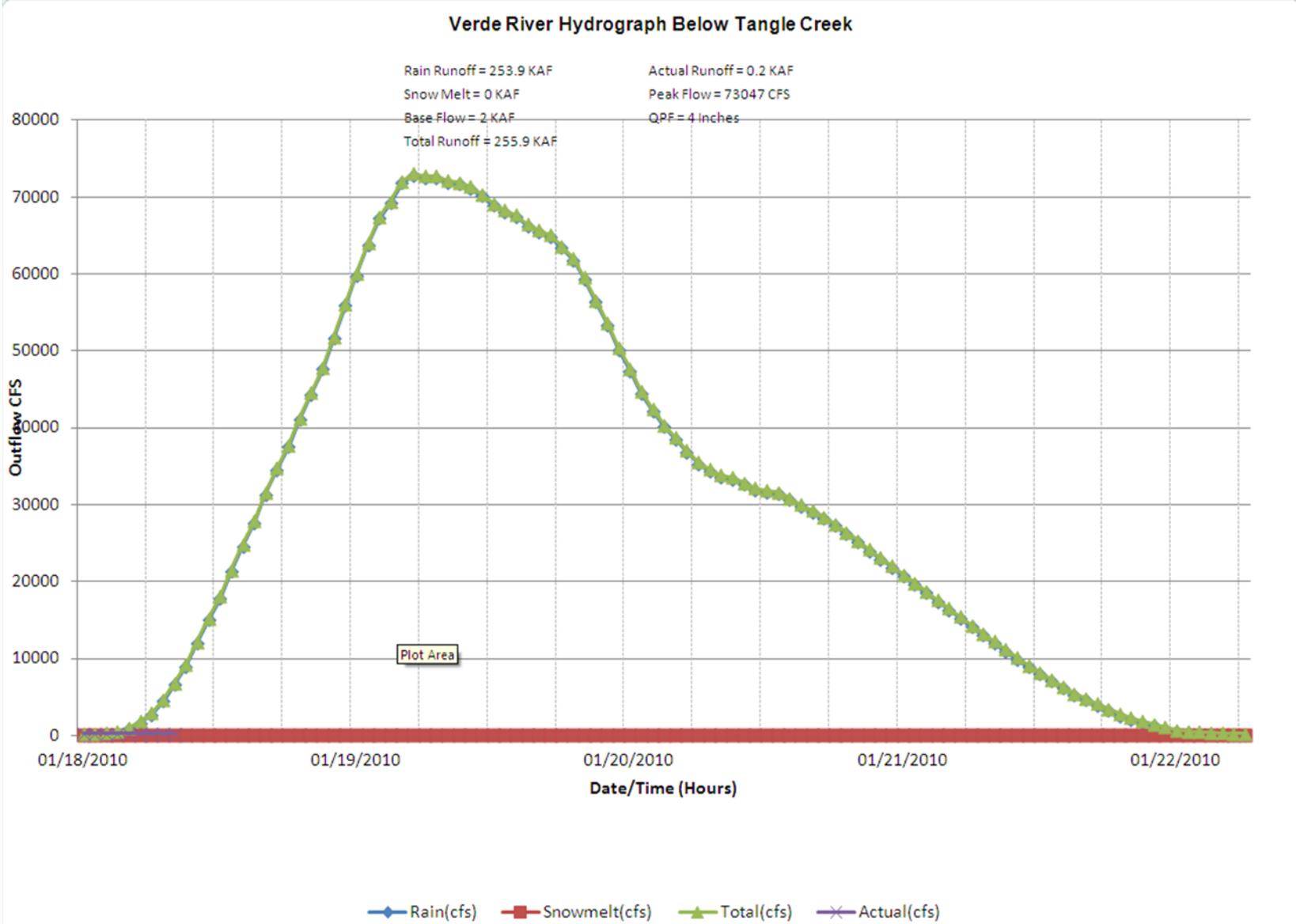
- Show Yearly Plots
- Show Averages on Yearly Plots
- Show Shaded Individual Daily Max/Min Station Values on Group Plot
- Show Dotted Line Individual Daily Max/Min Station Values on Group Plot
- Show Missing Data on Group Plot
- Show Missing Data Alerts
- High Resolution
- Show Tabular Data

Apply

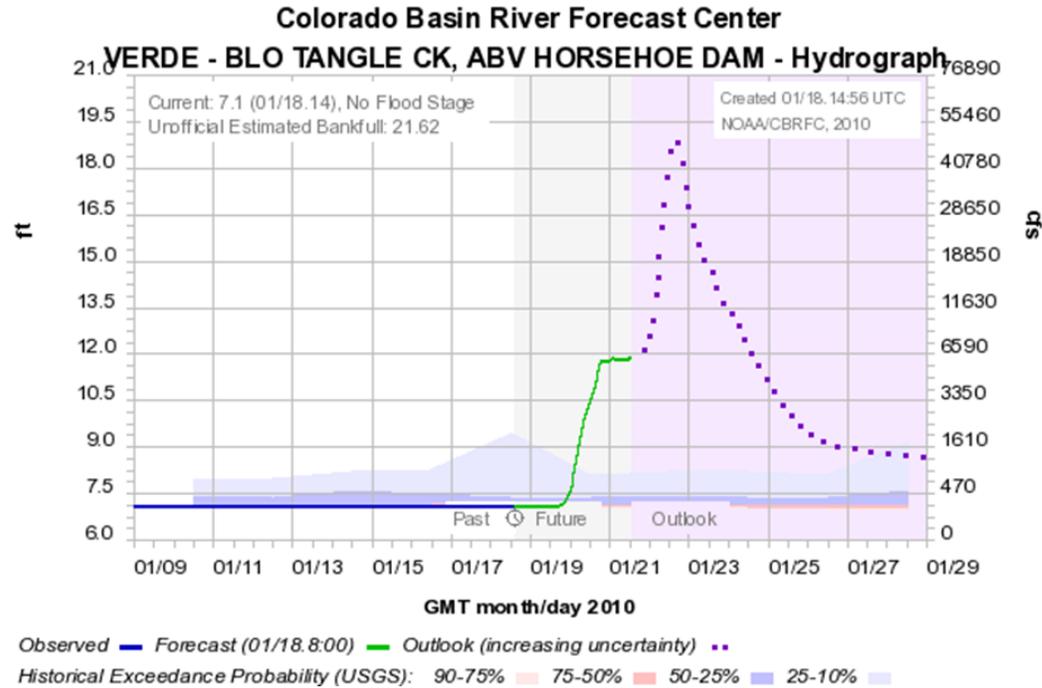
Flood Event – January 18-23, 2010



Flood Event – January 18-23, 2016



Flood Event – January 18-23, 2016



Hydrograph Options

<input type="checkbox"/> Critical Stages	Years	Date
<input type="checkbox"/> Simulated	1946 ▲	01-18-10
<input type="checkbox"/> Raw Data	1947	Fast Days
<input type="checkbox"/> Linear Flow	1948	10 ▼
<input type="checkbox"/> Mean Daily Values	1949	Future Days
<input type="checkbox"/> Forecast Peak	1950	10 ▼
<input type="checkbox"/> Historical Peak	1951	Analog Years
<input type="checkbox"/> Yearly Peaks	1952	Off ▼
<input type="checkbox"/> Daily Maxima	1953	Analog Years Period
<input checked="" type="checkbox"/> Statistics	1954 ▼	Off ▼
<input type="checkbox"/> Contingency		

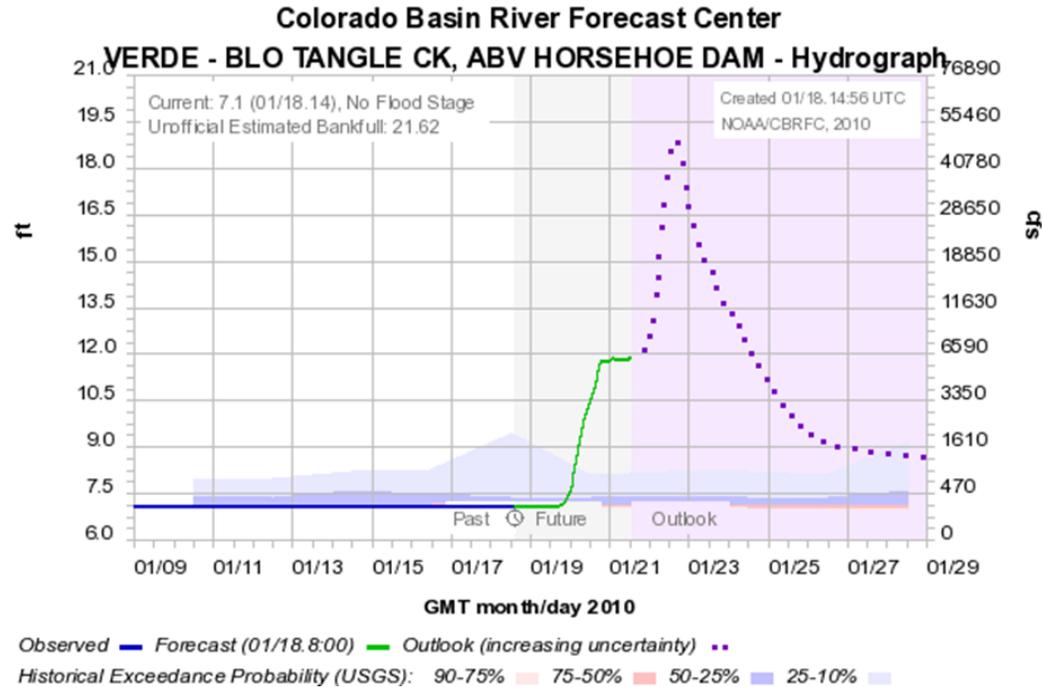
Graphs

<input type="checkbox"/> Precipitation	<input type="checkbox"/> Precipitation
<input type="checkbox"/> Temperature	<input type="checkbox"/> Temperature
<input type="checkbox"/> Freezing Level	<input type="checkbox"/> Freezing Level
<input type="checkbox"/> Snow	<input type="checkbox"/> Snow
<input type="checkbox"/> Soil Moisture	<input type="checkbox"/> Soil Moisture
<input checked="" type="checkbox"/> Hydrograph	<input type="checkbox"/> Flows

Tabular Data

<input type="checkbox"/> Precipitation
<input type="checkbox"/> Temperature
<input type="checkbox"/> Freezing Level
<input type="checkbox"/> Snow
<input type="checkbox"/> Soil Moisture
<input type="checkbox"/> Flows

Flood Event – January 18-23, 2016



Hydrograph Options

- Critical Stages
 - Simulated
 - Raw Data
 - Linear Flow
 - Mean Daily Values
 - Forecast Peak
 - Historical Peak
 - Yearly Peaks
 - Daily Maxima
 - Statistics
 - Contingency
- Years: 1946 ▲, 1947 ▲, 1948 ▲, 1949 ▲, 1950 ▲, 1951 ▲, 1952 ▲, 1953 ▲, 1954 ▼
- Date: 01-18-10
- Fast Days: 10 ▼
- Future Days: 10 ▼
- Analog Years: Off ▼
- Analog Years Period: Off ▼

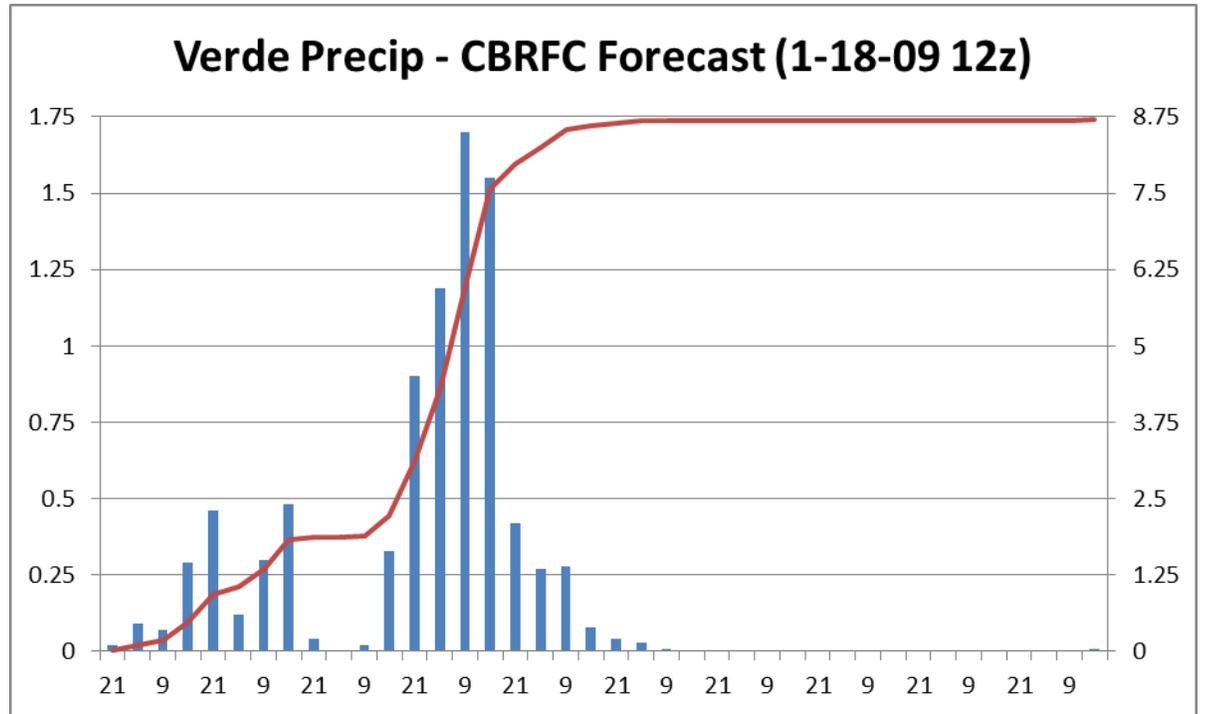
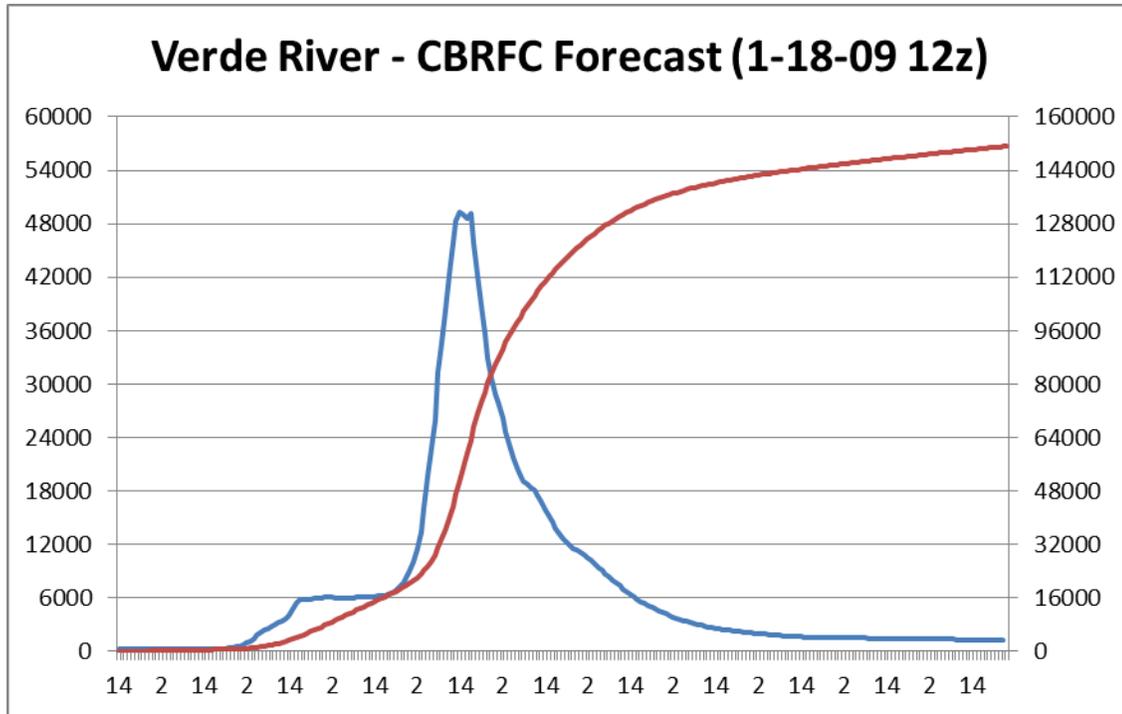
Graphs

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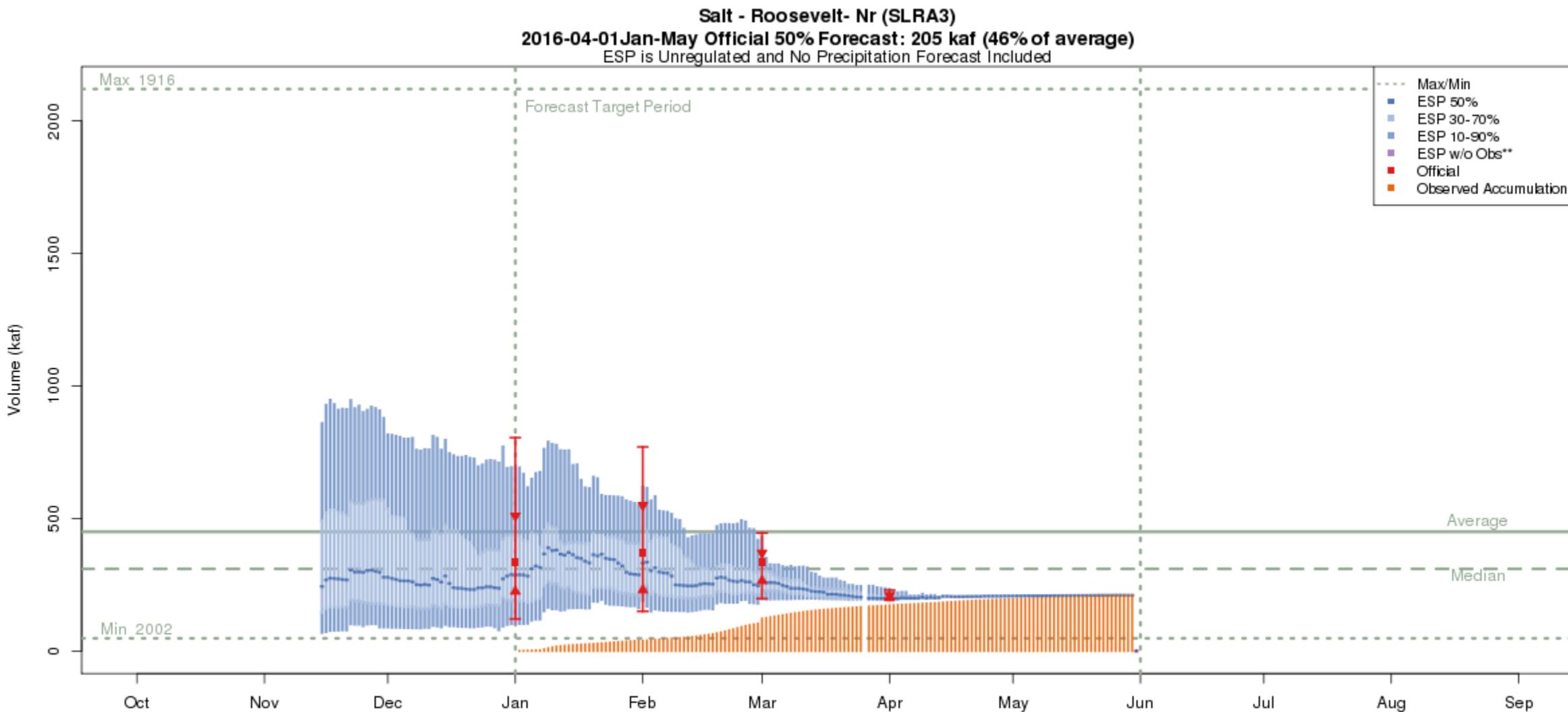
Tabular Data

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- Temperature
- Freezing Level
- Snow
- Soil Moisture
- Flows

Flood Event – January 18-23, 2016



Seasonal Streamflow Forecasts



The latest (2016-05-30) 50% ESP forecast is 210 kaf.

Plot Created 2016-08-24 07:20:41, NOAA / NWS / CBRFC

**Purple ESP forecasts do not include observed and are not total runoff.

Seasonal Streamflow Forecasts



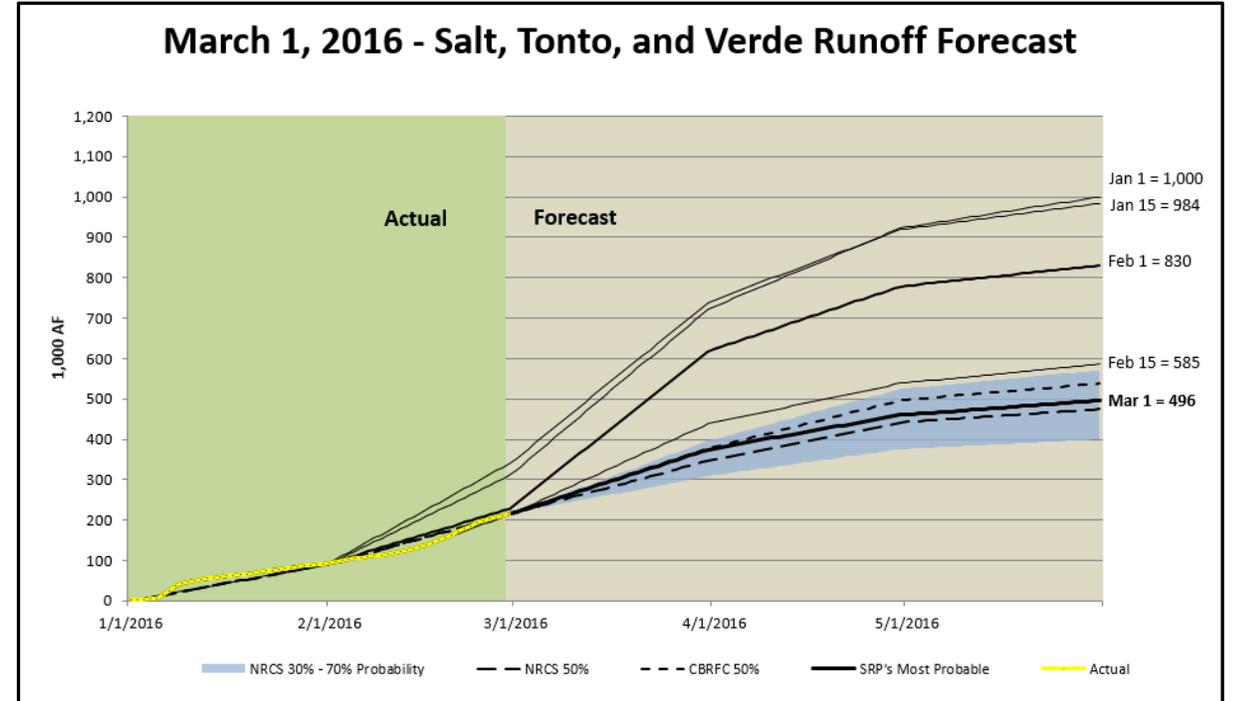
Lower Colorado Water Supply Outlook, January 1, 2016



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



Arizona Basin Outlook Report January 1, 2016



Questions

