

# NOAA's Colorado Basin River Forecast Center

## An Overview of the CBRFC

2017 Stakeholder Open House



# Overview

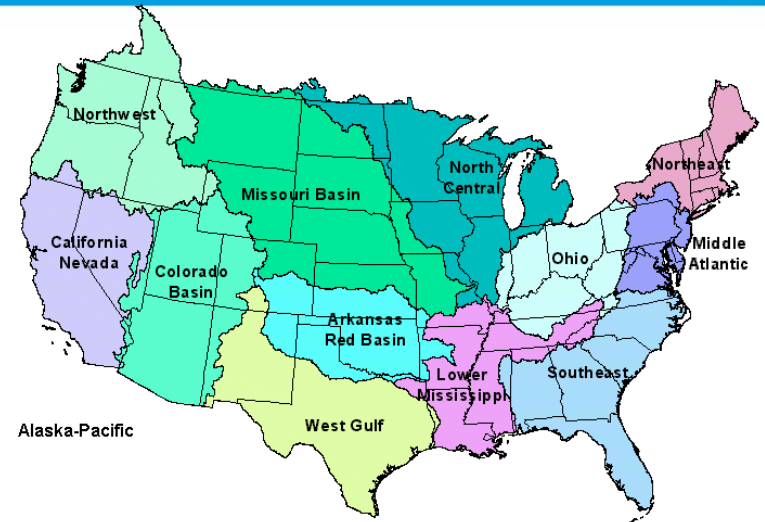
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- Who we are
- Summary of operations
- Products and Services





# Who Are We?



- Part of NOAA - NWS, one of 13 RFCs nationwide
- An operational field office located in Salt Lake City, UT
- Highly collaborative, reliant on partners and data
- All about decision-support!



# Who We Are

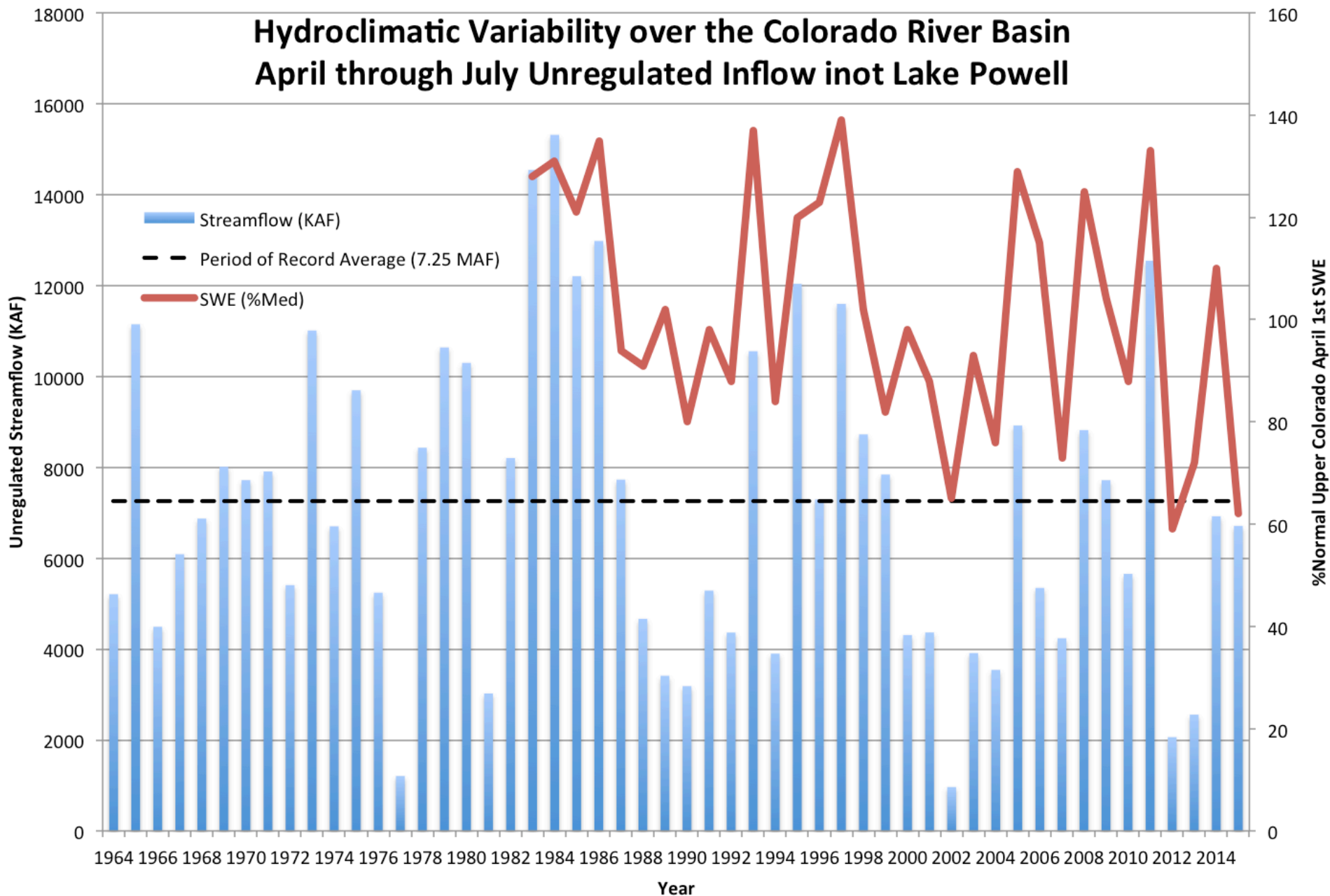
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- Work with a broad and diverse set of stakeholders
  - Weather Forecast Offices and Reclamation
  - Municipal and Agricultural Water Users
  - USGS, NRCS, and many other federal agencies
  - State agencies, Academics, NGOs, Tribes
- Receive data from many of these sources



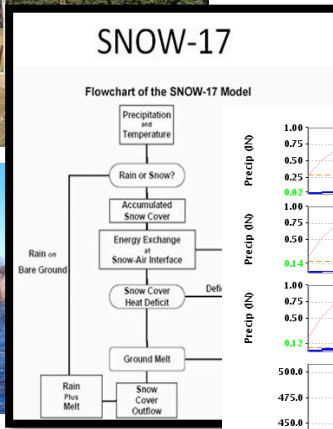
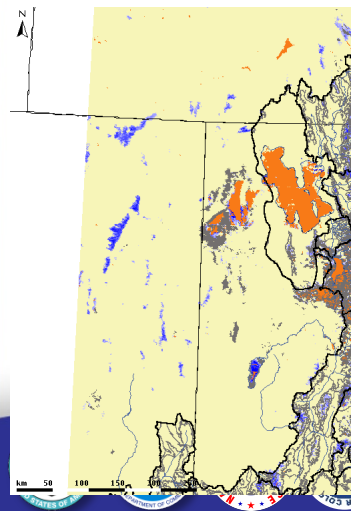
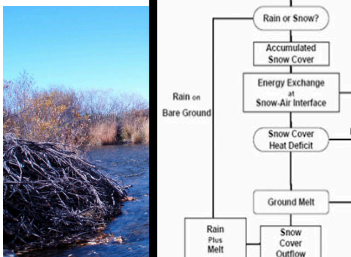
# Hydroclimatic Variability over the Colorado River Basin

## April through July Unregulated Inflow into Lake Powell

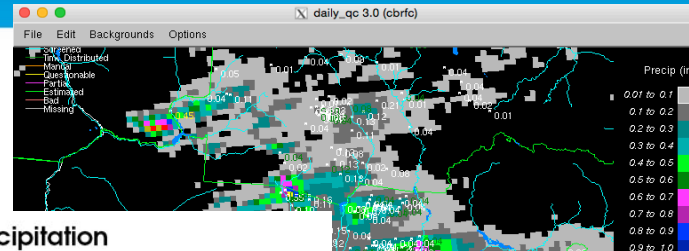


# Providing Decision Support

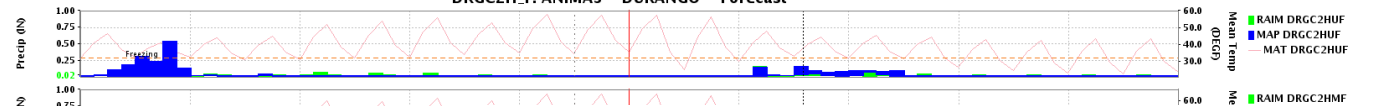
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Evapo-  Precipitation



DRGC2H.F: ANIMAS - DURANGO - Forecast

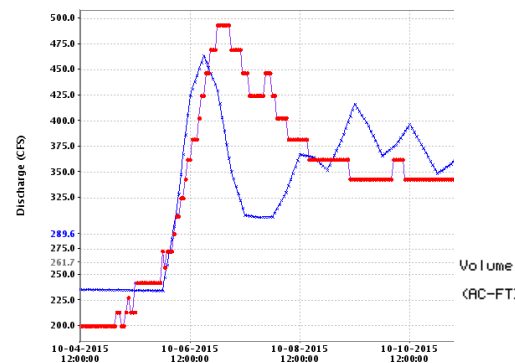


ESP Trace Ensemble of COLORADO - LAKE POWE

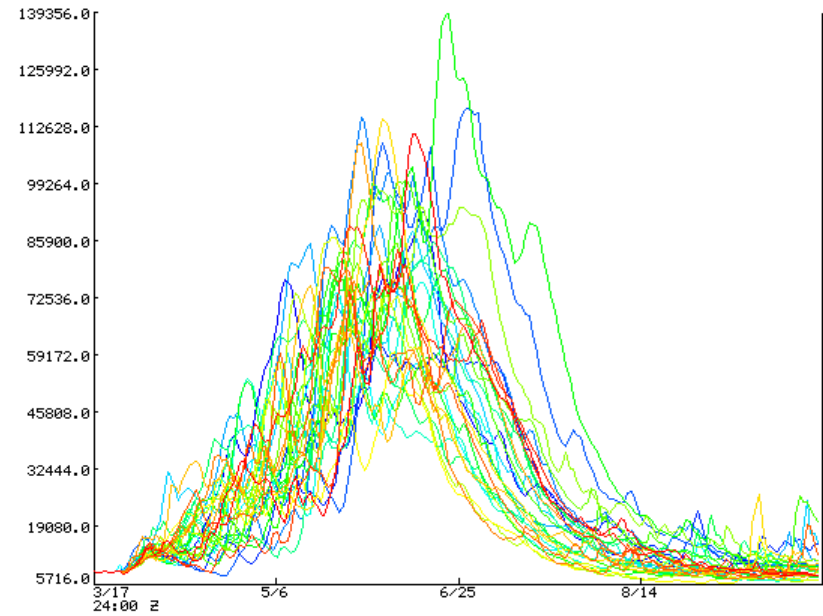
Latitude: 36.9 Longitude: -111.5

Forecast for the period 3/17/2014 24h - 10/1/2014 24h

This is a conditional simulation based on the current conditions as of 3/17/2014



Volume  
(AC-FT)



# Stakeholder Needs Are Changing

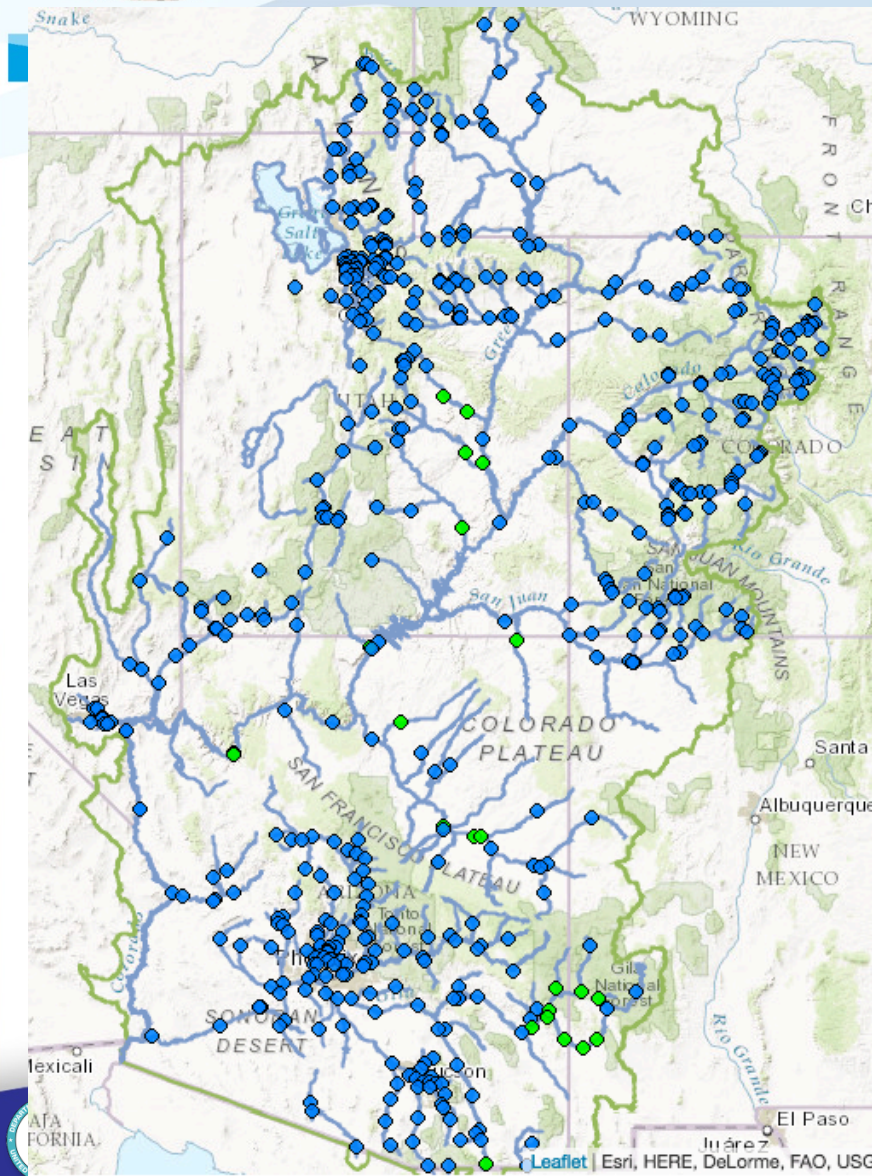
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- Where we were:
  - What is THE forecast?
  - How much water is there?
  - How much snow is there?
  - Will there be flooding?
- Where we are going:
  - What is the range of forecasts?
  - What is the likelihood of reaching this flow?
  - What if it's a dry/wet year?
  - What is the risk to filling my reservoir?
  - What is your uncertainty?

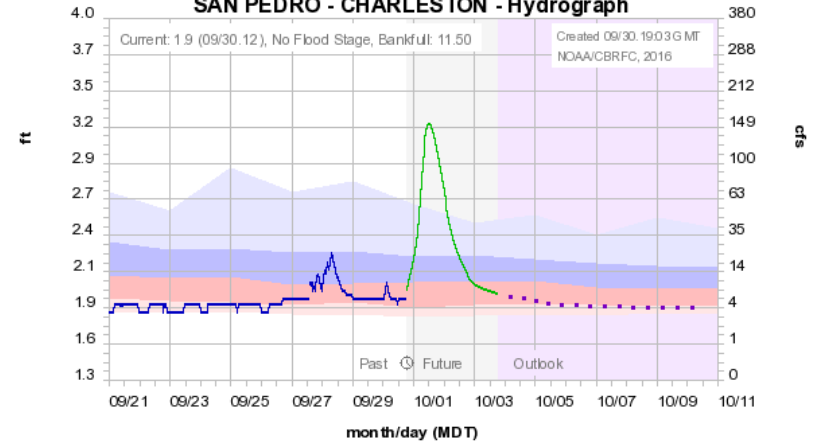


# Products and Services

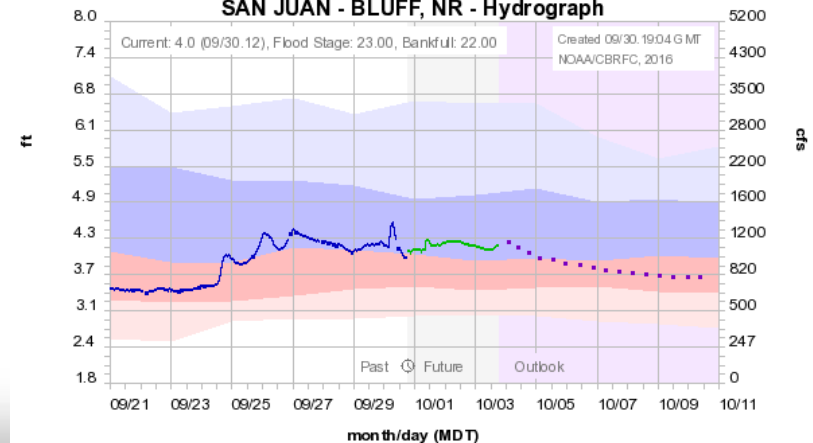
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Colorado Basin River Forecast Center  
SAN PEDRO - CHARLESTON - Hydrograph



Colorado Basin River Forecast Center  
SAN JUAN - BLUFF, NR - Hydrograph

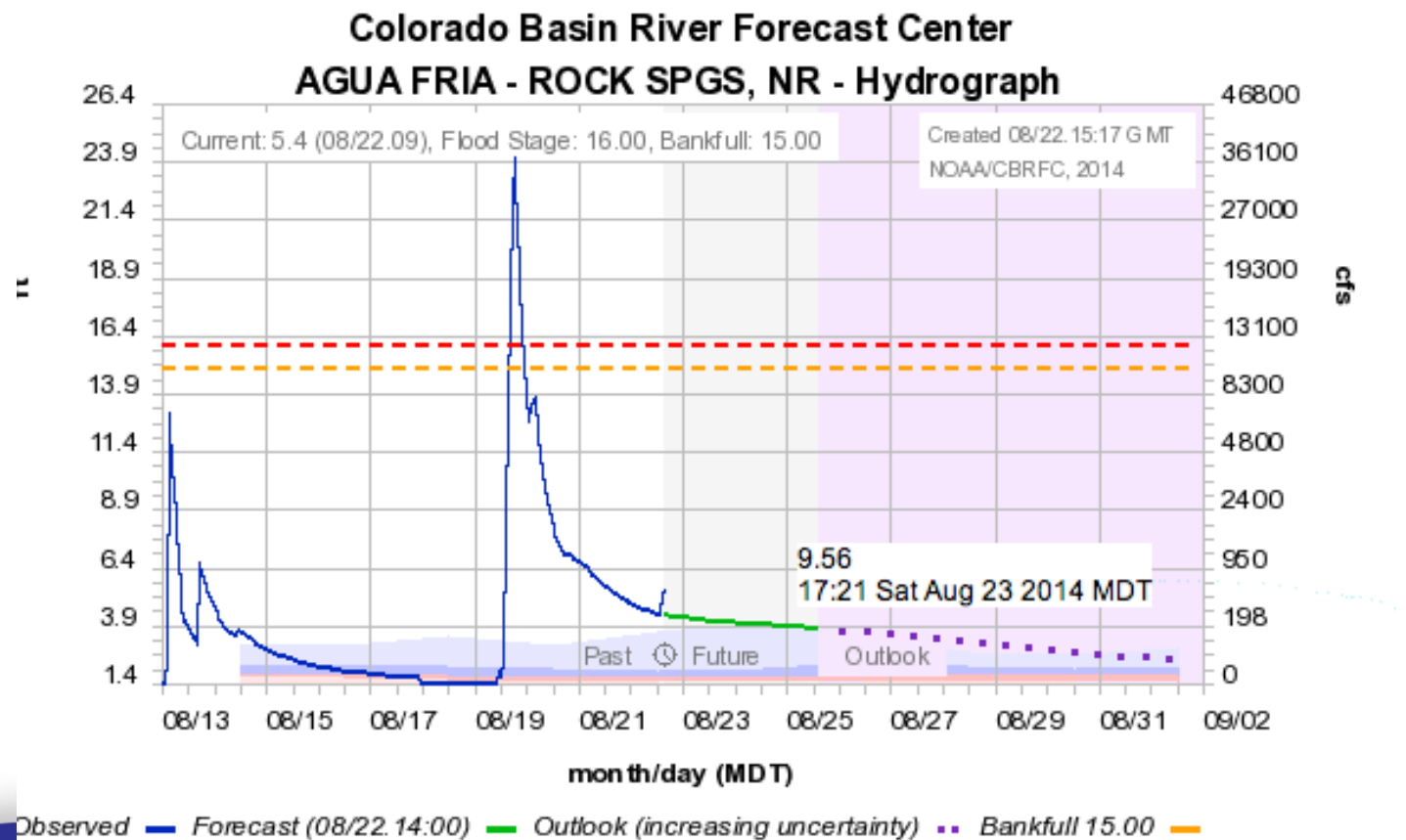




# Products and Services

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Support flood warning efforts by weather forecast offices

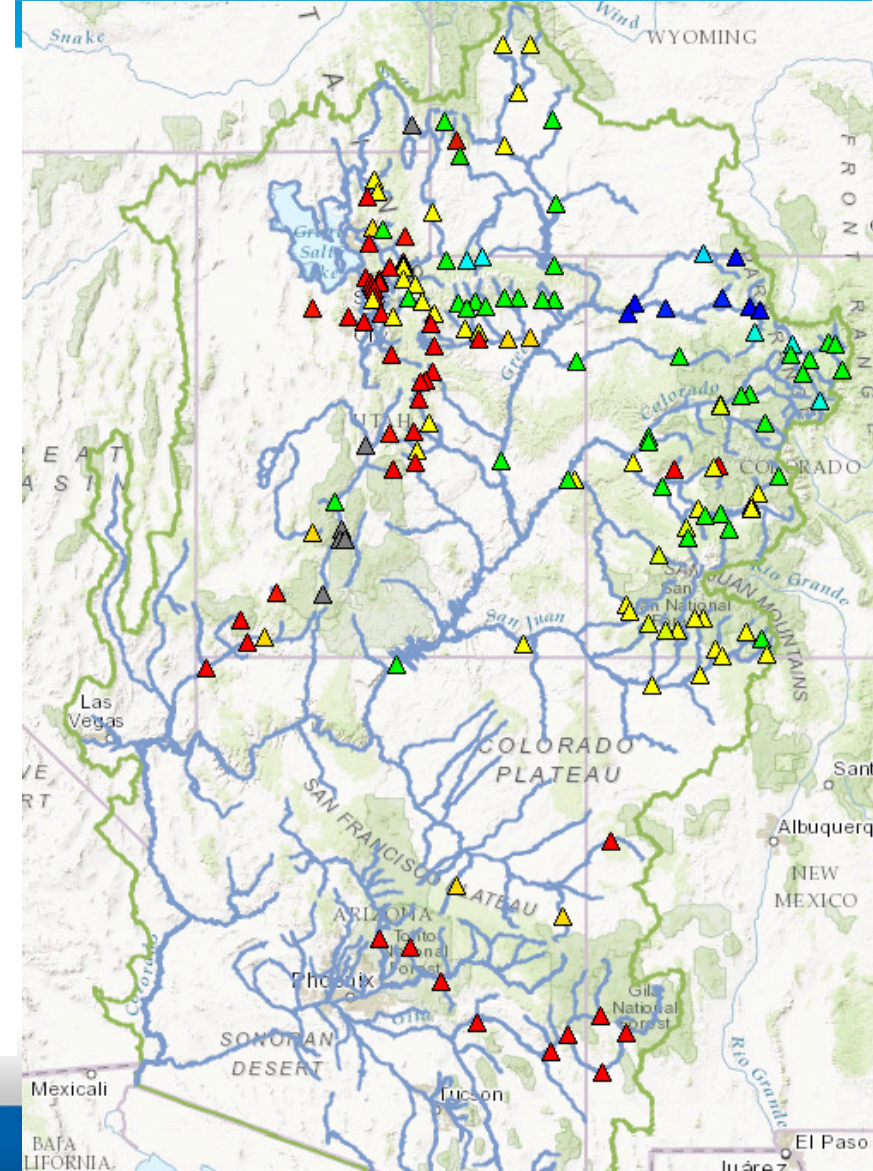
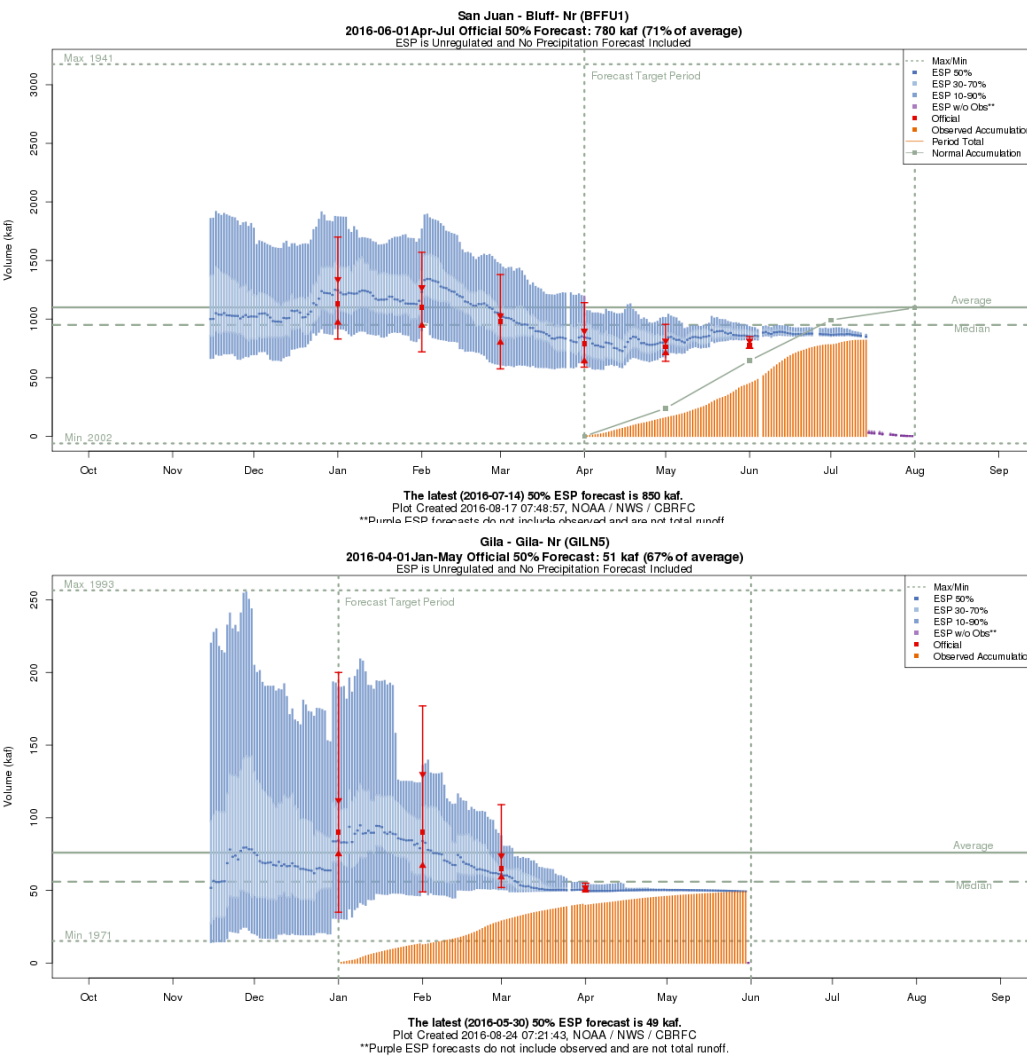


# Products and Services

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- Water Supply Forecast
  - Utilize an ensemble of future climate to generate possible streamflow futures
  - Dependent on precipitation information during the runoff season – we pay close attention to snowpack
  - Model soil moisture component is very important
- The more information we have the better!

# Products and Services

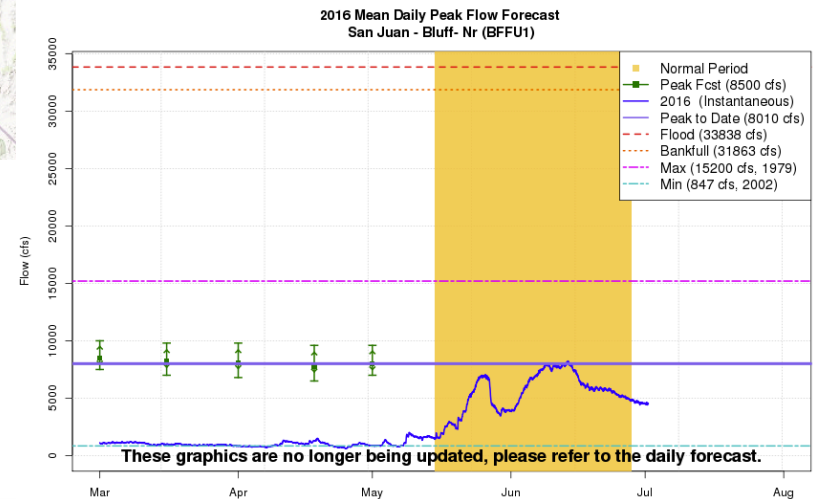
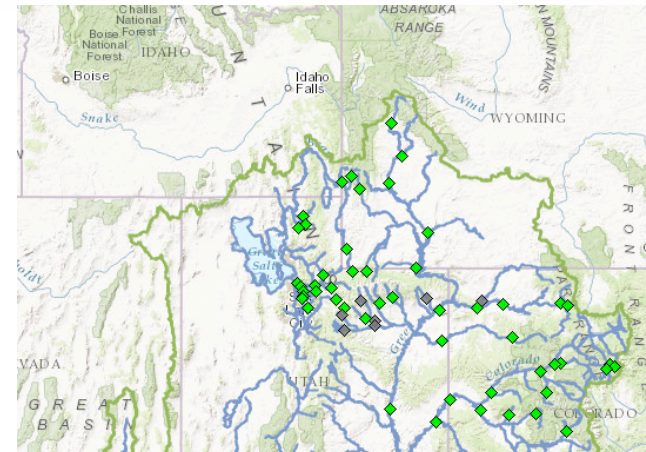




# Products and Services

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- Peak Flow Forecasts
  - Mean Daily Peak Flow
  - Helpful for environmental resource managers
  - Meet environmental targets



Plot Created 2016-07-01 11:40:14  
CBRFC / NWS / NOAA

# Coordination Efforts

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- Stakeholder Open House (Like this one!)
  - Broad range of stakeholders
  - Introduce new products and services
  - Reinforce traditional products and services
  - Important for us to get feedback
- Frequent webinars
  - Water supply, peak flows
  - Custom Webinars for your group
  - WFO Coordination



# Coordination Efforts

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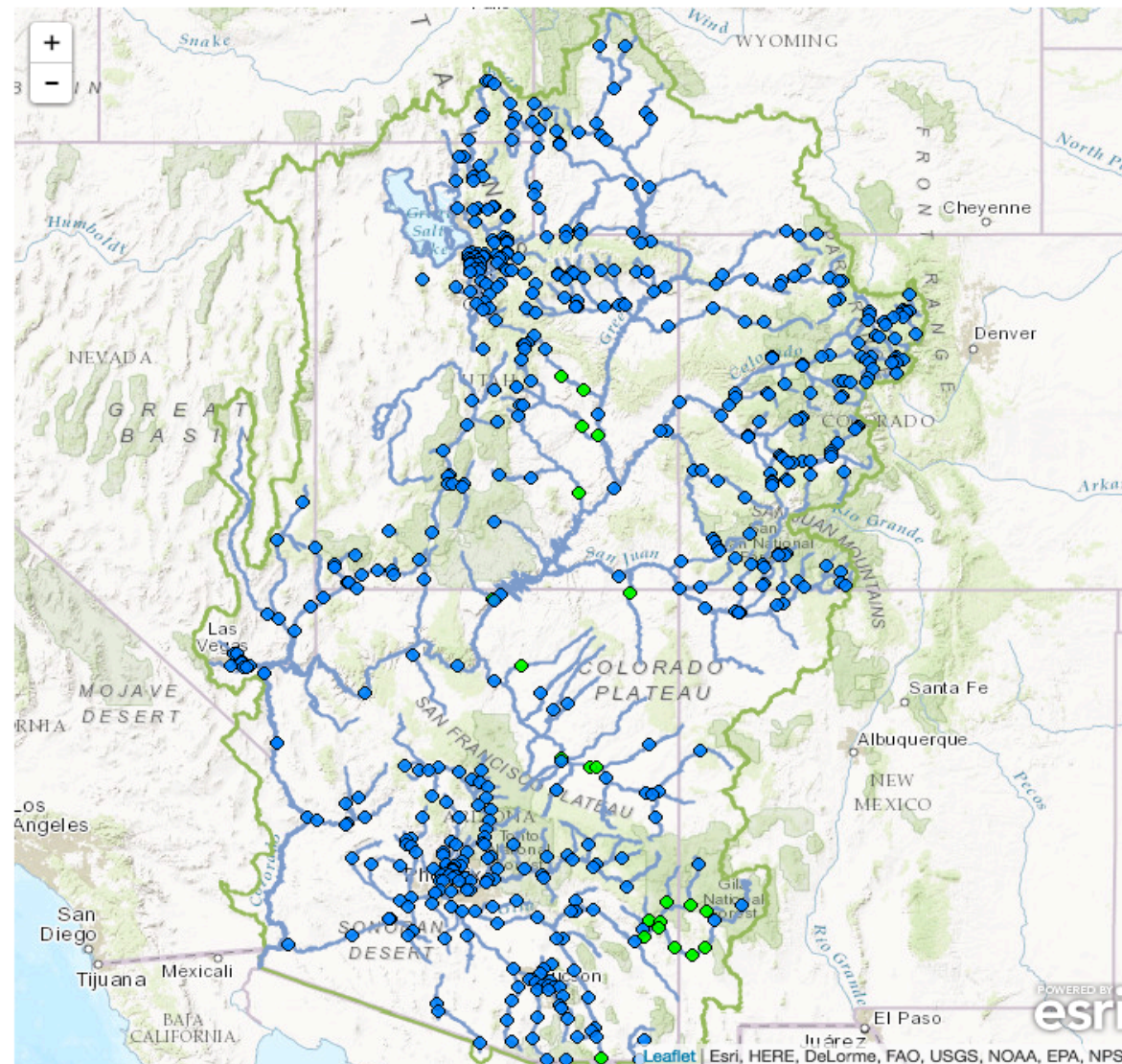
- Participation in stakeholder-run meetings and events
- Participation in multi-agency efforts
  - Landscape Conservation Cooperatives
  - Climate Science Centers
  - NOAA RISAs (like CLIMAS or WWA)
  - Others
- Direct contact by phone, e-mail, etc...





**News** Most recent presentations of Water Supply Briefings can be found here: [Read More...](#)

## Conditions Map [Help](#)



### ▼ River Conditions

Data Updated: 09/30/19Z

[Help](#)

☒ Show [Hide Other Types](#)

- ☐ Data
- ☒ Forecast
- ☒ Reservoir Inflow
- ☒ Reservoir Outflow
- ☒ Official Flood
- ☒ Active

- ◆ Not Available
- Normal
- Significant Rise
- Near Bankfull
- Above Bankfull
- Above Flood Stage
- Outlook (> 3 days)

☐ Popup Alerts

► [Snow Conditions](#)

► [Water Supply Forecasts](#)

► [Peak Flood Probability](#)

► [Reservoir Conditions](#)

► [Daily Precipitation](#)

► [Monthly Precipitation](#)

► [Soil Moisture](#)

► [Map Options](#)

► [Search Points](#)

# How can we help?

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- What sites, areas are important to you?
- Is there a site or area that you would like us to add?
- What are your major concerns and decisions? What kind of information can we provide to help with decision support?



# How can you help?

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- We always need data and can work with you to get us the information in a way that is convenient to you
  - If there's enough data, we can add points
  - Changes to operations
- What are your major decision points?
- Let us know how we can help!

