



Updates, Projects and Activities



New Staff!

Patrick Kormos - Bear and Weber basin

Cody Moser - Colorado Headwaters

Zach Finch - Lower Colorado Basin

Ashley Nielson - Green River Basin and Lake
Powell

Greg Smith - San Juan, Gunnison and Dolores

Tracy Cox - Lower Basin

Brenda Alcorn - Training

Brent Bernard - Six Creeks, Provo, Sevier



Contact us!

- Michelle Stokes – Hydrologist In Charge
- John Lhotak – Development and Operations Hydrologist
- Paul Miller – Service Coordination Hydrologist
- Brenda Alcorn – Senior Hydrologist
- Cody Moser – Upper Colorado Focal Point
- Greg Smith – San Juan and Gunnison Focal Point
- Ashley Nielson – Green River Basin Focal Point
- Brent Bernard – Six Creeks and Provo Focal Point
- Patrick Kormos – Bear and Weber Focal Point
- Tracy Cox – Lower Basin Focal Point
- Zach Finch – Lower Basin Focal Point
- Craig Peterson – Senior Hydrometeorologist
- Cass Goodman – Computer Systems

michelle.stokes@noaa.gov

john.lhotak@noaa.gov

paul.miller@noaa.gov

brenda.alcorn@noaa.gov

cody.moser@noaa.gov

greg.smith@noaa.gov

ashley.nielson@noaa.gov

brent.bernard@noaa.gov

patrick.kormos@noaa.gov

tracy.cox@noaa.gov

zach.finch@noaa.gov

craig.peterson@noaa.gov

cass.goodman@noaa.gov

Projects Priorities

Priorities based on

- Stakeholder requests
- Improving our forecasts and services
- Participate in national programs

For WY2018

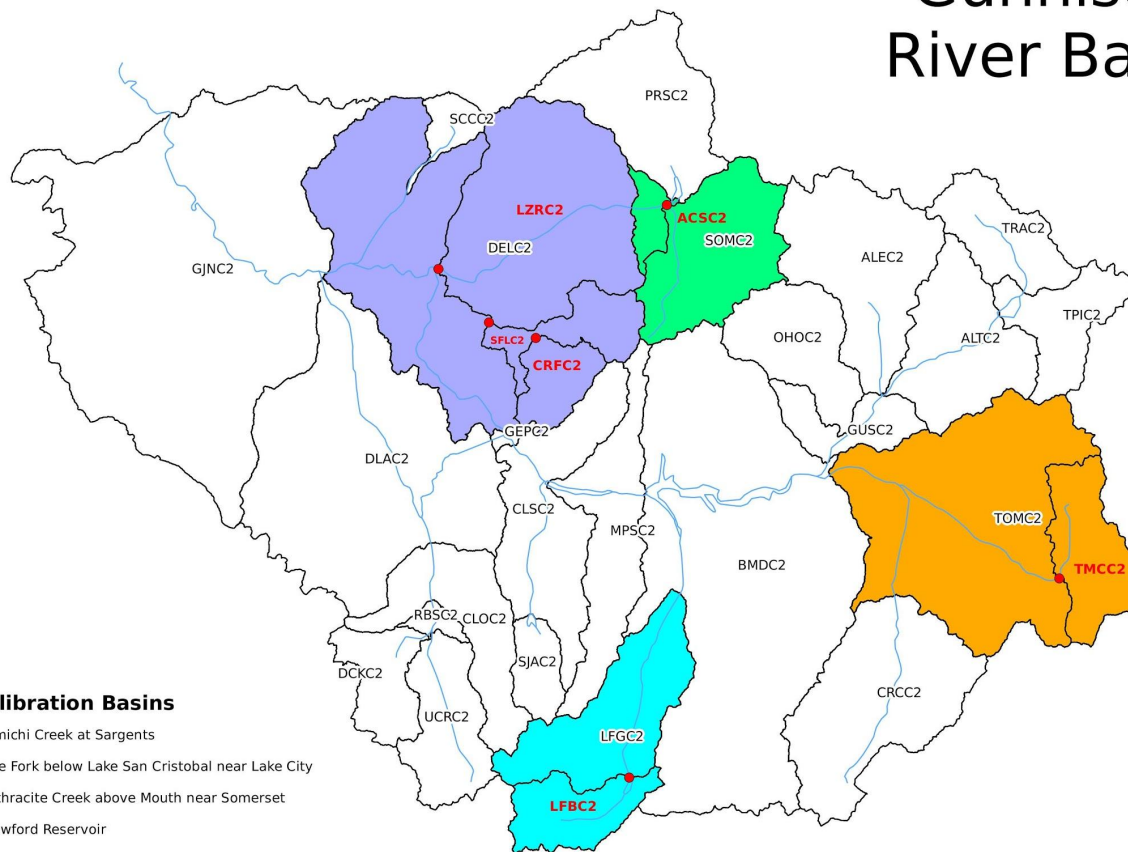
- Calibrations
- Improving snow modeling
- Providing uncertainty information for our short term forecasts
- Water Resources Monitoring and Outlook Website

Calibrations work

- Adding 5 years of data and ESP traces to Great Basin (Upper Colorado was done last year)
- Adding new segments, mostly to the Gunnison
- Calibration work in the Lower Basin

New basins in the Gunnison

Gunnison River Basin



New Calibration Basins

TMCC2 - Tomichi Creek at Sargents

LFBC2 - Lake Fork below Lake San Cristobal near Lake City

ACSC2 - Anthracite Creek above Mouth near Somerset

CRFC2 - Crawford Reservoir

SFLC2 - Smith Fork near Lazear

LZRC2 - North Fork Gunnison River above Mouth near Lazear



Calibration work in the Lower Basin

- A calibration quality precipitation and temperature data set for use in the lower basins
 - Uses all gages
 - Easily adds years to the ESP data set
 - The MAPs/MATs are calculated from grids. These grids can be used in the the next generation of distributed models
 - Ensures that calibrations and operations are identical



Improving Snow Modeling: RTi and USU collaboration

In collaboration with Utah State University and RTi, evaluating operational use of distributed model

- Utah Energy Balance snow model
- Sacramento Soil Moisture Model

Timeline: Four years of funding, which is about halfway done

Early results

What we're hoping for: A distributive model we can run in house, along with an energy balance snow model

Hydrologic Ensemble Forecast System - HEFS

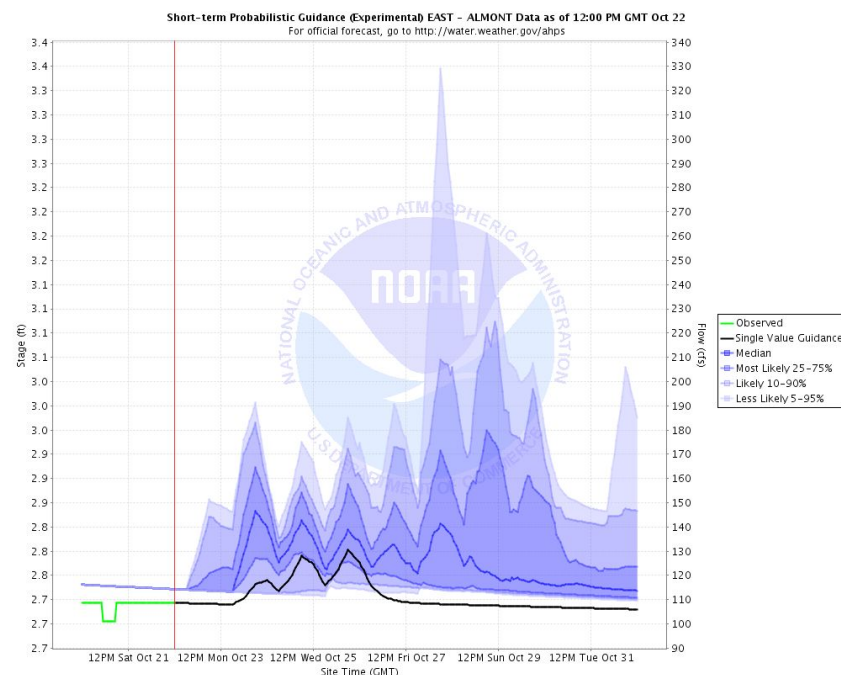
Seasonal forecasts

Evaluated Upper Colorado

– No skill added from using historically data

Need to evaluate lower Colorado

Setting it up and evaluating to short term forecasts – could help for runoff scenarios





National Water Model

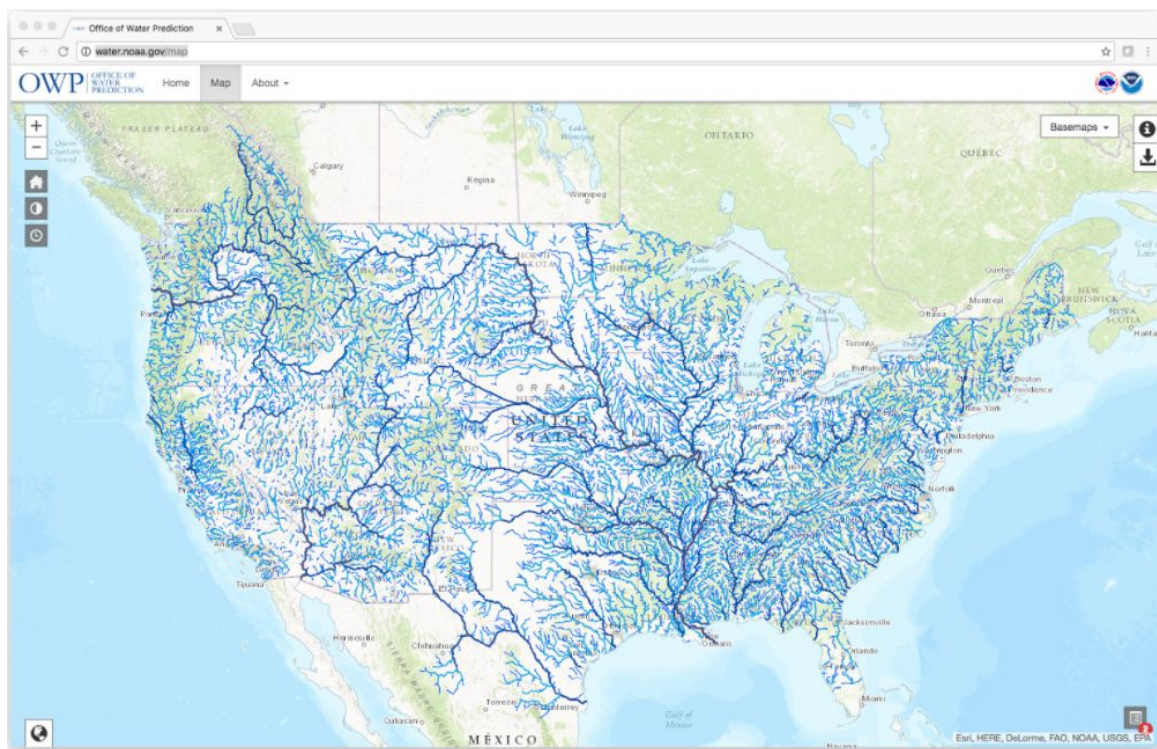
- Developed by NCAR
- WRF-Hydro model as foundation
- Stream routing based on NHDPlusV2 streams
- More info at <http://water.noaa.gov/about/nwm>
- Provides forecast guidance for underserved locations
- No real-time forecaster engagement
- Not calibrated
- Still needs work

National Water Model

- RFCs involved in evaluating the NWM, and soon to be engaged to improve the NWM

Major current limitations:

1. No regulation information
2. Does not use RFC quality controlled observations
3. Spotty verification





Water Resources Monitoring and Outlook Webpage - WRMO



National Oceanic and
Atmospheric Administration
U.S. Department of Commerce

Water Resources Monitor & Outlook

Forecast As Of

2017-05-01

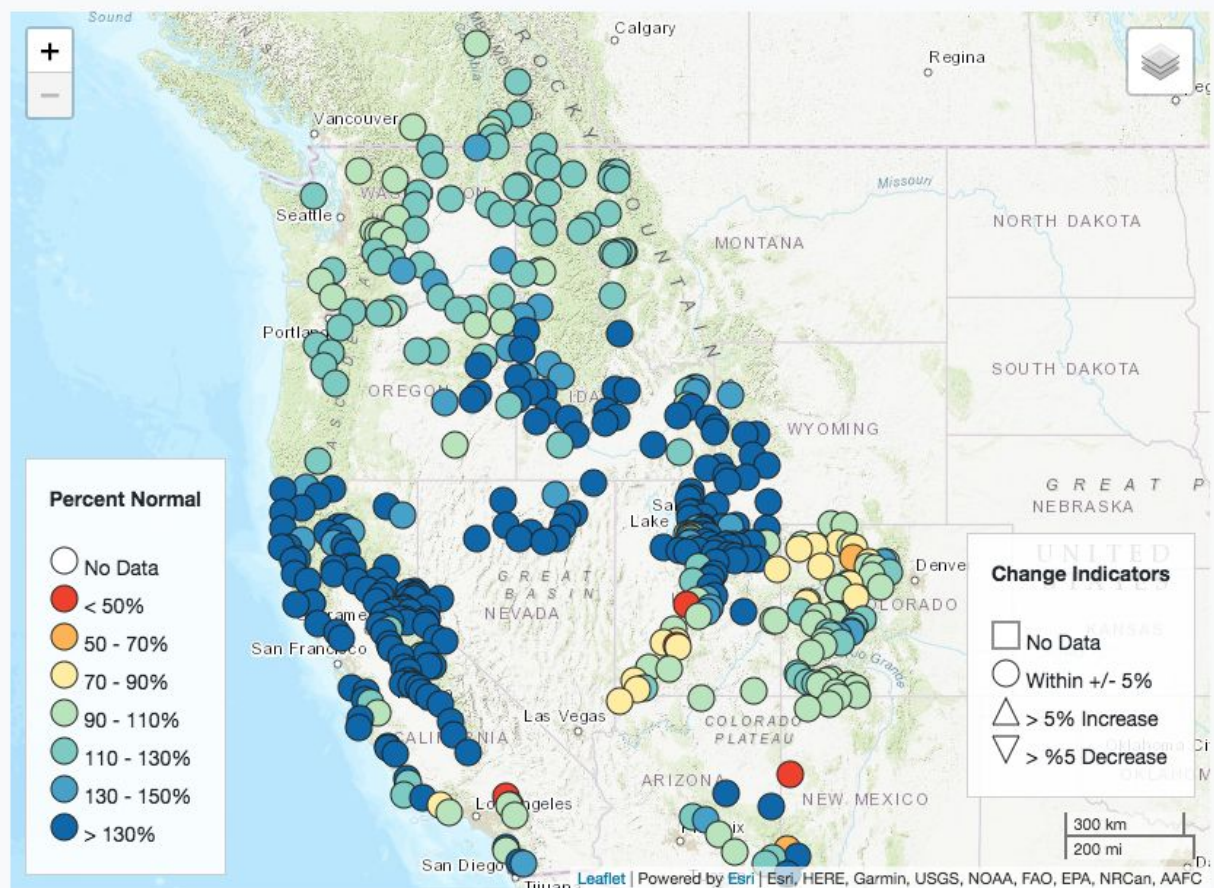
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Site

American - Folsom Reservoir

Change From

Off





Forecast As Of

2017-05-01

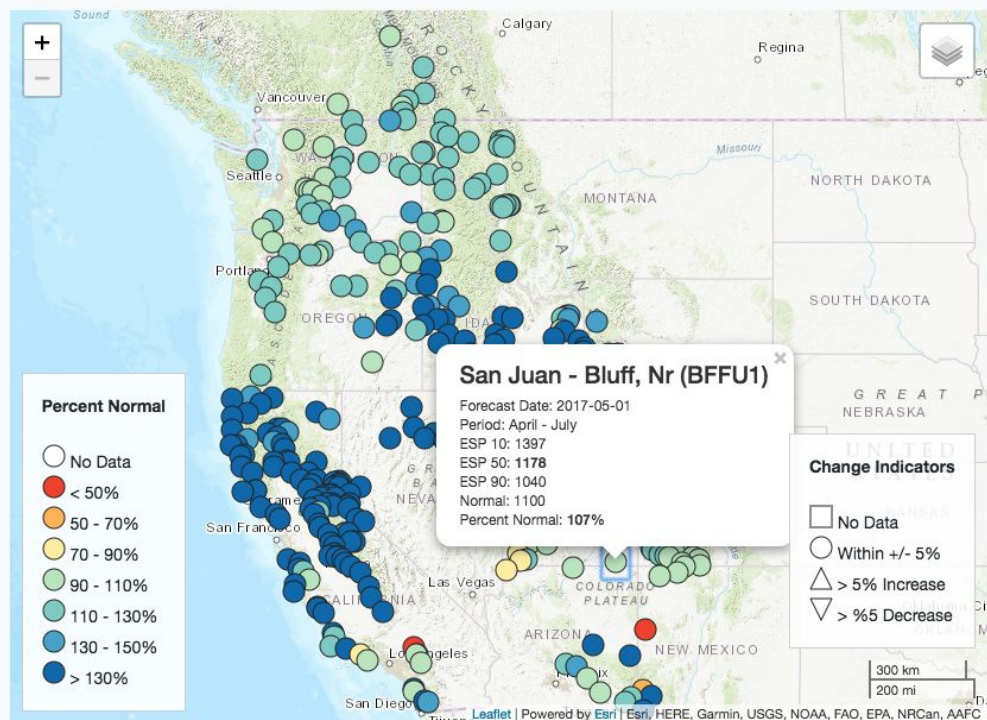
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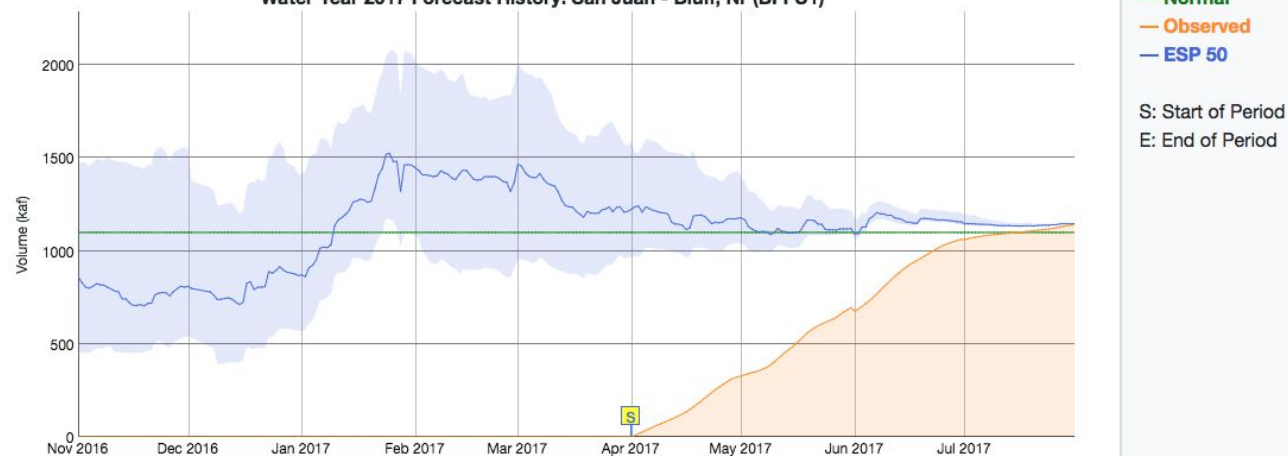
American - Folsom Reservoir

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Water Year 2017 Forecast History: San Juan - Bluff, Nr (BFFU1)



Questions?



Your Feedback

Did the meeting meet your expectations?

Suggestions for improvements?

Ideas for next year's Stakeholder Meeting:

Meet in various parts of the basin?