Snowpack Conditions, Station Information and Data Acquisition/Analysis

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March Air Temperature Anomaly

Daily Mean Temperature Anomaly: 01 March 2017 - 21 March 2017
Period ending 7 AM EST 21 Mar 2017
Base period: 1981-2010
(Map created 22 Mar 2017)

Analysis includes sites with at least 15 years of historical data. Anomalies are departures from the 14-day average of the period of record median. Temperature is measured from midnight to midnight.
Water Year Mountain Precipitation through March 21, 2017
Mountain Snowpack Conditions (% Median)

March 1, 2017

March 22, 2017
March Snow Water Equivalent Delta Records
Month to Date Change in Forecast Guidance
Large Winter Storm Cycles – Adverse effects on SNOTEL Precipitation Data Collection

- WY 2017 has seen extensive capping and plugging of SNOTEL storage gages throughout the Green River Basin and eastern Great Basin
- Storage gage capping and plugging results in invalid precipitation data
- NRCS SNOTEL Data Editors use data from other sensors and nearby sites to estimate precipitation (usually collocated snow pillow data)
- The longer the plug or cap persists, the less confident the precipitation estimate becomes
Capped Storage Gages
Plugged Storage Gages
Example Data from Plugged Storage Gage
SNOTEL Installation Schedule, 2017
Colorado Basin and Great Basin

• 1 New site scheduled for installation in 2017 – West Salt Creek on north side of Grand Mesa. Tributary to Plateau Creek. Related to continued flood and landslide concerns at the site of the West Salt Creek landslide of May 25, 2014.
Trapper Lake Snotel Wildfire Impact (2002)

Pre-Disturbance

Post-Disturbance
Red Mountain Pass Snotel – Land Ownership Issue

- Site is on private land and landowner wants it removed
- Red Mountain Pass Snotel is a long term, high elevation site
- Critical for water supply forecasting in the Dolores, Gunnison and San Juan River Basins
- **Option to purchase land**
- Option to move site
- Option to discontinue site
- Outcome actively being negotiated
SNOTEL and AWDB Data Access

- Report Generator
  http://wcc.sc.egov.usda.gov/reportGenerator/

- AWDB Web Service:
Data Analysis and Mapping

- Interactive Map: http://www.wcc.nrcs.usda.gov/snow/snow_map.html
Contact NRCS Snow Survey and Water Supply Forecasting Program

- [http://www.wcc.nrcs.usda.gov/contact/index.html](http://www.wcc.nrcs.usda.gov/contact/index.html)
- The Contact Help Center offers comprehensive contact choices based on subject matter
- And of course, you can always contact me directly: [angus.goodbody@por.usda.gov](mailto:angus.goodbody@por.usda.gov)