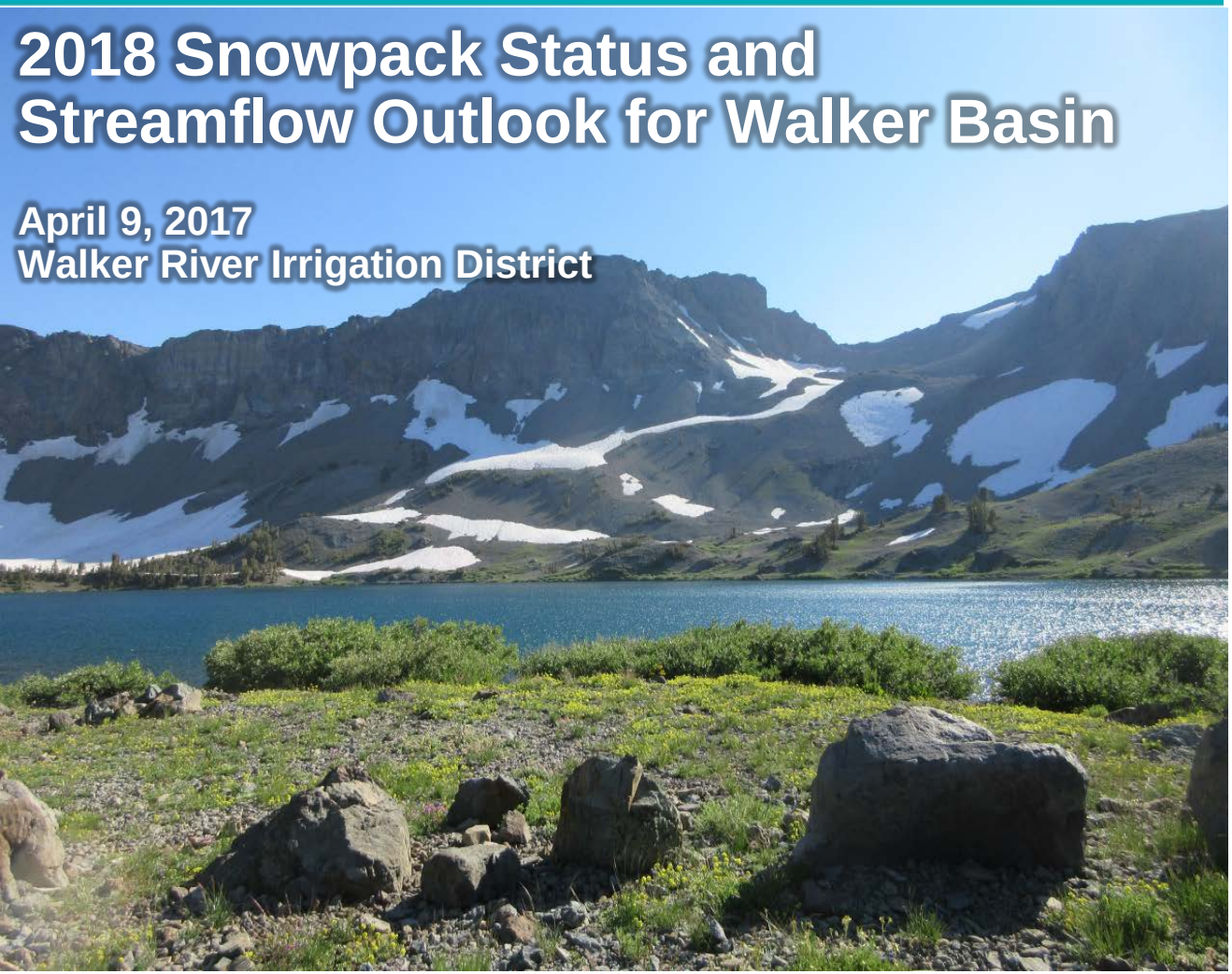
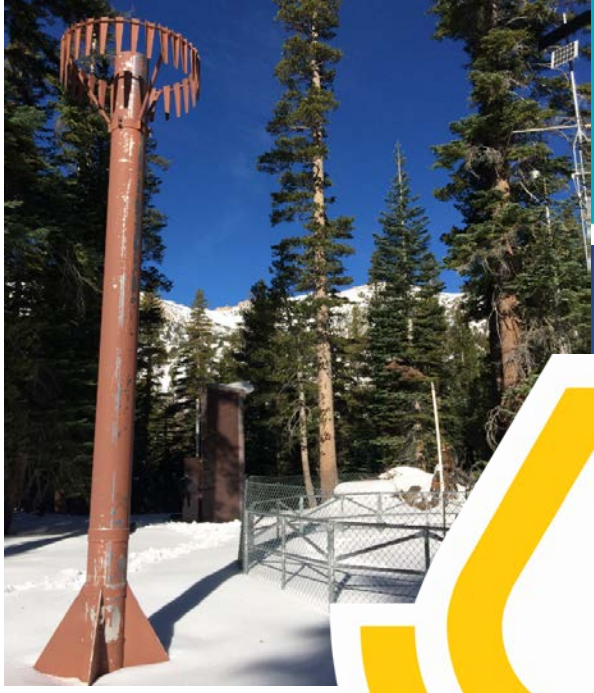
United States Department of Agriculture

2018 Snowpack Status and Streamflow Outlook for Walker Basin

April 9, 2017
Walker River Irrigation District



Leavitt Lake - August 10, 2017



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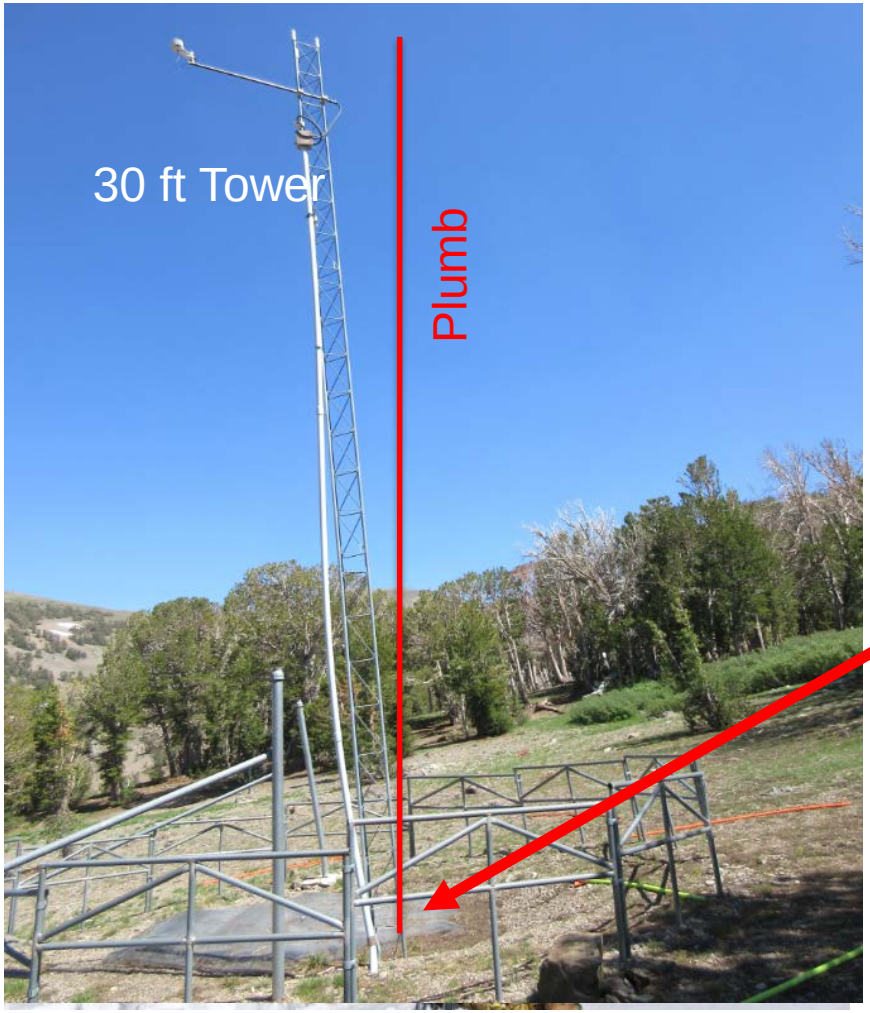
Natural Resources Conservation Service
www.nv.nrcs.usda.gov/snow

Leavitt Lake SNOTEL, CA



Effects of Snow Creep

New tower brace

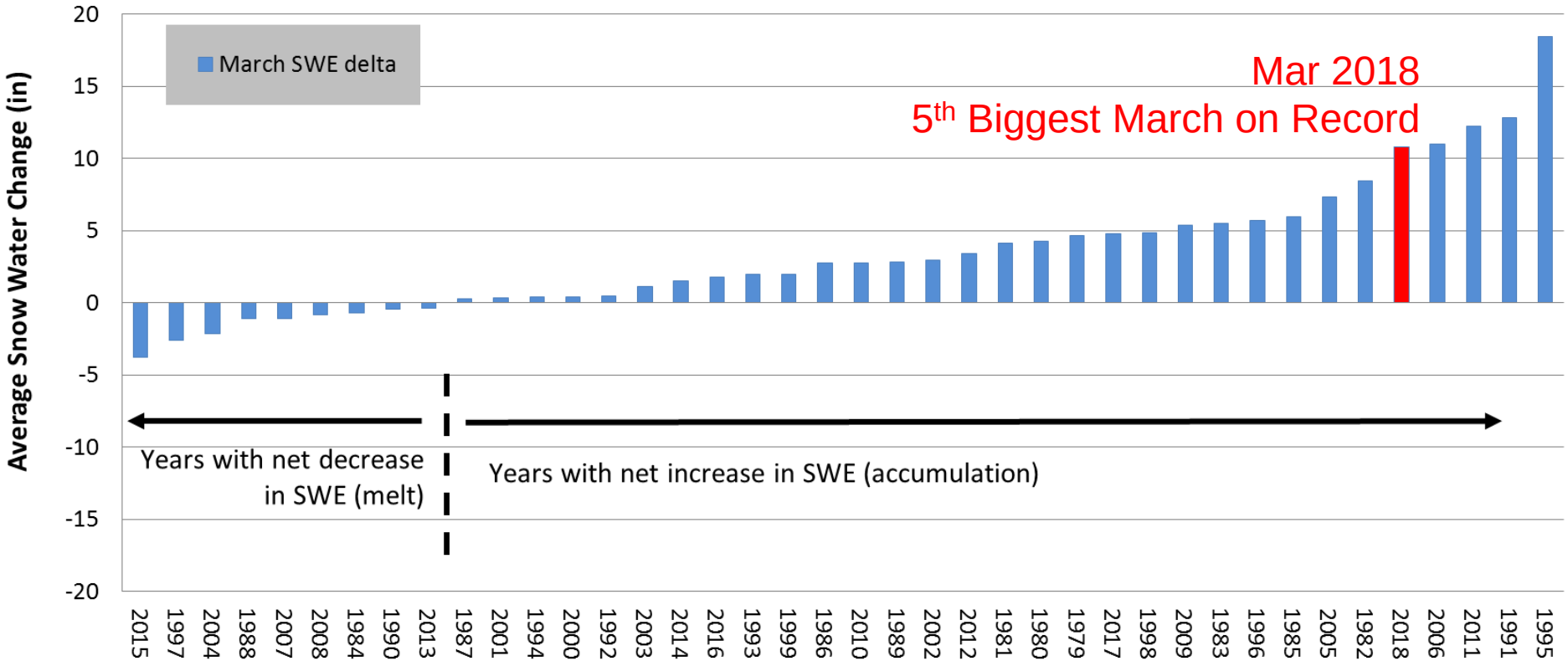
Splint on tower leg

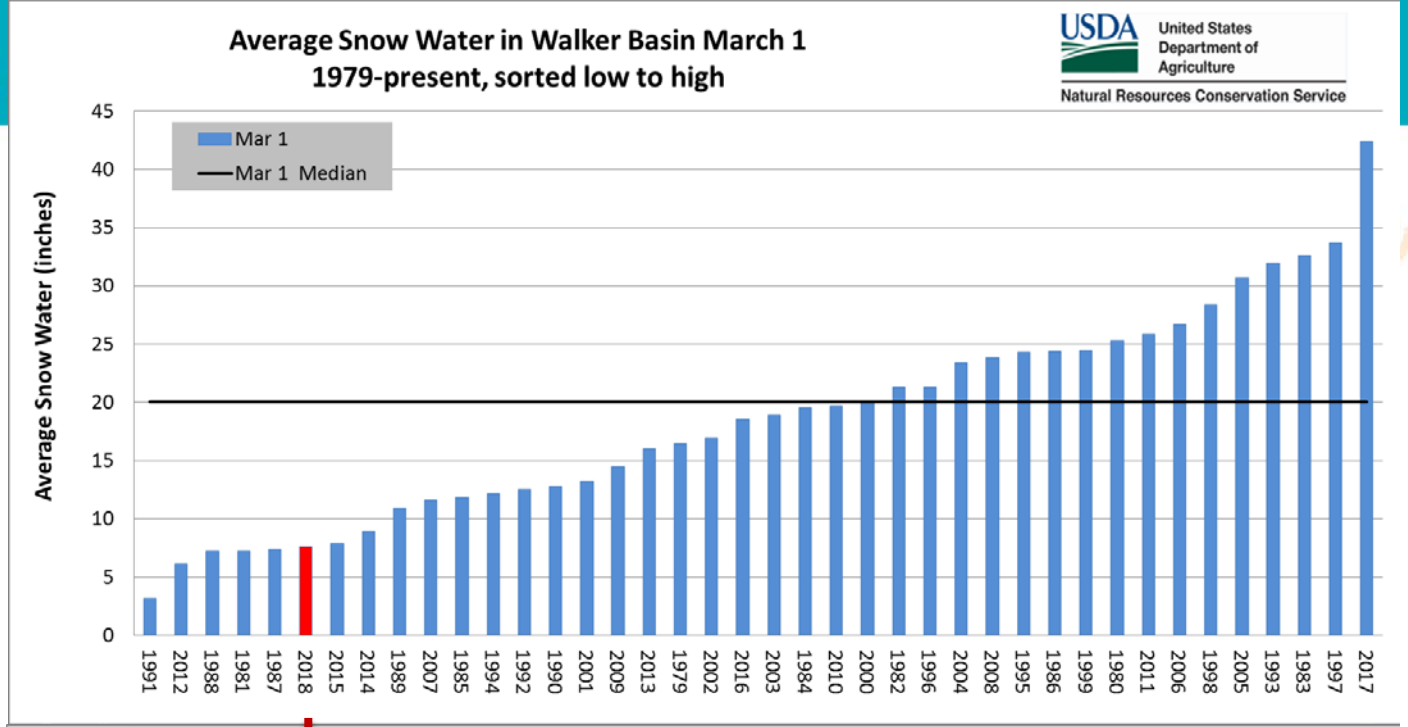
Key Points Up Front:

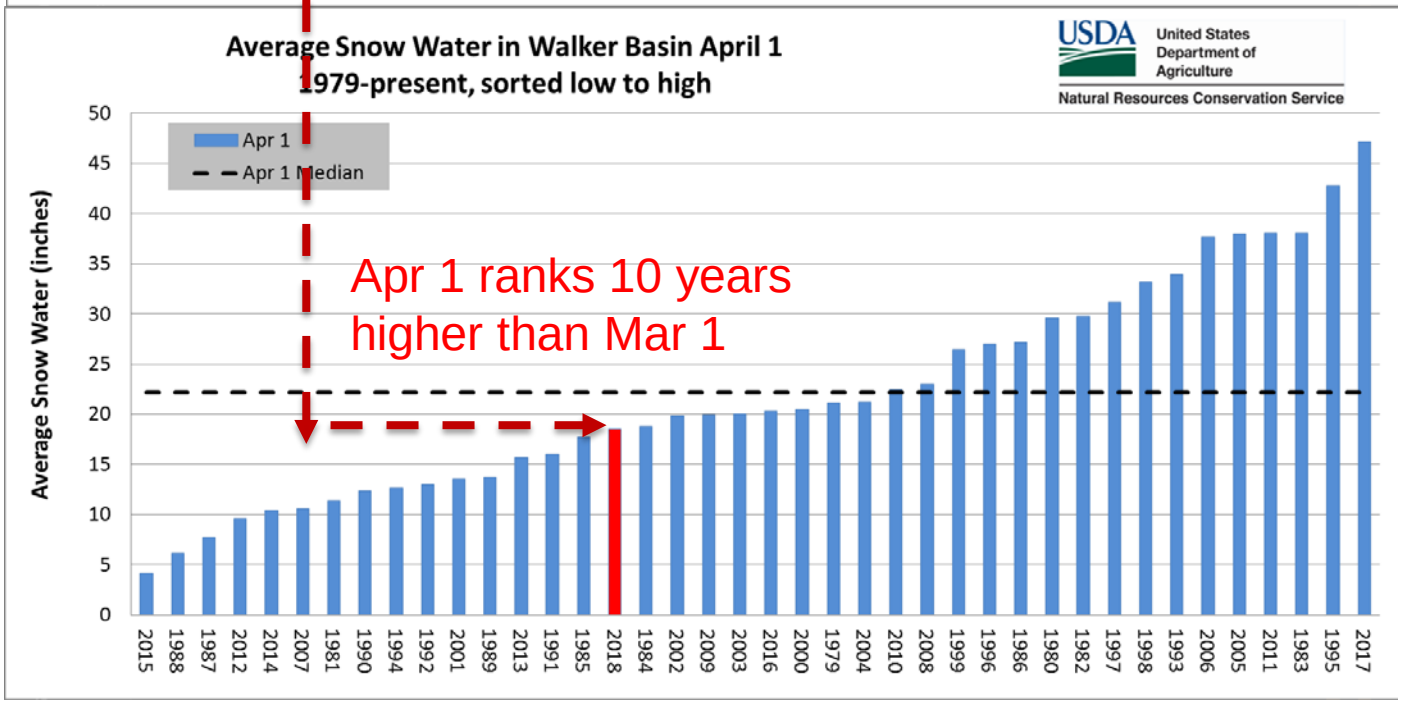
- Snowpack
  - This March was 5th largest March increase on record
  - Snowpack went from 32% of peak March 1 to 80% on March 26
  - Below 8,800ft SWE already melting prior to storm, during storm rain passed through and melted snow.
  - Above 9,600ft SWE increased, but by the end of the storm the snowpack released water
- Precipitation
  - As of 4/8/2018 water year to date precipitation is 94% of average (77% of WY average)
  - April precipitation is already 63% of April monthly average
- Soil Moisture
  - Soil moisture spiked up from near average on April 1.
  - Expect an efficient runoff this spring.
- Streamflow Forecasts
  - NRCS 50% exceedance forecasts assumes normal amounts of precipitation in future. If future weather is wetter consider 30% exceedance volume.

Average Snow Water Change between March 1 and April 1 in the Walker Basin 1979-present, sorted low to high

USDA United States Department of Agriculture
Natural Resources Conservation Service



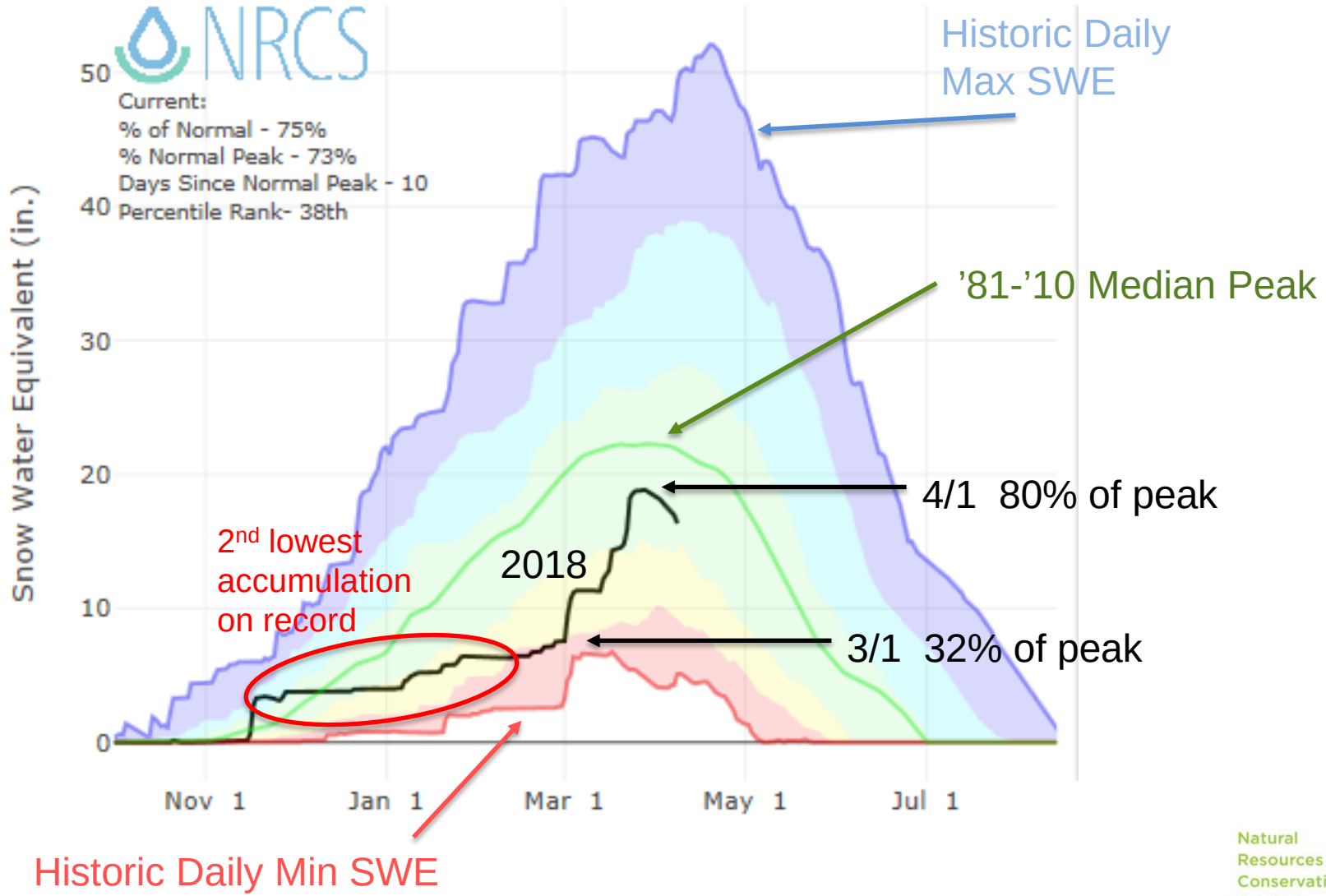




Natural Resources Conservation Service

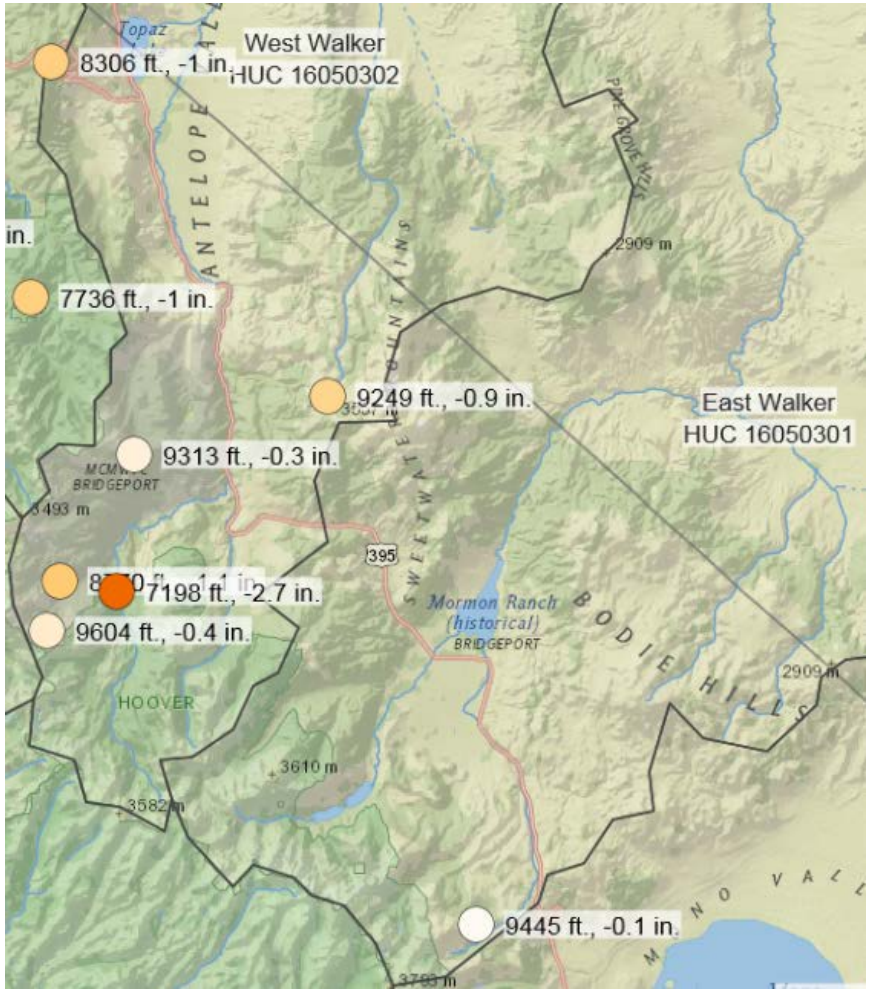
Snow Water Equivalent in Walker River Basin

4/8/2018

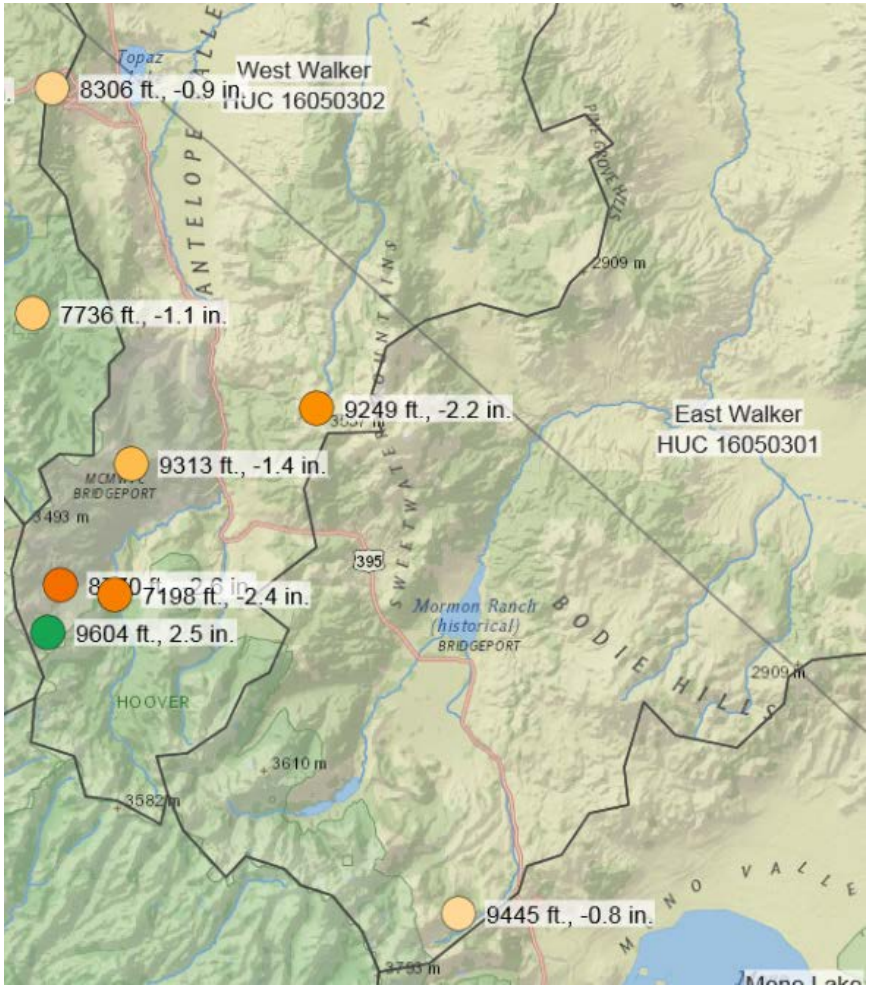


Snow Water Change

April 1-5, 2018

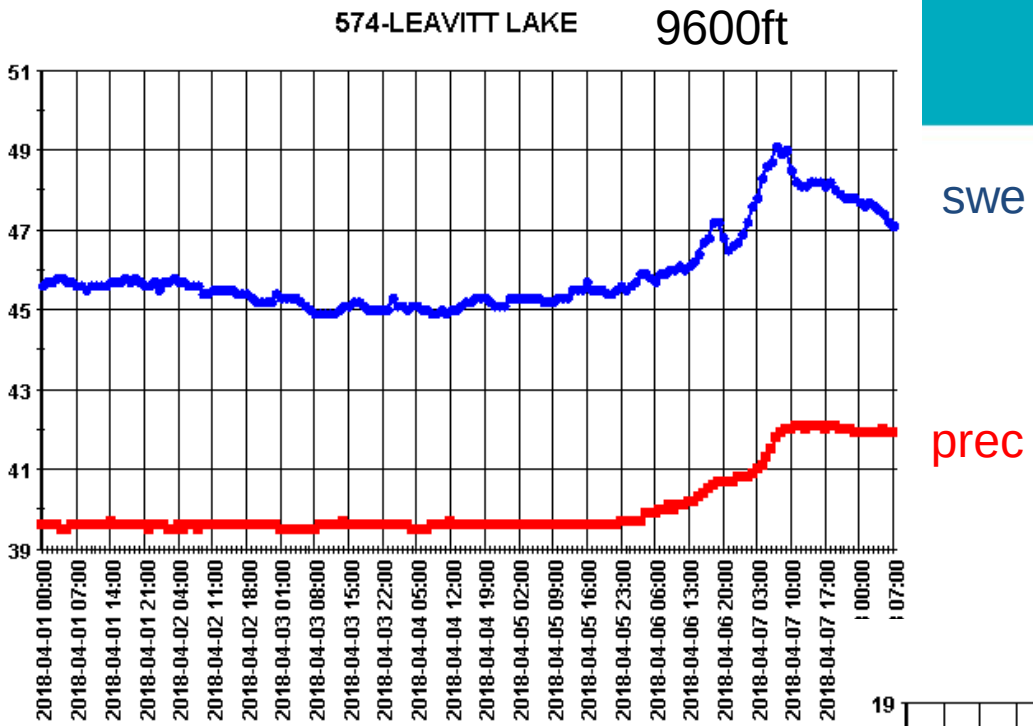


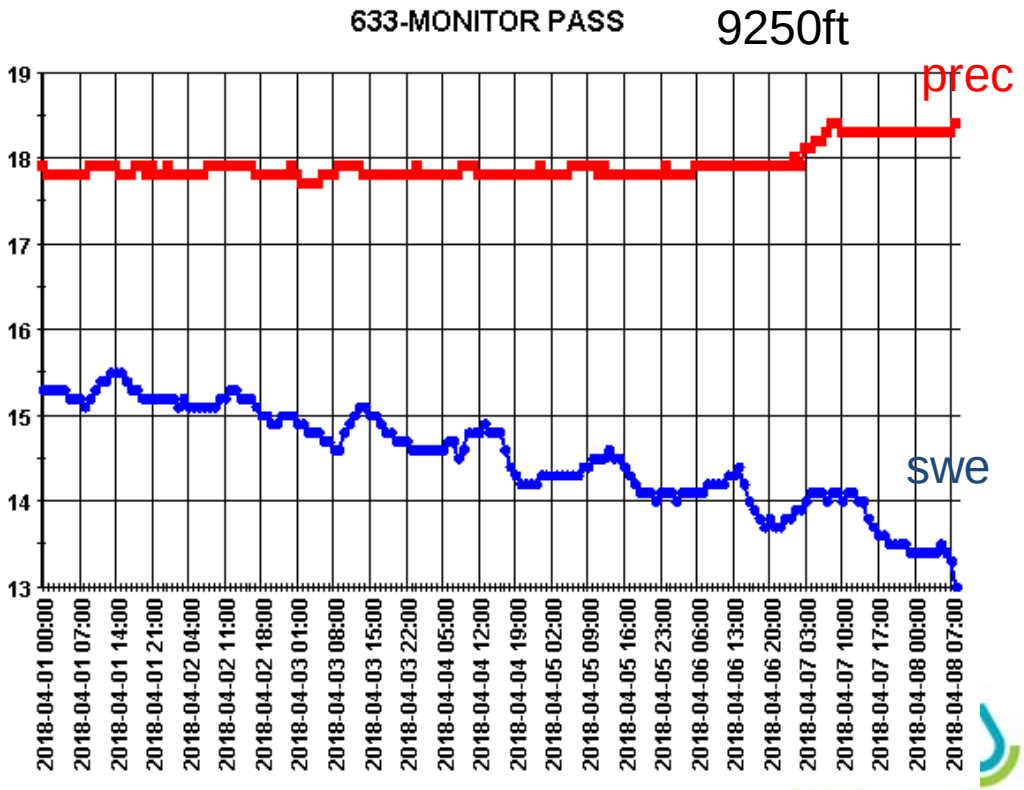
April 5-8, 2018



Snowmelt was progressing at most stations prior to AR

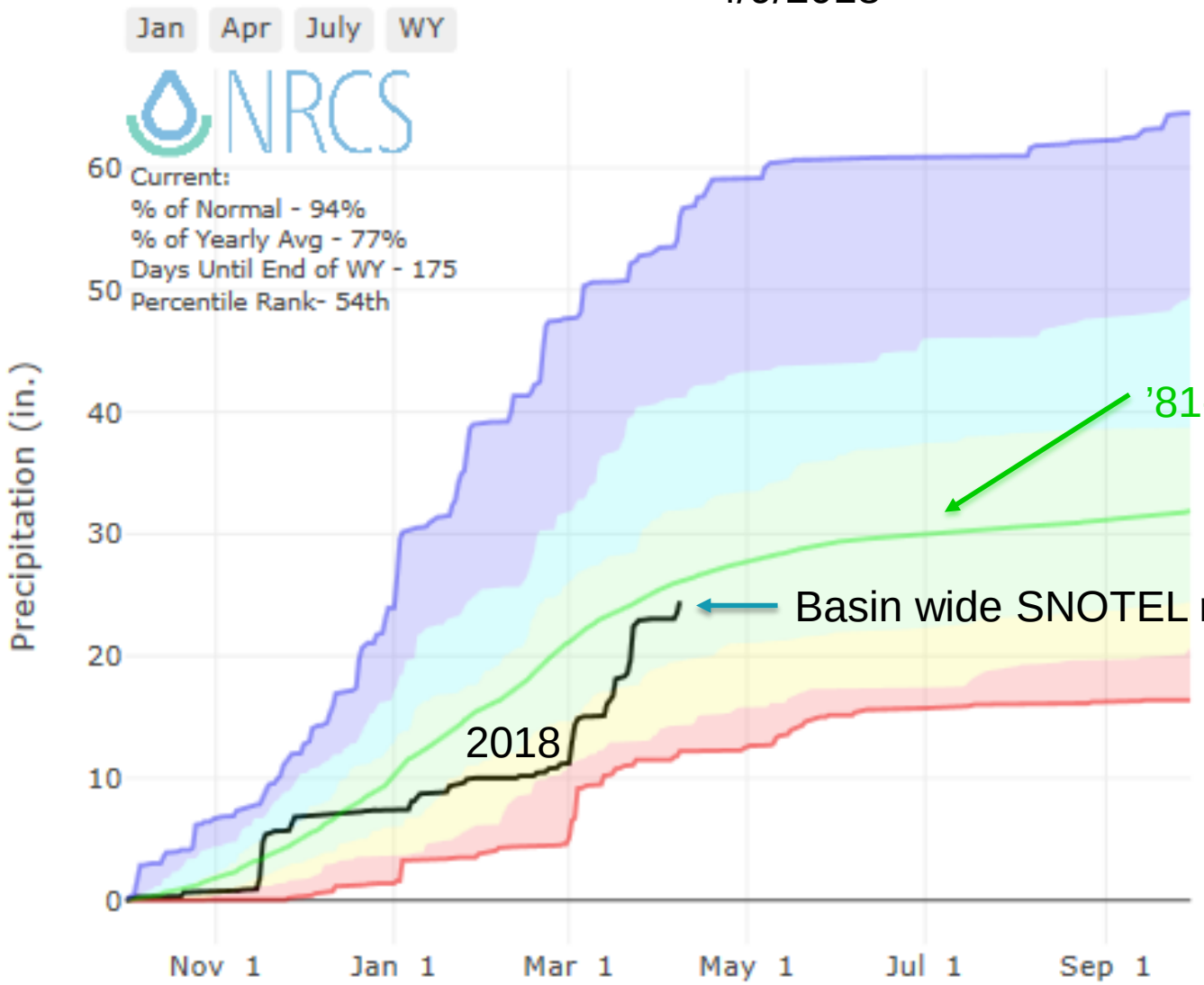
During AR only Leavitt Lake gained SWE



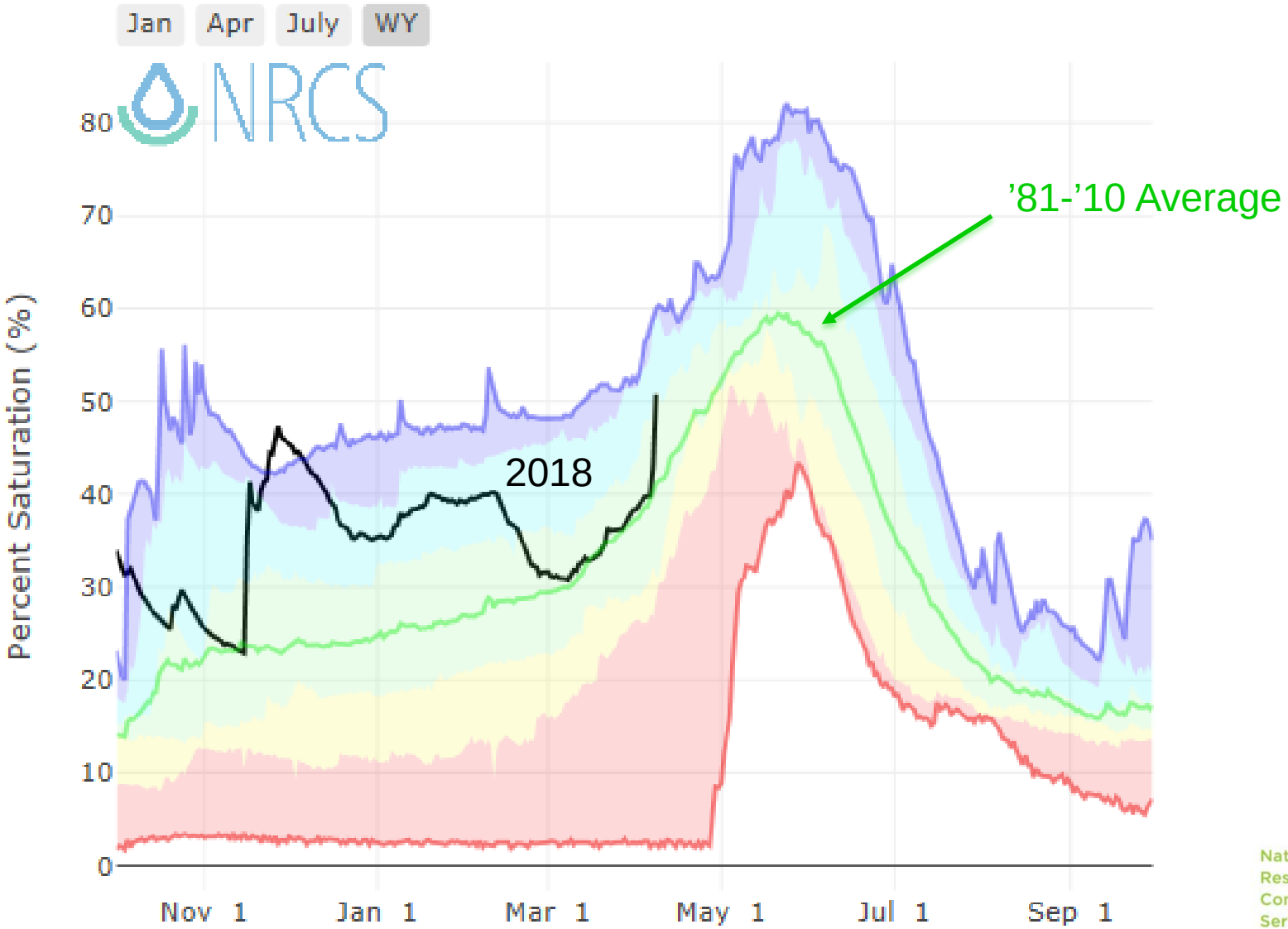


Recent Hourly Snow Water And Precipitation Data

Precipitation in Walker River Basin
4/9/2018

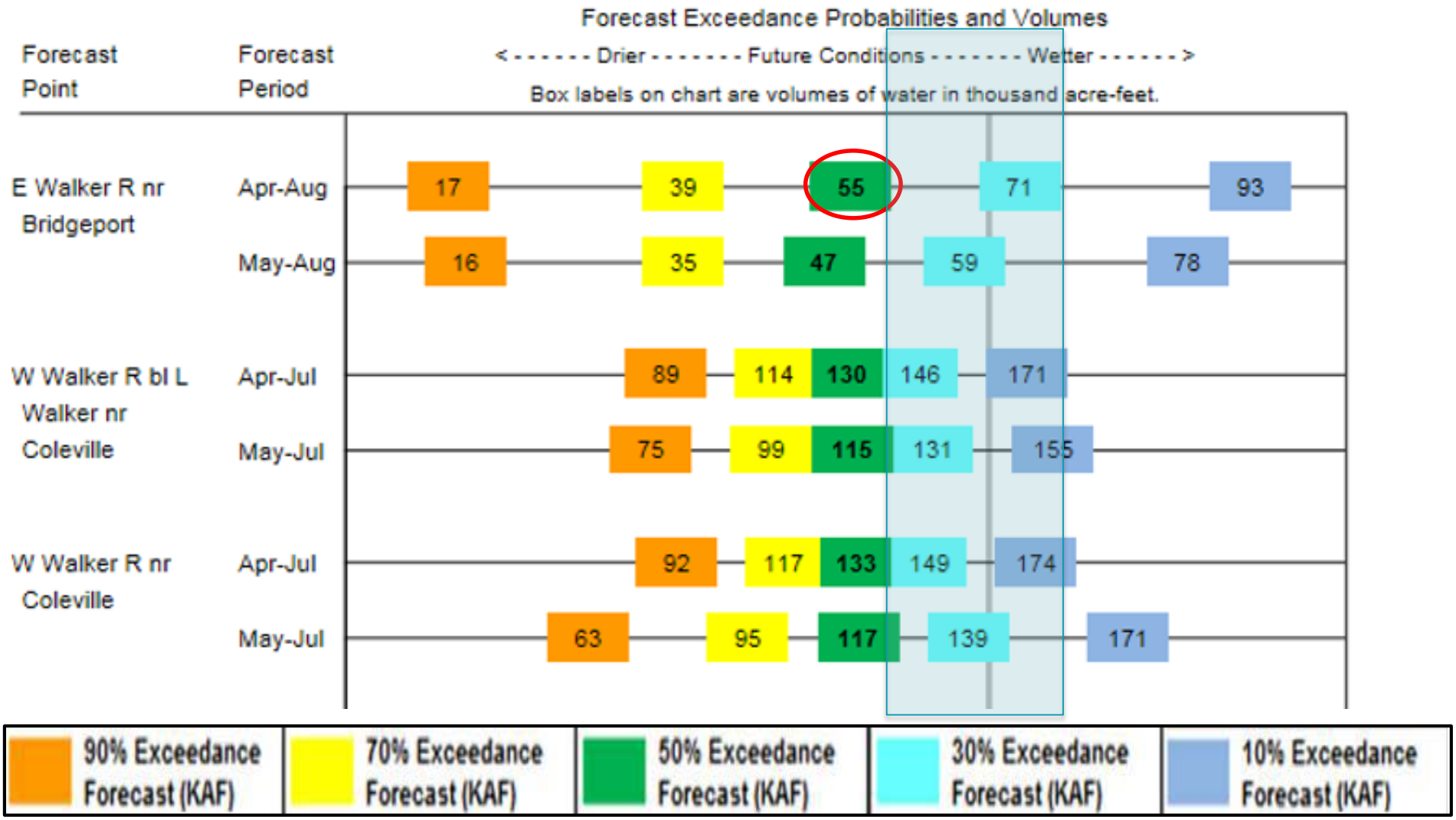


Average Soil Saturation in Walker River Basin
4/8/2018



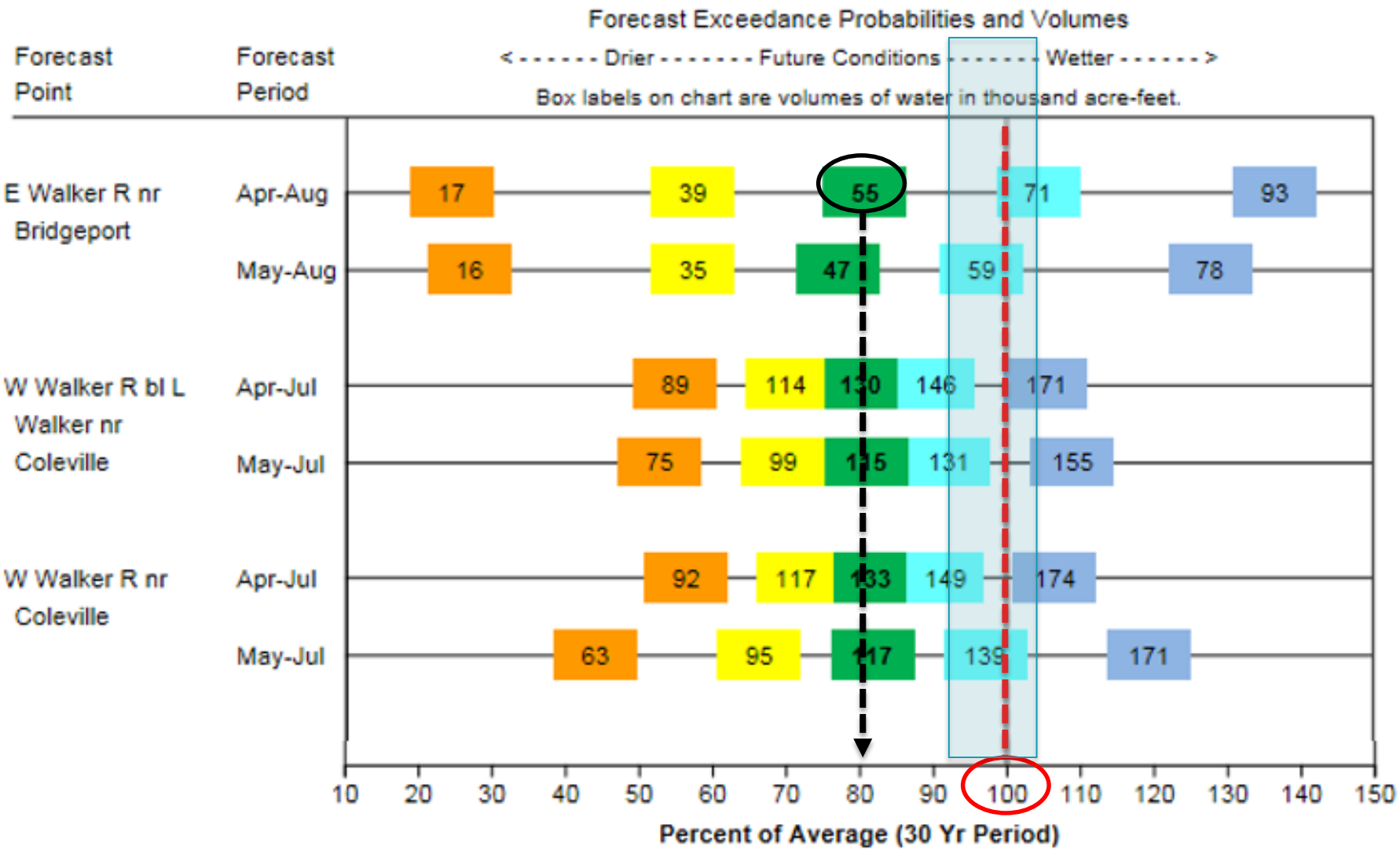
Walker River Basin
Water Supply Forecasts
April 1, 2018

Numbers in Boxes are volumes (KAF) of each exceedance forecast



Walker River Basin
Water Supply Forecasts
April 1, 2018

Boxes position relative to x-axis is Percent of Average



STOP
DO NOT ENTER
USMC
LIVE FIRE EXERCISE
IN PROGRESS
INDY
VOYAGEUR