

May 2019 Public Works Report

Capital Improvement Projects

Erie Parkway Bridge Replacement

Progress continues on this project with contractor SEMA Construction and construction management from RockSol Consulting Group. The deck is scheduled to be poured May 22nd, which will be an all-day event. This project continues to be on track for a late fall completion. The project is on schedule and within budget.

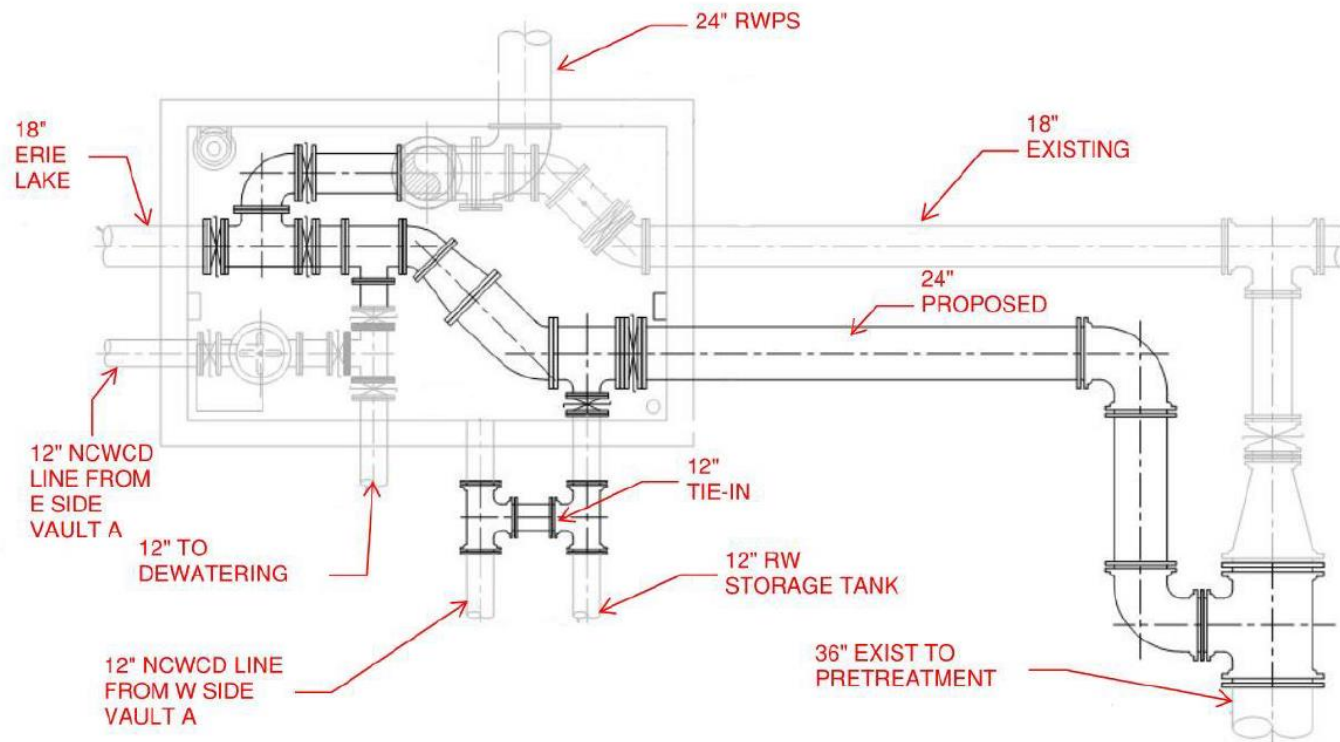


Lynn R Morgan Water Treatment Facility (WTF) Expansion

We will be bringing the Guaranteed Maximum Price (GMP) for the Construction Manager at Risk (CMAR) Garney Construction and Construction Administration Agreement to the May 14th Board Meeting for approval. This will add roughly 70% more capacity to the WTF and should be complete in 2020.

Morgan WTF Expansion

Town of Erie



Seismic Testing

Seismic Acquisition Services LLC is on schedule to complete their seismic data collection work by May 10th.

Lynn R. Morgan Water Treatment Facility (WTF)

Annual Daily Average Flow:

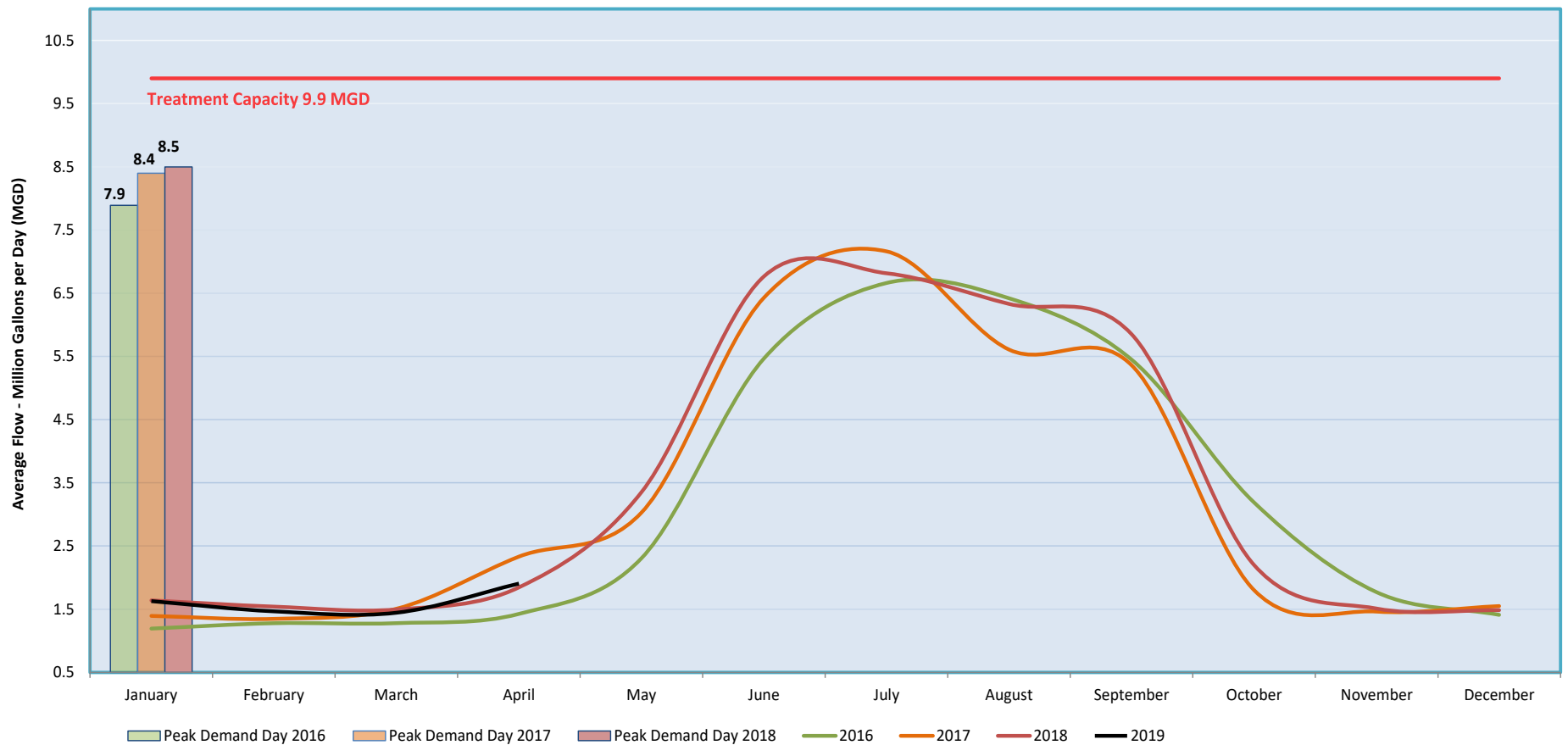
2016 - 3.3 (Million Gallons) MG

2017 – 3.4 MG

2018 – 3.4 MG

July 2017 maintains the record for the highest monthly average flows at 7.16 MG, while January 2016 had the lowest flows at 1.19 MG. Summer demands greatly affect the annual average due to outdoor irrigation. The daily peak demand (customer meter totals) of 8.45 MGD was in July of 2018. We will be bringing resolutions for construction expansion to bring the WTF to 16.7 MGD this month. Through working with the contractor, Garney Construction, as part of the design we have identified roughly \$1 million in savings to the project.

Average Monthly Production



Annual Daily Gallons Per Capita per Day (GPCD):

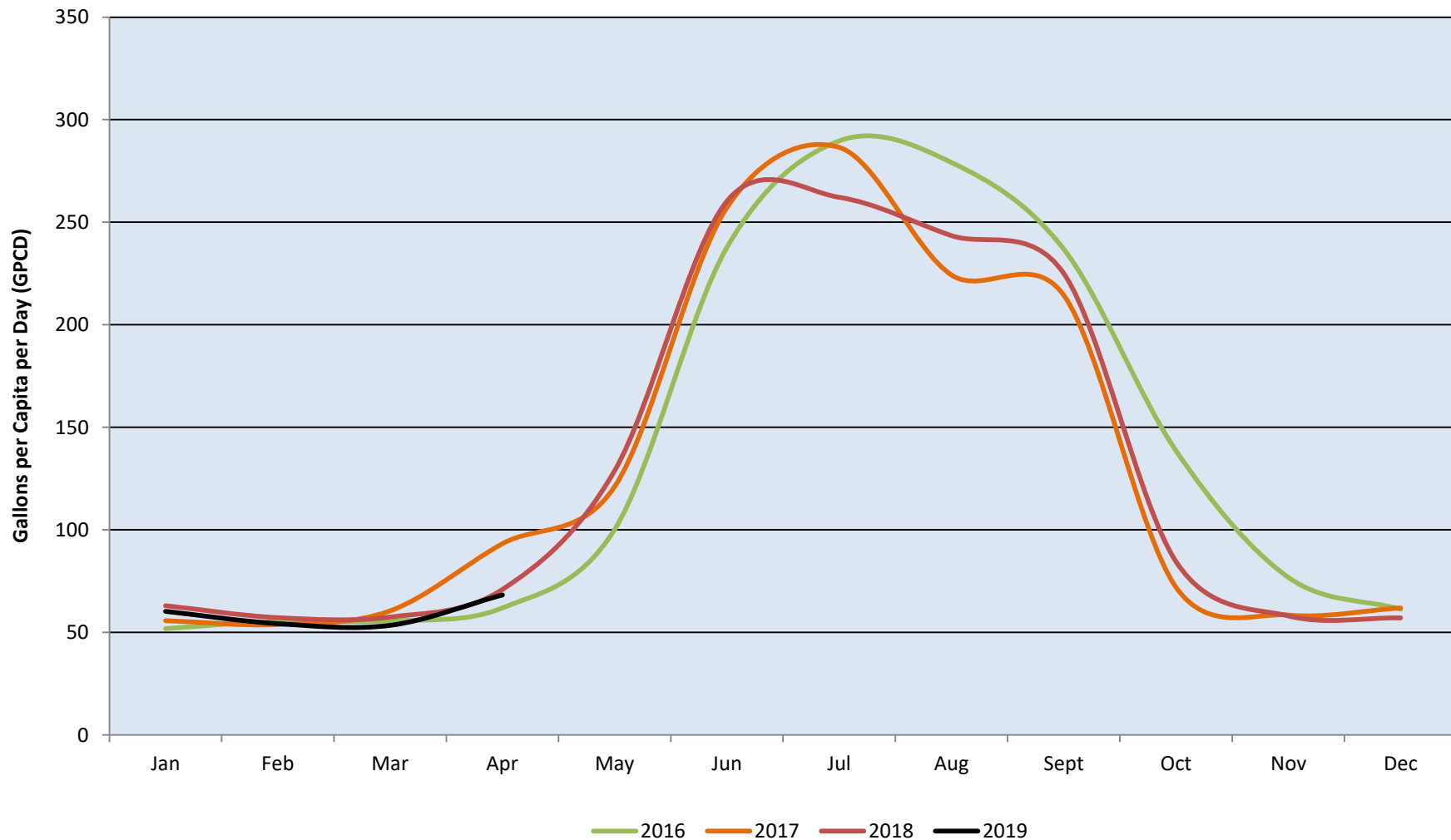
2016 - 131 GPCD

2017 – 130 GPCD

2018 – 131 GPCD

July 2016 had the highest average daily usage at 290 gallons GPCD. January 2016 had the lowest usage at 52 GPCD. Reducing summer irrigation and increasing reuse water availability will reduce reliance on treated water supplies in the future.

Average Daily Usage Per Capita



North Water Reclamation Facility

Annual Daily Average Flow:

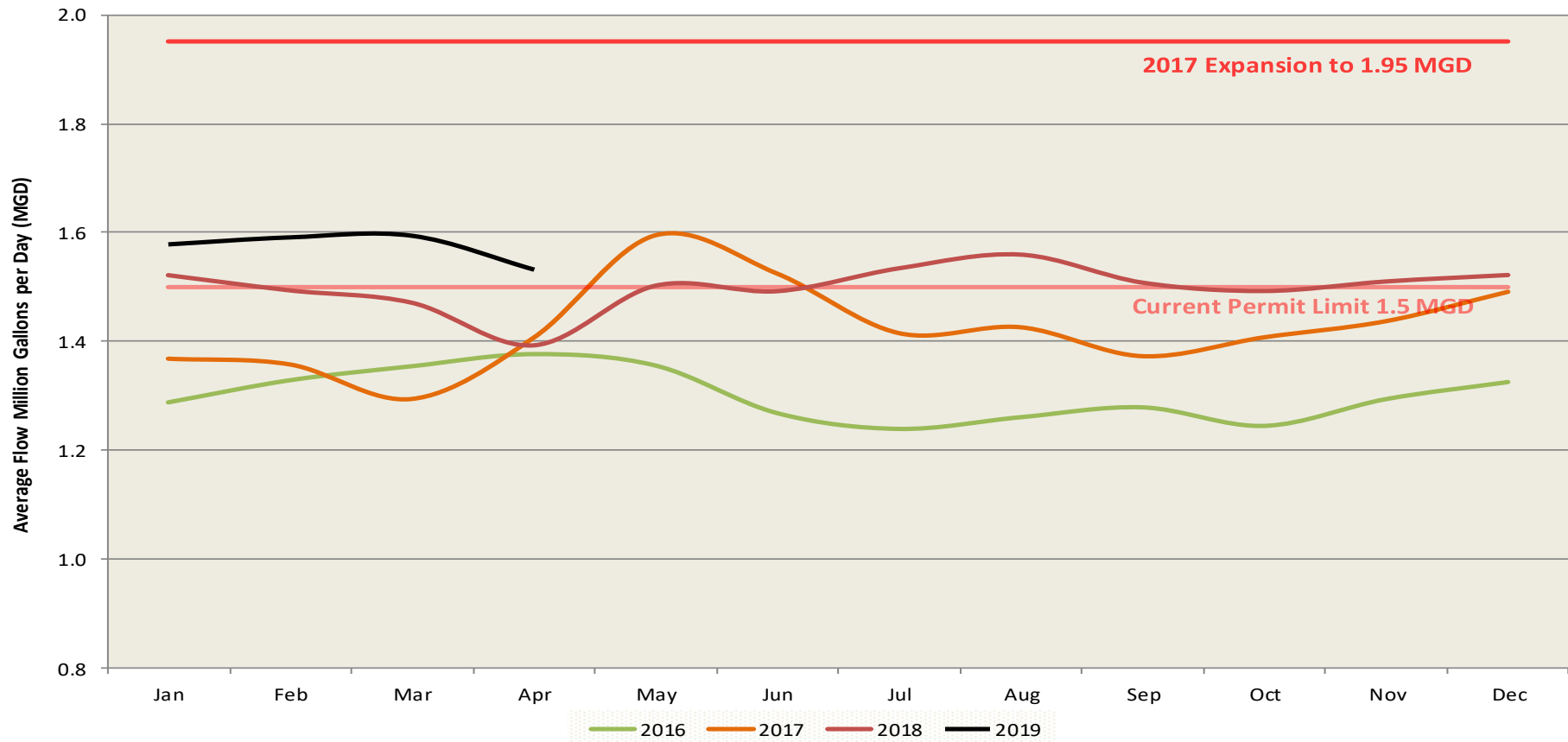
2016 - 1.30 MG

2017 – 1.42 MG

2018 - 1.50 MG

October 2016 had the lowest average flow of 1.24 million gallons per day (MGD). May 2017 set a high average monthly flow of 1.60 MGD, triggered by snowmelt and subsequent inflow into the collection system, likely through low lying manhole lids. Inflows are up slightly this winter for the same reason and due to relatively frequent snowfall. Staff worked with consultant Leonard Rice Engineers (LRE) and submitted a request for modifications to the facility permit from the Colorado Department of Public Health and Environment (CDPHE) in April 2018. The end result of this effort will be a permit at 1.95 MGD and more appropriate discharge limits than in the current or proposed permit. CDPHE has indicated that they will not process this request until after 2019; we are reaching out to CDPHE and asking they revisit this position. Design is underway with HDR engineering, we will look to engage a CMAR at roughly 30% design. We anticipate construction in late 2019 or early 2020 and lasting through 2021.

Average Monthly Flows



Annual Daily Gallons Per Capita per Day (GPCD):

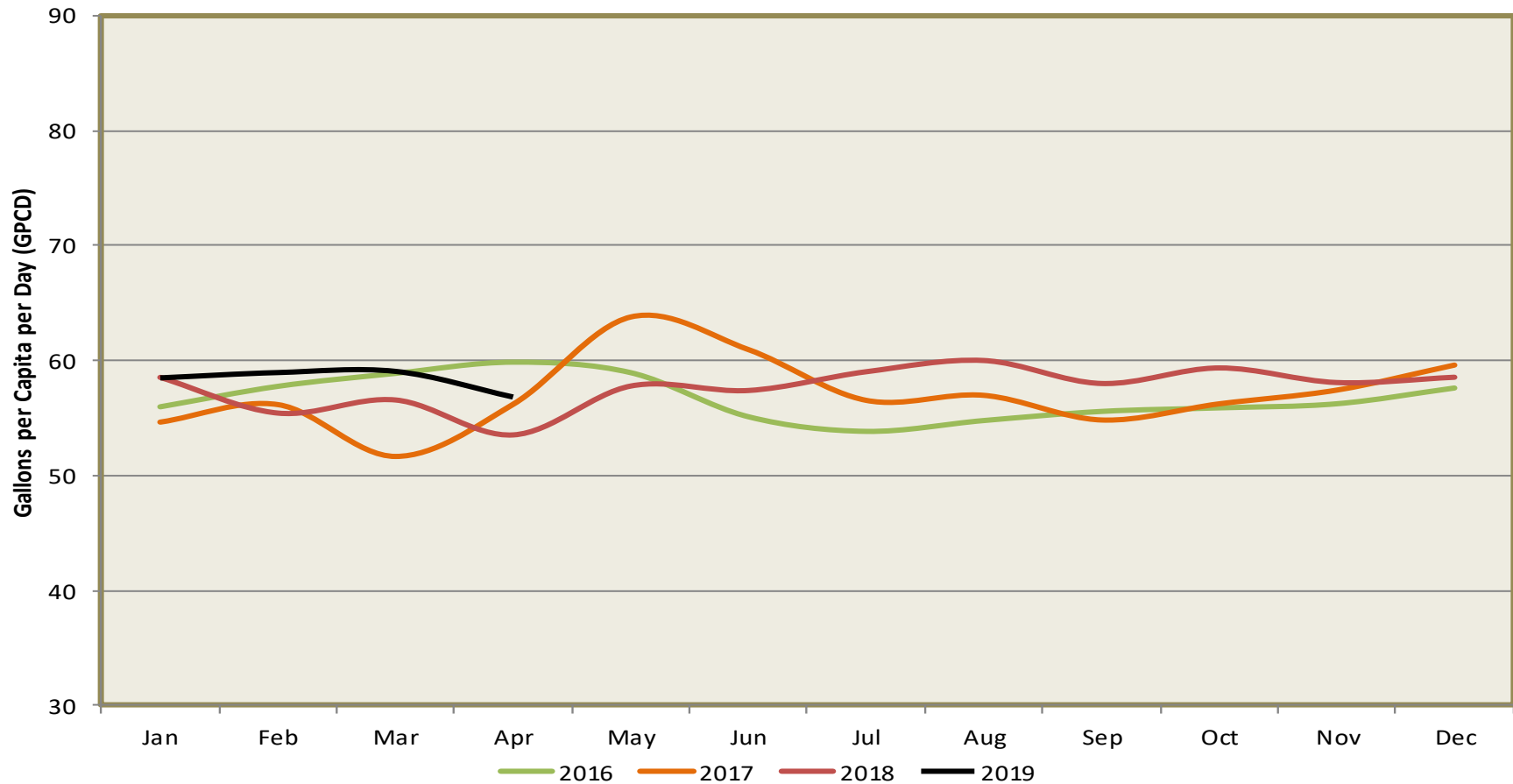
2016 - 57 GPCD

2017- 57 GPCD

2018 - 58 GPCD

This graph depicts customer indoor water usage. May 2017 had the highest usage at 64 GPCD, primarily due to snow melt seeping into manholes after a particularly wet snow and subsequent warm weather. March 2017 had the lowest usage at 52 GPCD. Overall flows into the wastewater treatment plant are trending upward over this period, however per capita demands remain relatively flat on an annual basis. Fall, with relatively little precipitation and dropping groundwater levels, is a good indicator of true daily usage.

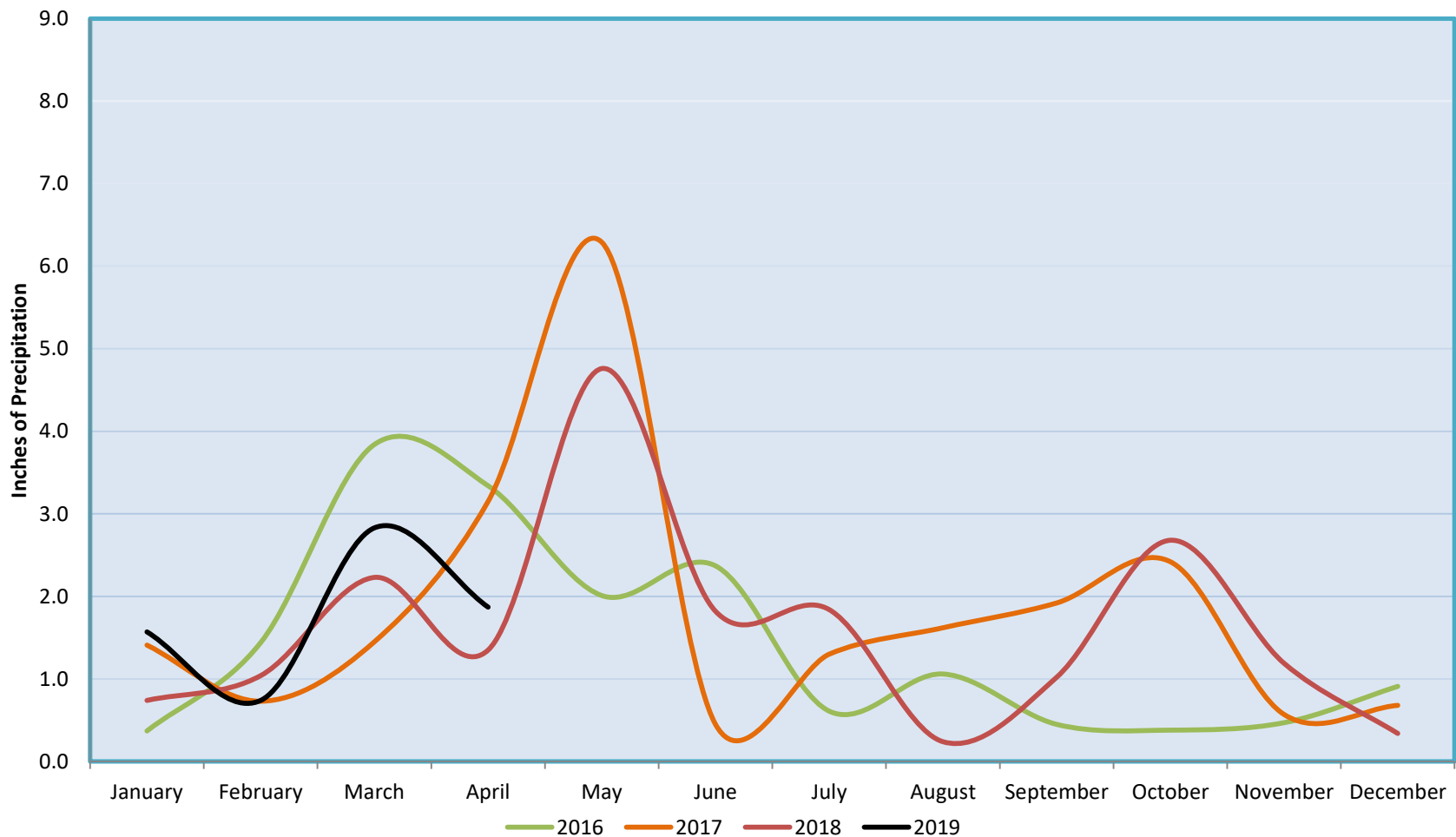
Average Daily Usage Per Capita



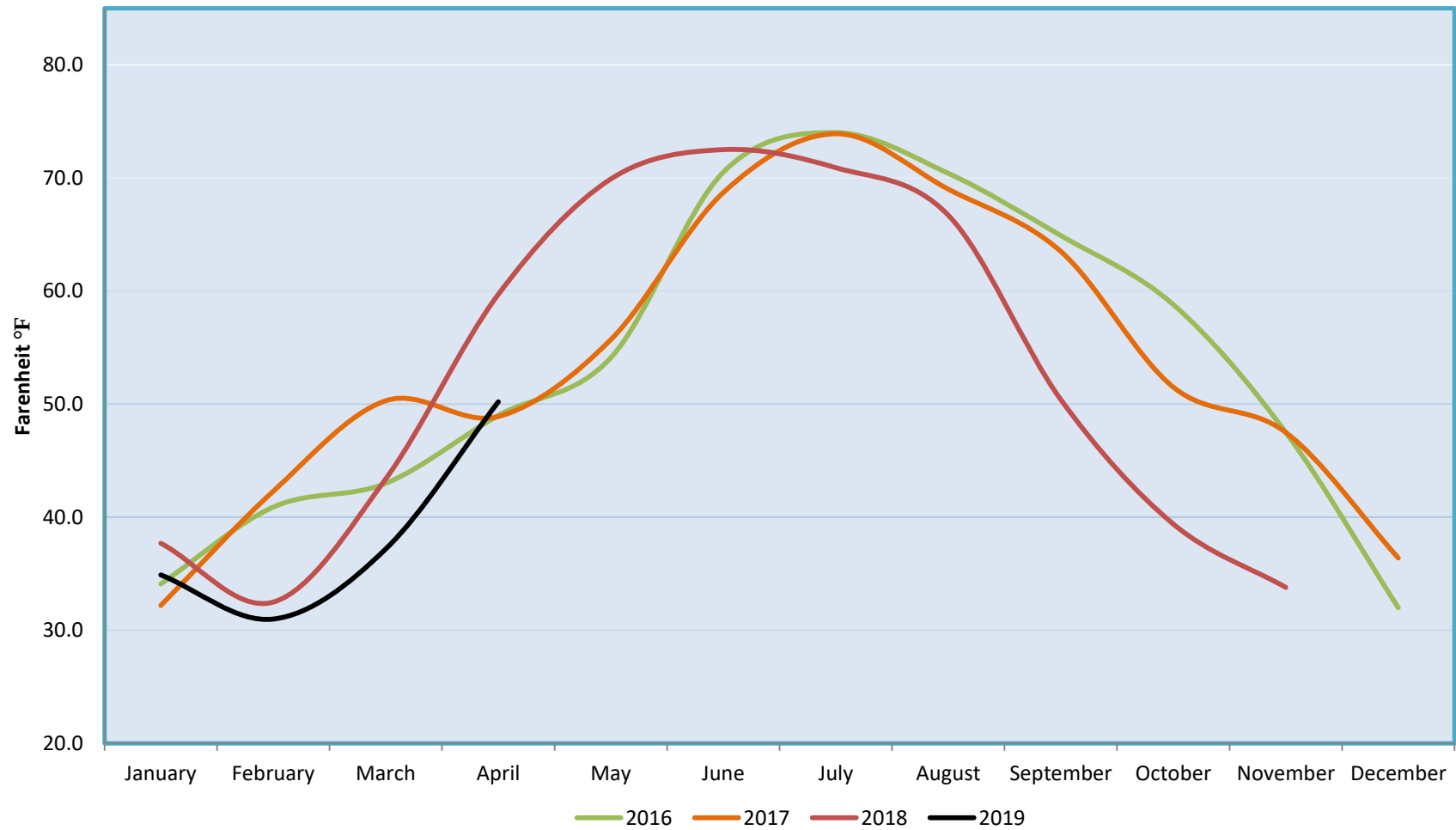
Monthly Data for Boulder – National Oceanic and Atmospheric Administration (NOAA) & Natural Resource Conservation Service (NRCS)

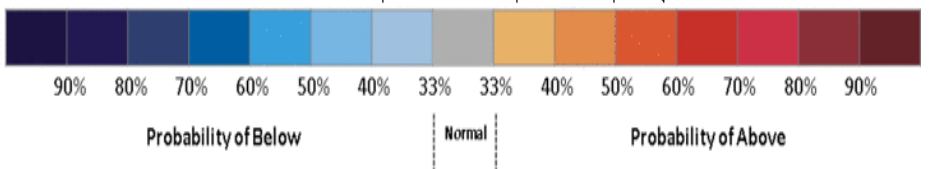
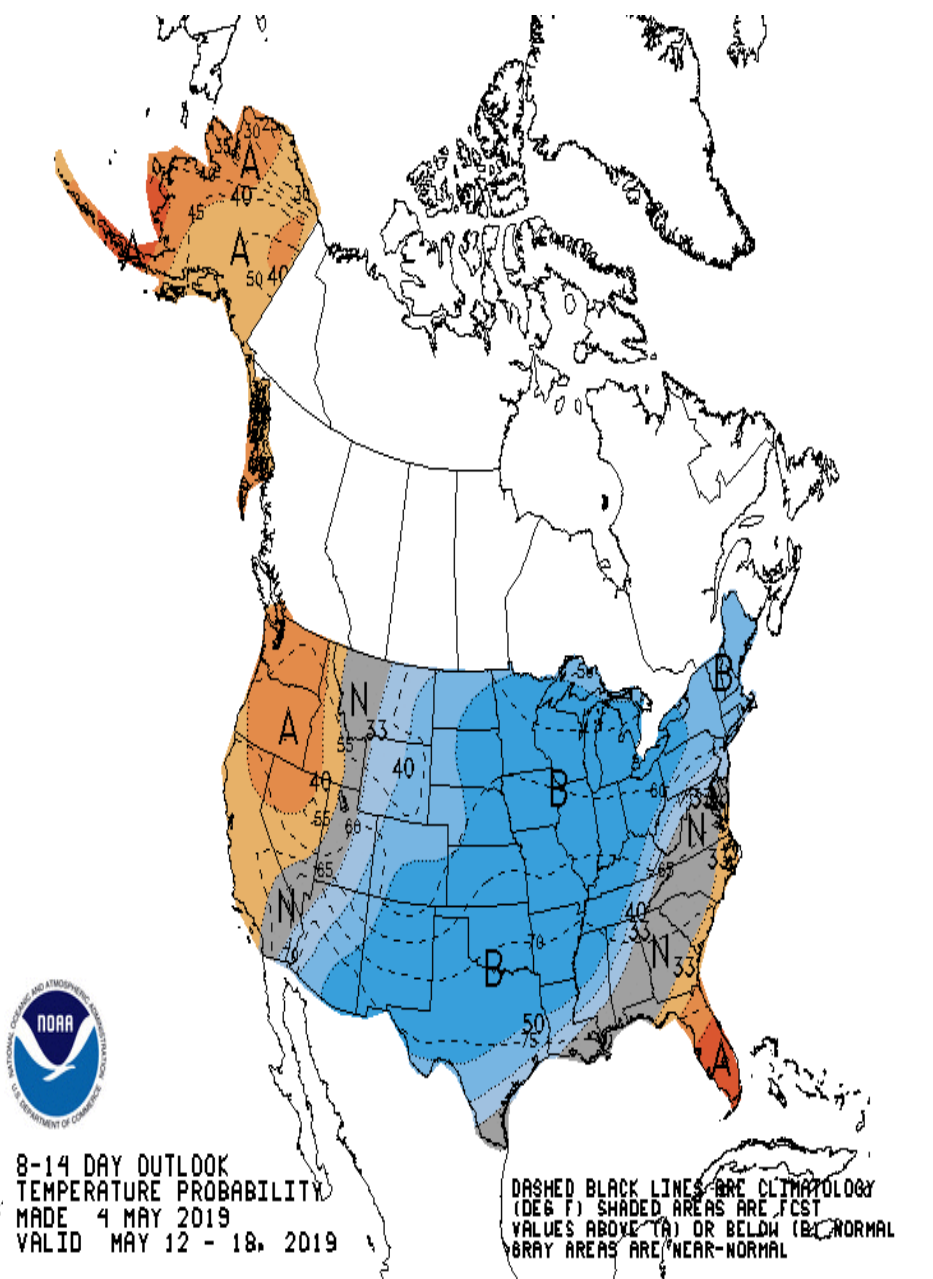
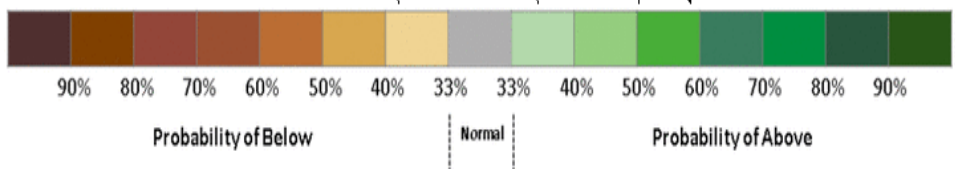
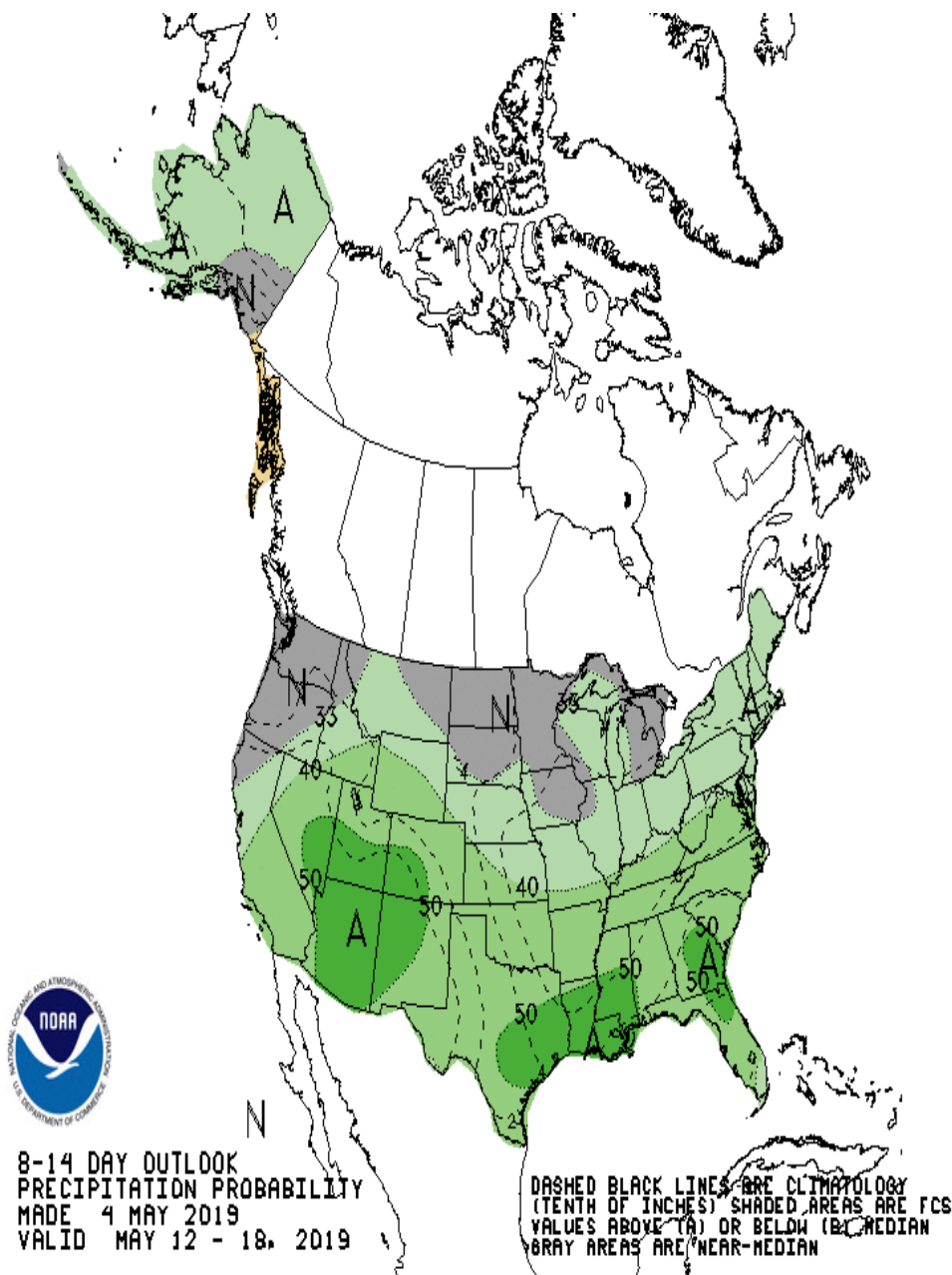
NOAA is predicting 40% chance of above normal precipitation and 40% chance of below normal temperatures. The snow pack in the upper part of the state (where we get our water) continues the trend from last month in being well above average and the southeast area of the State continues it's rebound from last years drought. This is great news for the 7 States (and Mexico) which rely on the Colorado River.

Precipitation



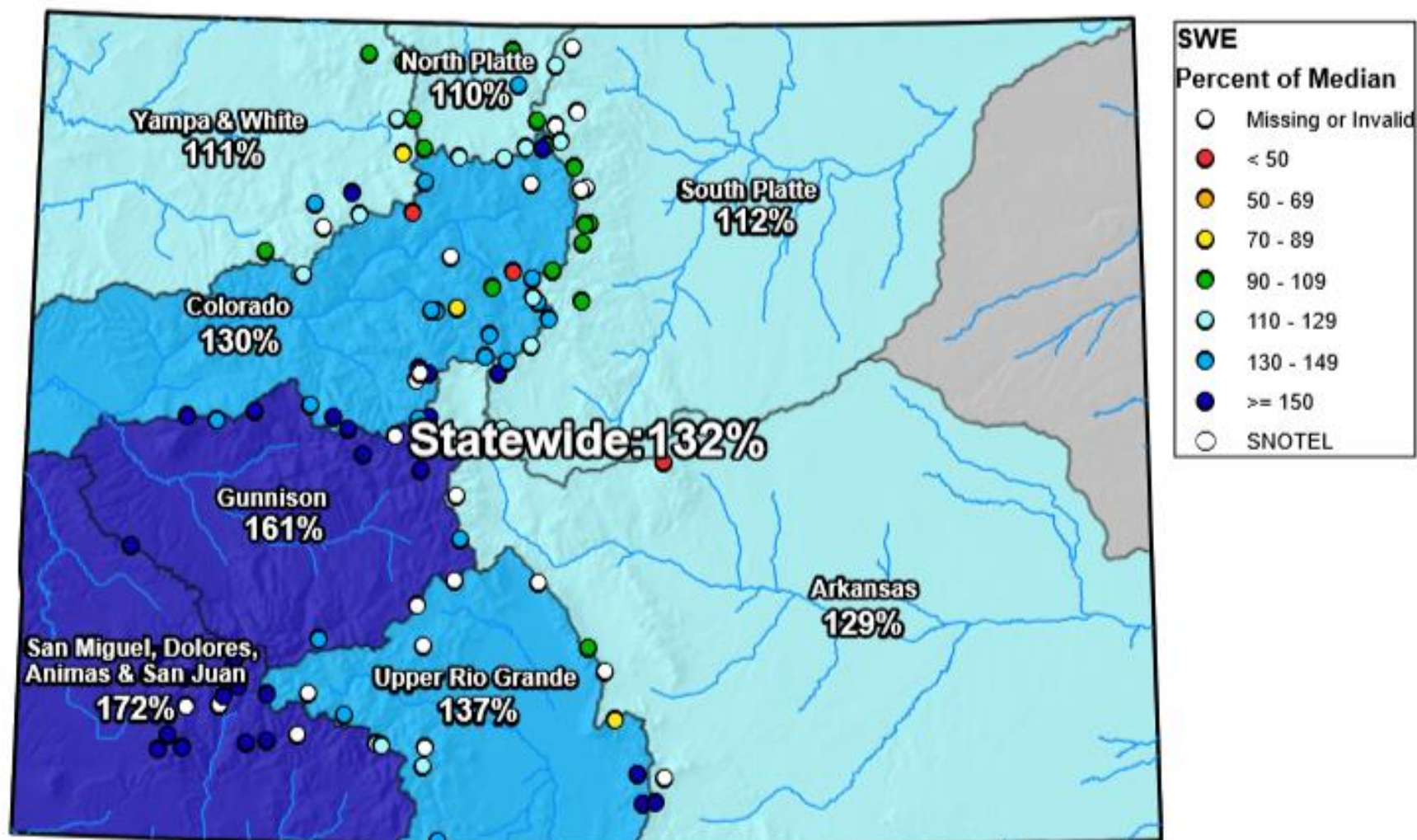
Mean Temperature





Colorado SNOTEL Snow Water Equivalent (SWE) Update Map with Site Data

Current as of May 03, 2019



0 25 50 100 150 200 Miles



United States Department of Agriculture

Natural Resources Conservation Service