

May 2020 Public Works Report

Capital Improvement Projects

Erie Parkway Bridge

The contractor (SEMA) is back finalizing items on the punch list that were delayed last year due to weather. These items include concrete replacement, landscaping and other minor issues.

Lynn R Morgan Water Treatment Facility (WTF) Expansion

Construction of the WTF expansion continues ahead of schedule and well under budget. Garney Construction will be awarded a change order for the installation of the hydroturbine and will begin procuring equipment and construction of the vault once we have a signed agreement from DOLA for reimbursement of grant funds. The Board approved this change order at the May 12 meeting.

4 Million Gallon (MG) Water Storage Tank

Crews are working to recoat the areas where the interior coating was removed with the goal of having the tank back online the week of October 18...just in time for summer demands. We will apply a final coat in the fall or spring 2021.

Sustainability and Water Conservation

- Earth Week was successfully launched digitally with daily topical focuses on energy, waste, water, transportation, food/ag, and resiliency emailed out. A fun “postings” of Earth Week artwork submitted by residents’ kids is featured on [Erie.Earth](#) and each participant will be delivered a sustainability gift bag this next the third week of May.
 - A local artist volunteered to draw a digital children’s book about Zero Waste to be featured as soon as it is completed.
- Erie Green Business Certification is now also featured at Erie.Earth for when businesses are ready to engage again. The outreach is now being heavily focused on the economic savings achieved by using their resources most efficiently. These resources will provide additional opportunities through local utilities and Boulder County for businesses to learn how to save money during this tough economic time.
- The Sustainability Advisory Board (SAB) is working on a EV Rate Structure Study to recommend to the Board how much to charge users per kWh.
 - Seven charging stations should be delivered the last week of May and be temporarily stored at Schofield Farms barn house alongside Parks & Rec equipment until they are installed in June. The first installations will be 4 dual-port charging stations at the Community Center in the south east corner of the parking lot.
- The Recycling Center will be opening up at the end of May and Tyler Kesler, Sustainability and Water Conservation Coordinator, will be training reallocated staff in education of what can and can’t be recycled by handing out the attached resources page.
 - Residents who use the Recycling Center will be need to provide identification and also be surveyed on a couple questions regarding recycling before they enter.
- New resident water efficiency post card has been updated and will be sent out on a quarterly basis from the Billing Dept. (attached).

Lynn R. Morgan Water Treatment Facility (WTF)

Annual Daily Average Flow:

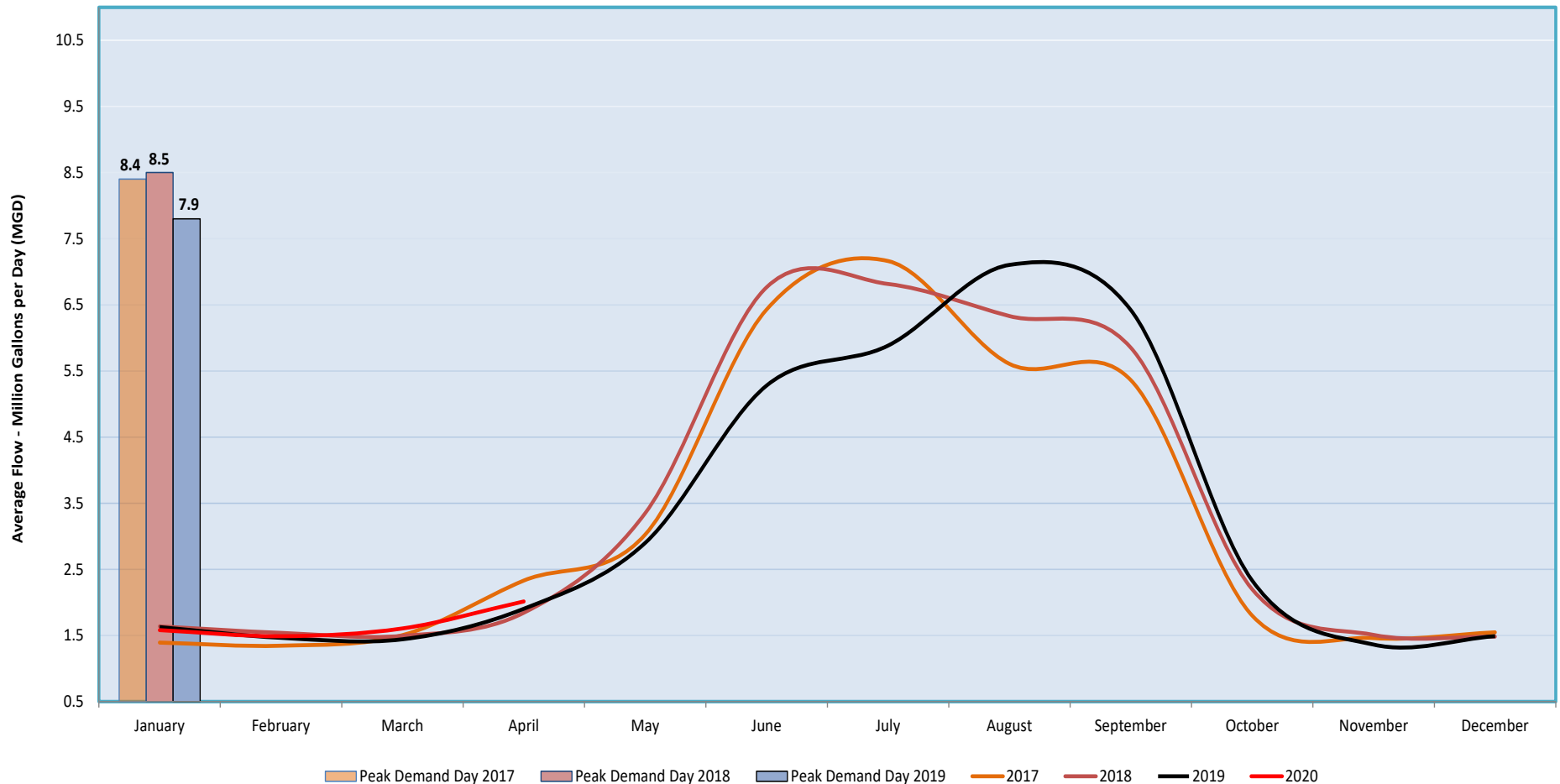
2017 - 3.3 (Million Gallons) MG

2018 – 3.4 MG

2019 – 3.3 MG

July 2017 maintains the record for the highest monthly average flows at 7.16 MG, while February 2017 had the lowest flows at 1.35 MG closely followed by November 2019 at 1.36 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. 2020 continues to be off to an average start, with recent spring weather causing higher and lower daily production.

Average Monthly Production



Annual Daily Gallons Per Capita per Day (GPCD):

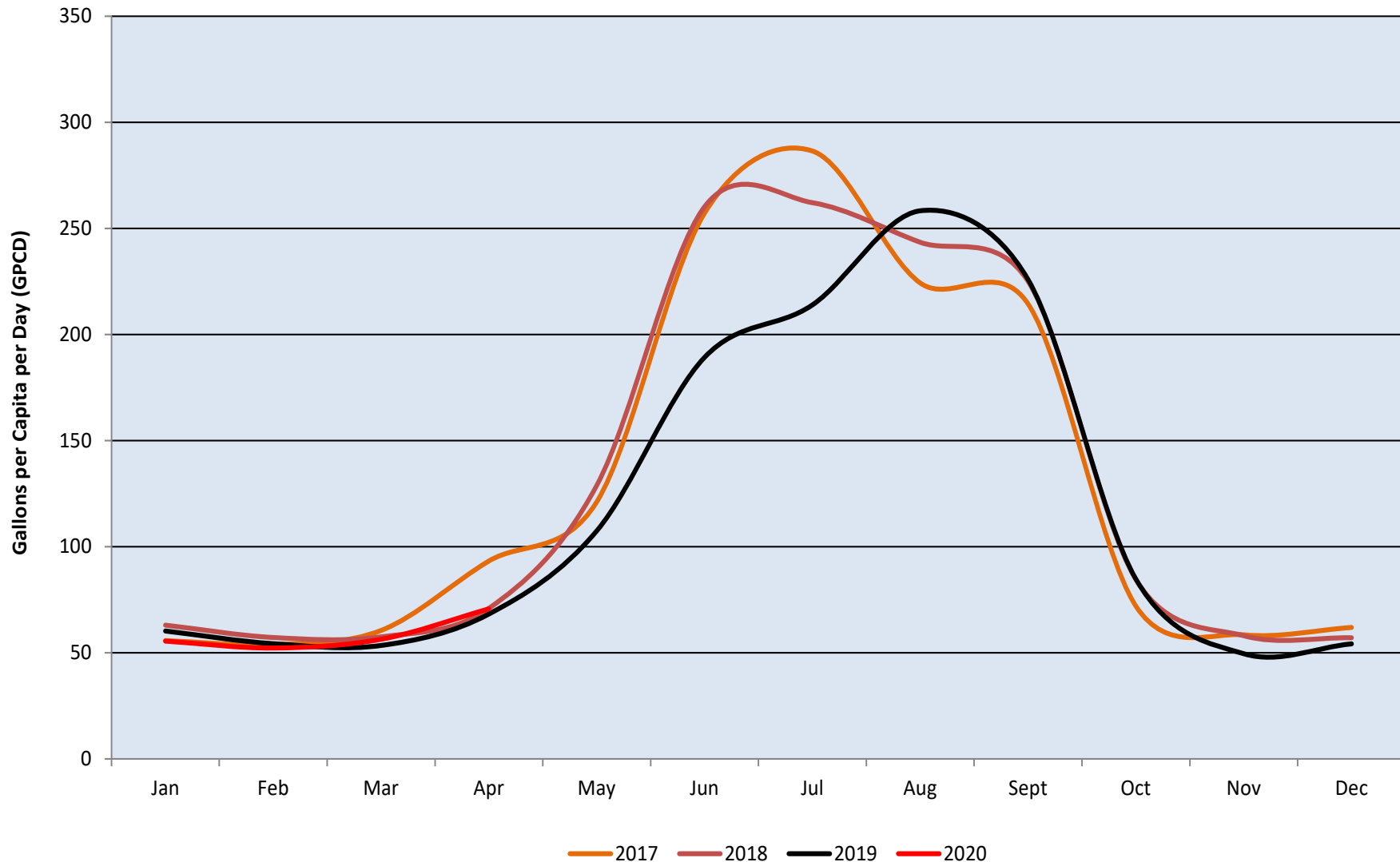
2017 - 130 GPCD

2018 – 131 GPCD

2019 – 118 GPCD

July 2017 had the highest average daily usage at 287 gallons GPCD. February 2020 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:

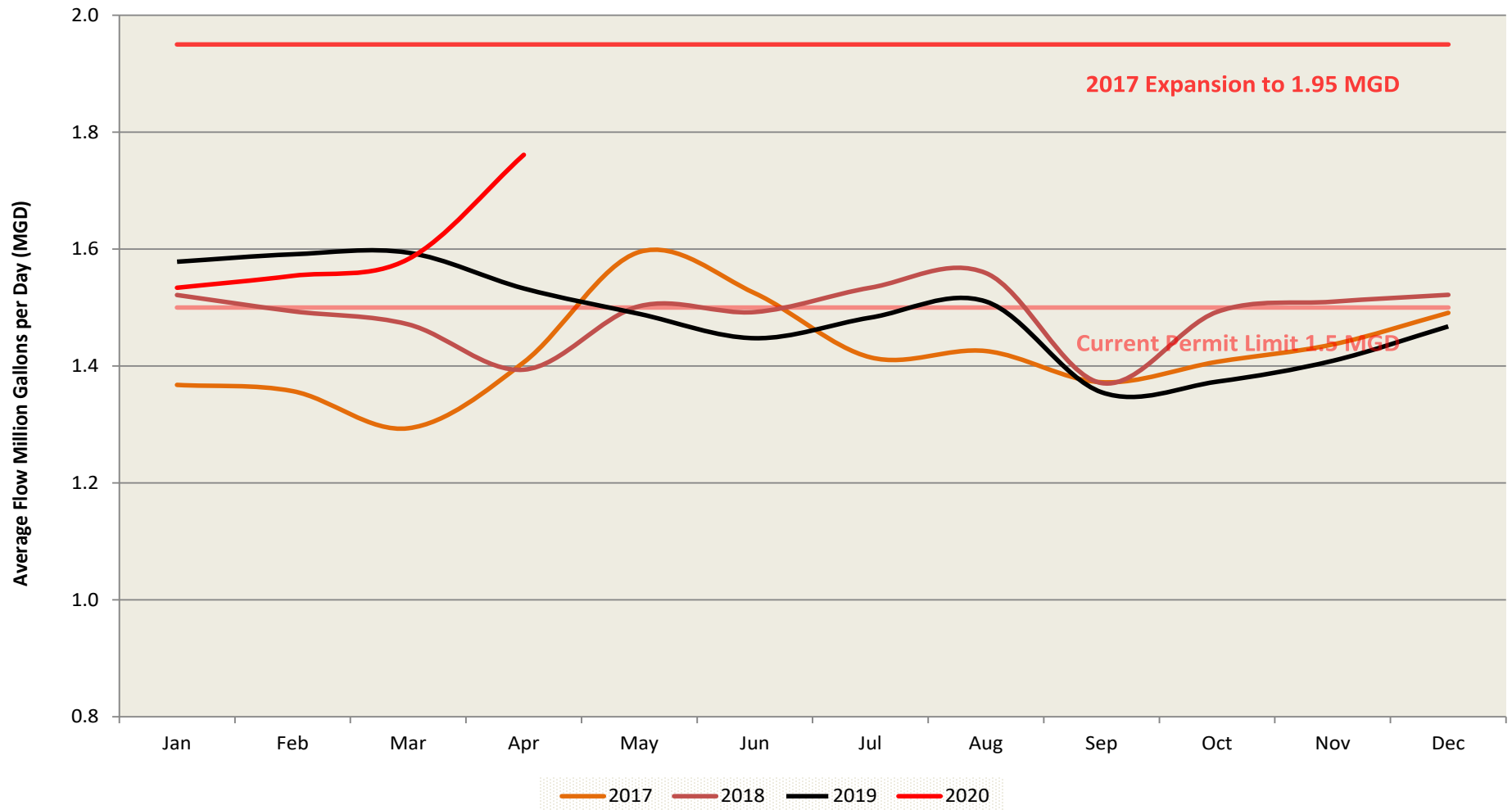
2017 - 1.42 MG

2018 - 1.49 MG

2019 - 1.49 MG

March 2017 had the lowest average flow of 1.29 million gallons per day (MGD). April 2020 set a high average monthly flow of 1.76 MGD. This stark increase is likely due to the Stay at Home and Safer at Home orders which have driven residents who work out of town to stay at home. CDPHE is indicating that they will not be renewing our permit until as late as 2023 or 2024. We anticipate a delay in construction of the expansion to 3.03 MGD with Archer Western Construction due to permitting delays at CDPHE.

Average Monthly Flows



Annual Daily Gallons Per Capita per Day (GPCD):

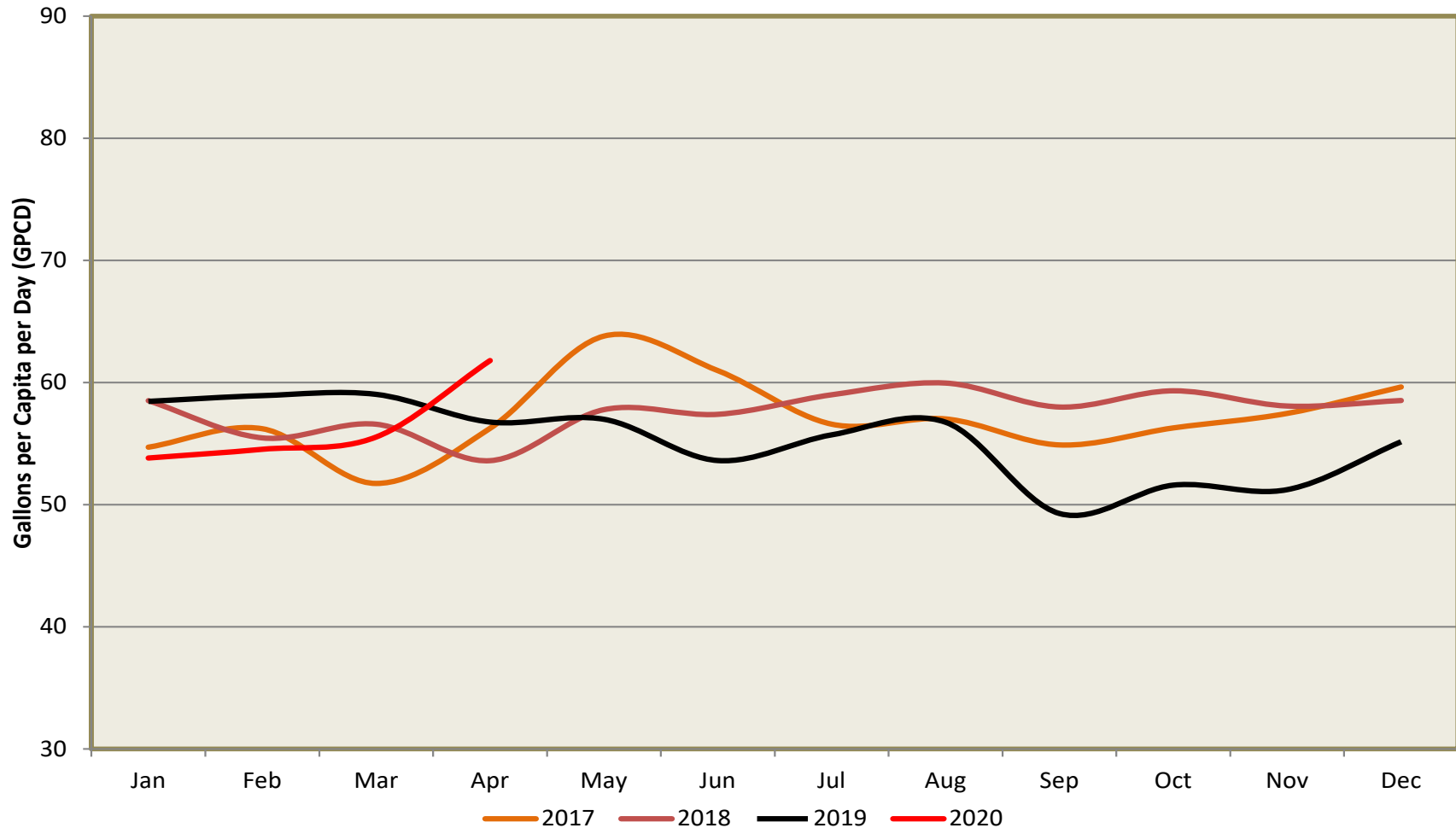
2017 - 57 GPCD

2018 - 58 GPCD

2019 - 55 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 which we believe are now primarily resolved. September 2019 had the lowest usage at 49 GPCD. Fall, with relatively little precipitation and dropping groundwater levels, is a good indicator of true daily flows, with the current pandemic being an exception to that rule.

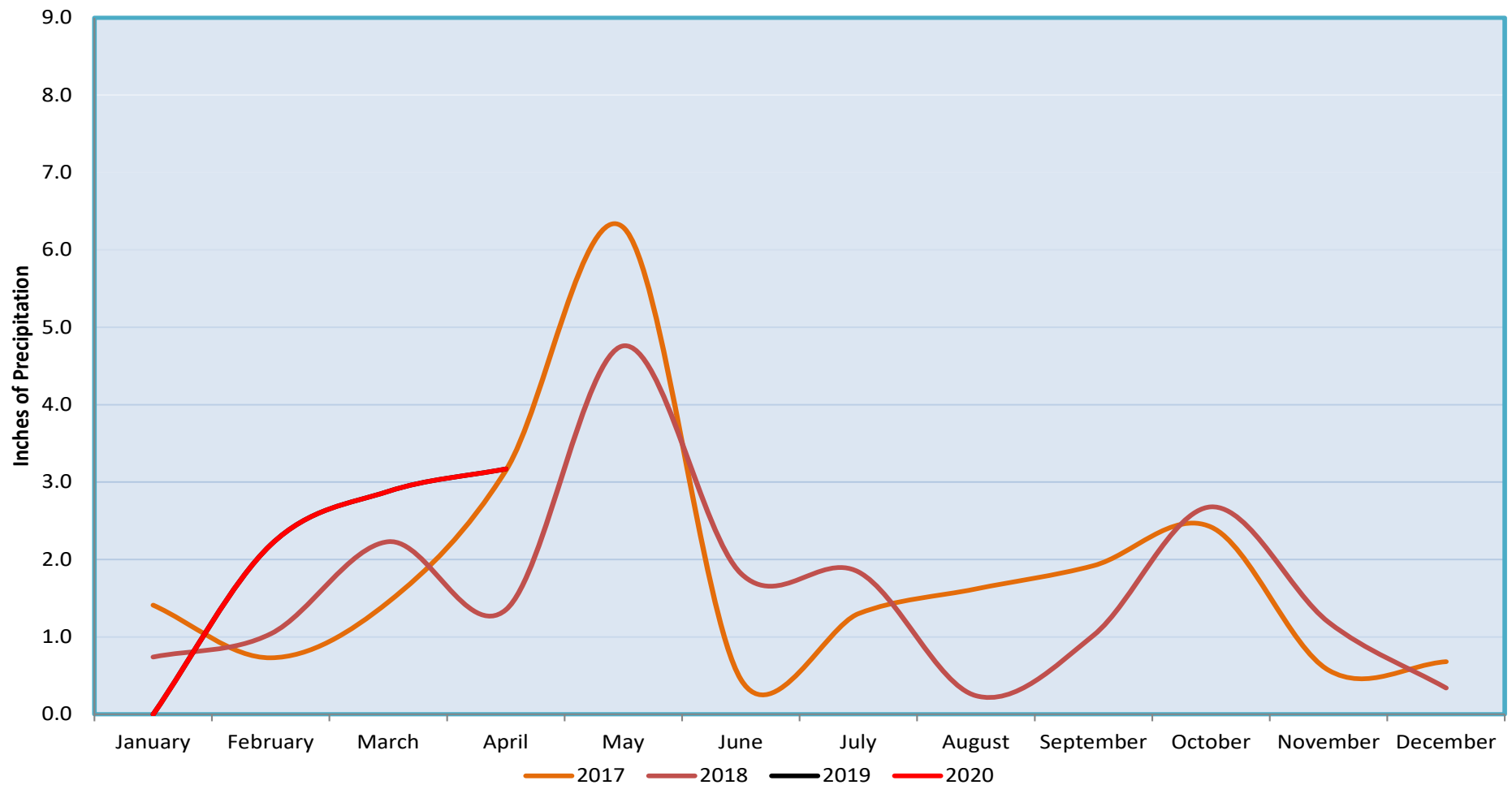
Average Daily Usage Per Capita



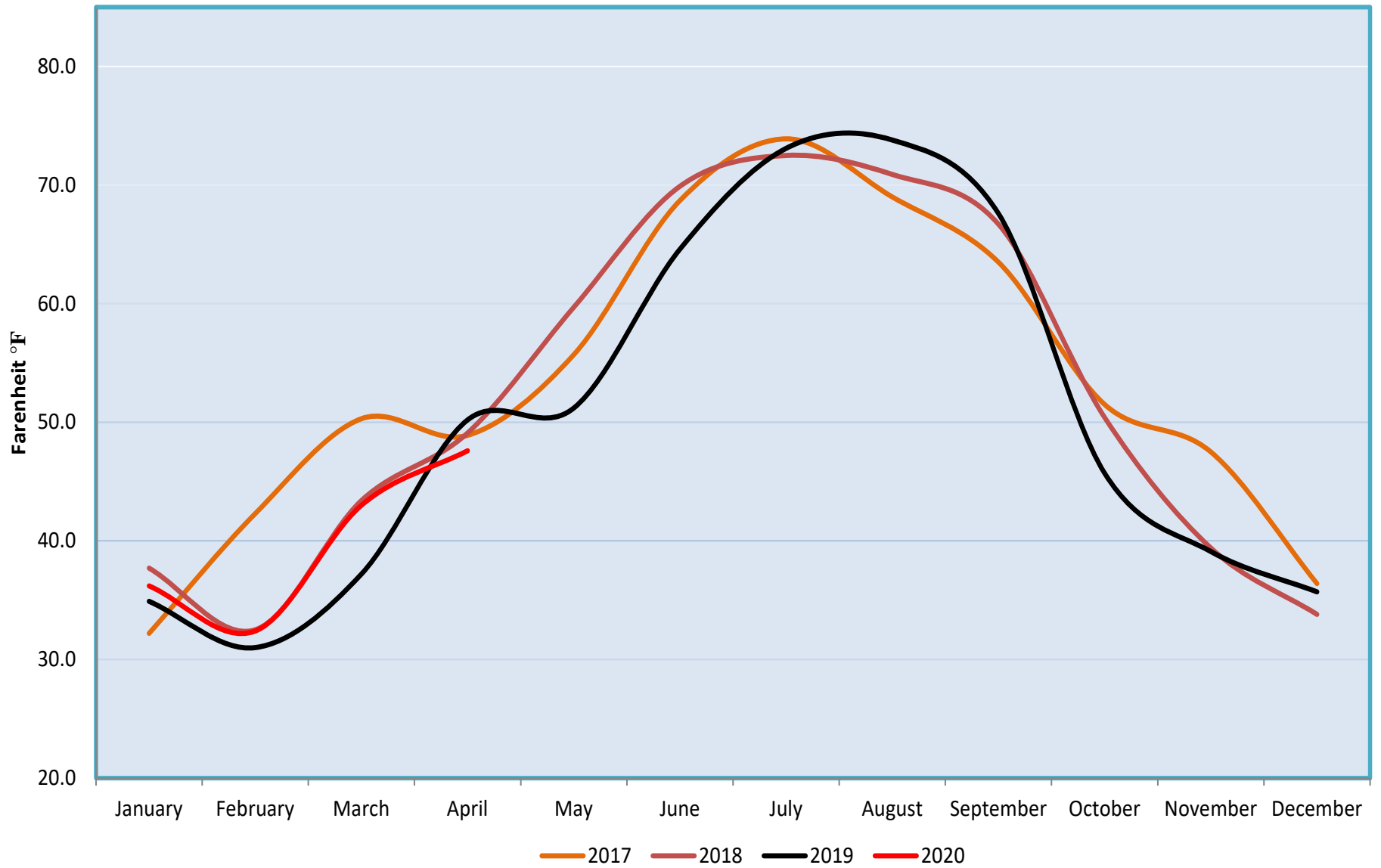
Monthly Data for Boulder – National Oceanic and Atmospheric Administration (NOAA) & Natural Resource Conservation Service (NRCS)

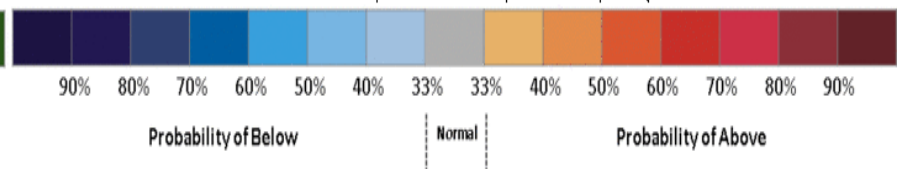
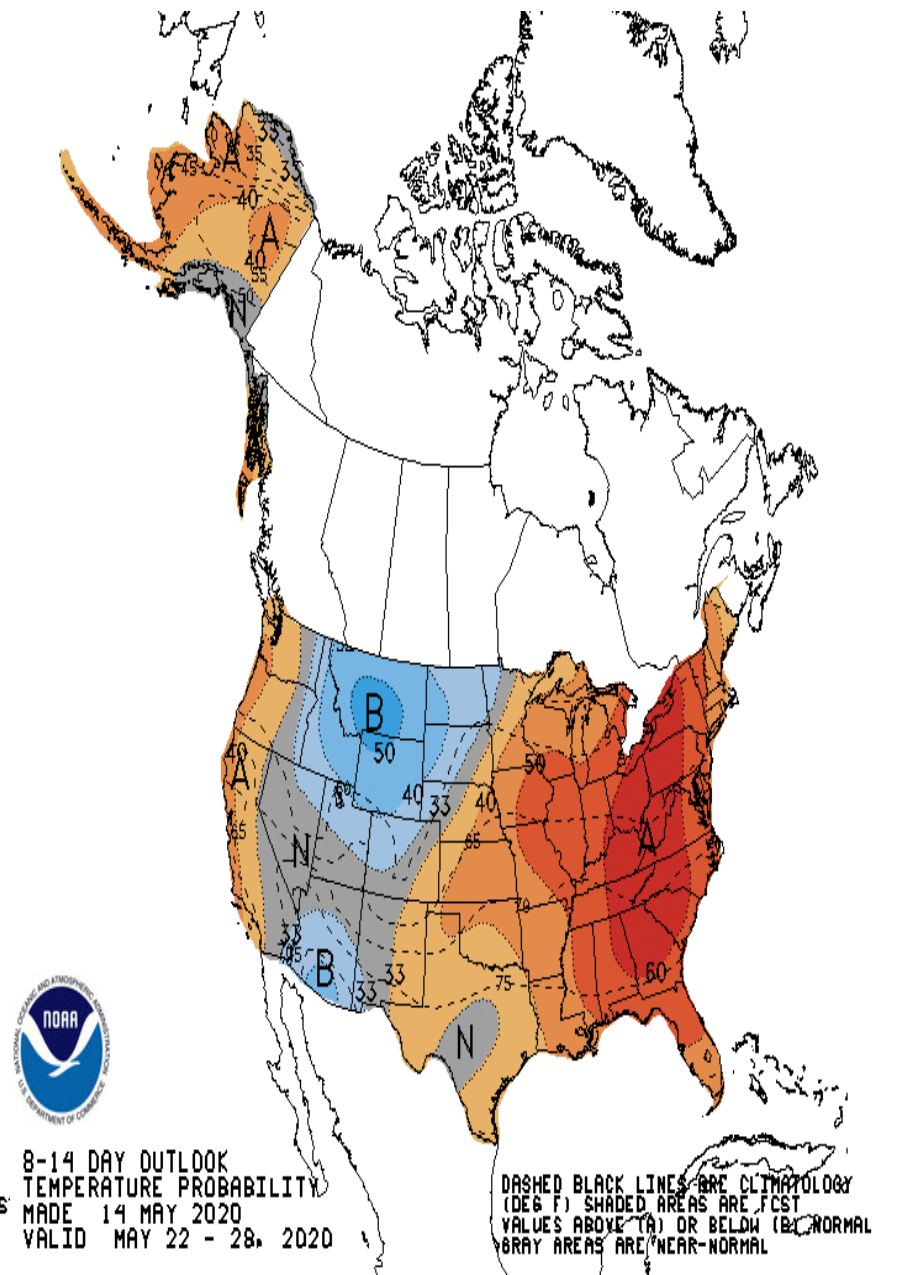
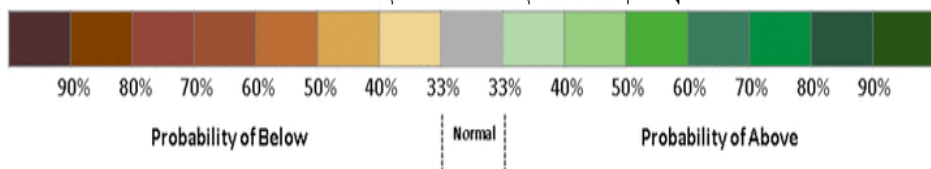
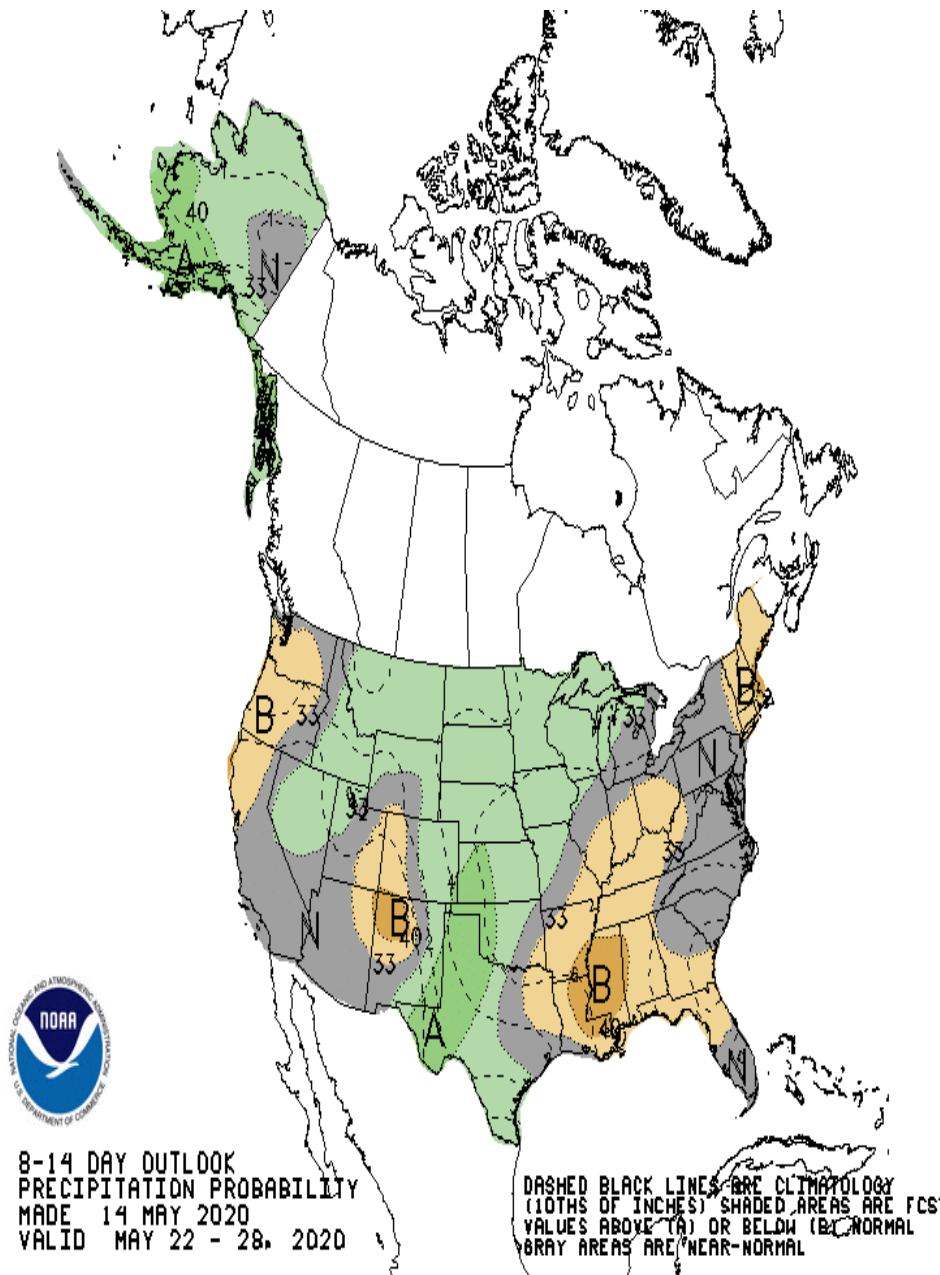
NOAA is predicting a 33% chance of above normal precipitation and 33-40% chance of below normal temperatures through late May. This year's graph looks unusual due to a complete lack of precipitation early in the year followed by higher than normal precipitation. Snowpack, our water supply, continues to remain strong as we transition into spring. Run off in the high country has begun in earnest with recent warm temperatures. Overall snowpack for the year was strong.

Precipitation



Mean Temperature





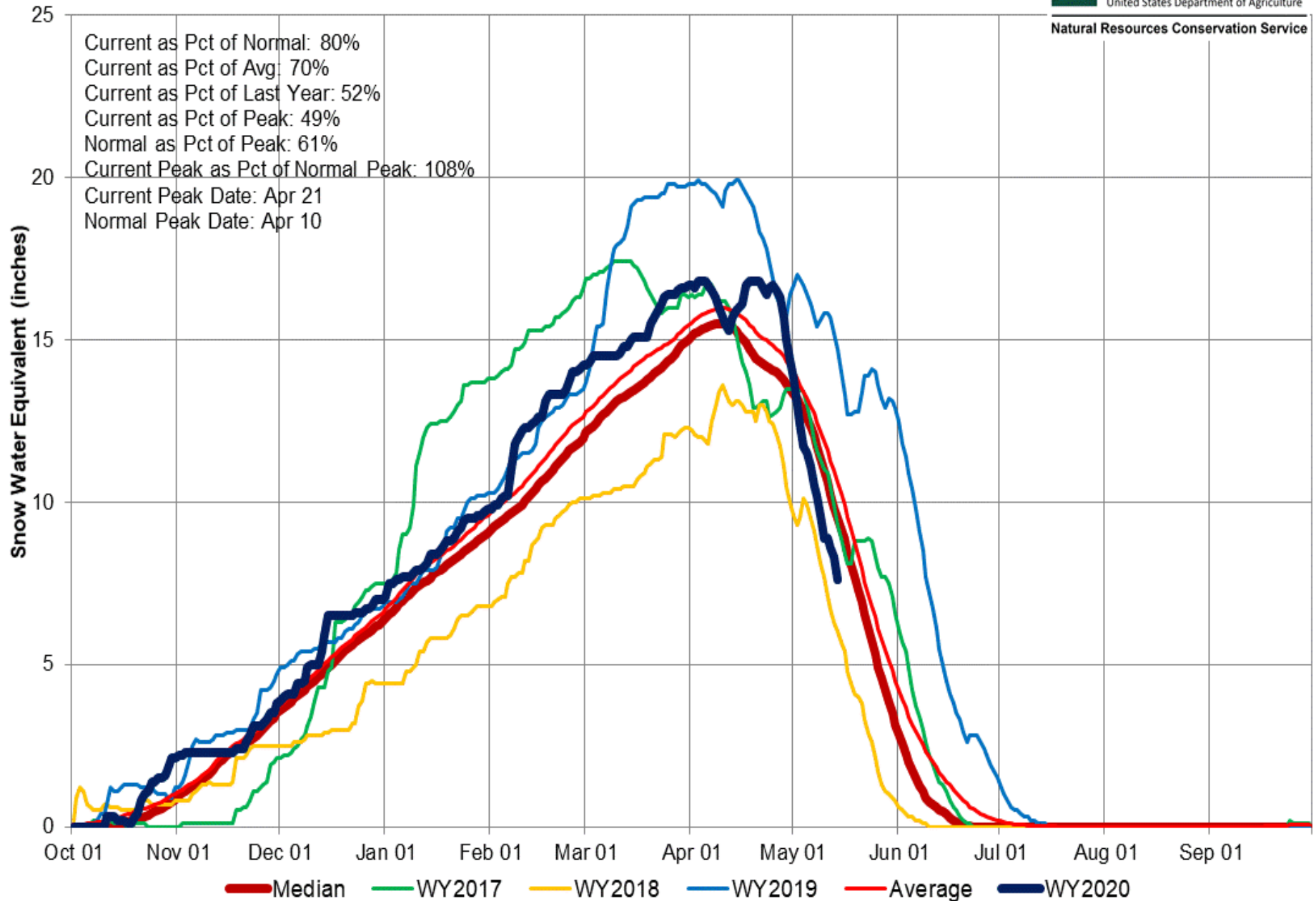
Colorado River Basin Time Series Snowpack Summary

Based on Provisional SNOTEL data as of May 14, 2020



United States Department of Agriculture

Natural Resources Conservation Service



Transportation Updates

There are few updates this month due to COVID-19. During this period the Town signed off on an improved access at State Highway 7 and Palisade Parkway in Broomfield (west of King Soopers).

We have also finalized a street median policy in conjunction with Felsburg Holt Ulevig (FHU) which will be an appendix to the 2018 Transportation Master Plan. We will be bringing this to a Study Session for the Board's consideration and input. This plan seeks to develop a master plan for median placement and width while balancing aesthetics and sustainable design. Staff received input from advisory boards as well as incorporating policy regarding the incorporation of low water use, xeric and pollinator plants into landscape goals.

