

April 2020 Public Works Report

Spring Clean Up

Our annual Spring Clean Up has been cancelled due to COVID-19. We are looking into options to expand services of our Fall Clean Up.

Capital Improvement Projects

Lynn R Morgan Water Treatment Facility (WTF) Expansion

Construction of the WTF expansion continues ahead of schedule and well under budget. We received a \$766,704 grant from DOLA (see Patrick Hammer's Staff Report) towards this project which greatly improves the Net Present Value of the project. We will be bringing a request to the Board next month to move this project forward.

4 Million Gallon (MG) Water Storage Tank

Crews are working to strip and recoat the interior of the Town's main water storage tank, in preparation for summer irrigation demand and making steady progress.



Sustainability and Water Conservation

- Earth Week Proclamation 20-178 was proclaimed by the Trustees March 24th. All the planned Earth Week events have been cancelled and new virtual options will be sent out daily the week of April 20th, including the announcement of the Erie.Earth website which will be launched for Earth Day on April 22nd. This is being created as a community platform to learn, organize, and celebrate virtually all the different ways we can take actions towards our sustainability goals throughout Erie.
- All 80 Garden In a Box coupons the town provided for residents have been used and the no-contact pickup for these gardens will take place May 13th at the Erie Community Center with overly cautious precautions implemented.
- Weve applied for a CDPHE Recycling Rebate as well as Xcel Energy's Electric Vehicle Supply Infrastructure Program to assist with upgrades at our Recycling Center and EV infrastructure costs.
- More than a dozen residents have taken advantage of Water Efficiency Rebates even during the cold winter months.



Lynn R. Morgan Water Treatment Facility (WTF)

Annual Daily Average Flow:

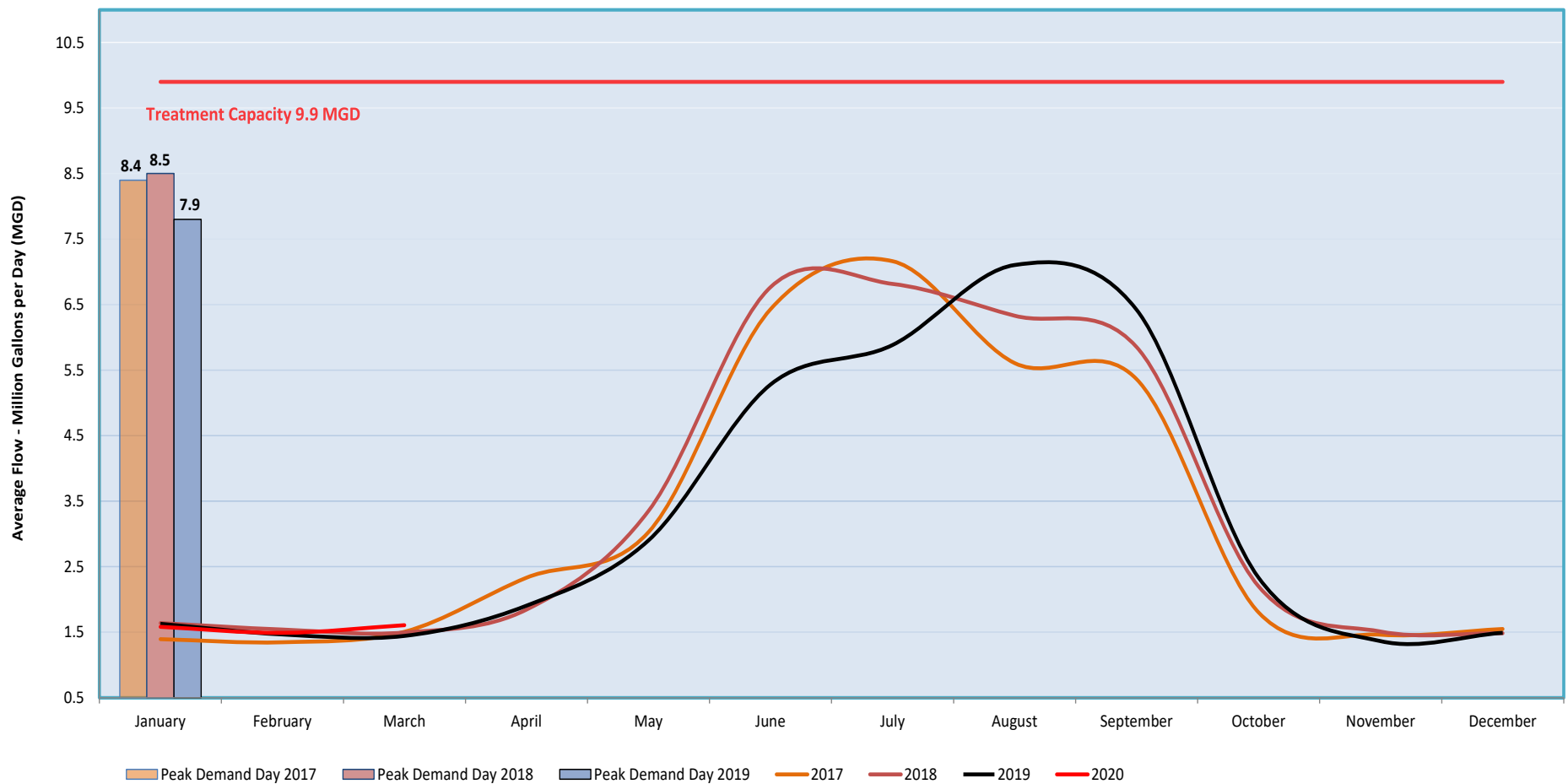
2017 - 3.3 (Million Gallons) MG

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.

Average Monthly Production



Annual Daily Gallons Per Capita per Day (GPCD):

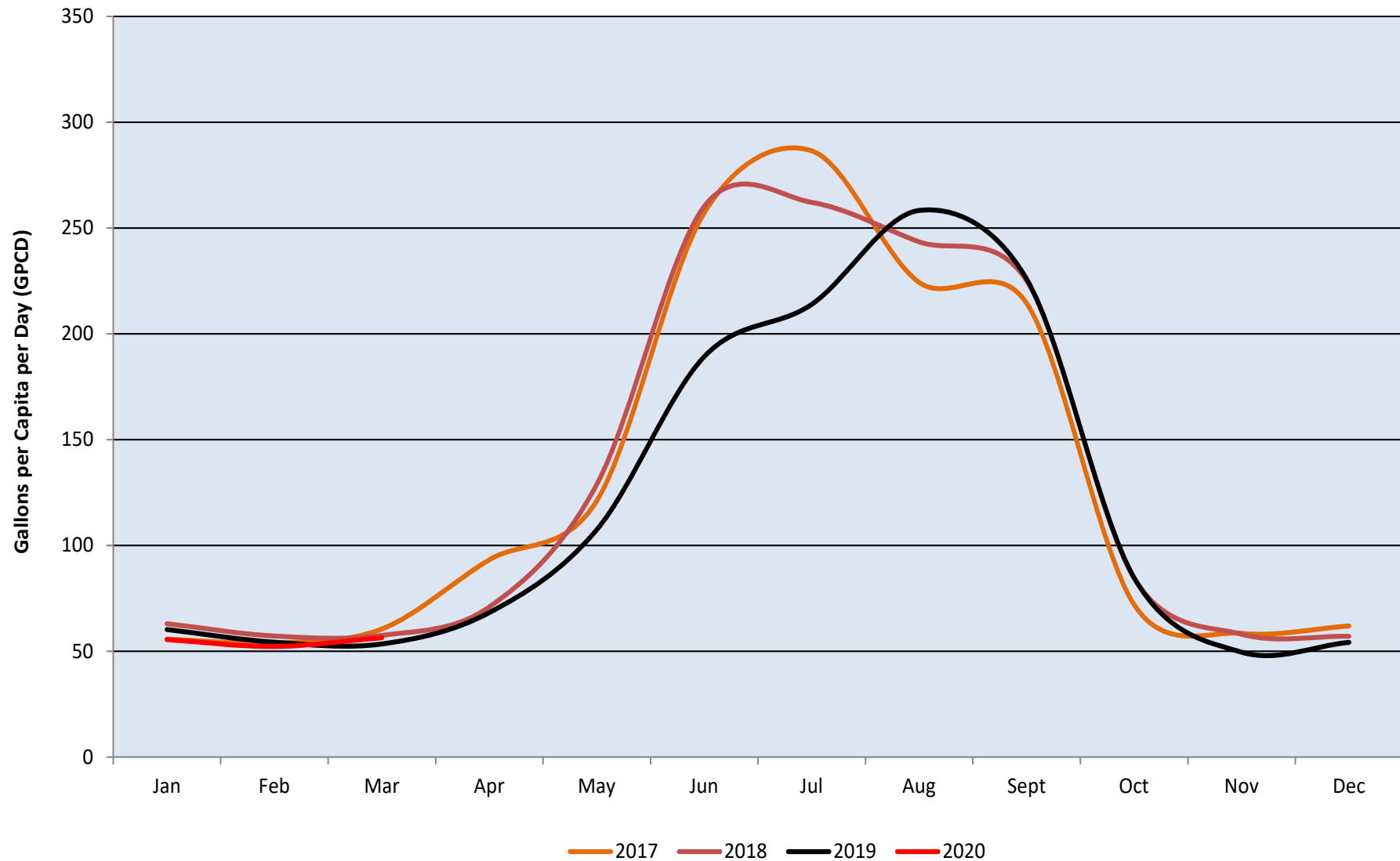
2017 - 130 GPCD

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:

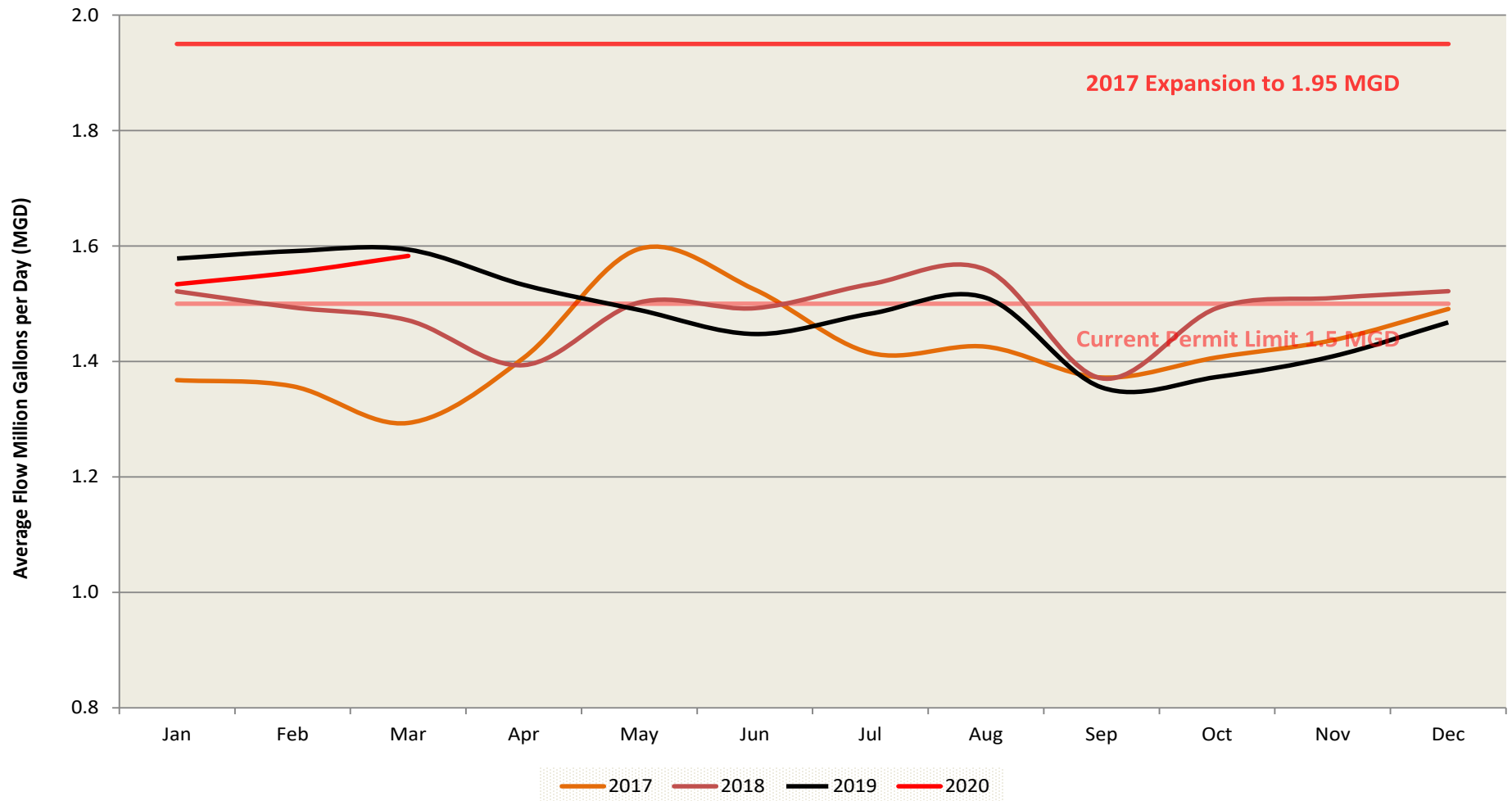
2017 - 1.42 MG

2018 - 1.49 MG

2019 - 1.49 MG

March 2017 had the lowest average flow of 1.29 million gallons per day (MGD). May 2017 set a high average monthly flow of 1.60 MGD. CDPHE is indicating that they will not be renewing our permit until as late as 2023 or 2024. We anticipate construction of the expansion to 3.03 MGD with Archer Western Construction in late 2019 or early 2020 and lasting through 2021.

Average Monthly Flows



Annual Daily Gallons Per Capita per Day (GPCD):

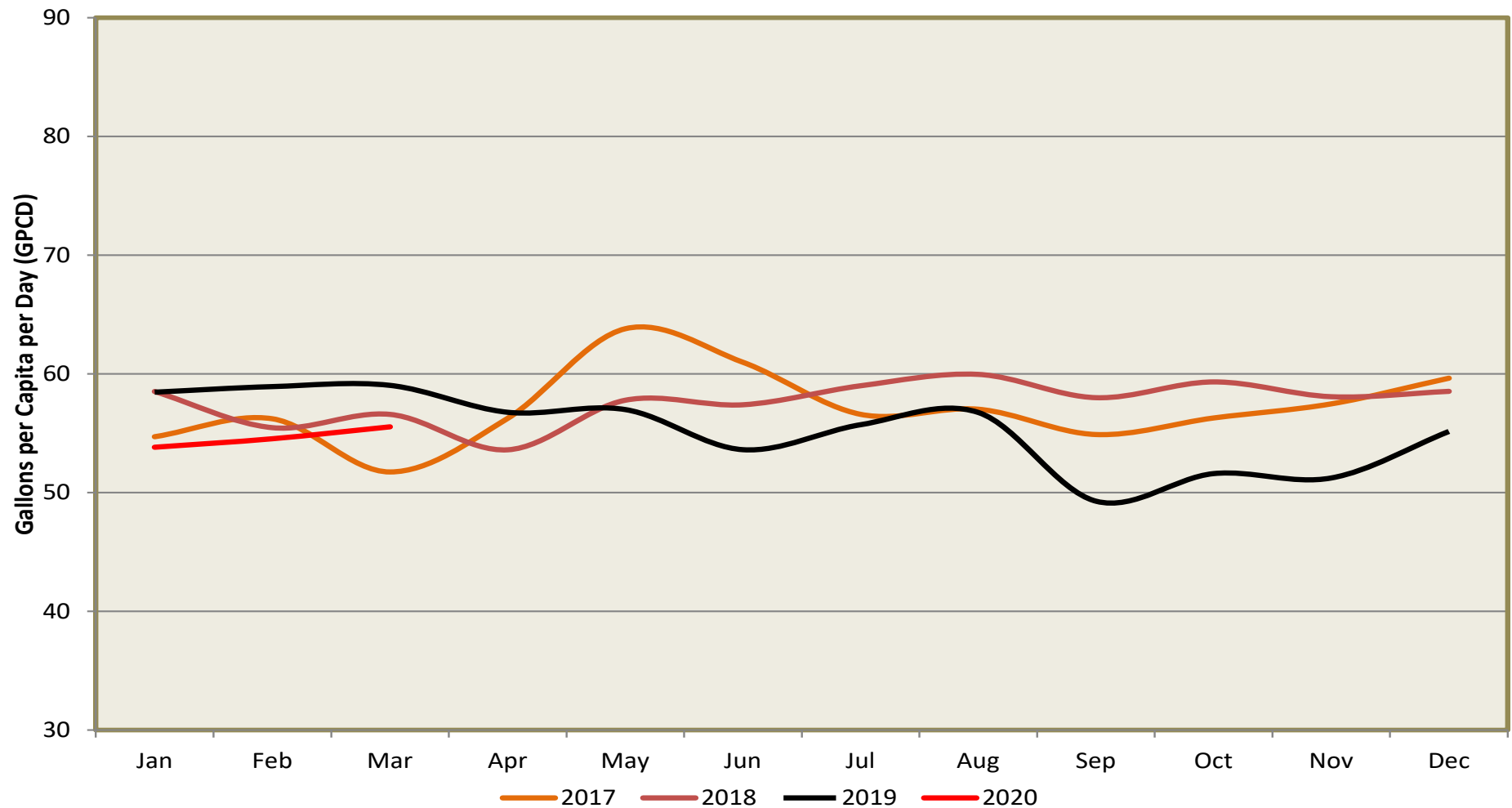
2017 - 57 GPCD

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. 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.

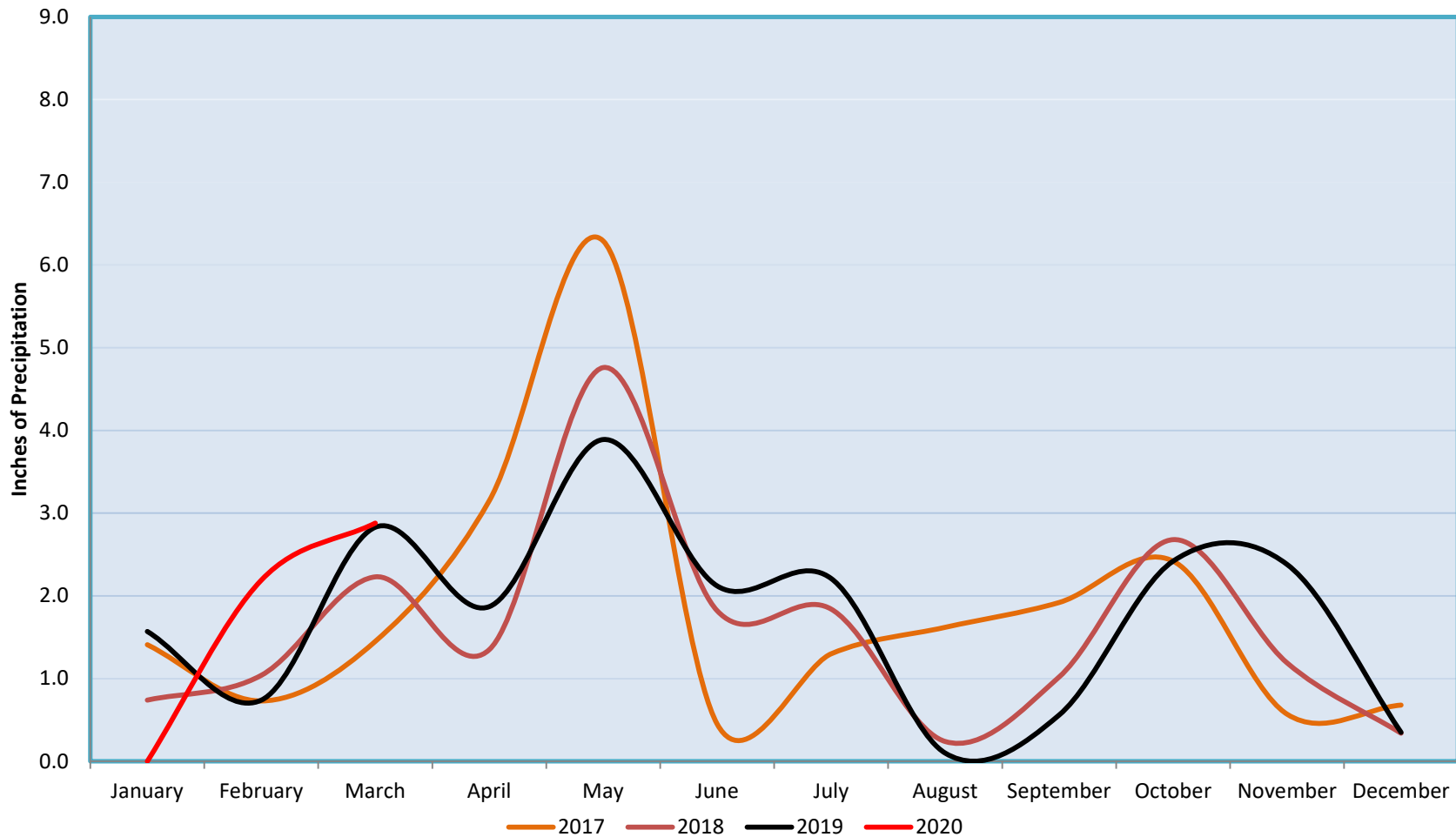
Average Daily Usage Per Capita



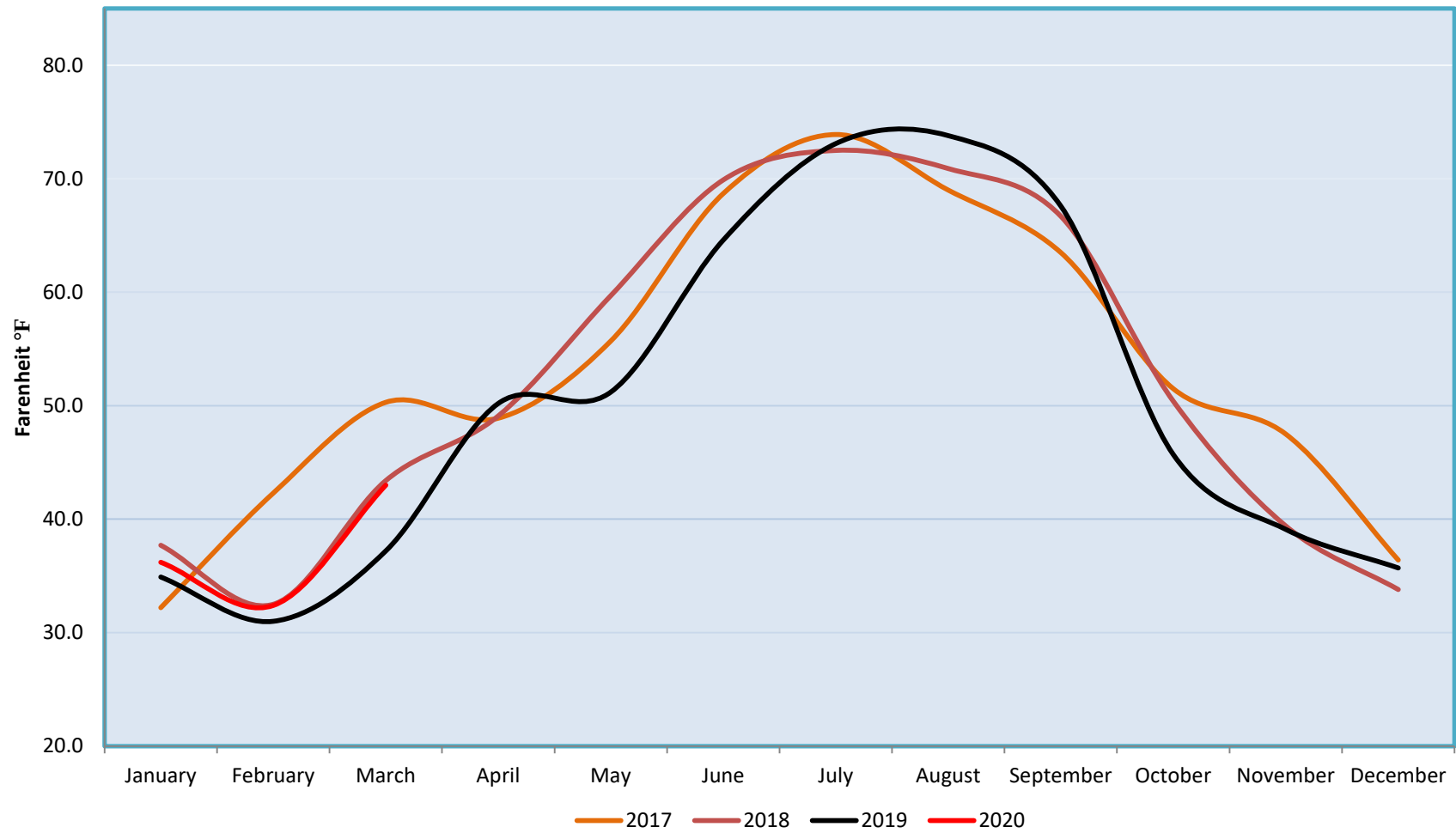
Monthly Data for Boulder – National Oceanic and Atmospheric Administration (NOAA) & Natural Resource Conservation Service (NRCS)

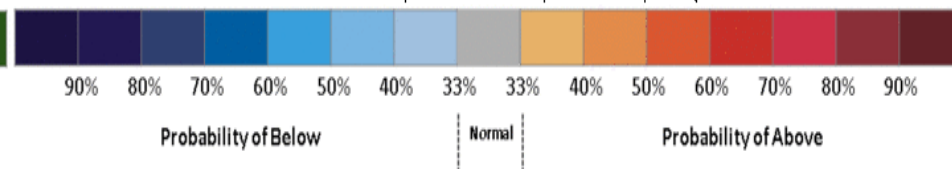
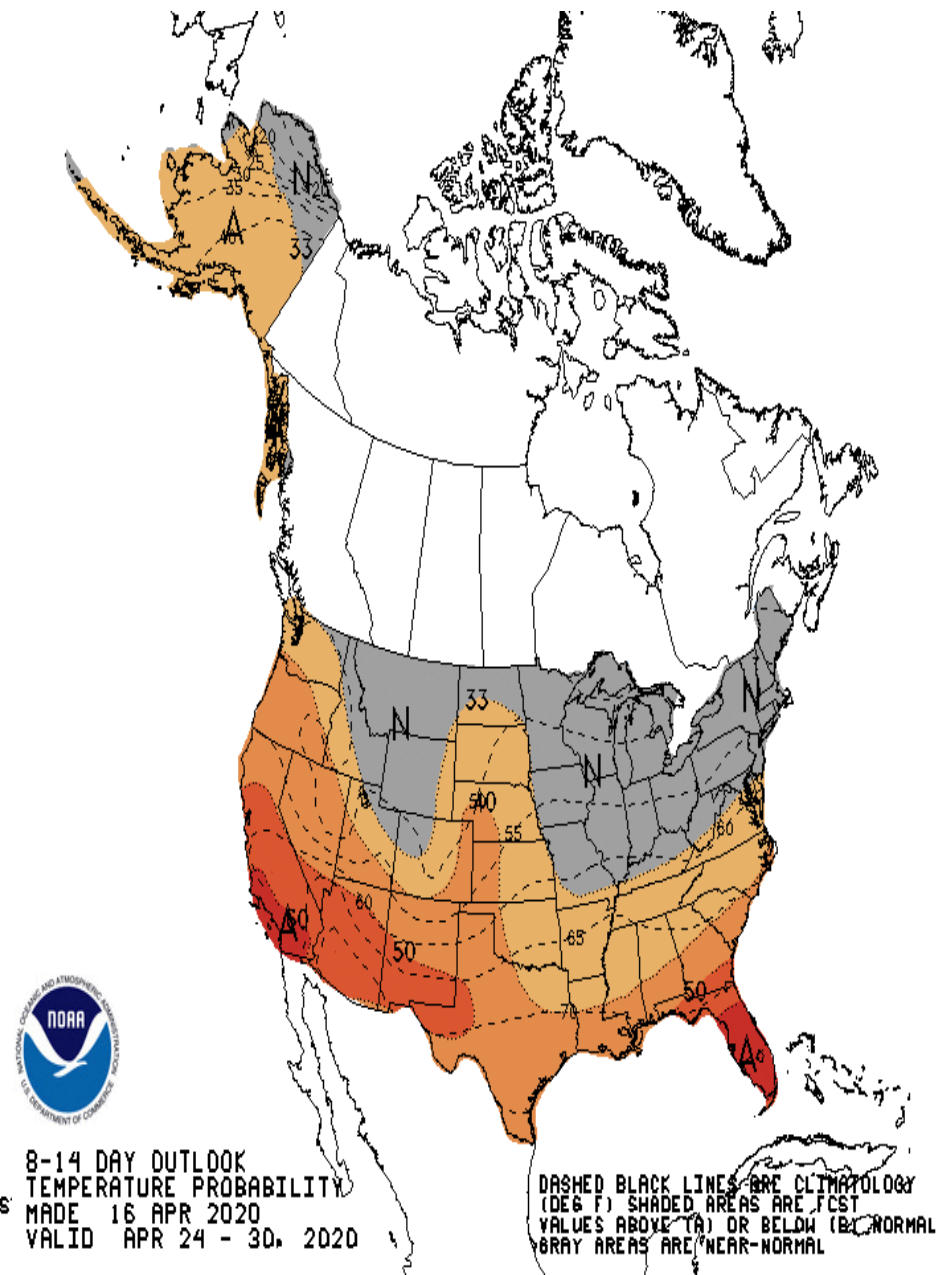
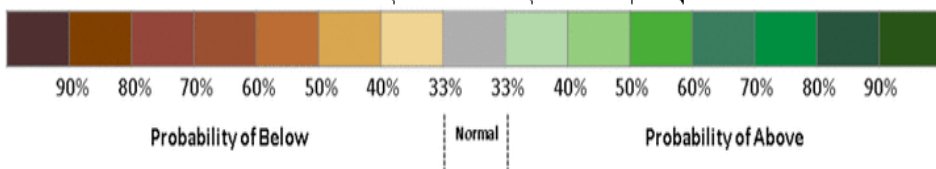
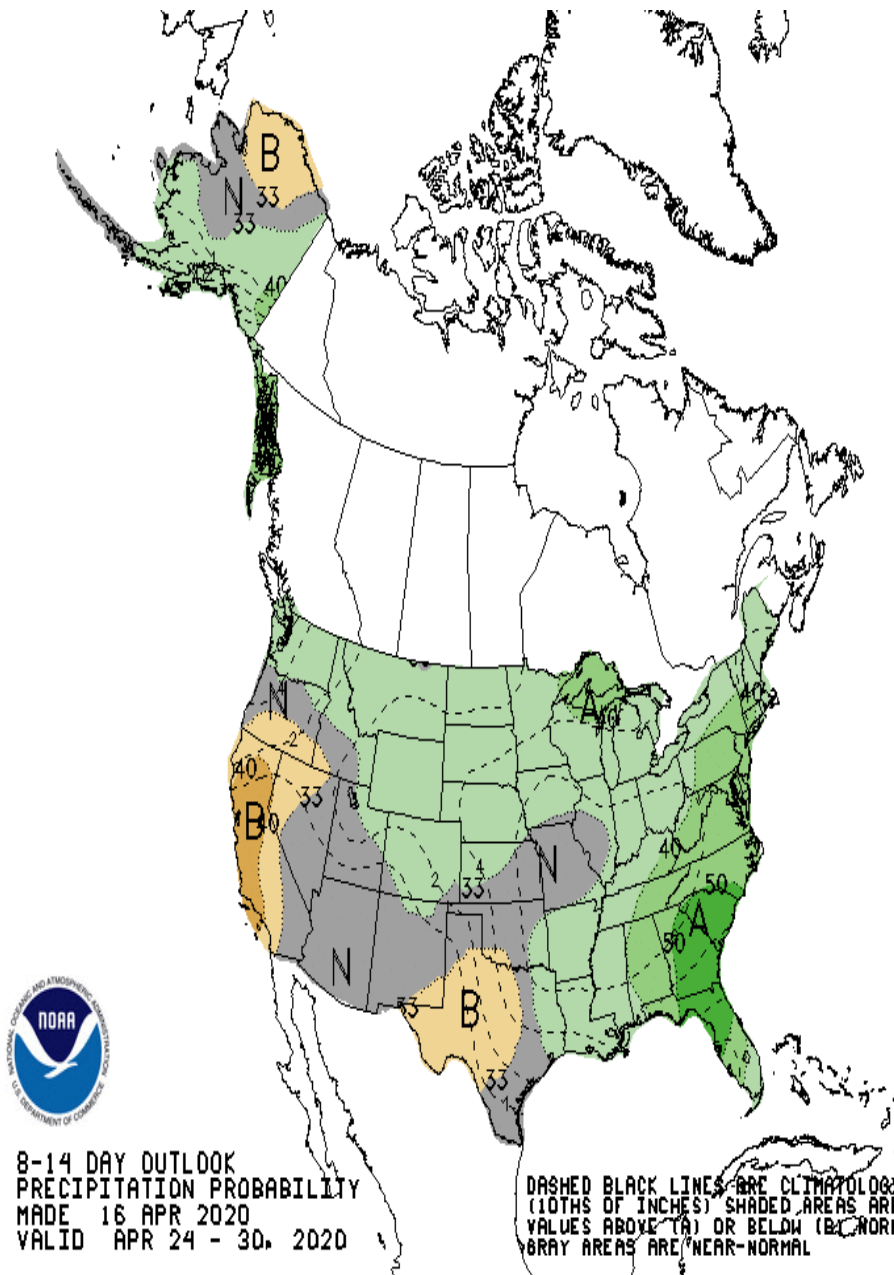
Similar to last month NOAA is predicting a 33% chance of above normal precipitation and 33% chance of above normal temperatures through late April. Snowpack, our water supply, continues to remain strong as we transition into spring, in fact Boulder had the most snowfall for any city over 50,000 population in the U.S. as of April 16, 2020.

Precipitation



Mean Temperature





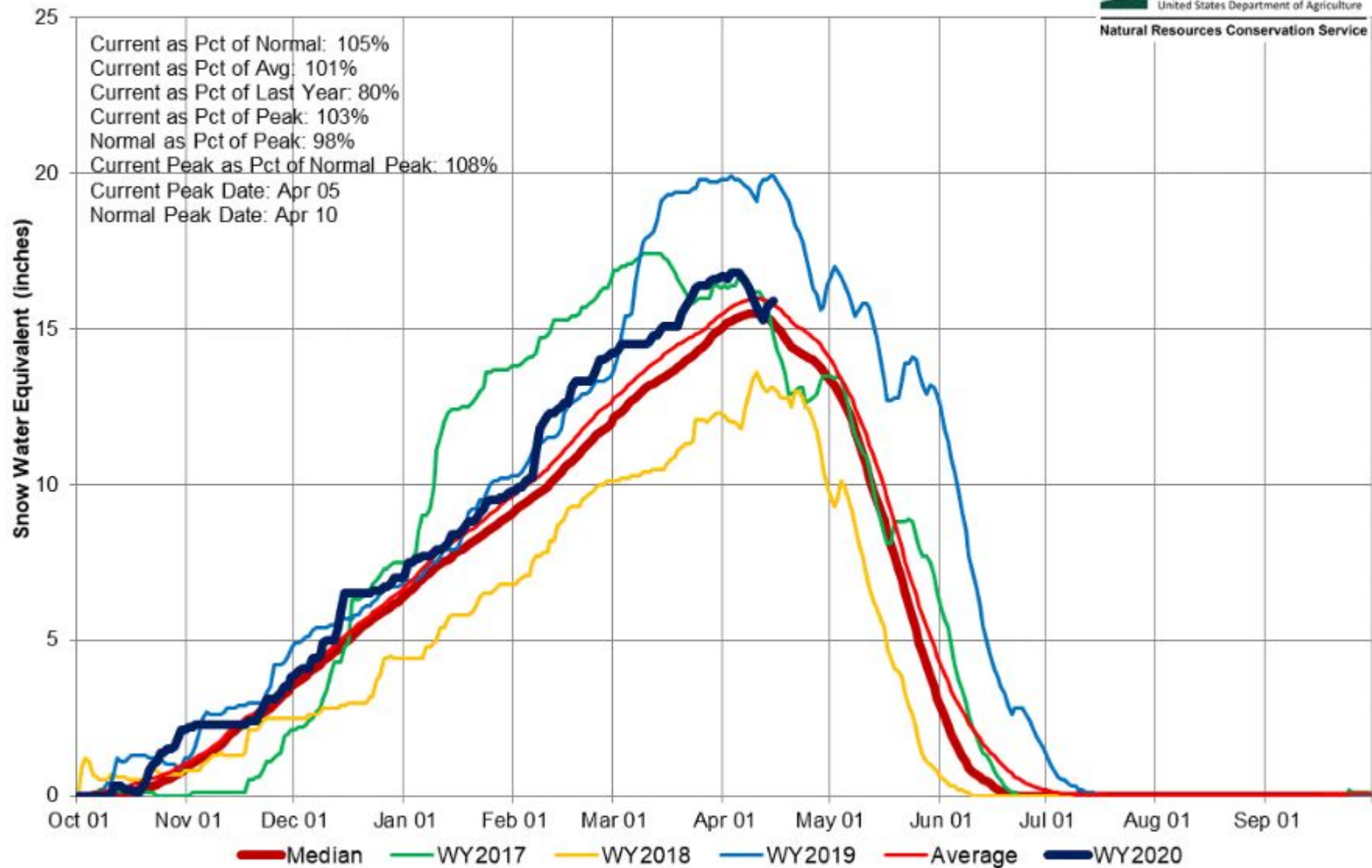
Colorado River Basin Time Series Snowpack Summary

Based on Provisional SNOTEL data as of Apr 15, 2020



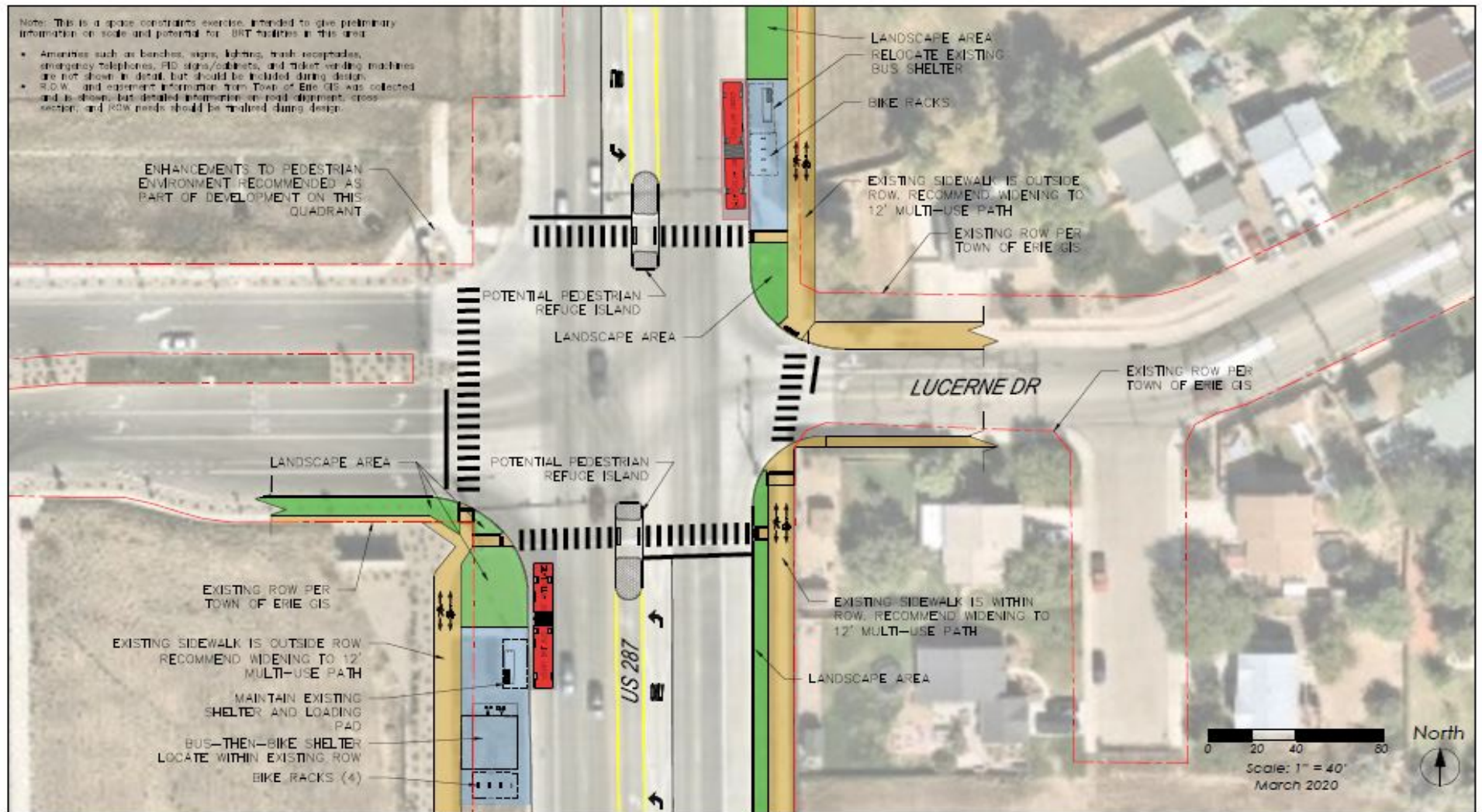
United States Department of Agriculture

Natural Resources Conservation Service



Transportation Updates

There are few updates this month due to COVID-19. Below are conceptual designs for Bus Rapid Transit (BRT) stations at HWY 287 and Arapahoe, a joint effort between Erie and Boulder County. This proposed design allows planned development in the area to move forward and is the lowest cost option as it uses an existing crossing at Lucerne St. There is a reimbursement agreement with Boulder County in this meeting's packet related to this effort.



US 287 Bus Rapid Transit - STATION CONCEPT
Alternative 1 - At-Grade Crossing at Lucerne Dr

