

November 2019 Public Works Report

Capital Improvement Projects

Erie Parkway Bridge Replacement

This project final punch list walkthrough will occur Wednesday November 6th. Due to early winter weather we delayed the **Grand Opening** until **November 3rd** from 2 pm to 3 pm.



Lynn R Morgan Water Treatment Facility (WTF) Expansion

Construction of the WTF expansion continues ahead of schedule and within budget. Garney Construction continues wrapping up the concrete pours for the pretreatment building, and is preparing to begin working on the membrane system inside the WTF.

Lynn R. Morgan Water Treatment Facility (WTF)

Annual Daily Average Flow:

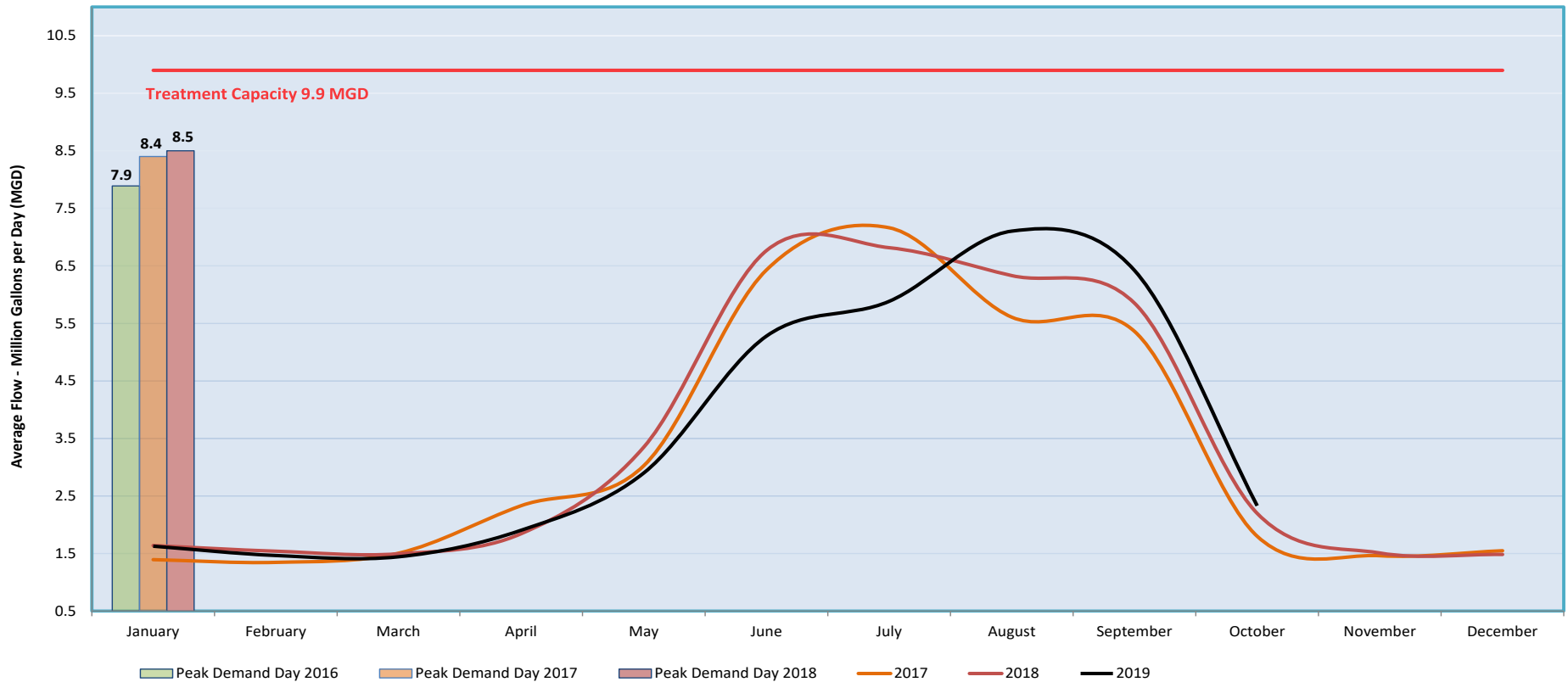
2016 - 3.3 (Million Gallons) MG

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. This year's water demands have been unusual, in that demands are arrived much later in the summer than usual and continued later into fall.

Average Monthly Production



Annual Daily Gallons Per Capita per Day (GPCD):

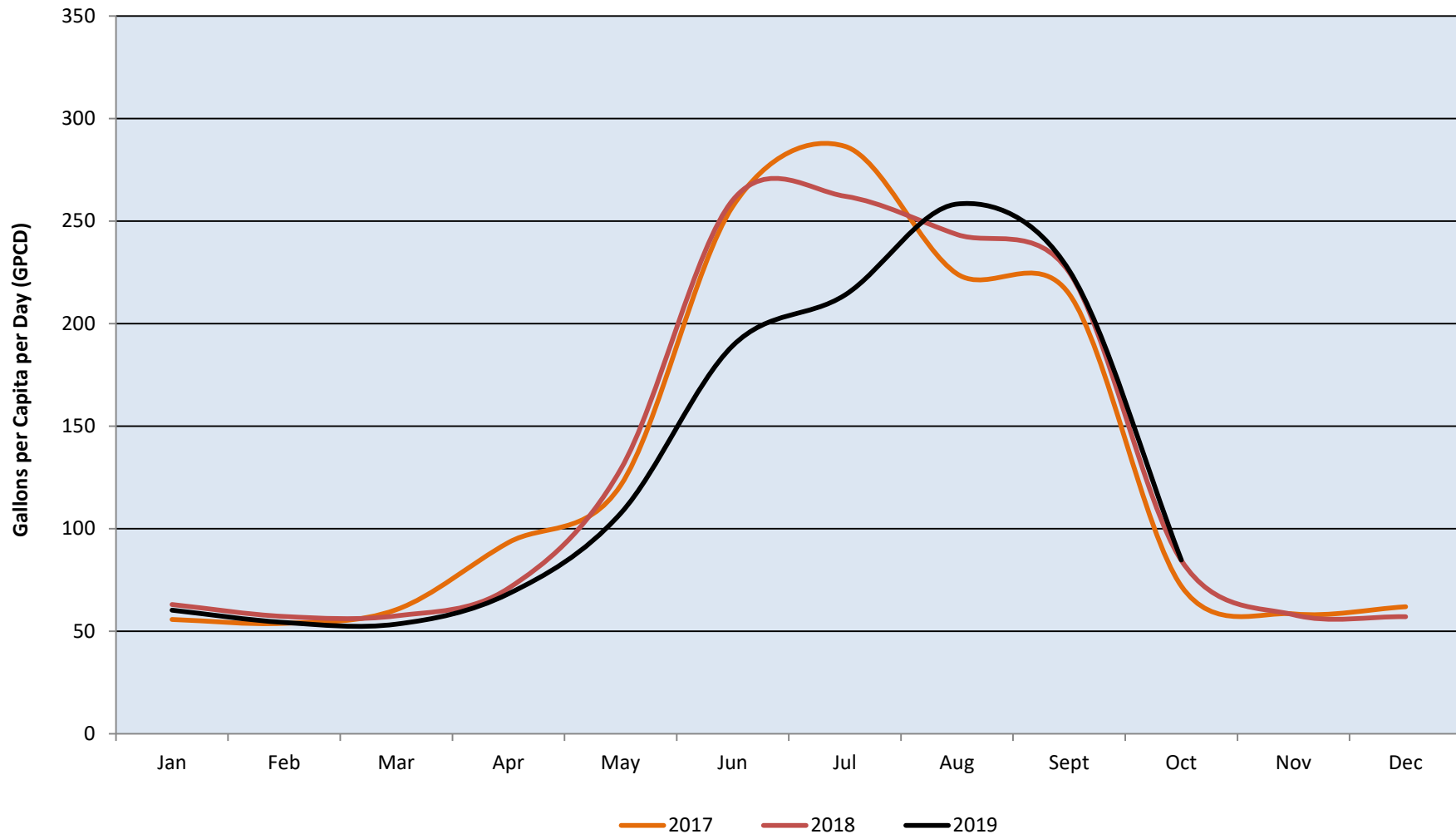
2016 - 131 GPCD

2017 – 130 GPCD

2018 – 131 GPCD

July 2017 had the highest average daily usage at 287 gallons GPCD. March 2019 had the lowest usage at 53 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:

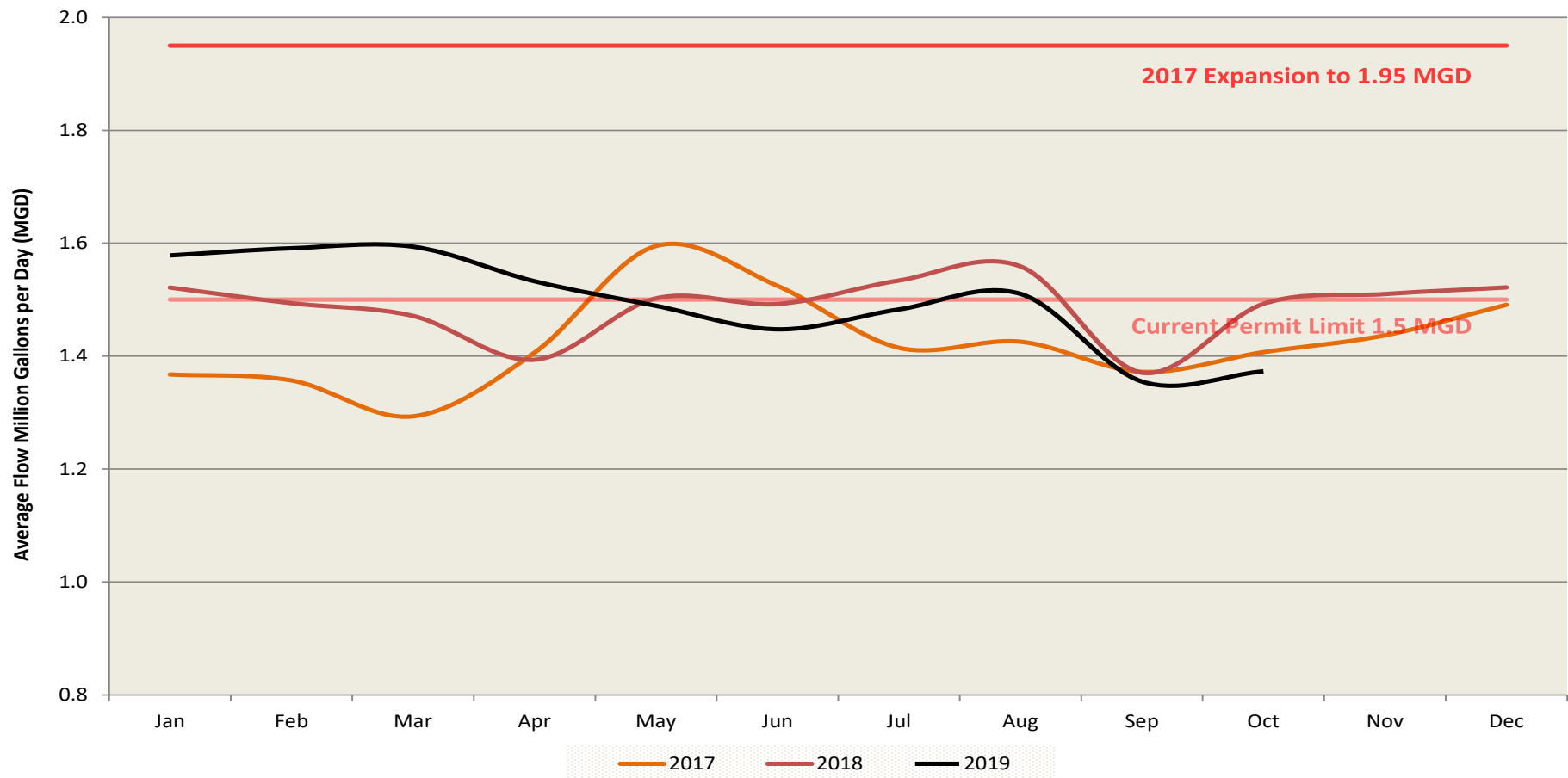
2016 - 1.30 MG

2017 – 1.42 MG

2018 - 1.50 MG

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, triggered by snowmelt and subsequent inflow into the collection system, likely through low lying manhole lids. CDPHE is indicating that they will not be renewing our permit until as late as 2023 or 2024, we continue to press the State to expedite this review so that our permit is in line with our approved expansions as well as correcting some incorrect permit limits. Design of the next plant expansion continues with HDR Engineering. We anticipate construction 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):

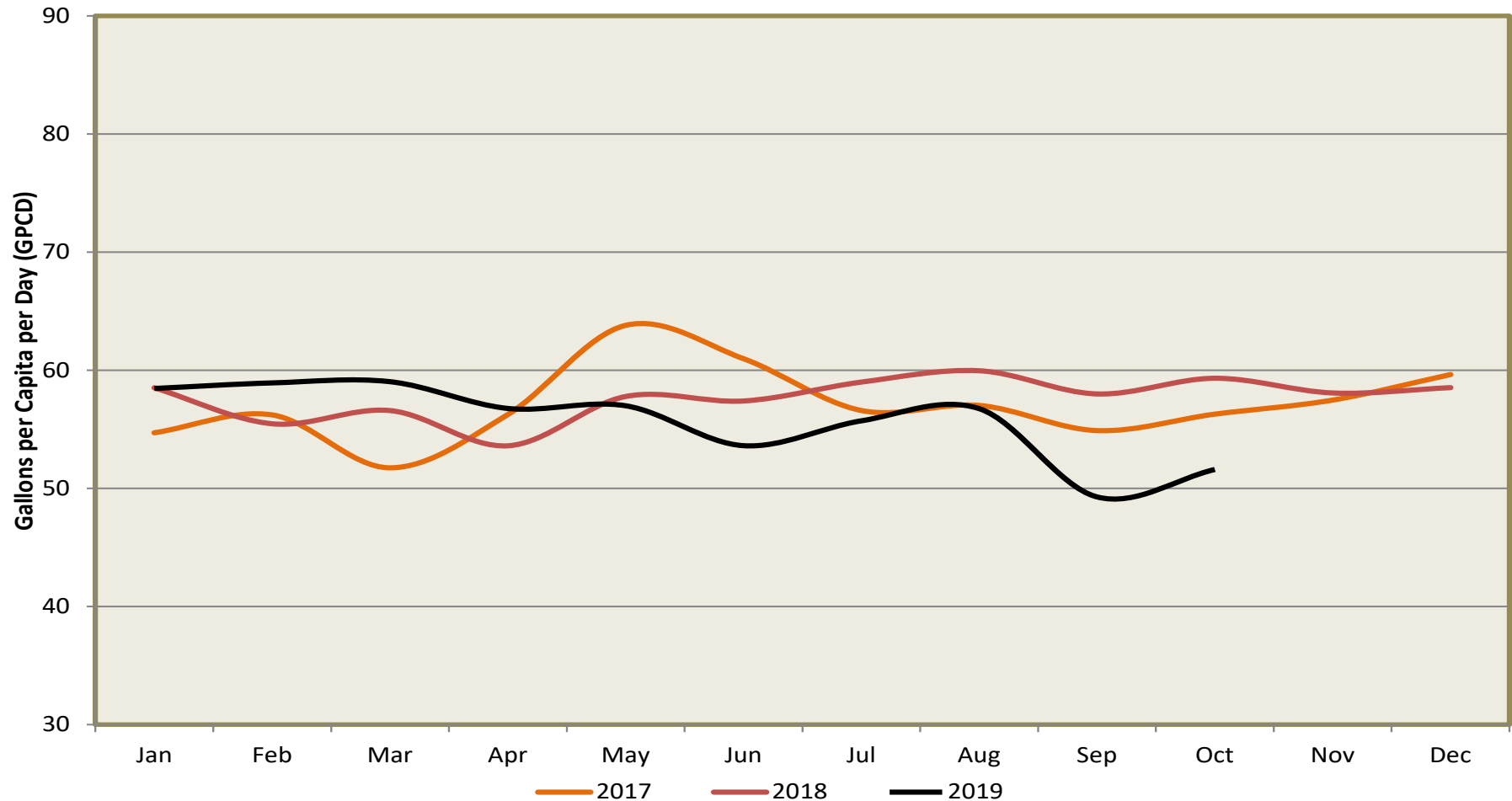
2016 - 57 GPCD

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. 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.

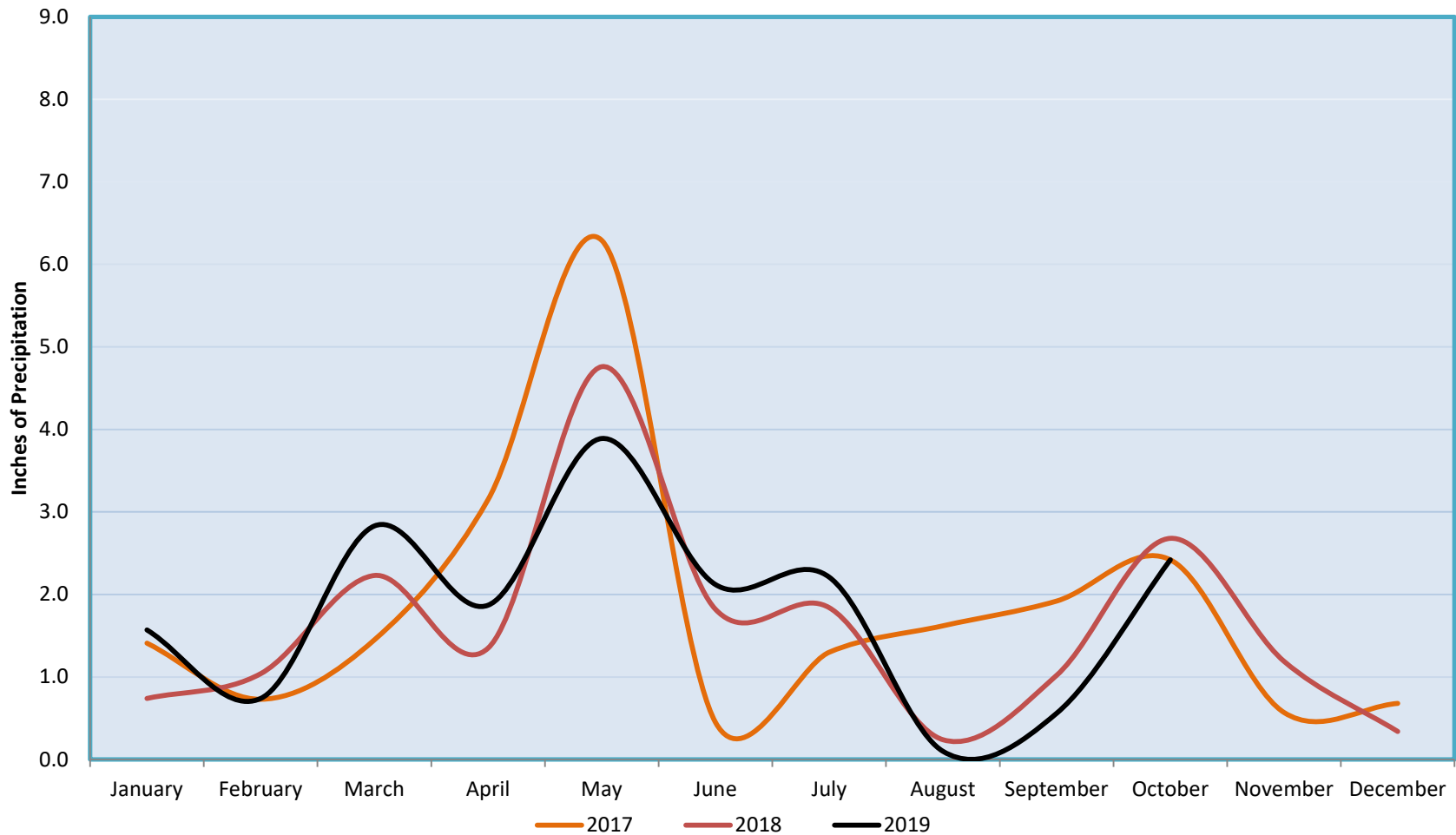
Average Daily Usage Per Capita



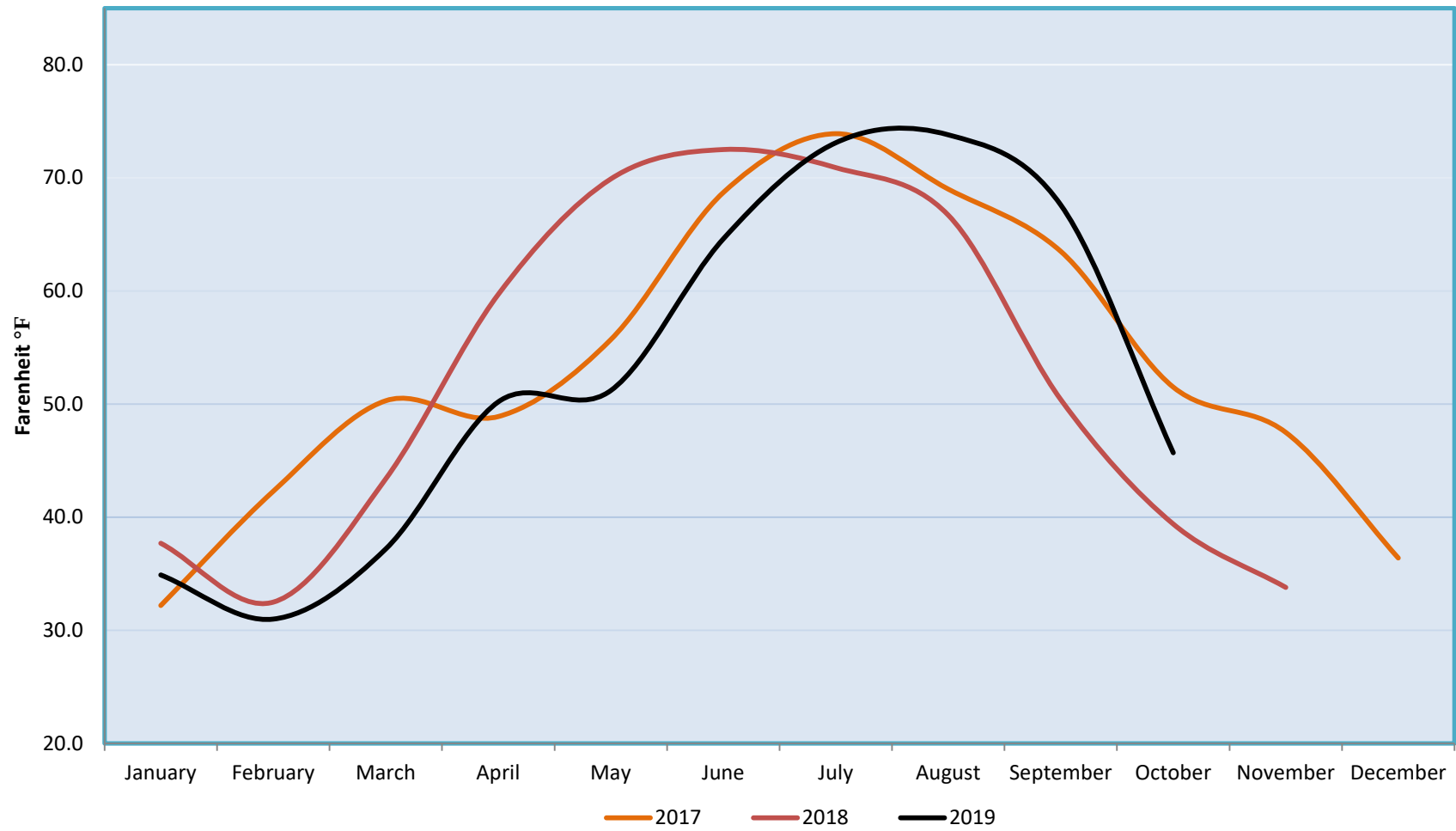
Monthly Data for Boulder – National Oceanic and Atmospheric Administration (NOAA) & Natural Resource Conservation Service (NRCS)

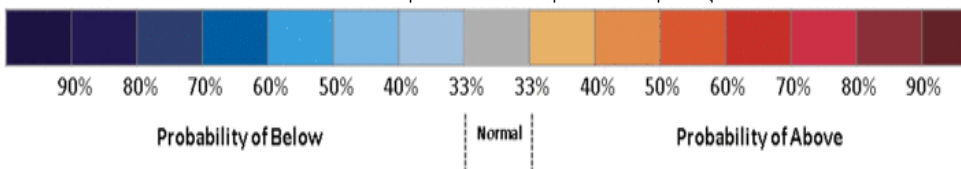
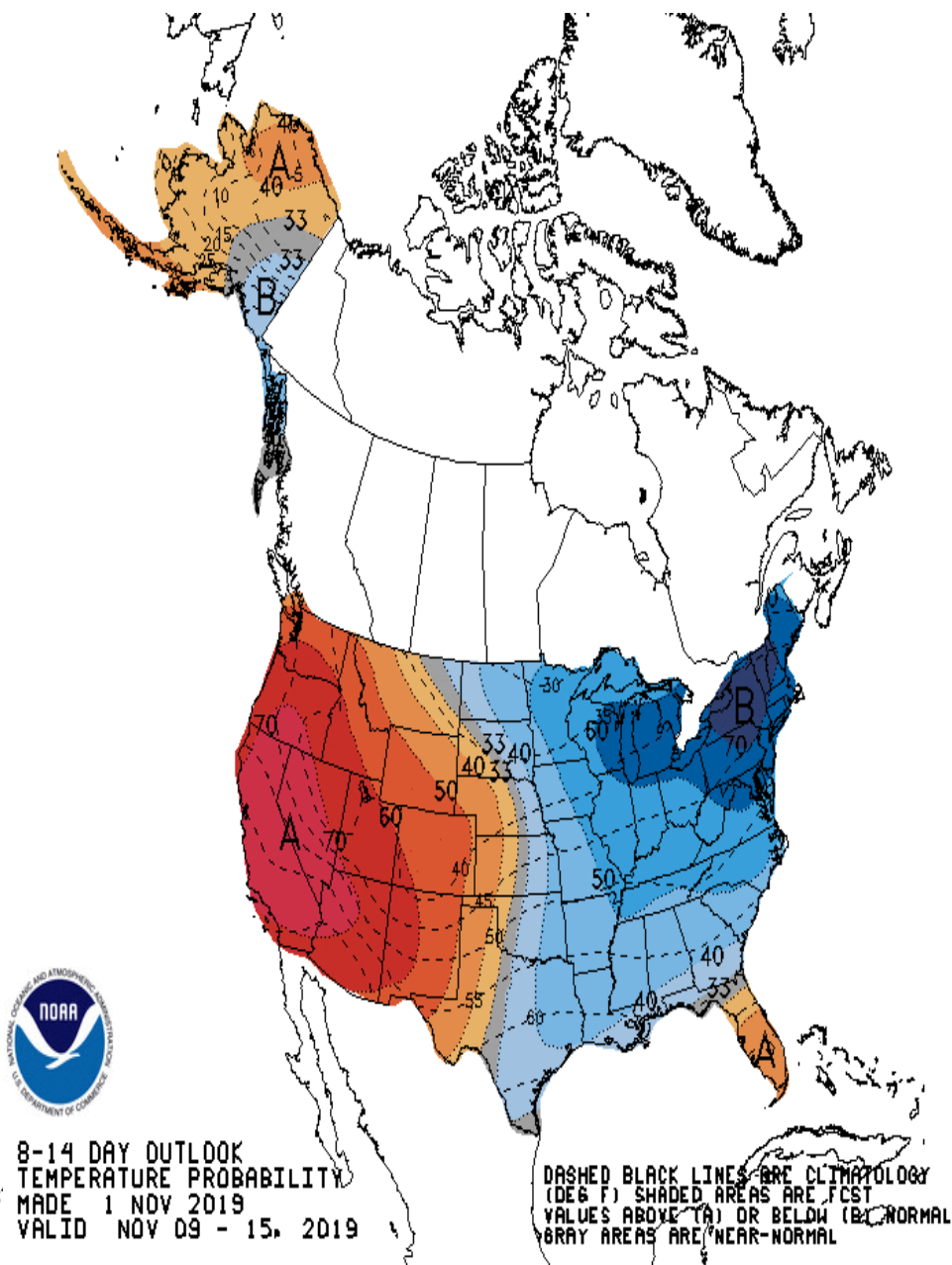
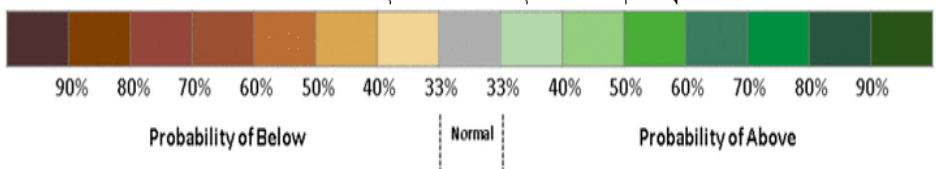
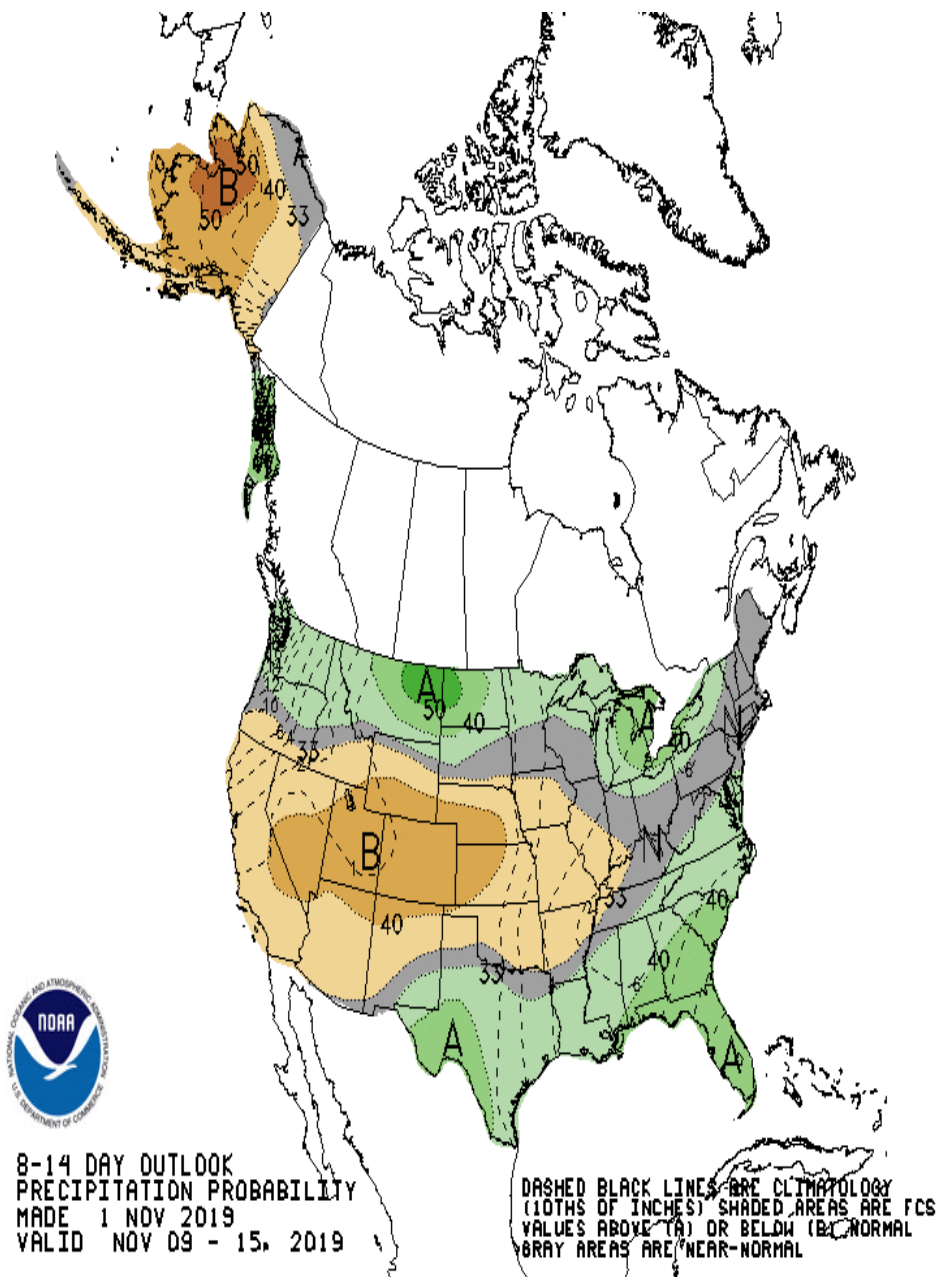
NOAA is predicting 40% chance of below normal precipitation and 40% chance of above normal temperatures, through mid month. Drought conditions have worsened somewhat, with levels intensifying in the southwestern portion of the state. However it is very early in the season to draw any conclusions for the snow year.

Precipitation



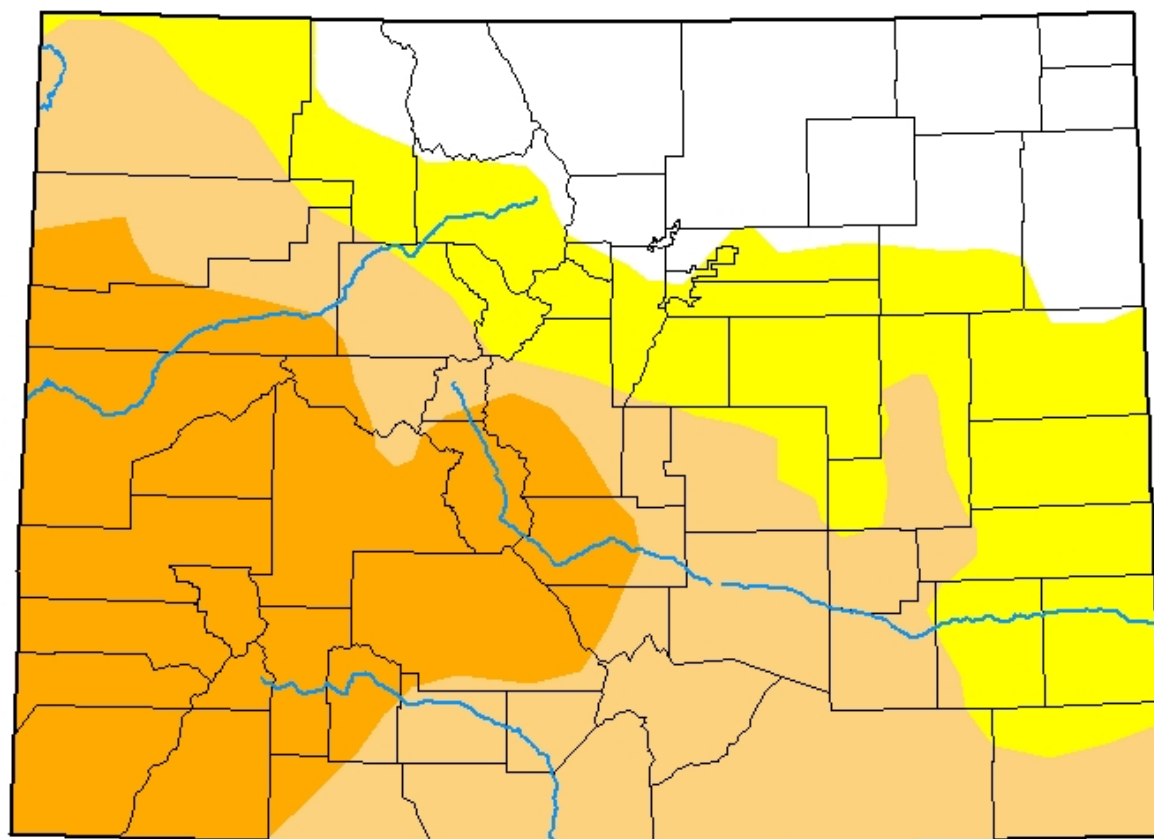
Mean Temperature





U.S. Drought Monitor Colorado

October 29, 2019
(Released Thursday, Oct. 31, 2019)
Valid 8 a.m. EDT



Intensity:

-  None
-  D0 Abnormally Dry
-  D1 Moderate Drought
-  D2 Severe Drought
-  D3 Extreme Drought
-  D4 Exceptional Drought

The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements.

Author:

David Simeral
Western Regional Climate Center



droughtmonitor.unl.edu