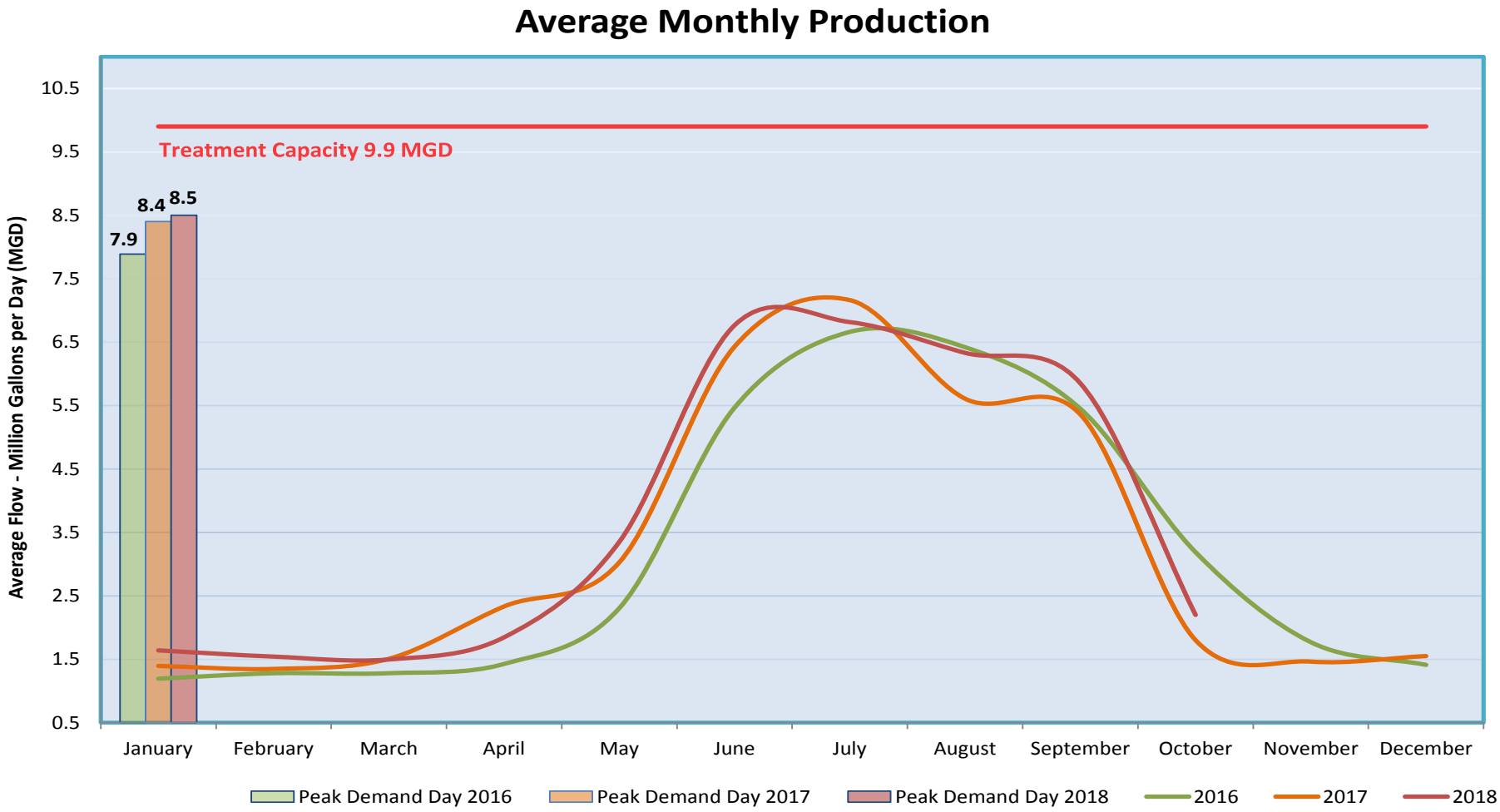
Lynn R. Morgan Water Treatment Facility

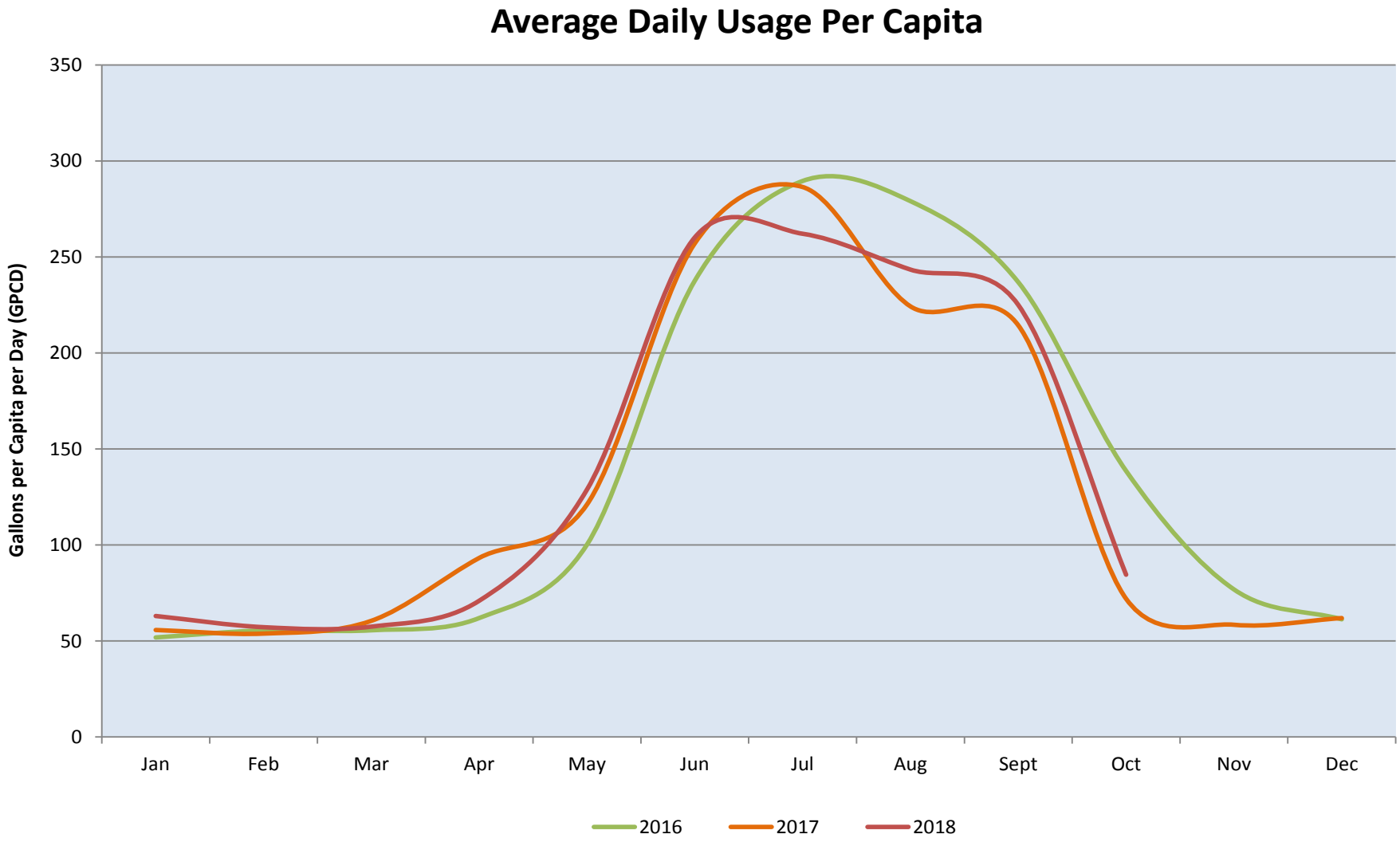
Annual Daily Average Flow: **2016** - 3.3 MG **2017** – 3.4 MG **2018** (to date) – 3.8 MG

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 (just up over July 2017 which was 8.4 MGD). Design continues with Burns & McDonnell for an expansion of the water treatment facility from 9.9 MGD to 16.7 MGD, we received 30% designs in September as well as a draft feasibility study for a hydroelectric turbine which could generate roughly $60,000 worth of electricity per year. We are currently working to engage construction contractors to be a part of the design team through a qualifications process. This will save money ultimately, in developing cost projections and more constructible designs.



Annual Daily Gallons Per Capita per Day (GPCD): **2016** - 131 GPCD **2017** – 130 GPCD **2018** (to date) – 145 GPCD

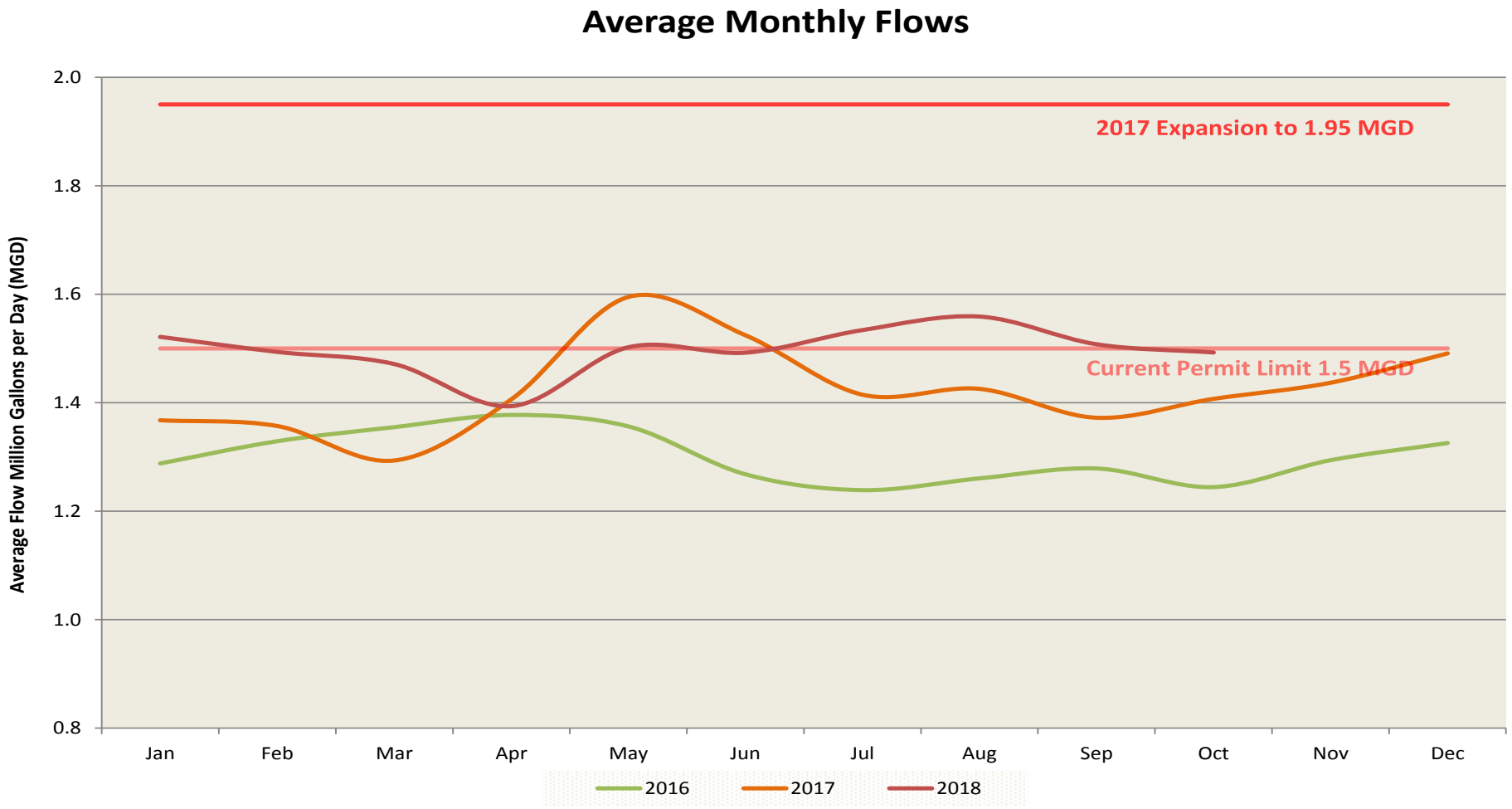
July 2016 had the highest average daily usage at 290 gallons per capita per day (GPCD). January 2016 had the lowest usage at 52 GPCD. A relatively wet and cool summer 2017 kept overall average water demands down for the year, 2018 is showing a similar pattern. Reducing summer irrigation and increasing reuse water availability will reduce reliance on treated water supplies in the future. Generally lower temperatures and a longer rainy season has kept water demands down this summer compared to the two prior years. Worth noting, Erie's low flow toilet program through Resource Central, Flush for the Future, has seen high demand and all reduced-cost toilets have been claimed for the year.



North Water Reclamation Facility

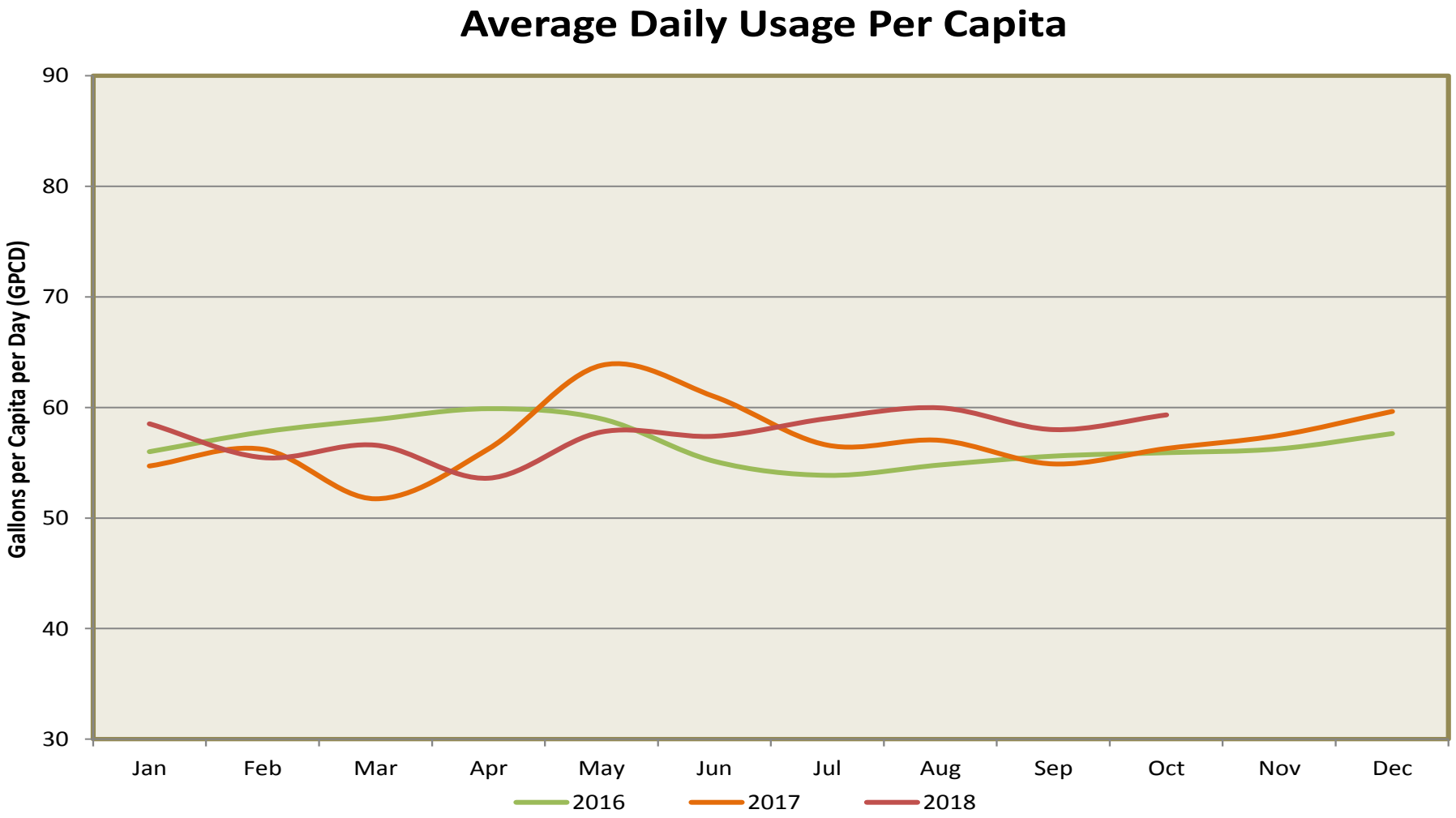
Annual Daily Average Flow: **2016** - 1.30 MG **2017** – 1.42 MG **2018** (to date) - 1.50 MG

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. 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. 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. We continue working with HDR Inc. on facility master planning and preliminary design for the next NWRF expansion to roughly 3.0 MGD. We anticipate construction in late 2019 or early 2020.



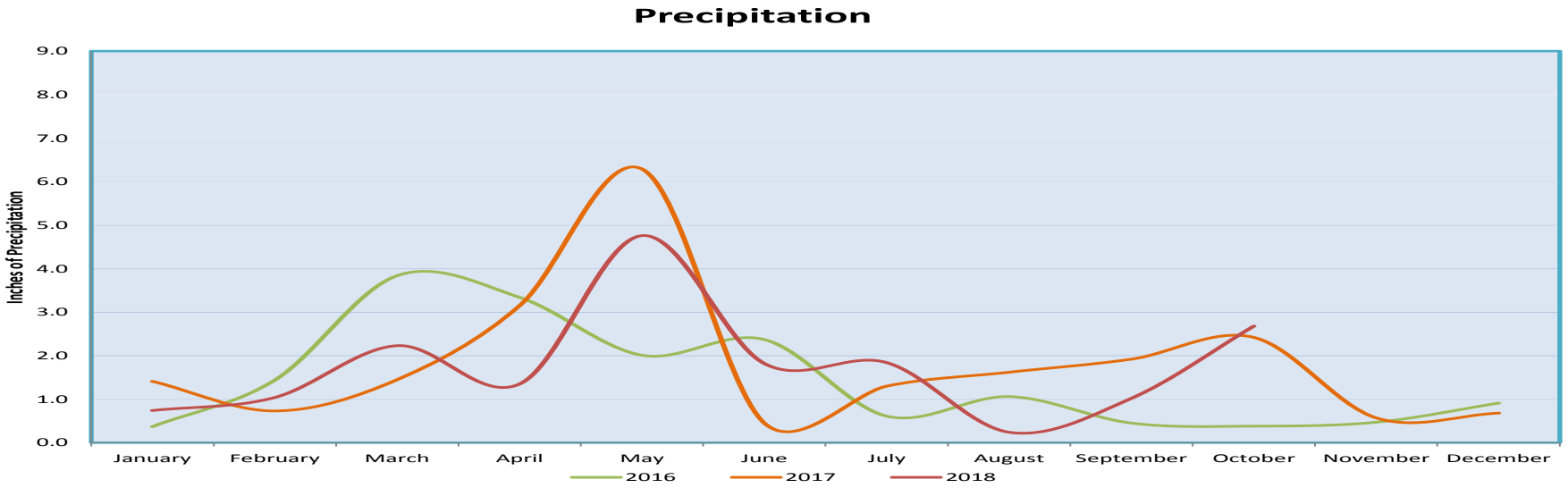
Annual Daily Gallons Per Capita per Day (GPCD): **2016** - 57 GPCD **2017-** 57 GPCD **2018** (to date) - 58 GPCD

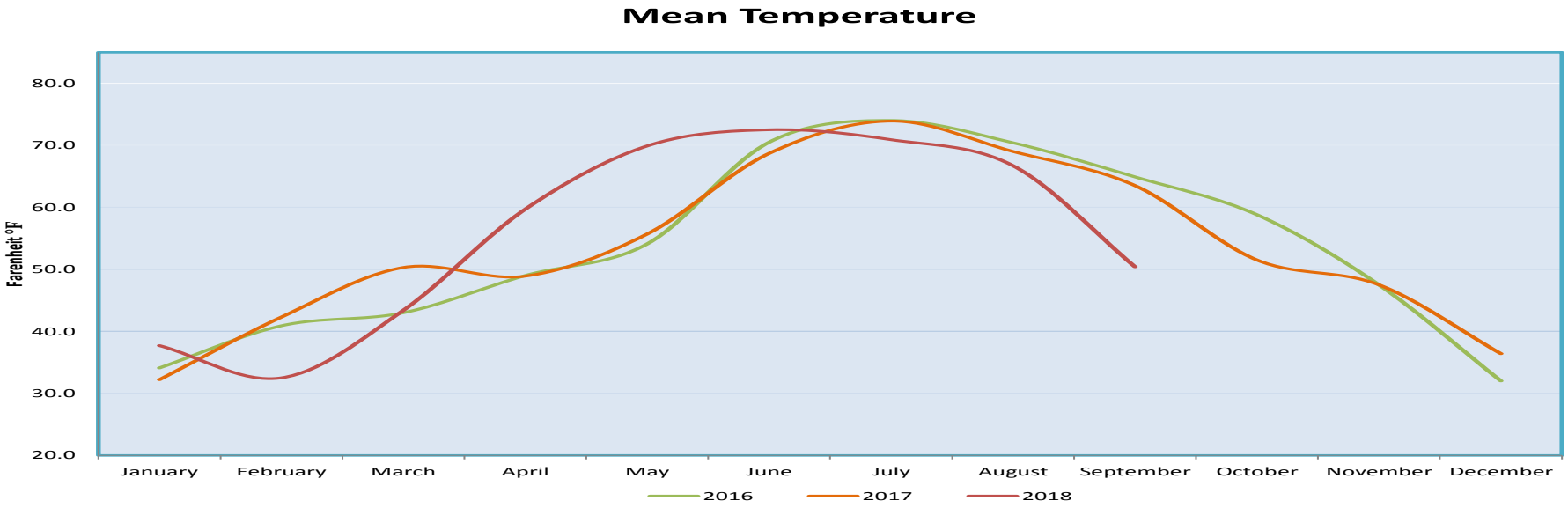
This graph depicts customer indoor water usage. May 2017 had the highest usage at 64 GPCD, primarily due to snow melt seeping into manholes after a particularly wet snow and subsequent warm weather. March 2017 had the lowest usage at 52 GPCD. Overall flows into the wastewater treatment plant are trending 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. Flows to the NWRF trended up during this period presumably due to significant hail events, higher groundwater levels in inflow.

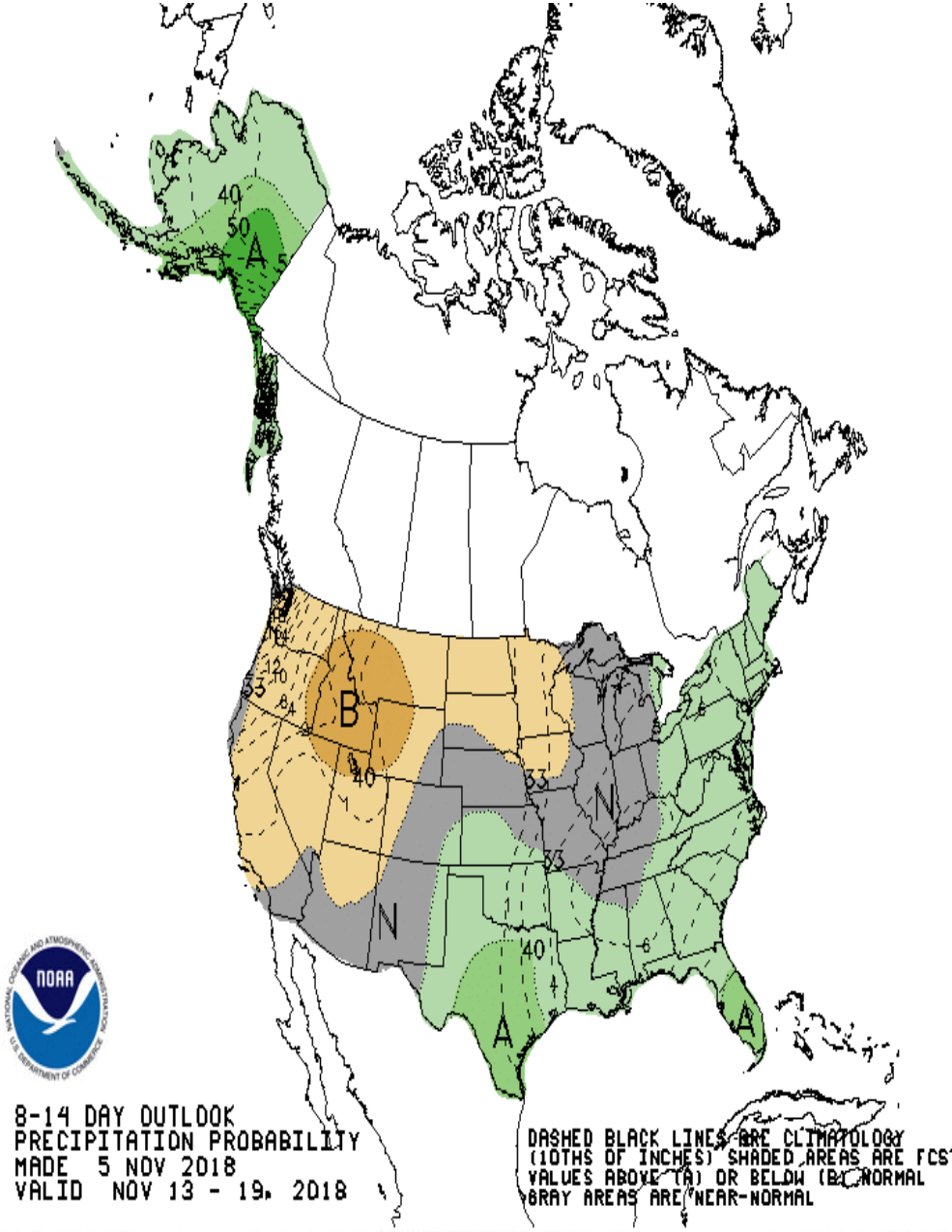


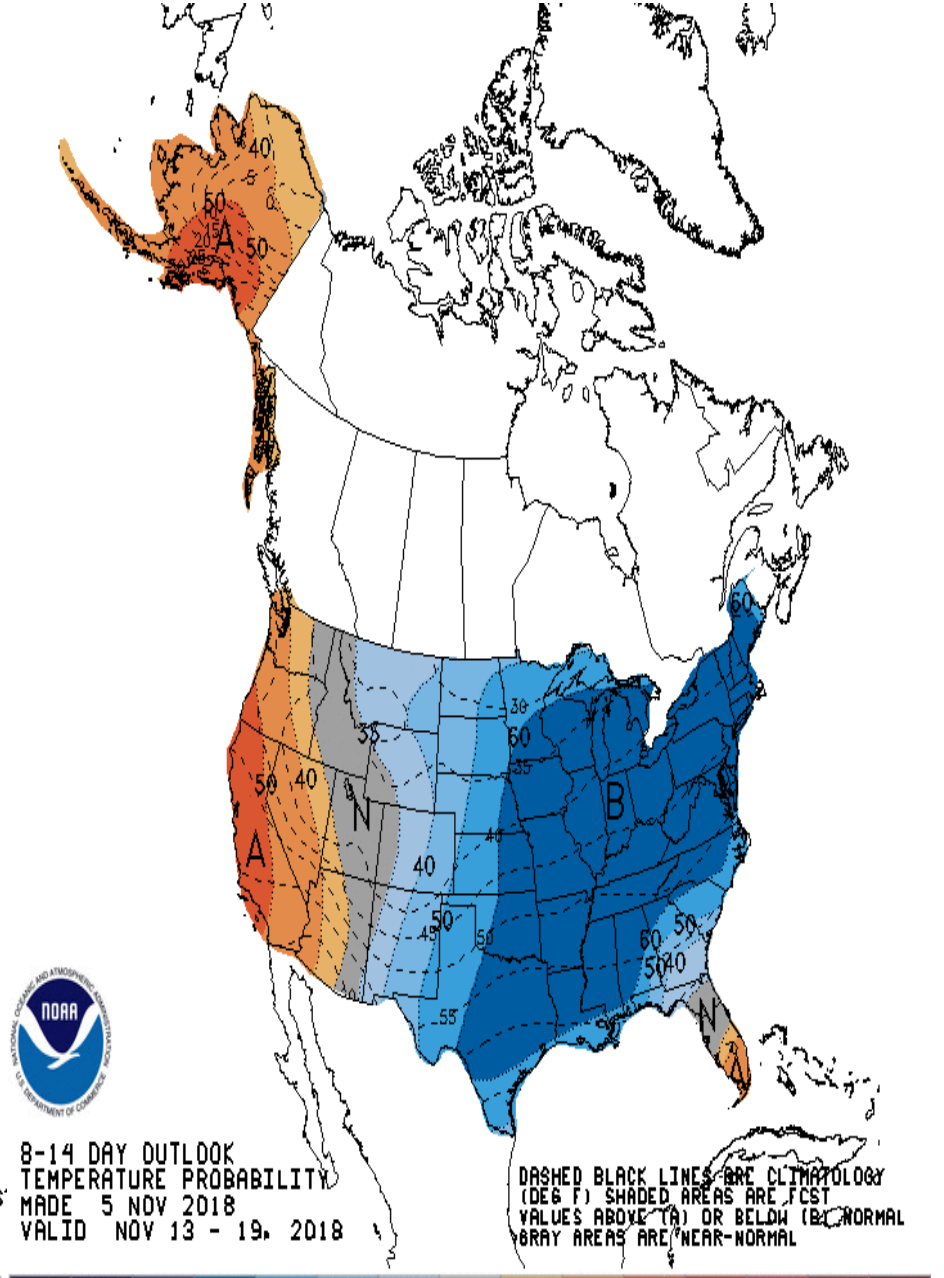
Monthly Data for Boulder – National Oceanic and Atmospheric Administration (NOAA) & Natural Resource Conservation Service (NRCS)

NOAA is predicting normal precipitation and a 30 – 40% chance of below normal temperatures through mid-November in our area. Drought conditions are starting to relieve somewhat statewide due to recent precipitation. As of November 5, October mean temperature data had not yet been entered into NOAA's web site.






8-14 DAY OUTLOOK
PRECIPITATION PROBABILITY
MADE 5 NOV 2018
VALID NOV 13 - 19, 2018
DASHED BLACK LINES ARE CLIMATOLOGY
(10THS OF INCHES) SHADED AREAS ARE FCST
VALUES ABOVE (A) OR BELOW (B) NORMAL
GRAY AREAS ARE NEAR-NORMAL
90% 80% 70% 60% 50% 40% 33% 33% 40% 50% 60% 70% 80% 90%
Probability of Below
Normal
Probability of Above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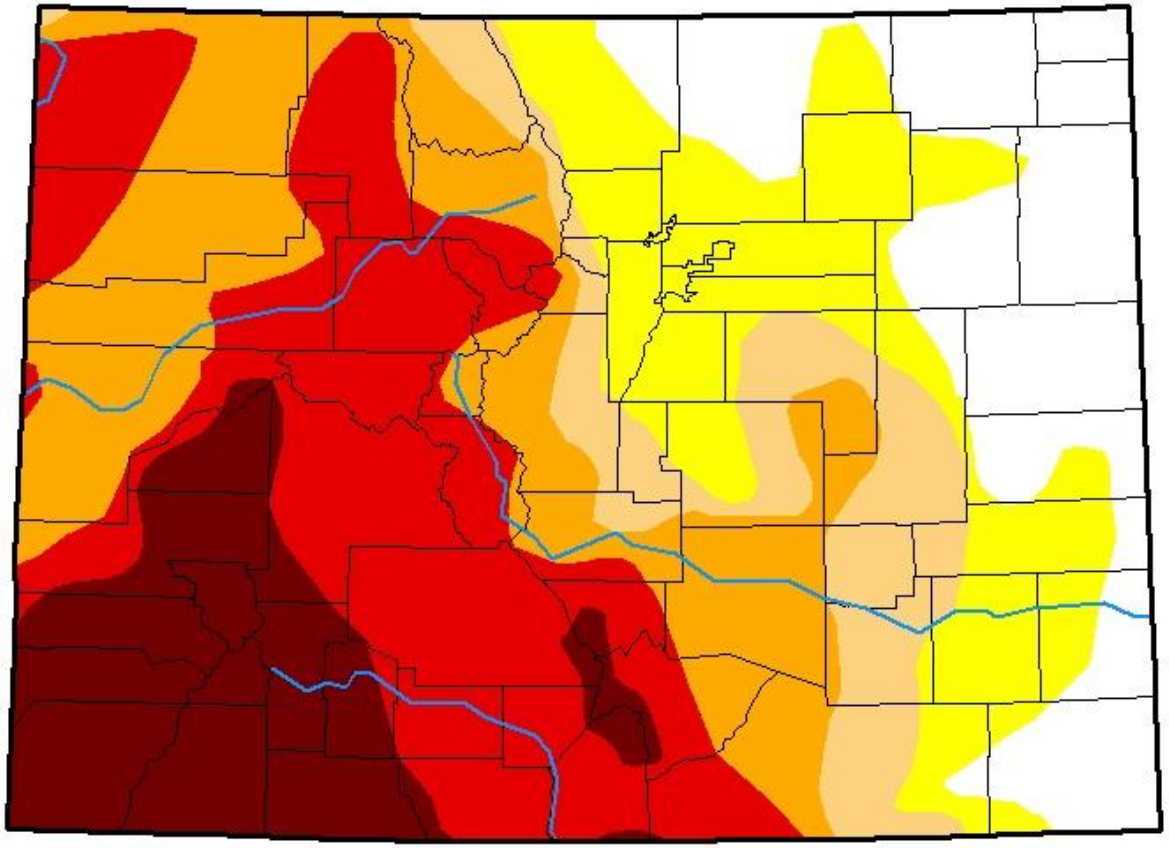
U.S. Drought Monitor

Colorado

October 30, 2018

(Released Thursday, Nov. 1, 2018)

Valid 8 a.m. EDT



Intensity:

- 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:

Deborah Bathke
National Drought Mitigation Center

http://droughtmonitor.unl.edu/

U.S. Drought Monitor

Continental U.S. (CONUS)

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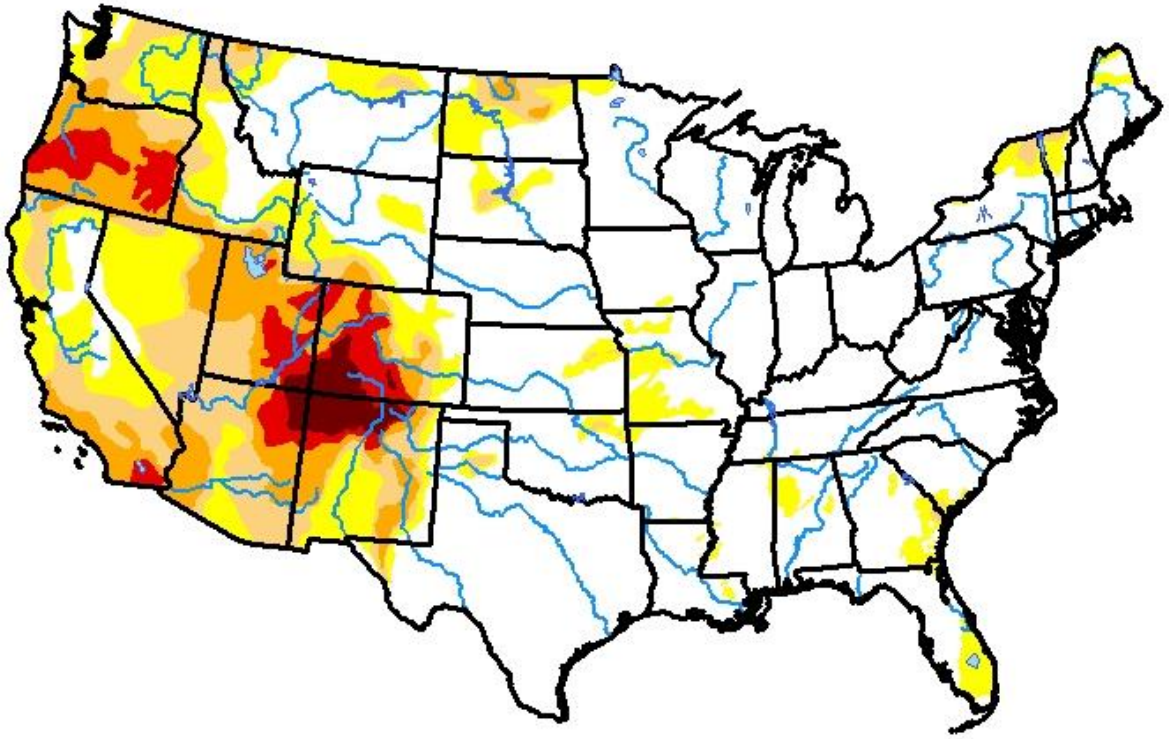

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