

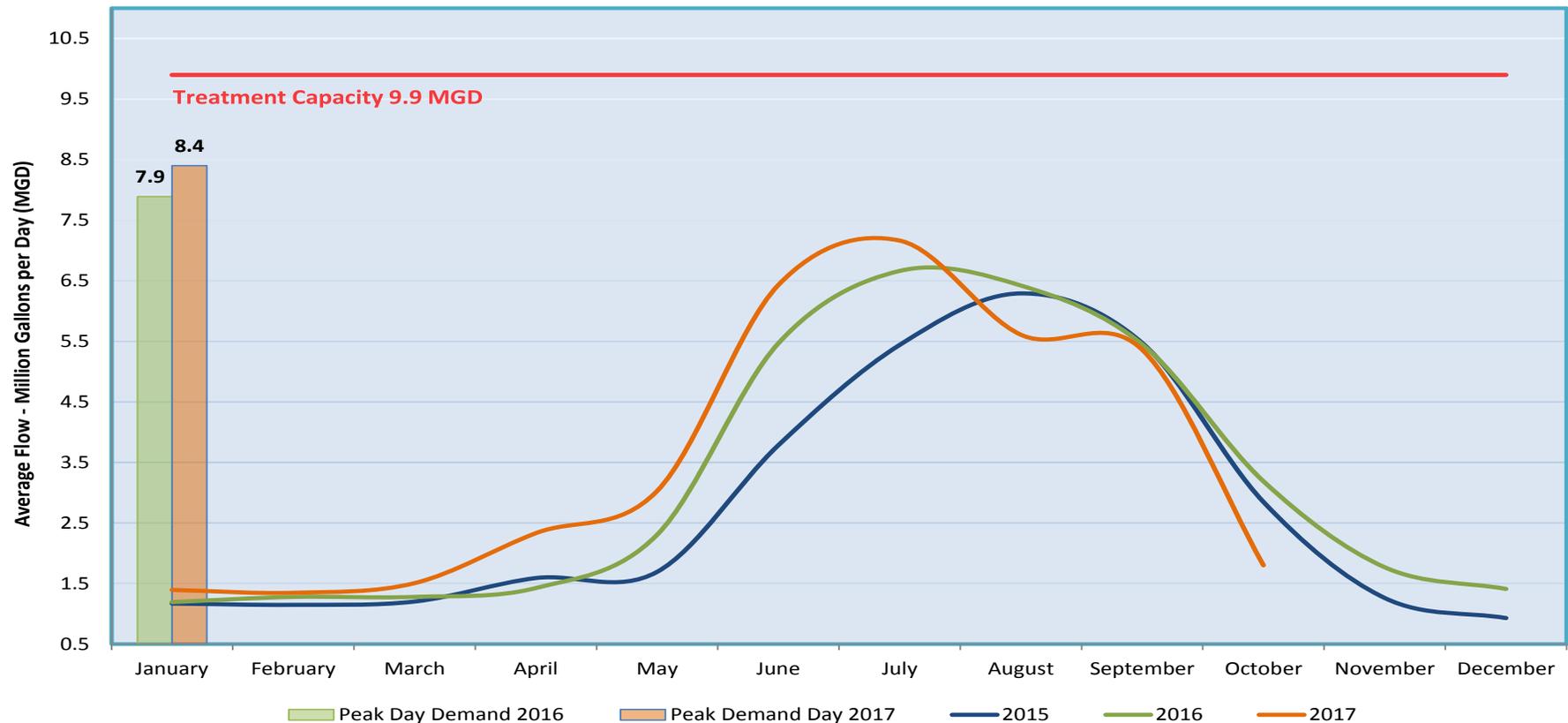
Lynn R. Morgan Water Treatment Facility

Annual Daily Average Flow: **2014** - 2.6 million gallons (MG) **2015** - 2.7 MG **2016** - 3.3 MG

July 2017 maintains the record for the highest monthly average flows at 7.16 MG, while December 2015 had the lowest flows at 0.93 MG. Summer demands greatly affect the annual average due to outdoor irrigation. Water storage tanks in the distribution system play a key role in supplying peak overnight irrigation demands, and are refilled in the day when demands decrease. A notable shift on this chart is in May 2015, where we saw very high precipitation.

The daily peak demand (customer meter totals) of 8.4 MGD was in July of this year. This equates to a 0.5 MG increase in daily peak demand over last year. Staff is currently discussing options with design engineers to increase plant capacity ahead of the next expansion project, which is anticipated to be designed in 2018 and constructed in 2019.

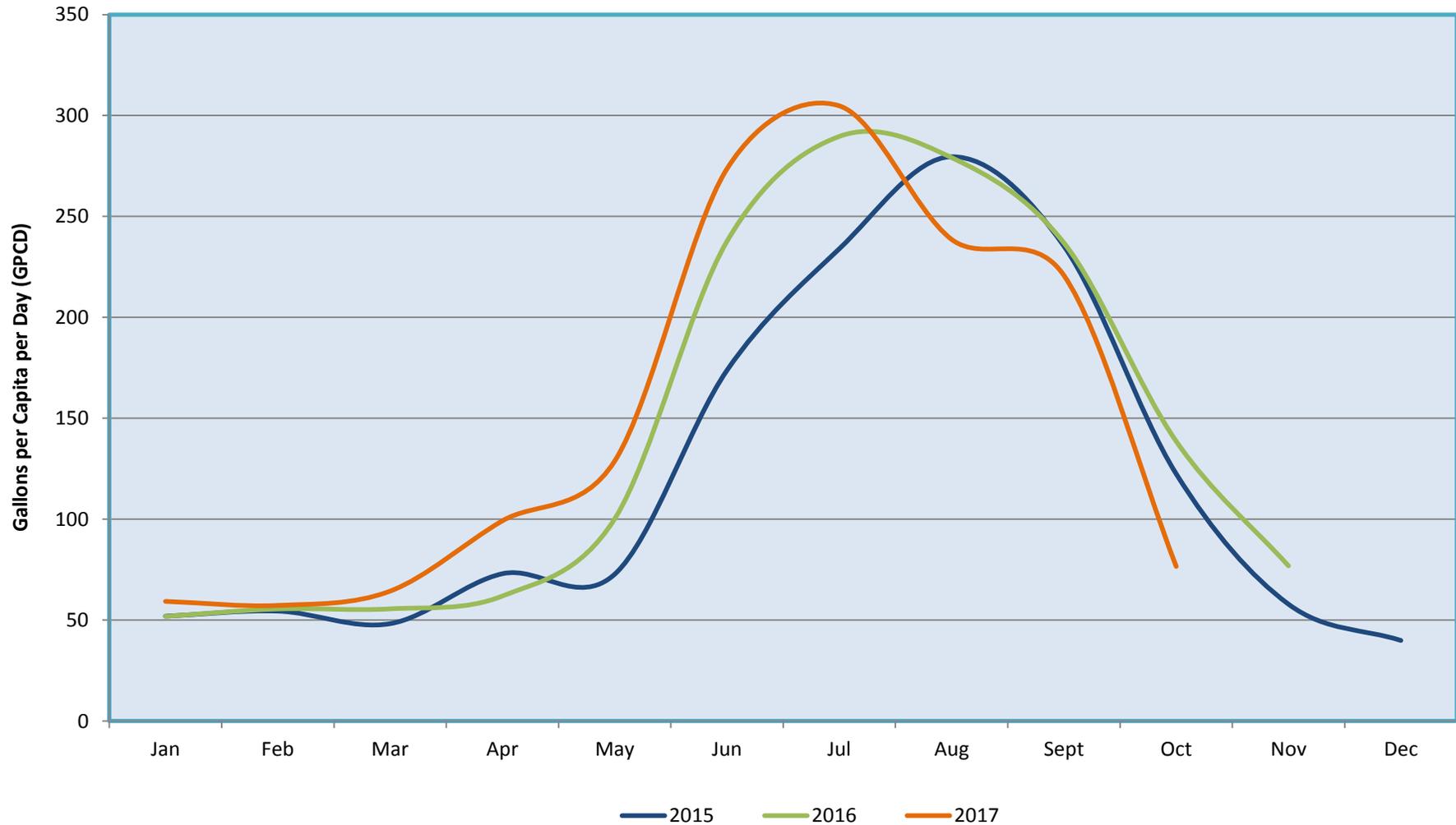
Average Monthly Production



Annual Daily Gallons Per Capita per Day (GPCD): **2014** – 122 GPCD **2015** - 120 GPCD **2016** - 144 GPCD.

July 2017 had the highest average daily usage at 305 gallons per capita per day (GPCD) an increase over the previous record set in July 2016 of 290 GPCD. December 2015 had the lowest usage at 40 GPCD. Reducing summer irrigation and increasing reuse water availability will reduce reliance on treated water supplies in the future. Recent cold weather has resulted in a sharp decline in water demand as irrigation systems are shut down for winter.

Average Daily Usage Per Capita

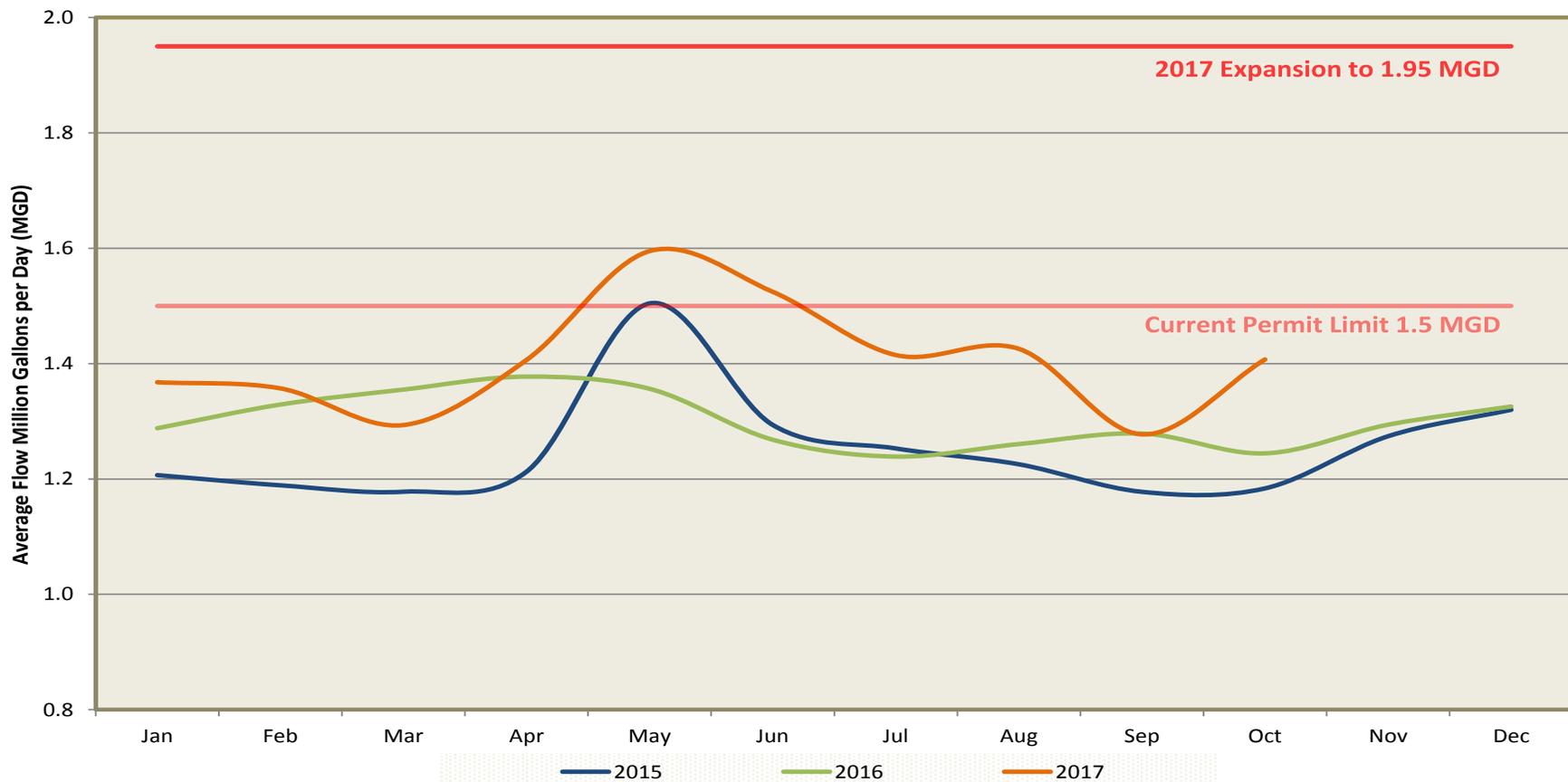


North Water Reclamation Facility

Annual Daily average flow: **2014** - 1.3 million gallons **2015** - 1.3 million gallons **2016** - 1.5 million gallons

January 2014 had the lowest average flow of 1.12 million gallons. May 2017 set a high average monthly flow of 1.60 million gallons per day, triggered by snowmelt and subsequent inflow into the collection system. Staff received a preliminary permit analysis from consultant Leonard Rice Engineers (LRE) and will work with LRE to request some modifications to the existing planned permit limits from the Colorado Department of Public Health and Environment to ensure the Town has a permit based on the most accurate and relevant data. A minor spike in flows occurred during this period due to recent snow events which allowed some inflow into the system. Staff continues to work to reduce such inflows and is working with Merrick & Company to monitor flows at a number of locations in the sewer collection system in an effort to pinpoint problem areas.

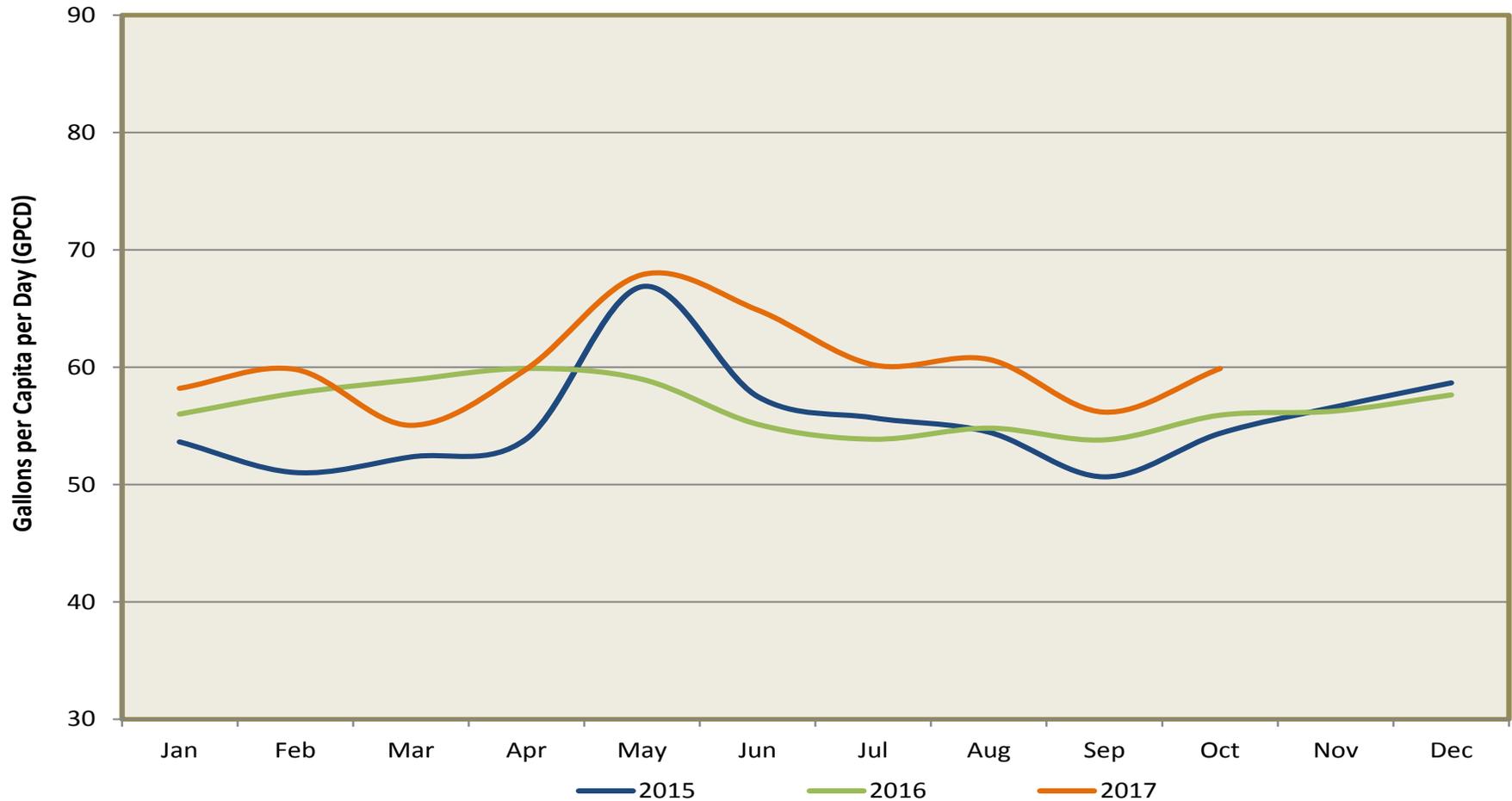
Average Monthly Flows



Annual Daily Gallons Per Capita per Day (GPCD): **2014** - 62 GPCD **2015** - 56 GPCD **2016** - 64 GPCD

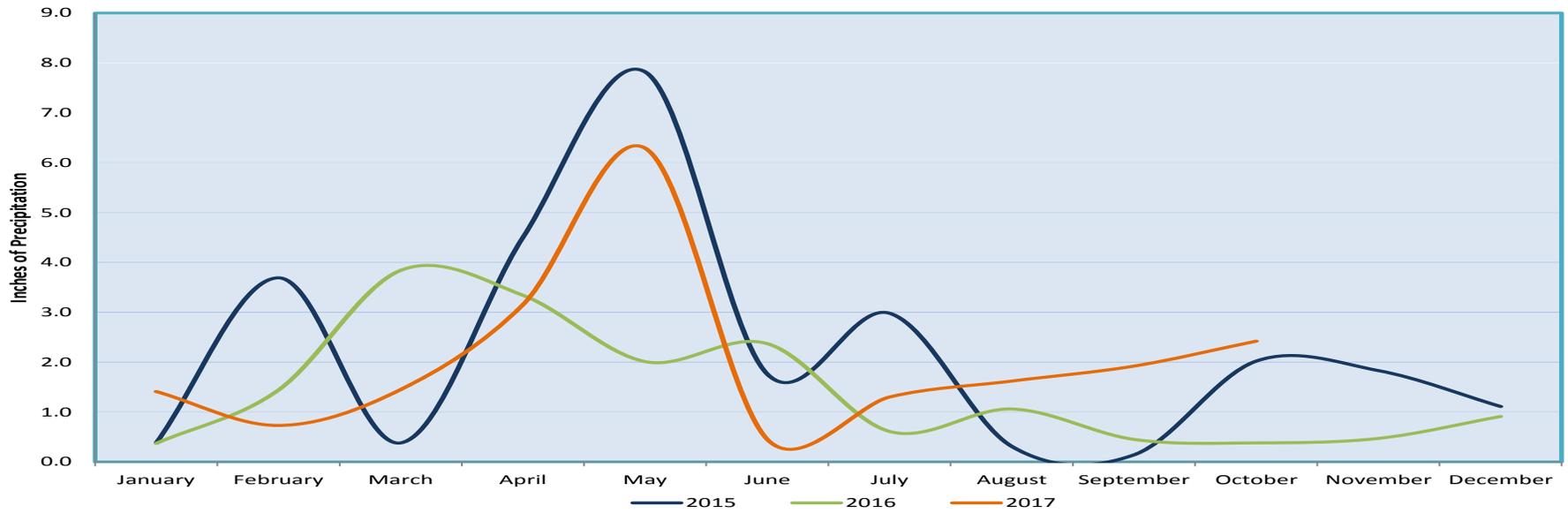
This graph depicts customer indoor water usage. May 2017 had the highest usage at 68 gallons, while February and September 2015 had the lowest usage at 51 gallons. Overall flows into the wastewater treatment plant are trending upward over this period. Increased population appears to be offset by more efficient water use indoors, and possibly new homes with water saving appliances and fixtures. Worth noting again is the effect of precipitation in May of 2015 and 2017. Fall, with relatively little precipitation and dropping groundwater levels, is a good indicator of true daily usage.

Average Daily Usage Per Capita

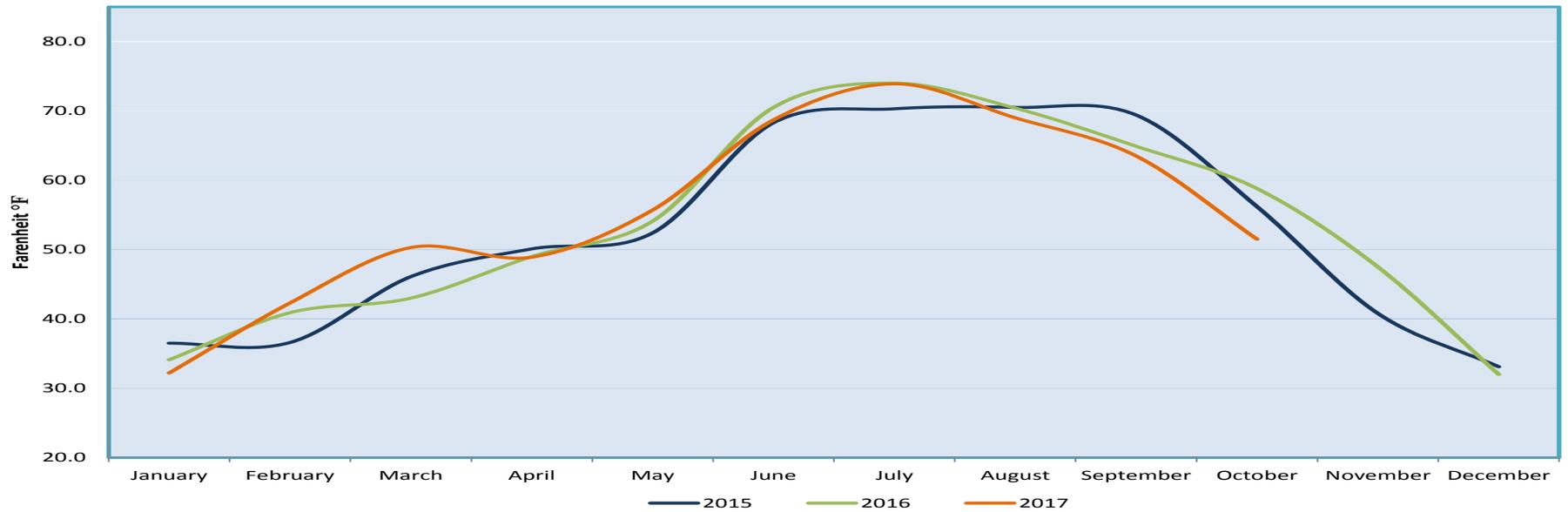


Monthly Data for Boulder – National Oceanic and Atmospheric Administration (NOAA)

Precipitation

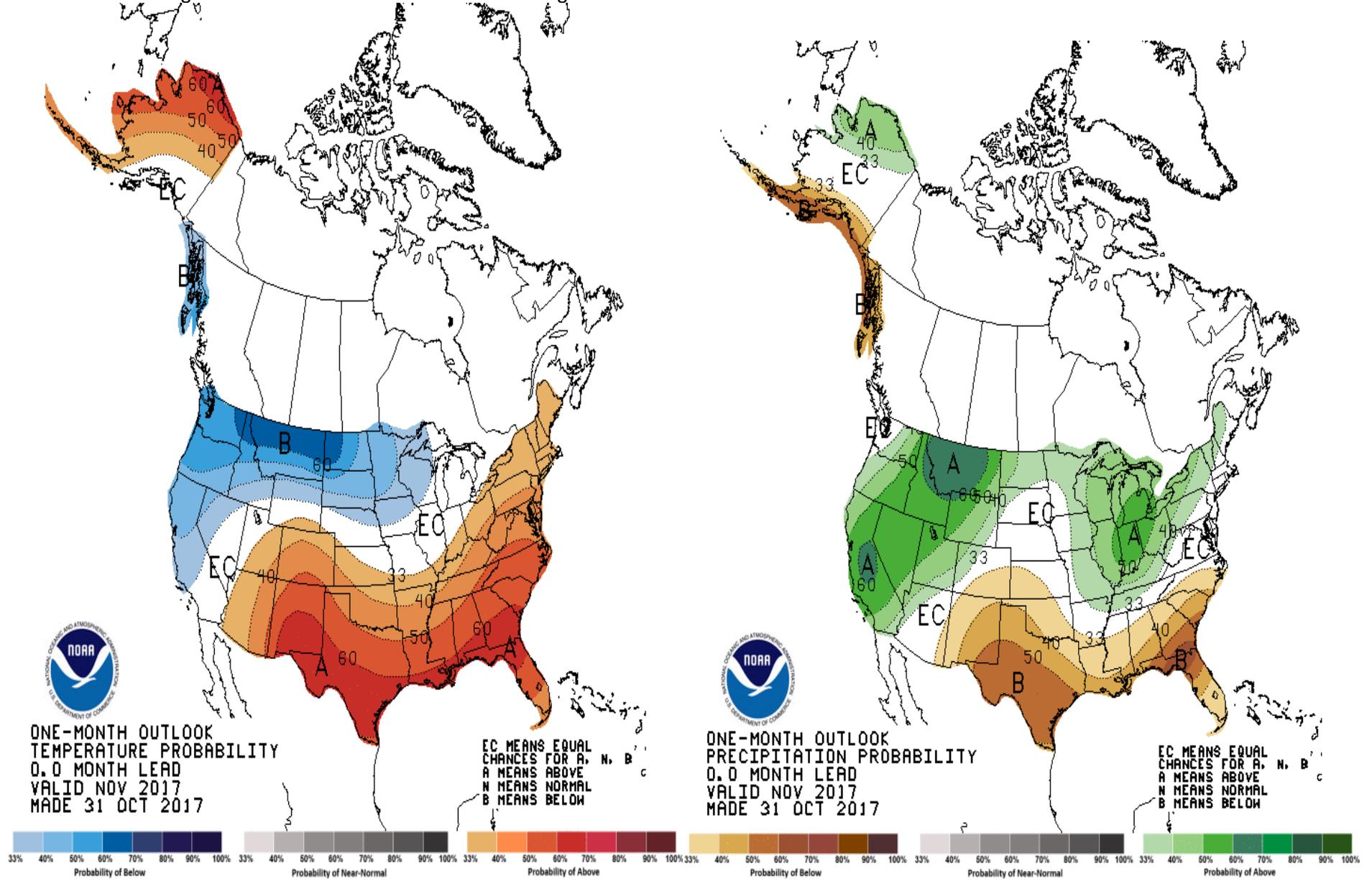


Mean Temperature



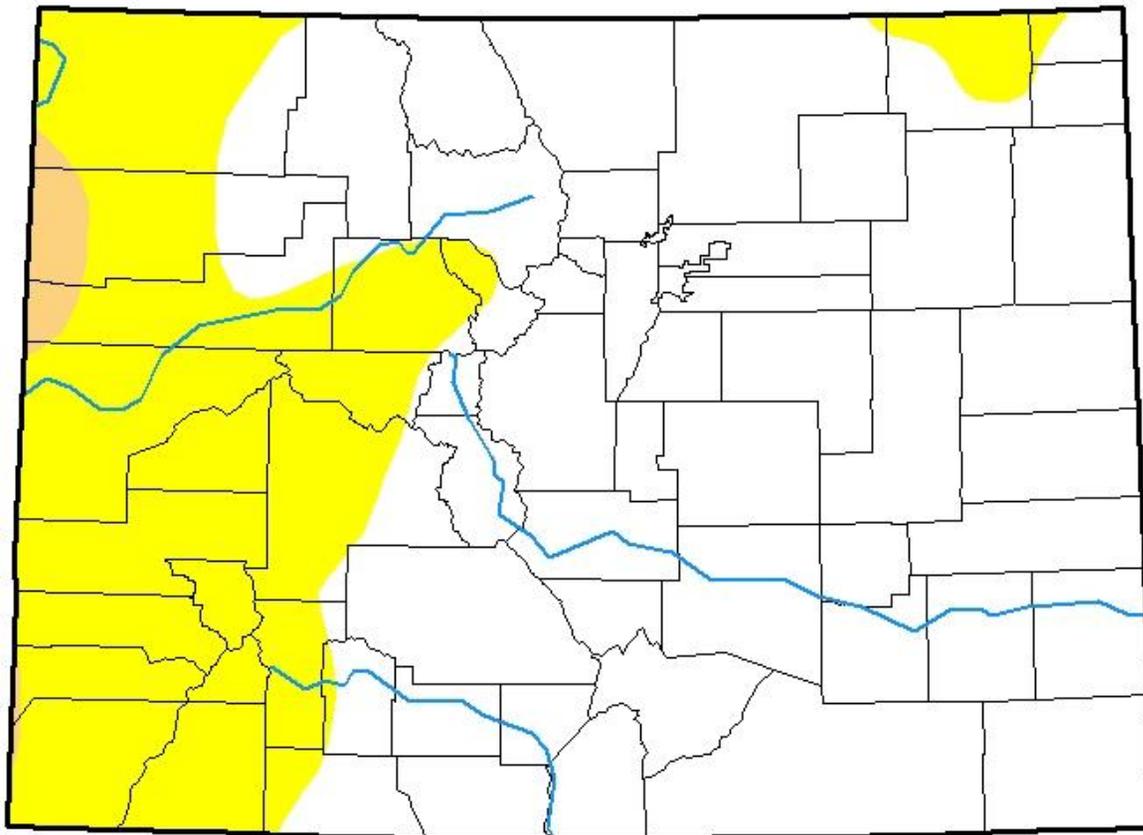
1 Month Weather Forecasts – NOAA

NOAA is predicting a 33 - 40% chance of above normal temperatures and equal chances of above or below normal precipitation in November in our area. The drought monitor shows most of the state in a good condition as we transition from fall to winter.



U.S. Drought Monitor Colorado

October 31, 2017
(Released Thursday, Nov. 2, 2017)
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:

David Miskus
NOAA/NWS/NCEP/CPC



<http://droughtmonitor.unl.edu/>