

Lynn R. Morgan Water Treatment Facility

Annual Daily Average Flow:

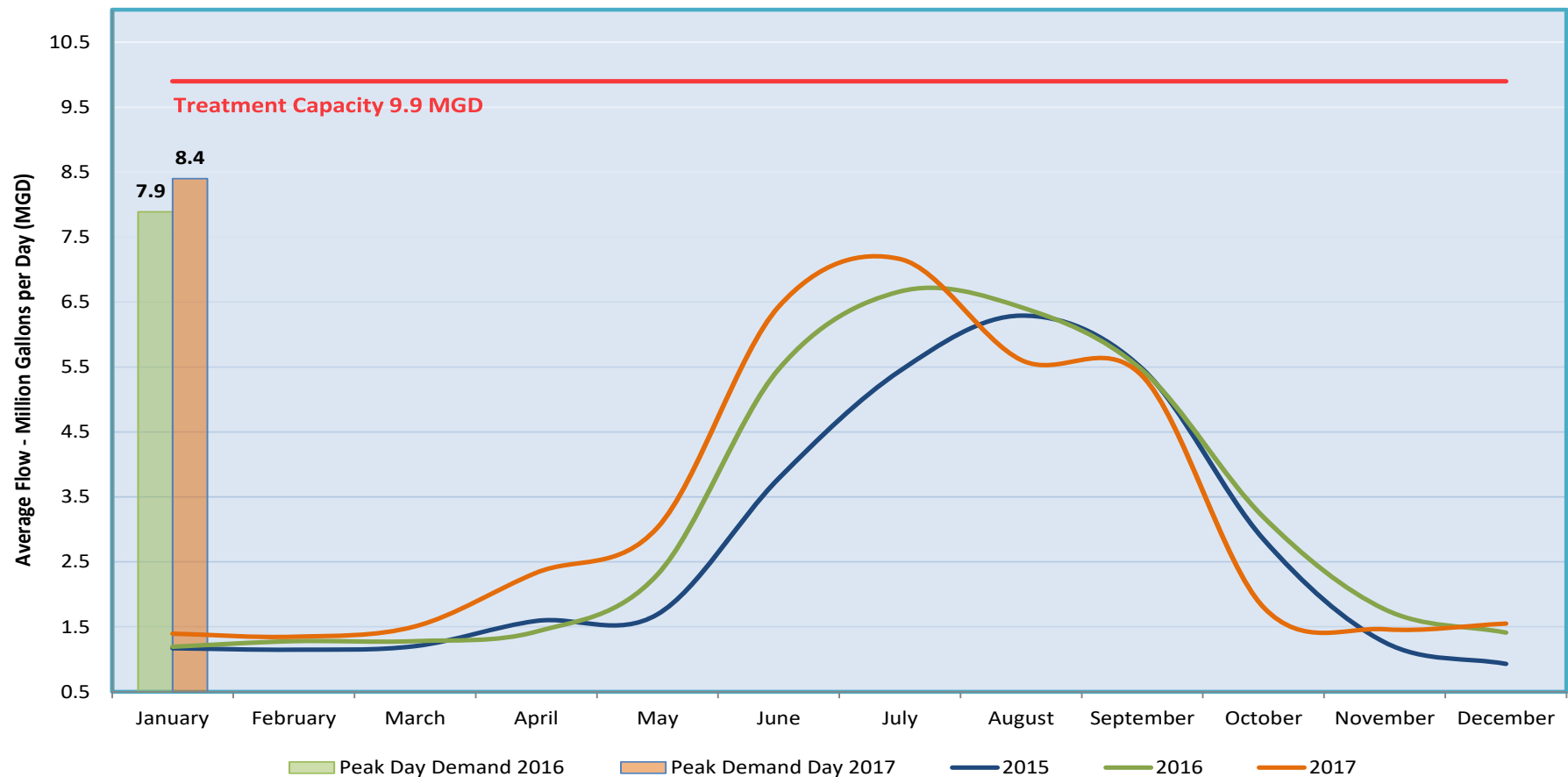
2015 - 2.7 MG

2016 - 3.3 MG

2017 – 3.4 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 fire flow storage, and are refilled in the day when demand 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 planning to enter into design for expansion of the Water Treatment Facility in 2018, with an anticipated 2019 construction project.

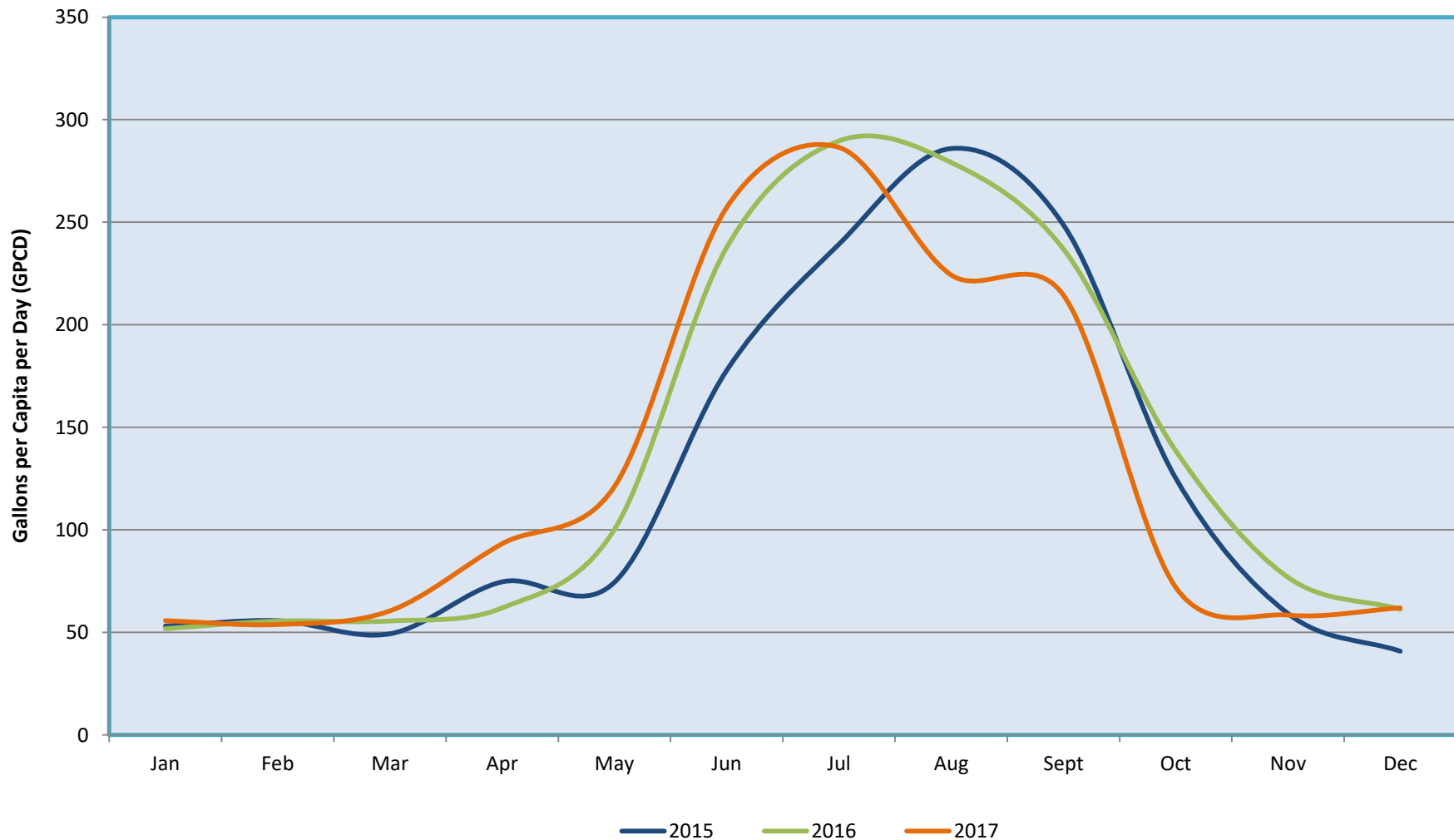
Average Monthly Production



Annual Daily Gallons Per Capita per Day (GPCD): **2015** - 124 GPCD **2016** - 137 GPCD **2017** – 130 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. A relatively wet and cool summer 2017 kept overall average water demands down for the year.

Average Daily Usage Per Capita

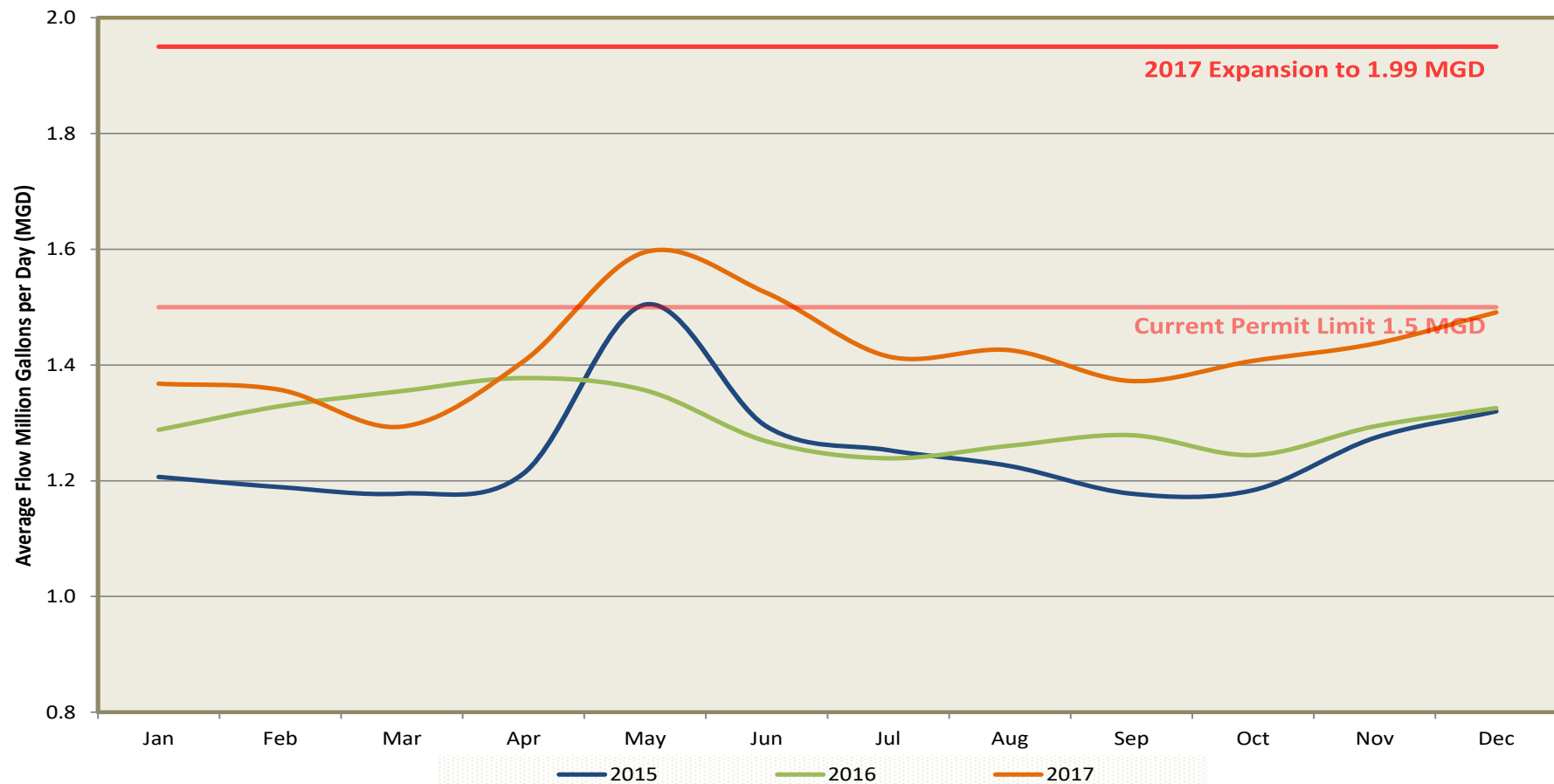


North Water Reclamation Facility

Annual Daily Average Flow: **2015** - 1.25 MG **2016** - 1.30 MG **2017** – 1.42 MG

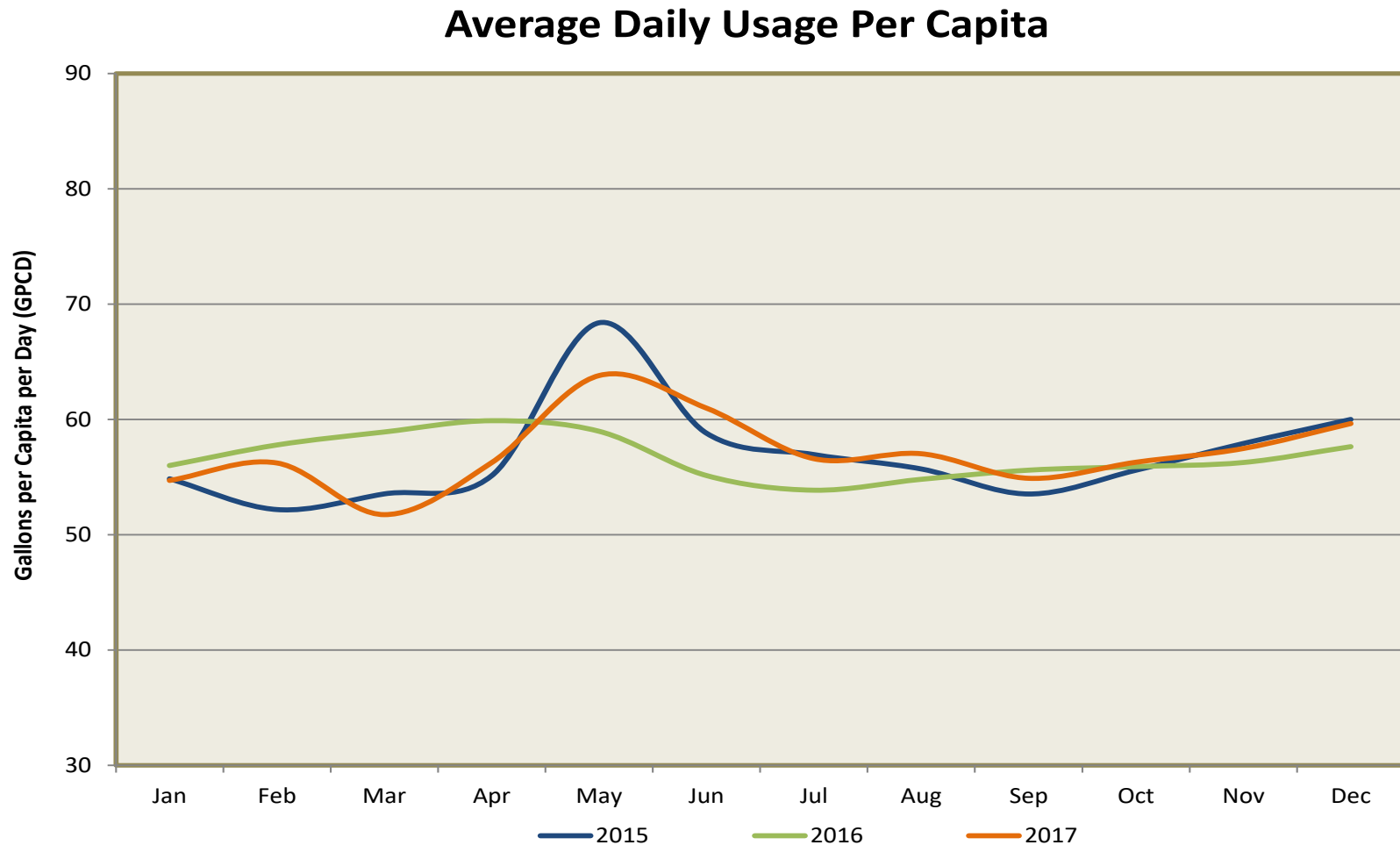
March and September of 2015 both had the lowest average flow of 1.18 million gallons per day (MGD). May 2017 set a high average monthly flow of 1.60 MGD, triggered by snowmelt and subsequent inflow into the collection system. The Engineering Division is wrapping up a study to determine locations where these inflows exist so they can be addressed. Staff continues to work with consultant Leonard Rice Engineers (LRE) to request some modifications to the existing planned permit limits from the Colorado Department of Public Health and Environment, in order to ensure the Town has a permit based on the most accurate and relevant data. The end result of this effort will be a permit at 1.99 MGD and achievable effluent limitations.

Average Monthly Flows



Annual Daily Gallons Per Capita per Day (GPCD): **2015** - 57 GPCD **2016** - 57 GPCD **2017**- 57 GPCD

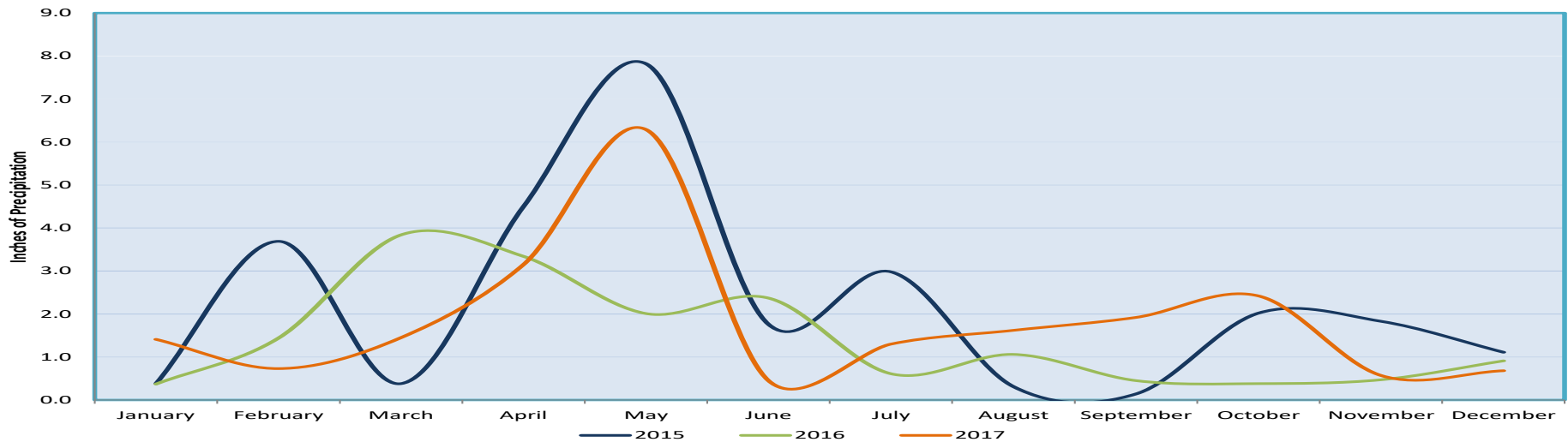
This graph depicts customer indoor water usage. May 2017 had the highest usage at 68 gallons, primarily due to snow melt seeping into manholes. February and September 2015 had the lowest usage at 51 gallons. Overall flows into the wastewater treatment plant are trending upward over this period, however per capita demands remain relatively flat on an annual basis. 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.



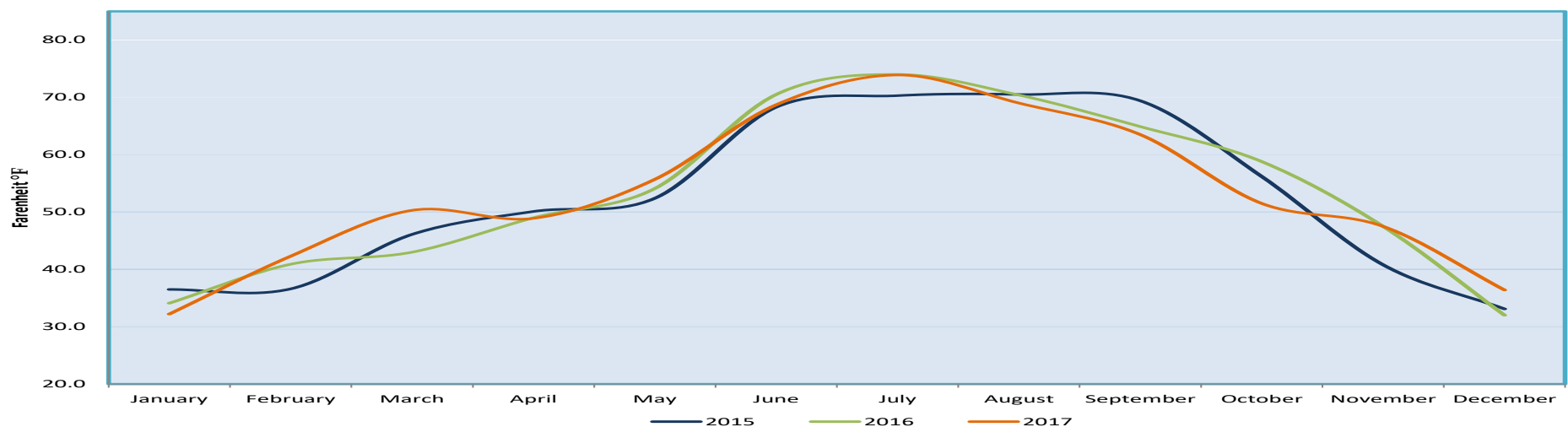
Monthly Data for Boulder – National Oceanic and Atmospheric Administration (NOAA) & Natural Resource Conservation Service (NRCS)

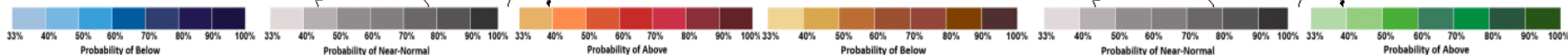
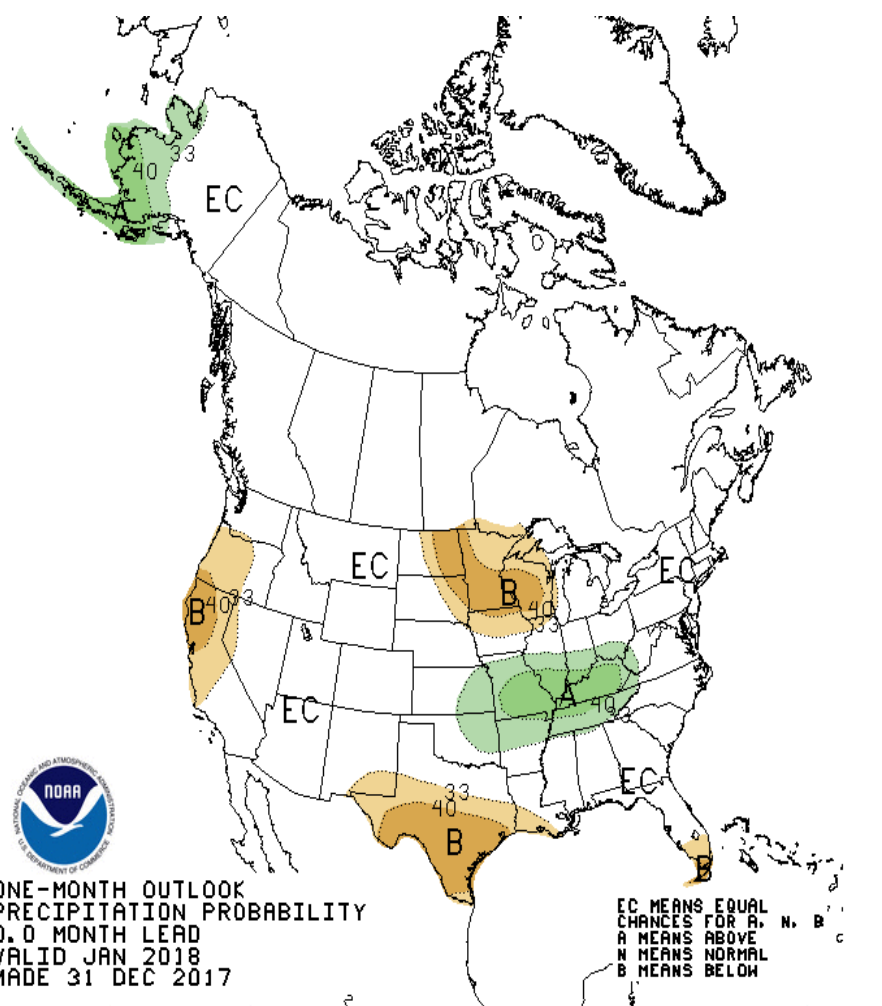
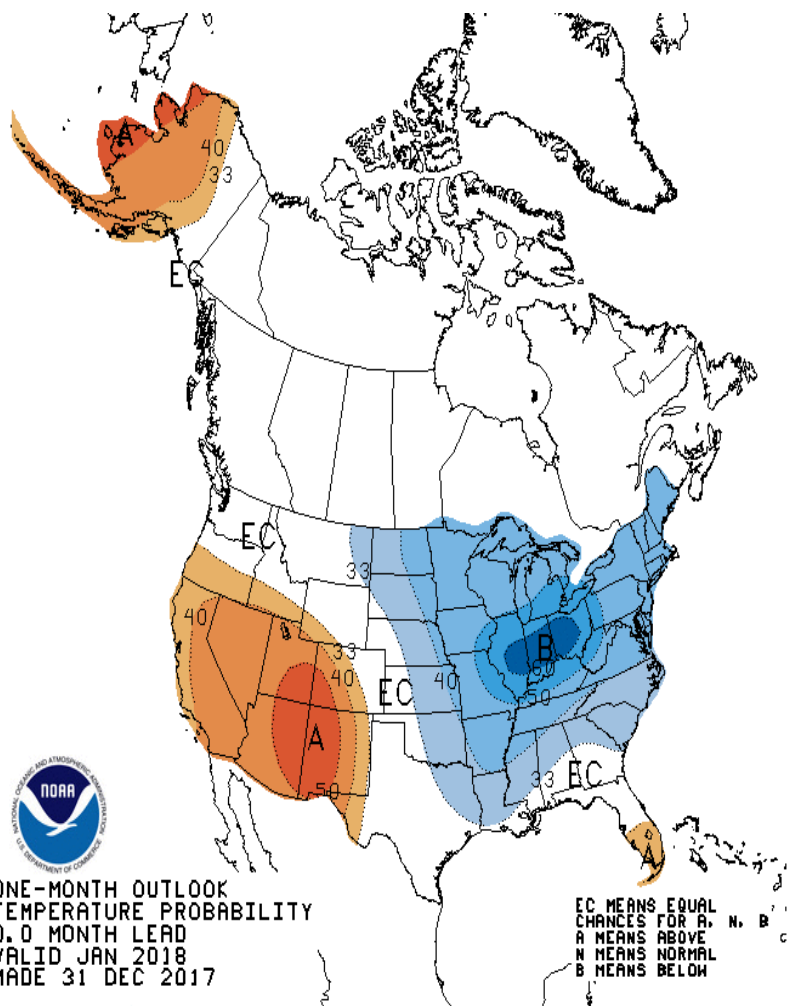
NOAA is predicting a 0-33% chance of above normal temperatures and equal chances of above or below normal precipitation in January in our area. Winter snowpack in terms of Snow Water Equivalent (the amount of water per inch of snow) particularly in the Upper Colorado Basin is the main source of supply for Erie, depending on the source of data snowpack is currently 73 – 78% of normal.

Precipitation



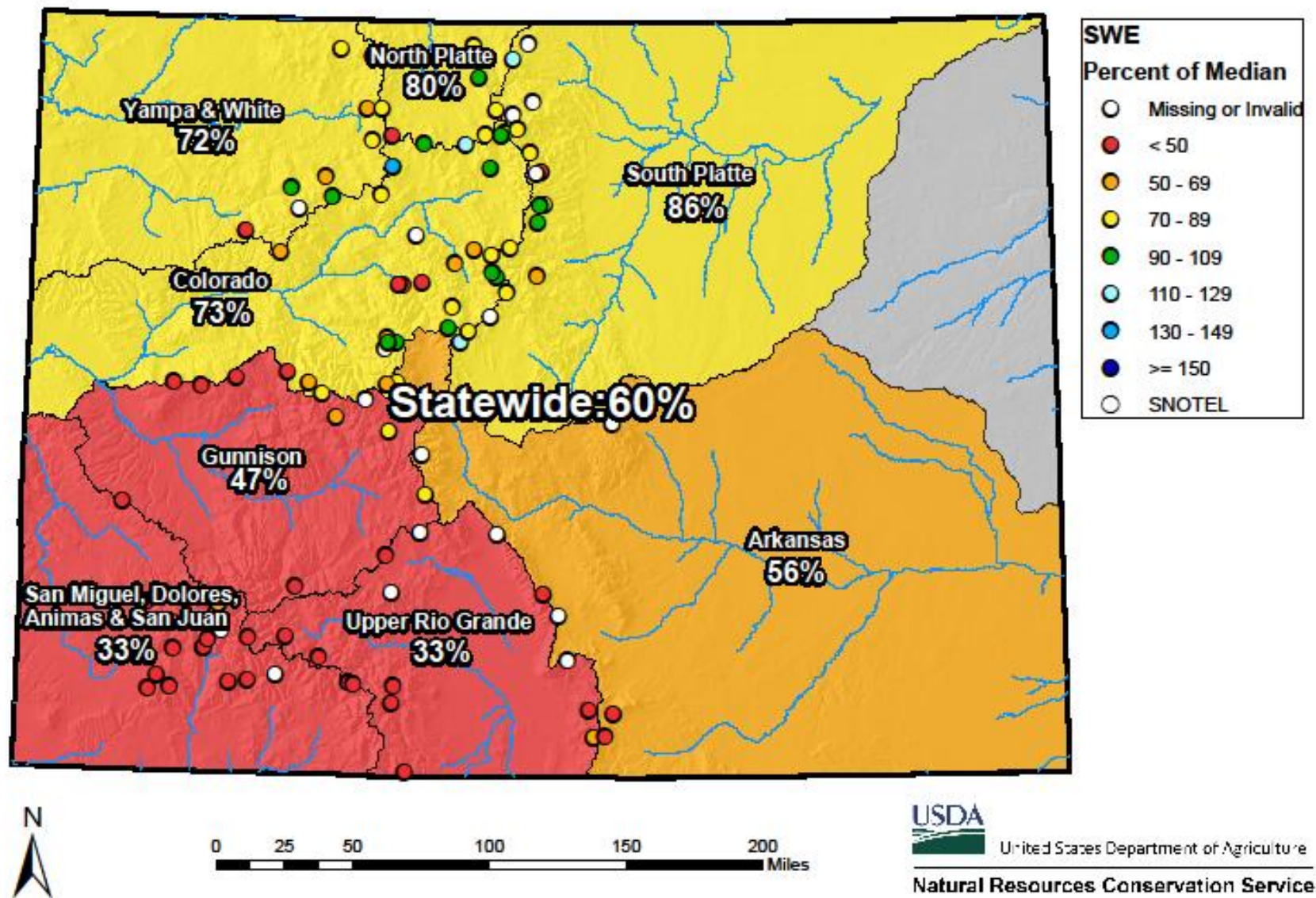
Mean Temperature





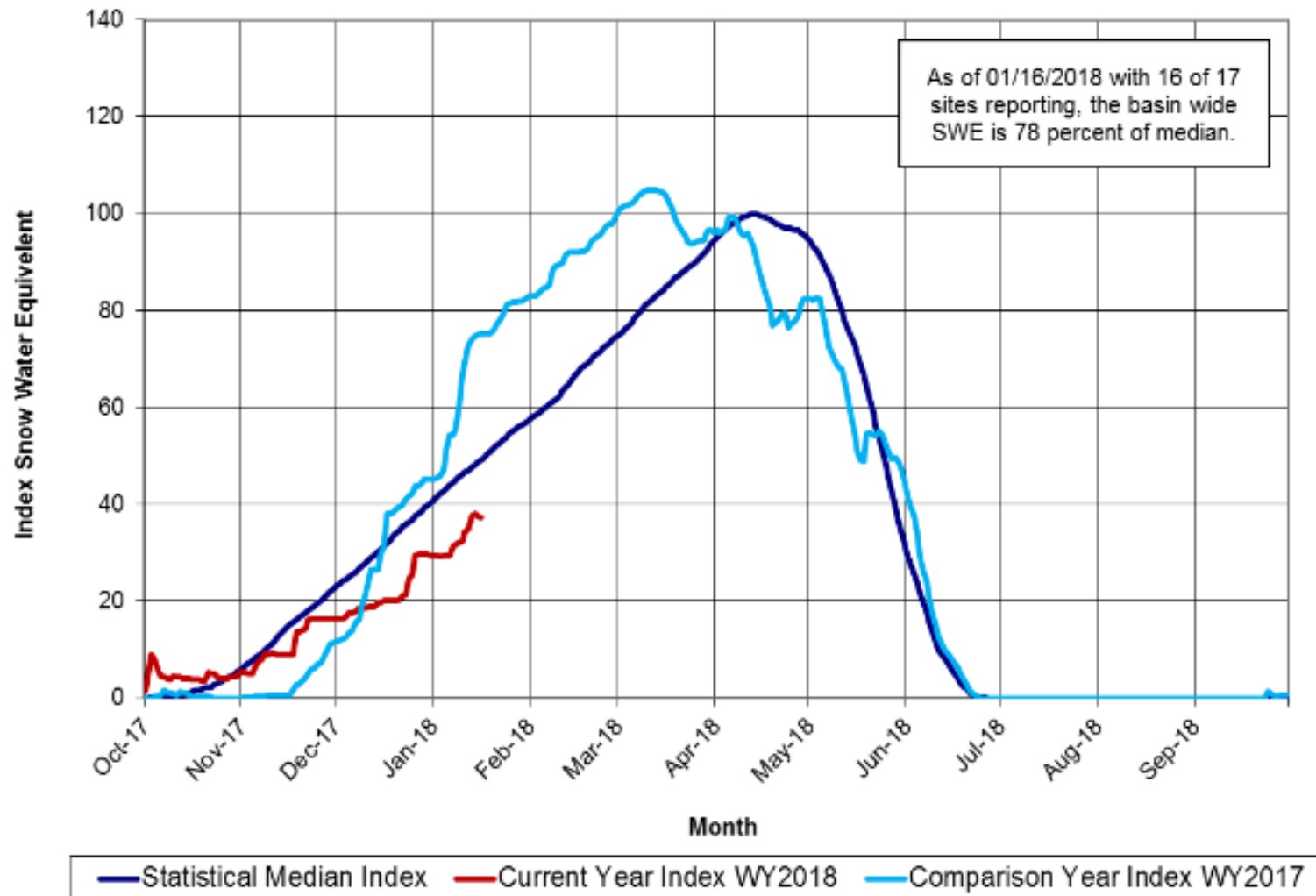
Colorado SNOTEL Snow Water Equivalent (SWE) Update Map with Site Data

Current as of Jan 16, 2018



Upper Colorado

Upper Colorado River Headwater Basin Snotel Tracking
Aggregate of 17 Snotel Sites in the Upper Colorado Headwater Basin



Data Provided by the Natural Resource Conservation Service