



MEMORANDUM

Date: July 18, 2021

To: Patti Garcia, Town Administrator

From: Bob Gowing, Public Works Director

Subject: Monthly Water and Wastewater Report for June 2021

Please find attached several charts summarizing the performance of the Water Treatment Plants (WTPs) and Wastewater Treatment Plant (WWTP) for the month of June.

WTP Production Charts (attached pages 1-4) – These charts summarize the total monthly production by month for the current year and the previous four years. A few take-aways from this data are:

1. Total Monthly Production for all plants was 48.1 million gallons (MG). This represents a reduction of 12.5% from June 2020 but is still the 2nd highest monthly production for any June on record.
 - a. The reduction is partially a result of higher precipitation this June.
 - i. June 2021 precipitation = 2.17"
 - ii. June 2020 precipitation = 1.39"
2. Although the Nanofiltration Plant was turned up a bit in June, it still operated at a reduced rate for the month. This was done to reduce brine discharge to the WWTP to help solve a process upset.
3. The annual volume of raw water drawn from the Wilson Wells through June was 25.4 acre-feet.
4. The annual volume of raw water drawn from Reservoir #3 through the end of June was 468 acre-feet, which extrapolates to a year-end usage of about 1,044 acre-feet. This would be about 100 acre-feet less than 2020 usage, but significantly higher than 2019 usage.

WWTP Production Charts (attached pages 4-5) – These charts summarize the total monthly volume of influent and the influent average daily organic loading per month. A few take-aways from this data are:

1. Total Monthly Volume in June was 19 MG. This represents a reduction of 5% from June 2020 and is close to the 5-year average.
 - a. The annual volume of wastewater treated throughout June was 102 MG (314 acre-feet). As can be seen from past years, the highest monthly volumes typically occur in July and August.
2. The monthly organic loading for June was 2440 pounds of Biologic Oxygen Demand (BOD). This is the highest loading for the year.
 - a. The percent of permitted organic capacity for June was 92%.

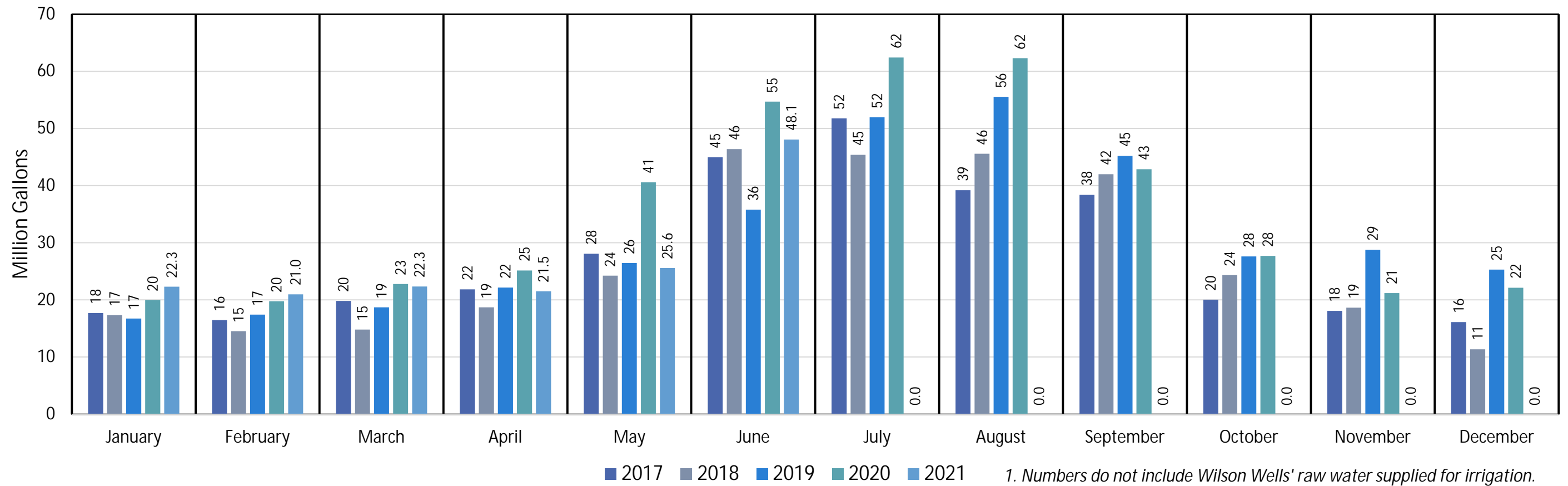
In summary, water production is down a small amount from last year. This is probably mostly due to the increased rainfall and weather conditions during the month of June. Comparing water production to wastewater hydraulic loading indicates that a substantial amount of treated water was used for outdoor purposes in June. The water conservation outreach programs initiated by staff appears to have helped curb outdoor use to a small degree.



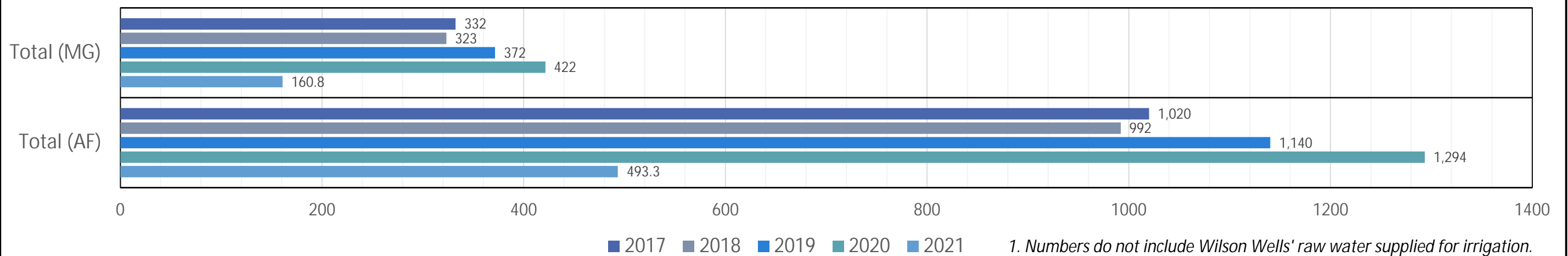
The organic loading at the WWTP has risen sharply in the last three months, peaking at 92% of capacity in June. Although it is not unusual for organic loading to see increases from March through June, it should be noted that July and August typically experience the highest organic loadings.

Town of Wellington Water Treatment

Total Monthly Production: Main WTP (Conventional & Microfiltration), Nano Plant₁ and RO (Through June 2021)

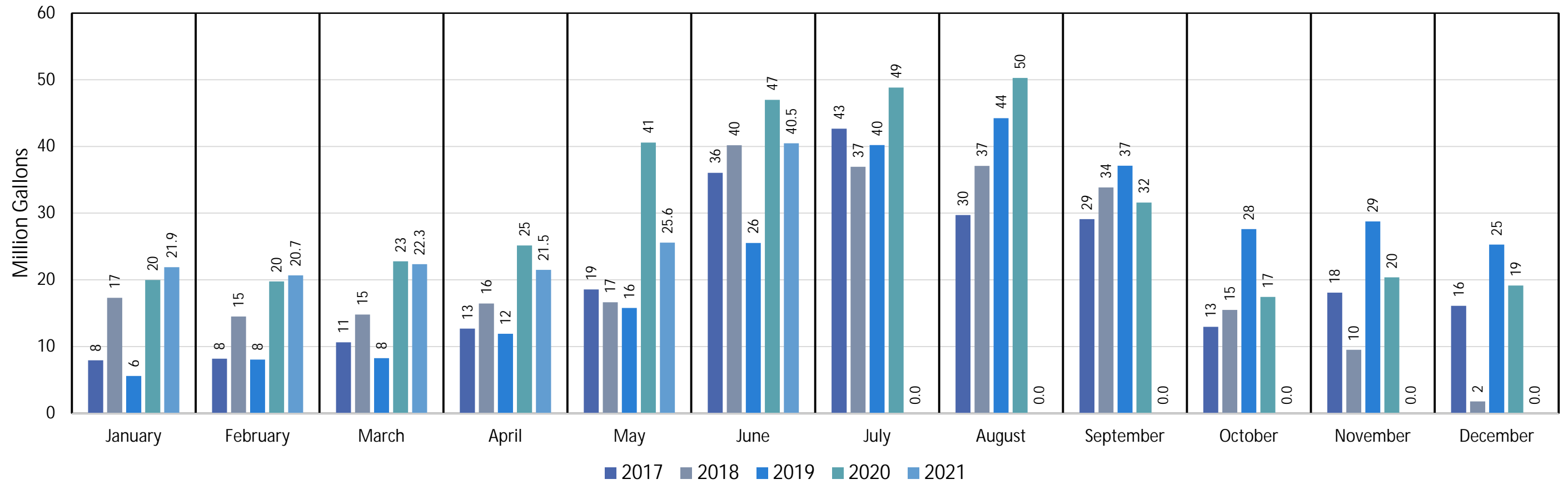


Annual Production Volumes₁ (Through June 2021)

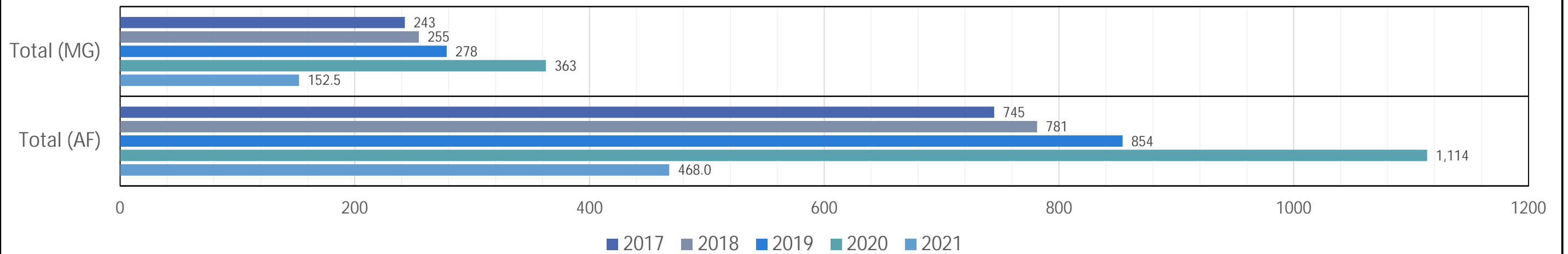


Town of Wellington Water Treatment

Monthly Production: Main WTP (Conventional & Microfiltration) (Through June 2021)

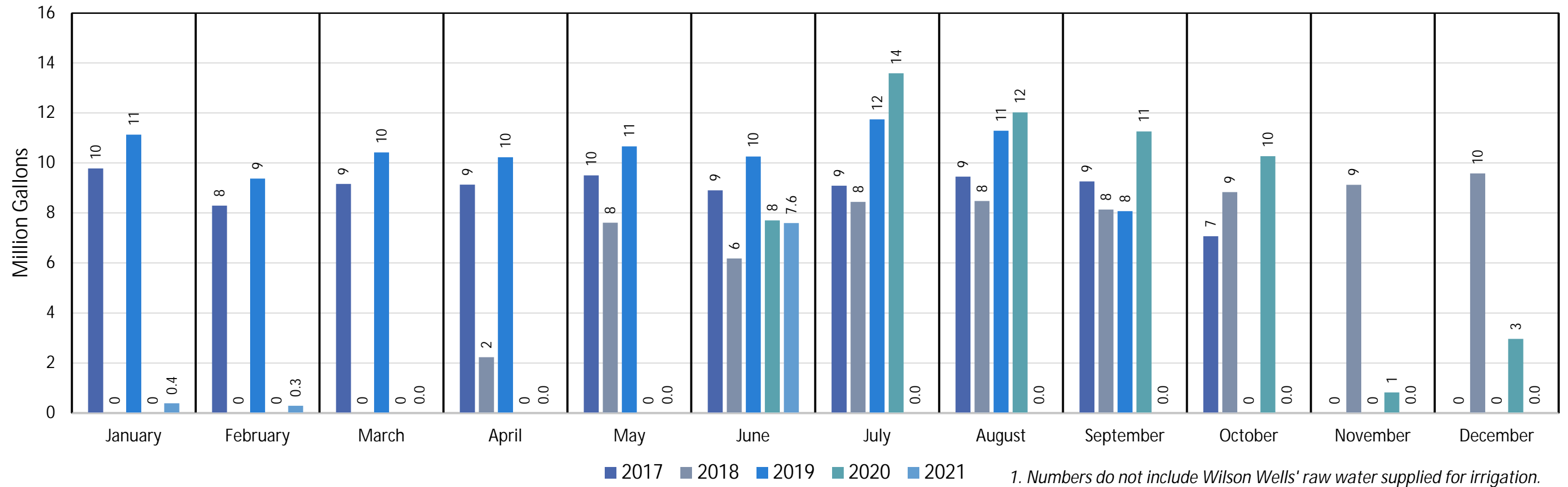


Annual Production Volumes (Through June 2021)

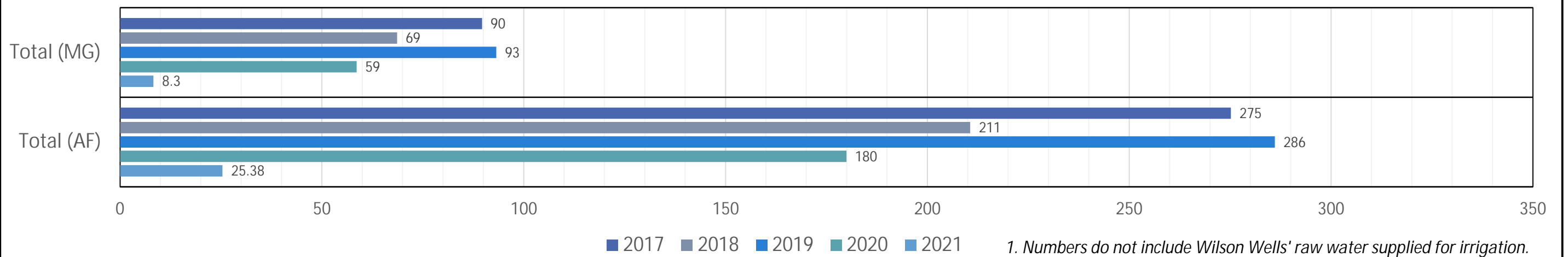


Town of Wellington Water Treatment

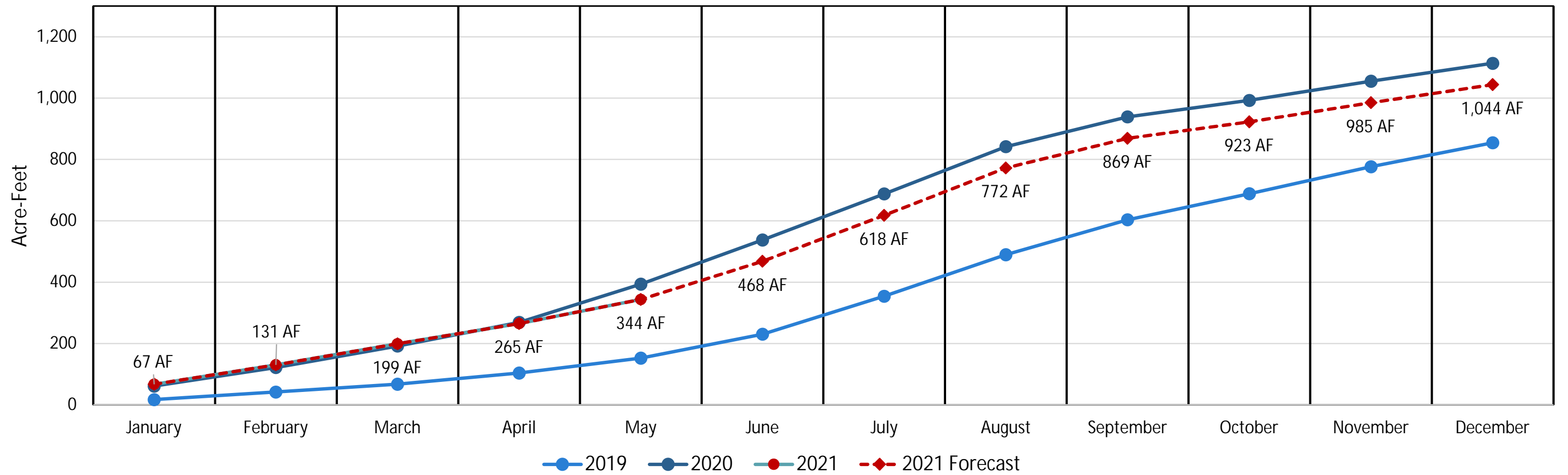
Monthly Production: Nano Plant₁ (Through June 2021)



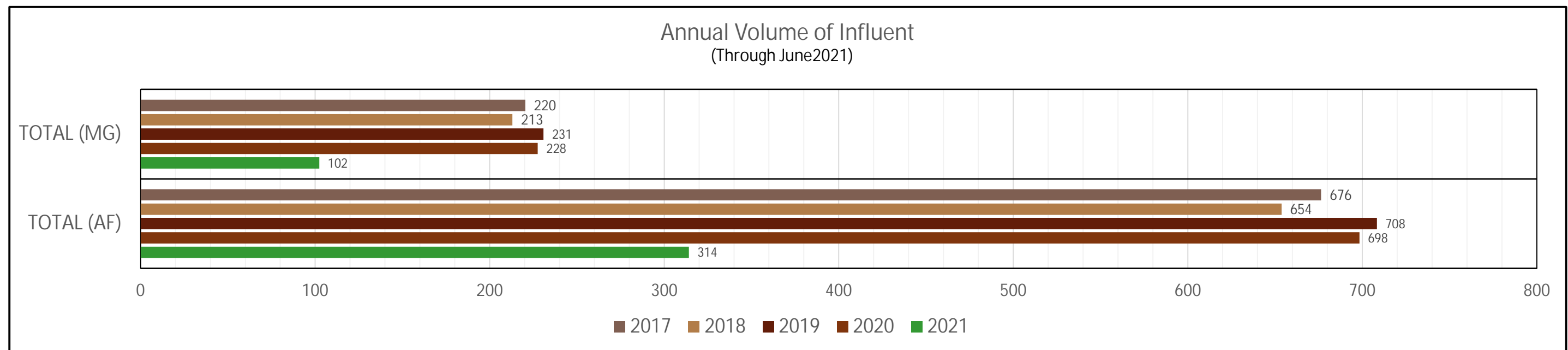
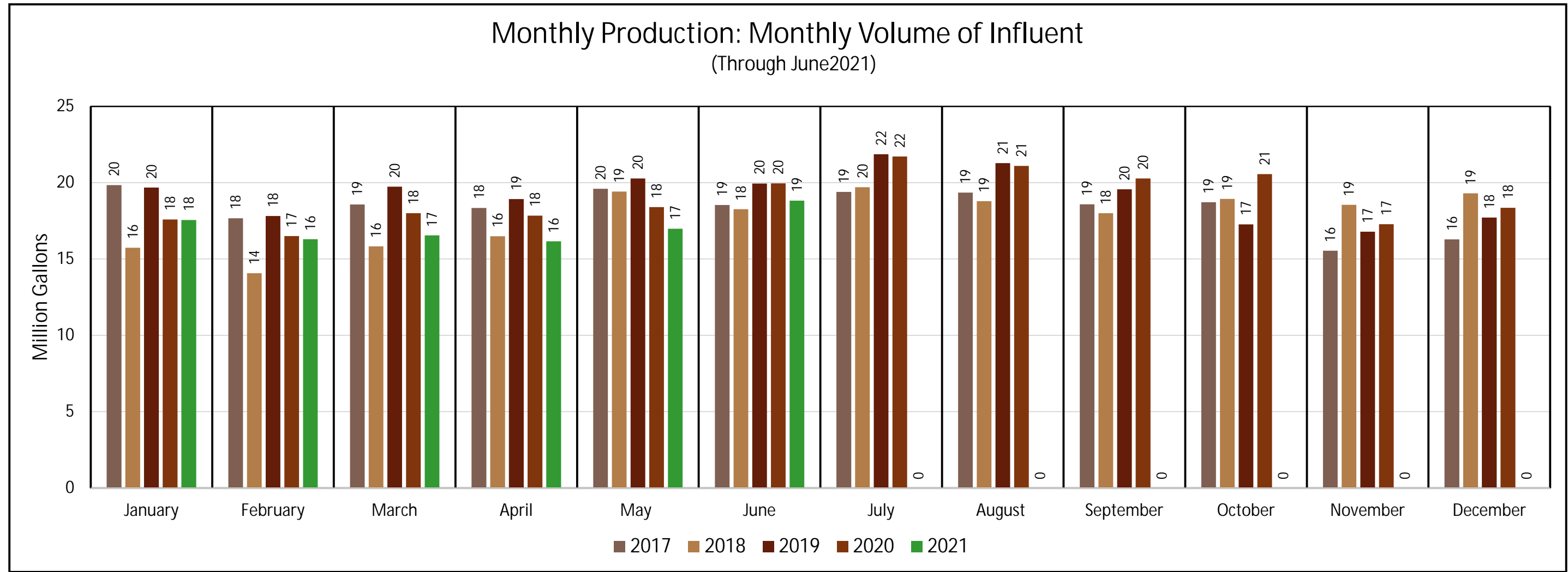
Annual Production Volumes₁ (Through June 2021)



Cumulative Water Production Sourced from North Poudre Reservoir No. 3
 (Through June 2021)



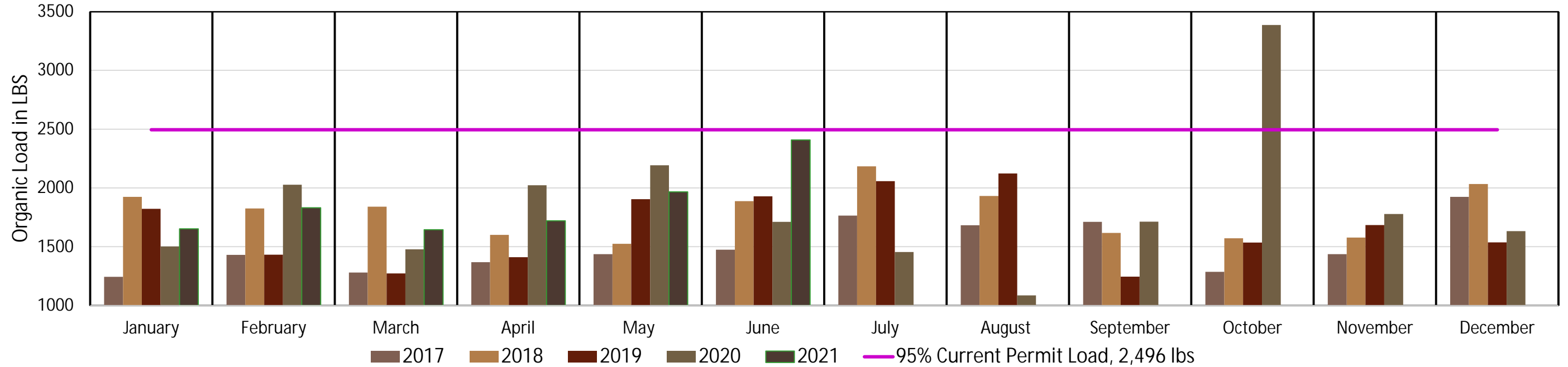
Town of Wellington Wastewater Treatment



Town of Wellington Wastewater Treatment Plant

Monthly Production: Organic Loading (Through June 2021)

Note: June 2018 permitted capacity increased from 1314lbs to current level of 2627lbs.



Monthly Production: Percent of Permitted Organic Capacity (Through June 2021)

Note: June 2018 permitted capacity increased from 1314lbs to current level of 2627lbs.

