

# Warrant Article for Special Town Meeting

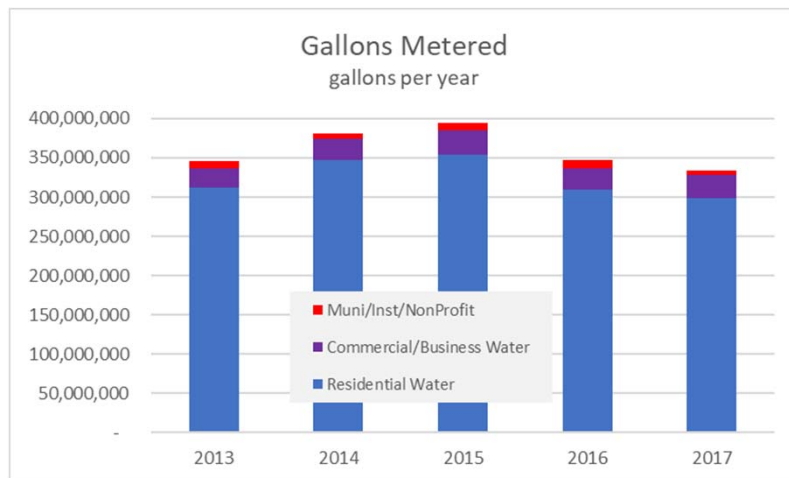
Medfield Board of Water and Sewerage

October 2018

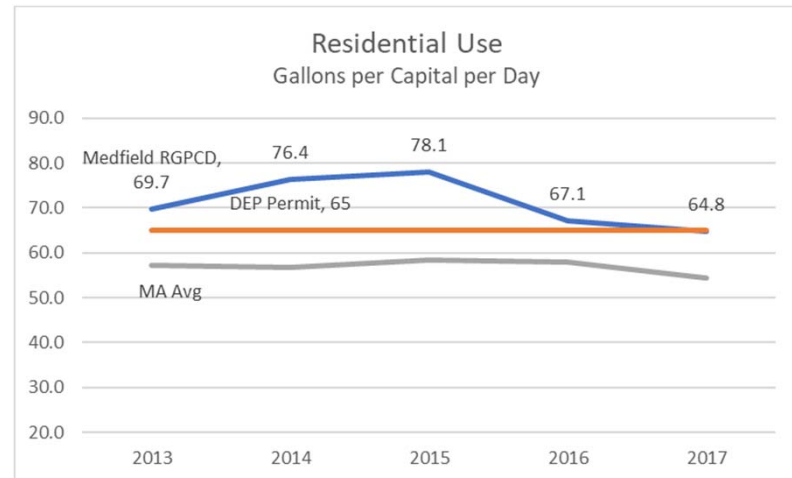
# Situation

- 2018 Annual Town Meeting passed warrant article 34
  - Project to design a water treatment plant for elevated levels of manganese
  - Funds are from segregated W&S Enterprise Fund, not Town General Fund
- However, the system infrastructure has leaks/inaccuracies that
  - Prevent confident figures to design a treatment plant
  - Water losses need to be accounted for and reduced to be able to supply the housing boom in Medfield (40B projects, MSH development, organic growth), and comply with Medfield's well withdrawal permits

# Customer Profile

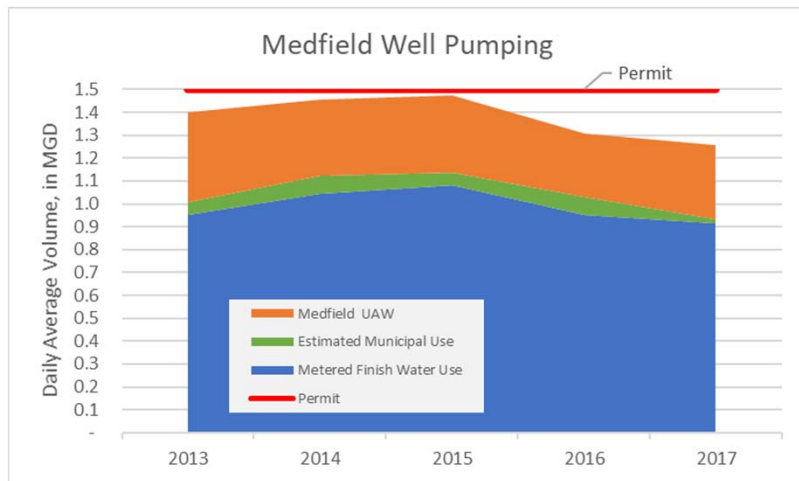


Residential Customers account for a vast majority of water volume use



The per capita consumption has been above the DEP permit, but we are getting better

# Ability to Meet Demand



“UAW” is Unaccounted for Water

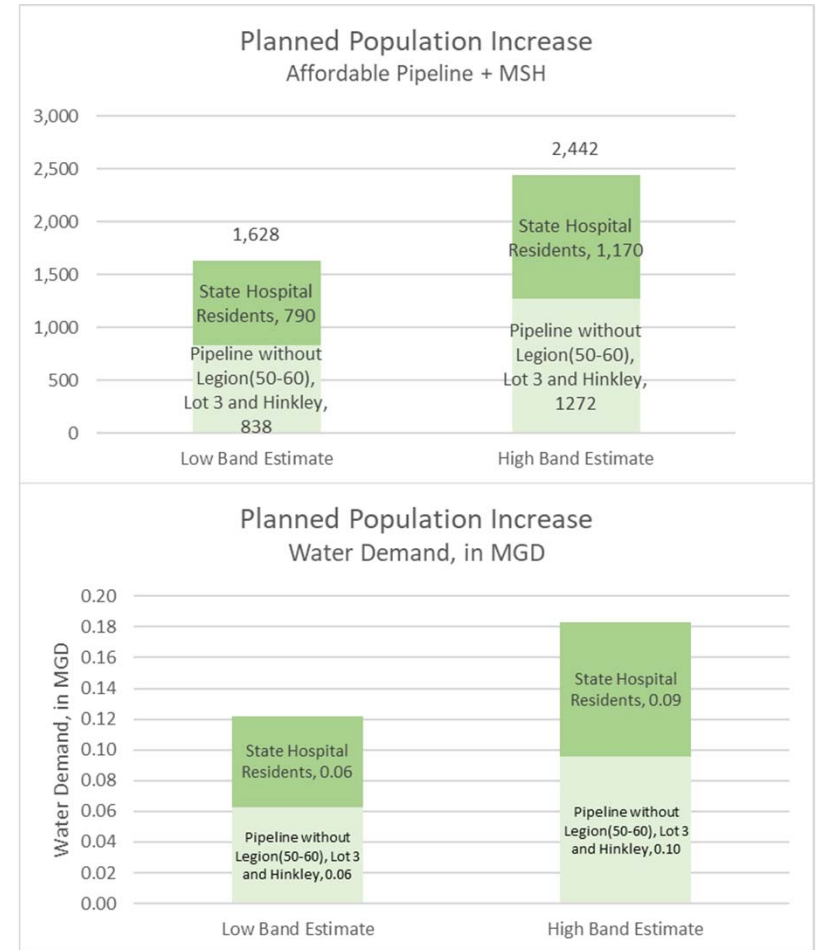
Defined as difference between what is pumped from our wells and what is read by customer meters

- Losses in pipeline
- Inaccurate meters reading low, i.e. unbilled water

We have come very close to exceeding our allowable withdrawal permit.

10/10/2018

Medfield Board of Water and Sewerage



Known residential growth projected to increase Medfield population by 10-15%. This excludes organic growth.

We would not have been able to meet demand in 2013, 2014, 2015 with this population increase, use profile and waste.

# Water Withdrawal Permit

- Variety of constraints
  - Volume for each basin (i.e. “water areas”), we have two, each with limits
  - Each well has permitted withdrawal limits
  - Town has an overall water withdrawal limit (average daily volume across the year)
  - Consumption per Capita
  - Limits on infrastructure water losses as % withdrawn
- We are close to not being able to supply water to current and new residents as per our well withdrawal permits
- Solutions are to first reduce UAW, then see if other water restrictions are required in the future
- Asking the DEP to expand allowable pumping would be hard to justify if we are not on track to meet UAW and Per Capita goals

# Goal of Warrant Article

## October 2018 Special Town Meeting

- Re-prioritize water projects
- Our UAW (26%) is substantially higher than our permit target 10%
  - UAW = Unaccounted for Water, which is essentially the difference between what is pumped from our wells and what is read by our meters
- Tackle the UAW to both get on target for DEP permit and also have water for future
- Re-appropriate a fraction of funds of what was previously appropriated from Article 34 at 2018 Town Meeting
  - To investigate water main leaks
  - To develop a plan to replace all the water meters in town
- Capital investment recommendations on leaking water mains and meter replacement expected to be considered in FY 2020