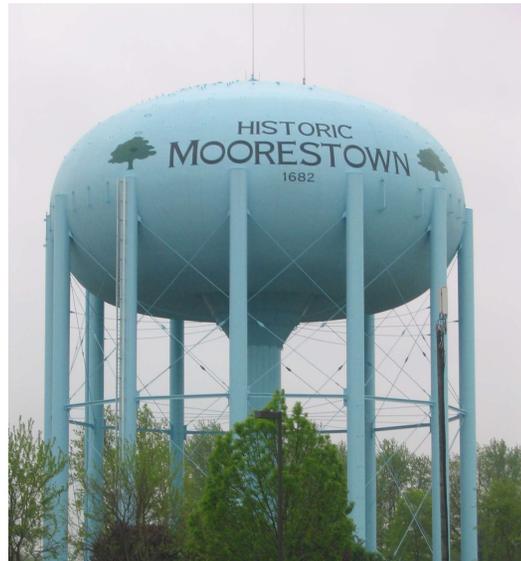


# Moorestown Township

## Special Meeting on Water



Wednesday, February 10, 2016

# Agenda

1. Clarify current water related issues facing the township.
2. Confirm the plan that is being implemented to successfully address these issues.

# Moorestown's Water Supply

- ▶ General Infrastructure
  - ▶ Water Treatment Plants
  - ▶ Water Mains
- ▶ Firm Capacity/Water Allocation
  - ▶ MOA with the NJDEP
- ▶ Water Quality
  - ▶ 123 TCP
  - ▶ Other Contaminants

# General Infrastructure

The Township's water infrastructure includes:

- ▶ North Church Street Water Treatment Plant (WTP), wells #7 & #9
- ▶ Kings Highway WTP, wells #3, #5, & #6
- ▶ Hartford Road WTP, wells #4 & #8
- ▶ 110 miles of water mains
- ▶ Two interconnects with New Jersey American Water Company (NJAWC)
- ▶ Five emergency interconnects (two with Mount Laurel, two with Maple Shade and one with NJAWC)
- ▶ Two elevated water storage tanks (North Church Street and Westfield Road)

# General Infrastructure

- ▶ Kings Highway WTP was built in 1884, and converted to well water in 1923. It needs to be modernized in order to treat water at full capacity.
- ▶ Hartford Road WTP was built in 1969 and has not provided water to the Township's system since the 1990's. It needs to be rebuilt.
- ▶ Water mains range in size from 4" in diameter to 12" in diameter. Mains are constructed of three different materials; cast iron (unlined), concrete, and cement lined ductile iron.

# Firm Capacity/Water Allocation

The township's firm capacity is set by the NJDEP based on how much water the wells can produce and the designed treatment capacity, and the amount of water we are under contract to purchase from NJAWC. This amount of water is compared to a NJDEP formula that calculates the peak month over the past five years divided by the number of days.

The current firm capacity of the township is 4.376 mgd.

However, the average daily use for 2015 was 3.11 mg.

The North Church Street WTP can treat 2.88 mgd.

Our contractual obligation to NJAWC is to purchase .896 mgd.

# Firm Capacity/Water Allocation

Whenever there is a firm capacity deficit, the township cannot issue building permits for any project requiring a connection to the township's water system.

Previous efforts to address the issue in the past have resulted in:

- ▶ The construction of well #9 in 2011.
- ▶ The construction of an additional interconnect with NJAWC in 2013.
- ▶ A memorandum of agreement with the NJDEP in 2015 to address our firm capacity issues and to allow additional water connection permits to be issued.

# Water Quality

Moorestown's Water is Safe to Drink

**The township's water has and continues to meet State and Federal drinking water standards.**

Through testing and monitoring we are aware of the existence of 123 Trichloropropane in wells #7 & #9, an contaminant unregulated by the USEPA and the NJDEP.

No regulated contaminants violate State and Federal drinking water standards.

## How we will continue to provide Moorestown with abundant, affordable, safe drinking water.

### North Church Street WTP

- ▶ A pilot plant study was completed and the results received in December, 2015. Engineering for the installation of treatment for TCP, TCE, manganese and radiological contaminants is underway.
- ▶ Proposed construction date: 2016-2017.
- ▶ Preliminary Cost Estimate: \$7,000,000.

How we will continue to provide Moorestown with abundant, affordable, safe drinking water.

### North Church Street WTP - **Immediate Interim Treatment**

- ▶ Evaluation of the pilot plant study has determined the best permanent treatment solution available.
- ▶ A more immediate, interim treatment solution is possible.
- ▶ Engineer directed to determine feasibility and affordability of obtaining immediate interim treatment.

## How we will continue to provide Moorestown with abundant, affordable, safe drinking water.

### Kings Highway WTP

- ▶ Planned upgrade includes the abandonment of the majority of the existing plant and the construction of a new treatment processes.
- ▶ Bid specifications to go out in April/May, 2016.
- ▶ Proposed construction date: 2016-2017.
- ▶ Preliminary Cost Estimate: \$7,250,000.

How we will continue to provide Moorestown with abundant, affordable, safe drinking water.

### Hartford Road WTP

- ▶ Planned upgrades include demolition and replacement of all existing treatment units and the rehabilitation of the existing treatment building.
- ▶ Proposed construction date: 2018-2020.
- ▶ Preliminary Cost Estimate: \$6,900,000.

## How we will continue to provide Moorestown with abundant, affordable, safe drinking water.

### Water main replacement projects and projected costs - 2016

▶ North Church Street; E. Main St to E. Central Ave.	\$850,000
▶ Prospect Ave.; S. Church St. to High St.	\$410,000
▶ W. 2 <sup>nd</sup> Street; Locust St. to Camden Ave.	\$430,000
▶ Oak Avenue; Irving Court to Chester Ave.	\$1,228,000
▶ W. 3 <sup>rd</sup> Street; North Church St. to Collins Ave.	\$1,157,000
▶ S. Washington Avenue; Prospect Ave. to Harris Ave.	\$250,000
<b>TOTAL:</b>	<b>\$3,895,000</b>

## How we will continue to provide Moorestown with abundant, affordable, safe drinking water.

### Water main replacement projects and projected costs - 2017-2019

▶ North Church St.; E. Central Ave. to New Albany Rd.	\$2,488,000
▶ 3 <sup>rd</sup> Street; North Stanwick Rd. to Poplar Avenue	\$368,000
▶ Centre Street; N. Lenola Rd. to Red Leaf Rd.	\$1,301,000
▶ Plum Street; Chester Avenue to Schooley St.	\$149,000
▶ Lorraine Road; N. Church St. to end of road	\$265,000
▶ Pearl Street; Linden Ave. to E. 3 <sup>rd</sup> Street	\$149,000
▶ Cedar Street; N. Church St. to Locust Street	\$255,000
<b>TOTAL:</b>	<b>\$4,975,000</b>