



**CHESTER Water Commission
CHESTER TOWN HALL**

Public Hearing Minutes- water department improvements: issues and solutions

28 June 2022

Members Present: Lyle Snide (Chair)
Bob Daley

Members Absent: Tom Bean

Hearing called to order at 5:05 pm.

Item 1: The attached pages show an outline of the water issues addressed with the public and the actions being taken to correct them. Those in attendance were attentive and receptive to the actions being taken with few questions. The questions raised included:

- What is the level of risk with the high TTHM levels in the water? The EPA study conducted about 20 years ago that showed THM levels of 100 µg/liter in drinking water may cause 3 to 4 additional cancers in a group of 10,000 over 70 years of drinking 2 liters a day was discussed to illustrate the risk was low and that our water currently averages 80 to 100 µg/liter.
- A concern was raised about the lack of hydrant flushing due to water issues- are the hydrants currently usable for the Fire Department, if needed? The hydrants are usable, but we want to reinstate hydrant flushing as soon as possible to improve water quality and ensure the hydrants work properly.
- A concern was raised about the cost of going to a full time water operator. We explained that there is a scarcity of qualified water operators and the chances of being able to hire a part time operator were very low. In addition, a full time operator would be able to handle necessary routine maintenance such as hydrant flushing and valve exercising, which now depends on the availability of volunteers. The water rate hike of 38% that will take effect on 01 July is the first rate hike in over a decade, and the average water user will see a \$11 increase per month. This rate increase should allow us to pay for routine water operations and a small surplus to allow for unexpected contingencies. It is not enough to pay for a full time operator at today's wages, so another rate increase (and public hearing) will be required when we are able to hire a full time operator.

Hearing adjourned at 6:45 pm.

Submitted,

Lyle Snide, Chair, Water Commission



CHESTER WATER COMMISSION PUBLIC HEARING

Water Department Improvements: issues and solutions

28 June 2022

ISSUES

1. Water Quality

- a. Disinfection byproducts (DBP) levels (THM/HAAC5)
- b. Color

2. Water Leaks

- a. Typical usage: 35-40,000 gallons per day (GPD)
- b. 1st quarter 2022 usage: 99,000 GPD
- c. Current usage: 62-65,000 GPD

3. MASS DEP Administrative Consent Order (ACO)

- a. Biweekly water sampling and subsequent engineering analysis to modify water treatment to reduce DBP levels; due by July 2023 (\$\$\$)
- b. Update the asset management plan and capital improvement plan
- c. Establish a valve exercise and maintenance program

4. Water operator succession plan

- a. Current primary operator is 70
- b. No qualified operators available in western MA
- c. Needs a T2 operator license and live within 1 hour of the water plant

5. Aging equipment- water plant and distribution system

- a. Most water plant instrumentation is original (1997)- when fails, requires replacement (\$\$\$)
- b. Operational status of hydrants and valves is unknown

6. Water department support

- a. Consists of 2 part time operators, 1 part time meter reader, 1 part time billing assistant, and 3 volunteer water commissioners
- b. Highway department assists when available

7. Financing for future needs and contingencies

- a. Currently paying just enough for current operations; no funding for contingencies

SOLUTIONS

1. Water quality

- a. Fix leaks: found and repaired 3 so far (cost: \$2700 per leak); still have 20-30,000 GPD of leaks to locate and repair

Using available Federal funds

- b. Conduct hydrant flushing; cannot do until leaks fixed
- c. Restore Austin Brook Reservoir to service; dredge and fix pumps
 - i. Currently using Horn Pond as source water, which has higher Total Organic Carbon (TOC) levels, which result in higher THM levels
- d. Perform an engineering analysis to modify the chemical treatment of the water to reduce THM levels (\$\$\$)
 - i. Conducting biweekly sampling of our water for the next year before this analysis can be done (\$\$)
- e. Upgrade the water plant control system (SCADA) (\$)
- f. Replace water plant instrumentation (\$\$)

2. Water leaks

- a. Working with Mass Rural Water to detect leaks; making slow progress because there are multiple, small leaks which are harder to detect than one large one

3. MASS DEP ACO

- a. Biweekly sampling started in DEC 2021
- b. Engineering analysis report to modify water chemical treatment plan due by JULY 2023
- c. Working on an Asset Management Plan (AMP) grant to update the AMP, Capital Improvement Plan (CIP), and valve exercise/maintenance plan
 - i. Tighe & Bond preparing the grant: grant pays 60%, town pays 20% plus 20% in kind work by town
 - ii. Use Federal funds to pay the town's 20%
 - iii. 20% in kind work means the town provides assistance to complete the work
 - iv. This grant will provide a GIS database of the water distribution system allowing an accessible electronic database of the water system pipes, hydrants, and valves

4. Water operator succession

- a. Will need a full time operator- cannot attract a qualified operator to only work 4 hours per day
- b. Working with Blanford to establish joint water operations, similar to the police department agreement
 - i. This requires hiring 2 full time operators in a shift work schedule for simultaneous coverage of both towns (\$\$)
 - ii. In talks with a potential future operator (needs to complete qualifications)
 - iii. Reaching out to local community colleges to inform potential candidates as well as working with Gateway on a path for students interested in a water operator career
 - iv. A full time operator will take care of all water plant and distribution operations; currently rely on volunteers for flushing, fixing leaks, operating valves, and answering customer complaints
 - v. Also need 2 hours/day operator coverage on weekends and holidays

5. Aging equipment

- a. Replacing water plant instrumentation using Federal funds
- b. Commence routine hydrant flushing as soon as possible
- c. Conduct routine valve exercise program once in place
- d. Develop a GIS map of distribution system using the AMP grant
 - i. This will allow maintaining accurate maintenance records

6. Water department support

- a. Short term: hiring a part time water department assistant
- b. Long term: full time water operator(s)

7. Funding for future needs

- a. Established as a water department enterprise fund
 - i. Allows for accurate accounting of water costs
 - ii. New water rate as of 01JULY2022 increases the average water user's bill by \$34/quarter or \$11/month (see separate handout for cost breakdown)