

WTMUA Information Report to Washington Twp. Committee

June 13, 2018

Wastewater

1. Schooley's Mountain Wastewater Plant –The DEP continues studying, throughout the State, both nitrate and phosphorous limits. Presently the SM plant monitors the noted constituents as required by the NJPDES (NJ Pollution Discharge Elimination System). Depending on future facility discharge limits, the existing wastewater facility will have to be evaluated to determine if new limits can be met.

The nitrate and phosphorous limits are on hold until the DEP approves the Total Maximum Daily Load (TMDL) for the Raritan Basin. MUA staff have confirmed that chemical addition testing can reduce the phosphorous to anticipated permit limits. Nitrates have shown reduction with chemical addition but not to the anticipated permit limits. Nitrates will most likely need to be biologically treated.

2. The Authority will need to provide for capital projects for sewer system improvements in the Schooley's Mountain System.
 - a. Replacement of the Springtown Road Pump Station. The pump station currently handles approximately 70% of the daily flow to the plant. It is located in the flood zone and is subject to confined space entry.
 - b. Replacement of the RBC building and treatment equipment at the plant. However before the MUA can plan for these replacements, the MUA needs to know what the future permit limits are and whether the existing treatment process can meet those limits and/or what additional treatment improvements will be required.
 - c. Inflow & Infiltration at the Schooley's Mountain Wastewater System - The Authority continues to address the infiltration of ground water into the sewer system, concentrating in the easements in Parkview, Buttonwood & Nestling Wood area.

3. Long Valley Village Wastewater Plant – The MUA has received the new treatment works operating permit, no new operational parameters have been assigned to the plant. The DEP continues studying, throughout the State, both nitrate and phosphorous limits. Presently the LV plant monitors the noted constituents as required by its NJPDES.

The process treatment at the LV facility is such that any proposed phosphorus & nitrate limits will be attainable. The plant is running at about 50% capacity and will be able to handle any future development.

4. Equipment Maintenance for both sewer systems – The Authority has increased its budget for maintenance & repair to address the replacement of pumps, motors and other equipment in these facilities.

Water

5. Schooley's Mountain Water System – The Authority is working on the DEP & Highlands approvals which are required for Smith Well (SM23). There are issues with impervious coverage & reforestation. A forestry manager has recently been to the site to finish the forestry plan.

Appraisals have been prepared for the easements at the Cucinella School property & the property owner at 480 Naughtright Rd. The easements are for utilities & access.

6. High Ridge Standpipe – The Standpipe needs interior and exterior rehabilitation. The tank is a critical piece of infrastructure with no true redundancy. There are concerns having only the Naughtright tank in operation while the High Ridge tank work is being done.

The Authority has been investigating several alternatives including the construction of a new tank adjacent to the existing tank and then raising of the existing tank by 16 feet. Additional information on the High Ridge tanks footing composition & depth is required before it can be determined if the tank can be raised. The Authority will be reviewing other possible storage tank locations.

7. Water Restrictions Schooley's Mountain Water System - When the Smith well is placed on-line, the DEP may allow the water restriction limits to be modified.
8. Leaks in the Hager & Schooley's Mountain Water System – The Authority continues to address locating & repairing of leaks.
9. The watermain replacement project for Brookside Drive and a portion of North Washington Valley Blvd. is close to being completed, final paving and landscaping is to take place shortly.
10. The Authority is looking at additional capital improvements to the water system.
 - a) Once the Smith Well is placed on line there is a need to improve the water flow to the Naughtright Standpipe. A transmission line from the Cucinella School driveway to the Naughtright Standpipe is proposed.
 - b) The Authority is looking at connection between the watermains on Ann Road and Spring Lane to improve pressure & fire flow.
 - c) A transmission line from our office at 46 E Mill Road to the intersection of Schooley's Mountain Road & Fairview Avenue to improve hydraulics and provide redundancy for the portion of the Hagar Water System north of the South Branch of the Raritan River.

d) The capital budget calls for the future replacement of ACP (Asbestos Concrete Pipe) watermain in the Capital Estates section of the Hagar system.

11. Equipment Maintenance & Upgrades for both water systems – The Authority has increased its budget for maintenance, repair & upgrades to address the replacement of pumps, motors and other equipment in these facilities.
12. Water Meter Replacements – The Authority has completed approximately 85% of the water meters in our two water systems.

Other Items

1. Water Shut-Offs – The Authority has implemented its water shut-off policy which has reduced the number of delinquent customers.
2. Capital Spending – The Authority is investigating financial alternatives to pay for capital improvements. Currently approximately 33% of the budget is for debt reduction.
3. Service Agreements – The Authority has several agreements with the Township, including lawn maintenance and hydrant maintenance. The MUA would like to consider additional service agreements with the Township.
4. Backflow Prevention Program – The Authority is working/planning for the implementation of a backflow prevention program to be instituted. Presently primarily only the backflow preventers that the Authority operates are inspected and registered.
5. Grease Trap Program – The Authority is investigating the possible introduction of a grease trap operation/inspection program for businesses, to reduce the volume of grease that is observed in our sewerage pumping stations.
6. WQAA (Water Quality Accountability Act) – The Authority is actively working on requirements for the WQAA,
 - a. Cyber security
 - b. GPS hydrants and hydrant valves by October 2018
 - c. GPS system valves
 - d. Exercise and maintain all hydrants and hydrant valves annually
 - e. Exercise and maintain all system valves >12” every two years and <12 every four years
 - f. Asset management plan implementation by April 2019, with water main renewal at 150 year replacement cycle, water supply and treatment program