

4 Turkey Hill Road
Newtown, CT 06470
Tel (203) 270-4300
Fax (203) 426-9968



Fred Hurley,
Director

TOWN OF NEWTOWN
WATER AND SEWER AUTHORITY

Marianne Brown,
Chairman
Louis Carbone
George Hill
Alan Shepard
Eugene Vetrano
Richard Zang
Carl Zencey

THESE MINUTES ARE SUBJECT TO APPROVAL BY THE WATER AND SEWER AUTHORITY

The Water and Sewer Authority held a regular meeting on August 14, 2014 at the Waste Water Treatment Plant, 24 Commerce Road, Newtown, CT. Chairman Brown called the meeting to order at 7:11pm.

Present: Dick Zang, Gene Vetrano, George Hill

Absent: Lou Carbone, Marianne Brown, Alan Shepard, Carl Zencey

Also Present: Director of Public Works Fred Hurley, Jason O'Brien and Julio Segarra of United Water, one member of the press

Public Participation - None

Approval of Minutes – Tabled due to lack of quorum

UNFINISHED BUSINESS

Establish a Hawleyville Sewer District – Tabled

NEW BUSINESS

Presentation for Legislative Council/Water Rate Increase – Fred Hurley presented his suggested presentation to the LC for a water rate increase (Attachment A). The goal of the rate increase is to have enough reserve money to pay back the 1.4 million loan from the sewer and to have funds for capital improvements. Nunnawauk Meadows already has a subsidized rate so they will be paying ½ of what everyone else is paying.

Committee Reports: SCADA, solar, I&I, Finance, regulations, water supply, collection and distribution systems – **Solar** – everything is working with no issues. **SCADA** – everything is installed and up and running. There is a punch list for them to come back in October to iron out.

Report by United Water Environmental Services Inc. – The plant is running well (Attachment B).

Report by Public Works Director – Fred Hurley reported that they have met with the clerk of the works for the ambulance garage. The correct course of action is to change the pumps and control panel for their grinder pump to 240 volt to match our existing system of spare and replacement parts. If they do not make this change, anything that goes down is on the ambulance board. There are no replacements available through the WSA.

The general permit for Bungalow Terrace has been received.
Having no further business, meeting was adjourned at 8:07pm

Arlene Miles, Clerk

(H)

The Proposal: The Water & Sewer Authority at its July 10, 2014 regular meeting passed a resolution to request that the Legislative Council consider and approve an 8% rate hike for the users of the Fairfield Hills water system, for each of the next three (3) years. The Legislative Council (LC) is being requested to take this action because the ordinance changing the Water Pollution Control Authority (WPCA) to the WSA kept the authority to raise water usage rates with the LC. **This would be the first rate hike in over six (6) years.**

The Need: During the subsequent years from the last rate hike, the WSA has had to undertake \$1.4 Million in upgrades and improvements to the water system required by the CT State Department of Health, OSHA and general operating necessity. These projects have ranged from pipe and hydrant replacements to complete overhauls of the storage bunkers, wells and central pump house and addition of an emergency backup generator.

The system could not have been sustained without these repairs and improvements to serve its critical clients, which include Garner Correctional Facility, Nunawauk Meadows Senior Housing, Reed School, Newtown Municipal Center, Governor's Horseguard, Newtown Sports Academy, Federal Dog Training Facility, CONNDOT Garage, Newtown Animal Control Facility, Newtown Dog Park, five residences and the new Ambulance Facility.

The funding was provided by the reserves of the WSA from the sewer side of the Authority. However, the water users are required to pay back this advance. Over the next twenty (20) years, it is anticipated that an additional \$2 Million must be raised both for capital improvements and to establish an adequate cash reserve fund balance.

What is the Current Budget Situation: The current budget produces approximately \$316,000 in revenue. Of this total, \$193,000 is for direct operating expenses. The remaining \$123,000 is available for annual capital items and the repayment of the \$1.4 Million advanced by the Sewer Fund. However, after the \$123,000 is reduced by \$44,000 covering interest on the \$1.4 Million and \$50,000 for additional annual capital items, only \$29,000 remains for a principle payment.

The Problem: At this revenue level, the Water Fund will never be able to pay back the entire \$1.4 Million; it will never have continuing adequate funds for annual capital needs and it will never establish an appropriate fund balance. Inflation alone will continually drive up direct operating costs. After the third year, inflation of 3.5% will eliminate any available funds for a principle payment at the current water rates.

The Solution: Adding 8% water rate increases to revenue each of the next three years and adjusting for inflation would produce the following results-

	Base	8% Rate Increase	(3.5%) Inflation	Net Available	Total
Current Budget	\$316,000	-	-	\$29,000	
First Year	\$316,000	\$25,280	(\$6,755)	+\$18,525	\$47,525
Second Year	\$341,280	\$27,302	(\$6,755)	+\$20,547	\$68,072
Third Year	\$368,582	\$29,487	(\$6,755)	+\$22,732	\$90,804

The "Total Addition Column" indicates what would be available to repay the existing capital debt. The net total of \$90,804 added to the current interest payment of \$44,000 would provide a total of \$134,804 to cover an annual amortized payment of \$90,102 and begin to build a reserve fund balance for future capital project requirements. Future rate increases will be necessary to balance future inflation. But, this proposal will start the Water Fund on a secure self-funded basis.

Who's Impacted:	Water Usage
State of CT Facilities –	83.0%
Nunawauk Meadows* -	9.4%
Town	6.9%
Residences	.7%

*Subsidized Rate is approximately half the residential/commercial rate.

Rate(s) Changes:

Current	\$7.30 per 1,000 gallons
1 st Year	\$7.88 " "
2 nd Year	\$8.51 " "
3 rd Year	\$9.19 " "

These rates are in line with similar size small water systems.



(15)



MONTHLY OPERATING REPORT August 2014 TOWN OF NEWTOWN WPCF

EXECUTIVE SUMMARY

During the month of AUGUST the plant process performed well. Nitrogen average pound per day during the month was 7 lbs. The open channel flow meters have been relocated to new locations. The meters are located at a cross lot manhole on Taunton lake dr. coming from Diamond Dr. and directly prior to the Taunton Lake pump station. This will be our next areas of focus.

The plan will be to inspect during heavy rains for signs of inflow.

SCADA project is COMPLETE through the PLANT, PUMP STATIONS, and Fairfield Hills Water system.

We are now creating a punch list for all the systems.

Pump stations have been delayed in order to complete most Water Pollution plant upgrades prior to the June 1st timeline.

There have been no operational events due to the upgrade work being performed. The DEEP has been kept in the loop as the project proceeds. Other process control regulation comes into play then such as disinfection and phosphorous removal.

We are no longer operating ultraviolet treatment and alum dosing process until June 1st.

Below are some of the highlighted major operation and maintenance items that are currently in progress or completed.

PROJECTS

SCADA

- All the Water and Wastewater systems are now operating on the radio telemetry system.
- In October a final test and punch list of items will be addressed.

SOLAR

- All the panels appear to be working.

OPERATIONS & MAINTENANCE

- Sprayed for bees around plant.
- Called in for UV Bank A.
- Emergency CBYD.
- Worked on water plant Well 7 & 8 & Bank.
- Pulled grinder pump at #12 Hanover Rd.
- Work (paving) being done on 302. Checked manholes.
- Removed 3 foot manhole cover at the Rte. 302 Trailer Park.
- Changed grinder pump at 600 Main St. (Honan Funeral Home)
- Hosed down clarifier splitter box.
- Changed control panel bulbs.
- Greased Ross pumps WAS and Turbine and Ditch. Adjusted belts on WAS 2.
- Changed control panel bulbs.
- Blew off WAS Line from pump to Filter Building.
- Inspection of Filter Builder, Clarifier Building and Headworks.
- Flush Sand Filter #3.
- Reset breaker for Plant Drain Pump 1 & 2.
- Flushed and Cleaned Hach meter at WTP.
- Sprayed down foam in secondary splitter box.
- CBYD mark outs.
- Emergency CBYD Sea land Dr.
- Bi-weekly plant inspection.
- Pulled wires for Knapp Engineering at WTP, Well 7 and Bunker.
- Flushed K9 and City Hall.
- Daily testing and sampling.

PUMP STATIONS

- Checked pump stations.
- Cleaned out well at Sandy Hook Pump Station.
- Called in for Hawleyville Pump Station.
- Called in for Sandy Hook Pump Station.
- Replaced phase monitor at Taunton Lake Pump Station

ODOR ABATEMENT

No odors this month.

STAFFING

We are presently fully staffed.

TRAINING

All employees continued with our in house OSHA compliance safety training through Pure-Safety.

REGULATORY COMPLIANCE

In Compliance

SOLIDS HANDLING

Type	Gallons This Month	Target	Gallons This Year	Target
Sludge (SYNAGRO)	26,000	40,625 gal/mo 2 loads/wk	0.887 MG	0.527 MG 75 loads/yr

ANALYSIS OF WASTED SLUDGE

Waste Activated Sludge	Total Gallons	Min %	Max %	Average %	Total Pounds
SYNAGRO	26,000	4.24	5.16	4.76	10,322

EMERGENCY CALL-OUTS

Type	Total This Month	Total for Year
Sewer Backup	0	1
Pump Station	2	39
Plant	3	28
Odor	0	3
Grinder Systems	2	33

PLANT MAINTENANCE

The following data is provided as a record of maintenance work order activities during the month.

Type	Total This Month	Total for Year
Preventative Maintenance	49	663
Corrective Maintenance	20	432
Emergency Maintenance	2	5
Call-Before-You-Dig (CBYD)	39	871

FIELD OPERATIONS

Type	Monthly Ft	Total for Yr	Contract	Amount Left
Sewer Cleaning Scheduled	0	9650	*****	****7650***
Sewer Cleaning Unscheduled	0	2250	*****	*****
Other	Monthly Qty	Total for Yr	Contract	Amount Left
Manhole Inspections	6	108	*****	N/A
Grinder Replacements	2	42	As Necessary	N/A
New Grinder Stations	0	0	*****	N/A

PUMP STATIONS

Station	Baldwin	Hanover	Sandy Hook	Taunton Lake	Hawleyville	Fairfield Hills Metering
Number Inspections/Mo.	9	9	9	9	9	9
Service Failures	0	0	0	0	0	0
Number Callouts	0	0	1	0	1	0
Maintenance & Repair	0	0	0	1	2	0
Flow (Total MG)	.106	.327	1.503	.395	.578	4.078
(Avg. Daily GPD)	3,423	10,556	48,490	12,743	18,647	131,548

FINANCIAL STATUS – MAINTENANCE

Item	Budget \$	\$ Spent/Mo	\$ Spent/Yr	\$ Remaining
Preventative and Predictive	\$55,000	\$6,341.64	\$11,038.36	\$43,961.64
Capital Repair and Replacement	\$95,000	\$25,816.69	\$46,334.11	\$48,665.89

HAWLEYVILLE SEWER DISTRICT
EXECUTIVE SUMMARY - OPERATION & MAINTENANCE

INSPECTIONS

Type	Total This Month	Total for Year
Hawleyville Pump Station	9	27
Grinder Pump Station 1		
Grinder Pump Station 2		
Grinder Pump Station 3		
Grinder Pump Station 4		

EMERGENCY CALL-OUTS

Type	Total This Month	Total for Year
Hawleyville Pump Station	1	1
Grinder Pump Station 1		
Grinder Pump Station 2		
Grinder Pump Station 3		
Grinder Pump Station 4		

HAWLEYVILLE MAINTENANCE

The following data is provided as a record of maintenance work order activities during the month.

Type	Total This Month	Total for Year
Preventative Maintenance	9	14
Corrective Maintenance		
Emergency Maintenance		

FIELD OPERATIONS

Hawleyville District	Monthly Qty	Total for Year
Service Inspections		
Call-Before-You-Dig (CBYD)	1	9

HAWLEYVILLE - FINANCIAL STATUS – MAINTENANCE

Item	Budget \$	\$ Spent/Mo	\$ Spent/Yr	\$ Remaining
Preventative and Predictive				
Capital Repair and Replacement				

FLOW AND LOADS TRACKING

Budget Month/Yr	Influent Flow, MGD	Influent BOD, lbs	Influent TSS, lbs	Calendar Month / Year	Average N, lbs
July 2014	.422	828	746	January 2014	9.5
August 2014	.351	695	513	February 2014	8.5
September 2014				March 2014	17.0
October 2014				April 2014	8.0
November 2014				May 2014	9.0
December 2014				June 2014	9.0
January 2015				July 2014	10.0
February 2015				August 2014	7.0
March 2015				September 2014	
April 2015				October 2014	
May 2015				November 2014	
June 2015				December 2014	
Monthly Average	.422	828	746	Calendar Year to Date Average	10
Contract	Average 0.53 MGD Adjustment = Change in Flow in MG * \$17.83/MG	Avg. 999 lbs/day Adjustment = Change in BOD in lbs * \$0.04/lb	Avg. 703 lbs/day Adjustment = Change in TSS in lbs * \$0.16/lb	Contract	NPDES Permit Limit = 17 Lbs/day
Deviation % (+/-)	-33.8	-30.4	-27.0	Deviation % (+/-)	-41.2

FAIRFIELD HILLS WTF

EXECUTIVE SUMMARY

The staff continues to improve equipment and standard operating methods to prevent Fairfield Hills WTP failures. Well # 3 is OFF LINE as the lead pump at <20 gallons per minute. The water treatment plant operated very well in AUGUST.

NEW MAGNETIC FLOW METERS WERE INSTALLED AND CALIBRATED ON WELL THREE AND BOOSTER PUMP DISCHARGE LINE AND INTRAGRATED INTO THE NEW SCADA SYSTEM

GHD and Fuss & O'Neill are working to comply with the DPH upgrade requests and all temporary repairs or modifications have been completed. Pictures of the completed work were sent to the DPH.

Check and maintain calibrations of all equipment.

The lines were flushed at Fairfield Hills Town Hall during the month of AUGUST.

Listed below are some of the highlighted major operation and maintenance items that are currently in progress or have been completed.

OPERATION & MAINTENANCE

- Called in for power blip at FFH.
-
- Back flush at Washington Square and Mile Hill Rd.
- Installed backflow preventer for Mile Hill Rd.
- Flushed mile hill south line at Washington Square circle
- The bunker concrete sidewalls were repaired.
- Scada system in service at the bunkers.
- Installed new conduit raceways on both tanks.
- Installed a new 60 amp breaker panel on the south bunker.
- Calibrated and inspected both the ph and chlorine analyzer at the water treatment plant.
- Installed, calibrated new flow mag meters for the booster pumps and well #3 pump

STAFFING

Currently, all the regulatory required staffing positions are met for the Water Treatment Facilities.

REGULATORY COMPLIANCE

The Department of Health Monitoring Report did meet full compliance during the month.

EMERGENCY CALL-OUTS

Type	Total This Month	Total for Year
Plant WTP	1	11
Well Houses	0	0
Reservoirs (Storage)	0	1
Customer Service Issues	0	14

FAIRFIELD HILLS MAINTENANCE

The following data is provided as a record of maintenance work order activities during the month.

Type	Total This Month	Total for Year
Preventative Maintenance	17	239
Corrective Maintenance	1	24
Emergency Maintenance	0	9

FIELD OPERATIONS

Valve Inspections	8	60
Hydrant Inspections	6	42
Service Inspections	17	136
Call-Before-You-Dig (CBYD)	3	59
Valve Inspections	8	60

FINANCIAL STATUS – MAINTENANCE

Item	Budget \$	\$ Spent/Mo	\$ Spent/Yr	\$ Remaining
Preventative and Predictive	\$15,500.00	\$1,233.98	\$2,776.16	\$12,723.84
Capital Repair and Replacement	\$20,000.00	\$11,463.18	\$11,463.18	\$8,536.82

FLOW TRACKING

Month/Yr	Well No. 3 Gallons	Well No. 7 Gallons	Well No. 8 Gallons	Plant Production Gallons
July 2014	456,000	6,014,500	0	6,470,500
August 2014	1,000	5,589,800	0	5,590,800
September 2014			0	
October 2014			0	
November 2014			0	
December 2014			0	
January 2015			0	
February 2015			0	
March 2015			0	
April 2015			0	
May 2015			0	
June 2015			0	
Monthly Average	228,500	5,802,150	0	6,030,650
Daily Average	32.26	180,316	0	180,348