

Town of Montville Water & Sewer Commission
REGULAR MEETING MINUTES
October 2, 2023-- 6:00 PM
Town Council Chambers – Town Hall

1. Water and Sewer Commission

a. Call to Order

Chairman Longton called the regular meeting of the Water and Sewer Commission to order at 6:00 p.m.

b. Pledge of Allegiance

All stood and pledged the flag.

c. Roll Call

Present were Chairman Chuck Longton, Commissioners Kevin Lathrop, Town Councilor Alfred Mandler, Frank Miceli, and Richard Gladue. A quorum was present.

Also in attendance was Superintendent Derek Albertson, Wright Pierce Professional Engineer Therlin Montgomery, Account Clerk Kathryn Turker, and Mayor Ronald McDaniel.

d. Alterations to the Agenda -- *None*

e. To consider and act on a motion to approve the Regular Meeting Minutes of September 7, 2023

Motion by Commissioner Lathrop; seconded by Commissioner Miceli to approve the Regular Meeting Minutes of September 7, 2023. Discussion: none. Voice vote: 4-0-1; Commissioner Gladue abstained. **Motion carried.**

f. Communications pertaining specifically to matters which concern the Commission -- *None*

g. Remarks from the Public Regarding Items on the Agenda with a three-minute limit

Chairman Longton asked three (3) times for remarks from the public. There were none.

h. Report from Operations/Administration Division

Superintendent Albertson submitted an Operations/Administrative Report for September 2023, as follows:

1.0 Compliance/Process

1.1 Water Pollution Control Facility

The Montville Water Pollution Control Facility (WPCF) met required state and federal standards for effluent discharged to the Thames River. No complaints were received regarding the collection system or the WPCF.

Average daily influent flow to the WPCF was 2.2 mgd with a total treatment volume of 67 mg of wastewater. Removal efficiencies for key contaminants (BOD₅ and TSS) were both over 95%, respectively. Total Nitrogen (TN) loading was discharged in the treated effluent under the state permit limit (with removal efficiencies over 80%). No adverse process issues were encountered during the September storm events.

Approximately 55% of the treated effluent was recycled (sold) to Rand-Whitney Container Board's paperboard facility. On August 24, the RWCB wastewater discharge was bypassed from their discharge line to our municipal system (along Route 163) to allow for their continued production of paperboard.

Overall waste handling has improved. Waste activated sludge (WAS produced during secondary process) was dewatered effectively (> 6%) resulting on a lower number of sludge hauls. The

thickening of the waste sludge is the best for the year resulting in the lowest monthly total of sludge hauls. Grit removal has steadily improved in the pretreatment process.

1.2 Water Supply

The Montville Water Supply (WS) met required state and federal standards. No complaints were received. Routine (annual) flushing will not occur this year unless absolutely necessary due to the unaccounted-for-water issue.

A water main (30-inch line) break occurred within the Norwich system on September 27, requiring Montville to open the interconnection; directing flow from Montville to Norwich. Due to the break, the Norwich system experienced a significant loss of pressure. Permitting exists for the Thames Interconnection (Ledyard to Montville) and is for the interconnected water systems identified for the *Regional Water Interconnection Emergency Response Plan* (March 2005). This framework allows the regional water system to respond to short-term outages and emergencies without *Emergency Declaration* which authorizes transfers of up to 1.0 mgd from source utility (or utilities) to a receiving utility with a maximum length of seven days per triggering event.

As previously reported, an increase in non-revenue water (NRW) was observed after January 11 of this year. The identified leak is the reason for the rise in NRW. Another water audit performed showed < 10% NRW for a 7-day period. Monthly audits will be conducted and likely, the amount of NRW will drop.

2.0 Staff

2.1 Personnel

Three senior level workers will retire in less than 18 months. The Superintendent met with the HR Director regarding the hire of a new Collections II Operator and a Lab Director. Approximately 20 applicants were screened for the Collections II Operator with interviews proposed for the last week of the month. Following the hire of a Collections Operator, advertising will commence for the laboratory director position (current employee in this role to retire in early January 2024).

2.2 Health and Safety

Fire extinguishers are inspected by onsite staff on a monthly basis. Those found to be beyond their lifetime (or failing) were replaced by an outside contractor. Fire extinguishers are located throughout the WPCF as well as in work vehicles.

A new COVID vaccine is due out this month. CDC Director Dr. Mandy Cohen conveyed the ongoing threat posed by the Eris variant (EG.5 lineage) of COVID-19; fervently recommends availing the new vaccine. She delineates the protection the vaccine affords against long-term COVID. Measures of COVID rates including virus levels in wastewater had been increasing in New London County. Wastewater virus data is an important early warning signal- detecting COVID-19 infections (approximately seven days prior to outbreak) and before official test reporting. The CDC has divided the U.S. in specific regions for virus monitoring. Two regions out west are considered high with respect to positive screens. The next lowest positive rate, 12.4 percent, was seen in region one—consisting of Connecticut, Maine, New Hampshire, Massachusetts, Rhode Island and Vermont.

2.2 Training

Staff continued to receive training to meet CTDEEP and CTDPH requirements for (wastewater /water certification) training credits. Training and discussions have taken place to promote the OSHA defined competent person role: one who is capable of identifying existing and predictable hazards in the surroundings or working conditions which are unsanitary, hazardous or dangerous to employees, and who have authorization to take prompt corrective measures to eliminate them (OSHA Construction Standard 29 CFR 1926.32(f)). Flagger training (and certification) took place on September 19 for the operators/mechanics.

3.0 Equipment

3.1 WPCF/Collection System

On Saturday, September 16 at approximately 11 a.m., a MTUA employee reported water (flowing downhill to the north) atop the eastbound lanes of Route 32 adjacent to the curb near the Holly PS. The working operator responded immediately (as did the Superintendent). The responding operator coordinated with Montville Police for traffic control along the State Road. Pumps turned

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off and bypass via pumper truck (to Avery II PS) stopped the bypass of untreated wastewater within 20 minutes (less than 500 gallon discharged). The Superintendent conducted the regulatory reporting (CTDEEP and Uncas Health District). The emergency contractor (B & W Paving & Landscaping LLC) responded and began the six exploratory test pits to locate the elusive pipe breach. The hole was located by 7:30 p.m. with repairs completed by 8 p.m. Backfilling operations along with compaction were initiated with eventual paving. The CTDOT may require additional paving to that area. All said, the team responded very quickly and identified the issue and remedy.

Two vehicle purchases (Chevrolet Equinox and Ford F550) were made as part of the FY 2024 CIP. Routine WPCF plant (direct/via SCADA HMIs) inspections are made daily to ensure operation of equipment is maximized. The older F350 and trailer body were sold via an online auction service for government utilities to sell surplus directly to the public. All auctions take place online and are available to bid 24 hours a day. A complete review of all redundant equipment was made with some items listed on Municibid (<https://municibid.com/>) for sale with proceeds forwarded to the WPCA's general fund.

All pump stations were inspected and cleaned during the month as well as a large number of manhole inspections were made. CCTV sewer pipe/manhole inspections was conducted in prioritized areas (those areas identified in the 2010 and 2011 URS reporting/CIP Cross-Country Clearing areas).

Paving along Route 163 lead to manhole inspections and cover/frame replacements. Approximately 2,200 feet of cleaning/CCTV inspection has occurred so far in 2023. Work within the collection system is recorded in the GIS system (inspection attributes) as record for potential regulatory review.

The RWCB discharge line was leaking in the vicinity of Depot Road and Route 32, Maple Avenue and Route 32 and other areas along Maple Avenue. Per contract, we are responsible for the RWCB sewer/return lines. RWCB contributes money each year for this (\$200,000). RWCB has requested that P & H Construction conduct the initial repairs (Depot Road to Route 32 to Maple Avenue). New plumbing is considered as a long-term remedy for several lengths of line with C900 pipe for two other locations along Maple Avenue.

4.0 Projects

4.1 WPCF/Collection System/Water Supply

The blower building roof project began on September 28. The utility bridge repair project (above Stony Creek) was advanced with a defined scope of work presented and discussed. The U. S. Geological Survey (USGS) streamflow gauge funding (required per RWCB contract) funding was completed for October 1, 2023 through September 30, 2024. Interviews were conducted with two outside laboratories to determine cost structures and sample turnaround times.

The Cook Water Tower Project meeting was held on September 19 to define staff, procedures and initial construction concerns. A project walk-through was conducted.

4.2 Regulatory Oversight

No regulatory oversight or action is ongoing for the WPCA. The plant is a National Pollutant Discharge Elimination System (NPDES) permit holder. Additionally, two state permits (for nutrient removal as well as for stormwater management) exist for the plant. No existing state or federal *Consent Decrees* or *Consent Orders* currently exist.

The Superintendent completed an online CTDPH survey for the upcoming 2023 Sanitary Survey scheduled for September 12. The last survey of the Montville Water Supply was completed remotely (November 2020) due to the COVID pandemic. The sanitary survey is completed pursuant to law (*RCSA Section 1913-B102*). The significant amount of work conducted within the distribution system (e.g., acoustic studies, flow studies, meter calibrations, meter replacements, physical inspections, GIS mapping, billing software/hardware improvements) will support a positive outcome to the CTDPH review.

The USEPA issued revisions to the federal Lead and Copper Rule (LCR) on January 15, 2021. The Lead and Copper Rule Revisions (LCRR) strengthen every aspect of the LCR to better protect communities in elementary schools and childcare facilities from the impacts of lead exposure.

Over the next three years, the LCRR will require water systems to conduct an inventory of service lines and determine the material of those lines and fittings. The LCRR's inventory requires all water systems to develop an initial service line inventory by October 2024 or demonstrate the absence of Lead Service Lines. *Lead Service Line Replacement Plans* must then be created as a result of your inventory. Adequate funding is present to cover the expected costs of compliance. The distribution system is in compliance with the LCRR.

5.0 Development

The sewer and water connection plans have been proposed for residential and commercial development. Residential development is proposed for several locations along Route 32. The new animal facility is proposed along Route 163.

6.0 Finances

The WPCA operates within an Enterprise Fund (a business-like account with net-zero goals, that is AR should equal to AP, according to GAAP). The FY 2023 WPCA Sewer and Water Budgets began on July 1, 2022 and ended on June 30, 2023. FY 2024 began on July 1, 2023. The financial condition of both water and wastewater accounts is considered good. A complete review of accounts has been completed for the close of the FY 2023. End of year account sheets are provided as an attachment.

The sewer revenue was under the projection due to fewer connection fees and lower RWCB billing. Additionally, chemical purchases were higher than expected due to process control challenges earlier in the year. The payroll was over budget due to no money having been placed for the Administrator's salary, but overtime pay was much lower than forecasted (bucking the trend of state/federal budgets). Maintenance costs were over-budget, but energy expenditures and costs for sludge removal were low. Considering depreciation as a not an out-of-pocket expense (and grant money as not true income), the sewer side of the WPCA made approximately \$300,000 for the fiscal year.

As previously reported, a six-month elevated NRW situation adversely affected the water accounting. The good news is that the expected expenses were low. The fund balance was able to cover the lower-than-expected revenues and higher than expected costs with a net zero balance.

In 2019, Tighe & Bond (engineering firm) conducted a sewer rate study in Connecticut; average annualized sewer costs was determined to be \$520 (with a reported median = \$467) with a low of \$130, and a high of \$2,060. In their report, 73% of survey respondents had reported increased rates since their last survey in 2016. The WPCA rate is approximately 40% lower than the state average. In 2022, the average monthly water bill in the U.S. was up 51% since 2012- more than double the rate of inflation. The average Montville WPCA ratepayer pays less than half the national average.

Per WPCA and TC approval, the WPCA FY 2024 Sewer Budget is approximately \$7.1 million and the Water Budget is \$1.91 million. No rate increase is required for sewer for the coming year even with significant investment into the infrastructure. A rate study will be conducted for the water account and applied, as required.

6.1 Accounts Review

Current rates (and ancillary fees) appear to be adequate at this time to cover costs for water and wastewater activities. For the last four years (on average) the revenues for the sewer account has risen annually (above the national average) with a strong showing during the pandemic due to RWCB billing. It should be noted that the Town has a high collection rate (over 90%) which allows for a dependable revenue stream.

6.2 Assets

A formal review of the Construction-in-Progress occurred in June (year-end) to improve the understanding of existing assets. The challenge facing water systems (sewer/potable water) is aging infrastructure. A rate structure designed to provide sustainable revenue for operations as well as capital programs is critical to assure reliable effective sewerage and safe drinking water and fire protection. Existing URS Reporting (from 2010 and 2011) provided an asset listing (permanent attributes detailing the age and construction of the collection system and/or treatment plant equipment) which were installed into the current WPCA GIS system.

6.3 Grants/Funding

Some current wastewater projects are funded by State funds including two bonds and one grant (CTDEEP \$5 million *Grant-in-Aid for Sewage Treatment Facility Infrastructure Improvements and Upgrades at the Montville WPTF- State Grant Agreement 2017-170491*, approved via March 2014 Town of Montville Resolution No. 2014-25). The bonds were for infrastructure improvements within the plant including the new chlorine system, new recycling pumps, and grit removal system. Additionally, the aeration systems for SBR-1, 2, 3, 5 and 6 were replaced. The Mayor requested an extension for the Grant. A review of the approximately \$4.5 million in grant monies (slated for the WPCF) indicated adequate funding for the proposed projects with approximately \$450,000 margin- this money will be used to remedy the concrete failing in SBR-4.

Based on a review of the WPCA's *Eligibility Application* the CTDPH DWS had determined that the Cook Water Tower replacement project was ready to proceed and that DWSRF funding will be available. The Finance Director was notified of the intent to pursue federal funding for the tower project. The scheduled completion date of the storage tank is October 31, 2024. A Drinking Water State Revolving Fund (DWSRF) loan agreement package was signed by the Mayor on August 30 for the Cook Hill Tank Replacement Project (CTDPH Agreement #2024-7125). Initial engineering costs have been submitted for reimbursement.

The State DECD still recognizes the Town as a *Distressed Municipality*. The citation often allows consideration for certain funding and/or grants to enhance the community.

6.4 Energy

A decrease in plant energy demand has been observed associated with the (more controlled) lower dissolved oxygen (DO) settings in the process tanks due to the new fine-bubble diffusers as well as the new (more efficient) turbo blowers. The (electrical) energy is the single largest monthly expenditure. Electrical Energy is supplied to the plant by the Doosan Fuel Cell America, Inc. fuel cell (onsite generation by Unit #10587), Eversource (transmission) and *First Point Power* (generation). The power generation was formerly supplied by *Constellation Energy*. The WPCA is using less public grid kWhs and KVARh this year. Each month a review of energy usage is conducted for each billing (i.e., plant, pump stations) to determine if there is a sudden rise in demand which often indicates mechanical problems (i.e., pump/motor failures).

In March 2023, the Montville WPCA and Town signed a 20-year solar service agreement with N. Silver Brook, LLC- a Montville based renewable energy company. The agreement will save the Town of Montville more than \$850,000 and is structured for the Town to receive the full savings amount within one year of the solar facility's completion. N. Silver Brook and its partners allocated solar energy from a Connecticut solar project in Naugatuck to the WPCA's electrical accounts. On June 9th, that project was selected as a winning bid in Connecticut's Non-Residential Renewable Energy Solutions (NRES) program. All of the WPCA's electrical usage was assigned to the winning bid and will result in lower energy costs.

A study has been proposed for the conversion of an existing clarifier tank into an anaerobic digester. Anaerobic digestion produces methane gas while reducing waste solids.

Superintendent Albertson remarked on topics from his report i.e., process removal of wastewater contaminants; recycled water sold to Rand-Whitney; a decrease in sludge hauls and disposals, a significant cost savings; the Holly Hill main break two (2) weeks ago; P & H Construction restoration of storm drain fronting the Senior Center; status of the discharge line from Rand-Whitney near Depot Road and Route 32 and a meeting with the company on the same. He informed the Commission on the receipt of approximately 20 resumes for the Collections II Operator position. The Superintendent reported he is working with Human Resources concerning screening and interviews for the applicants—after tomorrow, six (6) applicants will have been interviewed, all very qualified, per a question from Chairman Longton. Superintendent Albertson responded to a question from the Commissioner Gladue regarding the amount of linear feet of RWCB discharge line that has been repaired and the amount remaining to complete.

i. Report from Mayor.

As a point of personal privilege per Roberts Rules of Order, Mayor McDaniel briefly attended the meeting to introduce Girl Scout Troop #63416 as part of the troop's tour of Town Hall to learn about some of the inner workings of Town government. The troop was there to see democracy in action working towards their Democracy Badge by witnessing volunteers in action, the Commission. The girl scouts were saluted with a round of applause from the Commission.

j. Report from Engineers

Superintendent Albertson reported on having invited PE Therlin Montgomery from Wright-Pierce to tonight's meeting to discuss the failing Stony Creek bridge. PE Montgomery reported his firm worked on a design to rehabilitate the bridge with different options for the same. An internal review was conducted by his firm and the bid package is expected to be 90% submittal ready to go out to bid by the end of October, but wants someone at the WPCA to review it toward 100% status. For the benefit of Commissioner Gladue, PE Montgomery explained the current condition of the Stony Creek bridge, specifically the corroded, steel support beams that will be corrected without affecting nor interrupting the two (2) sewer lines and the water line. Temporary support will be in place followed by blasting and recoating the 40-foot long bridge estimated to last another 50 years upon completion of the repair. Per a question by Commissioner Lathrop concerning provisions or needs in place for the future, PE Montgomery remarked on having yearly reviews of the structure. Chairman Longton reported in times past there was not conservative action to do updates; thus, a database is being created for inspection purposes with an end goal of having continued, scheduled upgrades—routine maintenance, not emergency ones--for the future. New stainless, hot dip galvanized steel will be used and some will be coated with corrosion resistant material. Chairman Longton spoke of asset management and the use of the database to establish conditions and determine remedies. PE Montgomery noted the Pink Row bridge was constructed at the same time as the Stony Brook bridge and suggested walking the system as well as taking photos.

k. Old Business -- None

l. New Business

1. To Consider and Act Funding of Engineering Research for the Conversion of an existing Clarifier (tank) to an Anaerobic Digester.

THE TOWN OF MONTVILLE WATER AND SEWER COMMISSION HEREBY RESOLVES to Consider and Act to Fund \$7,000 to Wright-Pierce (WPCA Engineer) to conduct preliminary research regarding the conversion of an existing (unused) clarifier tank to an anaerobic digester to promote onsite fuel (methane) generation.

Motion – Discussion – Roll Call Vote

SAR-No. 2023-20 THE TOWN OF MONTVILLE WATER AND SEWER COMMISSION HEREBY RESOLVES To Consider and Act on a motion to Fund \$7,000 to Wright-Pierce (WPCA Engineer) to conduct preliminary research regarding the conversion of an existing (unused) clarifier tank to an anaerobic digester to promote onsite fuel (methane) generation. **Motion** by Commissioner Mandler; seconded by Commissioner Gladue. Discussion: Superintendent Albertson remarked on an experiment done last year with an anaerobic situation and noted that disposal of solids had been reduced by 40%, the second leading cost for plants. He spoke of one (1) SBR being overloaded and converting it to an anerobic digester that can produce methane gas that can be used as fuel and reduce solids by 50% within 30 days. Truck disposal costs would reduce by half and taking the anerobic digester gas—gas that is dirty and must be scrubbed and has low heat capacity--and using it as a heating agent for the digester. There is a cycle of mixing as the digester must be fed in a certain way. He was in Norwich when they started their own. PE Montgomery suggested Doug Hankins as a source to do a preliminary evaluation and cost analysis to fund the project. Problems associated with the project was mentioned by Commissioner Lathrop and Superintendent Albertson who remarked it was common use back in the day that built up debris in pipes. He noted the plant has a tank that is not being used and remarked the project is doable as grants are available and funds will be realized from reducing solids. The Superintendent also noted consideration for a better method for reducing sludge that has increased the content of the RWCB paper sludge. He credited staff person Marcel for the

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same. The Commission discussed whether methane gas would need to be supplemented, the BTUs of the gas, possible new technology for cleanup of the methane gas and other possible uses for the gas. Roll Call Vote: *In Favor*: Commissioners Gladue, Lathrop, Longton, Mandler, and Miceli. *Opposed*: None. 5-0-0. **Motion Approved.**

m. Reports/Referral from Planning & Zoning

Chairman Longton had no report as the last meeting he attended was very short.

II. Water Commission

a. Report from Engineers

Superintendent Albertson reported Northeast Utilities had a 30-inch water main break in Bozrah. Groton Utilities supplied the Town of Montville with more water, a little over one (1) million gallons, charged at retail cost, causing a 13 lb drop. He also reported on the assistance supplied by John Lilly and Kevin Loiler, the monitoring of the water pumped from Groton Utilities in Ledyard, and a serious amount of water sent to Norwich. The Superintendent noted the incident was a good test for the transfer of water and remarked CTDPU was appreciative of the quick response. The receiving party, Bozrah, must report to DPU. Commissioner Lathrop questioned future methods to discern water leaks. Superintendent Albertson reported on speaking with water operators about metering kits to find leaks quickly. With a true monitoring system, focus can be on targeted areas and not the whole system per Commissioner Lathrop.

b. Old Business -- None

c. New Business -- None

d. Remarks from the Public

Chairman Longton asked three (3) times for remarks from the public. There were none.

e. Remarks from Commission Members

Commissioner Miceli remarked about his tour of the plant with Superintendent Albertson noting the improvements, indicative of the Superintendent being very proactive. He also remarked the Superintendent coincidentally talked two (2) weeks ago about an anerobic digester. Superintendent Albertson remarked on big issues that have occurred and having to move relatively quickly to resolve them. Chairman Longton spoke on an increase of his water bill by SCWA. Commissioner Mandler remarked it was a pleasure to be a part of the Commission stating he learned a lot and if re-elected he would like to continue serving on it. He suggested that the Commission consider changing the November meeting date given it is the day before the upcoming election and three (3) members of the Commission are running for election. He also noted that circumstances have changed a lot on the Commission. Commissioner Mandler praised the Recording Secretary and Superintendent Albertson stating it was a pleasure to work with them.

f. Adjournment

Motion by Commissioner Mandler; seconded by Commissioner Lathrop to adjourn the meeting at 6:52 p.m. Discussion: none. Voice vote: 5-0-0 , all in favor. **Meeting adjourned.**

Respectfully submitted by,

Gloria J. Gathers
Recording Secretary, Town of Montville

AN AUDIO RECORDING OF THE MEETING IS AVAILABLE ON THE TOWN OF MONTVILLE WEBSITE.