



ABOUT THE PIPELINE

The Pipeline publications help the Department to explain to you about the work we do. If, after reading this publication, you have questions or suggestions for future feature articles that you believe other customers would be interested in, please let us know. By hearing from our customers regularly, we can complete our mission to serve you better.

Updates from the Director

By Joseph Fazzino, Director of Water and Sewer

I hope that this issue of the pipeline finds you and your family well. This has been a very stressful time for all and hopefully we are over the worst of it. I would like to give you an update on the new Inter-Municipal Francis T. Patnaude Pump Station. It has been operational for over a year and all the nits have been worked out. We have been fine tuning the operation of the station and we are very happy with how everything has turned out. Within this time frame we have withstood three extremely heavy rain events. The two events last December and the third event this summer in July as a result of Hurricane Henri where we received over 4.5 inches of rain. All the planning and hard work has paid off as the pump station performed exceptionally well. We had some flooding of the lower level but that was expected considering how much rain we received.

The issue is the increased frequency and intensity of these storm events. Climate change is here and we need to deal with the new normal. With that being said we need to address the next big issue for the Department which is rain induced Inflow and ground water induced Infiltration.

The Department has a plan to go after this next phase by implementing our top ten list for Inflow and Infiltration (I/I) reduction. This is where you, our customers, can help.



We need to reduce the amount of clean water entering our sanitary sewer system. This comes in the form of basement sump pumps and/or roof drains entering into the sewer system. All this storm water is overwhelming our infrastructure and the Mattabasset Waste Water Treatment Plant. We as customers are paying to treat this rainwater. We need to work together to address these issues and in so doing we can lower our costs to the Mattabasset District.

Recently the City has received some American Recovery Act Grant Funding and we are in the process of addressing some of these issues. This funding will help us get started on this work.

The City has many miles of Water and Sewer infrastructure throughout that is a hundred years old or older and we have plans to address this. We need to get the storm water out of the sanitary sewer system so our treatment and pumping costs can go down. Projects like the recently completed Old Mill Road rehabilitation will need to be designed and construction in various location throughout the City.

We plan to work closely with Public Work to address some of these issues and also to help keep our construction cost low. This will happen by sharing the costs for road improvements.

If you think your home's roof drains or sump pumps are connected to the sewer system please contact our Engineering Division to see how you can help.

FALL PROJECTS IN THE WORKS

By Brian Robillard, Chief Engineer

Work on several significant projects for the Water and Sewer Department are underway:

Durham Meadow Waterline

The Durham Meadows project which will connect Durham to Middletown's water system is moving forward at a brisk pace. This project is being funded by the Environmental Protection Agency (EPA) and implemented by the Army Corps of Engineers. The contractor, Ludlow Construction, completed installing the water transmission main along Route 17 and is beginning to connect homes in Durham to Durham's existing water system. The new water storage tank, booster station and meter station have been built and are waiting for utility connections. It is anticipated that these facilities will be completed this fall.

Once the new facilities are on-line and tested, the two systems can be connected and Middletown can begin supplying drinking water to the residents of Durham. Additional project information can be found on EPA's website: www.epa.gov/superfund/durham



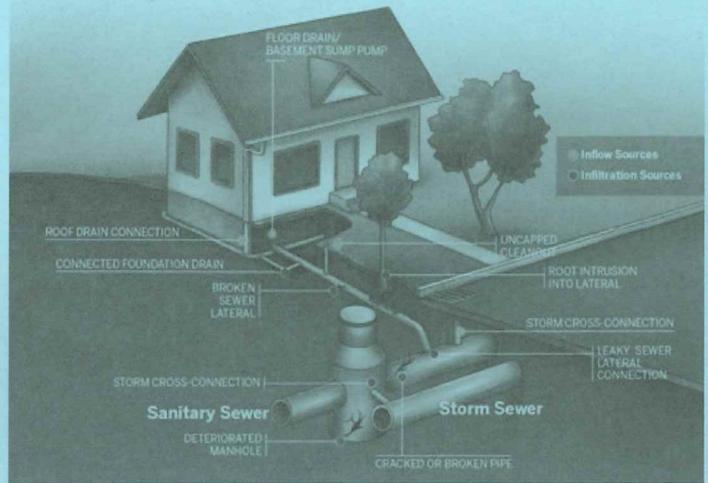
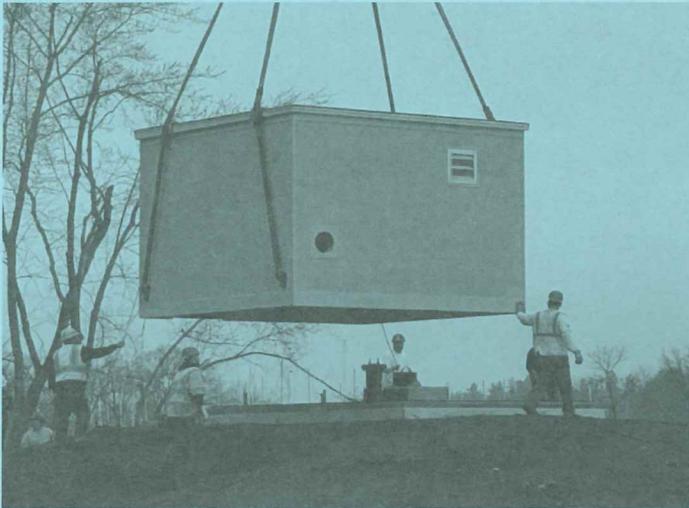
Hydrant Painting

The Water Department is in its third year of painting hydrants. Each year we try to paint 100 to 200 hydrants around the City that are in poor condition or the wrong color. City hydrants are typically green and yellow while private hydrants should be painted red. Repainting the hydrants make them more visible so the Fire Department can find them more easily and helps protect the hydrant so they last longer. Our painting contractor, Superior Finishes, in conjunction with our staff are doing a great job and we look forward to completing some more next year.

Wellfield Improvements

The Department recently completed its wellfield improvement project. This \$1.5 million project included raising two production wells above the 100 year flood elevation and installing new buildings over each well. New well pumps, instrumentation, controls and wiring were included in the upgrades.

These improvements increase our ability to produce water and allow for more flexibility when operating the City's wellfield. The contractor, D'Amato Construction, completed the majority of the work in June and the wells are now being used to provide water to our customers.



INFLOW AND INFILTRATION

By Theresa Spalletta, Manager of Regulatory and Technical Affairs

Right below our busy streets lies an intricate grid of pipes that accommodates several of our daily needs. These pipes distribute water for drinking and cleaning, they remove waste away from our homes and they insure that flooding does not occur. Although we would have a difficult time maintaining our daily routines without this important portion of infrastructure, they are commonly overlooked and unappreciated. The focus in this article looks at the removal of storm water in our sanitary sewers.

Excess water that flows into sewer pipes from groundwater and stormwater is called Infiltration and Inflow, or I/I.

Groundwater (infiltration) seeps into sewer pipes through holes, cracks, joint failures, and faulty connections. Stormwater (inflow) rapidly flows into sewers via roof drain downspouts, foundation drains, storm drain crossconnections, and through holes in manhole covers.

Why is infiltration and inflow important?

The City of Middletown estimates that I/I makes up 70 percent of the peak flows in the sewer system during storm events and that much of this I/I originates on private property.

Extra water in the sewer system is a problem because:

- It takes up capacity in the sewer pipes and ends up at the regional wastewater treatment plants where it must be treated like sewage, resulting in higher treatment costs and higher consumer costs.
- New and larger conveyance facilities are needed to transport larger volumes of flow, resulting in expensive capital projects. Again effecting the cost to the customer.
- I/I flows contribute to sewer system overflows into local homes and the region's waterways, negatively impacting public health and the environment. Protecting the environment and decreasing wastewater treatment costs are the benefits of a regional I/I control program

Do you have an illegal connection to the sanitary sewer systems?

The City of Middletown has an ordinance prohibiting the discharge of any stormwater, surface water, groundwater, roof runoff, subsurface drainage, uncontaminated cooling water, or unpolluted industrial process waters to any sanitary sewer. It is important to understand that a fine can be imposed when an inspection of a neighborhood is conducted and violations are sited. The City would rather work with their constituents to eliminate the issue and not impose a fine. To find out further information if you have this issue or on how to correct any prohibited discharges, please contact our engineering division at (860) 638-3500. *We are here to help.*

FATS, OIL AND GREASE (FOG)

By Theresa Spalletta, Manager of Regulatory and Technical Affairs

We all want to limit the amount of fats in our bodies and the same can be stated for our sanitary sewer system.

When fats, oils, and grease are poured or flushed down your sinks, drains, or toilets they enter the sewer system where they cool, harden and stick to the inner walls of sewer pipes. Over time, as more fats, oils, and grease are added to the system, these sewer blockages build-up and harden until they completely plug the pipes. The hardness of the blockages makes them very difficult and costly to clean out. You can help prevent these blockages by not pouring grease or oil down the drain. The best way for residents to get rid of grease is to allow it to cool and harden, then scrape it and food scraps from trays, plates, pots and

pans, utensils, grills, and cooking surfaces into your garbage. Oils should be absorbed with paper towels and then dispose of the paper towels in the garbage.

ELECTRONIC PAYMENTS

By Theresa Spalletta, Manager of Regulatory and Technical Affairs

The City of Middletown has now made it easier than ever to pay your bill. You will no longer need to get in your car, drive to City Hall and wait in line to pay your bill. All you need to do is go to www.middletownct.gov, click on "Online Bill Pay", select the department and register by entering your account number and payment information. Once that is completed you can enter anytime and make your payment. The site is secure and your information is kept confidential.

What's New with the Crew

It is my pleasure to announce three new additions to our Middletown Water and Sewer family.

Devin Rojas has been working for the City of Middletown since 2004. He was initially employed by the Board of Education in 2007, he transferred to our Middletown. Police Department and in April of this year, Devin, joined the Water and Sewer Department as Building Superintendent.

Devin lives in Middlefield and has two beautiful children, Taliyah and Devin Jr. He enjoys spending time with his family and makes every effort to make all his children's events.

Rosario Caccamo began his career as a mason and continued in that profession for 15 years.

In 2015, he began working at Moody School. In 2017, he joined the Park and Recreation Department and in June of this year, Rosaria joined the Water and Sewer Department as a Utility Worker II.

Rosario also lives in Middlefield and has a wife and two beautiful children, Amaya and Carmine. He devotes most of his free time to his wife and children.

Damian Chuchro worked for both the Meriden and Southington Water Department. In August of 2021 Damian joined the Middletown Water and Sewer Department as a Water Treatment Plant Operator I. Damian lives in Southington and enjoys the outdoors, including hunting and fishing. When he is not outdoors, he is entertained by watching both football and soccer.

We wish them well in their respected new positions with the department.