

USING TECHNOLOGY TO MANAGE WASTEWATER COMPLIANCE

Like a Big City on a Small Town Budget





Marlborough, MA is not your average medium-sized city. With the convergence of three major highways, Marlborough has a prosperous industrial sector with big players from the food, pharmaceutical, and electronics industries. These industries use a lot of water to produce their products and one of the city's two treatment plants must treat almost all this industrial effluent. The City also has a relatively large number of restaurants to serve the influx of fans during sporting events and visitors that come to enjoy the many recreational activities in the area.

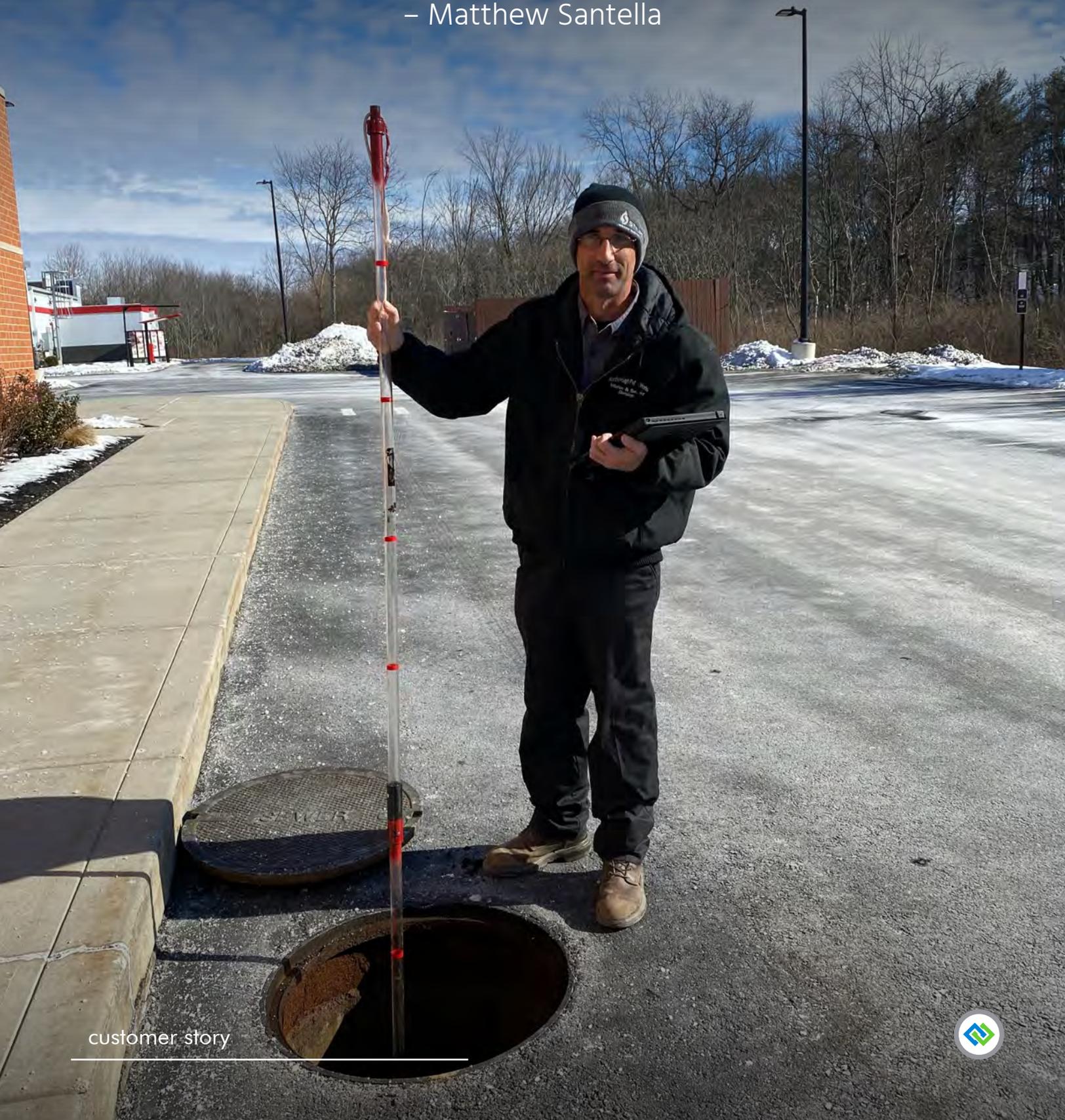
Not uncommon for a city of this size is a small public works department that needs to be thinking outside the box in order to manage it all. Matthew Santella has worked with the City for 10 years and is the creator, designer, inspector, and everything else that is needed, to manage a successful Industrial Pre-treatment Program. "Prior to 2017, we collected samples from our industrial users and entered the data into an old version of the Linko software on the hard drive of one of our computers. The data had not been put to use in close to seven years", said Santella, who has recently been promoted to General Foreman for the Water & Sewer Division of Marlborough.

Marlborough, like many municipalities, was collecting volumes of regulatory data, but not gaining actionable insight. In addition, the 300+ food service establishments (FSEs) were not effectively and efficiently being monitored for FOG compliance, forcing the public works crews into a reactionary approach to collection system maintenance. "As a one-man show, it was imperative that I found the right tools to get the data entry tasks under control and streamline my processes wherever possible, so I could spend more time in the field," said Santella.



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Up in the Cloud

The most logical approach was to update to the latest version of Linko in order to get the data hosted securely and accessible online making it possible to record and retrieve inspection results onsite, eliminating paperwork and data entry back at the office. This also opened up accessibility for other stakeholders' input. To get all FSEs into the system, Santella used Linko POM Portal for electronic reporting onsite. The portal gathers electronic pump out manifests from the FSEs and/or haulers directly, eliminating manual data entry of manifests by FOG program staff. Santella has even taken it one step further and enabled smaller establishments that are only required to self-clean their grease traps, to file a report online. The compliance rate is around 80% and customers like the efficiencies of the new system. "Email reminders are automatically sent to the FSEs through the POM portal, which improves our compliance rate as owners appreciate the reminder," said Santella.

Automation

Santella explains, "The streamlining of field data collection has not only saved time to get me in the field more often, but this data can now be used to automate a host of tasks including inspection and pump out scheduling, issuing permit renewals, keeping us up to date with regulatory changes, and violation notices. The software also connects to my Microsoft Outlook calendar, so I don't have to go into the system to retrieve my work plan. I can head straight to an inspection site first thing in the morning and have all the history and contact information I need to conduct an efficient inspection."

By eliminating paperwork from the field and manual data entry at the office, there is less chance for transcription errors. It has also freed up Santella to focus on the non-compliant customers who are typically the culprits for Sanitary Sewer Overflow (SSO) hot spots. "We now have the data at the tip of our fingers, meaning we have better intelligence from our FSE reports to prevent and solve blockages," said Santella. Since the new FOG program was put into place, there has been a noticeable reduction in grease at both wastewater treatment plants.

Monitoring Industrial Users

The industrial users with large water consumption or heavy chemical usage are under more stringent regulations through the Industrial Pretreatment Program of the Clean Water Act. Marlborough uses Linko to manage the permitting, sampling, and compliance activities that this Act requires. Automation is the key to eliminating errors when dealing with high volumes of sampling data, so the program allows labs to submit analytical data electronically to the industrial users. From there, the company compiles the Self Monitoring Report, signs, and submits it online.

The authority is then notified that a report has been submitted and prompts them to log into Linko to review the SMR where authorized users perform compliance reporting. Santella can evaluate 40 CFR 403 compliance requirements with a few clicks, and configurable views make annual reporting fast and easy. Marlborough's FOG and IPP programs now have more accurate, up to date data than ever before and have alleviated the risk associated with very important information being siloed on one computer, managed by one person.

"I am proud to say that our IPP and FOG programs are now comparable to any major city. All customers are in the system and are actively monitored for compliance. There was simply no way for a one-man operation to achieve this without moving to an online data management program like Linko, that allows for seamless flow of information between stakeholders.", concluded Santella.



Discover a better way to manage your water resources.

Get in Touch

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