



Photo: Scio Township

CASE STUDY



How Scio Township Solved Its Water Billing Issues

Switching to Metron's cellular meters cut water losses and resolved long-standing billing problems overnight.

When Brandon McNiel became utility director of Scio Township in 2023, the Michigan community northwest of Ann Arbor was struggling with billing problems, water losses, and aging metering infrastructure.

"There had never been a meter replacement program, so in some places we had meters that were 40 years old," McNiel explains. He made upgrading to Metron smart meters his top priority, and two years into the rollout he's seen dramatic improvements.

"The number one priority I was given, when I became utility director, was to fix the billing issues," McNiel recalls. "And switching to Metron fixed that, basically overnight."

Today, Scio Township has over 1,800 Metron meters and plans to install about 2,000 more over the next two years. "Metron meters are doing really well for us," McNiel says.

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Switching to Metron

Scio Township's older meters required drive-by readings and often broke down. During the COVID pandemic, a chip shortage made it impossible to find replacements. "We were having a massive amount of billing issues," McNiel says.

Scio had already installed a few dozen Metron meters, and McNiel thought switching to Metron system-wide might be a good solution, not least because Metron's cellular meters don't require drive-by

reads or costly RF infrastructure.

“For Scio Township, that was just a no-brainer,” McNiel says. “The cost of cellular service is baked into the extremely reasonable up-front cost.”

McNiel called other Michigan utilities before recommending Metron to Scio’s board. A manager in Flint gave Metron a resounding thumbs-up. “They’d just never had any issues,” McNiel says. In Detroit, too, a manager gave Metron a glowing review. “She just smiled and said, ‘We love Metron,’” McNiel recalls. “If it was up to her, they’d change everything in Detroit to Metron meters.”

Based on those recommendations, Scio Board of Trustees invested in a full replacement program. “I went to the Board and said, ‘Hey, we’ve already started moving towards Metron, and they’re good meters, so this makes sense for us,’” McNiel says.

Ease of Installation

Installing Metron equipment was so straightforward that Scio could handle everything in-house, saving the \$450,000 cost of third-party installation. That also meant Scio could combine the installations with state-mandated lead-piping inspections and some much-needed internal housekeeping. “We are auditing each of our accounts as we transition them to Metron meters, making sure our records are accurate for each location – that’s been a huge plus,” McNiel says.

Since April 2024, McNiel’s team has swapped in about 100 new meters per month, focusing on neighborhoods with high numbers of broken transceivers.

“The guys are loving doing this meter replacement using Metrons – they’re very easy and seamless to put in,” McNiel says.

The main advantage is that Metron’s cellular meters don’t require wires to be run to an external transceiver box – a time-consuming chore that often requires poking holes in walls. There’s also less to go wrong: field teams can slot in a meter and immediately see whether it’s uploading data correctly.

“The guys are loving doing this meter replacement using Metron meters.”

“The only meter we’ve got that isn’t sending a signal is an irrigation meter in a manhole structure that’s underwater right now,” McNiel says. “To have just one meter out of 1800-and-something that isn’t transmitting is unheard of. I mean, it’s *really* good.”

The Power of WaterScope

With the new meters up and running, Scio’s water management improved overnight. Previously, usage data only updated when quarterly bills were issued, so it was almost impossible to spot broken meters or provide explanations if a customer’s bill increased. “We had no information to go off of,” McNiel says. “I’d say, ‘Well, you probably have a leak, but I don’t have any way of knowing for sure.’”

Now, though, data automatically flows into Scio Township’s WaterScope portal on a daily basis, letting McNiel pull up usage data whenever he needs it.

“The WaterScope software is super, super easy to use – you have all the information you would ever need,” he says. “It’s the thing I like most about Metron.”

Besides simplifying billing, WaterScope also lets McNiel easily create sharable PDF usage reports, and customers can also go online themselves to check their consumption or set excess-usage alerts.

"It lets me be proactive about helping customers and explaining why their water bill is what it is – from big leaks down to water being used for showers or irrigation," McNiel says. "The transition to Metron has made a world of difference."

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No More Missing Water

Metron's smart meters also record water flow more accurately, helping to ensure that every drop gets accurately tracked and billed – a big upgrade from the older equipment, which was under-reporting water flow. "We were losing a substantial amount of money because the old meters weren't calculating the right amount of water usage," McNiel says. And as McNiel is quick to point out, more accurate meter readings can be an issue of equity. "The cost of water losses is spread across all customers. This way we can be sure we are charging customers for the water they are actually using."

At one 900-unit manufactured-home community, installing just two Metron meters to cover the whole campus led to a big increase in billed water usage. The previous meters had only been 10 or 15 years old, but Metron's impeller-style devices proved far more sensitive and accurate.

"The first new bill we issued using Metron data detected 15 percent more water usage than discovered using the old meters," McNiel says. "Switching to the Metron meter made that big of a difference."

Metron's smart meters also mean that water theft is a thing of the past. In some parts of Michigan, residents have been known to pop the head off meters, reducing recorded water flow – but Metron's equipment immediately reports any outages.

"If there's something wrong with your water meter, we see it instantly and can get to the bottom of billing issues a lot quicker," McNiel says. "We're collecting substantially more revenues since changing up our meters."

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Moving Forward with Metron

McNiel admits he got a little nervous when Scio Township's Board approved his request for a full meter replacement program. "Anytime you recommend something like this, there's a moment of hesitation – did I pick the right thing? Are these meters going to be what we need?" he says. "But it turns out I shouldn't have worried. Everything's working just as Metron said it would."

Word of Scio Township's successful replacement program has gotten around: other local utility leaders often call McNiel to ask his advice about switching to cellular smart meters. "More and more communities have been reaching out," he says. "I tell them: if it's my choice, I'm always going with Metron. You can get the WaterScope information through the cellular network – and who wouldn't want that?"

For the foreseeable future, Scio Township plans to keep swapping out old hardware, while also requiring Metron devices for new construction. "Our township is expanding fast, so we're going to need a lot more Metron meters here over the next few years," McNiel says.

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