

# "It Was Pretty Disconnected." How Chattanooga Built One Stormwater Program Out of Five.

## THE PROGRAM

### Before 2NFORM, there was no way to see across the program.

Chattanooga runs MS4 stormwater compliance across all six minimum control measures, each relying on a different group of people in a different department to do the work, track the data, and document compliance. Today, 29 city staff use 2NFORM across those programs. Three years ago, none of them had a shared system.

Josh Rogers wanted to be the bridge. He saw a program that operated in silos, five departments doing compliance work that was never designed to connect, and he wanted to change that. His word for the state of things: "disconnected".

Annual reporting meant tracking down each group individually, sending emails, and assembling whatever each team had managed to save. Not because anyone was failing. Because there was no shared system.



City of Chattanooga  
Hamilton County, TN

POPULATION  
**187,000**

PROGRAM SCOPE  
**All Six MCMs**

DEPARTMENTS CONNECTED  
**Five**

**There was no central location for any of our compliance records.**

— JOSH ROGERS · CITY OF CHATTANOOGA, BEFORE 2NFORM

CITY OF CHATTANOOGA, TN — CITYWIDE MS4 PROGRAM — THREE YEARS IN

**29** staff

City staff using 2NFORM across the compliance program

**1,693**

Field inspections completed in FY2025

**3,000** hrs+

Estimated annual time savings, post-construction program alone

1,480 registered projects and more than 4,000 structural BMPs tracked in a single system across all six minimum control measures

## THE BEFORE

**Post-construction had the biggest structural gap.**

Stormwater control measures (SCMs) entered a spreadsheet when a development closed out, if someone thought to add them. There was no map of where they were, no way to verify every registered SCM had been inspected, no mechanism to catch what slipped through. In a city that keeps growing, that gap was closing in on the program.

*"There was no visualization, no spatial database that we could see where people were going, where they needed to go," Rogers said. "I felt like there would be different spreadsheets. And so there may be SCMs that never got looked at."*

Rogers came to 2NFORM to solve an integration challenge. He needed a system that could support compliance for all six MCMs, connect them to shared data, and give him something he had never had before: a map. Not a spreadsheet of what was supposed to happen. A live, spatial picture of which watersheds were covered, which stormwater assets and facilities had been inspected, and which had not.

**That was the plan. The rollout was harder.**

Change management at this scale is always a people problem before it is a technology problem. Rogers was coordinating across departments he didn't directly control, asking groups who hadn't chosen the system to change how they worked. Some came in ready. Others needed more time, more direct engagement, and evidence that 2NFORM could be configured to match their existing workflows, not replace them.

**There was no visualization, no spatial database that we could see where people were going, where they needed to go.**

— JOSH ROGERS • CITY OF CHATTANOOGA, BEFORE 2NFORM

REGISTERED PROJECTS

**1,480**

post-construction projects tracked

STRUCTURAL BMPS

**4,000+**

associated stormwater structures



Field sampling in a Chattanooga watershed.



City staff walking a stormwater control measure together in the field.

City of Chattanooga Stormwater Program

#### GETTING FIVE DEPARTMENTS INTO ONE SYSTEM

### A rollout with barriers on multiple fronts became one with a shared understanding and a path forward.

2NFORM supports stormwater programs in 23 states, built to be flexible because no two programs run identically. What Maggie Mathias, 2NDNATURE's Chief of Product, brought to Chattanooga was the ability to demonstrate that flexibility in practice, group by group. During implementation, Maggie came onsite and met with each team separately, asked how they planned their work and tracked their findings.

She then showed each group how 2NFORM could support those exact workflows and where a modern GIS-based digital tool could even improve them. For groups that had been skeptical, that sequence changed the conversation.

*"I felt valued. The fact that Maggie came and spent the time with us," Rogers said.*

He also credited the 2NDNATURE account team for relationship-building that had established trust before the implementation challenges surfaced.

*"For her to come in and really listen respectfully and take it in, I think they did a lot to help ease the concerns for some of the people there," he said.*

**Instead of me having to keep a separate list or some sort of reminder of where I've been, 2NFORM does that for me. And when I get back to the office the inspection's already done.**

— BAILEE LESSENBERRY • CITY OF CHATTANOOGA

PROGRAMS SUPPORTED  
**All Six MCMs**

DEPARTMENTS  
**Five, One System**

2NFORM FOOTPRINT  
**23 States**

CITY STAFF ON PLATFORM  
**29 Users**

## THE FIELD STAFF WHO HELP SHAPE THE TOOL

**Bailee Lessenberry joined Chattanooga's post-construction team shortly after 2NFORM went live. She has never worked without it.**

That made her something the implementation team didn't anticipate: a user with no legacy workflow to protect and a clear instinct for what the tool needed to do better. She became a product contributor as much as a field inspector.

The auto-generated site map PDF, now a feature 2NDNATURE demonstrates in customer demos, started with her enforcement workflow. When Lessenberry sends a violation notice to a property owner, she includes a map showing exactly where the SCM sits on the property. Many owners don't know where their stormwater structures are. Some don't know they have them.

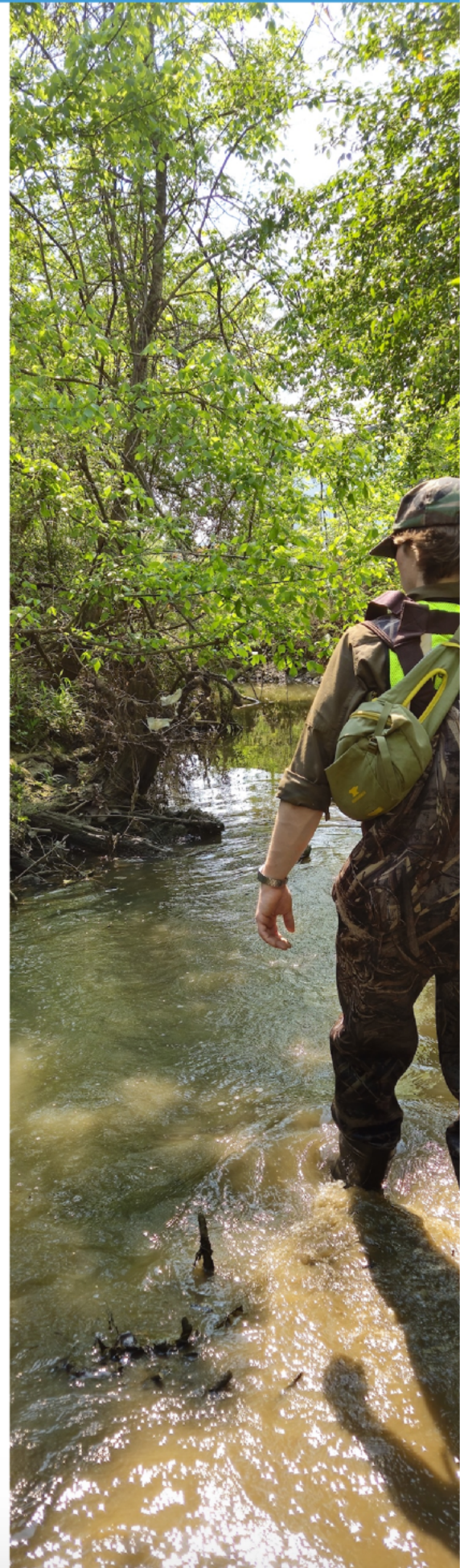
*"For all of our enforcement letters that we send out, we include a site map because a lot of the property owners either don't know where their structures are or don't know they have structures at all," Lessenberry said.*

She had been making those maps manually from Google Maps screenshots until she asked for 2NFORM to generate them automatically.

*"Instead of me having to keep a separate list or some sort of reminder of where I've been, 2NFORM does that for me. And when I get back to the office the inspection's already done," Lessenberry said. "I love the ease of doing inspections on 2NFORM."*

**I love the ease of doing inspections on 2NFORM.**

— BAILEE LESSENBERY • POST-CONSTRUCTION TEAM



## THE NUMBERS

Rogers now assigns field staff to one watershed at a time and can see coverage citywide in a way that wasn't possible when the inventory lived in separate spreadsheets. Chattanooga's post-construction program tracks 1,480 registered projects and more than 4,000 associated structural BMPs. In FY2025, the team completed 1,693 field inspections, and estimated time savings for the post-construction program alone exceed 3,000 staff hours per year.

**3,000+**  
STAFF HOURS SAVED PER YEAR

|                                                                                                                                       |                                                                                                                               |                                                                                                                                    |
|---------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------|
| <p><b>1,480</b></p> <p>registered post-construction projects, mapped and tracked in one system instead of scattered spreadsheets.</p> | <p><b>4,000+</b></p> <p>associated structural BMPs, each with a location, an inspection history, and a responsible party.</p> | <p><b>1,693</b></p> <p>field inspections completed in FY2025, assigned one watershed at a time with citywide coverage visible.</p> |
|---------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------|

| CHATTANOOGA MS4 PROGRAM · IN 2NFORM                              | CURRENT           |
|------------------------------------------------------------------|-------------------|
| Minimum control measures supported                               | <b>All six</b>    |
| City staff using 2NFORM                                          | <b>29</b>         |
| Registered post-construction projects                            | <b>1,480</b>      |
| Associated structural BMPs                                       | <b>4,000+</b>     |
| Field inspections completed, FY2025                              | <b>1,693</b>      |
| Industrial and commercial facilities inspected                   | <b>265</b>        |
| <b>Estimated Annual Time Savings · Post-Construction Program</b> | <b>3,000+ hrs</b> |

*"Even in just the three years that I've been here, the stormwater program has expanded considerably," Lessenberry said. "I'm really excited for the day that everything is in 2NFORM. That still hasn't happened and remains a work in progress."*

Adopting 2NFORM to track inspections and maintenance of municipal stormwater assets has required sustained investment from both sides. City leadership aligned the organization around the expectation. 2NDNATURE prioritized configurations for how the crew works in the field. The module is in active use and progressing.

*"I feel like 2NDNATURE went above and beyond," Rogers said. "They did so much to help the municipal operations crew working in the field."*

## POISED TO GO BEYOND COMPLIANCE

**Three years in, the clearest signal of where Rogers is now is his Monday morning emails.**

Every week an automated report shows what the municipal maintenance crew completed and flagged. When it is blank two weeks running, that is when he reaches out.

*"On Monday I can see just from the automatically shared spreadsheet that this person reported this problem last week," Rogers said. "For the last two weeks, that spreadsheet's been blank. I'm like, oh, what's going on?"*

Rogers is now positioned to use the data in 2NFORM to go beyond compliance and understand where the program is working and where to concentrate next. Three years of industrial and commercial inspection data across 265 facilities will surface the most common findings citywide, pointing the team toward targeted outreach before findings become violations and earning credit for prevention, not just enforcement.

*"I think we can get even more cohesion within all the independent groups that we have," Rogers said. "2NFORM continues to be a unifying tool to help bring us together."*

## "2NFORM continues to be a unifying tool to help bring us together."

JOSH ROGERS • CITY OF CHATTANOOGA



**City of Chattanooga**

Hamilton County, TN • 2NFORM across all six MCMs



Science-driven stormwater compliance technology.

### SEE WHAT THIS MEANS FOR YOUR PROGRAM

If your compliance records live in separate spreadsheets across separate departments, 2NDNATURE can show you what Chattanooga uses and estimate the impact for your program specifically.

Request a Demo  
**2ndnaturewater.com**