

930 Hours Back. How Wake Forest Built the Post-Construction Program Its Growth Demanded.

THE PROGRAM

Four years ago, an MS4 audit came to the Town of Wake Forest, North Carolina, and the stormwater program had to answer for itself.

Wake Forest sits in the Research Triangle's growth corridor. Since 2000, the population has grown more than 300%. One subdivision approved, one wet pond installed, one more stormwater control measure handed off to a private landowner who may or may not know what they're responsible for. By the time the audit hit, the stormwater program Kevin Kirsch and Nick Nolte were responsible for had grown fast and the systems holding it together could not keep up.

"We got audited," Kevin said. "And stormwater just exploded."

What came after was a decision to actually build the program, not just run it. A stormwater utility passed in July 2024. The compliance calendar got more demanding. Kevin, a Stormwater Specialist in the Town's engineering department, was doing the inspections, sending the maintenance notices, tracking private landowners, and compiling the annual report. Most of it happened on a laptop, in a parking lot, waiting for OneDrive to sync.

He knew there had to be a better way. In October 2025, after comparing options, Wake Forest subscribed to the 2NFORM Post Construction module. By December, less than two months after kickoff, Kevin had sent maintenance notices to all 180 projects in their registry.



WAKE
FOREST

Town of Wake Forest
Wake County, NC

2NFORM LIVE SINCE
October 2025

MODULES ACTIVE
Post-Construction + IDDE

WAKE FOREST, NC — POST-CONSTRUCTION PROGRAM — YEAR 1

930 hrs

Annual staff time saved across all compliance tasks

50%

Landowner response rate within 5 months of first notices

\$69,800

Documented annual staff time savings at \$75/hr

180 regulated post-construction projects tracked, inspected, and documented in a single system

THE BEFORE

Kevin's post-construction workflow before 2NFORM was not one problem. It was four problems that compounded each other.

Planning work consumed roughly a full day per week. Before heading to a site, Kevin needed to confirm the property contact, pull inspection history, locate assets in GIS, and figure out what the inspection history was for the north pond versus the south pond. Kevin's inspection workflows included running ArcGIS Online using a mobile hotspot in the field on his laptop. In a town with spotty coverage, some of his site prep happened in the parking lot of a neighborhood he hadn't reached yet.

The inspection itself was paperwork in the field and more paperwork in the car. Kevin carried a fillable PDF on his laptop, clicked into each field, typed the property name, email, location, asset condition. He photographed the stormwater controls or SCMs on his phone, walked back to the car, and waited for OneDrive to sync before attaching photos to the file. Then he labeled each folder by asset and filed the inspection inside the project folder. Data compilation ate another 30 minutes per project. He could inspect two or three projects on a good day.

Maintenance communications were the heaviest lift, two hours per project across 180 projects, finding the contact, pulling the plans, typing the email, tracking the response. Scattered across the calendar in ten-minute increments. The time spent managing project correspondence with the responsible parties took nine full work weeks a year.

"Nine full work weeks a year, just on correspondence."

The Town had tried to solve this. IT staff worked with Kevin and Nick Nolte, the Stormwater Utility Manager, to build inspection forms inside the asset management platform the public works department was already running. The build went through iteration after iteration, each version requiring changes, none of them quite right.

"It was always they bring us something and then we had to change it," Kevin said. "Round peg, square hole. I almost thought I'd rather just be out in the field doing it manually on my laptop again."

That sentence says something important. The manual laptop workflow was slow enough that a staff member was willing to go back to it rather than keep wrestling with a system that wasn't built for compliance. Asset management and MS4 compliance tracking are not the same job. The tools built for one were not designed for the other. Kevin and Nick went looking for an MS4 compliance system.

REGULATED PROJECTS

180

in the project registry

ANNUAL INSPECTIONS

400

SCM inspections per year

POPULATION GROWTH

300%

since 2000, Research Triangle

"Kevin and Nick went looking for an MS4 compliance system."



Kevin Kirsch, Stormwater Specialist, at a regulated stormwater control site in Wake Forest, NC.

Town of Wake Forest Stormwater Program

THE DECISION

The deciding factor was a stormwater compliance system built on GIS.

Wake Forest runs ArcGIS Online and the GIS team had already built out the Town's stormwater asset layer. The data existed. The contacts were in there. The SCM locations were mapped. What Kevin needed was a compliance platform that could take that foundation and work with it directly, not require a parallel data entry effort to keep two systems in sync.

Wake Forest signed in October 2025 with Post-Construction and IDDE. The scope was deliberate. The public works department was already committed to its asset management platform for operations and maintenance. Kevin and Nick weren't in that conversation when it happened, a dynamic familiar to stormwater program managers at municipalities where public works and stormwater sit in different budget lines and different procurement cycles. Rather than fight that boundary, they started where they had full ownership.

It was enough to start.

"To see that we could take our existing GIS data and give it to 2NDNATURE to populate 2NFORM to get us going seemed really great."

KEVIN KIRSCH · STORMWATER SPECIALIST

Within six weeks, Kevin had sent maintenance notices to all 180 projects in their registry. Before 2NFORM, that would have taken days following a project-by-project manual process. With 2NFORM, Kevin bulk-generated the letters, copied the addresses, and worked through the list in a single sitting.

Then the responses started coming back.

UTILITY ESTABLISHED
July 2024

SIGNED WITH 2NFORM
October 2025

ALL 180 NOTICES SENT
December 2025

RESPONSE RATE
50% in <5 months

THE SHIFT

The aha moment Kevin described was not a feature. It was an inbox. With 2NFORM, each maintenance notice includes a QR code. Landowners scanned it and submitted the required inspection documentation directly into Kevin's 2NFORM inbox. No spreadsheet. No hunting through email threads to reconstruct where a project stood.

They're responding, they're not throwing it in the trash. Once I started seeing those emails come in, I was just like, wow, it's working.

— KEVIN KIRSCH · STORMWATER SPECIALIST

In the first five months after signing, eighty-nine responses came back. That is a 50% response rate in the first year. That is 89 projects Kevin no longer had to manually chase through email threads, spreadsheets, and back-and-forth correspondence. Nothing falls through the cracks. He knows who has responded, who hasn't, and what each asset's current status is.

"Our goal doesn't stop at just sending maintenance notices to the responsible parties," Kevin said. "The goal is to make sure these systems are actually protecting water quality. Now that the administrative work isn't eating my week, I can now focus on that part."

The weekly administrative work isn't gone, it just no longer consumes Kevin's week.



THE NUMBERS

Wake Forest's post-construction program runs 180 regulated projects and conducts approximately 400 SCM inspections every year. Kevin estimated his time before and after 2NFORM across six task categories at the Town's loaded staff rate of \$75 per hour. Three numbers tell the story.

\$69,800
ANNUAL STAFF TIME SAVINGS

930 hrs

saved per year. Across planning, inspections, data entry, communications, and compliance follow-up. At \$75 per hour, that is \$69,800 in annual staff time returned to the program.

336 hrs

from resource management alone. Before 2NFORM, Kevin spent roughly a full day per week figuring out what needed to happen when. With 2NFORM's prioritized to-do list, that is down to about an hour a week.

270 hrs

from maintenance communications. What used to take about two hours per project across 180 projects is now automatically arriving directly in Kevin's inbox.

REQUIRED TASK · POST-CONSTRUCTION SITE RUNOFF PROGRAM	HOURS SAVED / YEAR
Resource Management (weekly planning)	336
Required Private Landowner Communications	270
Field Inspections	160
Data Compilation	90
Manage Follow-Ups and Enforcement Actions	60
Annual Reporting	8
Total Hours Saved per Year · Annual Cost Savings	930 hrs · \$69,800

2NDNATURE can provide a return on investment estimate for any program. **Contact us to find out more.**

WHAT'S NEXT

A Foundation for What Comes Next.

Wake Forest was one of the last municipalities in Wake County to establish a stormwater utility. That utility passed in July 2024. The program has a funding source now. It has a strong stormwater asset registry. It has 180 regulated post-construction projects tracked, inspected, and documented in a single system. Given the Town's rapid growth, the post-construction project count will continue to increase.

But this foundation is what makes the next step possible. Private landowners in Wake Forest need to understand not just that their stormwater controls require annual inspection, but why. A wet pond that isn't maintained stops functioning. A bioretention cell that isn't cleared loses its capacity. Whether that infrastructure actually retains volume and protects water quality depends on whether the people responsible for it know what they're managing. Kevin now has the time and the data to start that conversation.

The program Kevin runs today would not have been possible to manage the way he was managing it two years ago. The audit forced the question. The growth made doing nothing unsustainable. And the tool he found gave him back the hours to do the job the way it was always supposed to be done.

With the post-construction program running, Kevin is looking to extend 2NFORM into additional MS4 compliance programs as Wake Forest continues to grow.

**You're going from the Stone Age into space tech.
Everything's in front of you. You keep track of everything.**

— KEVIN KIRSCH · STORMWATER SPECIALIST

**Town of Wake Forest**

Wake County, NC · 2NFORM Post-Construction + IDDE

Science-driven stormwater compliance technology.

SEE WHAT THIS MEANS FOR YOUR PROGRAM

If your program is running post-construction compliance on spreadsheets or tools that don't talk to each other, 2NDNATURE can show you what Wake Forest uses and estimate the impact for your program specifically.

Request a Demo
2ndnaturewater.com