Meeting Summary
Etowah Sewer Advisory Committee

Date: **January 27, 2026, at 3:30 pm**

Location: **Etowah Horseshoe Fire Department**
15 Morgan Road, Etowah, NC

Agenda Item	Presenter
1. Call to Order, Welcome and Introductions	Chair Egolf
2. Approval of Summary of Previous Meeting Summary from Previous Meeting and Agenda	Chair Egolf
3. Public Comment	Chair Egolf
4. Update: NCDWQ Inspection Report	Jones
5. Update: Asset Inventory and Analysis project	Jones
6. Update: Plant Replacement Project and Funding	Jones
7. Update on System Repairs and Maintenance	Griffin
8. Questions and Adjourn	Chair Egolf

Staff Presentation and meeting notes from Annette Huetter are attached.

Etowah Sewer Advisory Committee

January 27, 2026

Meeting **Agenda**

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Update: NCDWQ Inspection Report

On December 17, 2025, our Wastewater Treatment Plant was inspected by NC Water Quality Regional Operations Section. The compliance inspection report is on the following pages.

EPA

United States Environmental Protection Agency
Washington, D.C. 20460

Water Compliance Inspection Report

Form Approved.
OMB No. 2040-0057
Approval expires 8-31-98

Section A: National Data System Coding (i.e., PCS)

Transaction Code	NPDES	yr/mo/day	Inspection Type	Inspector	Fac Type
N	NC0071323	25/12/17	R	S	

Inspection Work Days	Facility Self-Monitoring Evaluation Rating	B1	QA	Reserved
			N	

Section B: Facility Data

Name and Location of Facility Inspected (For Industrial Users discharging to POTW, also include POTW name and NPDES permit Number)

Etowah Sewer Company WWTP
Hwy 64
Etowah NC 28729

Entry Time/Date: 10:00AM 25/12/17
Exit Time/Date: 10:30AM 25/12/17
Permit Effective Date: 21/07/01
Permit Expiration Date: 25/11/30

Name(s) of Onsite Representative(s)/Titles(s)/Phone and Fax Number(s)

///
Mark Brandon Jones/ORC/828-273-0760/

Other Facility Data

Name, Address of Responsible Official/Title/Phone and Fax Number

Marcus Jones,1 Historic Courthouse Sq Ste 6 Hendersonville NC 28792/County Engineer/828-694-6560/8286986014

Contacted: No

Section C: Areas Evaluated During Inspection (Check only those areas evaluated)

■ Other

Section D: Summary of Finding/Comments (Attach additional sheets of narrative and checklists as necessary)

(See attachment summary)

Name(s) and Signature(s) of Inspector(s)	Agency/Office/Phone and Fax Numbers	Date
Trevor R Tubbs	DWR/ARO WQ/ - - /	1/8/2026
Richard Eguino	DWR/ARO WQ/828-296-4500/	1/8/2026
Jack Roberts	DWR/ARO WQ/828-296-4659/	1/8/2026

Signature of Management Q A Reviewer	Agency/Office/Phone and Fax Numbers	Date
		1/8/2026

EPA Form 3560-3 (Rev 9-94) Previous editions are obsolete.

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Section D: Summary of Finding/Comments (Attach additional sheets of narrative and checklists as necessary)

Richard Eguino, Jack Roberts, and Trevor Tubbs with the Asheville Regional Office conducted a Reconnaissance Inspection of the Etowah Sewer Company WWTP (NPDES Permit No. NC0071323) on December 17, 2025. This inspection was conducted at the request of Andrew Griffin, Henerson County Facility Services Director, and Mark Jones, ORC (Jones Environmental). Mr. Griffin and Mr. Jones were present during the inspection.

Henderson county took ownership of the WWTP and of the associated collection system in August of 2024. Mr. Griffin explained that they have identified the need for a large amount of repair work which is being prioritized in regard to safety, compliance, and capital improvements.

The WWTP is above ground and constructed of steel. It includes an influent lift station and two treatment trains in series. The north treatment train includes the equalization basin, an aeration basin, and a clarifier. The south treatment train includes an aeration basin, a clarifier, and the sludge holding basin which is not useable (described below). Tablet chlorine disinfection and tablet dechlorination is used.

The influent pump station routinely experiences bypass overflows following heavy rain events due to infiltration and inflow (I&I), which are reported to the Division. Mr. Griffin has explained how identifying the sources of I&I is an ongoing project and a high priority. The influent pump station includes two pumps that direct influent into the equalization (EQ) basin. Recently, a third pump has been temporarily installed in the influent pump station to help keep up with the high flow following rain events, which has helped to reduce the occurrence of bypass overflows.

The EQ basin was observed to have several structural integrity issues that indicate the possibility of a catastrophic failure. There are several bulges in the EQ basin's steel walls. One of these bulges is located at the southwest corner of the EQ basin, approximately seven feet high, and includes a seam split along the corner (see Photo 1 below). To avoid wastewater from leaking from the split seam, the liquid level inside the EQ basin is being kept no more than a few feet deep. However, during periods of I&I after rain events, the liquid level rises to the EQ basin's full capacity. Waterproof tape has been placed over the seam split to help control leaks when the liquid level rises. With the low liquid level, the internal structure of the EQ basin was observed, and a high amount of corrosion damage was noted—multiple steel support ribs and cross members are missing or highly damaged (see Photo 2 and Photo 3 below). It does not appear that the structural integrity of the EQ basin is sustainable due to the corrosion damage to these support structures.

The aeration basins and clarifiers did not have any observable bulges in their metal walls. They are maintained at their normal liquid level, so the condition of the internal structural support structures was not observed. However, any structural failures in the EQ basin or sludge holding chamber (described below) will also impact the other components which share the same exterior metal wall.

The sludge holding basin is not in use because it was filled with concrete (see Photo 4 below). Mr. Griffin explained it was filled with concrete before Henderson County took ownership. There are several bulges in the metal walls. Mr. Griffin and Mr. Jones believe the sludge holding chamber was filled with concrete to avoid a catastrophic structural failure and temporarily preserve the attached aeration basin.

Based on the observations made during this inspection, it appears the WWTP cannot safely treat any additional wastewater flow. If repairs are not feasible, a new WWTP, or tying into another WWTP's collection system is warranted in order to avoid a catastrophic structural failure.

Permit: NC0071323 **Owner - Facility:** Etowah Sewer Company WWTP
Inspection Date: 12/17/2025 **Inspection Type:** Reconnaissance

Other Yes No NA NE

Comment: See summary for details.

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Photo 1: View of seam split and bulging metal wall. Photo provided by Henderson County when the seam split was discovered in May of 2025.

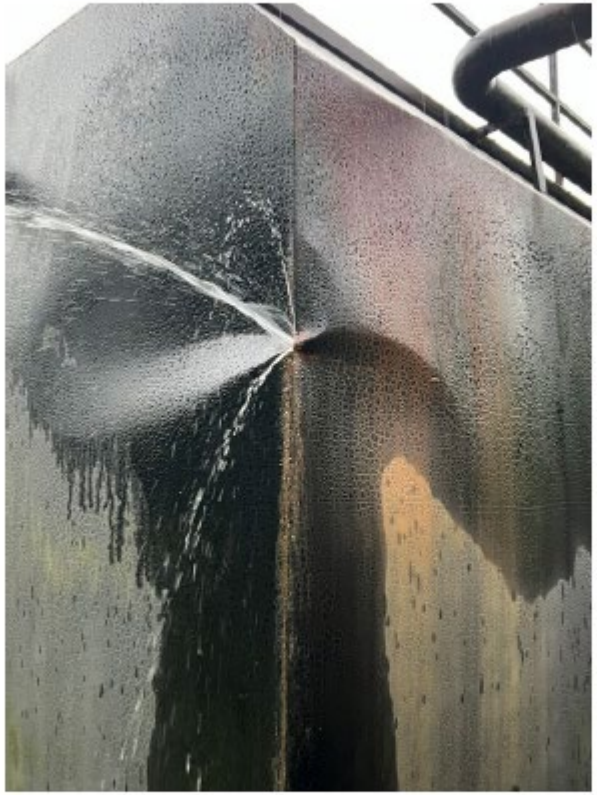

Photo 2: View inside EQ basin showing missing structural cross members.

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Photo 3: View inside EQ basin showing missing cross members and missing and corroded structural ribs.

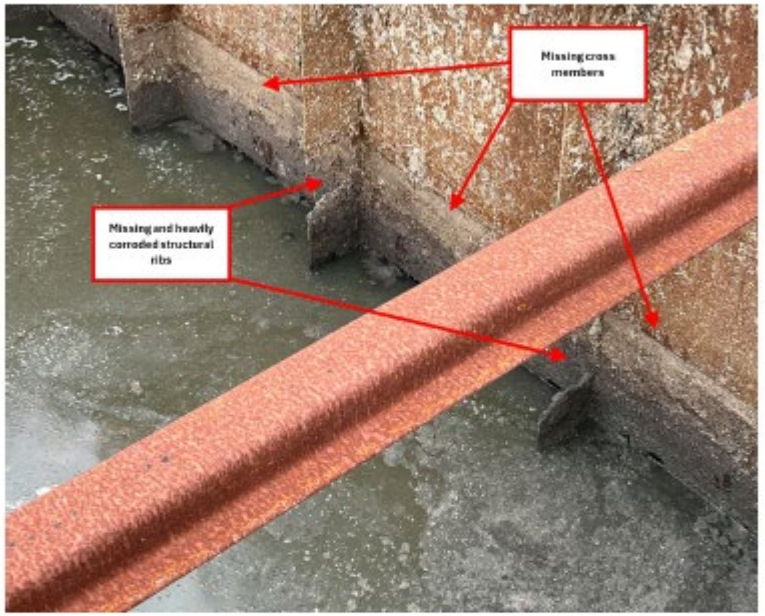

Photo 4: View of sludge holding basin which has been filled with concrete.

- Recall the older plant had a structural failure just prior to the plant transferring to the County. The previous operator addressed the problem by filling the sludge holding basin with concrete which seems to have stabilized the plant's wall. However, without the sludge basin, staff must pump sludge frequently from the processing portions of the plant which increases operations costs.

- With the latest failure and leak in the newer plant, we have lowered the plant level below the structural problems. This provides a temporary fix, but in practical terms has lowered our plant capacity by 25% to approximately 90,000 GPD. We are at or above the capacity with our daily average flow now.

- Staff has developed an emergency operation plan should one or both plants fail. The initial step is to employ pump and haul operations to stabilize until a rented plant can be mobilized. Depending on how long the emergency plan is implemented, the cost could be $1M to $2M.

Asset Inventory & Analysis Project

Etowah Asset Inventory & Analysis

Start: September 2024
Completion: March 2027

Scope: Map system asset into County GIS, analyze condition of assets, develop CIP, perform rate analysis.

Budget: $177,000 from SRP AIA grant

Actual Expenses: $177,000 to date

- *March 2027: Project closeout*
- *Feb 2026: Board presentation*
- *Draft Asset Management Plan*
- *Nov 2026: CIP Development & Rate Study*
- *June 2026: complete GPS data collection*
- 9-2-2025: Agreement with Withers Ravenel for $177,000.
- 6-2-2025: Selection of Withers Ravenel
- 8-20-2025: AIA grant acceptance of $150,000
- 9-19-2024: Asset and Inventory Analysis grant application to State Reserve Program with NCDWI

WWTP Replacement Project

Etowah Treatment Plant Start: March 2025 Completion: 4Q 2028 Scope: Replace wastewater treatment plant Budget: pending completion of planning Funding: $12,700,000 from NCDWI allocation Actual Expenses: • Planning: $163,000 • Design / Permitting: • Construction: • Construction Admin: • Contingency: • Total:	• *4-9-2026: Final Engineering Report* • 1-9-2025: Basis of Design memo • 10-21-2025: Senate Bill 449 removed NC ARPA funds, $12.7 million • 6-2-2025: Agreement with Withers Ravenel for planning, $160,000 • 3-12-2025: Selection of Withers Ravenel

Maintenance & Repairs

- Replaced Manhole in Etowah reach
- Jetted 2 lines in Etowah Reach
- Effluent Pump #1 Failed at WWTP sent to rebuild
- Odor Complaints addressed at plant by increasing soda ash and pump out both plants
- Cleaned up debris from Etowah reach manhole repair.
- WWTP had to be recalibrated and indicated under reporting by 58.4%
- 6 Customer service responses
- Gathered Data for CIP planning and work order system

- High Level alarms December total -19 No overflows
  - Etowah Reach -7
  - WWTP- 8
  - Brandymill – 1
  - Homeplace- 1
  - Meadows -1
  - Sunset Ridge – 1

Thank You

Questions?

DETAILED MEETING SUMMARY
ETOWAH SEWER ADVISORY COMMITTEE
JANUARY 27, 2026

Meeting purpose and context

- The committee met to receive updates from Henderson County staff on (1) the recent NCDEQ/NCDWQ inspection findings, (2) the ongoing Asset Inventory & Analysis (AIA) effort, (3) the treatment plant replacement program and funding, and (4) recent repairs/operations issues.

- Staff emphasized that conditions at the wastewater treatment plant have deteriorated materially since the prior committee update, but they have contingency planning in place to preserve sewer service even if a major component fails.

Call to order and introductions

- After informal pre-meeting conversation, the meeting began with introductions.
- County staff present and presenting:
    - Marcus Jones, County Engineer (stated he is the permit holder; primary technical presenter)
    - Andrew Griffin, Facilities Director (managing day-to-day system operations with his team; presented on inspection findings and system condition)

Administrative items and public comment

- Marcus Jones referenced the prior meeting summary being circulated as a "meeting summary" rather than formal minutes, and invited corrections by email.

- No written public comments were submitted ahead of time; none were presented during the public comment slot.

Key discussion themes and decisions

1. **<u>Capacity, taps, fairness, and developers</u>**

- A recurring concern raised was fairness between:
    - Existing customers already on the Etowah system,
    - Residents/areas with separate private systems nearby
    - Prospective new users (businesses/developers) seeking taps, and
    - Property owners who bought land expecting sewer access.

- Staff explained that "facilities are there so we can tap in" is incorrect in the current condition; the limiting factor is capacity/compliance, not just proximity of lines.

- Staff discussed the Utilities Commission matter involving WNC Resort Properties and noted that, as a result of that process, the County must offer taps when capacity becomes available, at the then-applicable cost. They stressed the practical implication: one requested tap can translate into many more similarly-situated taps that must be offered (a “one tap is really 50 taps” concept).

- Staff clarified “no new taps” under the current moratorium/compliance constraints, while also distinguishing that replacement of an existing connected structure (same meter size / no added flow) is different than adding new flow.

2. <u>Rate structure and potential impact fees</u>

- Staff explained the two-part structure that utilities often use:
    - Monthly user rates cover ongoing operations (billing, staffing, chemicals, routine maintenance).
    - Impact fees (if adopted) are intended to equitably assign capacity-related costs to new users. They described that North Carolina requires a formal study tying impact fees to the cost of capacity.

- Staff noted the rate increase already implemented was based on benchmarking and an “educated estimate” ahead of the full rate study results, and that the final study could still adjust rates up or down. They emphasized expectation management: the current number may not be the final number, but it will be supported by a transparent, cost-based analysis.

3. <u>Unbilled connections (“freeloading”) and mapping to confirm customer base</u>

- A question was asked about customers who have not been billed historically.

- Staff stated the issue is real but more complex than it sounds:
    - They believe there are at least 50 unbilled connections (possibly more).
    - Some affected customers may not realize they are not being billed.
    - The plan is to identify them through mapping/analysis, then bring a single consolidated recommendation to the Board of Commissioners on how to handle billing going forward and whether any back-charges are appropriate.

4. NCDEQ/NCDWQ inspection findings: "catastrophic failure" risk

- Staff reported that the State inspected the treatment plant and the collection system (separate permits) and issued written findings using unusually strong language indicating risk of catastrophic failure.

- Andrew described observed structural deterioration, including missing/rusted-through structural members in a digester tank and other failing components, with operational consequences:
    - Reduced usable volume in at least one tank (they are intentionally limiting operating levels to prevent leakage/spills).
    - One digester area filled with concrete, eliminating normal solids handling and increasing pumping frequency/costs.
    - Higher solids concentration, higher chemical use, more odor potential, and more wear on equipment.

- Operational impacts cited during the meeting:
    - Pumping costs have increased substantially (a figure of roughly $6,000 for the prior month was stated).
    - Odor complaints (notably near the shopping center) were discussed as tied to concentrated waste/solids handling constraints and the increased need for pumping and chemical dosing.

- Contingency planning for a catastrophic plant failure:
    - Staff explained they have evaluated emergency temporary treatment options.
    - A portable/temporary plant solution was described as very expensive (on the order of $2 million) and slow to deploy (estimated two to three weeks to set up).
    - During any interim period, service continuity would rely on aggressive pumping/hauling logistics (a "fleet of trucks" concept), driving major operating costs.

5. Asset Inventory & Analysis (AIA) project and timeline

- Staff described the AIA project as the foundational step to "know what the system is" (GIS mapping, condition assessment, and a capital improvement plan that forecasts replacements/maintenance across roughly a 10-year horizon).

- The completion date mentioned for the AIA/rate analysis work was March 2027.

- Staff tied AIA outputs directly to:
    - A defensible rate study,
    - Impact fee justification (if adopted), and
    - Better operational planning (replacement cycles, preventive cleaning/CCTV, pump inventory planning).

6. Repairs/maintenance since last update; monitoring issues

- Several operational pain points were described, including:
    - A manhole failure that required replacement (about $5,000).
    - Ongoing pump failures and rebuild costs (including large pumps; rebuild and replacement costs were discussed as significant).
    - A flow-meter calibration problem: the meter was reported to be under-reading by about 58%, requiring a data correction report to the State and possibly prompting meter replacement due to age and inability to hold calibration.
    - High-level alarms: staff referenced a high volume of alarms in December (19), each requiring staff response even if it does not rise to a reportable spill.

- Staffing and cost accounting:
    - Staff noted that a substantial amount of staff time is currently being absorbed outside the enterprise fund accounting structure (i.e., not fully charged back to the sewer fund), and that the rate study should address a sustainable staffing/indirect cost model.

7. "Flushable" wipes/rags/FOG education and enforcement

- A question was raised about whether alarms and failures share a common denominator.

- Staff described an influx of rags/wipes and related debris causing pump problems (wipes, shop towels, cleaning wipes, etc.).

- They discussed a practical education strategy:
    - A billing insert/flyer warning residents not to flush anything except human waste and toilet paper.
    - Potentially using visuals/photos of retrieved debris to make the message land.
    - Committee members were encouraged to spread the word within their communities.

- Staff acknowledged they have methods to identify sources over time, but education was positioned as the quickest, cheapest first step to reduce damage and operating cost.

8. <u>Plant replacement project, funding, and alternatives (regional pump station vs. new plant)</u>

- Staff confirmed the County is already moving "full steam ahead" on replacement planning and that rehab is not viable ("throwing good money after bad").

- Funding and schedule:
  - They referenced a major grant award of $12.7 million already secured.
  - Total project cost was described as likely exceeding $15 million, leaving a remaining gap they are actively pursuing with State support.
  - Current planning assumption: roughly a 3-year delivery timeline (improved from earlier 3–5 year framing because of the grant award).

- Alternatives and regional coordination:
  - Staff discussed evaluating either a new/expanded treatment plant and/or a regional pump station solution, including potential connection to MSD and/or the City of Hendersonville systems, and stated they have already initiated conversations about potential connection points.
  - Capacity considerations were discussed in plain terms:
    - Preliminary sizing discussed around 250,000 gallons/day for plant/pump station planning as a working figure (subject to the detailed analysis and policy choices).
    - The discharge permit capacity of 500,000 gallons/day was referenced for treated discharge to the French Broad, with the distinction that collection/pumping constraints also matter.

- Growth implications:
  - Committee discussion acknowledged the inherent policy tension:
    - Build too small and you lock out reasonable growth and/or push development toward less desirable onsite solutions.
    - Build too large and you may induce more growth demand than the community wants.
  - Staff emphasized that while engineering can "right-size" infrastructure, the ultimate growth posture is a policy call for the Commissioners informed by cost and zoning/buildout analysis.

9. **Specific development example: Bojangles**

- Bojangles was discussed as a concrete example of the current “no new tap” reality:
    - Without sewer service, they cannot obtain a certificate of occupancy.
    - They reportedly had not purchased the land as of the last attendee communication, and the project may be shelved unless/until sewer capacity becomes available.

How the committee can help

- Staff asked the committee to remain engaged, understand the constraints, and help communicate accurate information to customers to counter rumors/hearsay.
- Staff indicated that when options are ready for the Board, they will try to bring them to the advisory committee first to gather input and to be able to report the committee’s perspective back to the Commissioners.