



# NE CHATHAM COUNTY WASTEWATER STUDY COMMISSION

STATUS REPORT TO CHATHAM COUNTY BOARD OF COMMISSIONERS  
MAY 16, 2022

# Introduction

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# NE Chatham Wastewater Study Commission Co-Chairs



**Perry James**



**Liz Rolison**



**Scott Peck, PE**

# Study Commission Members

Perry James, co-chair

Scott Peck, co-chair

Liz Rolison, co-chair

Lee Bowman

Victor D'Amato

Francis DiGiano

James Flood

Halford House

David Moreau

Denise O'Gorman-Nowak

Robert Waldrop

Jason Welsch

# Study Commission Member Characteristics Supporting Wastewater Services

Collectively, over 300 Years of diverse experience in components of the wastewater industry—

- ▶ Academic leaders in area of environmental science and wastewater management
- ▶ Experience in engineering of wastewater facility construction
- ▶ Involvement in the development of public and private wastewater systems
- ▶ Local Government management experience
- ▶ Financings of \$ hundreds of millions in water and sewer projects
- ▶ Experience in best practice utility partnering by public jurisdictions
- ▶ Leadership in current state efforts to assist viable utility system improvements
- ▶ Leadership over community engagement on wastewater issues

# Objectives of Status Report

1. Review the “Problem Statement” approved by the Study Commission
2. Review the Study Commission’s Ten Potential Solutions
3. Identify Next Steps

# Why Do We feel the Study Commission's Work is Important?

*One of the major changes over the past 25 years is that nearly all counties provide services that once were only offered in towns or cities, such as recreation, water and sewer, and land use planning. Residents of incorporated areas in the county have generally come to expect that such services would be available, which has led to more and more counties initiating these services.*

*Chatham County Website*



- ▶ Wastewater services are a **vital** utility that will impact the quality of life of this county for years to come
- ▶ The opportunity is **now**. Studying this vital utility for Northeast Chatham County is a 'once in a lifetime' opportunity for our diverse group to assess and advise the County on the best sustainable solutions to be considered
- ▶ To fail to achieve a sustainable wastewater system poses significant **risks** to the county - quality of service risks, environmental problems, economic risks, and even tax burdens from unbalanced commercial and residential representation

# Problem Statement

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# Purpose of NE Chatham County Wastewater Study Commission

The proposal for the Wastewater Study Commission approved by the CCBOC in Sept 2021, describes our purpose as:

- Define the “problem” and hopes for the outcomes from the study
- Identify a list of options to explore.
- Identify additional information needed or desired.
- Reach consensus on information to be included in a Phase 1 final report that will capture the viable options to inform work on Phase 2.
- Development of final report and recommendations.

# How was the Problem Statement Developed?

- During preparations for our 2nd meeting, the County's facilitator discussed an agenda item for our March 1<sup>st</sup> meeting:

*“What are the problem(s) with wastewater in the Study Area the commission would like to address?”*

- To prepare for that discussion:
  - Co-chairs developed a first draft of a Problem Statement that was sent out to each of the commission members for input and comment.
  - The Problem Statement was revised based on that feedback and sent to the County's facilitator as a starting point for the discussion.
- During the March 1st meeting - the Problem statement was discussed and then unanimously approved by the WWSC.

# Problems/Issues with Current Strategy

- Of the 14 package plants in NE Chatham County:
  - 3 systems are regularly not meeting nutrient requirements for discharge
  - 3 systems are having capacity issues
  - 3 systems are approaching end of life for portions of their WWTP
  - 1 system has had 35 sewage spills
  - Management oversight is lacking in many of these facilities
- Average flow of current systems is 1 mgd, with projected growth/land availability we conservatively estimate a total capacity of 2-3 mgd by 2050.
- Root causes of these problems
  - Systems weren't designed for today's nutrient requirements for discharge.
  - Business model is not working:
    - Developers do not build WW facilities for the long term.
    - Private owners don't have incentive to invest in the system and staffing necessary to ensure quality operation and good management oversight.

# Problem Statement

*The growth in NE Chatham County is undeniable and Chatham County's current strategy for managing wastewater in this area is not sustainable long-term. To date, wastewater services have been provided either through privately owned package plants with limited treatment capacity that service the larger housing and commercial developments or by individual, often aging, residential onsite systems. The current approach has well documented problems and is not considered an adequate solution for the future. The NE Chatham County Wastewater Study Commission supports continued review of all options based upon smart growth principles, properly balanced residential and commercial property components, sound business practices and environmental sensitivity.*

# Key Points

- Statement identifies characteristics that we envision for a long term solution:
  - Reliable wastewater services that meet the needs of a balanced residential/commercial area as envisioned by the County Land Use planning efforts.
  - Comprehensive wastewater management practices to ensure quality management/oversight.
  - Potentially partnering with other jurisdictions, if feasible
  - Environmentally sensitive
  - Financially sound with costs spread over an adequate customer base to ensure financial stability.
- Key is identifying viable solutions that provide a long-term, sustainable strategy for NE Chatham County

# **NE Chatham County Potential Wastewater Solutions**

Developed by NE Chatham County Wastewater Commission and listed in random order

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# Potential Solutions List

## Current Situation

- Maintain Status Quo - Private package plants and septic systems

## Interim Measures to Consider while LT Solution is Pursued

- Managed Decentralized systems - Responsible mgmt. entity (RME) oversees package systems
- Agricultural Use of Reclaimed Water - Partial solution to reduce discharge into creeks

## Long-Term Solutions

- Expanded Town of Pittsboro system
- Extended Town of Sanford system
- Expanded Siler City system
- Extended OWASA system
- Extended South Durham system
- Extended Triangle (Durham County) system
- NE Chatham County Regional WW system

# Interim vs. Long-Term

During our most recent Commission meeting, it was discussed that the ultimate solution likely involves a combination of items from this list. None are mutually exclusive.

Our mission is to identify sustainable, long-term solutions for your consideration. Knowing that completion of a long-term solution will take time, we have also identified some interim measures that could help respond to current problems and enable a smoother transition to the long-term option.

We've challenged ourselves to consider:

- What options offer the “best” long-term solution for Chatham County.
- What can be done now to improve the performance of wastewater systems in this area and reduce NC DEQ violations?
- What actions could be implemented within a few years that would provide a responsible alternative in the interim?



- This list is only a starting point.
- This list is intended to guide our efforts for Education and Information Collection to allow a very high-level evaluation of feasibilities and benefits.
- As the Commission progresses, it is our intent to use the available information to eliminate any ideas that do not appear to be feasible and prioritize those that we would like to recommend to the Board for further evaluation during Phase 2 of the Study.

# Approach for High-Level Assessment of Options

During the April 25<sup>th</sup> Study Commission meeting the Commission members and the County Manager agreed on an approach to gain further understanding about the feasibility of the options listed.

- i. Study Commission developed a list of questions
- ii. The County Manager will provide feedback and insight as available from current experiences
- iii. The County Manager will take questions to appropriate public entities, along with two members of the commission, to gather information and answers. This information will be brought back and shared with the group.
- iv. This information will be used in Meeting 5 to refine the list of potential solutions and finalize recommendation for Phase II.

# Summary and Next Steps

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# Summary Points

- ▶ Early agreement on the wastewater problems faced in the northeast area of Chatham County
- ▶ Ten potential solutions evolved from Commission efforts
  - ▶ Transitional options
  - ▶ Sustainable, longer-term solutions
- ▶ Commission desire to gather further information to enable informed “high level” assessment of most feasible solutions to recommend
  - ▶ Agreement with County Administration to jointly engage with key public jurisdictions viewed as potential partners: Town of Pittsboro, Town of Sanford, City of Durham, Town of Siler City, OWASA

# Summary Points (cont.)

- ▶ Timing is Sensitive
  - ▶ Problems in Northeast Chatham grow more pressing
  - ▶ Growing opportunities for Chatham County require sustainable wastewater solutions - which take time to implement
  - ▶ There is “transformational” funding available for feasible studies and projects
    - ▶ Time requirements for expenditure
    - ▶ Applications require quality plans to be demonstrated

# Funding Opportunities

- ▶ Federal Infrastructure Investment and Jobs Act
  - ▶ Provides \$55 billion to “build smart, modern, resilient water and wastewater infrastructure
  - ▶ Flows through states
- ▶ American Rescue Plan Act (ARPA)
  - ▶ \$1.7 billion to North Carolina for Utility needs
  - ▶ Spring and Fall Applications to DEQ
  - ▶ Time requirements for expenditure
- ▶ Annual Funding Opportunities by DEQ
  - ▶ Merger, Regionalization Feasibility Study Grants

# Key DEQ Recommendations to Local Governments on Water and Wastewater System Needs

- ▶ Think 20, 30+ years on. What is best for the community then?
- ▶ Utility long-term viability
- ▶ Regionalization (interconnections, mergers, etc.)
- ▶ Resilience
- ▶ Resolve failing infrastructure

# Next Steps

- ▶ Study Commission works with County Manager on information gathering with public jurisdiction contacts
- ▶ Commission completes high level assessment of wastewater solutions
- ▶ Final Report of Study Commission Findings and Recommendations Made to CCBOC
- ▶ Board Consideration of Possible Phase II Efforts
  - ▶ Possible MRF Study on one or more sustainable solutions



# Conclusion

- ▶ Spartanburg South Carolina's Water organization likes to refer to its water and sewer operations as “A Utility of the Future ... Today”. In reading about it recently, I particularly liked a quote that I read from their CEO:  
“Wastewater treatment facilities symbolize a community's commitment to public health, to the environment, and to its economy.”
- ▶ Also, recently, at a state conference held by the NC League of Municipalities, I listened to a presentation by Mitchell Silver, a national expert on community planning, and one of his points was:  
“People don't just buy a Home, they buy a Place”
- ▶ Our Study Commission strongly believes that wastewater services are a key part of ensuring that our Chatham County “place” continues to meet your and our quality expectations
- ▶ Thank You for Supporting the Efforts of the NE Chatham Wastewater Study Commission
- ▶ Questions?