Jordan Nutrient Rules: Wastewater TAG#2

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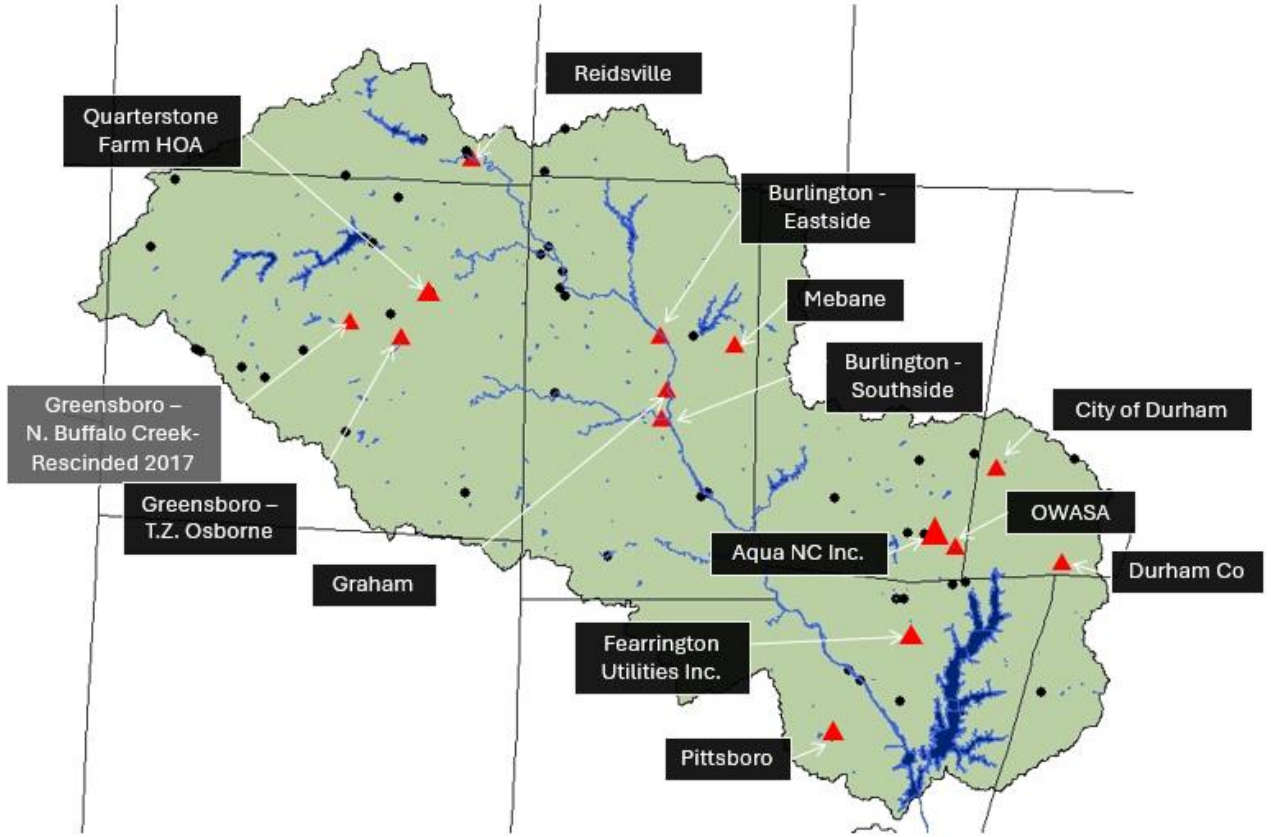
Welcome to the second Technical Advisory Group (TAG) for Wastewater Jordan Rule Readoption.

Introductions: please state name, affiliation, relation to Jordan wastewater regulations.



TAG Purpose & Process

Purpose of TAGs: to get feedback from stakeholders on current implementation and rule revision concepts. **There are three TAGs per rule.**

- **1st TAG - May 30th, 2024.** We covered current rule and implementation, how facilities have reduced TN and TP loading to the watershed over time, and started discussion on how to reduce loading even further.
- **2nd TAG - Nov 17th, 2024.**
- **3rd TAG - around April 2025.**

DWR plans to present rule concepts to EMC in late 2025.

Today's Agenda:

First Half	Review comments raised at the first TAG - PFAS standards and WW investment in NPS.
Second Half	Present preliminary calculations and discuss strategies to determine reduced nutrient allocations.

PFAS

- EPA announced regulations for six PFAS. In 2029, public water systems that have PFAS in drinking water which violates one or more MCLs must take action to reduce levels of these PFAS in their drinking water and must provide notification to the public of the violation.

- There is no surface water quality standard for specific PFAS compounds in North Carolina. **It is not known if a surface water quality standard for PFAS will be enacted and implemented at any time.**

- EPA expects to finalize a risk assessment for PFOA and PFOS in biosolids in the Winter 2024. This will not be a regulation but will be available to the public.

WW investment in NPS

- As verified by recent conversations with EPA Region 4, any current or future program for point source-nonpoint source offsets must meet specific criteria. **Point source dischargers with permits can buy nonpoint source credits in pounds of N and P – any offsets or trades must be quantified/measurable and conveyed in pounds of N and P.**

WW investment in NPS

- In practice to date, **principles and procedures for generating offset credits have only been developed for riparian buffer restoration and maintenance projects** and, thus, for the transfer of credits from the nonpoint sector to the point source sector.

- We suggest that stakeholders review and look for possible ways to improve the **current DWR guidelines** for use of nonpoint source reductions for trading with point source.

Reducing Load Allocations Over Time

- **We are considering different factors to guide reduced permitted nutrient allocations over time.**

- We would like to work with utilities to understand what would be a feasible reduction of nutrient allocations over time. A similar approach was taken to develop the Falls Nutrient Wastewater Rules.

Station Set: Haw Stations

P loading reduction (%)	Nitrogen Loading Reduction (%)							
	0%	10%	20%	30%	40%	50%	60%	70%
0%	0.21	0.20	0.18	0.17	0.16	0.16	0.17	0.10
10%	0.19	0.18	0.16	0.15	0.14	0.14	0.15	0.10
20%	0.16	0.15	0.14	0.13	0.12	0.12	0.12	0.09
30%	0.13	0.12	0.11	0.09	0.08	0.09	0.09	0.07
40%	0.10	0.10	0.08	0.07	0.06	0.05	0.05	0.05
50%	0.09	0.08	0.07	0.06	0.05	0.03	0.03	0.03
60%	0.08	0.08	0.06	0.05	0.04	0.03	0.02	0.02
70%	0.07	0.07	0.05	0.04	0.03	0.02	0.01	0.01

Possible:

- **30% N and 30% P**
- **20% N and 40% P**

> Studies outside the model show that its better to have a balance between N and P management for algal dynamics and impacts on both freshwater and marine systems.

Any new reduction goal will have a new baseline of 2014-2016.

Station Set: Morgan & Upper New Hope

Nitrogen Loading Reduction (%)

P loading reduction (%)	0%	10%	20%	30%	40%	50%	60%	70%
0%	0.29	0.28	0.26	0.25	0.22	0.17	0.11	0.05
10%	0.29	0.27	0.26	0.24	0.22	0.16	0.11	0.05
20%	0.28	0.26	0.25	0.24	0.21	0.16	0.11	0.05
30%	0.27	0.25	0.24	0.23	0.21	0.16	0.11	0.05
40%	0.26	0.24	0.24	0.22	0.20	0.16	0.11	0.05
50%	0.24	0.23	0.23	0.21	0.19	0.15	0.10	0.05
60%	0.23	0.22	0.21	0.20	0.18	0.14	0.10	0.05
70%	0.22	0.21	0.20	0.19	0.17	0.13	0.09	0.05

Station Set: Middle New Hope

Nitrogen Loading Reduction (%)

P loading reduction (%)	0%	10%	20%	30%	40%	50%	60%	70%
0%	0.25	0.23	0.21	0.18	0.13	0.11	0.09	0.06
10%	0.24	0.22	0.20	0.17	0.13	0.10	0.08	0.06
20%	0.23	0.21	0.19	0.17	0.12	0.10	0.08	0.05
30%	0.22	0.20	0.19	0.16	0.12	0.09	0.07	0.05
40%	0.21	0.19	0.18	0.15	0.11	0.09	0.07	0.04
50%	0.19	0.18	0.16	0.14	0.10	0.08	0.06	0.04
60%	0.17	0.16	0.14	0.12	0.08	0.06	0.05	0.03
70%	0.15	0.14	0.12	0.10	0.07	0.05	0.03	0.02

Color Scale

0.10	0.13	0.16	0.19	0.22	0.25	0.28	0.31	0.40

Combined Upper and Lower New Hope Possible:

- 50% N and 50% P

(upper – 60% N and 50% P; lower – 40%N and 50% P)

- Simplified implementation admin for Wake, Chatham, Cary

Any new reduction goal will have a new baseline of 2014-2016.

Preliminary calculations for major WWTPs:

Haw sub-basin –
A 20% N and 40% P reduction **might** equate to a concentration of

mg/l TP.

New Hope sub-basin –
A 50% N and %50% P reduction **might** equate to a concentration of

(Beyond limits of technology.)

Based off a 2014-2016 baseline nutrient discharges and 2024 permitted flows. We need to check all input numbers before sending out an excel to review scenarios.

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Thank you for your time and input!

We appreciate your time sending us your comments and any data/reports that can support wastewater decisions.