

Meeting Notes
Jordan Wastewater TAG Meeting 1
May 30, 2024, 10:00 am - noon, Teams

10:00-10:40am	Introductions and overview of TAG purpose and timeline	Ellie Rauh, DWR
	Basics of Wastewater Rule	Ellie Rauh, DWR
	Current Implementation and Reductions	Ellie Rauh, DWR
10:40-11:30am (or until Noon if longer discussion)	Review of other NSW wastewaters implementation and concentration limit scenarios	Ellie Rauh, DWR
	Discussion on TN and TP concentration limits and how to regulation going forward	Ellie Rauh, Siying Chen and Rich Gannon, DWR
	Closing	Ellie Rauh, DWR

Possible meeting discussion questions:

- Are any further operational or facility improvements planned to reduce TN or TP concentrations?
- Are there current plans to upgrade facilities to treat other contaminants?
 - Greensboro is testing for 1-4 Dioxane and plans for PFAS
- What would be needed for you to consistently achieve 3 mg/l TN and 0.18 mg/l TP at current and near-future flows?
 - Almost all facilities are currently around half to one-third of permitted flows
- Do you feel it would be equitable and feasible to require smaller dischargers - .02-.03 MGD – to meet limits?
- Is there interest in learning more about Neuse NRCA wastewater collaborations?
- Interest in starting/expanding group compliance associations in Jordan?
- Has anyone investigated nonpoint source nutrient reduction practices as an option?

Post-meeting main next steps:

- DWR: Complete interviews, research outstanding questions and comments, write up supporting research and new concepts, identify and send advance questions.
- TAG: Read write up and email/prepare comments before next TAG meeting.

Attendees:

New Hope Side:

- Kim Nimmer, OWASA
- Reggie Hicks, Durham City Dept WM

Haw Side:

- Bob Patterson, WR Director, Burlington
- John Dodson, Mebane WR Director
- Greensboro: Alicia Goots, Lab Superintendent; Kristine Williams, Ass't Director Utilities

Outside watershed:

- Brittany York, Siler City WWTF
- Holly Springs: Seann Byrd, Rachel Jones, Utility Engineer; Kendra Parrish, Director Utilities;

Other Interested:

Wesley Hutchins, McKim & Creed – work w/local utilities

Patty Barry, CPRC

Peter Raabe, American Rivers

TREBIC: Jon Hardister, President; Judy Stalder

Ben Brockschmidt, Piedmont Triad Apartment Association

DWR: Sara Gupta (intern); Matthew Nevills; Sylvia Chen – POTW Permitting; Fenton Brown, Elaine Wild, Doug Dowden - Industrial WW Permitting; Ryan Sparks - Basinwide Planning; Ellie Rauh, Rich Gannon – NPS Planning

Q: Upcoming facility improvements planned either for nutrients or other contaminants?

Kim Nimmer – feedback from Will Lawson, Utilities Director; master plan does have upgrades planned based on hydraulic or nutrient loading triggers; based on growth projections they fall 15 – 50 years out.

John Dodson, Mebane – getting ready to go out to bid on new 5-stage BNR. Probably start construction winter 2025. To take flow capacity up from 2.5 to 4.0 MGD.

Greensboro:

- Kristine Williams – started budget planning in 10-year CIP for PFAS. Also funding being budgeted for whatever nutrient needs they may get.
- Alicia - To decrease to scenario levels, would have to add carbon feed for N and some kind of membrane system for P b/c currently use chemical feed to meet P limits. \$200 - \$400 million for membrane. Hitting 0.3 – 0.8 mg/l P. Permitted flow is now 56 MGD since upgrade. Ellie – mean 0.5 mg/l P.

\$100m up to \$1B for 1,4-Dioxane, but need testing b/c most of systems contemplating are currently used for drinking water treatment, so could be issues.

Nutrient co-reductions from these measures? Not the typical types of treatment used for nutrients and so don't really know whether would provide nutrient benefits.

Bob Patterson, Burlington – need to do filter replace east plant so will probably do denitrification filter. Haven't gotten rolling on it yet. Anticipate installing C feed at both plants if these levels are required. Have biological P, don't. Expect need capacity upgrade South plant next 5 years. Doing capacity study east plant, this summer will be piloting via Collaboratory, DWI and NC Pure different pilot absorbents. And a novel process claimed to remove PFAS – foam fractionation. Nanotech company with something to capture and destroy PFAS. Also similar study to what Greensboro did for need for 1,4-D. \$\$ millions. Also have costs coming on drinking water side, PFAS related. Older plant have \$30-40 m upgrade coming. All competing for the same funding streams.

Too late to snag infrastructure funds for contaminant improvements?

- Bob P: got \$400k for study
- Kristine: also applied for PFOS side funds. Total project cost \$150 m at main WTP, GAC part \$60 m. Anticipate also having to do GAC at Townsend WTP. Also concerned significant rate increases associated with all this.

Kim N – OWASA also significant WTP costs upwards of \$75 million. Already gone to board for rate increase to cover this cost. Everyone in favor of reduction at source and polluter pays, but can't wait for that to get controls put in. Can only hope to recoup costs down line.

Kristine – PFOS coming from watershed, in soil, showing up in base stream flow, nothing to do for source control, have to treat at plant. Alicia – 1,4D coming from households as well; in laundry detergent and shampoo.

Bob P – have identified industries on PFAS, have worked with them. One going to PFAS-free, other working on it. Hope by 2025 that textile industry will be PFAS-free. Nobody knows when reduction will actually be seen once processes are PFAS-free. Also get it from 2 landfills leachate they send us; industry looking at treatment improvements, testing options now, DK effectiveness or if will be economical. EPA looking at drinking water, anticipate WW will be next.

Reggie Hicks – met w/Hazen this week. Will come back with rec's on options on emerging contaminants and nutrients. Want to plan into CIP.

Poll: interested in meetings on how to optimize? A: 7/10 yes; 1 no; 2 maybe.

Q: Interest in forming compliance Association?

- Bob - currently Haw compliance association: G'boro, Burlington, Reidsville, Graham, Mebane. Both N and P since Greensboro expansion.
- Have there been discussions about compliance group on New Hope side? Kim and Reggie?
 - o Reggie – no internal discussions in Durham to date.
 - o Kim – DK.

Poll: Tag very small dischargers with limits? A: 38% yes; 57% maybe; 7% no. 13 respondents.

Peter – also issue of I&I and credit for improving collections systems – like to see that built in.

Q: What's required to get down to 3 mg/l TN?

- Elijah (Greensboro Manager) – is flow variability to factor in. Would have to do footprint expansion. Membranes, carbon feed require added footprint.
- Bob: echo Elijah; unused capacity gives wet times buffer, but tech limits would require footprint expansion and further treatment installation.
- John Dodson: getting ready break ground brand new facility, so if couldn't meet 3 would have to send flow to Graham or elsewhere. Next month putting out to bid; early 2025 construction start to get online next 2-3 years.

Q: Anyone investigated use of NPS practices as part of picture?

- Alicia – have had a couple people come speak to us about doing things, but huge expense and not a lot of land in watershed. Haven't seen as cost-effective at this point.
- Kim – OWASA has not looked into it at this point, hazarding a guess.
- Kristine – as long as reductions are measured in pounds, will be hard to look at NPS practices. However if investment is used, interested in doing things with greater water quality value.
- Peter – encourage looking into as WW treatment C/B starts getting steep.

Q: will it be an issue to justify investment away from known nutrient reductions to NPS actions with much greater uncertainty?

- Kim – harder it is to define outcome, benefits, results, harder will be to go before board to ask for substantial funding.
 - o Peter – is one of problems with NPS, especially long-term maintenance issues. But where you get certainty is from watershed science showing ecosystem benefits vs only nutrients. LG staff all say need to spend on best practices, so when you shift compliance to investment, provides them flexibility wouldn't have otherwise.
- **Ellie – interested in NPS only if it will cost less than facility improvements?**
 - o Kristine – correct; council looking at rate payer impact and meeting compliance obligations. Will go with what's most cost-effective.

Kim: DWR plan going forward, and any process or content changes based on today's input?

- Ellie – yes, will need to look into complications driven by PFAS and 1,4-D. Also need to dig into very little guys questions and issues. Thinking next meeting in Sept or Nov. Intend further one-on-one meetings also. Welcome anyone sending us more reports, data as well.

Meeting ended 11:45.