



WATER

JUNE 4 | 11:00 AM - NOON



Audience Questions

Funding & Sustainability:

Q: Could the panel comment on creating new water sources for counties that need their own water supply instead of relying on adjacent counties? In particular, Franklin County had a plan to build a reservoir in the 1960's that could be reinstated. Are there lessons to be learned from the Randleman Dam project?

(A1): Surface water sources as drinking water supplies are an important water supply asset. There are significant contingencies associated with each project. The Randleman Dam project referred to in the question took many years to develop. There are significant regulatory hurdles, both legal and environmental, to purchasing (or condemning) land to developing reservoirs. They are enormously expensive. My sense is that they best pencil out for systems that supply a large user-base. In addition, there are additional treatment requirements and costs to using surface water sources (as compared to groundwater sources).

Could such a project work in Franklin County? Possibly, but there are so many contingencies that it would be hard to comment on the possibility more directly. It should always be an option among many to consider.

(A2): Reservoir projects are particularly challenging and are one reason many areas develop these on a regional basis or look at existing sources. Our Drinking Water State Revolving Fund (DWSRF) program, which is the Department of Environmental Quality's (DEQ) largest drinking water infrastructure program, has a federal restriction that prohibits water supply dams as an eligible project. DEQ's State Reserve program has no federal restrictions; however, it does not have sufficient capacity to provide meaningful funding compared to the cost for this type of project. It can be difficult to navigate an interlocal agreement (ILA) on regional projects but the UNC Environmental Finance Center has developed an ILA guidance document that may be a useful resource

(<https://efc.sog.unc.edu/resource/crafting-interlocal-water-and-wastewater-agreements>). This guide uses their expertise and others' past experiences to help craft successful agreements. There is also a condensed guide available.

Q: What is the percentage increase in cost year-over-year for North Carolina water?

(A1): The broad nature of this question makes it a difficult question to answer for two reasons:

- 1) cost is very much dependent on the source of the water, and
- 2) every system is different for the ratepayers.

(A2): There are multiple different ways to compare water and wastewater rates over time, but perhaps the simplest one is to compare the median monthly residential bill for both water and wastewater over time. The chart below shows the median residential rates from 2015 to 2020, assuming a residential consumption of 5,000 gallons per month (close to average for residential water and wastewater consumption). This information is from the annual *North Carolina Water and Wastewater Rates Reports*, which can be found on the UNC School of Government's Environmental Finance Center website at: <https://efc.sog.unc.edu/resource/north-carolina-water-and-wastewater-rates-report-2019>.

Median Monthly Bill for NC residents (5,000 gallons)

Year	Water	Wastewater
2020	\$35.98	\$44.27
2019	\$34.60	\$42.75
2018	\$34.00	\$42.00
2017	\$32.63	\$40.74
2016	\$31.80	\$38.88
2015	\$31.32	\$38.42

Source: Annual NC Water and Wastewater Reports

As the above chart indicates, median water and wastewater bills tend to show a small year-over-year increase, and the median wastewater bill is generally higher than the median water bill. These medians provide a broad statewide trend, but water and wastewater bills vary widely across utilities based on the size of the utility, the rate structure, residential vs. commercial consumption, and end-user consumption quantities.

For more specific rate comparisons across utilities, check out the Environmental Finance Center's (EFC) water and wastewater rates dashboard at:

<https://efc.sog.unc.edu/resource/north-carolina-water-and-wastewater-rates-dashboard>. The dashboard allows individuals to compare their utility's rates to other utilities of a similar size or geographic location. The EFC also makes available tables of past years' rates for comparison, which are available at:

<https://efc.sog.unc.edu/resource/tables-water-and-wastewater-bills-and-rate-structures-north-carolina-january-2019>

(A3): See page 10 of this report from the UNC Environmental Finance Center

https://efc.sog.unc.edu/sites/default/files/2020/NC%202020_Final.pdf. About 41% of utilities raised rates last year, and the median increase (among those that did raise rates) was 4.7% for water and 4.8% for wastewater. According to EFC staff, this has been fairly consistent over the last several years. Keep in mind that even if a utility doesn't increase rates, it doesn't necessarily equate to a lack of increasing costs or needs.

Internal and Financial Management:

Q: Do you see a potential place for small-scale, decentralized wastewater treatment systems like this in rural places? What problems do you see that are missing in this type or research?

<http://sanitation.pratt.duke.edu/community-treatment/about-community-treatment-project>

(A1): Absolutely. This approach needs to be on the table for small communities that, for whatever reason, cannot achieve economies of scale by becoming part of a larger system. There are questions of ownership and maintenance, particularly with the grinder pumps, that must be resolved, and of course there are the soil suitability issues to consider as well.

(A2): In the legislation mentioned during the webinar, there are specific provisions for decentralized systems, which may be needed in areas where there has been a loss in population or of large users of the system. Generally, with new technology or processes, a lack of familiarity can inhibit adoption of those new technologies.

