



## Frequently Asked Questions About the Brunswick County FY22 Approved Water Rates, Wholesale Water Rates, and Northwest Water Treatment Plant Upgrades

*Last Updated: Jan. 11, 2022*

### 1. Why do water rates need to increase?

- a. **Answer:** Two reasons. First, in June of 2017, Brunswick County was advised that Chemours had polluted the river with Per- and poly-flouroalkyl substances (including GenX) that conventional treatment methods could not remove. Based on the need to protect public health, the County immediately took steps that resulted in the installation of the costly low-pressure reverse osmosis systems necessary to remove the contaminants. Second, the County's Northwest Water Treatment Plant is nearing its maximum capacity and infrastructure improvements have been planned since 2006 that would provide additional water capacity necessary to sustain the ongoing growth that is critical to the local economy. Follow the project's status at [brunswickcountync.gov/nwtp](http://brunswickcountync.gov/nwtp)

### 2. Why do the FY22 approved water rates begin in January 2022?

- a. **Answer:** The County's debt service for the raw water main and the Northwest Water Treatment Plant expansion with low-pressure reverse osmosis treatment starts in this time frame. The County timed the start for the new rates in January to avoid charging customers too soon before debt payments had begun.

### 3. Can the timing of when the water rates go into effect be adjusted?

- a. **Answer:** Most of the wholesale contracts specify that the rates will adjust on July 1 each year. However, based on the timing that the debt service will be due, it is preferable to have the rates become effective on Jan. 1, 2022.

### 4. How do County retail customer bills compare with retail bills of utilities of similar size in North Carolina?

- a. **Answer:** Brunswick County's average retail water bill in the previous fiscal year (FY21) was \$24.83 for someone using 4,500 gallons per month. Using the FY22 rates, the estimated bill is \$34.68 for someone using 4,500 gallons (or \$36.75 for 5,000 gallons).

This is well below the average bill of other North Carolina coastal communities of \$41.04 (4,500 gallons) and the NC state median of \$38.45 (5,000 gallons). Even after the proposed rate increases, average county water bills will be comparable with the NC coastal communities while providing the best available treatment technology.



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### 5. How were the FY22 water rates determined?

- a. **Answer:** The rate changes considered recommendations from the Raftelis water rate study completed in 2019 and subsequent financial forecasts developed in 2020; the water rate study was updated and presented in March 2021. The rate methodology used in the study is in accordance with procedures outlined in the American Water Works Association M-1 Manual, which is the industry standard. This standard sets rates for each customer class based on the cost to provide that particular class water service. The rates address several factors:
- i. The anticipated debt service repayments that will begin in 2022 for capital improvements at the Northwest Water Treatment Plant
  - ii. The loss in revenues due to the recent closure of an industrial customer
  - iii. The expected reductions in revenue from wholesale customers
  - iv. The expected rate increases for raw water the County purchases from the Lower Cape Fear Water and Sewer Authority

### 6. What is the estimated monthly cost for a county retail customer with a 3/4-inch meter?

- a. **Answer:** For a retail county customer, the estimated monthly cost for someone using 4,500 gallons per month (average user) is \$34.68. For wholesale water customers, the rate will depend on your wholesale utility system's specific rate structure and whether it passes any increases to its customers.

### 7. When was the last time water rates were changed?

- a. **Answer:** Brunswick County retail water rates have seen minimal adjustments over the past 17 years. The only increase occurred in FY 2015 when the monthly retail base rate was increased by \$1. Meanwhile, volumetric rates for retail customers were decreased by \$0.90 in both FY 2004 and FY 2020. Changes to wholesale and industrial rates over the years have also remained lower, averaging about 1.4% per year.

### 8. Should the County increase system development fees to help reduce costs charged to wholesale customers?

- a. **Answer:** The American Water Works Association cost of service rate making methodology seeks to set rates that offset the costs of service to each customer class. Increasing the System Development Fees to retail customers to help subsidize the cost to wholesale customers is not consistent with the principles used in this method.



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### 9. What are the standard water rates currently within the County?

- a. **Answer:** The table shows standard water rates in FY21. Customers with lower usage are typically in lower tiers while customers with higher usage are in upper tiers.

Rate	Lower Tier Rate \$/per 1,000 gallons	Upper Tier Rate \$/per 1,000 gallons
County	\$ 2.85	\$ 3.85
Shallotte	\$ 5.33	\$ 7.13
Ocean Isle Beach	\$ 4.01	\$ 4.87
Leland	\$ 3.49	\$ 4.25
Leland Commercial	\$ 4.00	\$ 7.06
Southport	\$ 5.84	\$ 7.43
Oak Island	\$ 3.68	\$ 4.92
H2GO	\$ 3.50	\$ 4.00
Holden Beach	\$ 3.10	\$ 4.10
Bald Head Island	\$ 6.02	\$ 9.86

### 10. How does Brunswick County pay the water system treatment and transmission costs associated with its wholesale customers?

- a. **Answer:** Wholesale customers do not make any multi-million dollar up-front payments for water treatment and transmission infrastructure costs. The County uses its own bonding capacity to front the money for these improvements and ensures wholesale rates are adequate to cover the associated debt service.

### 11. How much of the capital recovery fees, system development fees, or similar charges that wholesale customers (utilities) collect from new development get transferred to Brunswick County for water treatment and transmission?

- a. **Answer:** Wholesale customers do not transmit system development fees directly to Brunswick County to offset capital costs for treatment and transmission infrastructure improvements like the Northwest Water Treatment Plant expansion. They may use these fees indirectly to pay for monthly wholesale water bills received from the County.



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### **12. Why are the rates for wholesale customers and industrial customers different under the approved rates?**

- a. **Answer:** The FY22 rates are now using the industry standards found in the AWWA M-1 manual, which bases the rates on the actual costs of service to each user group. Each group's peaking factor is a significant factor in rate determination. Since the makeup of our wholesale customers is essentially residential with limited commercial, these exhibit higher peaking factors than the industrial group.

### **13. Is the wholesale water customer's bill really increasing by 81.7% under the approved rates?**

- a. **Answer: No.** The County's wholesale water rate to other utilities in FY21 was \$2.89 per 1,000 gallons and the FY22 rate is \$5.25 per 1,000 gallons; this is a \$2.36 increase. While this is an 81.7% increase in the wholesale rate compared to the previous rate, it should not equate to an 81.7% increase to a customer's bill from any particular utility because there are other factors and fees that could influence the final rate (i.e., base fee, capital recovery fee, etc.).

Ultimately, it is a wholesale customer's decision whether and how they will pass on any changes in their wholesale rate down to their customers. Brunswick County cannot control how much a municipal/utility wholesale customer decides to charge its customers after it sells its water to them. A municipal/utility wholesale customer might determine that their current rate structure could absorb all or part of an increase already without any changes to their rate. Other factors such as the wholesale customer's water rate structure, water usage, and other water-related fees also impact a customer's overall water bill.



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**14. How do the wholesale rates factor in the growth within the municipalities that are wholesale customers and countywide?**

- a. **Answer:** Based on the Raftelis cost-of-service water rate study, water usage for retail and wholesale customers has increased on average by approximately 3.0% to 3.5% per year over the past several years. The County’s retail and wholesale customer base was expected to continue growing, **but at a more moderate pace**. Retail water flow was anticipated to increase by 2.6% per year, while wholesale water flow was anticipated to increase at a rate of 2.0% per year over the forecast period. However, as mentioned previously, it was anticipated that wholesale and industrial water flow would decrease due to losses in wholesale and industrial customers by FY 2022.

The table below calculates the revenue impact for various growth rates applied to our wholesale customers. The FY22 approved rates currently factor in an estimated 2% growth rate. Even by adjusting the estimated growth rate to 3%, 4%, or 5% would have minimal impact on revenues.

	FY 2020 Flows	Revenue Generated from Growth @ \$5.25 per 1,000 Gallons				
		1%	2%	3%	4%	5%
Town of Oak Island	387,649,640	\$ 20,352	\$ 40,703	\$ 61,055	\$ 81,406	\$ 101,758
Town of Ocean Isle Beach	234,601,080	12,317	24,633	36,950	49,266	61,583
City of Southport	193,527,020	10,160	20,320	30,481	40,641	50,801
Town of Shallotte	167,086,640	8,772	17,544	26,316	35,088	43,860
Town of Holden Beach	146,593,900	7,696	15,392	23,089	30,785	38,481
		59,297	118,593	177,890	237,186	296,483
Revenue impact for every 1% increase in growth				\$ 59,297	\$ 118,593	\$ 177,890
Per Raftelis Study:						
"Water usage for retail and wholesale customers has increased on average by approximately 3.0% to 3.5% per year over the past several years. The County’s retail and wholesale customer base was expected to continue growing, but at a more moderate pace. Retail water flow was anticipated to increase by 2.6% per year, while wholesale water flow was anticipated to increase at a rate of 2.0% per year over the forecast period. However as mentioned previously, it was anticipated that wholesale and industrial water flow would decrease due to losses in wholesale and industrial customers by FY 2022."						
Note: Estimates are conservative to account for fluctuation in irrigation due to weather						



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### **15. Why isn't Chemours and/or DuPont paying for the reverse osmosis treatment system?**

- a. **Answer:** In 2018, Brunswick County joined other utilities in the region to sue DuPont and Chemours. The County is seeking monetary damages from Chemours to hold it responsible for the millions of dollars it is spending to install a new treatment system necessary to remove PFAS contaminants. The lawsuit remains active and ongoing. Any proceeds received will be used for the benefit of all customer classes. How any proceeds from litigation would be returned has not been analyzed nor determined at this time.

### **16. Are water rates paying for the reverse osmosis and expansion at the plant?**

- a. **Answer:** Brunswick County is absorbing some of the costs for the Northwest Water Treatment Plant infrastructure enhancements—therefore all the project costs would not be directly passed on through water rates. However, the County must start making anticipated debt service repayments in 2022 for the installation of the reverse osmosis treatment system to remove unregulated PFAS contaminants like GenX from our water and to construct a new raw water line to increase capacity to the plant.

### **17. Has the County considered other options besides the rate changes?**

- a. **Answer:** Brunswick County considered several treatment options after the discovery of PFAS in our source water in 2017. An option to not provide advanced water treatment was thrown out because it is not protective of human health and would have significant economic impacts on the region. If damages are received from the lawsuit then they will be used for the benefit of all customer classes.

### **18. Has the County tried to apply for grants or federal funding to help pay for the plant?**

- a. **Answer: Yes.** The County applied for the Water Infrastructure Finance and Innovation Act (WIFIA) Federal program; although it was selected for the program, the County was unable to take advantage of the program benefits after working with the Local Government Commission and Bond Counsel. The County also applied for the State Revolving Funds but the project was not ranked high enough to receive funding because the NC Division of Environmental Quality's rating system did not provide significant points for *contaminants of concern* that did not have a regulatory Maximum Contaminant Level (MCL). Also, rankings are higher when MCLs are exceeded and violations occur, but since the contaminants are currently unregulated, no violations occurred.



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Brunswick County will continue to seek opportunities to fund the project through state and federal programs as eligibility requirements evolve to allow PFAS-driven projects to rank on priority lists.

### **19. Can Brunswick County use funding it received from the federal government due to COVID-19 to cover payments for the Northwest Water Treatment Plant Project?**

- a. **Answer: No.** The federal government's current guidelines for the American Rescue Plan indicate that counties cannot use their allocation to fund debt service for projects, including this one. The federal funding Brunswick County received in 2020 through the Coronavirus Relief Fund were restricted to pandemic- and health-related expenditures only.

Municipalities also received federal funding through the Coronavirus Relief Fund and will receive funding through the American Rescue Plan, as well. Customers of wholesale municipal water utilities are encouraged to ask their municipal leaders about what opportunities they are considering to use ARP funding for the benefit of their utility customer classes or other essential needs in the future.

### **20. When will additional water capacity be available at the Northwest Water Treatment Plant and when will the reverse osmosis advanced treatment system begin operation?**

**Answer:** Individuals can find the latest updates and details about the project at [brunswickcountync.gov/nwtp](https://brunswickcountync.gov/nwtp)

The following estimated completion or beneficial use start dates are as follows:

Conventional Treatment Expansion Completion: June 2022

Low-Pressure Reverse Osmosis Beneficial Use – Skids 1-5: June 2023

Low-Pressure Reverse Osmosis Completion – Skids 6-8: September 2023

Final Completion: December 2023

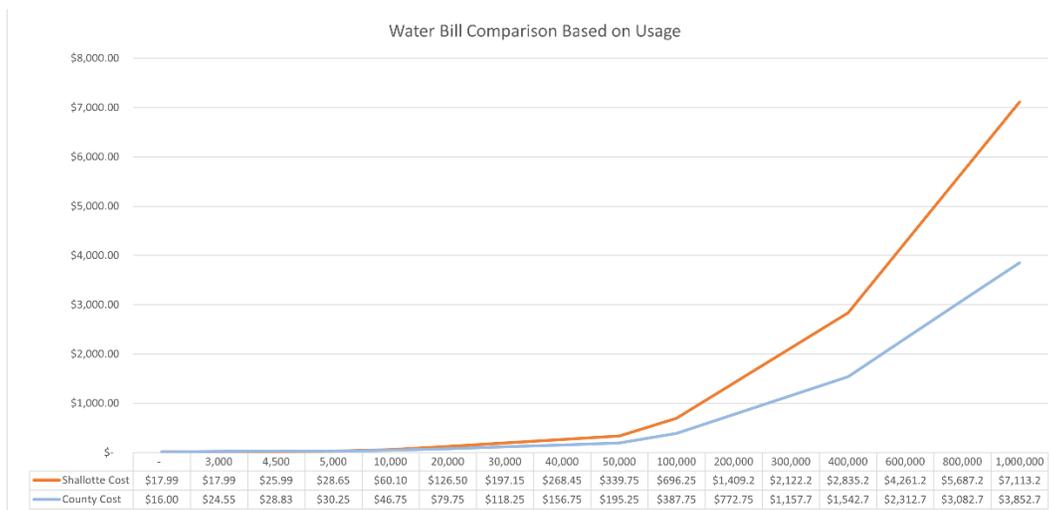


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### 21. How do the Town of Shallotte’s retail water bills compare to County retail water bills before the rate increase? (1-inch meter)

- a. **Answer:** The following chart compares the FY21 rates. The County rate is for a 1-inch meter. Based on this data, the Town of Shallotte’s FY21 rate structure shows that customers with higher volume usage (typically commercial customers) carry more of the burden of costs than a customer using a lower volume of water (typically residential customers). Shallotte’s FY21 rate structure does not appear to make a distinction between commercial use and residential use at this time.



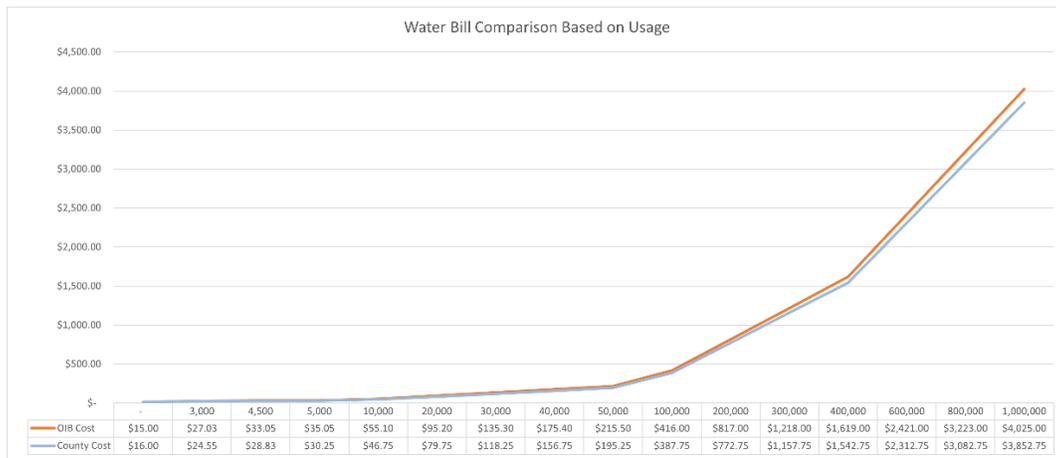


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**22. How do the Town of Ocean Isle Beach’s retail water bills compare to County retail water bills before the rate increase? (1-inch meter)**

**Answer:** The following chart compares the FY21 rates. The County rate is for a 1-inch meter. Based on this data, it appears the Town of Ocean Isle Beach’s FY21 rates are trending higher than the County’s FY21 rate for a 1-inch meter regardless of meter size. Ocean Isle Beach’s FY21 rate structure does not appear to make a distinction between commercial use and residential use at this time.





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### 23. How do the Town of Holden Beach’s retail water bills compare to County retail water bills before the rate increase? (1-inch meter)

