

Raftelis National 2022 Water and Wastewater Rate Survey



AWWA and Raftelis thank you and your utility for participating in the 2022 Water and Wastewater Rate Survey.

Please report your utility's most current information when responding to questions. For conversions and definitions, please see the following document: [Conversions and definitions](#). Use approximations or rounding only when necessary and make a note at the end of the section of the question number. Please provide answers for as many questions as possible.

You will be able to go back and forth between sections and your work will be saved for later provided that you access the survey through the personalized link that was sent to you. You can share this link with others in your organization and the work will remain saved.

Want to submit the completed survey in PDF form?

If you wish to submit a hard copy of the survey, please fill out the survey PDF and return to UNC EFC (EFC@sog.unc.edu) or fax to (919) 843-2528.

Utility Information

1 - UI

Respondent Name: _____

Respondent title: _____

Respondent phone: _____

Respondent email: _____

Utility name: _____

2 - UI Please list the municipalities and counties your utility serves. Please separate each with a comma (For example: Municipality 1, Municipality 2, Unincorporated County Area 1, etc.)

Retail: _____

Wholesale: _____

3 - UI Please select your utility's ownership model.

- Municipality (independent agency)
- Municipality (subdivision of another department)
- Governmental district/authority
- Homeowner's association/co-op
- Private/investor owner
- Other

4 - UI If you selected other for utility ownership model, please explain your utility's **ownership model**.

5 - UI What **core service(s)** does your utility provide?
Select all that apply.

- Water
- Wastewater

6 - UI What **specific services(s)** does your utility provide? *Select all that apply.*

- Water - Raw Source/Supply
- Water - Treatment
- Water - Transmission (Wholesale)
- Water - Distribution (Retail)
- Wastewater Conveyance
- Wastewater Treatment
- Wastewater Reclamation
- Separate Irrigation Meters
- Stormwater - Collection
- Stormwater - Green Infrastructure
- Stormwater - Treatment
- Other (please explain): _____

7 - UI Does your utility provide any of the following separate utility services? *Select all that apply.*

- Gas
- Electric
- Solid Waste
- Broadband

8 - UI Please provide an estimate of your utility's staff size as **full-time equivalents (FTEs)*** with your utility at the close of your **2021** fiscal or reporting period. If you cannot segregate by service, please enter the total FTEs in the cell labeled 'Combined services, cannot separate'

*Full-time Equivalent (FTE): an FTE is the allocation of employee time equal to 2080 hours per year (40 hrs/wk x 52 wks/yr). The number of FTEs is calculated by dividing the total employee hours worked during the reporting time by 2080 hrs.

- Water services: _____
- Wastewater services: _____
- Combined services; cannot separate: _____

9 - UI Does your utility have a customer assistance program (CAP)? Select all that apply.

- Bill discount
- Flexible terms (More frequent billing, levelized billing, etc.)
- Lifeline rate
- Temporary assistance
- Water efficiency (Leak repairs, rebates on fixtures, etc.)

9B - UI What is the revenue source(s) that funds your bill discount CAP?

- General fund
 - Rate revenues
 - Voluntary customer bill round up
 - Third-party funding (Charitable organization, non-profit, etc.)
 - State or federal funding
-

9B - UI What is the revenue source(s) that funds your flexible terms CAP?

- General fund
- Rate revenues
- Voluntary customer bill round up
- Third-party funding (Charitable organization, non-profit, etc.)
- State or federal funding

9B - UI What is the revenue source(s) that funds your lifeline rate CAP?

- General fund
 - Rate revenues
 - Voluntary customer bill round up
 - Third-party funding (Charitable organization, non-profit, etc.)
 - State or federal funding
-

9B - UI What is the revenue source(s) that funds your temporary assistance CAP?

- General fund
- Rate revenues
- Voluntary customer bill round up
- Third-party funding (Charitable organization, non-profit, etc.)
- State or federal funding

9B - UI What is the revenue source(s) that funds your water efficiency CAP?

- General fund
- Rate revenues
- Voluntary customer bill round up
- Third-party funding (Charitable organization, non-profit, etc.)
- State or federal funding

System Characteristics

1 - SC Please indicate your utility's **water sources** in millions of US gallons for 2021 or the most recent 12-month reporting period. *No response will be taken as a zero.*

- Groundwater withdrawals: _____
- Surface water withdrawals: _____
- Purchased water for regular, non-emergency use: _____
- Purchased raw water: _____
- Non-potable recycled or reused water: _____
- Purchased non-potable recycled or reused water: _____
- Desalination: _____
- Other – Description: _____
- Other – Volume: _____

2 - SC Please complete the following table regarding **water production** in millions of US-gallons per day (MGD) for 2021 or the most recent 12-month reporting period.

NOTE - this is the rate of water treated by the utility and would be 0 (leave with no response) if the utility only purchases water.

- Average-day water production rate: _____
- Maximum-day water production rate: _____
- Rated water treatment production capacity (design max daily): _____
- Please describe any special circumstances that impact the above answers:

3 - SC Please provide the total amount of **water sold** (i.e., distributed to customers) in millions of US-gallons in 2021 or the most recent 12-month reporting period. Include sales inside and outside city of municipal limits. *No response is taken as a zero. NOTE - this includes water treated and purchased.*

Retail water sales (MG/year): _____

Wholesale water sales (MG/year): _____

4 - SC Please indicate the **total billed** volume(s) of wastewater in millions of US gallons for 2021 or the most recent 12-month reporting period.
No response is taken as zero.

Retail billed wastewater conveyed and/or treated (MG/year): _____

Wholesale billed wastewater treated (MG/year): _____

5 - SC Please complete the following regarding **wastewater conveyed and/or treated** in millions of US gallons per day (MGD) for 2021 or the most recent 12-month reporting period.
No response is taken as a zero.

Average-day wastewater flow conveyed and/or treated (MGD): _____

Rated wastewater treatment capacity (design maximum daily) (MGD): _____

6 - SC What percentage of your utility's collection system is comprised of separate stormwater and sanitary sewers?

_____ %

7 - SC What are the approximate sizes of your utility's **service populations** as measured in persons (not connections or households)? Please base these approximations on 2021 utility data, data from the most recent 12-month reporting period, or current census data.

No response is taken as zero.

Retail service (residential, institutional, commercial, and industrial):

- Water: _____
- Wastewater: _____

Wholesale service (estimated population served by wholesale customers):

- Water: _____
- Wastewater: _____

8 - SC Please indicate the number of **active accounts** (billing accounts) served by your utility in 2021 or the most recent 12-month reporting period. Include sales inside and outside city or municipal limits. *No response is taken as a zero.*

Residential accounts - single family:

- Water: _____
- Wastewater: _____

Residential accounts - multi-family:

- Water: _____
- Wastewater: _____

Non-residential accounts (i.e., industrial, commercial, or irrigation):

- Water: _____
- Wastewater: _____

Wholesale accounts (i.e., sales for resale):

- Water: _____
- Wastewater: _____

9 - SC What **other water-related services(s)** does your utility provide?
Select all that apply.

- Demand management program
- Xeriscaping program
- Interior plumbing retrofits
- Landscape water audits
- Aquifer storage and recovery
- Source protection program
- Education programs
- Customer discounts - low volume
- Customer discounts - low income
- Other (please explain): _____

10 - SC What **other wastewater-related services(s)** does your utility provide?
Select all that apply.

- Greywater education
- Customer discounts - low volume
- Customer discounts - low income
- Non-potable reuse
- Indirect potable reuse
- Aquifer storage and recovery
- Other (please explain): _____

11 - SC Does your utility serve **reuse customers**?

Yes

No

12 - SC Does the **reuse rate structure** recover cost of service as allocated in the most recent cost of service study?

Yes

No

13 - SC How many **reuse accounts** does your utility serve? _____

Financial

1 - F What is your utility's **capital needs forecast** (expansion, upgrade, replacement, etc.) for the next five years (based on CIP or equivalent) in \$US? If your utility does not have at least a five-year CIP, please enter your forecast for as many years as possible.

Please enter forecasted capital needs only in the relevant column to your utility.

	Total Forecasted Capital Needs (\$)		
	Water	Wastewater	Combined
2022			
2023			
2024			
2025			
2026			
2027			

2 - F Please indicate the **drivers** behind your utility's CIP by checking the appropriate boxes. *Select all that apply.*

	CIP Drivers	
	Water	Wastewater
Repair or rehabilitation	<input type="checkbox"/>	<input type="checkbox"/>
Replacement	<input type="checkbox"/>	<input type="checkbox"/>
Expansion	<input type="checkbox"/>	<input type="checkbox"/>
New facilities	<input type="checkbox"/>	<input type="checkbox"/>
Upgrades related to new regulations	<input type="checkbox"/>	<input type="checkbox"/>

Water Rates

1 - **W** Does your utility have a seasonal rate structure for residential water customers?

Yes

No

2 - **W** What is the average **monthly** residential water consumption? Enter only the units that your utility uses. No need to convert.

Average monthly residential water consumption:

- Gallons: _____
- Cubic Feet: _____

3 - **W** What is the average monthly residential water consumption **during the average non-peak month**? If you have more than two seasons in your rate structure, use the lowest usage month. Enter only the units that your utility uses. No need to convert.

Average monthly residential water consumption during the average non-peak month:

- Gallons: _____
- Cubic Feet: _____

4 - **W** What is the average residential water consumption **during the average peak month**? Enter only the units that your utility uses. No need to convert.

Average monthly residential water consumption during the average peak month:

- Gallons: _____
 - Cubic Feet: _____
-

5 - W Does your utility serve **wholesale** customers?

Yes

No

6 - W Does the wholesale rate(s) recover cost of service as allocated in the most recent cost of service study?

Yes

No

7 - W What approach does your utility use for calculating wholesale rate(s)?

Cash basis

Utility basis

Other (please explain) _____

8 - W What is the rate of return used to calculate the wholesale rate(s)?
Enter a percentage (do not include % symbol).

_____ %

9 - W Does your utility charge a tapping fee or connection charge for residential water service (5/8" or 3/4" meter) to recover the cost of physically connecting customers to the system?

Yes

No

10 - W If a fixed tapping fee amount is charged to residential customers, what is the amount?
Enter a dollar amount.

\$ _____

11 - W Has your utility conducted a cost-of-service study to determine this tapping fee?

Yes

No

12 - W Does the tapping fee charge include a capital recovery component?

Yes

No

13 - W Does your utility charge system development, capital recovery, or impact fees to new residential customers to finance expansion of trunk facilities (i.e., source of supply, treatment facilities, transmission mains, etc.) or buy-in to existing capacity?

Yes

No

14 - W Assuming a new residential customer with a 5/8" or 3/4" water meter, 100 foot frontage, using an average of 1,000 cubic feet (7,480 gallons) of water per month, what is the amount of the fee? *Enter a dollar amount.*

\$ _____

15 - W When was the most recent system development, capital recovery, or impact fee determined? *Enter a year (YYYY).*

16 - W Has your utility conducted a cost-of-service study to determine this system development, capital recovery, or impact fee?

Yes

No

17 - W Does this system development, capital recovery, or impact fee include the cost to physically connect to the system?

Yes

No

18 - W Please indicate the types of rate surcharges that your utility imposes. *Select all that apply.*

Environmental fee

Security surcharge

Infrastructure or rehabilitation surcharge

Regulatory fee or surcharge

Conservation surcharge

No surcharges

Other (please enter here): _____

19 - W Does your utility provide service(s) outside of the city (municipal) limits?

Yes

No

20 - W How are rates for customers outside of city or municipal limits established?
Select all that apply.

- Utility basis
- General utility policy (i.e., utility discretion)
- Public utility commission ruling or policy
- City or county policy
- Contract
- State law
- Other (please enter here): _____

21 - W You selected that the utility basis is used to establish outside rates.
What is the rate of return used to determine the differential? *Enter a percentage.*

_____ %

22 - W Has your utility had to impose voluntary and/or mandatory water use restrictions since the beginning of calendar year 2021? *Select all that apply.*

- Voluntary
- Mandatory
- No restrictions

23 - W Has your utility implemented special rates or surcharges during times of restricted water use?

- Special rates
- Surcharges
- No

24 - W Notes or feedback. If you are providing notes on a particular response, please note the question number.

Wastewater Rates

1 - WW What is the average **monthly** residential wastewater flow rate? Enter only the units that your utility uses. No need to convert.

Average monthly residential wastewater flow rate:

- Gallons: _____
- Cubic Feet: _____

2- WW Please indicate if your utility imposes surcharges on customers for the following parameters? If so, please enter the surcharges per unit, the units (per pound, ccf, etc.), and the numerical limits?

	Does your utility impose this surcharge?			
	Check if yes	Surcharges/Tariffs	Units (per 1,000 gallons, CCF, pound, etc.)	Limit (mg/L or ppm)
Total Suspended Solids (TSS)	<input type="checkbox"/>			
Biological Oxygen Demand (BOD)	<input type="checkbox"/>			
Chemical Oxygen Demand (COD)	<input type="checkbox"/>			
Phosphorous	<input type="checkbox"/>			
Nitrogen	<input type="checkbox"/>			
Oil & Grease	<input type="checkbox"/>			

3 - WW Does your utility surcharge commercial customers such as restaurants for high strength discharges?

Yes

No

4 - WW Does your utility have an industrial pretreatment program?

Yes

No

5 - WW What charges does your utility impose to fund the industrial pretreatment program?
Select all that apply.

Permitting fees

Monitoring charges

Laboratory charges

Other (please enter here): _____

6 - WW Does your utility perform wholesale wastewater treatment for systems outside your service area?

Yes

No

7 - **WW** What components does the wholesale rate structure include?

- Base charge with no wastewater flow allowance
- Minimum charge with wastewater flow allowance (take or pay)
- Volumetric rate
- Other (please explain): _____

8 - **WW** Does the wholesale rate(s) recover cost of service as allocated in the most recent cost of service study?

- Yes
- No

9 - **WW** What approach does your utility use for calculating wholesale rates?

- Cash basis
- Utility basis
- Other (please enter here): _____

10 - **WW** You selected that the utility basis is used to establish wholesale rates. What is the rate of return used to determine the differential? *Enter a percentage.*

_____ %

11 - **WW** Does your utility charge a **tapping fee or connection charge** for residential wastewater service to recover the cost of physically connecting customers to the system?

- Yes
- No

12 - WW Does your utility charge a fixed tapping fee or connection charge?
If yes, what is the amount?

- No, no fixed fee is charged.
- Yes, a fixed fee is charged (enter dollar amount here): \$ _____

13 - WW Has your utility conducted a cost-of-service study to determine this tapping fee or connection charge?

- Yes
- No

14 - WW Does the tapping or connection charge include a capital recovery component?

- Yes
- No

15 - WW Does your utility charge system development, capital recovery, or impact fees to new residential customers to finance trunk facilities (i.e., treatment facilities, collection mains, etc.)?

- Yes
- No

16 - WW Assuming a new residential customer with a 5/8" or 3/4" water meter, 100-foot frontage, using an average of 1,000 cubic feet (7,480 gallons) of water per month, what is the amount of the fee? *Enter a dollar amount.*

\$ _____

17 - WW When was the most recent system development, capital recovery, or impact fee calculated? *Enter a year (YYYY).*

18 - WW Has your utility conducted a cost-of-service study to determine this system development, capital recovery, or impact fee?

Yes

No

19 - WW Does this system development, capital recovery, or impact fee include the cost to physically connect to the system?

Yes

No

20 - WW Please indicate the types of rate surcharges that your utility imposes. *Select all that apply.*

Environmental or regulatory surcharge

Infrastructure, rehabilitation, or capital surcharge

No surcharges

Other (please explain here): _____

21 - WW Does your utility provide service(s) outside of the city (municipal) limits?

Yes

No

22 - WW How are rates for customers outside of city or municipal limits established?
Select all that apply.

- Utility basis
- General utility policy (i.e., utility discretion)
- Public utility commission ruling or policy
- City or county policy
- Contract
- State law
- Other (please enter here): _____

23 - WW Does your local government charge a stormwater utility fee?

- Yes
- No, ad valorem property tax
- No

24 - WW Notes or feedback. If you have notes on a specific question, please indicate the question number.

PLEASE READ THE FOLLOWING:

Once you submit the survey through the link, you **cannot go back** to edit your responses.

Please review your answers before submitting the survey.

Once submitted electronically, you will be showing a summary of your responses. Click "download PDF" to save a copy.

As a reminder, you can also email this completed survey copy to Evan Kirk (emkirk@sog.unc.edu) or fax to (919) 843-2528.

Thank you!