



Meeting Summary

Water and Wastewater Utility Rate Study Community Advisory Group (RSCAG)

Monday, March 9, 2020

Ellen M. Bozman Government Center

6:30 – 8:00 p.m.

RSCAG Members Attending

Lily Duran
Herschel Kanter
Peter Robertson
Bob Orttung
Heitham Ghariani
Regina Boston
Nora Palmatier

RSCAG Members Absent

Matt Gerber
Daniel Logan
Michael Mesmer
Kathleen Harrison
Rafael Sampayo

County Staff and Consultants Attending

Mike Collins, Department of Environmental Services
Krista Bourgon-Abele, Department of Environmental Services
Janelle Okorie, Department of Environmental Services
Lisa Wilson, Department of Environmental Services
Bart Kreps, Raftelis
Will Kerr, Raftelis
Jason Gershowitz, Kearns & West
Samantha Ramsey, Kearns & West

1. WELCOME AND INTRODUCTIONS

Jason Gershowitz, the RSCAG facilitator, opened the meeting by welcoming participants and members of the public.

2. SPECIAL TOPICS PRESENTATION

During the third RSCAG meeting, advisory group members indicated that they would like an additional RSCAG meeting to discuss special topics related to the new water and wastewater rate structure. These special topics include affordability, outdoor use (irrigation) and wastewater billing, cooling towers, and water that leaks into the ground. The purpose of RSCAG Meeting 4 was to address these special topics, provide advisory group members and the public more information on them, and gather insights on how to incorporate them into the rate structure.

Affordability

Janelle Okorie, Department of Environmental Services, presented on affordability program options. The presentation summarized various affordability program options as well as key considerations for

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evaluating these options. Ms. Okorie prefaced her presentation by noting that affordability program options may be implemented only where legally permissible. She grouped the affordability program options into four categories: rate options, billing and collection options, customer assistance programs, and educational and technical assistance.

Ms. Okorie explained that affordability rate options are intended to incorporate affordability within the rate structure. Types of rate options include:

- **Lifeline Supply Rate:** Eligible low-income customers are charged a lower rate (“lifeline rate”) for the quantity of water deemed necessary for basic human needs. A higher rate is charged for all water use beyond that amount.
- **Conservation-Oriented Rate Structure:** Conservation-oriented rate structures encourage efficient water use. These rate structures often result in lower bills for low-income customers, particularly those with smaller lot sizes and smaller increases in consumption during the summer (peak water use season).
- **Discounted Rate Class:** Eligible low-income customers are billed according to a separate, discounted rate class. The discounted rate class for a particular customer may vary based on a number of factors such as income, household size, etc.
- **Low-to-Moderate Fixed Charge:** Many utilities implement fixed charges to achieve greater revenue stability. High fixed charges give customers less control over their bills. Low-to-moderate fixed charges give customers more ability to reduce their bills via usage reductions, while also helping utilities achieve revenue stability.

Billing and collection options are plans or programs that assist customers in coping with late payment or non-payment. Types of billing and collection options include:

- **Deferred Payment Plans:** Deferred payment plans allow the customer to pay the entire balance due at a later date.
- **Installment Plan (with disconnection avoidance or arrears forgiveness):** Customer enters into an agreement that allows them to divide their balance due into multiple installments instead of one lump sum. Installment plans may stand alone or be coupled with disconnection avoidance or arrears forgiveness.
- **Budget (or “Levelized”) Billing:** Prior year usage is used to determine the average amount the customer should pay per billing period the following year. At the end of the following year, a “true-up” is performed to determine whether additional sums are due, or a credit should be issued.
- **Alternative Billing Schedule:** “Pick-a-date” programs allow customers to change the timing of bills to more closely align with their income stream. For example, the timing might be changed to coincide with the receipt of Social Security or pension income.
- **Allow Others to Make a Payment to Customer’s Account:** Some utilities allow someone other than the account holder to make a payment to an account. More recently, utilities have begun offering “gift cards” that can be purchased by others and provided to customers to help them pay their utility bills.

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- **Pre-Disconnection Protections:** The utility gives customers formal notice of opportunities to enter into deferred payment arrangements, installment plans, etc. before water service is disconnected.

Customer Assistance programs provide financial assistance to qualifying low-income customers. Types of customer assistance programs include:

- **Bill Payment Assistance for Income-Qualified Households:** Eligible low-income customers may receive grants to help them pay their utility bill or prevent disconnection of service. Eligible customers may receive more than one grant may be available per year.
- **Leak Repair Assistance for Income-Qualified Customers:** Eligible low-income customers who own and occupy their own homes may receive grants for repair of leaky toilets, faucets, plumbing fixtures, etc. Eligible customers may receive more than one grant per year.
- **Crisis Assistance/One-time Emergency Grants:** One-time emergency grants for households with employment, medical, or other personal emergencies. For direct customers, often coupled with flexible billing and payment options (e.g., waiver of delinquency charge).
- **Assistance for Occupants of Multi-family Dwellings:**
 - **Portland, OR:** The Portland Water Bureau offers financial assistance to eligible, low-income occupants of multi-family dwellings, who are facing eviction.
 - **Seattle, WA:** Seattle Public Utilities assists renters in multi-family units by providing a water credit on their electric bill.
- **Bill Credit for Eligible Multi-family Affordable Housing Units: New York, NY:** The Department of Environmental Protection partnered with the NYC Housing Development Corporation to offer a monthly credit to affordable, multi-family housing projects that participate in a conservation program and demonstrate efficient water use.
- **Donations and/or Referrals to Social Service Agencies:** Utility donates money to social service agencies that offer utility bill assistance or financial literacy programs. Utility may also offer an elevated level of customer service by partnering with the social service agency to share information about customers in need.

Educational and technical assistance programs provide education towards low-income customers that inform them how to reduce water use and, subsequently, their water bill. Types of educational and technical assistance programs include:

- **Conservation Education:** Utility provides or sponsors educational programs that allow customers to learn about efficient water use practices.
- **Targeted Conservation Retrofit and Rebate Programs:** With rebate programs, the utility provides a partial refund to off-set the cost of the purchase of high-efficiency fixtures. For retrofits, the utility may offer a one-time credit when retrofits are performed (e.g., xeriscaping) or when high-efficiency products (e.g., sprinkler heads) are installed. Both types of programs can be limited to low-income customers.
- **Residential Water Audits:** Utilities offers free water audits to assist households with assessing how efficiently they use water and identifying opportunities to reduce water use.

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Ms. Okorie offered key considerations for implementing affordability programs. She explained that any affordability program must fall within the program objectives of the rate structure. Through Arlington County's community engagement efforts, conservation was ranked as community member's top value and affordability was ranked second. Ms. Okorie noted that as the County considers programmatic objectives, the County wants to gather additional insights as to how they can be incorporated within the rate structure.

Legality and risk and funding sources are also important considerations for developing a rate structure. Ms. Okorie explained that Virginia has strict legislation that guides how resources from the County's enterprise fund can be allocated. Any affordability assistance programs must adhere to these guidelines. Additional considerations include administrative feasibility, resource requirements, as well as the ability to reach households in the community.

Following the presentation, participants shared questions and answers captured in the table below. Throughout the discussion, two additional themes emerged:

- **Defining Low-Income Status:** Participants inquired about what is considered when determining low-income status for customers. They specifically indicated that they would like greater clarification around how, or if, an individual's assets are considered.
- **Increased Communication and Education about Assistance Programs:** Participants shared that increased communication about assistance programs would be very helpful for understanding eligibility, program adoption, as well as the program reach and achieved benefits.

Ref	Question or Comment	Response
1	Do low-income individuals who live in multi-family housing see their individual water and wastewater bill? Or is it lumped in with their rent?	Typically, individuals who live in multi-family housing do not receive their own water bill. There are many assistance programs that are offered that do not reach those populations because rent and utilities are combined.
2	Does Arlington County consider an individual's assets when determining if they qualify as a low-income customer? Or do they only look at income?	The Department of Human Services (DHS) has a form that they reference when determining low-income status. Arlington County will follow up with the specific definition of low-income and whether the County considers assets when determining low-income status.
3	Can you please provide more detail on one-time emergency assistance versus long-term assistance?	One-time emergency assistance is available to low-income customers one time per year. Grant programs, for assistance related to leak repairs and bills, typically enable low-income customers to receive \$350 – 500 per year. Customers can apply multiple times a

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		year, but usually can not exceed \$500 in assistance per year. Arlington County does not currently offer grant programs.
4	I'm familiar with energy assistance volunteers that offer free repair services in homes. I've always heard of them being oriented towards electrical services. Do they ever assist with housing or plumbing issues?	On the electric side, there are state programs where the state is providing funds for the county to disperse resources for electric, heating, and gas bills. There is a greater opportunity for alignment between Arlington County and these types of assistance groups
5	How can individuals benefit from assistance programs, especially if they live in multi-family housing?	In Virginia, there is one utility that provides a discounted class rate, but the legal structure within that jurisdiction is different than Arlington County. It all comes back to funding and whether resources are being dispersed from the enterprise funds or other funds. If it's coming from the enterprise fund, there is concern around subsidizing one group. Within Virginia, there are some programs the customer can apply for, but others require the customer to qualify based on income.
6	In Arlington County, how many people do you think would qualify for these types of programs?	As the County evaluates affordability options for the rate structure, we will provide estimates for these.
7	Why doesn't Arlington County provide pre-disconnection notifications?	The County does provide multiple notifications between account delinquency and disconnection. Arlington County has not specifically provided a disconnection notice, but it is a good idea to consider going forward.

Outdoor Use (Irrigation) & Wastewater Billing

Will Kerr, Raftelis, presented on residential wastewater billing. Mr. Kerr began by elaborating on wastewater billing methodology, explaining that water usage is often used as a surrogate to estimate wastewater flows. Water usage data is available to public utilities and has a good correlation to wastewater usage. He noted that it is impractical to put residential wastewater meters on all residences.

Mr. Kerr explained the various residential wastewater billing methodologies, noting that wastewater revenue requirements must still be recovered regardless of the chosen methodology. Within a rate structure, there are four primary types of residential wastewater billing methodologies: percentage of water usage, water usage with a cap (fixed), water usage with a cap (variable), and averaged winter consumption.

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Percentage of Water Usage is when a customer's wastewater rate is based on a percentage of their total water usage.

- **Advantage:** Percentage of Water Usage is easy to administer.
- **Disadvantage:** Percentage of Water Usage benefits customers without discretionary use.

Water Usage with a Cap (Fixed)

- **Advantage:** Water Usage with a Cap (Fixed) is easy to administer.
- **Disadvantage:** Water Usage with a Cap (Fixed) enables high-volume customers to benefit significantly.

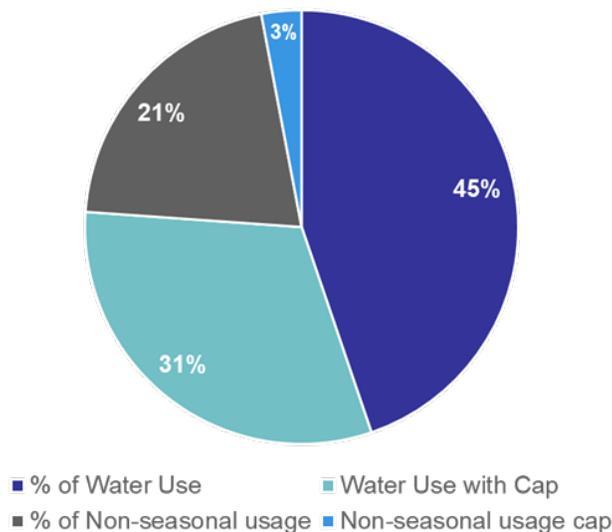
Water Usage with a Cap (Variable)

- **Advantage:** Water Usage with a Cap (Variable) is more equitable. Additionally, bills are capped based on historic demand patterns.
- **Disadvantage:** Water Usage with a Cap (Variable) is difficult to administer and requires additional decision-making. Quarterly billing can also increase the complexity of this method.

Average Winter Consumption is when a customer's wastewater rate is determined by their average water usage during a set period of winter months.

- **Advantage:** Average Winter Consumption is more equitable. Bills are based on historic demand patterns and customers receive a more predictable monthly bill.
- **Disadvantage:** Average Winter Consumption allows "snowbirds," or people who reside elsewhere during the winter months, to benefit from this billing pattern. Quarterly billing can also increase the complexity of this method.

Fig. Wastewater Billing Methodology



(Source: 2019 National Water & Wastewater Rate Survey Co-Produced by AWWA & Raftelis)

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Mr. Kerr provided an overview of how neighboring counties structure their residential wastewater billing. He highlighted that within Arlington County's neighboring counties, it is common to see the customer's wastewater bill based on 100% of water use or water usage capped at average winter consumption. The chart below summarizes local residential wastewater billing methodologies.

Utility	Wastewater Billing Policy
AlexRenew (Alexandria)	Water usage capped at Average Winter Consumption (AWC) between December – February 4,000 gal/no minimum AWC Cap
Falls Church	Water usage capped at AWC during February – April Quarterly billing
DC Water	100% of water use
Prince William County	Water usage capped at 3-month AWC during summer
WSSC	100 % of water use
Fairfax (City)	100% of water use
Fairfax (County)	Water usage capped at AWC
Loudoun Water	Water usage capped at AWC + 3,000 gallons Quarterly billing

The table below captures questions and answers participants shared following the Outdoor Use (Irrigation) & Wastewater Billing presentation.

Ref	Question or Comment	Response
8	Is everyone being billed at 90% for the Percentage of Water Usage?	No, only single-family residential customers are being billed through this manner.
9	Can Arlington County use estimated rainwater to calculate the sewer plant's inflow and mass balance?	The County has broad numbers for predicting precipitation, however there are too many moving parts to accurately calculate this figure. Arlington County takes in water from neighboring counties and some wastewater also flows to other treatment facilities. Additionally, it can be difficult to factor water leakage into this prediction.
10	The Urban Forestry Commission calculated average costs for watering one tree during the summer and it came out to \$78. That is not a lot of money to water a tree.	A healthy, mature tree will adapt to water shortage conditions, except in instances of extreme drought

Cooling Towers

Bart Kreps, Raftelis, presented on cooling towers and deduct (water only) meters. He explained that cooling towers are used for air conditioning for large commercial properties. Through this system, a portion of the water used evaporates while the rest is discharged into the sewer. Mr. Kreps shared that some utilities install "water-only" deduct meters to measure the water that is not returned to the sewer system. He noted that there is a cost associated with purchasing and installing the deduct meters, along with reading and reporting consumption and ongoing administration and maintenance. A utility might

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also decide to implement a cooling tower credit program, which estimates the “return” factor to determine the customer’s wastewater bill. Mr. Kreps noted that Arlington County has a fair amount of cooling towers because there are a lot of commercial, governmental, and multi-family properties within the County that require these types of systems.

Mr. Kreps offered considerations for the types of cooling tower and deduct metering programs.

Percentage of Water Usage (*Arlington County’s current program*)

- **Advantage:** Percentage of Water Usage is easy to administer
- **Disadvantage:** Percentage of Water Usage can raise concerns over equity because the customer pays for wastewater charges for water that does not enter the sewer system.

Deduct/ Water-Only Meters

- **Advantage:** Deduct/ Water-Only Meters may benefit commercial customers that use water for cooling towers.
- **Disadvantage:** Deduct/ Water-Only Meters require additional costs, billing, administration, and could create other policy issues

Cooling Tower Credit Program

- **Advantage:** Cooling Tower Credit Programs may benefit commercial customers that use water for cooling towers.
- **Disadvantage:** Cooling Tower Credit Programs may create concerns over accuracy and other policy issues.

Mr. Kreps highlighted other water-only considerations, including sewer flow meters and irrigation meters. He explained that sewer flow meters are often used for large commercial customers that use significant process water, such as a brewery or the Pentagon. He noted that for large volume customers, these meters are accurate, though they do require a high degree of maintenance. He added that sewer flow meters are typically not accurate at lower volumes. Irrigation meters are available for both residential and non-residential customers, where the customer bears the cost for the meter and installation.

Mr. Kreps provided an overview of the types of policies neighboring counties have in relation to cooling towers, deduct metering, and irrigation. The chart below summarizes neighboring counties’ policies on cooling towers, deduct metering, and irrigation.

Utility	Cooling Tower / Deduct / Irrigation Policies
DC Water	Cooling Tower Credit Program – Bill credited for either metered flows or estimated sewer discharge. Irrigation Credit Program – A separate meter or deduct meter is installed (used behind the main meter)
Prince William County	Customers have the option of opening a separate water-only account (for irrigation, pools, or water-cooling tower purposes). The customer pays a separate water availability feed.
WSSC	“Submeters” are available, though the customer is responsible for the cost of installation. “Hose Bib” meters are available, too.

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Fairfax Water	The customer is responsible for the costs of installing a second water-only meter. Meters are for commercial uses, such as irrigation, cooling tower use, and community pools
Loudoun Water	The County encourages reclaimed water for cooling towers. Water-only accounts are not offered.

The table below captures questions and answers from the Cooling Tower presentation.

Ref	Question or Comment	Response
11	As a matter of policy, are cooling towers something the County wants?	<p>Cooling towers are used as a standard item in large buildings. It is important to note that cooling towers evaporate water, but some water is also returned to the wastewater system.</p> <p>DC Water meters the water on both sides of the cooling tower to know how much water is going in and how much is coming out. However, this creates administrative issues. It's a topic that only affects the commercial customer class.</p>
12	Would it be worth it to install a sewer flow meter on a multi-family home?	The county would not be able to rely on sewer flow meter readings from a multi-family home because the flow is typically not high enough volume to provide accurate readings.

Water Leaking into the Ground

Mike Collins, Department of Environmental Services, presented on water leaking into the ground. Mr. Collins began his presentation by distinguishing a public leak and a private leak. He explained that any leak that occurs up to, and including, the water meter is the County's (public) responsibility. This is because the County owns the connection from the water main up to, and including, the meter. Any leak that occurs behind the meter is considered a private plumbing issues.

Next, Mr. Collins explained the most common ways for customers to identify leaks. This includes seeing water discharging from the group or meter box, hearing running water in the toilets or pipes, or receiving an usually high water bill.

Once a water leak has been identified, there are several ways the County can assist the customer.

- **24-Hour Hotline:** The County offers a 24-hour hotline for water or sewer emergencies; customers may contact the emergency hotline at 703-228-6555.
- **Leak Adjustment Program:** When a customer receives a high bill and is able to identify the leak, they may contact the Water and Utilities Customer Contact Center and submit a receipt from a plumber. Then, the County will credit a portion of the bill back to the customer. If the leak occurred inside the home, Arlington County will waive 50% of the excess water and 50% of the

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excess wastewater. If it was a private service line leak, Arlington County will waive 50% of the excess water and 100% of the excess wastewater.

- **High-Use Investigation Program:** When a customer receives a high water-use notice, Arlington County offers for a plumber to come to the residence or building and conduct a high-use investigation. The plumber will read the meter and pull previous water use data to assist the customer in narrowing down where the leak originated.

Following the presentation, participants shared questions and answers captured in the table below. Throughout the discussion, one additional themes emerged:

- **Leak Assistance Programs:** Participants inquired about assistance programs that help low-income customers pay for leakage costs. Advisory group members voiced concerns over the costs associated with private water leaks and requested to explore affordability programs for private service line leaks.

Ref	Question or Comment	Response
14	I remember reading about high-use water complaints shortly after the summer that were actually related to high-irrigation. How much water is used during irrigation?	In some homes, irrigation can double or triple a customer's water use. If a customer is irrigating their property, they could use an average of 6,000 gallons per hour. For reference, a residential house typically uses 1400 – 1700 gallons per day, so depending on how much someone irrigates, it can be pretty significant.
15	In our condominium complex, we had a leak and had to have a specialized consultant come in and identify the leak, which occurred in a PVC pipe. Are there standards today that wouldn't allow PVC? Our leak was very expensive to find and fix, which is something that a low-income family likely could not afford.	Copper pipes are used today for many water pipes. They have a typical service life of 50 – 75 years. PVC is not common, though there are some types of plastic that are used for pipes.

3. PUBLIC COMMENT

Members of the public that attended the meeting were invited to provide comments and questions.

Ref	Question or Comment	Response
1	Are high water use investigations only for residential customers?	Arlington County will verify the answer to this question and follow-up in future correspondence.
2	Are bill credits legal in Virginia? For example, if a multi-family building installed retrofitted plumbing, would they get a credit?	Arlington County's legal office would need to assess that option to understand the legality around that option. Within Virginia, the source of the funding is the most important consideration. If the funding source came from outside of the enterprise fund, then that could be possible.

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4. WRAP-UP AND NEXT STEPS

Jason Gershowitz reviewed the upcoming RSCAG schedule, highlighting that next steps include the alternative rate and fee structure proposals followed by the recommended rate and fee structures.

Mr. Gershowitz summarized key considerations from the meeting. Those included:

- Defining low-income customers in Arlington County, as well as the factors considered in this determination;
- Exploring partner-program assistance collaborations;
- Frequency of cooling tower-use in Arlington County;
- Assistance programs for private service line leaks; and,
- Types of customers eligible for a high water-use investigation (commercial, residential).

Jason Gershowitz closed the RSCAG meeting by thanking individuals for their role in supporting and advancing the Study.