

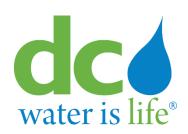
Miscellaneous Fee Report

Final Report / July 8, 2022

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July 8, 2022

Mr. Syed Khalil Director, Rates and Revenue DC Water 5000 Overlook Avenue, SW Washington, DC 20032

Subject: Water and Wastewater Miscellaneous Fee Report

Dear Mr. Khalil,

Raftelis Financial Consultants, Inc. (Raftelis) is pleased to provide this Water and Wastewater Miscellaneous Fee Report (Report) for DC Water to address the comprehensive review and update of customer service fees and charges and to establish new miscellaneous fees that are fair and equitable.

The major objectives of the study include the following:

- Review and update permitting review fees based on budgeted 2023 costs
- Update Fat, Oil, and Grease (FOG) Fees, Cross-Connection/Backflow Preventer Inspection fees, Hydrant Fees, and new fees based on budgeted 2023 costs
- Update high strength and waste hauler fees based on the most recent cost of service study
- Update existing customer service fees and charges, such as late payment penalties and event fees
- Benchmark DC Water's fees and charges based on those assessed by peer utilities

The Report summarizes the key findings and recommendations related to the development of the miscellaneous fees.

It has been a pleasure working with you, and we thank you and DC Water staff for the support provided during the course of this study.

Sincerely,

Jon Davis

Executive Vice President

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1. Introduction

1.1. Background of the Study

In the fall of 2021, DC Water engaged Raftelis to conduct a Water and Wastewater Miscellaneous Fees Study (Study), as a follow up to a similar study conducted in 2018, to develop sustainable miscellaneous fees for the water and wastewater enterprises. The impetus for this update was the escalating costs of providing service for ancillary, or non-user charge related, customer activities. DC Water had not undertaken a comprehensive study of miscellaneous fees study since 2018, so many fees have not been updated in several years. In general, when established, the proposed fees are based on the cost of providing the service, while accounting for the level of fees in comparison to other regional peers. As a result, in some instances, no increase was recommended as that increase would be out of line with peer fees.

1.2. Objectives of the Study

The objectives of the Study include:

- Review and update permitting review fees based on budgeted 2023 costs
- Update Fat, Oil, and Grease (FOG) Fees, Cross-Connection/Backflow Preventer Inspection fees, Hydrant Fees, and new fees based on budgeted 2023 costs
- Update high strength and waste hauler fees based on the most recent cost of service study
- Update existing customer service fees and charges, such as late payment penalties and event fees
- Benchmark DC Water's fees and charges based on those assessed by peer utilities

Based on the latest cost data provided by DC Water staff, Raftelis updated the various categories of fees that DC Water charges, to ensure the fees would be sufficient to recover costs. The following summary describes these fee updates. Raftelis also conducted a benchmarking study of the miscellaneous fees with national peers to evaluate the reasonableness of the proposed fees.

Permitting Review Fee Update

Permitting and Engineering Review Fees, the largest category of DC Water fees, were updated with the guidance of a fee assessment model, to accommodate a budget of \$5.75 million. Several new fees in this category were added, including Construction Support Fees (for residential, small non-residential, or large projects), Meter Inspection Fees, Water Service Fees, and Utility Infrastructure Only Review Fees. Permitting review fees are designed to recover the cost of approving developers' plans for new construction. DC Water spends a significant amount of time and effort reviewing these plans, providing system information, determining and collecting inspection fees, creating work orders, creating commercial accounts, and managing the refund process. The permit reviews are designed to enforce safe design standards throughout the city, and the peripheral services support the

design, construction, and inspection of the proposed work. The fees are designed to recover the full costs associated with the review process and ensure that these activities are not subsidized by other DC Water revenues.

Fat, Oil, and Gas (FOG) and Backflow Preventer Fees

Raftelis updated the cost of service analysis for the FOG and cross connections/backflow prevention fees, which were established in the previous 2018 study. FOG relates to the discharge of fat, oil, and/or grease into the sewer system. The fee represents the cost to monitor and check establishments that have registered grease traps and that potentially discharge FOG effluent that may coagulate and clog the sewer collection system. These masses of fat impede sewer flow and increase maintenance costs for DC Water. The cross connection/backflow preventer fee allows for enhanced inspection of assemblies that prevent polluted water from accidentally siphoning backward into the distribution system thus contaminating clean, or potable, water. Currently, DC Water inspects backflow preventers, but new fees would allow them to increase frequency of those inspections. Services, like restaurants, laundromats, etc. utilize these devices.

Fire Hydrant Charges

Fire Hydrant fees were updated based on new budget data provided by DC Water staff. These fees include hydrant meter rentals, fire hydrant rental deposits, private fire hydrant flushing, and fire hydrant permits. These fees were based on labor hours (to assemble, calibrate and maintain equipment, and process permits) as well as equipment material costs.

High Strength Wastewater and Waste Hauler Fees

The high strength wastewater rate per gallon and hauled waste per pound fees, as well as the waste hauler fee, were updated based on the cost of service revenue requirements for wastewater (part of the study used to set retail rates), and an estimate of staff time, respectively.

Miscellaneous Retail & Additional Customer Fees

Raftelis evaluated new fees provided by DC Water staff, including a Notice of Follow Up (NOFOL) Compliance Fee, Reconnection fee for Non-Residential customers, and Manual Meter Read Fees by meter size. In addition, Raftelis updated_existing retail miscellaneous fees that customers pay for non-user fee related activities. These fees were updated based on estimated inflation since the previous fee update was completed in 2018. The utility provides many services to retail customers outside of the usual water and wastewater services appearing on the monthly bill. These fees range from late check fees to turn off fees. Additional non-retail fees, such as industrial permitting fees and event fees, were included in the inflation-based fee updates.

1.3. Study Results

The results of this study are documented within this report. Throughout this report Raftelis identifies whether the fees are newly added or updated, and the basis for the recommended change.

2. Engineering and Permitting Fees

DC Water's Department of Permit Operations oversees the permitting process that all residential and commercial customers must complete when conducting any work that affects the public water or sewage systems. Proper permitting ensures the development of DC Water's systems is in accordance with legal and operational standards. For complex projects, the Department of Permit Operations and the Department of Engineering and Technical Services will verify and confirm the capacity of the system to accommodate the project and evaluate the proposed design's impacts on existing infrastructure. Extensive reviews consume many labor hours to adequately ensure compliance. Since the initiation of these fees in 2011, redevelopment in the District has been prolific. The number of permit applications has risen significantly, and the level of inter-agency coordination has expanded. Thus, the number of personnel required and the cost to accommodate the amount of work has increased.

When originally implemented, the permitting fees covered all aspects of costs related to permit compliance and approval. Currently, the engineering review fees generate \$2.12 million in annual revenue, although operating expenses were \$3.95 million. The FY 2023 budgeted costs have increased to \$4.57 million plus an additional ask of \$1.18 million to add staff to perform expedited reviews – a service the group had not had the capacity to provide. Therefore, the fees needed to be set to recover \$5.75 million, a 90% increase over the 2018 revenue target. Significant adjustments in fees are needed to fully recover the revenue requirements.

2.1. Revenue Requirements

The Department of Permit Operations and the Department of Engineering and Technical Services review all permits for DC Water. Any construction that will affect the water or sewer systems must go through this permitting process. The fees are designed to recover the labor cost of reviewing these permits. The update of the cost allocations, projections of the number of services to be performed, and addition of new fees, required that the individual fee increases would not be a uniform percentage for each fee.

DC Water staff provided direction on the elimination or creation of permit review fees so that the proposed set of fees more accurately reflect the permitting review activities. All proposed fee categories represent current services offered by the department.

DC Water staff determined that the Permit Operations Department is projected to spend \$5.75 million to satisfactorily provide quality service to developers and contractors in 2023. This includes costs for full time equivalent (FTEs) new staffing positions working on the permit process, as shown

in Table 1. These staff will work on expedited permit reviews, post-permit customer service, and expanded developer business support (needed for the new accounting program).

No. of Positions Existing Proposed Additional 4 Permit Management/Admin 4 0 Permit Plan Review Staff 14 16 2 3 5 2 Developer Business Support 0 4 4 Post Permit Customer Support 21 29 **Total Positions** 8

Table 1: Permit Operations New Staff Positions

2.2. Fee Calculation

The proposed permit review fees were developed using the top-down approach fairly allocating the \$5.75 million revenue requirement among the various groups of fees and then to the individual fees. Raftelis used an iterative process of modeling fee revenues to develop appropriate fees. The first step was to break down the total revenue requirement into spending on several categories: Intake (processing plan submissions), Large Plan Review, Small Plan Review, Miscellaneous Permitting Fees, and Construction Support Fees. The Intake (which includes only two fees, Base Plan Submission Review and Rejected Plan Resubmission) represents 4% of total costs, Large Plan Review represents 54% of the total fees collected, Small Plan Review represents 36%, Miscellaneous Fees represent 5%, and Construction Support Fees represent 1% of fees collected. Raftelis calculated draft fees based on total costs allocated to each fee type. Within each category, fees were calculated based on ratios, or weighting factors, determined based on existing fees. New fees were added and incorporated into the weighting calculations.

Another element of the fee calculation was incorporating expedited fees. Expedited fees allow customers to pay a higher fee to have a project review or permit fast-tracked. Expedited fees were established in the 2018 study and were calculated based on a 1.75 times differential compared to regular fees. This differential was increased to 2 times for the FY23 fee calculation. The 200% upcharge is designed to discourage everyday use, as the fee is designed to be used only by customers with an abbreviated project timetable.

Fee revenues were calculated based on estimated quantities of fees, which were provided by DC Water staff. Adjustments to fees and quantities were reviewed to ensure the estimated revenues diverged less than 0.1% from the total \$5.75 million budget.

Although they are under the purview of the Department of Permit Operations, "as-built" structure permits and services were evaluated separately from other permitting and engineering fees and were not part of the \$5.75 million budget. These fees were not increased from 2018 levels.

Several new fees were added to more accurately reflect services the Permit Operations Department is providing:

- Water Service Connection (WCONN): Charge for DC Water staff to provide field inspection and valve shuts, and check and notify services required for the insertion of a new water service connection of 3" or greater. Previously this service has initiated a \$2,500 reimbursable fee. This field and office work is always performed but often not charged. Changing this to a fixed fee will reduce the clerical effort of account generation and refunding, making it immediate revenue.
 - o Recommended Fee: \$2,500
- **Meter Setter Inspection and Reinspection:** Charge for DC Water staff to field inspect and verify that meter setter is properly set and that the meter is ready prior to installing the water meter. This will increase the reliability of our data base and reduce/eliminate small diameter services using a jumper instead of a meter.
 - o Recommended Fee: \$250/occurrence
- **Meter Vault Inspection and Reinspection:** Charge for DC Water Staff field inspection by meter branch to verify that the meter vault is to specifications, that it is safe, that there is adequate provision for the transmitter.
 - o Recommended Fee: \$1,000/occurrence
- Construction Phase Customer Support: These fees reflect a proactive, white glove approach to contractor customer service. The contractors have difficulty finding the correct entity at DC Water to coordinate with (e.g., Water Services, Sewer Services, Meter Branch, Customer Service, Permits, etc.). This fee would support a one stop shop to proactively manage the construction phase and ensure applications for taps, connections, meter sets and inspections happen when they should. This management would include checks on work order status and as-built preparation. This will enhance the integrity of GIS/utility data and will make the refund process go much smoother if all work orders are routed to completion.
 - o Recommended Fees:

■ Small/Residential: \$500

Small Nonresidential: \$2,000

Large or Sheet and Shore: \$4,500

2.3. Proposed Plan Review Fees

The following figures show the proposed plan review fees. Fees are categorized by function for clarity. Numerical codes are pre-existing codes that were assigned to each fee by the Department of Permit Operations.

Table 2: Plan Submittal (Intake) Fees

Code	Fee Description	Existing	Proposed
1001	Base Plan Submission Fee- for all review types	\$140	\$200
1002	Rejected Plan Resubmission fee for all review types	\$75	\$100

Table 3: Large Plan Review Fees – Project Review

Code	Fee Description	Existing	Proposed
2040	Large Basic Review Fee	\$10,000	\$15,000
2041	Large Basic Review Fee – Expedited	\$17,400	\$30,000
2054	Large (>2") Fire Only	\$4,500	\$5,000
2055	Large (>2") Fire Only – Expedited	\$7,800	\$10,000
2056	Large Sanitary/Combined Sewer Conn. Only (=>8")	\$4,500	\$5,000
2057	Large Sanitary/Combined Sewer Conn. Only (=>8") – Expedited	\$7,800	\$10,000
2058	Large Storm Connection Only (=>15")	\$4,500	\$5,000
2059	Large Storm Connection Only (=>15") – Expedited	\$7,800	\$10,000
7007	Large Project Dox Signoff	\$400	\$500
7007	Large Project Dox Signoff - Expedited	\$700	\$1,000

Table 4: Large Plan Review Fees – Easement & Covenant

Code	Fee Description	Existing	Proposed
2076	Processing of Standard Easement Covenant	\$1,000	\$2,000
2077	Processing of Standard Easement Covenant – Expedited	\$1,750	\$4,000
2078	Processing of Non-Standard Easement Covenant	\$5,000	\$8,500
2079	Processing of Non-Standard Easement Covenant - Expedited	\$8,750	\$17,000
2080	Utility Infrastructure Only Review Fee (to 1,000 impact to mains)	New Fee	\$10,000
2080	Utility Infrastructure Only Review Fee (to 1,000 impact to mains) – Expedited	New Fee	\$20,000
2081	Utility Infrastructure Only Review Fee (to 2,500 impact to mains)	New Fee	\$15,000
2081	Utility Infrastructure Only Review Fee (to 2,500 impact to mains) – Expedited	New Fee	\$30,000
2082	Utility Infrastructure Only Review Fee (over 2,500 impact to mains)	New Fee	\$18,000
2082	Utility Infrastructure Only Review Fee (over 2,500 impact to mains) – Expedited	New Fee	\$36,000

Table 5: Large Plan Review Fees – Miscellaneous

Code	Fee Description	Existing	Proposed
2042	Large Foundation to Grade	\$1,000	\$1,750
2043	Large Foundation to Grade – Expedited	\$1,750	\$3,500
2044	Approved Plan Revision (Field Conditions)	\$1,000	\$2,000
2045	Approved Plan Revision (Field Conditions) – Expedited	\$1,750	\$4,000
2046	Large Project Sheeting and Shoring (Large Commercial)	\$6,500	\$12,500
2047	Large Project Sheeting and Shoring (Large Commercial) - Expedited	\$11,300	\$25,000
2050	Water and Sewer availability letter (large)	\$500	\$750
2051	Water and Sewer availability letter (large) – Expedited	\$880	\$1,300
2052	Temporary Water Connections	\$3,300	\$5,000
2053	Temporary Water Connections – Expedited	\$5,800	\$10,000
2060	Large water meter size reduction plan	\$3,300	\$5,000
2061	Large water meter size reduction plan - Expedited	\$5,800	\$10,000
2062	Large Project Raze utility release letter – no abandonments	\$300	\$500
2063	Large Project Raze utility release letter – no abandonments – Expedited	\$500	\$1,000
2064	Large Project Raze utility release letter – with abandonments	\$700	\$1,500
2065	Large Project Raze utility release letter – with abandonments – Expedited	\$1,200	\$3,000
2074	Large Plan Excessive Submission Review	\$2,400	\$3,500
2075	Large Plan Excessive Submission Review – Expedited	\$4,200	\$7,000
2090	One Day Plan Design and Review and Approval (Velocity type program)	\$20,000	\$25,000

Table 6: Small Plan Review Fees – Non-Residential

Code	Fee Description	Existing	Proposed
2009	Small basic non-residential project per metered connection	\$3,300	\$5,000
2010	Small basic non-residential project per metered connection – Expedited	\$5,800	\$10,000
2011	Small Hybrid Non-Residential per metered connection	\$5,000	\$6,750
2012	Small Hybrid Non-Residential per metered connection – Expedited	\$8,700	\$13,500
2015	Small Non-Residential or Hybrid Approved Plan Revision	\$1,000	\$1,450
2016	Small Non-Residential or Hybrid Approved Plan Revision – Expedited	\$1,750	\$2,900
2017	Sanitary or combined sewer connection only 6" and less	\$700	\$1,000
2018	Sanitary or combined sewer connection only 6" and less – Expedited	\$1,200	\$2,000
2019	Storm sewer connection only less than 15"	\$700	\$1,000
2020	Storm sewer connection only less than 15" – Expedited	\$1,200	\$2,000

Table 7: Small Plan Review Fees - Residential

Code	Fee Description	Existing	Proposed
2005	Single Family Residential/Metered Connection	\$700	\$1,500
2006	Single Family Residential/Metered Connection – Expedited	\$1,200	\$3,000
2013	Small Residential Approved Plan Revision Each	\$250	\$500
2014	Small Residential Approved Plan Revision Each – Expedited	\$500	\$1,000

Table 8: Small Plan Review Fees - Release Letters

Code	Fee Description	Existing	Proposed
2021	Small Non-Residential or Residential Raze utility release letter – no abandonment	\$330	\$400
2022	Small Non-Residential or Residential Raze utility release letter – no abandonment – Expedited	\$580	\$800
2023	Small Non-Residential or Residential Raze utility release letter – with abandonment	\$700	\$1,000
2024	Small Non-Residential or Residential Raze utility release letter – with abandonment – Expedited	\$1,200	\$2,000

Table 9: Small Plan Review Fees - Miscellaneous

Code	Fee Description	Existing	Proposed
2003	Small Sheet and Shore	\$1,000	\$1,250
2004	Small Sheet and Shore – Expedited	\$1,750	\$2,500
2027	Small Temporary Water (Non-Residential)	\$700	\$2,000
2028	Small Temporary Water (Non-Residential) – Expedited	\$1,200	\$4,000
2070	Residential Plan Excessive Submission Review	\$360	\$500
2072	Small Non-Residential Plan Excessive Submission Review	\$600	\$750
7006	Small Project Dox Signoff	\$100	\$150

Table 10: Miscellaneous Permitting Fees

Code	Fee Description	Existing	Proposed
2048	Abandonment Waiver Request	\$500	\$750
2049	Abandonment Waiver Request – Expedited	\$880	\$1,300
7001	Request for Information (RFI)	\$30	\$175
7002	Request for Information (RFI) – Expedited	\$60	\$350
7003	Request for As-Built-Drawings	\$90	\$200
7004	Request for As-Built-Drawings – Expedited	\$150	\$400
7009	Letter in Lieu of Hydrant Flow Test	\$125	\$250

Table 11: Construction Phase Customer Support

Code	Fee Description	Existing	Proposed
8001	Residential Projects (including new SFU, THs, water/sewer connections, raze, temporary connection, 2" or less water meter)	New Fee	\$500
8002	Small Non-Residential or Hybrid (including new connections, raze, temporary connection, 2" or less water meter)	New Fee	\$2,000
8003	Large (including new connections, raze, sheeting and shoring, temporary connection, 3" or larger water meter)	New Fee	\$4,500

Table 12: Meter Inspection & Water Service Fees

Code	Fee Description	Existing	Proposed Normal
9001	Meter Setter Inspection	New Fee	\$250
9002	Meter Setter Re-Inspection	New Fee	\$250
9003	Meter Vault Inspection	New Fee	\$1,000
9004	Meter Vault Re-Inspection	New Fee	\$1,000
9006	Water Connections 3" and Larger	New Fee	\$2,500

Table 13: As-Built Fees

Fee Description	Existing/Proposed (No Changes)
Small Residential or Townhouse	\$250 (each bldg.)
Small Non-Residential	\$250 (each bldg.)
Small Hybrid	\$250 (each bldg.)
Large Project	\$750 (each connection – water or sewer)
Installation of New Water or Sewer Main (20 to 100 feet)	\$2,500
Each additional 200 feet of water line	\$2,000
Each additional 400 feet of sewer main/line	\$2,000
Installation of Water Line – larger than 24" in diameter	Determined on a per project basis
Installation of Sewer – larger than 60" in diameter	Determined on a per project basis

2.4. Benchmarking

Engineering and permit reviews are completed in some form by every utility. When customers are making modifications in and around water and sewer lines, the utility must be a part of that process. Many utilities design their fees in a manner similar to DC Water. By charging individual fees, utilities can accurately recover the cost of the service of each fee. Utilities throughout the U.S offer various levels of engineering fees to fund their engineering departments. Although the service operations differ, all fees that fund operations are based on level of service. This level of service principle is the sample principle that DC Water is using to cost their fees. Based on benchmarking with other utilities, DC Water has one of the more robust permitting operations which has grown to meet the needs of intense development within the District. The substantial number of fees is needed

to meet DC Water's varied service demands. Many other utilities do not face nearly as many demands. Correspondingly, they will have fewer fees.

2.5. Conclusions

DC Water and Raftelis believe these proposed fee structure will better align revenue with costs incurred to provide high quality service to the development community. The fee structure uses a top-down fee development approach that provides a mechanism to recover the total cost of service from many different fees adequately and equitably across all permitting review fees. The increased number of fees are designed to address all services that the DC Water Permit Department and Engineering/Technical Service Department currently offer. By implementing these proposed fees, DC Water will raise approximately \$3.63 million in incremental revenue and cover the costs of permit operations.

3. FOG Inspection Fees

3.1. Description of Fees

The Fats, Oils, and Grease (FOG) fees, established in 2018, fund a program to enforce the installation and maintenance of FOG abatement systems as required by plumbing code. The fee is typically assessed to food service establishments such as restaurants, bars, cafeterias, etc. DC Water requires that customers in FOG-related business, like restaurants, properly collect and dispose of FOG to prevent it from entering the sewer collection system. Proper collection of FOG usually requires a working grease trap or oil/water separator. Currently, DC Water requires participants to maintain a record of maintenance for their FOG device.

The increase in the monthly FOG fee from \$13.70 to \$18.70 reflects the addition of two new staff members, up to five dedicated FOG staff from the existing group of three. Dedicated staff are needed because when a FOG complaint comes in, DC Water draws on staff resources the cross-connection program, hindering that program's operations. The proposed fee will fund the two new positions, ensuring the FOG program remains a proactive program from a reactionary program. The goal of the initial program is to inspect FOG establishments at least once every five years. As the program evolves it is expected that inspections will further increase. Inspections do not occur annually, but DC Water will implement an inspection program where each participant will be inspected on a more regular basis.

3.2. Revenue Requirements

Raftelis updated the existing a cost of service methodology with more current data to calculate the proposed fee. When implemented, this fee will fund the proposed relevant labor and materials of the FOG inspection program. Costs were identified in close collaboration with DC Water staff. Personnel time, O&M (operation and maintenance) costs, and implementation costs were determined through this process. The FOG program requires the continuing development and maintenance of a DC Water FOG database to allow DC Water to easily monitor program participants. Relevant capital costs were depreciated over a straight-line basis over five years. Shown below are the new costs for the FOG inspection program, compared to the costs for the previous fee update.

Table 14: FOG Inspection Costs

Cost Drivers	2018 Costs	2023 Costs
Personnel	\$536,429	\$645,641
Materials	\$65,700	\$87,462
Training	\$10,000	\$21,854
Certification	\$80,000	\$31,000
Billing System	\$10,000	\$43,608
Total Costs	\$702,129	\$829,665

The new FOG fee is calculated based on dividing 2023 costs by estimated number of participants, yielding a monthly fee, as shown in Table 15. A monthly fee allows participants to pay for the service each month and more easily include that cost in their business model.

Table 15: FOG Fee Calculation

Per Participant	2018 - Existing	2023 - Proposed
Number of Participants (1)	4,700	3,700
Annual Fee Per Participant	\$164.40	\$224
Monthly Fee	\$13.70	\$18.70

¹⁾ Decline in participants is due to a DCRA database update and a pandemic-related decline in food service establishments.

By instituting a FOG fee DC Water is following a utility industry best practice. In the U.S many utilities still use voluntary self-reporting guidelines for FOG where businesses must annually select a contractor from an approved list. The current DC Water program allows the participants to self-regulate. By having a dedicated FOG department, the utility is better able to enforce the applicable regulations, since participants know more regular inspections will occur.

Three comparable utilities that charge directly for FOG are listed below.

4. Backflow Prevention Inspection Fees

4.1. Description of Fees

Like the FOG fees, the Cross-Connection/Backflow Prevention fees were established in 2018 to recover costs of the inspection and enforcement program. Backflow preventer assemblies prevent untreated water from siphoning back into the potable water distribution system. If contact were to occur, then untreated water could contaminate treated water. DC Water completes inspections approximately once every ten years to ensure that compliance is occurring by verifying establishments that have backflow preventers in place at cross connections. Currently, DC Water requires participants to annually hire a certified backflow preventer inspector. The independent inspectors are certified by DC Water. The inspectors upload the results of their inspection to a DC Water maintained database. This database requires continues maintenance by DC Water staff.

The 2018 fee allowed the program to expand, growing from inspections of 1,000 establishments per year to 2,000 inspections per year. The backflow prevention program had 3 specialists and 1 analyst supporting the program, and the 2018 fee allowed the program to fund additional indirect personnel.

Because no growth in the program is anticipated, the Cross-Connection/Backflow Prevention fee will remain the same as it is currently (\$6.70).

5. Fire Hydrant Use Program

5.1. Description of Fees

The Fire Hydrant Use Permit Program (FHUP) issues fire hydrant use permits and rents fire hydrant meters and equipment. Customers connect to fire hydrants for temporary water service for various purposes, such as construction, landscaping, and community events. There are no personnel assigned to the FHUP, and the updated FHUP fees will help fund two new positions dedicated to the program.

The fees were calculated based on costs, including labor costs to assemble, calibrate, and maintain equipment, time to process permits, and equipment material costs. The proposed fees are shown in Table 16.

Table 16: Fire Hydrant Use

Fee Name	Existing	Proposed
Fire Hydrant Permit	\$75	\$75
Private Fire Hydrant Flush	\$81	\$90
Water and Sewer for Hydrant Use	Prevailing (usage based)	Prevailing (usage based)
3" Hydrant Meter Deposit	\$1,600	\$1,750
3" Hydrant Meter Rental <15	\$75	\$130
3" Hydrant Meter Rental >=15	\$5/day	\$10/day
3" Hydrant Meter w BP Deposit	\$2,200	\$2,750
3" Hydrant Meter w BP Rental <15 days	\$150	\$195
3" Hydrant Meter w BP Rental >=15 days	\$10/day	\$15/day
5/8" Hydrant Meter w BP Deposit	\$700	\$950
5/8" Hydrant Meter w BP Rental <15 days	\$75	\$115
5/8" Hydrant Meter w BP Rental >=15 days	\$5/day	\$10/day
Fire Hydrant Use Per Day	Usage based	Usage based

6. High Strength Fees

6.1. Description of Fees

High Strength Fees are linked to the cost of service study that sets DC Water's retail monthly water and sewer rates. Each time the cost of service study is updated, high strength fees for biological oxygen demand (cBOD), total suspended solids (TSS), total nitrogen (TN), and total phosphorus (TP) are updated to align with revenue requirements. Domestic strength waste fees are also calculated as part of the update. The same fee calculation methodology was used in the previous 2018 study.

DC Water decided to use the same flow and loading data as in the previous study because more recent data reflected the impacts of the COVID-19 pandemic and would not be indicative of normal usage. The flow and loading assumptions are shown in Table 17.

Table 17: Wastewater Flows and High Strength Loadings

Units of Service	Flow	cBOD	TN	TP	TSS
Daily Totals	282 MGD	428,346 lb/day	93,327 lb/day	9,506 lb/day	321 dtpd
Annual Totals	102,930,000 kgal/year	156,346,239 lb/year	34,064,344 1b/year	3,469,537 lb/year	234,330,000 lb/year

Total wastewater revenue requirements were divided by these flows and loadings to yield costs per pound. The cost per pound was multiplied by an assumed loading, provided by DC Water, resulting in cost per kgal. The calculation results in cost per pound for cBOD, TN, TP, and TSS, as well as a high strength fee per kgal and a domestic fee per kgal (see blue highlights, Table 20).

Table 18: High Strength & Hauled Waste Fee Calculation

	Flow	cBOD	TN	TP	TSS	Total
Total Annual Cost, \$Millions	\$213.6	\$25.3	\$56.6	\$18.1	\$65.1	\$378.8
Units of Service	102,930,000	156,346,239	34,064,344	3,469,537	234,330,000	
Cost per lb.	\$2.075	\$0.162	\$1.662	\$5.234	\$0.278	\$3.680(1)
Lbs/Kgal (assumed strength)		104	51	1	160	
Cost per Kgal	\$3.680	\$16.85	\$7.56	\$4.41	\$44.53	\$77.02
High Strength Waste Fee/Kgal						\$77.00 (2)
Domestic Strength Waste Fee/Kgal						\$4.00 (3)

- 1) Total cost per pound is calculated by dividing the total revenue requirements by the flow units.
- 2) The high strength fee per kgal is calculated by rounding the total cost per kgal.
- 3) The domestic strength fee per kgal is calculated by rounding the total flow cost per kgal (\$3.680).

The following table summarizes the calculated wastewater fees, as they appear on the DC Water website.

Table 19: High Strength & Hauled Waste Fee Calculation

Pretreatment Fees	Existing	Proposed
High strength grease trap waste	\$0.07/gal	\$0.077/gal
High strength septage waste	\$0.07/gal	\$0.077/ga1
Domestic strength waste	\$0.003/ga1	\$0.004/ga1
Low strength waste	\$0.003/ga1	\$0.004/ga1

High Strength Waste Fees	Existing	Proposed
BOD	\$0.135/1b	\$0.162/1b
TSS	\$0.263/1b	\$0.278/1b
TN	\$1.471/1b	\$1.662/1b
TP	\$4.524/1b	\$5.234/1b

7. Miscellaneous Fees

7.1. Description of Fees

The retail customer fees are the miscellaneous fees that retail customers pay, ranging from bad check fees to water tap fees. These fees pay for the administration, maintenance, and operational costs of running a utility. Many of the fees will affect low income households. Due to this, care must be taken when revising and updating the fees. DC Water elected to use regional CPI data from the time of the last fee update in 2018 to 2022 to calculate an appropriate increase for the existing fees. Increases of 6% were applied to existing fees to allow them to keep pace with inflation.

7.1. New Fees

DC Water implemented several new fees, including the Notice of Follow Up (NOFOL) Compliance Fee, and higher Reconnection and Manual Meter Read (MMR) fees specifically for Non-Residential customers. These new fees are described below:

- Notice of Follow Up (NOFOL) Compliance Fee (\$475): This fee is assessed to non-residential customers who have received a 30-Day NOFOL reminder letter. Customers paying the fee have neglected to make repairs following an inspection, which may be causing interference with the transmission signal, preventing DC Water from reading, testing, accessing, or repairing the meter or meter transmitting device. The fee will encourage compliance and prevent delays that hinder DC Water's ability to provide timely and accurate bills.
- Non-Residential Reconnection Fee (\$100): This fee is charged to customers for restoring service after non-pay disconnect or customer-initiated turn off. The fee increase will be applicable to non-residential accounts only to create cost of service equity.
- **Non-Residential Manual Meter Read (MMR):** This fee is currently \$20 per month across all customer classes. This new tiered MMR fee is being proposed for non-residential customer classes by meter size. It is designed to place focus on large non-residential customers who refuse to adhere to the repair order and the NOFOL reminder notice. The fee increases by meter size, creating cost of service equity.
 - o Recommended Fees:

• 5/8"-2" Meters: \$100

■ 3" - 4" Meters: \$250

• 6" + Meters: \$500

7.2. Existing Miscellaneous Fees

7.2.1.MISCELLANEOUS RETAIL CUSTOMER FEES

DC Water increased other existing miscellaneous fees by 6%, based on CPI data for the DC Metro Region. The 6% increase represents inflation over the past four years, since the last miscellaneous fee study was completed. Fees were rounded to the nearest \$5.

Table 20: Residential Customer Fees

Fee Name	Existing	Proposed
Customer Bad Check Fee	\$25	\$30
Declined Credit Card Fee	\$35	\$40
Customer Penalty Late Fee	10% + 1% per month of Balance due	10% + 1% per month of Balance due
New Account Initiation Fee	\$50	\$55
Turn Off Charges for Non-Payment	\$50	\$55
Reconnection Fee (Residential) (1)	\$50	\$50
Broken By-Pass Seal	\$700	\$745
Unauthorized Turn On	\$245	\$260
Second Water Audit within 24 months	\$125	\$135
Manual Meter Reading Fee	\$20/month/meter	\$20/month/meter

¹⁾ These fees are kept constant, per DC staff. A separate \$100 Non-Residential Reconnection Fee was added this year (above).

Table 21: Proposed Cross Connection Violation Charges

Fee Name (1)	Existing	Proposed Fee
Cross-Connection Turn-off 5/8" to 2"	\$200	\$215
Cross-Connection Turn-off 3" to 5"	\$400	\$425
Cross-Connection Turn-off 6" and larger	\$900	\$955

¹⁾ The cross-connection violation charge occurs when the cross-connection relationship is violated. The charge serves as a deterrent to help prevent violations.

Table 22: Connection and Tap Fees

Fee Name	Existing	Proposed
1 Inch Water Tap Insertion	\$425	\$455
1.5 Inch Water Tap Insertion	\$500	\$530
2 Inch Water Tap Insertion	\$540	\$575
Water Connection	Reimbursable	Reimbursable
Water Tap Abandonment (2" or less)	\$400	\$425
Water Service Connection Abandonment (greater than 2")	\$800	\$850
Inspect Pointing Up Sewer Taps	\$860	\$915
Inspect Insertion of Y-Branch	\$306	\$325
Inspect Installation of Standard Cleanout	\$306	\$325
Inspect Sewer Tap Removal	\$306	\$325

Table 23: Fire Hydrant Flow Tests

Fee Name	Existing	Proposed
Fire Hydrant Flow Test (Field Test)	\$300	\$320
Fire Hydrant Flow Test (Computer Model) (1)	\$200	\$320
Fire Hydrant Flow Test (Recent Test Record Available)	\$125	\$135

1) The Computer Model Hydrant Flow Test will be set equal to the Field Test, to simplify fee administration through the permits tracking and billing system.

7.2.2.LEGAL FEES

The Legal Department at DC Water charges several fees that were updated by DC staff, shown in Table 25.

Table 24: Fire Hydrant Flow Tests

Fee Name (1)	Existing	Proposed
Witness Fee	Salary + Fringe	\$40 plus travel expenses
DC Water Staff Expert Witness Fee	n/a (new fee)	Salary + Fringe + Travel + Expenses
Standard Letter and Legal Pages (photocopying)	\$0.75	\$0.75
FOIA Processing	New fee	\$10 + Salary + Fringe

7.2.3. EVENT FEES

DC Water assesses event fees when event organizers request the water utility's presence to generate discussion and interaction. When DC Water participates in an event, it incurs personnel time costs and equipment costs. The costs to serve these events scale up according to the size of the event, so

DC Water charges \$81/hour based on the cost of one DC Water staff member attending the event. This fee is multiplied by the number of DC Water employees attending. DC Water also has several equipment fees. The fee framework easily allows DC Water to add or subtract services/people. Described below are the fees that go into an event fee.

Table 25: Event Fees

Equipment	Existing	Proposed
Event Fees per Hour	\$81	\$90
Misting Tent	\$550/day	\$585/day
Mobile Brita Hydration Station	\$600	\$640
Cooling Station	\$420	\$450
Quench Buggy	\$2,500	\$2,650
DC Water Mascot (1)	\$50	\$80

1) Rate per hour is \$20, and each event is assumed to be 4 hours long, for the purpose of initial hourly fee calculation.

7.2.4. INDUSTRIAL PERMITTING FEES

Some fees from DC Water's wastewater department were updated based on estimates of cost of service, provided by DC Water staff. The Industrial Permitting fees were originally instituted in 2012. Industrial permits are required by commercial enterprises and government agencies that can discharge process wastewater or contaminated groundwater into DC Water's system. The waste hauler fee is a per-vehicle fee, calculated based on the cost of staff time. These fee updates are shown in Table 26.

Table 26: Wastewater Department Fees - Cost of Service Adjustments

Industrial User Compliance Fees (1)	Existing	Proposed
Industrial User Individual Permit Fee – Initial	\$2,500	\$2,865
Industrial User Individual Permit Fee – Renewal	\$700	\$955

Waste Hauler (2)	Existing	Proposed
Waste Hauler Discharge Annual Permit Fee per vehicle	\$30	\$50

- 1) Increase is based on additional report review costs of \$200 (4 hours at \$50/hour), plus inflation.
- 2) Proposed waste hauler fee was based on estimated cost per hour for staff time.

Compliance fees for industrial customers were escalated at 6%, based on CPI data for the DC Metro Region. The 6% increase represents inflation over the past four years, since the last miscellaneous fee study was completed. Fees were rounded to the nearest \$5. The industrial permits are based on number of outfalls, where the physical connection to the wastewater system occurs. Sampling and inspection of outfalls is conducted annually. The inspection process requires significant investment

in time and lab work. Inspectors collect samples at outfalls and send the samples to labs to analyze. Industrial permitting fees are shown in Table 27.

Table 27: Industrial Permitting Fees

Fee Name	Existing	Proposed
Compliance Fee – SIU/CIU – 1 outfall	\$3,100	\$3,290
Compliance Fee – SIU/CIU – 2 outfalls	\$4,300	\$4,560
Non-Significant IU – 1 outfall	\$700	\$745
Non-Significant IU – 1 outfall	\$900	\$955

8. Benchmarking

The benchmarking analysis below compares DC Water's proposed fees to those of six other utilities that are similar to DC Water. Each utility serves a large population and has comparable demographics, ensuring relevant comparison. Each utility has different miscellaneous fees, and most fees have no direct comparison. The benchmarking results also show the numerous ways to charge for related items.

The results of the benchmarking analysis show that DC Water charges appropriate rates for its retail fees. DC Water's bad check fees, turn off fees, and late fees are all in line with comparable utilities.

Table 28: Penalty Fees

Retail Customer Fees	D.C. Water	WSSC	Philadelphia	Atlanta	Fairfax Water	Loudoun County	Arlington County
Customer Bad Check Fee	\$30	\$35	n/a	\$30 or 5%	n/a	\$35	\$50
Declined Credit Card Fee	\$40	\$35	n/a	n/a	n/a	n/a	n/a
Customer Penalty Late Fee	10% + 1% per month of Balance due	n/a	5% of bill	n/a	10% of bill	10% of bill	n/a
Initiation Fee (Turn on Fee)	\$55	\$90	n/a	n/a	\$50	\$30	\$25
Turn off Charges for Non- Payment	\$55	n/a	\$105	\$48	\$50	n/a	n/a
Reconnection Fee (Residential)	\$50	n/a	n/a	n/a	\$50	n/a	\$25
Broken By-Pass Seal	\$745	n/a	n/a	n/a	n/a	n/a	n/a
Unauthorized Turn On	\$260	n/a	n/a	n/a	\$250	\$500	n/a
Second Water Audit within 24 months	\$135	n/a	n/a	n/a	n/a	n/a	n/a
Manual Meter Reading Fee (Residential)	\$20	n/a	n/a	n/a	n/a	n/a	n/a

Table 29: Water Taps and Connections

Water Taps and Connections Installation	D.C. Water	WSSC	Philadelphia	Atlanta	Fairfax Water	Loudoun County	Arlington County
1" Tap	\$455	\$375	\$430	n/a	n/a	\$260	n/a
1.5"	\$530	\$275	\$805	n/a	n/a	\$850	n/a
2"	\$575	\$450	\$905	n/a	n/a	\$1,100	n/a
Water Tap Abandonment (2" or less)	\$425	n/a	\$105	n/a	n/a	n/a	n/a
Water Service Connection Abandonment (greater than 2")	\$850	n/a	\$280	n/a	n/a	n/a	n/a
Inspect Pointing Up Sewer Taps	\$915	n/a	n/a	n/a	n/a	n/a	n/a
Inspect Insertion of Y-Branch	\$325	n/a	n/a	n/a	n/a	n/a	n/a
Inspect Installation of Standard Cleanout	\$325	n/a	n/a	n/a	n/a	n/a	n/a
Inspect Sewer Tap Removal	\$325	n/a	n/a	n/a	n/a	n/a	n/a

Table 30: Fire Hydrant Flow Testing

Fire Hydrant Flow Tests	D.C. Water	WSSC	Philadelphia	Atlanta	Fairfax Water	Loudoun County	Arlington County
Fire Hydrant Flow Test (Field Test)	\$320	\$693	\$930	n/a	n/a	n/a	\$300
Fire Hydrant Flow Test (Computer Model)	\$320	n/a	n/a	n/a	n/a	n/a	n/a
Fire Hydrant Flow Test (Recent Test Record Available)	\$135	\$83	n/a	n/a	n/a	n/a	n/a
Letter in Lieu of Hydrant Flow Test	\$250	n/a	n/a	n/a	n/a	n/a	n/a

Table 31: Fire Hydrant Use Charges

Fire Hydrant Use Charges	D.C. Water	WSSC	Philadelphia	Atlanta	Fairfax Water	Loudoun County	Arlington County
Fire Hydrant Permit	\$75	n/a	\$735	n/a	n/a	\$260	n/a
Water and Sewer Rate - for Hydrant Use	Prevailing (Usage Based)	n/a	n/a	n/a	n/a	\$850	n/a
3" Hydrant Meter Deposit	\$1,750	\$2,420	n/a	n/a	n/a	\$1,100	n/a
3" Hydrant Meter Rental <15 days	\$127.50	\$130	n/a	n/a	n/a	n/a	n/a
3" Hydrant Meter Rental >=15 days	\$8.50/day	\$175	n/a	n/a	n/a	n/a	n/a
3" Hydrant Meter w BP Deposit	\$2,750	n/a	n/a	n/a	n/a	n/a	n/a
3" Hydrant Meter w BP Rental < 15 days	\$195	n/a	n/a	n/a	n/a	n/a	n/a
3" Hydrant Meter w BP Rental >=15 days	\$13.00/day	n/a	n/a	n/a	n/a	n/a	n/a
5/8" Hydrant Meter w BP Deposit	\$950	n/a	n/a	n/a	n/a	n/a	n/a
5/8" Hydrant Meter w BP Rental < 15 days	\$112.50	n/a	n/a	n/a	n/a	n/a	n/a
5/8" Hydrant Meter w BP Rental >= 15 days	\$7.50/day	n/a	n/a	n/a	n/a	n/a	n/a
Fire Hydrant Use Per Day	Usage Based	Usage Based	n/a	n/a	n/a	n/a	n/a