



ALAMEDA COUNTY WATER DISTRICT FACILITIES CONNECTION CHARGE UPDATE



February 2, 2024

FINAL REPORT



HF&H Consultants, LLC

ALAMEDA COUNTY WATER DISTRICT
43885 S. Grimmer Boulevard
Fremont, CA 94538

2023 FACILITIES CONNECTION CHARGES

FINAL REPORT

February 2, 2024

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Jonathan Wunderlich, Director of Finance & Administration
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Alameda County Water District
43885 S. Grimmer Blvd.

Fremont, CA 94538

Subject: 2023 Facilities Connection Charge

Dear Jonathan and Sydney:

HF&H Consultants, LLC (HF&H) is pleased to submit this draft facilities connection charge report to the Alameda County Water District (District) for its review and comment. The report updates the District's facilities connection charges based on the current value of current capacity in the District's water system, as well as expanded capacity, that benefits new connections to the system. The report describes the background, approach, and calculation of each facilities connection charge.

Sincerely,

HF&H CONSULTANTS, LLC

A handwritten signature in blue ink that reads "Richard J. Simonson".

Rick Simonson
Senior Vice President

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APPENDIX

The appendix lists supporting documents which form the basis for the proposed update to the District’s Facilities Connection Fees. Note: due to the volume of material (hundreds of pages), the documents and spreadsheets are available for review at the District offices and/or online on the District’s website.

- Prior Facilities Connection Charges Report from 2019
- Inventory of Existing Water Facility Assets
- Replacement Cost New Less Depreciation (RCNLD) Calculations
- Capital Improvement Program Costs and Cost Allocations
- Adopted Budget for FY 2023-24
- Financial Planning Model

I. INTRODUCTION

BACKGROUND

HF&H Consultants (HF&H) was retained to update the Alameda County Water District's (District's) facilities connection charge. The facilities connection charge is a one-time charge to new or expanded connections to the District's water system.

The District's water system services the cities of Fremont, Newark, Union City, and southern portions of Hayward. The water system includes approximately 930 miles of pipe and 3 treatment plants.

Capacity charges were last studied in 2019 and have been adjusted annually by the change in the construction cost index for the San Francisco area, since adoption. **Figure I-1** summarizes the current facilities connection charges.

Figure I-1. Current Facilities Connection Charge

| Customer Class | Incremental Portion | Equity buy-In Portion | Total |
|--|---------------------|-----------------------|------------------|
| Residential (per dwelling unit) | | | |
| Single Family | \$6,194 | \$3,734 | \$9,928 |
| Multi Family | \$5,202 | \$3,137 | \$8,339 |
| Dormitory | \$3,715 | \$2,241 | \$5,956 |
| Non-Residential (meter size) | | | |
| 5/8" | \$6,194 | \$3,734 | \$9,928 |
| 3/4" | \$9,291 | \$5,603 | \$14,894 |
| 1" | \$15,487 | \$9,340 | \$24,827 |
| 1.5" | \$30,977 | \$18,681 | \$49,658 |
| 2" | \$49,563 | \$29,889 | \$79,452 |
| 3" | \$108,423 | \$65,385 | \$173,808 |
| 4" | \$185,872 | \$112,091 | \$297,963 |
| 6" | \$418,216 | \$252,207 | \$670,423 |
| 8" | \$495,663 | \$298,912 | \$794,575 |

STUDY OBJECTIVES

Publicly owned water system's assets are typically paid for by the contributions of existing customers through rates, charges, and taxes. In service areas that incorporate new or expanding customers, the infrastructure developed by previous customers is generally extended towards the service of these new or expanding customers. Existing customers' investment in the existing system capacity allows newly connecting

customers to take advantage of unused surplus capacity. To further economic equity among new and existing customers, in turn, new connectors will typically buy-in to the existing and pre-funded facilities, effectively putting them on par with existing customers. In other words, the new users are buying into the existing system through a payment for the portion of facilities that have already been constructed in advance of new development. In addition, current facilities may be expanded, or new facilities may be constructed to accommodate new or expanding customers.

Key objectives of the study include:

- Provide independent review of the District’s current facilities connection charge;
- Develop an appropriate approach/methodology for updating the District’s facilities connection charges;
- Develop updated facilities connection charges that:
 - Determine the value of the facilities that provide capacity for growth, from existing facilities and future expansion.
 - Equitably recover such value from new connections;
 - Are consistent with industry-standard practices and methodologies;
 - Comply with California Government Code.

LEGAL FRAMEWORK

Facility Connection Charges (also referred to as “Capacity Fees”) are required to ensure that development pays its fair share of the costs associated with providing system capacity, both existing capacity and additional capacity built specifically for growth. Capacity Fees are a type of development impact fee that public agencies may impose as a condition of development under the authority of California Government Code Section 66000 *et seq.*, the Mitigation Fee Act. The Act requires that “those fees or charges shall not exceed the estimated reasonable cost of providing the service”¹. Because the Act does not prescribe a formula or procedure for determining “the estimated reasonable cost,” it is the responsibility of the local agency to employ a method that yields a reasonable result.

This report updates the District’s facility connection charges. The following sections provide summaries of the approach and resulting charges.

¹ Mitigation Fee Act Section 66013(a).

II. APPROACH

The purpose of this report is to document that the conditions have been met to establish that the District's facilities connection charges recover the reasonable cost of providing capacity.

ANALYTICAL APPROACH

Three steps are required to determine the reasonable costs that can be recovered with facility connection fees: (1) facilities that benefit growth must be identified, (2) the value of those facilities must be derived, and (3) the capacity provided by those facilities must be determined. The approach used in this report to address each of these steps is described below.

In establishing facility connection charges, there are three generally accepted methods, as discussed in the American Water Works Association M-1 Manual:

- **Buy-in Method.** The buy-in method is based on the value of the existing system's capacity. This method is typically used when the existing system has remaining capacity to serve new development now and into the future.
- **Incremental Cost Method.** The incremental cost method is based on the value or cost to expand the existing system's capacity, to accommodate growth. This method is typically used when the existing system has limited or no capacity to serve new development.
- **Combined Method.** The combined approach is based on a blended value of both the existing and expanded system's capacity. This method is typically used where some capacity is available in parts of the existing system and new or incremental capacity will need to be built in other parts to serve new development at some point in the future.

The 2019 study which established the District's current facility connection charges used the combined method. This update will continue to use the combined method as the District's existing system has some capacity still available to serve growth and has identified specific expansion-related capital projects, or portions of projects, that will be done in the future in order to accommodate new connections.

Buy-in Component Approach

For the buy-in component of the fees, the value of the District's current system will be determined and then be divided by the total number of equivalent meter units, which will determine the unit cost of capacity. In this way, the buy-in component of the fee is the average cost paid by today's connections, if no additional expansion to the system were required. There is currently capacity available to new connections to join the system.

In order to join the system, new connections need to pay the average cost so that they are at the same level of capital participation as existing connections and thereby have fully reimbursed existing customers so that all connections have borne an equivalent cost.

Value of the Current System (Buy-in Component)

The value of the current system is the numerator in determining the unit cost of capacity for the buy-in component. This value should reflect the original cost of constructing the facilities plus any subsequent costs incurred by rate payers to maintain the facilities so that they are capable of providing capacity for growth, when and if it occurs. A reasonable approach to determining this value is referred to as “replacement cost new less depreciation” (RCNLD) by utility valuation specialists. This method inflates the District’s individual asset values using the Engineering News-Record (ENR) San Francisco Region Construction Cost Index (CCI) so that all assets are valued in current dollars regardless of purchase year. Depreciation of these assets is then removed to value the system at current costs and current condition.

Capacity of Current System (Buy-in Component)

The capacity of the current system is the denominator in determining the unit cost of capacity. The current number of connections is converted to a standard connection referred to as an Equivalent Meter Unit (EMU). An EMU helps standardize customer classes and meters of varying sizes to express the capacity. This allows for a fair comparison of customer classes & meters and provides a normalized basis for assessing capacity charges.

Buy-in Component Unit Cost of Capacity

Dividing the value of the current system facilities by the number of EMUs served determines the buy-in component of the District’s system. In effect, the buy-in component represents the unit cost associated with the capacity that rate payers have already funded. By paying this unit cost, each future connection attains the same level of capital participation in the facilities as an existing rate payer.

Incremental Component Approach (Growth Component)

For the incremental component of the fees, the value of the expanded-capacity projects will be determined and divided by the number of additional EMUs until build-out. Capital improvements that expand system capacity to serve existing and future customers will be included proportionally to the percentage of the cost specifically required for expansion of the system. The portion of such capital improvement projects to serve existing customers are not included and will be covered by rates from current customers.

Cost of the Incremental Facilities (Growth Component)

The cost of the expansion-related facilities needed to accommodate growth is the numerator in determining the unit cost of capacity for the growth component of the facilities connection charge. The value of growth-related projects for the water system is based on the District’s capital improvement program (CIP), presented in current dollars, included in the District’s 25-year adopted CIP.

The capital improvement programs used in this study include projects estimated through FY 2047-48.

Capacity of Incremental Facilities (Growth Component)

The capacity provided by the expansion projects is the denominator in determining the unit cost of capacity. The District’s projected growth in EMUs is currently estimated to be 45,576 EMUs to connect to the District’s water system.

Growth Component Unit Cost of Capacity

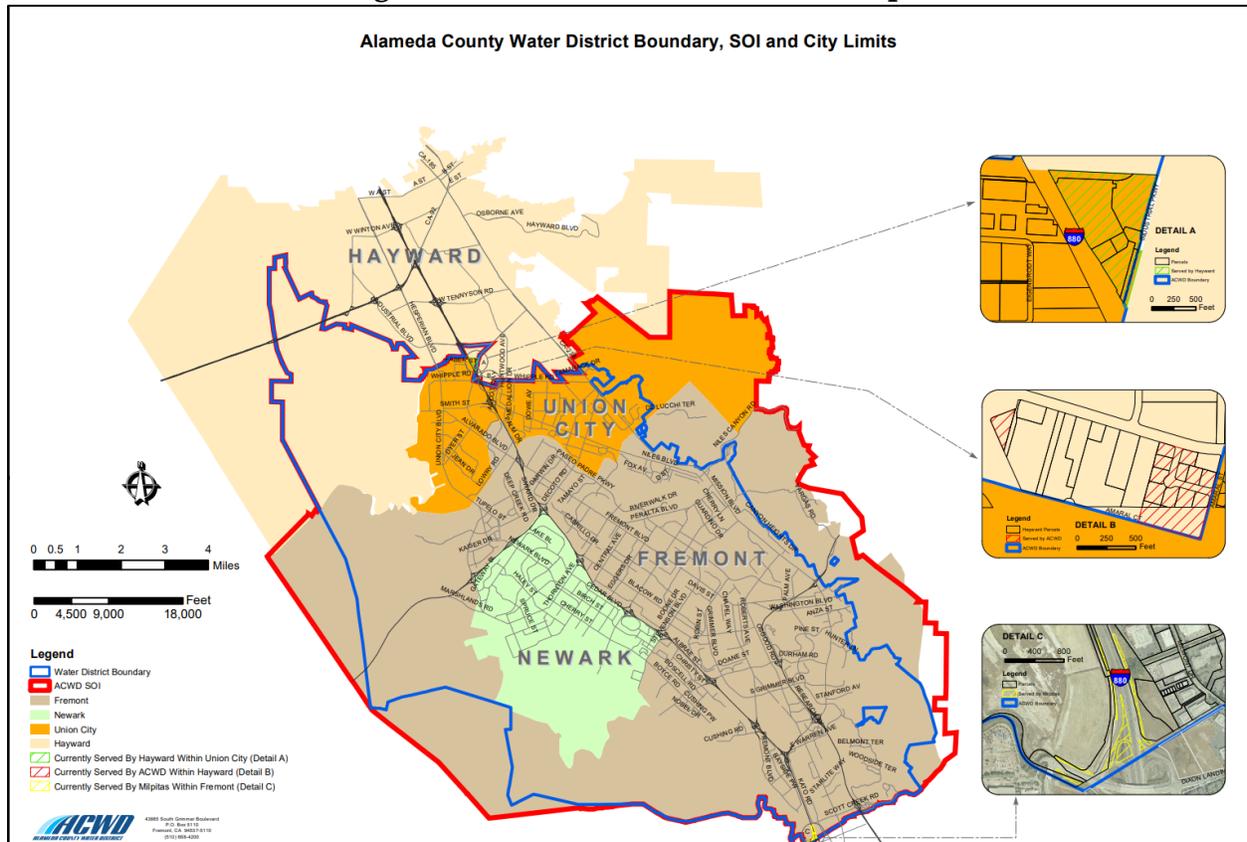
Dividing the value of the new facilities by the number of EMUs served determines the growth component of the District’s system. The growth component represents what new or expanded connections should pay for the cost of additional capacity and expansions necessary to serve the new or expanded development.

The buy-in and growth components will then be combined to determine the total facilities connection charges.

III. FACILITIES CONNECTION CHARGE

This section of the report presents the key assumptions in the calculation of the District’s facilities connection charge. The calculation of the District’s FCC is based upon District specific accounting and planning information to provide water service to the City of Fremont, Newark, and Union City in Alameda County (Figure III-1).

Figure III-1. ACWD Service Area Map



BUY-IN COMPONENT

Value of Existing System

The first step is determining the value of the existing system. In order to join the system, new connections pay equitable costs to be at an equitable level of capital participation as existing connections and ensure that all connections have borne an equivalent cost.

The District’s water system includes approximately 930 miles of pipe and 13 reservoirs & tanks. The District also has 3 active treatment facilities, Water Treatment Plant Number Two, Newark desalination Facility, and Blending Facility.

The determination of reasonable costs begins by determining the net equity current customer have in the existing facilities described above.

The District’s water system and facilities were valued by escalating the original construction costs to current year costs using the *Engineering News Record* Construction Cost Index as of June 2023, so that all assets are valued in current dollars regardless of purchase year. Depreciation of these assets was then removed to value the system at current costs and current condition. The calculated current value of the District’s water system is \$697,866,153. The inventory of the existing pipelines and facilities was compiled by the District and is current as of June 30, 2023. The inventory includes the acquisition date, original cost, and estimated service lives for each asset, based on the District’s records. A copy of the inventory of existing water facility assets (which number nearly 14,000 assets; therefore, not attached to this report), and the RCNLD calculations, used in this study are available at District offices and/or on the District’s website.

This total asset valuation (\$697,866,153) contains both the system’s meters and service lines connecting mains to meters. The District assesses the cost of the meters and meter installation to connectors separately from facility connection charge. This means the value associated with meters and meter installations (\$27,305,834) should be removed from the total asset value, to avoid double counting. Additionally, the service lines connecting new services to backbone infrastructure are constructed by new development and these values (\$64,384,601) should also be removed from the total system value. Lastly, the District also provided HF&H with its total outstanding debt principal (\$64,910,000) which has also been removed from the total system value, to avoid double counting of these costs once new development connects. Once connected, the new connectors will begin paying the outstanding debt as an on-going rate payer.

The net value in the District’s existing water system is summarized in **Figure III-2**.

Figure III-2. RCNLD of Existing Water System

| Assets | RCNLD |
|--|----------------------|
| Total Assets Value | \$697,866,153 |
| Less: Services | (\$64,384,601) |
| Less: Meters & Meter Installations | (\$27,305,834) |
| Less: Total Outstanding Debt Principal | (\$64,910,000) |
| Value of Existing System | \$541,265,718 |

Capacity in the Existing System

The next step in determining the buy-in component is to determine the current used capacity of the system. Dividing the value of the system by the capacity will provide a unit cost for the buy-in component of the facilities connection charges. The current used

capacity of the existing water system is 148,239 EMUs, which was provided by District staff based on current customer subscriptions.

Figure III-3. Total System EMUs

| Total EMUs | |
|----------------------|----------------|
| SFR EMUs | 74,431 |
| MFR EMUs | 41,612 |
| RDU | 68 |
| Non-Residential EMUs | 32,128 |
| Total | 148,239 |

Buy-in Component Calculation

The value of the water system (**Figure III-2**) serves as the cost basis for the buy-in component of the facilities connection charge. The buy-in component is determined by dividing the net equity current connections have in the existing system by the total current used capacity in the system, 148,239 EMUs (**from Figure III-3**). The derivation of the buy-in component of \$3,651 per EMU is shown in **Figure III-4**.

Figure III-4. Buy-in Component Calculation

| Equity Buy-In Charge per EMU | |
|---------------------------------------|----------------|
| Value of Existing System | \$541,265,718 |
| Current Demand (EMUs) | 148,239 |
| Equity Buy-In Charge (Per EMU) | \$3,651 |

Source: Figures III-2 and III-3

INCREMENTAL (GROWTH) COMPONENT

Value of Future Facilities

The next step is to determine the value of future growth-related capital improvements necessary to accommodate new or expanded connections through the District's planned build-out.

The District maintains a capital improvement program (CIP) that addresses necessary capital improvement projects to maintain the current system in good working order, as well as projects needed to expand the water system capacity through build-out. The District assigned a future growth share to each project in the capital improvement program. For a typical project, such as renewal or replacement of existing core infrastructure, sufficient capacity is built to serve future growth. The default *percentage growth* assigned to improvement projects is based on the estimated water demand from future growth. Since the future growth represents 22.6% of estimated water demands at the end of the planning horizon for this study, that is the share of cost allocated to growth unless a different allocation is warranted for a specific project. . A list of the District's planned capital improvements and their respective percentages which are growth-

related is available at the District offices. The total project costs are based on the projected projects and updated valuations included in the District’s recent financial plan and Board-approved budget for FY 2023-24, which projected capital project costs through FY 2047-48. The allocated costs reflect only the proportionate share of the total costs of the project that are growth related. The existing Financial Planning model for the District anticipates two debt issuances, with \$20,000,000 in FY 2026 and \$25,000,000 in FY 2028, aimed at refinancing the 2015 debt and to support capital projects.

Fund Reserves

Next, we subtract the Facilities Improvement Fund (FIF)² reserve balance (as of June 30, 2023) to recognize the revenue that has already been contributed by developers towards the remaining capital projects necessary to accommodate the growth.

Figure III-5 summarizes the net growth-related capital projects necessary to provide service to the projected future users.

Figure III-5. Net Growth-Related CIP

| | Current |
|-------------------------|----------------------|
| Total Growth CIP | \$419,670,412 |
| Less FIF Balance | (\$77,577,131) |
| Incremental Cost | \$342,093,281 |

Incremental Capacity

The next step in determining the growth component is to determine the incremental capacity provided by the net growth-related capital improvement projects identified by the District. Dividing the cost of growth-related projects, net of facility connection charges collected and not yet spent, by the additional capacity the projects will provide, determines the unit cost for the growth component of the facilities connection charge. District staff currently estimates there will be an additional 45,576 EMUs at the end of the CIP schedule by 2048 (as shown in **Figures III-6** and **III-7**). The District’s estimate of projected growth in EMUs is aligned with their Urban Water Management Plan (UWMP) that goes through 2045. As more thoroughly explained in section 2.4 of the UWMP, growth projections through 2040 align with historical experience while growth from 2041-2045 is intended to bring total growth projections into alignment with regional planning agency estimates. The majority of growth will be from new non-residential and multi family customers.

² Revenue collected from facilities connection charges, and not yet spent. These funds are specifically earmarked for capital costs tied to growth and have been removed to eliminate double counting.

Figure III-6. Residential Growth EMUs

| Fiscal Year | SFR Dwelling Units | MFR Dwelling Units | Residential Dwelling Units | New Total Dwelling Units | New SFR Dwelling Units (17.2%) | New MFR Dwelling Units (82.8%) | SFR Growth EMUs | MFR Growth EMUs (84% of SFR) |
|-------------------------|-----------------------|-----------------------|----------------------------------|--------------------------------|--------------------------------------|--------------------------------------|-----------------------|------------------------------------|
| 2023 (Current) | 74,431 | 49,652 | 124,083 | | | | | |
| FY 2024 | 74,551 | 50,156 | 124,707 | 624 | 120 | 504 | 120 | 423 |
| FY 2025 | 74,619 | 50,739 | 125,358 | 651 | 68 | 583 | 68 | 490 |
| FY 2026 | 74,765 | 51,444 | 126,209 | 851 | 146 | 705 | 146 | 592 |
| FY 2027 | 74,911 | 52,148 | 127,059 | 851 | 146 | 705 | 146 | 592 |
| FY 2028 | 75,057 | 52,853 | 127,910 | 851 | 146 | 705 | 146 | 592 |
| FY 2029 | 75,203 | 53,558 | 128,761 | 851 | 146 | 705 | 146 | 592 |
| FY 2030 | 75,349 | 54,262 | 129,611 | 851 | 146 | 705 | 146 | 592 |
| FY 2031 | 75,490 | 54,939 | 130,429 | 818 | 141 | 677 | 141 | 569 |
| FY 2032 | 75,631 | 55,617 | 131,248 | 818 | 141 | 677 | 141 | 569 |
| FY 2033 | 75,772 | 56,294 | 132,066 | 818 | 141 | 677 | 141 | 569 |
| FY 2034 | 75,913 | 56,971 | 132,884 | 818 | 141 | 677 | 141 | 569 |
| FY 2035 | 76,054 | 57,649 | 133,703 | 818 | 141 | 677 | 141 | 569 |
| FY 2036 | 76,200 | 58,352 | 134,552 | 850 | 146 | 704 | 146 | 591 |
| FY 2037 | 76,346 | 59,056 | 135,402 | 850 | 146 | 704 | 146 | 591 |
| FY 2038 | 76,492 | 59,760 | 136,252 | 850 | 146 | 704 | 146 | 591 |
| FY 2039 | 76,638 | 60,464 | 137,102 | 850 | 146 | 704 | 146 | 591 |
| FY 2040 | 76,784 | 61,168 | 137,952 | 850 | 146 | 704 | 146 | 591 |
| FY 2041 | 77,543 | 64,819 | 142,362 | 4410 | 759 | 3651 | 759 | 3,067 |
| FY 2042 | 78,302 | 68,471 | 146,773 | 4410 | 759 | 3651 | 759 | 3,067 |
| FY 2043 | 79,061 | 72,122 | 151,183 | 4410 | 759 | 3651 | 759 | 3,067 |
| FY 2044 | 79,820 | 75,774 | 155,594 | 4410 | 759 | 3651 | 759 | 3,067 |
| FY 2045 | 80,579 | 79,425 | 160,004 | 4410 | 759 | 3651 | 759 | 3,067 |
| FY 2046 | 80,579 | 79,425 | 160,004 | - | - | - | - | - |
| FY 2047 | 80,579 | 79,425 | 160,004 | - | - | - | - | - |
| FY 2048 | 80,579 | 79,425 | 160,004 | - | - | - | - | - |
| Projected Growth | | | | 35,920 | 6,147 | 29,773 | 6,147 | 25,009 |

Figure III-7. Non-Residential Growth EMUs

| | Total Demand (AF) | Demand from New Accounts (AF) | EMUs per AF of Demand | Growth Non-Residential EMUs |
|-------------------------|-------------------|-------------------------------|-----------------------|-----------------------------|
| 2023 (Current) | 12,504 | 0 | 2.57 | 0 |
| FY 2024 | 12,743 | 44 | 2.57 | 112 |
| FY 2025 | 12,983 | 45 | 2.57 | 116 |
| FY 2026 | 13,035 | 53 | 2.57 | 136 |
| FY 2027 | 13,088 | 53 | 2.57 | 136 |
| FY 2028 | 13,142 | 53 | 2.57 | 136 |
| FY 2029 | 13,195 | 53 | 2.57 | 137 |
| FY 2030 | 13,248 | 53 | 2.57 | 137 |
| FY 2031 | 13,330 | 82 | 2.57 | 210 |
| FY 2032 | 13,411 | 82 | 2.57 | 210 |
| FY 2033 | 13,493 | 82 | 2.57 | 210 |
| FY 2034 | 13,575 | 82 | 2.57 | 210 |
| FY 2035 | 13,656 | 82 | 2.57 | 210 |
| FY 2036 | 13,743 | 87 | 2.57 | 223 |
| FY 2037 | 13,830 | 87 | 2.57 | 223 |
| FY 2038 | 13,916 | 87 | 2.57 | 223 |
| FY 2039 | 14,003 | 87 | 2.57 | 223 |
| FY 2040 | 14,089 | 87 | 2.57 | 223 |
| FY 2041 | 14,973 | 883 | 2.57 | 2,269 |
| FY 2042 | 15,856 | 883 | 2.57 | 2,269 |
| FY 2043 | 16,739 | 883 | 2.57 | 2,269 |
| FY 2044 | 17,623 | 883 | 2.57 | 2,269 |
| FY 2045 | 18,506 | 883 | 2.57 | 2,269 |
| FY 2046 | 18,506 | - | 2.57 | - |
| FY 2047 | 18,506 | - | 2.57 | - |
| FY 2048 | 18,506 | - | 2.57 | - |
| Projected Growth | | 5,612 | 2.57 | 14,420 |

Figure III-8. Projected Growth EMUs by Class

| Projected Growth EMUs | |
|----------------------------------|---------------|
| SFR EMUs | 6,147 |
| MFR EMUs | 25,009 |
| Non-Residential EMUs | 14,420 |
| Growth EMUs (2024 - 2048) | 45,576 |

Source: Figures III-6 and III-7

Growth Component Calculation

The growth component is determined by dividing the net replacement cost new of the growth-related capital improvement costs by the additional capacity provided, 45,576 EMUs. The derivation of the growth component of \$7,506 per EMU is shown in **Figure III-9**.

Figure III-9. Incremental (Growth) Component Calculation

| Incremental Cost Charge per EMU | |
|--|----------------|
| Incremental Cost | \$342,093,281 |
| Growth EMUs (2024 - 2048) | 45,576 |
| Incremental Cost Charge (Per EMU) | \$7,506 |

Source: Figures III-5 and III-8

FACILITIES CONNECTION CHARGE CALCULATION

We add together the buy-in component and incremental (growth) component, as shown in **Figure III-10**, to arrive at the proposed facilities connection charge of \$11,157 per EMU.

Figure III-10. Facilities Connection Charge Calculation (\$ per EMU)

| SFR Connection Charge | |
|---|-----------------|
| Equity Buy-In Charge (Per EMU) | \$3,651 |
| Incremental Cost Charge (Per EMU) | 7,506 |
| Facilities Connection Charge (Per EMU) | \$11,157 |

Source: Figures III-4 and III-9

One EMU is the equivalent of a 5/8" meter and a single-family home is categorized as one EMU because a 5/8" meter meets the typical demands of single-family homes, excluding flows from a fire sprinkler system. **Figure III-11** calculates the cost for each component (buy-in and incremental) and the resulting total facilities connection charge per dwelling unit (for residential customers) and size of meter (for non-residential customers).

Figure III-11. Facilities Connection Charge Calculation (by Customer Class)

| Customer | Proposed Equity Buy-In Component | | | Proposed Incremental Component | | | Proposed Facilities Connection Charge |
|-------------------------------------|----------------------------------|---------------------|------------------|--------------------------------|---------------------|------------------|---------------------------------------|
| | Cost per EMU | Capacity Multiplier | Equity Buy-In | Cost per EMU | Capacity Multiplier | Incremental | |
| Residential (per DU) | a | b | c = a * b | d | e | f = d * e | g = c + f |
| SFR | \$3,651 | 1.00 | \$3,651 | \$7,506 | 1.00 | \$7,506 | \$11,157 |
| MFR | \$3,651 | 0.84 | \$3,067 | \$7,506 | 0.84 | \$6,305 | \$9,372 |
| Dorm | \$3,651 | 0.60 | \$2,191 | \$7,506 | 0.60 | \$4,504 | \$6,694 |
| Non-Residential (meter size) | | | | | | | |
| 5/8" | \$3,651 | 1.00 | \$3,651 | \$7,506 | 1.00 | \$7,506 | \$11,157 |
| 3/4" | \$3,651 | 1.50 | \$5,477 | \$7,506 | 1.50 | \$11,259 | \$16,736 |
| 1" | \$3,651 | 2.50 | \$9,128 | \$7,506 | 2.50 | \$18,765 | \$27,893 |
| 1.5" | \$3,651 | 5.00 | \$18,255 | \$7,506 | 5.00 | \$37,530 | \$55,785 |
| 2" | \$3,651 | 8.00 | \$29,208 | \$7,506 | 8.00 | \$60,048 | \$89,256 |
| 3" | \$3,651 | 17.50 | \$63,893 | \$7,506 | 17.50 | \$131,355 | \$195,248 |
| 4" | \$3,651 | 30.00 | \$109,530 | \$7,506 | 30.00 | \$225,180 | \$334,710 |
| 6" | \$3,651 | 67.50 | \$246,443 | \$7,506 | 67.50 | \$506,655 | \$753,098 |
| 8" | \$3,651 | 80.00 | \$292,080 | \$7,506 | 80.00 | \$600,480 | \$892,560 |

Figure III-12 compares the facilities connection charges to the current charges, by customer class, followed by descriptions of how the fees were determined for each customer class.

Figure III-12. Current and Proposed Facilities Connection Charges

| Customer | Current | | | Proposed | | |
|-------------------------------------|---------------|-------------|------------------|---------------|-------------|------------------|
| | Equity Buy-In | Incremental | FCC | Equity Buy-In | Incremental | FCC |
| Residential (per DU) | | | | | | |
| SFR | \$3,734 | \$6,194 | \$9,928 | \$3,651 | \$7,506 | \$11,157 |
| MFR | \$3,137 | \$5,202 | \$8,339 | \$3,067 | \$6,305 | \$9,372 |
| Dorm | \$2,241 | \$3,715 | \$5,956 | \$2,191 | \$4,503 | \$6,694 |
| Non-Residential (meter size) | | | | | | |
| 5/8" | \$3,734 | \$6,194 | \$9,928 | \$3,651 | \$7,506 | \$11,157 |
| 3/4" | \$5,603 | \$9,291 | \$14,894 | \$5,477 | \$11,259 | \$16,736 |
| 1" | \$9,340 | \$15,487 | \$24,827 | \$9,128 | \$18,765 | \$27,893 |
| 1.5" | \$18,681 | \$30,977 | \$49,658 | \$18,255 | \$37,530 | \$55,785 |
| 2" | \$29,889 | \$49,563 | \$79,452 | \$29,208 | \$60,048 | \$89,256 |
| 3" | \$65,385 | \$108,423 | \$173,808 | \$63,893 | \$131,355 | \$195,248 |
| 4" | \$112,091 | \$185,872 | \$297,963 | \$109,530 | \$225,180 | \$334,710 |
| 6" | \$252,207 | \$418,216 | \$670,423 | \$246,443 | \$506,655 | \$753,098 |
| 8" | \$298,912 | \$495,663 | \$794,575 | \$292,080 | \$600,480 | \$892,560 |

Single Family Residential

A single family connection is charged 1 EMU or \$11,157 per connection. While a single-family home typically receives a 1" meter to accommodate fire flows, the connection charge only considers capacity needed for residential purposes (i.e. excluding fire flows).

Multi Family & Dormitory Residential

Multi Family connections are charged 0.84 EMUs or \$9,372 per dwelling unit (\$11,157 x 0.84 EMUs) and dormitory connections are charged 0.60 EMUs or \$6,694 per dwelling unit (\$11,157 * 0.60 EMUs), which is consistent with the current fee structure and recent evaluations by District staff.

Reduced fees for multi family dwelling units and dormitory units are fairly common in the industry as these customer classes typically use less water than single family dwellings. On average, multi family dwelling units and dormitory units are smaller and have fewer persons per household than single family dwellings, thus resulting in less water to be used and transported through the District's water system. These percentages are based on a District analysis of peak water demand of a multi-family dwelling unit compared to a single-family home.

Non-Residential

Non-residential commercial customers are charged based on their meter size. Charges for non-residential commercial customers are calculated by multiplying the charge per EMU by the capacity provided by each meter size.

IMPLEMENTATION

It is our opinion that the facilities connection charges developed in this report are reasonable for the forthcoming year. In order to maintain the fees in current dollars going forward, we recommend that the District annually update the fees by the percentage change in the Engineering News Record Construction Cost Index (ENR CCI), beginning May 1, 2025. In addition, we recommend that the District conduct a new facilities connection charge study every five years or whenever a new facilities master plan is prepared.



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