



AGENDA REPORT

Meeting Date: February 3, 2015

Item Number: E-1

To: Honorable Mayor & City Council

From: Trish Rhay, Assistant Director, Public Works Services
Daniel E. Cartagena, Senior Management Analyst
Michelle Tse, Senior Management Analyst

Subject: A. AN ORDINANCE OF THE CITY OF BEVERLY HILLS AMENDING THE BEVERLY HILLS MUNICIPAL CODE TO ESTABLISH A WATER CAPACITY CHARGE
B. RESOLUTION OF THE COUNCIL OF THE CITY OF BEVERLY HILLS AMENDING THE COMPREHENSIVE SCHEDULE OF TAXES, FEES & CHARGES TO ESTABLISH A WATER CAPACITY CHARGE

Attachments: 1. Ordinance
2. Resolution
3. Capacity Charges Report dated December 22, 2014 by Raftelis Financial Consultants

RECOMMENDATION

Staff recommends that the City Council move to waive the full reading of the ordinance and that the ordinance entitled, "ORDINANCE OF THE CITY OF BEVERLY HILLS AMENDING THE BEVERLY HILLS MUNICIPAL CODE TO ESTABLISH A WATER CAPACITY CHARGE" be introduced and read by title only.

Staff also recommends that the City Council approve the resolution entitled "A RESOLUTION OF THE COUNCIL OF THE CITY OF BEVERLY HILLS AMENDING THE COMPREHENSIVE SCHEDULE OF TAXES, FEES & CHARGES TO ESTABLISH A WATER CAPACITY CHARGE."

INTRODUCTION

At the December 2, 2014 Formal Session, staff outlined the guidelines and parameters for imposing a water capacity charge on water system customers, in connection with certain development on the customer's property. The City Council was in agreement with the program parameters and directed staff to return with an ordinance amending the Beverly Hills Municipal Code (BHMC) to establish a water capacity charge and a resolution to establish the amount of the

water capacity charge. This report transmits both the ordinance and resolution to establish the water capacity charge.

DISCUSSION

At its August 13, 2014 meeting, the Public Works Commission ("Commission") unanimously supported the establishment of both water and wastewater capacity charges in the Beverly Hills Water service area, which includes a portion of West Hollywood. The Public Works Liaison Committee ("Liaison Committee") members, Councilmembers Brien and Mirisch, are also in support of the water capacity charge framework. The proposed water capacity charge structure will be assessed on both new construction and substantial remodels and additions for residential, commercial, and mixed-use projects. This report will describe the framework and impact of capacity charges to offset the anticipated increase in water demand on the existing water system. A Liaison meeting was held on November 25, 2014 and their recommendation will be presented to the City Council during the December 2, 2014 Study Session. The wastewater capacity charge recommendation will be brought forward for City Council consideration at a future meeting.

In the last few years, the City has experienced an increase in construction in both residential and commercial sectors following the 2008 economic downturn. The trend with construction projects is that the properties being built are considerably larger in size. This growing trend prompted the Commission to inquire as to the financial and physical conditions of the existing water infrastructure to meet the anticipated water demand increase due to these larger properties. The concern expressed was that the growing pace of construction activity may accelerate the need to increase the water system's supply and capacity.

By way of background, Beverly Hills rate payers have been investing in the existing water system since the early 1900's. With the exception of the water treatment plant (currently debt funded) the entire system has been paid for by past and present customers. Current water rates are not adequate to support projects to expand and maintain the water system to meet future needs. As part of the analysis, the Commission discussed the fairness of levying the cost of expanding the water system to existing customers. To address the fairness and equality issue, the Commission recommends that water capacity charges be applied to new and substantial remodel and development projects. These funds would then be used to expand the City's water system in order to meet increased demand.

Capacity charges are one-time capital charges that ensure rate equity between past, present and future customers. These charges are imposed on customers that request new or expanded connections to the City's water system. Such charges are not uncommon and are permitted by law. There are, however, provisions that limit how the capacity charges can be structured. Water capacity charges can be imposed so long as the charges do not exceed the estimated cost for providing such a service. A capacity charge is not uncommon. Cities such as Glendale, Santa Monica, Santa Barbara and San Diego currently have such a charge in place. Cities generally impose the capacity charge based on water meter size or the net increase with a water meter change.

The basic statutory standards governing water capacity charges are embodied in Government Code Sections 66013, 66016, 66022 and 66023. Government Code Section 66013, in particular, contains requirements specific to pricing water connection charges:

Notwithstanding any other provision of law, when a local agency imposes charges for water connection or sewer connection, or imposes capacity charges, those charges, or charges shall not exceed the estimated reasonable cost of providing the service for which the charge or charge is imposed, unless a question regarding the amount the charge or

charge in excess of the estimated reasonable cost of providing the services or materials is submitted to, and approved by, a popular vote of two-thirds of those electors voting on the issue.”

Section 66013 also includes the following general requirement that the connection charge revenue must be segregated from the General Fund in order to avoid commingling of connection charges and the General Fund.

Public Works Commission and Public Works Liaison Committee Review

The water capacity charge framework has been discussed and vetted by the Commission and the Liaison Committee and both support the establishment of water capacity charges. The Liaison Committee is recommending the water capacity charge apply to both new construction and substantial remodels for commercial, mixed-use, multi-residential and single family properties. During these discussions, it was pointed out that the standard approach for assessing capacity charges was based on the water meter size needed to support new development. However, the Liaison committee felt the standard meter size assessments missed smaller scale development that may be expanding their usage but not significant enough to trigger a water meter upgrade. A brief discussion also took place in September with the City Council during setting of the fiscal year 2014/15 water rates.

The City caused to be prepared by Raftelis Financial Consultants, Inc., a report entitled “Capacity Charges Report” (the “Report”) and dated December 22, 2014. The Report recommends a hybrid approach in which the charge is calculated based on water meter size upgrade, increase in square footage, or based on business type. The following sections discuss the capacity charge framework.

Proposed Hybrid Capacity Charge Structure

The first step in the capacity charge calculation is to determine the total cost associated with providing capacity for future development. There are two factors that need to be considered when determining the investment new customers should pay:

1. Water distribution system – asset value
2. Additional water supply development – future investment

These factors set the total revenue target any new capacity charge would need to recover from development within the City’s system. The following sections elaborate on the factors and figures taken into consideration in the development of the capacity charge structure.

Water Distribution System - Asset Value

Since rate payer investments made since the early 1900’s have created a water system that would support existing and future customers, the capacity charge should factor in new customers “paying back” existing customers for past investments made that allow and support new development. This section details the value of these past investments.

By way of background, the existing water system consists of the following major components:

- 10 reservoirs for a total storage capacity of close to 40 million gallons
- 4 groundwater wells
- 2 service connections to Metropolitan Water District (MWD)
- 171 miles of pipeline
- 11,000 water meters

Table 2 below provides the estimated value of the existing Water System.

Table 2 – Estimated City Water System Value

Asset Value		\$124.4 Million
Capital Improvement Program (CIP)	[+]	\$ 6.1 Million
Debt	[-]	\$ 37.7 Million
TOTAL		\$ 92.8 Million

The asset value in the table above is based on current book value of all water assets within the City of Beverly Hills water system. The City will need to add new wells and treatment capacity for new users; therefore these assets in the current water system are excluded in the system value. The Capital Improvement Program (“CIP”) value represents a 2.5 year average of the current 5-year CIP. This CIP value is based on the City’s current 5-year CIP. This value will be scaled in each consecutive year so new customers will pay the appropriate share of these costs. The debt balance represents the remaining principal bond payments for the Water Treatment facility. All rate payers will pay for this debt on their base bills.

Water Supply Development - Future Investment

Public Works Services is currently working with the Commission to complete the 10 year Water Enterprise Plan. This plan will formalize the project and investment portfolio needed to sustain the City’s long term water supply. The preliminary estimated investment of approximately \$30 million over the next 10 years will be required to meet the City’s increased water production needs. Currently, the estimated \$30 million capital investment is currently not factored in the existing water rates.

Calculation of Charges

The next step in the process is to convert the above investments into the proportional charge related to any given development size and impacts. This is done by converting each investment type into a unit type usage rate. Table 1 below shows these conversions.

Table 1- Total Cost per Gallons Per Day (GPD)

Investment Type	Total Investment	System Volume (gpd)*	Cost / gpd*
Water Distribution System	\$92,817,860	9,030,575	\$10.28
Water Supply Development	\$30,000,000	3,000,000	\$10.00
Sum of Water Distribution and Water Supply Development			\$20.28

*Gpd = gallons per day

The resulting cost/gpd of \$20.28 can then be used to assess the cost of the projected water usage for project development. The average water use for a single family residence is approximately 925.7 gallons per day. To calculate the single family residence connection cost, the cost/gpd (i.e. \$20.28) multiplied by the average number of gallons per day for a single family residence (i.e. 925.7 gallons) equates to \$18,773. There are several assumptions in this calculation:

Assumptions:

1. The \$18,773 figure accounts for both indoor and outdoor water use on the property.
2. Half of the usage is for personal indoor use. To find the average cost for a single family residence indoor use, 50% of \$18,773 would be \$9,387.
3. The average single family residence size is 5,000 sq. ft. To calculate the average cost per square footage of single family residence, it would be \$9,387 / 5,000 sq. ft = \$1.88 (approx. \$2 per sq. ft).

Based on this analysis, \$2 sq. ft. is the average cost per square charge of single family residence; this figure will be used to calculate the capacity charge using the net increase of square footage. Example 3a below will highlight how this figure is used to calculate the capacity charge for residential projects.

In summary, the proposed capacity charge framework is designed to achieve the following objectives:

- Assess the water capacity charge on new and substantial residential, commercial, and mixed-use projects that have expanded water usage but may not necessarily trigger a meter size upgrade.
- The first 1,000 sq. ft. net increase of floor space for residential projects (in which the project scope does not trigger a meter size upgrade) would be exempt from the capacity charge assessment.
- Commercial development and redevelopment projects would be assessed a capacity charge different than residential projects. The calculation would be based on building use type, similar to the pre-existing wastewater charges.

Application of the Charge

As stated earlier, the hybrid approach will assess charges for both residential and commercial redevelopment projects regardless of whether the development triggers a meter change or not. Table 2 below illustrates which calculation would apply to any given commercial and residential development.

Table 2 – Hybrid Capacity Charge Framework

	Meter Rate Calculation Approach	Sq. Ft. Rate Calculation Approach
New Development	Yes	No
Substantial Remodel Requiring Meter Change	Yes	No
Substantial Remodel Not Requiring Meter Change	No	Yes

Following are examples for each specific type of assessment that may occur under the proposed hybrid capacity charge framework and highlights how the capacity charge framework will be applied in both residential and commercial project settings.

Example 1: New Development – Residential and Commercial Projects

For both new residential and commercial projects that need to be connected to the City’s water system for the first time, the capacity charge would be calculated based on a flat rate charge based on meter size. Given the current layout of the City, there are very few, if any, areas that do not have water meter connections already in place.

Table 3 provides the breakdown of the water capacity charge assessments based on the various water meter size.

Table 3 - Water Capacity Charge Based on Meter Size

Meter Size	Capacity Multiplier	Capacity Charge
1"	1	\$ 14,912
1.5"	2	\$ 29,824
2"	3.2	\$ 47,719
3"	6	\$ 89,473
4"	10	\$149,121
6"	20	\$298,243

For example, if a 6-unit condo development of 100,000 sq. ft. is built on a vacant lot with no current meter but installs a 2" water meter, the capacity charge assessment would be \$47,719 as outlined in Table 2 above.

Example 2: Redevelopment Requiring Meter Upgrade – Residential and Commercial Projects

Residential and commercial projects that trigger the need for a larger meter size would be assessed the cost difference of the meter upgrade from the current smaller to new larger meter. However, if a property remodel does not trigger a meter change-out, the capacity charge would be calculated based on the net increase of square footage in floor area.

For example, if a single-family residential redevelopment project required a water meter upgrade from a 1" to a 1.5" water meter, then the capacity charge would be assessed as follows:

1.5" new larger meter size:	\$ 29,824
<u>Less 1" current smaller meter size:</u>	<u>\$ 14,912</u>
<i>Assessed Capacity Charge:</i>	<i>\$ 14,912</i>

Example 3a: Redevelopment Without Meter Upgrade – Residential Projects

If a residential redevelopment project does not require a meter change-out, the capacity charge would be calculated based on the net increase of square footage in floor area.

For example, if the 4,000 sq. ft. single family residence was torn down to build a 6,000 sq. ft. single family home, the water capacity charge would be calculated based on the net increase of square footage in floor area. In this case, the 2,000 sq. ft. increase in the property size would result in a capacity charge assessment of \$3,760, calculated as follows:

2,000 sq. ft. property size next increase x \$1.88/sq. ft. = \$3,760 capacity charge assessment

However, any net increase of square footage up to 1,000 sq. ft. would be exempt from the capacity charge assessments. This exemption is included in the framework calculation to address rounding factors within the calculations. Smaller residential projects may be significant enough to warrant a capacity charge assessment. As such, any net increase of square footage in excess of the 1,000 sq. ft. would be assessed the capacity charge.

Example 3b: Redevelopment Without Meter Upgrade – Commercial Projects

Capacity charges for commercial projects that do not trigger a water meter upgrade will be calculated using the pre-existing water uses utilizing wastewater charges. Table 4 provides an overview of the pre-existing rates based on building usage type.

Table 4 – Water Capacity charges for Non-Residential Use

Customer Class	Beverly Hills Estimated Water GPD (gal/day)	Service Unit	Water Connection Charges
Auditorium/Community Center	4.4	Per seat	\$ 90
Bank	167	Per 1,000 sq. ft.	\$ 3,380
Gymnasium	278	Per 1,000 sq. ft.	\$ 5,633
Health Spa	667	Per 1,000 sq. ft.	\$13,519
Hotel, per room	144	Per room	\$ 2,929
Medical Office	278	Per 1,000 sq. ft.	\$ 5,633

Office Building	167	Per 1,000 sq. ft.	\$ 3,380
Shopping Center	167	Per 1,000 sq. ft.	\$ 3,380
Cofcharge House	333	Per 1,000 sq. ft.	\$ 6,759
Restaurant – Full Service	33	Per seat	\$ 676
Retail Store	89	Per 1,000 sq. ft.	\$ 1,803
School – Private	222	Per 1,000 sq. ft.	\$ 4,506
Supermarket	167	Per 1,000 sq. ft.	\$ 3,380

If the project increases the existing size of the business for the same use, then the net increase of square footage will be calculated based on the business type use.

For example, if a hotel expands its size by adding 6 more rooms, then the capacity charge would be calculated as follows: \$2,929 per room x 6 rooms = \$17,574.

The capacity charge calculation will also take into consideration a change in building use. For example, if a 750 sq. ft. commercial building was redeveloped from retail use to a hair salon, the capacity charges will be calculated using the net square footage increase with the new building use type rate.

Health spa connection charge: 750 sq. ft. x \$13,519 per 1,000 sq. ft.		\$10,139.25
<u>Retail store connection charge: 750 sq. ft. x \$1,803 per 1,000 sq. ft.</u>	<u>[-]</u>	<u>\$ 1,352.25</u>
<i>Capacity charge assessment:</i>		<i>\$ 8,787</i>

It is possible to have instances in which commercial development projects may initially trigger a capacity charge based on a meter size upgrade and subsequent future development projects may trigger additional capacity charge assessments based on this proposed framework. For commercial projects that have previously paid for the capacity charge based on a meter upgrade, development projects for the same building can appeal the re-assessment for capacity charges. The rationale is that capacity charges based on meter change upgrades already pay for the anticipated increase in demand. As such, the assessment of additional capacity charges is not necessary.

Proposed Capacity Charge Collection Method

The City would collect the Capacity charge through one of the City’s billing processes. Staff would, on a regular basis, compile a listing of all development projects in both Beverly Hills and the portion of West Hollywood serviced by the City to assess the capacity charges.

As previously mentioned, there will also be an appeals process in place to address instances in which commercial development projects may trigger subsequent capacity charge assessments after having paid for the capacity charge assessed based on a water meter upgrade.

FISCAL IMPACT

The proposed Capacity charges would fund future capital infrastructure projects to expand and maintain the City’s existing system. The City’s Water utility service is funded by the Water Enterprise Fund. The Water Enterprise Fund is solely dependent on user rates, charges and charges to fund operations, maintenance and long-term debt obligations. The establishment of the Water Capacity Charge is seen as a method to minimize future rates increases due to buy-in benefits resulting from future growth.


George Chavez
Approved By

Attachment 1

ORDINANCE NO. ____

AN ORDINANCE OF THE CITY OF BEVERLY HILLS AMENDING
THE BEVERLY HILLS MUNICIPAL CODE TO ESTABLISH A
WATER CAPACITY CHARGE

THE CITY COUNCIL OF THE CITY OF BEVERLY HILLS DOES ORDAIN AS
FOLLOWS:

Section 1. The City Council of the City of Beverly Hills hereby finds as follows:

(a) Each new connection to the City's water system creates a demand for additional water and additional capacity in the water system.

(c) The City Council wishes to establish a charge for the cost of water facilities in existence and for new water facilities to be acquired or constructed that are of proportional benefit to the person being charged.

(d) The City Council commissioned a study (the "Study") by Raftelis Financial Consultants, Inc., dated December 22, 2014, to calculate such charge in an amount that reflects the proportional costs to serve a new or expanded connection to the water system.

(e) On this date, the City Council conducted a public hearing on the proposed water capacity charge.

Section 2. The City Council hereby amends the Municipal Code of the City of Beverly Hills by adding Article 2.5 to Chapter 1 (City Utility Services) of Title 6 (Utilities and Franchises) to read as follows:

"Article 2.5. Water Capacity Charge

6-1-250: Purpose:

The purpose of this article is to establish a water capacity charge for the cost of water facilities in existence and for new water facilities to be acquired or constructed that are of proportional benefit to the person being charged, including supply or capacity contracts for rights or entitlements, real property interests, and entitlements and other rights of the City involving capital expense relating to its use of existing or new water facilities.

6-1-251: Establishment of a Water Capacity Charge:

Upon near completion of a qualifying residential or commercial project when the project is ready for connection to the City's water system , a user of city water service shall pay a water capacity charge in an amount established by resolution of the city council.

6-1-252: Project Defined:

For the purposes of this Article, "project" means the construction or addition of "floor area," as defined in section 10-3-100 of this code, which requires a building permit. "Project" also shall mean any change of use of property, which requires a larger water meter and a building permit.

6-1-253: Collection of Water Capacity Charge:

The city may collect the water capacity charge from the water user with a bill for water service charges, or by delivering a separate bill for the water capacity charge. The City may collect the water capacity charge in two or more installments The city council may provide, by resolution, for an alternative procedure for collection of the water capacity charge.

6-1-254: Establishment of Special Fund for Charge:

Pursuant to Government Code section 66013, there is hereby established a special fund entitled the “water capital facilities fund.” The city shall place the revenues from the water capacity charge into the water capital facilities fund to be used solely for the purposes established by this article.

6-1-255: Annual Report:

The city shall annually provide the information required by Government Code section 66013, as such law may be amended from time to time, in the manner provided by such law.

6-1-256: Adjustments:

A person may apply to the Director of Public Works Services or his/her designee for an adjustment to the water capacity charge for a project based upon facts that show the person previously paid a water capacity charge in an amount that reflects the proportional costs to serve the new or expanded connection to the water system for the property. ”

Section 3. The City Clerk shall cause this Ordinance to be published at least once in a newspaper of general circulation published and circulated in the City within fifteen (15) days after its passage, in accordance with Section 36933 of the Government Code; shall certify to the adoption of this Ordinance and shall cause this ordinance and her certification, together with proof of publication, to be entered in the Book of Ordinances of the Council of this City.

Section 4. This Ordinance shall go into effect and be in full force and effect at 12:01 a.m. on the thirty-first (31st) day after its passage.

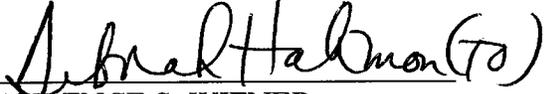
Adopted:
Effective:

LILI BOSSE
Mayor of the City of Beverly Hills,
California

ATTEST:

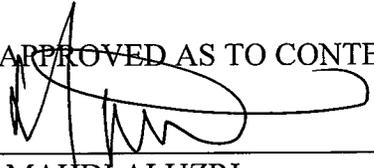
(SEAL)
BYRON POPE
City Clerk

APPROVED AS TO FORM:

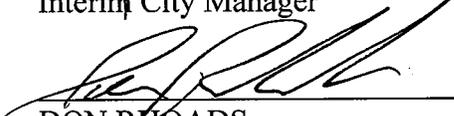


LAURENCE S. WIENER
City Attorney

APPROVED AS TO CONTENT:



MAHDI ALUZRI
Interim City Manager



DON RHOADS
Director of Administrative Services/Chief
Financial Officer

Attachment 2

RESOLUTION NO. 15-R- _____

RESOLUTION OF THE COUNCIL OF THE CITY OF
BEVERLY HILLS AMENDING THE COMPREHENSIVE
SCHEDULE OF TAXES, FEES & CHARGES TO ESTABLISH
A WATER CAPACITY CHARGE

The Council of the City of Beverly Hills does resolve as follows:

Section 1. The City Council hereby establishes a water capacity charge (the “Charge”) as set forth in Exhibit “A” to this Resolution. The Charge shall be included and incorporated into the City’s Comprehensive Schedule of Taxes, Fees & Charges. The Charge shall be effective upon the effective date of Ordinance No _____, entitled “An Ordinance of the City of Beverly Hills Amending the Beverly Hills Municipal Code to Establish a Water Capacity Charge.”

Section 2. The City Council is taking action only on the Charge set forth in Exhibit A. The (i) remaining fees, permit fees, City services charges, and other fees, charges, and required payments for municipal services, use of City property, inspections, enforcement activities or for other indicated purposes as set forth in the current Comprehensive Schedule of Taxes, Fees & Charges; and (ii) fees, permit fees, City service charges, and other fees, charges, and required payments for municipal services, use of city property, inspections, enforcement activities or for other indicated purposes as set forth in any resolution(s) adopted by the City Council, that are not listed in Exhibit A to this Resolution, have not been readopted or revised and remain in place at the current amount.

Section 3. The City Clerk shall certify to the adoption of this resolution and shall cause this resolution and his certification to be entered in the Book of Resolutions of the City Council of this City.

Adopted:

LILI BOSSE
Mayor of the City of Beverly Hills, California

ATTEST:

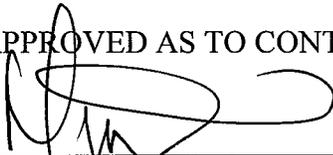
(SEAL)
BYRON POPE
City Clerk

APPROVED AS TO FORM:



LAURENCE S. WIENER
City Attorney

APPROVED AS TO CONTENT:



MAHDI ALUZRI
Interim City Manager



DON RHOADS
Chief Financial Officer

EXHIBIT A

Water Capacity Charge

- A. For a residential or commercial project that requires a new connection to the City's water system, the water capacity charge shall be based on the size of the water meter for the connection, as follows:

Meter size in inches	Water Capacity Charge
1	\$14,912
1.5	\$29,824
2	\$47,719
3	\$89,473
4	\$149,121
6	\$298,243

- B. For a residential or commercial project that requires the size of the water meter to be increased, the water capacity charge shall be the amount of the water capacity charge for the size of the new water meter less the amount of water capacity charge for the size of the existing water meter, as such amounts are shown in paragraph A above.
- C. For a residential project that does not require the size of the water meter to be increased but results in a net new floor area greater than 1,000 sq. ft., the water capacity charge shall be an amount that is \$1.88 per square foot of net new floor area greater than 1,000 sq.ft.

D. For a commercial project that does not require the size of the water meter to be increased, the water capacity charge shall be based on the net increase in service units, as follows:

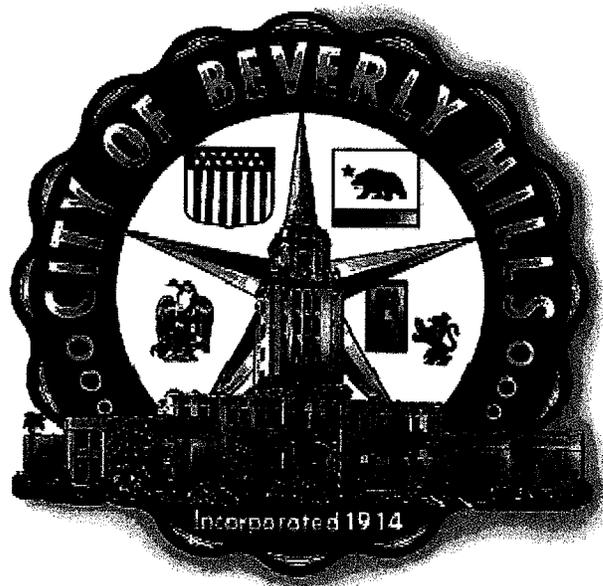
Commercial Use	Service Unit	Water Capacity Charge per Service Unit
Auditorium/Community Center	Per seat	\$90
Bank	Per 1000 sq. ft.	\$3,380
Gymnasium	Per 1000 sq. ft.	\$5,633
Health Spa	Per 1000 sq. ft.	\$13,519
Hotel	Per room	\$2,929
Medical Office	Per 1000 sq. ft.	\$5,633
Office Building	Per 1000 sq. ft.	\$3,380
Shopping Center	Per 1000 sq. ft.	\$3,380
Coffee House	Per 1000 sq. ft.	\$6,759
Restaurant – full service	Per seat	\$676
Retail Store	Per 1000 sq. ft.	\$1,803
School – private	Per 1000 sq. ft.	\$4,506
Supermarket	Per 1000 sq. ft.	\$3,380

E. For a commercial project that does not require the size of the water meter to be increased but increases the square footage of the business for the same commercial use, the water capacity charge shall be in the amount based on the business type use as provided in paragraph D above.

F. For a commercial project that does not require the size of the water meter to be increased but results in a change of commercial use, the capacity charge shall be the net increase in service units as provided in paragraph D above.

Attachment 3

CAPACITY FEES REPORT



Source: <http://www.beverlyhills.org/citygovernment/aboutbeverlyhills/cityseal/>

December
22, 2014

City of Beverly Hills





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Suite 301
Pasadena, CA 91101

Phone 626 . 583 . 1894
Fax 626 . 583 . 1411

www.raftelis.com

January 29, 2015

Mr. George Chavez
Director of Public Works Services
City of Beverly Hills
345 Foothill Road
Beverly Hills, CA 90210

Subject: Capacity Fees Report

Dear Mr. Chavez,

Raftelis Financial Consultants Inc. (RFC) is pleased to present this report on water capacity fees to the City of Beverly Hills (City).

The study develops capacity fees for the City's water system based on a comprehensive review of the City's existing assets, capital improvement plan, and system usage. The updated single-family residence capacity fee is \$14,912 for the water system and \$1.88 per square foot for redevelopment.

Our recommendations are based on sound principles and industry-accepted methodologies, and we are confident that the recommendations will result in fair and equitable capacity fees for the City's customers.

We have enjoyed the opportunity to assist you on this project. Should you have any questions or comments regarding this report, feel free to contact me at (626) 583-1894.

Sincerely,
RAFTELIS FINANCIAL CONSULTANTS, INC.

A handwritten signature in black ink, appearing to read 'Sudhir Pardiwala', is written over a faint, circular stamp or watermark.

Sudhir Pardiwala
Vice President



Executive Summary

This document outlines the purpose of capacity fees, as well as the methodologies, and rationales behind implementing the City of Beverly Hills' capacity fees. The executive summary will provide a brief summary of these topics as well as touch on the results of the study.

Economic and Legal Framework Summary

Capacity fees are fees imposed on new customers connecting to the City's water system. The purpose of a capacity fee is as follows: capacity fees prevent a "free-rider" problem by allowing the agency to charge new customers for the cost of the existing system. This allows the agency to avoid unfairly burdening existing customers with the cost of the system by distributing an equitable portion of the system cost to new customers. This purpose reflects the basic economic principal behind capacity fees which is that "growth should pay for growth."

The legal grounds for establishing capacity fees are established in Government Code Sections 66013, 66016, 66022 and 66023. Per section 66013, capacity fees imposed by a city "shall not exceed the estimated reasonable cost of providing the service for which the fee or charge is imposed..."

Approach Summary

There are several different methodologies for calculating capacity fees. The two that are most commonly used are: the Equity Buy-In approach and the Incremental-Cost approach. The Equity Buy-In approach is most appropriate for agencies that are already mostly built out. It ensures that new customers pay the cost of the existing facilities. By contrast, the Incremental-Cost approach is most appropriate for agencies anticipating construction of new facilities to meet new demand. The costs of the new facility are distributed to customers based on their expected utilization of the new plant's capacity.

Beverly Hills finds itself in a position where it satisfies both of these requirements: the City's water system is already fairly built out, yet the City also anticipates building a new treatment facility to deal with increased demand in the near future. As such, RFC recommends a hybrid approach to the City's capacity fees in order to charge for both the cost of the existing system and the proportional cost of new capacity.



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www.raftelis.com

Calculation Summary

The first step of the hybrid capacity fee methodology is calculating the cost per equivalent dwelling unit (EDU) according to the equity buy-in approach. This cost was obtained by dividing the total water system buy-in cost by the total number of EDUs in Beverly Hills. The total water system buy-in cost was calculated to be \$92.8 million and the total number of EDUs was determined to be 16,413. The result of dividing \$92.8 million by 16,413 EDUs yields a per EDU cost of \$5,655.

The next step is to add to this the incremental cost of the new treatment plant. This is determined by dividing the new water treatment plant's total estimated capacity (in gallons per day) by its total estimated cost, the result of which is the cost per gallon per day. The estimated capacity of this plant was 3 million gallons per day and the estimated cost was \$30 million. Dividing the cost by the capacity results in a gallon per day cost of \$10. The next step was to multiply this number by the average single family residence usage in gallons per day, which is 925.7 gallons per day. The incremental cost was then calculated to be \$9,257. Adding the incremental cost to the equity buy-in cost results in a total cost per EDU of \$14,912.

Redevelopment costs were calculated by obtaining the cost per square foot of an EDU. The methodology for this was first to calculate the total system cost per gallon per day (including the new water treatment plant). This total system cost per gallon per day was calculated to be \$20.28 gallons per day. The cost per residential square foot was then calculated by multiplying this cost by average residential usage (925.7 gallons per day) and by assumed indoor usage (50% of total usage), and dividing by average house size (assumed to be 5000 square feet). These calculations result in a redevelopment fee of \$1.88 per square foot of redeveloped area.

Non-residential costs were obtained by multiplying total system cost per gallon per day by a predetermined per unit¹ multiple and by the number of total units in the non-residential building.

¹ "Unit" varies significantly depending on building type, e.g. the operative unit for restaurants is number of seats, while the operative unit for hotels is number of rooms.

City of Beverly Hills Connection Fees Report

The purpose of this report is to develop updated capacity fees for the City of Beverly Hills' (City) water system.

Introduction

Capacity fees are the one-time capital charges that City of Beverly Hills will impose on customers that demand new or expanded connections to the City's water system facilities. The fees should generally reflect the estimated reasonable cost to the City of providing existing or additional system capacity to new development. Other common designations for these fees are impact, system development, developer, capital facilities, or capacity fees.

Economic and Legal Framework for Capacity Fees

For publicly owned water system, most of the assets are typically paid for by the contributions of existing customers through rates, charges, and taxes. In service areas that incorporate new customers, the infrastructure developed by previous customers is generally extended towards the service of new customers. Existing customers' investment in the existing system capacity allows newly connecting customers to take advantage of unused surplus capacity. To ensure economic equality among new and existing customers, new connectors will pay back the value of the existing system capacity to existing customers, effectively putting them on par with existing customers. In other words, the new users are buying into the existing system for the portion that has already been invested in by existing customers.

ECONOMIC FRAMEWORK The basic economic philosophy behind capacity fees is that the costs of providing water service should be paid for by those that receive utility from the product. In order to effect fair distribution of the value of the system, the fee should reflect a reasonable estimate of the cost of providing capacity to new users, and not unduly burden existing users. Accordingly, many utilities adopt this philosophy as one of their primary guiding principles when developing their capacity fee structure.

The philosophy that service should be paid for by those that receive utility from the product is often referred to as "growth-should-pay-for-growth." The principal is summarized in the American Water Works Association (AWWA) Manual M26, Water Rates and Related Charges:

"The purpose of designing customer-contributed-[connection fees] is to prevent or reduce the inequity to existing customers that results when these customers must pay the increase in water rates that are needed to pay for added plant costs for new customers. Contributed capital reduces the need for new outside sources of capital, which ordinarily has been serviced from the revenue stream. Under a system of

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contributed capital, many water utilities are able to finance required facilities by use of a 'growth-pays-for-growth' policy."

LEGAL FRAMEWORK² The City reserves broad authority over the pricing of water capacity fees. The most salient limitation on this authority is the requirement that recovery costs on new development bear a reasonable relationship to the needs and benefits brought about by the development. Courts have long used a standard of reasonableness to evaluate the legality of connection fees. The basic statutory standards governing water capacity fees are embodied by Government Code Sections 66013, 66016, 66022 and 66023. Government Code Section 66013, in particular, contains requirements specific to pricing water capacity fees:

"Notwithstanding any other provision of law, when a local agency imposes fees for water connections or sewer connections, or imposes capacity charges, those fees or charges shall not exceed the estimated reasonable cost of providing the service for which the fee or charge is imposed, unless a question regarding the amount the fee or charge in excess of the estimated reasonable cost of providing the services or materials is submitted to, and approved by, a popular vote of two-thirds of those electors voting on the issue."

Section 66013 also includes the following general requirements:

- Local agencies must follow a process set forth in the law, making certain determinations regarding the purpose and use of the fee; they must establish a nexus or relationship between a development project and the public improvement being financed with the fee.
- The connection fee revenue must be segregated from the general fund in order to avoid commingling of connection fees and the general fund.

Approach Overview

There are several available methodologies for calculating connection fees. The various approaches have evolved largely around the basis of changing public policy, legal requirements, and the unique and special circumstances of every local agency. However, there are two general approaches that are widely accepted and appropriate for water capacity fees. They are the "equity buy-in" and "incremental-cost" approaches.

² RFC does not practice law nor does it provide legal advice. The above discussion is to provide a general review of apparent state institutional constraints and is labeled "legal framework" for literary convenience only. The City should consult with its counsel for clarification and/or specific review of any of the above or other matters.

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EQUITY BUY-IN APPROACH

The equity buy-in approach rests on the premise that new customers are entitled to service at the same price as existing customers. However, existing customers have already developed the facilities that will serve new customers, including the costs associated with financing those services. Under this approach, new customers pay only an amount equal to the net investment already made by existing users, based on replacement cost less depreciation. This net equity investment figure divided by the current demand of the system – number of customers (or customer equivalents) – determines the new user's fee.

For instance, if an existing system has 100 units of average usage and the new connector uses an equivalent unit, then the new customer would pay $1/100^{\text{th}}$ of the total value of the existing system. By contributing this connection fee, the new connector has bought into the existing system. The user has effectively acquired a financial position on par with existing customers and will face future capital challenges on equal financial footing with those customers. This approach is suited for agencies that have capacity in their system and are essentially close to full build-out.

INCREMENTAL-COST APPROACH

When new users connect to a water system, they use either surplus capacity from the existing system, which must then be replaced, or they require new capacity that must be added to the system to accommodate their needs. Under the incremental-cost approach, new customers pay for additional capacity requirements regardless of the value of past investments made by existing customers.

For instance, if it costs X dollars (\$X) to provide 100 additional units of capacity for average usage and a new connector uses one of those equivalent units, then the new user would pay $\$X/100$ to connect to the system. In other words, new customers pay the incremental cost of capacity. As with the equity buy-in approach, new connectors will effectively acquire a financial position that is on par with existing customers. This approach is best suited for growing communities where additional facilities are needed to accommodate growth.

HYBRID APPROACH

In addition to the above two capacity fee calculation methodologies, there is also a hybrid approach which entails using aspects of both the incremental-cost approach and the equity buy-in approach. This is appropriate when cities are in a position where they have already built out their delivery system substantially yet are also in the process of planning or building additional capacity. The hybrid approach recognizes that new customers benefit from both existing infrastructure and planned capital improvements and therefore the charge is calculated to reflect this fact.

Capacity Fees Calculations

The most appropriate approach to capacity fees for City of Beverly Hills is a hybrid approach. Since the City's water infrastructure is substantially built-out, new customers will largely be served by existing infrastructure into which existing customers have invested a considerable amount of economic resources through water rates. However, since the City is considering building a new water treatment plant to provide capacity for future customers, it is necessary to also adjust fees in order to charge these customers for the new build-out.

The hybrid approach RFC has used in this case begins with using the equity buy-in approach. After calculating the equity buy-in, this hybrid approach used the incremental cost method to determine the proportionate cost to each customer resulting from construction of the new water treatment plant.

The basic methodology for the equity buy-in approach is to take the total current value of the water system and the planned capital improvement for the following year and divide each by the system's current demands. The resulting "unit facility value of capacity per dollar" is in turn converted into an "equity capacity fee per single-family customer" by dividing by a single-family customer's daily usage. The unit capacity value of capacity in dollars can similarly be applied to the City's various customer types based on their levels of average actual usage.

After this cost is determined, the incremental approach will be used to ensure that the additional cost to the system posed by the new water treatment plant is also charged to new customers. This is accomplished by taking the total estimated cost of the new facility and dividing by estimated capacity which yields a result of "dollars per gallon per day." The next step is to multiply the result by the average single family residential daily usage, which results in an "incremental capacity fee per single-family customer." This number is then added to the previously derived "equity capacity fee per single-family customer" which results in the total capacity fee.

Current Value of the City's Systems

RFC determined Replacement Cost Less Depreciation (RCLD) as the appropriate method to determine the current value of the water system. RCLD is a commonly used method, and it is often preferred to alternative methods such as Original Cost Less Depreciation (OCLD), Original Cost (OC), and Replacement Cost (RC) because of its a better reflection of the system's value in today dollars. In most cases – barring, for example, instances of water system that has depreciated significantly due to lack of replacement and repair – RCLD is more defensible because the replacement cost: 1) is inflation-adjusted and thus recovers the cost of replacing

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that capacity in current dollars; and 2) accounts for depreciation and thus addresses the fact that the system is not new and has been used by current users.

SYSTEMS ASSET VALUE For the purpose of calculating the system's RCLD, the City provided original cost records for the fixed assets of the utility systems as of fiscal year-end 2013 (June 30, 2013). Original cost was inflated to replacement cost, the estimated expected cost of a similar facility constructed today. Costs were escalated using a combination of construction-related inflation indices – the Construction Cost Index (CCI) and the Handy-Whitman index. The Construction Cost Index is based on an average of costs among 20 cities and is published by the Engineering News Record, and the Handy-Whitman Index for construction of public utilities is published by Whitman, Requardt & Associates, a construction engineering firm. Both indices are commonly used for this purpose; however, the Handy-Whitman index for the Pacific Region is specific for water utilities more representative of the inflation in the utilities industry. Since the City's systems were constructed as public utilities, RFC elected to apply Handy-Whitman as the primary cost index. However, while the oldest assets of the water system were put in service in 1928 and 1925, respectively, the Handy-Whitman index started tracking costs from 1942 only. Thus, costs for assets put in service from 1925-1941 were escalated by CCI, and those for 1942 onward were calculated by the Handy-Whitman index. Land value was not inflated since it is dedicated for the water system and will not be replaced.

ACCUMULATED DEPRECIATION The City provided accumulated depreciation associated with the original cost for each of its fixed asset accounts. To validate accumulated depreciation, RFC calculated the ratio of the replacement cost to the original cost for each fixed asset account to derive pro-rata accumulated depreciation for those asset accounts. The accumulated depreciation was then deducted from the replacement cost to determine RCLD.

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Table 1 – Existing System Value – RCLD

	Water System
Water Rights	\$1,475,884
Land	\$5,157,432.71
General Assets - Buildings	\$11,270,180
Pump Stations	\$897,277
Transmission Mains	\$2,192,348
Distribution Mains	\$6,143,414
Reservoirs	\$45,663,364
Fire Hydrants	\$302,198
Services	\$1,474,413
Water Mains	\$48,855,272
Misc Transmission and Distribution Equip	\$122,217
Purification Equipment (Treatment-related)	\$251,758
Telemetry Equipment (SCADA)	\$158,504
General Equipment	\$240,091
Office Equipment	\$126,236
Software	\$64,311
Existing System Value (*)	\$124,394,898

() Based on 'Replacement Cost Less Depreciation'*

CAPITAL IMPROVEMENT PLAN PROJECTS The cost of planned capital improvements (CIP) is included within the valuation of the systems based on the following year capital projects. The City provided capital plans for the water system, which were identified as non-growth, repair and rehabilitation-related capital improvement.

Table 2 – Summary of Adjusted System Value

	Water System
Replacement Cost (Less Depreciation)	\$124,394,898
(+) Average Value of CIP	\$6,147,962
(-) Outstanding Debt Principal	(\$37,725,000)
Adjusted System Value	\$92,817,860

Capacity Fees Calculations

The final steps for the capacity fee calculation are deriving an equivalent dwelling unit value, expressed in terms of \$/EDU. The equivalent dwelling unit value is calculated by dividing the above-determined value of the system by the number of equivalent dwelling units.

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The City provided total account numbers for FY 2014, including meter size. Different meter sizes are assigned different equivalent dwelling unit values based on a capacity multiplier that is derived from that meter's capacity relative to a base meter, in this case a one inch meter. The Different meter sizes and their capacity multiplier are displayed below in Table 3. From this methodology we have determined that there are 16,413 EDUs in Beverly Hills.

Table 3 – Meter Size and Capacity Multiplier

Meter Size	Meter Capacity Multiple
1"	1
1-1/2"	2
2"	3.2
3"	6
4"	10
6"	20

By dividing the Adjusted System Value by the total number of Equivalent Dwelling Units we find that the capacity fee per established EDU is \$5,655 and is the average total system cost borne by individual equivalent dwelling unit.

However, the City is scheduled to build a new water treatment plant to help deal with increased demand stemming from new development and home expansion. This represents an estimated additional cost of \$30 million. It is estimated that the new water treatment plant will increase the City's capacity by 3 million gallons per day (GPD). Since the City is building the new water treatment plant to deal with increased demand stemming from new developments and home expansions it is necessary that new development and expansion will have to pay for the new treatment plant costs through an increase in capacity fees.

The necessary increase in fees was found by first dividing the water treatment plant's total cost by the plant's capacity to find a value for the plant's cost per GPD. Since the plant is expected to cost \$30 million and provide 3 million GPD, the expected cost per GPD is \$10. From there it is necessary to estimate the cost associated with a single family residence, the basis of our EDU calculation above. The City provided an average SFR consumption of 925.7 gallons per day. Therefore the additional cost per EDU of a new meter is \$9,257.

By adding these two costs together, the total capacity fee per new EDU is determined. The sum of these two costs is \$14,912, which gives us the cost per connection per 1" meter. Table 4 below shows the capacity fee for meters of different sizes based on meter capacity multipliers. These values were derived by multiplying the base cost (\$14,912) by the capacity multiplier.

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Table 4 – Meter Size, Capacity Multiplier, and Associated Fees

Meter Size	Meter Capacity Multiple	Fee
1"	1	\$14,912
1-1/2"	2	\$29,824
2"	3.2	\$47,719
3"	6	\$89,473
4"	10	\$149,121
6"	20	\$298,243

Calculation Example 1: Residential account requiring a meter upgrade

If a residential account requires a meter upgrade, the appropriate capacity fee to be assessed is the difference between the fee associated with their current meter size and the fee associated with the new size. For example, a residential account that went from a 1" meter to a 2" meter would pay the difference between \$14,912 and \$47,719, or \$32,806.

Redevelopment Fee Calculations

RFC then calculated the redevelopment fees. These fees are associated with building expansion, redevelopment, or renovation. As a result, these fees are prorated depending on the size of the expansion. In order to derive the costs associated with adding a new meter for a new development RFC found the gallon per day cost associated with adjusted system value and added that to the gallon per day cost associated with the new water treatment plant.

The adjusted system value divided by system gallons per day yields the current system's cost per gallon per day. The adjusted system value, as reported above, was calculated to be \$92.8 million. The total system capacity was provided by the City, and was reported at 9.075 million GPD. \$92.8 million divided by 9.075 million GPD yields a cost per gallon per day of \$10.28. The cost per gallon per day associated with the water treatment plant was calculated above, and was found to be \$10. Adding these two costs per gallon per day yields a total cost of \$20.28.

To derive the costs associated with redevelopment on a prorated basis, RFC then calculated the average cost associated with a SFR on a cost per gallon per day basis. The average usage of an SFR was provided by the City as 925.7 GPD. The cost per GPD associated with an SFR was then calculated by multiplying the average SFR daily usage by the total cost per GPD. The cost per GPD per SFR was calculated to be \$18,722.

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In order to get a cost for an expansion or redevelopment RFC then found the cost associated with an individual square foot of expansion. It was assumed that the average house size in Beverly Hills was 5,000 square feet (ft²), and that 50% of the total household usage was indoor usage. Therefore, in order to calculate the usage associated with an individual square foot of added development RFC multiplied SFR GPD usage by 50% and divided the resulting number by 5000, resulting in a cost per ft² of \$1.88.

Calculation Example 2: Remodel or redevelopment of less than 1000 ft²

There is no capacity fee for additions or redevelopment of less than 1000 ft² of additional space. In this case, there is no charge.

Calculation Example 3: Remodel or redevelopment of more than 1000 ft²

For residential redevelopment or additions beyond 1000 ft² there is a capacity charge of \$1.88 per ft². For example: a new addition of 1500 ft² would result in a \$2820 capacity fee charged for the 1,500 ft².

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Non-Residential Fee Calculation

Capacity fees for Non-Residential meters were calculated according to the multiples shown in Table 5 below. This table shows water capacity fees per unit for non-residential institutions. The water capacity fees in the right hand column were calculated by multiplying the City's estimated gallons per day by the total cost per gallon per day (calculated above and shown to be \$20.28) and result in the total cost per unit listed in Service Unit column. To use Auditoriums/Community Centers as an example, the estimated water use per day per seat is 4.4 gallons. Multiplying 4.4 by \$20.28 results in a capacity fee per seat of \$90.

Table 5 – Water Capacity Fees for Non-Residential

Customer Class	BH Est. Water, gpd	Service Unit	Water Connection Fees
Auditorium/Community Center	4.4	per seat	\$90
Bank	167	per 1,000 sq ft	\$3,380
Gymnasium	278	per 1,000 sq ft	\$5,633
Health Spa	667	per 1,000 sq ft	\$13,519
Hotel, per room	144	per room	\$2,929
Medical Office	278	per 1,000 sq ft	\$5,633
Office Building	167	per 1,000 sq ft	\$3,380
Shopping Center	167	per 1,000 sq ft	\$3,380
Coffee House	333	per 1,000 sq ft	\$6,759
Restaurant - Full-Service	33	per seat	\$676
Retail Store	89	per 1,000 sq ft	\$1,803
School - Private	222	per 1,000 sq ft	\$4,506
Supermarket	167	per 1,000 sq ft	\$3,380

The water capacity fees calculated above are then multiplied by the number of units in the new connecting building. Using the Auditorium/Community Center example again, a building with 100 seats would have a capacity fee of \$90 multiplied by 100 seats, which produces a total capacity fee of \$9,000.

Calculation Example 4: Commercial account requiring a meter upgrade

A commercial account that changed its total number of Service Units in such a way that would require a meter upgrade would have to pay the difference in gallons per day per Service Unit multiplied by the increased number of Service Units and the total cost per gallon per day. Essentially the commercial account would have to pay the equivalent of the added estimated demand in gallons per day multiplied by the cost per gallon per day. For example, a restaurant

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that went from 30 seats to 60 seats would have to pay 30 (additional seats) multiplied by \$676 (total cost per seat based on estimated usage and cost per day, see Table 5) resulting in a total cost of \$20,280.

Calculation Example 5: Commercial change in use

For changes in commercial use of a property, the new account holder will pay the difference between estimated usage per day between the previous estimated usage and the current estimated usage. For this example, let's assume that a 2000 ft² retail space turned into a 2000 ft² coffee house. The account would pay a capacity fee equivalent to the difference between calculated per Service Unit Water Capacity Fees and the total number of Service Units. The Service Unit for each type of account is 1000 ft² so each account has 2 service units. Therefore the capacity fee would be twice the difference between the Water Capacity Fee for the coffee house, \$6,759, and the retail store \$1,803, as shown in Table 5. The resulting capacity fee is \$9,912.