



AGENDA REPORT

Meeting Date: November 17, 2015

Item Number: E-1

To: Honorable Mayor & City Council

From: Trish Rhay, Assistant Director of Public Works Services,
Infrastructure & Field Operations
Caitlin Sims, Senior Management Analyst CS

Subject: A. AN ORDINANCE OF THE CITY OF BEVERLY HILLS
AMENDING THE BEVERLY HILLS MUNICIPAL CODE TO
ESTABLISH A WASTEWATER CAPACITY CHARGE

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

Attachments: 1. Ordinance
2. Resolution
3. Wastewater Capacity Fees Report

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 WASTEWATER 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 WASTEWATER CAPACITY CHARGE."

INTRODUCTION

At its May 11, 2015, the Public Works Commission unanimously recommended to the City Council for the development and implementation of a wastewater capacity fee. The concept was presented to the Public Works Liaison Committee (Vice Mayor Mirisch and Councilmember Brien) on August 12, 2015, and was recommended for City Council

consideration. Staff worked with Raftelis Financial Consultants, Inc. (“RFC”) – the firm that prepared the City’s water capacity fee – to develop the wastewater capacity fee structure. The structure being used is similar to that used for the City’s water capacity fee.

DISCUSSION

By way of background, Beverly Hills rate payers have been investing in the existing wastewater system for many years, and the entire system has been paid for by past and present customers. The City’s wastewater system is a gravity-fed system constructed in the 1930s that includes approximately 100 miles of pipeline. Wastewater flows through the system and is treated by the City of Los Angeles at its Hyperion Treatment Plant, located near Playa Del Rey. The City is billed based on the volume and quality of the wastewater that is treated at the Treatment Plant. In 2009, the City completed a Sewer Master Plan which indicated that the system is adequately-sized for the current sewer system flows. However, additional development would reduce the wastewater system’s capacity.

When new customers are incorporated into the system, they are able to take advantage of the unused surplus that was paid for by existing users. To address the fairness and equity issues, the City Council directed staff to develop a wastewater capacity fee for new and substantial remodel development projects. A wastewater capacity fee would provide more economic equality among new and existing customers by requiring new connectors to pay back the value of the current system capacity to existing customers, effectively putting them on par with existing customers.

Capacity charges are one-time capital charges that ensure rate equity between past, present, and future customers. Such charges are not uncommon, permitted by law, and similar to the City’s current water capacity charge. There are, however, provisions that limit how the capacity charges can be structured. Wastewater capacity charges can be imposed so long as the charges do not exceed the estimated cost for providing such service. Other cities such as Santa Monica, Santa Barbara and San Diego currently have such a charge in place and are generally imposed based on the size of the project.

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 and wastewater 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 requires that the connection charge revenue must be segregated from the General Fund in order to avoid commingling of connection charges and the General Fund local agencies. It also requires that the local agency establish a nexus between a development project and the public improvement being financed with the fee.

A summary of the recommendations is outlined in the Wastewater Capacity Fees Report and is included as Attachment 3.

The report recommends the City utilize an “equity buy-in approach” in which the charge is calculated based on the residence size (in number of bedrooms) and type (apartment, condominium, duplex/townhome, or single family residence) for residential accounts and the number of “service units” found in non-residential accounts. The equity buy-in approach is the most appropriate methodology for agencies that are mostly built-out, like Beverly Hills. The methodology ensures that new customers pay the cost of the existing facilities. The following sections discuss the capacity charge framework.

Proposed Equity Buy-In Approach Capacity Charge Structure

The basic methodology for the equity buy-in approach is to divide the total current value of the City’s wastewater system by the system’s current demand. This value is the “equity connection fee,” which is the cost that ensures that new customers pay the cost of existing facilities. The first step in the capacity charge calculation is to determine the total current value of the system.

Total Current Wastewater System Value

The City’s wastewater system was constructed in the 1930s and is substantially built-out. Rate payer investments made over time have created a water system that supports both existing and future customers. The wastewater capacity charge should factor in new customers “paying back” existing customers for these past investments that allow and support new development.

RFC utilized the Replacement Cost Less Depreciation (“RCLD”) method to determine the current value of the City’s wastewater systems. RCLD is a commonly used method that calculates a system’s current value adjusting for inflation and system depreciation over time.

For the purpose of calculating the system’s RCLD, the original cost records for the fixed assets of the utility systems as of fiscal year-end 2013 were reviewed. Data from FY 2012-2013 was used in order to be consistent with the calculation of the water capacity fee, which was completed in the fall of 2014. At that time, data from FY 2013 was the most complete dataset available at the time. The City’s wastewater system costs include the following components:

- Sewer improvements
- Machinery & equipment (i.e. Closed Circuit TV)
- Plant capacity rights
- Software/Hardware

Table 1 provides the estimate of the existing system value, as calculated using RCLD.

Table 1 – Existing System Value – Replacement Cost Less Depreciation

	Original Cost	Replacement Cost	Accumulated Depreciation	Replacement Cost Less Depreciation
Sewer Improvements	\$6,241,096	\$9,758,693	\$4,075,768	\$5,682,925
Machinery & Equipment	\$562,742	\$751,302	\$535,179	\$216,123
Plant Capacity Rights	\$50,166,555	\$71,517,075	\$24,227,079	\$47,289,996
Software/Hardware	\$126,640	\$131,919	\$37,791	\$94,228
Existing System Value	\$57,097,033	\$82,158,990	\$28,875,717	\$53,283,273

The cost of the planned capital improvement projects was then incorporated into the system's valuation. Capital plans for the wastewater system for fiscal year 2014-15, which include sewer improvements, machinery and equipment, plant capacity rights, and software, were included as the basis for determining connection fees.

Table 2 below provides the summary of the adjusted system value, incorporating the costs of the capital projects less the outstanding debt principal.

Table 2 – Summary of Adjusted System Value

Wastewater System	
Replacement Cost (Less Depreciation)	\$53,283,273
(+) Value of FY 2015 CIP	\$6,344,400
(-) Outstanding Debt Principal	\$11,915,000
Adjusted System Value	\$47,712,673

Calculation of Charges

The next step in the process is to convert the investments into a proportional fee related to any given development size and impacts. This is done by deriving a unit value expressed in cost per gallon per day. The dollar per gallon per day value is calculated by dividing the adjusted system value of the system by the average number of gallons treated per day by the system. In FY 2012-2013, the City had an average daily wastewater flow of 5.003 million gallons per day (MGD). The resulting cost per gallon per day of \$9.54 can then be used to assess the wastewater capacity fee for new residential and non-residential projects.

The City of Los Angeles, which treats the wastewater generated by the City, has established the amount of wastewater generated by different types of residential and commercial establishments. The following sections provide examples of how the calculations are applied to residential and non-residential projects.

Example 1: New Residential Development

For new residential projects, the residential customer wastewater capacity fees are based on residence size (in number of bedrooms) and type (whether it is an apartment, condominium or a duplex/townhouse or single family domicile). The wastewater capacity fees were calculated by multiplying the expected wastewater generation in gallons per day by \$9.54, the capacity fee per gallon per day. Table 3 provides the wastewater capacity fees for residential customers.

Table 3 – Summary of Wastewater Capacity Fees for Residential Accounts

Customer Type	Expected Wastewater (WW) Generation (Gallons Per Day (GPD))	Capacity Fee (\$/GPD)	Fee (\$) (Expected WW Generation x Capacity Fee)
Residential: Apt = Bachelor	80	\$9.54	\$763
Residential: Apt = 1 BR	120	\$9.54	\$1,144
Residential: Apt = 2 BR	160	\$9.54	\$1,526
Residential: Apt = 3 BR	200	\$9.54	\$1,907
Residential: Apt > 3 BR	40 for each additional BR	\$9.54	\$381/BR
Residential: Condo = 1 BR	120	\$9.54	\$1,144
Residential Condo = 2 BR	160	\$9.54	\$1,526
Residential Condo = 3 BR	200	\$9.54	\$1,907
Residential Condo > 3 BR	40 for each additional BR	\$9.54	\$381/BR
Residential: Duplex/Townhouse/SFD = 1 BD	130	\$9.54	\$1,240
Residential: Duplex/Townhouse/SFD = 2 BD	180	\$9.54	\$1,717
Residential: Duplex/Townhouse/SFD = 3 BD	230	\$9.54	\$2,193
Residential: Duplex/Townhouse/SFD = 4 BD	280	\$9.54	\$2,670
Residential: Duplex/Townhouse/SFD > 4 BD *For each additional bedroom	50 for each additional BR	\$9.54	\$477/BR

If a new three-bedroom single-family residential home was built, the capacity fee would be \$2,193, calculated as follows:

$$230 \text{ (expected wastewater generation per day)} \times \$9.54 = \$2,193$$

Example 2: Residential Re-development

If a home is demolished and re-built, this is considered a “redevelopment”, so the wastewater capacity fee is calculated based on the net increase of square footage in the floor area.

Similar to what was used to determine the water capacity fee, it is assumed that the average Beverly Hills residential home is 5,000 square feet and consists of four bedrooms with an average wastewater generation of 280 gallons per day. Using the summary of wastewater capacity fees, the capacity fee for this project would be \$2,670. To calculate the average cost per square foot in a single family residence, it would be $\$2,670 / 5,000 \text{ SF} = \0.534 per square foot (or \$53.40 per 100 square feet). To allow for smaller additions it suggested that an exemption be included for additions of less than 1,000 square feet.

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 wastewater capacity fee 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 fee assessment of \$1,068, calculated as follows:

$$2,000 \text{ sq. ft. property size net increase} \times \$53.41/100 \text{ sq. ft.} = \$1,068 \text{ capacity fee assessment}$$

Example 3: New Commercial Development

The commercial customer wastewater capacity fees are based on type of facility (i.e. auditorium/bank/restaurant, retail store, etc.) and the number of “service units.” The service unit varies for each type of facility. The wastewater connection fee is calculated by multiplying the City-estimated wastewater gallons per day (found in Table 4) by the number of service units by \$9.54 (the capacity fee per gallon per day).

Table 4 – Summary Wastewater Connection Fees for Commercial

Customer Type	Expected Wastewater (WW) Generation (Gallons Per Day (GPD))	Service Unit	Connection Fee (\$/GPD)	Wastewater Connection Fees (Service Unit x Connection Fee)
Auditorium/Community Center	4	No. of Seats	\$9.54	\$53
Bank	150	1,000 SF	\$9.54	\$38
Gymnasium	250	1,000 SF	\$9.54	\$1,431
Health Spa	600	1,000 SF	\$9.54	\$2,384
Hotel, per room	130	No. of Rooms	\$9.54	\$1,240
Medical Office	250	1,000 SF	\$9.54	\$2,861
Restaurant – Full-Service	30	No. of Seats	\$9.54	\$286
Retail Store	80	1,000 SF	\$9.54	\$763
School – Private	200	1,000 SF	\$9.54	\$1,907
Supermarket	150	1,000 SF	\$9.54	\$1,431

If a new auditorium or community center housing 100 seats were built, the cost would be a connection fee of \$38.16 per seat, calculated as follows:

$$4 \text{ (expected wastewater generation per day per seat)} \times \$9.54 = \$38.16/\text{seat}$$
$$\$38.16 \times 100 \text{ seats} = \$3,816 \text{ wastewater capacity charge}$$

Example 3: Commercial Redevelopment

Wastewater capacity fees for commercial redevelopment projects will be calculated using the difference between the expected wastewater generation per service unit (in gallons per day) for the current size or use and the expected wastewater generation per service unit for the new size or use.

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 fee would be calculated as follows: \$1,240 per room x 6 rooms = \$7,440.

The capacity fee 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 fees will be calculated using the net square footage increase with the new building use type rate.

Health spa capacity fee: 750 sq. ft. x \$2,384 per 1,000 sq. ft.	\$1,788.00
Retail store capacity fee: 750 sq. ft. x \$763 per 1,000 sq. ft. [-]	\$ 572.25
<i>Capacity fee assessment:</i>	<u>\$ 1,215.75</u>

Proposed Capacity Fee Collection Method

The City would collect the wastewater capacity fee upon final inspection of a project. 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 wastewater capacity fees.

There will also be an appeals process in place to address instances in which development projects may trigger subsequent wastewater capacity fee assessments.

FISCAL IMPACT

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


Don Rhoads
Finance Approval


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
WASTEWATER 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 or expanded connection to the City's wastewater system creates a need for additional wastewater collection and additional capacity in the wastewater system.

(c) The City Council wishes to establish a charge for the cost of wastewater facilities in existence and for new wastewater 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 October 2015, to calculate such charge in an amount that reflects the proportional costs to serve a new or expanded connection to the wastewater system.

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

Section 2. The City Council hereby amends the Municipal Code of the City of Beverly Hills by adding Article 3.5 to Chapter 1 (City Utility Services) of Title 6 (Utilities and Franchises) to read as follows:

"Article 3.5. Wastewater Capacity Charge

6-1-350: Purpose:

The purpose of this article is to establish a wastewater capacity charge for the cost of wastewater facilities in existence and for new wastewater 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 wastewater facilities.

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

The user of city wastewater service shall pay a wastewater capacity charge in an amount established by resolution of the city council. The wastewater capacity charge is due upon the final inspection of a project.

6-1-252: Project and Floor Area Defined:

(a) For the purposes of this Article, "project" means the construction or addition of floor area (as defined in paragraph (b) below), which requires a building permit.

(b) For the purposes of this Article, "floor area" shall mean the following:

A. Nonresidential and multi-family residential zones: "Floor area" shall mean the area of all floors or levels included within the surrounding walls of a building or structure. Space devoted only to the following shall not be considered in determining the total floor area within a building or structure:

1. Stair shafts;

2. Elevator and escalator shafts and elevator lobbies located in parking areas or on rooftops. The area of each elevator lobby at each floor shall not exceed one hundred (100) square feet per elevator cab; provided, however, that any elevator lobby area in excess of one hundred (100) square feet per elevator cab shall be considered in determining the total floor area within a building or structure;

3. Courts;

4. Parking spaces below the first floor and access thereto, including void spaces in parking areas below the first floor used exclusively for storage related to operation of the building. Such void spaces may be enclosed and shall not exceed two thousand (2,000) square feet on each parking floor or five percent (5%) of the floor area of the entire building, whichever is less;

5. Rooms exclusively housing building operating equipment or machinery;

6. Parking spaces at or above the first story and access thereto provided that in commercial zones:

a. Not less than the front forty feet (40') of the ground floor shall be devoted to retail sales, offices, or financial uses; notwithstanding such restriction, the director of planning and community development may reduce the amount of floor area required under this provision by up to ten percent (10%) pursuant to the provisions of article 36 of this chapter regarding minor accommodations if the director finds that the dimensions of the site do not provide adequate space for internal circulation for parking and such accommodation would not substantially compromise pedestrian activity in the area; and

b. At least one full level of parking below grade is provided;

7. Mall areas; and

8. Space used or provided within a building or structure for publicly owned off street parking facilities.

B. Single-family residential zone: "Floor area" shall mean the area of all portions of floors and levels, including basements, which have a roof or floor level above and are enclosed by exterior walls by more than fifty percent (50%). Further, "floor area" shall include the area of that portion of an upper level not separated from a lower level by a floor/ceiling assembly, but shall not include crawl spaces and up to four hundred (400) square feet of garage area.

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

The city may collect the wastewater capacity charge from the wastewater user with a bill for wastewater service charges, or by delivering a separate bill for the wastewater capacity charge. The City may collect the wastewater capacity charge in two or more installments. The city council may provide, by resolution, for an alternative procedure for collection of the wastewater 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 "wastewater capital facilities fund." The city shall place the revenues from the wastewater capacity charge into the wastewater 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 wastewater capacity charge for a project based upon facts that show the person previously paid a wastewater capacity charge in an amount that reflects the proportional costs to serve the new or expanded connection to the wastewater 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.

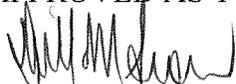
Adopted:
Effective:

JULIAN A. GOLD, M.D.
Mayor of the City of Beverly Hills,
California

ATTEST:

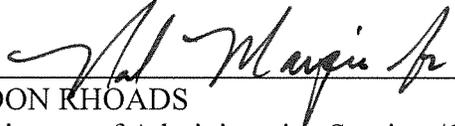
(SEAL)
BYRON POPE
City Clerk

APPROVED AS TO FORM:



DAVID M. SNOW
Interim City Attorney

APPROVED AS TO CONTENT:

MAHDI ALUZRI
City Manager


DON KHOADS
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 WASTEWATER CAPACITY CHARGE

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

Section 1. The City Council hereby establishes a wastewater 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 Wastewater 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:

JULIAN A. GOLD, M.D.
Mayor of the City of Beverly Hills, California

ATTEST:

(SEAL)
BYRON POPE
City Clerk

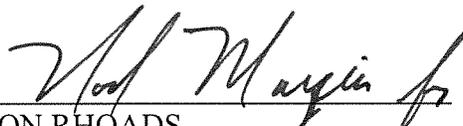
APPROVED AS TO FORM:



DAVID M. SNOW
Interim City Attorney

APPROVED AS TO CONTENT:

MAHDI ALUZRI
City Manager



DON RHOADS
Chief Financial Officer

EXHIBIT A

Wastewater Capacity Charge

- A. For a residential project that results in a net new floor area of 1,000 sq. ft. or more, the wastewater capacity charge shall be an amount that is \$0.534 per square foot.
- B. For a commercial project that a results in a net increase in service units, the charge is as follows:

Commercial Use	Service Unit	Wastewater Capacity Charge per Service Unit
Auditorium/Community Center	Per seat	\$38
Bank	Per 1000 sq. ft.	\$1,431
Gymnasium	Per 1000 sq. ft.	\$2,384
Health Spa	Per 1000 sq. ft.	\$5,722
Hotel	Per room	\$1,240
Medical Office	Per 1000 sq. ft.	\$2,384
Office Building	Per 1000 sq. ft.	\$1,431
Shopping Center	Per 1000 sq. ft.	\$1,431
Coffee House	Per 1000 sq. ft.	\$2,861
Restaurant – full service	Per seat	\$286
Retail Store	Per 1000 sq. ft.	\$763
School – private	Per 1000 sq. ft.	\$1,907
Supermarket	Per 1000 sq. ft.	\$1,431

- C. For a commercial project that results in a change of commercial use, the capacity charge shall be the net increase in service units as provided in paragraph B above.

Attachment 3



CITY OF BEVERLY HILLS

Wastewater Capacity Fees Report

November 2015





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Suite 301
Pasadena, CA 91101

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

www.raftelis.com

November 5, 2015
Mr. George Chavez
Director of Public Works Services
City of Beverly Hills
345 Foothill Road
Beverly Hills, CA 90210

Subject: Wastewater Capacity Fees Report

Dear Mr. Chavez,

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

The study develops updated capacity fees for the City's wastewater system based on a comprehensive review of the City's existing assets, capital improvement plan, and system usage. The updated wastewater capacity fee is \$9.54 per gallon per day (gpd) of wastewater).

Our recommendations are based on sound principles and industry-accepted methodologies. We are confident that the recommendations will result in fair and equitable wastewater 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 blue ink, appearing to read 'Sudhir Pardiwala', is positioned above the printed name.

Sudhir Pardiwala
Vice President

City of Beverly Hills

Wastewater Capacity Fees Report

Executive Summary

This document outlines the purpose of wastewater capacity fees, as well as the methodologies, and rationales used to calculate the City of Beverly Hills' wastewater 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 wastewater system. The purpose of a wastewater 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 its 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 facilities' capacity.

RFC determined that the proper wastewater capacity fee calculation for Beverly Hills was the equity buy-in approach: the City's wastewater system is already substantially built out.

Calculation Summary

The first step of the capacity fee methodology is calculating the total system cost per gallon per day (GPD) according to the equity buy-in approach. This cost is obtained by dividing the total wastewater system buy-in cost by the total GPD treated by the wastewater system in Beverly Hills. The total wastewater system buy-in cost was calculated to be \$47.7 million and the total

City of Beverly Hills
Wastewater Capacity Fees Report

number of GPD was determined to be 5.003 million. The result of dividing \$47.7 million by 5.003 million GPD yields a per GPD cost of \$9.54 per GPD.

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

Introduction

Capacity fees are the one-time capital charges that City of Beverly Hills imposes on customers that demand new or expanded connections to the City’s wastewater 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.

Currently, the City assesses a one-time capacity fee on new users that request connection to the City’s wastewater system. The charges are intended to reflect either: 1) the cost of system capacity that is required to provide service to new customers; or 2) increased demand for system capacity that results from renovations and/or additions to existing establishments.

Economic and Legal Framework for Capacity Fees

For publicly owned wastewater systems, 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 wastewater 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 adopts 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 Water Environment Federation Manual of Practice, Financing and Charge for Wastewater Systems:

“System development charge proceeds are typically used to pay for capital projects related to growth. Application of these fees assists the utility in implementing a “growth pays for growth” policy.”

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LEGAL FRAMEWORK¹ The City reserves broad authority over the pricing of wastewater 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 capacity fees. The basic statutory standards governing wastewater 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 and wastewater 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 capacity fee revenue must be segregated from the general fund in order to avoid commingling of capacity fees and the general fund.

¹ 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.

Approach Overview

There are several available methodologies for calculating capacity 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 wastewater capacity fees. They are the “equity buy-in” and “incremental-cost” approaches.

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 1/100th of the total value of the existing system. By contributing this capacity 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 wastewater 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

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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 calculating capacity fees for City of Beverly Hills is an equity buy-in approach. Since the City's wastewater 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 wastewater rates.

The basic methodology for the equity buy-in approach is to take the total current value of the City's wastewater system and divide it 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 normalizing it to a daily single-family customer's usage. For residential customers these fees are calculated according to the type of residence and number of bedrooms and the residence's resulting expected wastewater generation. The "unit facility value of capacity per dollar" can similarly be applied to the City's various customer types based on their projected levels of average usage.

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 wastewater systems. 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 better reflection of the system's value in today dollars. In most cases – barring, for example, instances of wastewater systems that have 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 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 for the wastewater system were escalated using the Construction Cost Index (CCI). The Construction Cost Index is based on an average of costs among 20 cities and is published by the Engineering News Record.

ACCUMULATED DEPRECIATION The City provided accumulated depreciation associated with the original cost for each of its fixed asset accounts. To validate accumulated depreciation, RFC

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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.

Table 1 – Existing System Value – RCLD

	Original Cost	Replacement Cost	Accumulated Depreciation	RCLD
Sewer Improvements	\$6,241,096	\$9,758,693	\$4,075,768	\$5,682,925
Machinery & Equipment	\$562,742	\$751,302	\$535,179	\$216,123
Plant Capacity Rights	\$50,166,555	\$71,517,075	\$24,227,079	\$47,289,996
Software	\$126,640	\$131,919	\$37,691	\$94,228
Existing System Value	\$57,097,033	\$82,158,990	\$28,875,717	\$53,283,273

CAPITAL IMPROVEMENT PLAN PROJECTS The cost of planned capital improvement projects (CIP) is included within the valuation of the systems based on the City’s preference for developing a multi-year (five-year) capacity fee schedule. The City provided capital plans for the wastewater system, which were identified as sewer improvement, machinery and equipment, plant capacity rights, and software. RFC used the value of FY 2015’s CIP, which had the highest value of any of the years provided, as the basis for determining capacity fees.

Table 2 – Summary of Adjusted System Value

	Wastewater System
Replacement Cost (Less Depreciation)	\$53,283,273
(+) Value of FY 2015 CIP	\$6,344,400
(-) Outstanding Debt Principal	\$11,915,000
Adjusted System Value	\$47,712,673

Capacity Fees Calculations

The final step for the capacity fee calculation is deriving a unit value expressed in terms of \$/GPD. The dollar per gallon per day value is calculated by dividing the above adjusted system value of the system by the average number of gallons per day treated by the system.

The City provided RFC with the average daily flow values for FY 2013. In FY 2013 the City had an average daily wastewater flow of 5.003 million gallons per day (MGD).

By dividing the Adjusted System Value by the total number of gallons per day we find that the capacity fee per gallon per day is \$9.54.

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The City of Los Angeles, which treats the wastewater generated by the City, has established the amount of wastewater generated by different types of residential and non-residential establishments. The residential customer wastewater capacity fees are based on residence size (in number of bedrooms) and type (whether it is an apartment, condominium or a duplex/townhouse or single family domicile). These fees can be seen below in Table 3. The capacity fees were calculated by multiplying the expected wastewater generation in gallons per day by \$9.54, the capacity fee per gallon per day.

Table 3 – Summary of Wastewater Capacity Fees for Residential Accounts

Customer Type	Expected WW Generation (GPD) (A)	Capacity Fee (\$/GPD) (B)	Fee (\$) (A)*(B)
Residential: Apt - Bachelor	80	\$9.54	\$763
Residential: Apt - 1 BR	120	\$9.54	\$1,144
Residential: Apt - 2 BR	160	\$9.54	\$1,526
Residential: Apt - 3 BR	200	\$9.54	\$1,907
Residential: Apt >3 BR	40 for each addn br*	\$9.54	\$381
Residential: Condo - 1 BR	120	\$9.54	\$1,144
Residential: Condo - 2 BR	160	\$9.54	\$1,526
Residential: Condo - 3 BR	200	\$9.54	\$1,907
Residential: Condo > BR	40 for each addn br*	\$9.54	\$381
Residential: Duplex/Townhouse/SFD- 1 BR	130	\$9.54	\$1,240
Residential: Duplex/Townhouse/SFD- 2 BR	180	\$9.54	\$1,717
Residential: Duplex/Townhouse/SFD- 3 BR	230	\$9.54	\$2,193
Residential: Duplex/Townhouse/SFD- 4 BR	280	\$9.54	\$2,670
Residential: Duplex/Townhouse/SFD > 4 BR	50 for each addn br*	\$9.54	\$477

* for each additional bedroom

For additions it is necessary to analyze the characteristics of an average residential account. Typical average residences in the City are 5,000 sq ft and consist of 4 bedrooms with an average wastewater generation of 280 gpd. This results in a capacity fee of

$$2670/5000 = \$0.534 \text{ per sq ft or } \$53.40 \text{ per 100 sq ft}$$

Therefore, for additions the charge would be \$53 per 100 sq ft. As a matter of policy the City will not charge capacity fees for additions less than 1000 sq ft.

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Non-Residential Fee Calculation

Capacity fees for Non-Residential customers were calculated according to the multiples shown in Table 4 below. This table shows wastewater capacity fees per unit for non-residential institutions. The wastewater capacity fees in the right hand column were calculated by multiplying the City estimated wastewater gallons per day by the total cost per gallon per day (calculated above and shown to be \$9.54) and result in the total cost per unit listed in Service Unit column. To use Auditoriums/Community Centers as an example, the estimated wastewater use per day per seat is 4 gallons. Multiplying 4 by \$9.54 results in a capacity fee per seat of \$38.

Table 4 – Wastewater Capacity Fees for Non-Residential

Customer Class	Expected WW Generation per Service Unit (GPD) WW gpd (A)	Service Unit	Capacity Fee (\$/GPD) (B)	Wastewater Capacity Fees (A)*(B)
Residential	5.6	100 sq ft	\$9.54	\$53
Auditorium/Community Center	4	No. of Seats	\$9.54	\$38
Bank	150	1,000 sq ft	\$9.54	\$1,431
Gymnasium	250	1,000 sq ft	\$9.54	\$2,384
Health Spa	600	1,000 sq ft	\$9.54	\$5,722
Hotel, per room	130	No. of Rooms	\$9.54	\$1,240
Medical Office	250	1,000 sq ft	\$9.54	\$2,384
Office Building	150	1,000 sq ft	\$9.54	\$1,431
Shopping Center	150	1,000 sq ft	\$9.54	\$1,431
Coffee House	300	1,000 sq ft	\$9.54	\$2,861
Restaurant - Full-Service	30	No. of Seats	\$9.54	\$286
Retail Store	80	1,000 sq ft	\$9.54	\$763
School - Private	200	1,000 sq ft	\$9.54	\$1,907
Supermarket	150	1,000 sq ft	\$9.54	\$1,431

The wastewater 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 \$38 multiplied by 100 seats, which produces a total capacity fee of \$3,800.