SAN BENITO COUNTY WATER DISTRICT

Water Capacity Fee Report

FINAL REPORT / MAY 7, 2025

RAFTELIS

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May 7, 2025

Mr. Brett Miller, CPA, CPFO
Assistant General Manager
San Benito County Water District
30 Mansfield Road
Hollister, CA 95023

Subject: Water Capacity Fee Report – FINAL

Dear Mr. Miller:

Raftelis is pleased to provide this Water Capacity Fee report for the San Benito County Water District (SBCWD) to develop a water capacity fee.

This report summarizes the methodology for calculating the fee and presents the recommended water capacity fee.

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

Sincerely,

Theresa Jurotich, P.E. (KS, WA), PMP
Manager

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1. Executive Summary

1.1. Background

San Benito County Water District (SBCWD) manages the water resources within San Benito County and is the Groundwater Sustainability Agency for the county. SBCWD provides retail and wholesale potable water services as well as groundwater replenishment and recycled water. SBCWD owns two surface water treatment plants and manages local and imported surface water through the San Benito River System and the San Felipe Distribution System, respectively. A portion of the drinking water delivered to the Sunnyslope County Water District and City of Hollister becomes recycled water (from the City of Hollister's reclamation plant) that is used for irrigation. The imported water improves overall water quality as the groundwater pumped from local aquifers has varying levels of salts and high mineral content.

1.2. Background of the Study

SBCWD is developing a capacity fee for the purpose of funding potential water supply projects to accommodate future growth in municipal customers. This report documents the resultant findings, analyses, and proposed SBCWD water capacity fees. The capacity fees documented in this report are in accordance with the rules and regulations of California State Government Code Section 66013. This report is the formal technical documentation in support of adoption of the water capacity facility fees within SBCWD's service area including data sources, methodology, results, and comparisons.

The major objectives of the study include the following:

- Develop capacity fees to fund the proposed water supply expansion projects being developed by the SBCWD;
- Ensuring capacity fees are fair to both future users and to existing users who have invested, and reinvested, in the water supply system.

1.3. Capacity Fees

Capacity fees are also commonly known as developer fees, development impact fees, connection fees, and system development charges, among others. This report uses the term capacity fees reflecting the nomenclature most common in California. Capacity fees are one-time capital charges assessed against a new development to recover the proportional share of capital facility investment necessary to accommodate growth. Capacity fees are codified in the California Government Code Sections 66013-60025. Capacity fees must reflect the link between the fee imposed on, and the benefit received by, a new connection to the system. The fee charged may not exceed the estimated reasonable cost of providing the service for which the fee is charged.

Broadly, utilities use one of three different methodologies to calculate capacity fees: Buy-In, Incremental, and Hybrid; with variations of each dictated by local community and system characteristics, as well as policy objectives. Utilities have broad latitude in the method and approach used to calculate fees provided the fees do not exceed the estimated reasonable cost for providing service for which the fee is charged.

1.4. Recommended Fees

Since SBCWD is capacity constrained, the Raftelis Team recommends using the incremental method. Raftelis worked closely with SBCWD staff and referenced the Final San Benito Urban Areas Water Supply and Treatment Master Plan Update (October 25, 2023) to determine the estimated cost of proposed water supply expansion projects and the estimated number of new equivalent single family dwelling units (EDU) that could be supported by the proposed water supply expansion projects. In an email from HDR on May 2, 2025, an EDU was defined as a 5/8" meter (equivalent meter (EM)).

The capacity fee is $12,327/EM. The fee for other meter sizes is determined based on AWWA safe operating capacities. This fee will be adjusted annually each July 1 using the Consumer Price Index for the San Francisco Bay Area – All urban index for May of the then current year and May of the previous year.

2. Background

For publicly owned systems, most of the assets are typically paid for by the contributions of existing customers through rates, charges, securing debt, 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 further economic equality among new and existing customers, new connectors will typically "Buy-In" to the existing and pre-funded facilities based on the existing assets, effectively putting them on par with existing customers. In other words, the new users are buying into the existing system based on the replacement costs of existing assets to continue to provide the same level of service to new customers through repairs, expansions, and upgrades to the system.

The basic economic philosophy behind capacity fees is that the costs of providing service should be paid for by those that receive utility from the product. To achieve fair distribution of the value of the system, the charge should reflect a reasonable estimate of the cost of providing capacity to new users and not unduly burden existing users through a comparable rate increase. Accordingly, many utilities make this philosophy 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-capital system charges 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 contributed capital, many water utilities are able to finance required facilities by use of a 'growth-pays-for-growth' policy."*

This principle, in general, applies to water, wastewater, and storm drainage systems. In the excerpt above, customer-contributed-capital system charges are equivalent to capacity fees.

Values shown in report tables and figures are rounded to the digit shown. Therefore, any manual reproduction of the calculations shown may not match the precise results displayed in the report.

3. Methodology Overview

A capacity fee is a one-time charge paid by a new water system customer for the cost of backbone facilities and incremental expansion necessary to provide water system capacity to that new customer. However, it is also assessed to existing customers requiring increased water system capacity. Backbone facilities refers to those components of the system that are necessary to provide service to all customers, inclusive of supply, treatment and transmission lines. Revenues generated by this charge are used to pay for growth-related water facilities.

3.1. Capacity Fee Methodologies

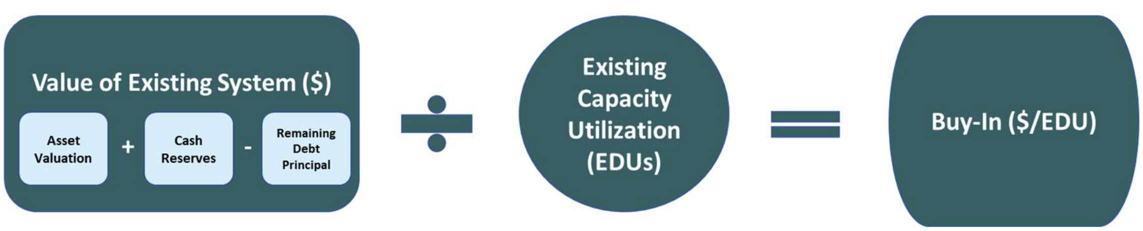
The method for calculating capacity fees generally utilizes one of the following three approaches: Buy-In, Incremental, or Hybrid. The Buy-In approach is designed to recover the historical costs of plant investment in proportion to the amount of built capacity, some of which is available for new growth. The Incremental approach is designed to recover the costs of future growth-related projects and the additional capacity those projects will yield. The Hybrid approach is appropriate where some remaining capacity is available in the existing system and where new, future facilities are required for development.

3.1.1. Buy-In Method

The Buy-In Method is based on the premise that new customers are entitled to service at the same cost as existing customers. Under this approach, new customers pay only an amount equal to the current system value, either using the original cost or replacement cost as the valuation basis and either netting the value of depreciation or not. This net investment, or value of the system, is then divided by the current capacity utilization on the system by existing users to determine the Buy-In cost per unit.

For example, if the existing system has 100 equivalent dwelling units of capacity and the new connector uses an equivalent unit, then the new customer would pay 1/100 of the total value of the existing system. By contributing this capacity fee, the new connector has "bought in" to the existing system. The new user has effectively acquired a financial position on par with existing customers and will face future capital re-investment on equal financial footing with those customers. This approach is suitable when: (1) an agency has built most or all of their facilities and only a small, or no, portion of future facilities are required for build-out development, (2) an agency does not have a detailed adopted long-term capital improvement plan, or (3) an agency's "build-out" date is so far out in the future that it is difficult to accurately project growth and required facilities with precision. Figure 3-1 shows the framework for calculating an Equity Buy-In capacity fee.

Figure 3-1: Formula for Equity Buy-In Approach



3.1.2. Incremental Cost Method

The Incremental-Cost Method states that new development (new users) should pay for the additional capacity and expansions necessary to accommodate them. This method is typically used when there are specific capital improvements needed to furnish growth for new development. Under the Incremental-Cost Method, growth-related capital improvements are allocated to new development based on their estimated usage or capacity requirements, irrespective of the value of past investments made by existing customers.

For instance, if it costs X dollars ($X) to provide water supply for 100 additional equivalent dwelling units and a new connector uses one of those equivalents, then the new user would pay $X/100 to connect to the system. In other words, new customers pay the incremental cost of capacity based on the estimated cost of the new facility projects. This method is generally used when detailed facilities are identified for the capacity required to serve new customers and little to no existing system capacity is available for development. While California Code 66013 (b)(3) does not define a specific period over which to include future projects, these periods can be as long as a master planning period. Figure 3-2 shows the framework for calculating an incremental cost capacity fee.

Figure 3-2: Formula for Incremental Cost Method

3.1.3. Hybrid Method

The Hybrid Method is typically used where some capacity is available to serve new growth, but additional expansion is still necessary to accommodate new development. Under the hybrid method, the capacity fee is based on a weighted average of the existing capacity value and the costs of necessary expansions (i.e., the Buy-In component and the Incremental-cost component).

Capital improvements that are required to serve existing users and expand system capacity to serve future customers may be included proportionally to the percentage of the cost specifically required for expansion of the system.

3.1.4. Recommended Methodology

Since SBCWD is capacity constrained, the Raftelis Team recommends using the incremental method.

3.2. Asset Valuation Options

Four principal methods are used to estimate the value of existing facilities: original cost, replacement cost, original cost less depreciation, and replacement cost less depreciation.

3.2.1. Original Cost

The principal advantages of original cost valuation are relative simplicity and stability since the recorded costs of fixed assets are held constant. The major criticism levied against the original cost method is that it disregards changes in the time value of money, and future capital costs, which are attributable to inflation and other factors. As evidenced by history, prices tend to increase rather than to remain constant or decrease. This situation may be exacerbated since most water and sewer systems are developed over time on a piecemeal basis as demanded by the customer base and service area growth. Consequently, each asset addition is paid for with dollars of different purchasing power. When these outlays are added together to obtain a plant value, the result can be misleading. Additionally, original cost does not account for the depreciation of facilities and other assets as they age, which may not be representative of the state of the systems. We discuss depreciation in further detail below.

3.2.2. Replacement Cost

Changes in the value of the dollar over time, represented by cost inflation, is recognized by the replacement cost valuation. The replacement cost represents the cost of duplicating the existing water and sewer facilities (or duplicating their functions) at current dollars. Unlike the original cost approach, the replacement cost approach recognizes price level changes that have occurred since plant construction and subsequent investments. The most accurate replacement cost valuation requires a physical inventory and appraisal of plant components in terms of their replacement costs at the time of valuation. However, with original cost records available, a reasonable approximation of replacement cost plant value can be easily derived by trending historical original costs. This approach employs the use of cost indices to express actual capital investment by the utility in current dollars. An obvious advantage of the replacement cost approach is that it accounts for changes in the value of money over time. However, just like original cost it does not account for the depreciation of facilities and other system assets.

3.2.3. Original Cost Less Depreciation

The current value of water and sewer facilities is materially affected by the effects of age. All assets have estimated useful lives, which vary by type. For example, pumps may have a 20-year life, buildings 50 years, and pipelines 40-80 years depending on the material of construction. Each year an asset is revalued by the fraction of its useful life relative to its original cost. This is referred to as straight line or linear depreciation. At the end of an asset's useful life, it is worth zero dollars on paper, though it may still be in service. Depreciation accounts for estimated devaluation in system assets caused by wear and tear, decay, inadequacy, and obsolescence. To provide appropriate recognition of the effects of depreciation on existing water and sewer systems, the original cost valuation can be expressed as net of depreciation to yield the original cost less depreciation. Accumulated depreciation is computed for each asset and reduces the valuation based on age or condition, from the respective total original cost.

3.2.4. Replacement Cost Less Depreciation (RCLD)

The RCLD is identical to the original cost less depreciation valuation method, with the exception that asset cost and asset depreciation is expressed in today's dollars rather than the value of the dollar when the asset was placed in service. Original cost and depreciation are inflated using historical indices to reflect today's dollars. Replacement cost depreciation is then subtracted from the replacement cost of the asset to yield replacement cost less depreciation. RCLD allows for an accounting of system assets in present value while also accounting for proportional devaluation via depreciation. To reiterate from Section 3.2.2, replacement cost is the common nomenclature; however, in the context of this study it is not a process to appraise or receive bids on replacing each existing asset or facility; it is instead a method of approximating the replacement cost of existing facilities based on historical construction cost increases.

3.2.5. Recommended Asset Valuation Method

Raftelis recommends using the RCLD method to account for today's replacement cost for system improvements while acknowledging the remaining useful life of the system facilities. This valuation approach ensures that future users' investment represents a fair share of the system in both the accounting sense and the level of service these future users are purchasing.

4. Capacity Fee Development

The incremental method capacity fee is based on the cost of potential water supply expansion projects divided by the additional capacity provided by those projects. Potential water supply expansion projects have been identified by SBCWD's engineering consultants, HDR[1].

Table 4-1 shows the steps to determining the estimated number of single-family residential (SFR) dwelling units that can be served by the proposed water supply expansion projects. Per HDR, the average annual yield of the North Area Groundwater Phase 1 is anticipated to be approximately 1,000 AF, and the average yield of the BF Sisk project is anticipated to be approximately 1,500 AF[2]. Due to mixing of water sources to meet quality requirements, each unit of demand for new developments will be met with an 81/19 percent mix of new water source to current water source. This in effect increases the average annual yield to 3,086 AF. The presumed average demand per single-family residential dwelling unit is 0.33 AF[3]. Dividing 3,086 AF of capacity by 0.33 AF of demand per unit results in an estimated 9,353 single-family equivalent units that can be served by the new capacity. The equivalent meter (EM) size associated with an EDU is a 5/8" meter per an email from HDR on May 2, 2025.

Table 4-1: Estimated New Units Served by Growth Projects

Line Item	Average Annual Yield, AF	Growth	Unit
North Area Groundwater Phase 1	1,000	100%	1,000
BF Sisk growth-related capacity, AF	1,500	100%	1,500
Total additional capacity, AF			2,500
% of New Demand met through New Sources			0.81
Adjusted additional capacity, AF			3,086
Demand (AF)/SFR unit			0.33
Estimated new units (5/8" meters)			9,353

Table 4-2 shows the development of the growth-related capital cost to be recovered by the capacity fee. The capital cost for the two growth projects in February 2021 dollars as developed by HDR is $64.1 million[4]. Those costs were escalated to 2025 dollars using the Engineering News Record Construction Cost Index for San Franscico between February 2021 and February 2025. In addition to the capital costs, costs associated with financing the projects have been included. The discounted value of the cost of issuance on debt funding and debt interest have been added. The discounted value of the interest earnings on a debt reserve fund associated with planned debt issues have been subtracted. The cost of issuance and interest earnings on the debt reserve fund are discounted using a 0.5 percent discount rate, which is the presumed interest earnings rate. The debt interest has been discounted using an estimated real rate of 2.2 percent, which is calculated as the debt interest rate (5.6 percent) less the 5-year average Consumer Price Index for San Franscico (3.4 percent). The adjusted capital cost is $115.3 million.

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[1] Kennedy, Holly, et al., "Final San Benito Urban Areas Water Supply and Treatment Master Plan Update", HDR, Folsom, California, October 25, 2023.

[2] Ibid.

[3] Ibid.

[4] Ibid.

Table 4-2: Adjusted Capital Cost

Basis of Proposed Water Supply Capacity Fees	
Growth Capital Projects	$74,364,246
Cost of Issuance, Discounted	$458,746
Debt Interest, Discounted	$40,972,149
Debt Reserve Interest Earnings Applied towards last payment, Discounted	-$500,207
Adjusted Capital Cost	$115,294,935

Table 4-3 shows the calculation of the new water supply capacity fee on an equivalent meter basis. The fee is the adjusted capital cost divided by the estimated equivalent meters that can be served by that capacity. This fee will be adjusted annually each July 1 using the Consumer Price Index for the San Francisco Bay Area – All urban index for May of the then current year and May of the previous year.

Table 4-3: Water Supply Capacity Fee

Line Item	Value
Adjusted Capital Cost	$115,294,935
Equivalent Meters	9,353
Capacity Fee, $/EM	**$12,327**

Table 4-4 shows the initial capacity fee at meter sizes from 5/8" to 4". SBCWD plans to charge new single family residences that have to install a 1" meter for fire requirements at the 5/8" capacity fee. As the base meter size fee is adjusted annually, the other meter sizes will be adjusted according to the ratios shown in Table 4-4.

Table 4-4: Water Supply Capacity at Different Meter Sizes

Meter Size	Ratio	Fee, $/mtr
5/8"	1.00	$12,327
3/4"	1.50	$18,490
1"	2.50	$30,817
1.5"	5.00	$61,635
2"	8.00	$98,616
3"	17.50	$215,722
4"	31.50	$388,300