Santa Clarita
Water Division

Capacity Fee Study Report

June, 2016

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SCWD

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June 20, 2016

Mr. Keith Abercrombie
Retail Manager
Santa Clarita Water Division
26521 Summit Circle,
Santa Clarita, CA 91350

Subject: Capacity Fees Report

Dear Mr. Abercrombie

Raftelis Financial Consultants Inc. (RFC) is pleased to present this report on the development of capacity fees for the Santa Clarita Water Division (Division).

The study develops updated capacity fees for the Division's water system based on a comprehensive review of the Division's existing assets, capital improvement plan, and system usage. The updated single-family residence capacity fee is $3,712 for 1 inch meters in the water system.

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 Division'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 (213)262-9304.

Sincerely,
Raftelis Financial Consultants, Inc.

Sanjay Gaur
Vice President

EXECUTIVE SUMMARY

This document outlines the purpose of capacity fees[1], as well as the methodologies, and rationale behind updating the Santa Clarita Water Division's capacity fees. The executive summary will provide a brief summary of these topics and discuss the results of the study.

ECONOMIC AND LEGAL FRAMEWORK SUMMARY

Capacity fees are one-time fees imposed on customers requesting a new, an additional, or a larger connection to the Division's water system. Capacity fees prevent a "free-rider" problem by allowing the agency to charge new customers for certain costs of the existing system. The agency avoids 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 "growth should pay for growth."

The legal grounds for establishing capacity fees are Government Sections 66013, 66016, 66022 and 66023. Per section 66013, capacity fees imposed by a Division "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 most commonly used are 1) Equity Buy-In approach and 2) Incremental-Cost approach. The Equity Buy-In approach is most appropriate for agencies that are mostly built out but still have some capacity in the system to accommodate growth. This methodology 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 facilities are distributed to new customers based on the number of expected additional meters, and the value of the additional Capital Improvement Program (CIP).

The Division finds itself in a position where it satisfies both of these requirements. The Division's water system is already fairly built out, but the Division also anticipates a substantial amount of expansion related CIP spending to deal with growth related increases in demand in the future. As such, RFC recommends a hybrid approach to the Division's capacity fees in order to charge for both the cost of the existing system and the proportional cost of new capacity required to serve their demand on the water system.

[1] These fees are also referred to by other agencies as connection fees, development impact fees, etc.

CALCULATION SUMMARY

The first step of the hybrid capacity fee methodology is calculating the cost per Meter Equivalent Unit (MEU)[2] 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 MEUs in the Division's service area. The total water system buy-in cost was calculated to be $76.1 million and the total number of MEUs was determined to be 35,075. The result of dividing $76.1 million by 35,075 MEUs yields a per MEU cost of $2,168. This is shown in **Table 1**.

Table 1: Buy-In Capacity Fee Calculation

Asset Values	Starting Balance	Outstanding Debt Principal	Current MEUs	Buy-In Capacity Fee
A	B	C	D	E=(A+B-C)/D
$105,490,456	$29,272,497	$58,710,000	35,075	$2,168

The next step is to add to this the incremental cost of the projected growth related CIP. This is determined by dividing the total value of the projected growth related CIP by the number of MEUs expected at buildout less current MEUs. The projected value of the Division's growth related CIP is $37.8 million. Dividing the cost by the difference in MEUs at buildout less current MEUs in the system results in an incremental cost of $1,544. This calculation is shown in **Table 2**.

Table 2: Incremental Capacity Fee Calculation

Growth Related CIP	Additional MEUs at Buildout	Incremental Capacity Fee
A	B	C=(A/B)
$37,797,000	24,481	$1,544

Adding the incremental cost to the equity buy-in cost results in a total cost per MEU of $3,712. Costs for larger meters were multiplied by the ratio of that meter's AWWA Maximum Safe Operating Capacity to the 1 inch meter's AWWA Maximum Safe Operating Capacity.[3] The Division is not anticipating adding any meters smaller than 1 inch, so meters smaller than 1 inch are shown to have the same cost as the 1-inch base meter. Final capacity fees by meter size are shown in **Table 3**.

[2] Meter Equivalent Units are a ratio based unit that derive their value for each meter size based on the ratio of that meter size's American Water Works Association (AWWA) Safe Maximum Operating Capacity to that of the Division's base meter size's (which are 1 inch meters).

[3] American Water Works Association, *Principles of Water Rates, Fees, and Charges* (2012), Table B-1, "Safe Maximum Operating Capacity by Meter Type."

Table 3: Total Capacity Fees

Meter Size	Buy-In Capacity Fee A	Incremental Capacity Fee B	Total Capacity Fee A+B
5/8 by 3/4 inch	$2,168	$1,544	$3,712
3/4 inch	$2,168	$1,544	$3,712
1 inch	$2,168	$1,544	$3,712
1.5 inch	$4,337	$3,088	$7,425
2 inch	$6,939	$4,941	$11,880
3 inch	$13,877	$9,881	$23,758
4 inch	$21,683	$15,439	$37,122
6 inch	$43,366	$30,878	$74,244
8 inch	$69,386	$49,405	$118,791

The purpose of this report is to develop updated capacity fees for the Santa Clarita Water Division's water system.

INTRODUCTION

Capacity fees are one-time charges that the Division imposes on any person requesting a new, an additional, or a larger connection to the Division's water system facilities. The fee is a charge for public facilities in existence at the time a charge is imposed or charges for new public facilities to be acquired or constructed in the future that are of proportional benefit to the person or property being charged, including supply or capacity contracts for rights or entitlements, real property interests, and entitlements and other rights of the local agency involving capital expense relating to its use of existing or new public facilities. They should generally reflect the estimated reasonable cost to the Division of providing existing or additional system capacity. Other common designations for these fees are connection, system development, capital facilities, or capacity charges.

ECONOMIC AND LEGAL FRAMEWORK FOR CAPACITY FEES

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 benefit from the product is often referred to as "growth-should-pay-for-growth." This principal, that "new development [should pay] its own way," is listed as one of the primary objectives of a capacity fee in the American Water Works Association (AWWA) Manual M1, Principles of Water Rates, Fees and Charges.

LEGAL FRAMEWORK [4] The Division 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 capacity fees. The basic statutory standards governing capacity fees are embodied in Government Code Section 66013. Government Code Section 66013 contains requirements specific to pricing water capacity fees:

[4] 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 Division should consult with its counsel for clarification and/or specific review of any of the above or other matters.

"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.

- The capacity fee revenue must be segregated from the Division's general fund in order to avoid commingling of capacity fees and the general fund.

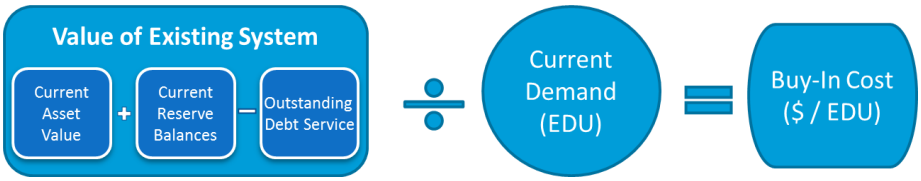
APPROACH OVERVIEW

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 capacity fees. These are the "equity buy-in" and "incremental-cost" approaches.

EQUITY BUY-IN APPROACH The equity buy-in approach rests on the premise that those requesting a new, an additional or larger connection to the water system 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, the person requesting the new, additional or larger connection pays only an amount equal to the net investment already made by existing users, based on replacement cost less depreciation. This net equity investment figure is 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 person requesting the new, additional, or larger connection to the water system uses an equivalent unit, then the person would pay $1/100^{th}$ of the total value of the existing system. By paying this capacity fee, the person 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. Figure 1 shows the framework to calculate the system buy-in Capacity Fees. Note that **Figure 1** uses "EDU" as a unit instead of EMU. EDU is short for Equivalent Dwelling Unit, and in this case the two terms are functionally equivalent.

Figure 1: Formula for System Buy-In Capacity Fees



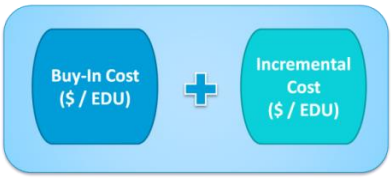
INCREMENTAL-COST APPROACH When a person requests a new, additional, or larger connection to a water system, they use either surplus capacity from the existing system, which must then be replaced, or they require new capacity that must be added to the system to accommodate their demand. Under the incremental-cost approach, the person requesting a new, additional, or larger connection to the water system pays for the additional capacity required to serve their property 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 of average usage, and a new connector uses one of those equivalent units, then the new connector would pay $X/100 to connect to the system. In other words, new connector pays the incremental cost of capacity required to serve their new demand. As with the equity buy-in approach, any person requesting a new, additional, or larger connection to the water system 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. **Figure 2** shows the framework for calculating the incremental cost capacity fee.

Figure 2: Formula for Incremental Cost Capacity Fees

HYBRID APPROACH The hybrid approach 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 approach the capacity fee is based on the summation of the existing capacity and any necessary expansions. In utilizing this methodology, it is important that system capacity costs are not double-counted when combining costs of the existing system with future costs from the CIP. CIP costs associated with repair and replacement of the existing system should not be included in the calculation, unless specific existing facilities which will be replaced through the CIP can be isolated and removed from the existing asset inventory and cost basis. In this case, the rehabilitative costs of the CIP essentially replace the cost of the relevant existing assets in the existing cost basis. Capital improvements that expand system capacity to serve future demand may be included proportionally to the percentage of the cost specifically required for expansion of the system. **Figure 3** shows the framework for calculating the hybrid connection fee

Figure 3: Formula for Hybrid Capacity Fees



PROPOSED APPROACH

Table 4: Proposed Approach for Capacity Fees

Approach vs. Capacity to Serve New Demand	Equity Buy-In	Incremental	Hybrid	Santa Clarita WD System?
Capacity Available in Current System	✓ Yes		✓ Yes	✓ Yes
Additional Facilities Required		✓ Yes	✓ Yes	✓ Yes

The most appropriate rate structure for the capacity fees for the Division is a hybrid approach. Since the Division's water infrastructure is substantially built-out, those requesting a new, additional, or larger connection will largely be served by existing infrastructure into which existing customers have invested a considerable amount of economic resources through water rates. However, the Division is still expecting a substantial amount of growth in the long term in its service area, and is expecting to expend a substantial amount of capital in growth-related CIP; therefore, it is reasonable for the capacity fee to pay for this CIP as well.

CAPACITY FEES CALCULATIONS

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 the additional growth-related CIP.

The basic methodology for the equity buy-in approach is to take the total value of the Division's water system and divide it by the system's current demand as represented by the number of MEUs in the system. The result of this calculation is the Buy-In Capacity Fee component of the rate structure for the base 1-inch meter.

After the Buy-In Capacity Fee is determined, the incremental approach will be used to ensure that the additional cost to the system posed by the growth-related CIP is properly allocated to new demand. This is accomplished by taking the total estimated cost of the growth-related CIP and dividing it by estimated additional MEUs, which yields the Incremental Capacity Fee component for each MEU.

The final step is to add the two fee components together, which results in the total capacity fee.

CURRENT VALUE OF THE DIVISION'S SYSTEMS

As stated earlier, the first step is to determine the asset value of the capital improvements required to serve those requesting a new, additional, or larger connection. However, under the equity buy-in approach, the facilities have already been constructed, therefore the goal is to determine the value of the existing system/facilities. To estimate the asset value of the existing facilities required to serve those requesting a new, additional, or larger connection, various methods are employed. The principal methods commonly used to value a utility's existing assets are original cost and replacement cost.

1. **Original Cost (OC).** The principal advantages of the original cost method lie in its relative simplicity and stability, since the recorded costs of tangible property are held constant. The major criticism levied against original cost valuation pertains to the disregard of changes in the value of money, which are attributable to inflation and other factors. As evidenced by history, prices tend to increase rather than remain constant. Because the value of money varies inversely with changes in price, monetary values in most recent years have exhibited a definite decline; a fact not recognized by the original cost approach. This situation causes further problems when it is realized that most utility systems are developed over time on a piecemeal basis as demanded by service area growth. Consequently, each additional asset was paid for with dollars of different purchasing power. When these outlays are added together to obtain a plant value, the results can be misleading.

2. **Replacement Cost (RC).** Changes in the value of the dollar over time, at least as considered by the impact of inflation, can be recognized by replacement cost asset valuation. The replacement cost represents the cost of duplicating the existing utility facilities (or duplicating its function) at current prices. Unlike the original cost approach, the replacement cost method recognizes price level changes that may have occurred since plant construction. The most accurate replacement cost valuation would involve 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 most easily be ascertained by trending historical original costs. This approach employs the use of cost indices to express actual capital costs experienced by the utility in terms of current dollars. An obvious advantage of the replacement cost approach is that it gives consideration to changes in the value of money over time.

3. **Original Cost Less Depreciation (OCLD) or Replacement Cost Less Depreciation (RCLD).** Considerations of the current value of utility facilities may also be materially affected by the effects of age and depreciation. Depreciation takes into account the anticipated losses in plant value caused by wear and tear, decay, inadequacy, and obsolescence. To provide appropriate recognition of the effects of depreciation on existing utility facilities, both the original cost and reproduction cost valuation measures can also be expressed on an original cost less depreciation (OCLD) and replacement costs less depreciation (RCLD) basis. These measures are identical to the aforementioned valuation methods, with the exception that accumulated depreciation is computed for each asset account based upon its age or condition, and deducted from the respective total original cost or replacement cost to determine the OCLD or RCLD measures of plant value.

RFC determined RCLD as the appropriate method to determine the current asset value of the water system. RCLD is a commonly used method and is often preferred to alternative methods, such as OCLD, original cost (OC) and replacement cost (RC), because of its defensibility. In most cases – barring, for example, instances of water systems that have depreciated significantly due to lack of replacement and repair – RCLD is more defensible because the replacement cost: 1) is adjusted for inflation, and thus recovers the cost of replacing that asset in current dollars; and 2) accounts for depreciation (assuming the replacement value), and thus addresses the fact that the system is not new and has been used by current users.

SYSTEM ASSET VALUE For the purpose of calculating the system's RCLD, the Division provided original cost records for the fixed assets of the utility system as of fiscal year-end 2015 (June 30, 2015). OC was inflated to RC, the estimated expected cost of a similar facility constructed today. Costs were escalated using a combination of construction-related inflation indices – the 20 city Engineering News Records (ENR) Construction Cost Index (CCI) and Los Angeles specific CCI. The LA CCI only goes back to FY 1978, so all construction that occurs before FY 1978 was escalated using a combination of the 20 city CCI and the LA CCI.

ACCUMULATED DEPRECIATION The Division provided accumulated depreciation associated with the OC for each of its fixed asset accounts. However, for this analysis with RC, RFC used straight-line depreciation along with the asset's useful life and total value of the asset to determine the depreciation of each asset. This is shown in **Table 5**.

Table 5: Existing System Value

Category Code	Asset Category	Replacement Cost	RCLD
18206	Land	$3,249,230	$3,249,230
18215	Wells	$3,449,214	$1,382,067
18221	Structures & Improvements	$6,162,165	$4,783,166
18224	Pumping	$12,533,127	$5,776,334
18232	Water Treatment Equipment	$1,229,762	$873,876
18242	Tanks & Reservoirs	$36,530,825	$16,588,132
18243	Mains	$106,701,421	$57,107,310
18245	Services	$22,143,666	$7,110,462
18246	Meters	$3,925,855	$1,127,384
18248	Hydrants	$12,820,916	$3,502,132
18271	Office/Warehouse Structures & Improvements	$1,506,925	$326,489
18272	Office Equipment	$2,576,719	$1,185,179
18273	Vehicles	$1,708,066	$1,114,800
18274	Store Equipment	$63,218	$17,360
18275	Lab Equipment	$52,378	$7,821
18276	Communications Equipment	$1,605,615	$241,296
18277	Power Operated Equipment	$1,796,572	$1,057,244
18278	Tools, Shops & Garage Equipment	$185,118	$22,206
18279	Other General Plant	$335,943	$17,966
	Total	**$218,576,738**	**$105,490,456**

FUND BALANCE The Division's total fund balance was included in the total value of the system, as this capital reserve is the result of the accumulation of capital from charging existing customers for service. A summary of the Division's Fund Balances as of June 30, 2015 are shown in **Table 6**.

Table 6: Summary of Fund Balances

Fund	Starting Balance
CIP Fund	$3,782,464
Operating Reserve Fund	$5,498,500
Rate Stabilization Reserve Fund	$1,507,050
Capital Reserve Fund	$1,000,000
Emergency Reserve Fund	$1,000,000
Unrestricted Reserve Fund	$16,484,483
Total	**$29,272,497**

OUTSTANDING DEBT PRINCIPAL The Division's outstanding debt principal balance was subtracted from the total value of the system, as the outstanding debt will be repaid by the rates that a customer will pay once connected to the water system. The Division currently has two outstanding debts: the 2010B COP and the 2011A Revenue Bonds. The outstanding debt principal is shown in **Table 7**. Details of current debt principal owed can be found in the Appendix.

Table 7: Summary of Outstanding Debt Principal

Current Outstanding Debt	Maturity	Outstanding Principal (FY 2016 – maturity)
2010B COP	FY 2041	$13,185,000
2011 A Revenue Bonds	FY 2028	$45,525,000
Total		**$58,710,000**

CAPACITY FEE CALCULATIONS

The final steps for the capacity fee calculation are deriving a MEU value, expressed in terms of $/MEU. The buy-in value is calculated by dividing the above-determined value of the system by the number of MEUs.

The Division provided total account numbers for FY 2016, including by meter size. Different meter sizes are assigned different MEU values based on a capacity multiplier that is derived from that meter's capacity relative to a base meter, in this case a 1-inch meter. For example: a 1.5 inch meter has the Safe Maximum Operating Capacity of 100 gallons per minute (gpm) whereas the base 1 inch meter has the Safe Maximum Operating Capacity of 50 gpm.[5] By dividing 100 gpm by 50 gpm we arrive at 2, which tells us that a 1.5 inch meter is worth 2 MEUs.

[5] American Water Works Association, *Principles of Water Rates, Fees, and Charges* (2012), Table B-1, "Safe Maximum Operating Capacity by Meter Type"

The meter count by the different meter sizes and their respective capacity multiplier are displayed below in **Table 8**. From this methodology we have determined that there are 35,075 MEUs in the Division's service area.

Table 8: Meter Counts by Size and MEU Calculation

Meter Size	Meter Count	AWWA Safe Maximum Operating Capacity (GPM)	Calculated Ratio	MEU Total
5/8 by 3/4 inch	6,499	20	1.0	6,499
3/4 inch	17,917	30	1.0	17,917
1 inch	3,419	50	1.0	3,419
1.5 inch	715	100	2.0	1,430
2 inch	1,162	160	3.2	3,718
3 inch	43	320	6.4	275
4 inch	108	500	10.0	1,080
6 inch	24	1,000	20.0	480
8 inch	8	1,600	32.0	256
Total	**29,895**			**35,075**

By dividing the total system value from **Table 5**, **Table 6**, and **Table 7**, by the total number of MEUS in **Table 8**, we find that the Buy-In Capacity Fee component per MEU is $2,168. This represents the average total system cost borne by each 1 inch meter. This calculation is summarized in **Table 9**.

Table 9: Buy-In Capacity Fee Calculation

Asset Values	Starting Fund Balances	Outstanding Debt Principal	Current MEUs	Buy-In Capacity Fee
A	B	C	D	E=(A+B-C)/D
$105,490,456	$29,272,497	$58,710,000	35,075	$2,168

The rate of the Buy-In Capacity Fee component for a 1-inch meter is then multiplied by the ratios found in **Table 8** to determine the rates for the Buy-In Capacity Fees for meters larger than 1 inch. As stated above, the Division no longer anticipates the installation of meters smaller than 1 inch due to new requirements for Fire Sprinkler Systems in new homes and the corresponding flow requirements. Fees for Meters larger than 1 inch are found in **Table 10**.

Table 10: Rates for Buy-In Capacity Fee Calculation by Meter Size

Meter Size	Ratios	Buy-In Capacity Fee
5/8 by 3/4 inch	1.0	$2,168
3/4 inch	1.0	$2,168
1 inch	1.0	$2,168
1.5 inch	2.0	$4,337
2 inch	3.2	$6,939
3 inch	6.4	$13,877
4 inch	10.0	$21,683
6 inch	20.0	$43,366
8 inch	32.0	$69,386

Additionally, the Division is expected to outlay nearly $38 million in growth-related CIP.[6] According to the Division's 2013 Water Master Plan, it is estimated that at build-out at maximum density, the Division will serve 59,556 households.[7] Since the Division is spending the capital to deal with increased demand stemming from new development and expansion, it is necessary that new development and expansion will have to pay for the growth-related CIP. This additional component of the Division's capacity fee rate structure is the Incremental Capacity Fee.

The necessary increase in the capacity fees was found by dividing the total value of growth-related CIP by the total additional MEUs expected. The amount of growth-related CIP spending expected was provided by Division staff and estimated at $37,797,000.

The number of additional MEUs expected was determined by subtracting the Division's current MEU total from the number of households expected at buildout. This calculation is shown in **Figure 4** below.

Figure 4: Incremental MEUs at Buildout

$$59,556 - 35,075 = 24,481 \text{ MEUs}$$

Table 11 shows the calculation for the Incremental Capacity Fee for 1 MEU.

Table 11: Incremental Capacity Fee Calculation

Growth-Related CIP A	Additional MEUs at Buildout B	Incremental Capacity Fee C=(A/B)
$37,797,000	24,481	$1,544

[6] Figure provided by Division staff.
[7] *SCWD 2012 Water Master Plan Update* (2013), page 2-3, Table 2.1, "Build-out Population Estimate"

The rate for the Incremental Capacity Fee for a 1-inch meter is then multiplied by the ratios found in **Table 8** to determine the rates for the Incremental Capacity Fees for meters larger than 1 inch. Note that the Division no longer anticipates the installation of meters smaller than 1 inch due to new requirements for Fire Sprinkler Systems in new homes and the corresponding flow requirements. This calculation is shown in **Table 12**.

Table 12: Incremental Capacity Fee Calculation by Meter Size

Meter Size	Ratios	Incremental Capacity Fee
5/8 by 3/4 inch	1.0	$1,544
3/4 inch	1.0	$1,544
1 inch	1.0	$1,544
1.5 inch	2.0	$3,088
2 inch	3.2	$4,941
3 inch	6.4	$9,881
4 inch	10.0	$15,439
6 inch	20.0	$30,878
8 inch	32.0	$49,405

By adding the Buy-In Capacity Fee component from **Table 10** to the rates of the Incremental Capacity Fee component in **Table 12**, the rates for total capacity fee per new MEU are determined. The sum of these two costs is $3,712, which gives us the cost per connection per 1-inch meter. **Table 13** below shows the rates for the total capacity fee for meters of different sizes based on meter capacity multipliers.

Table 13: Total Capacity Fees

Meter Size	Buy-In Capacity Fee A	Incremental Capacity Fee B	Total Capacity Fee A+B	Current Capacity Fee	Change ($)	Change (%)
5/8 by 3/4 inch	$2,168	$1,544	$3,712	$2,047	$1,665	81%
3/4 inch	$2,168	$1,544	$3,712	$2,047	$1,665	81%
1 inch	$2,168	$1,544	$3,712	$3,699	$13	0%
1.5 inch	$4,337	$3,088	$7,425	$7,143	$282	4%
2 inch	$6,939	$4,941	$11,880	$12,567	-$687	-5%
3 inch	$13,877	$9,881	$23,758	$21,430	$2,328	11%
4 inch	$21,683	$15,439	$37,122	$36,816	$306	1%
6 inch	$43,366	$30,878	$74,244	$95,234	-$20,990	-22%
8 inch	$69,386	$49,405	$118,791	$132,561	-$13,770	-10%

APPENDIX

OUTSTANDING DEBT PRINCIPAL DETAIL

Year	2010B COP Principal	2011 A Revenue Bonds Principal	Total
FY 2016	$285,000	$2,230,000	$2,515,000
FY 2017	$0	$0	$0
FY 2018	$290,000	$2,455,000	$2,745,000
FY 2019	$305,000	$2,705,000	$3,010,000
FY 2020	$315,000	$2,950,000	$3,265,000
FY 2021	$330,000	$3,210,000	$3,540,000
FY 2022	$345,000	$3,490,000	$3,835,000
FY 2023	$365,000	$3,785,000	$4,150,000
FY 2024	$380,000	$4,110,000	$4,490,000
FY 2025	$400,000	$4,460,000	$4,860,000
FY 2026	$420,000	$4,825,000	$5,245,000
FY 2027	$445,000	$5,220,000	$5,665,000
FY 2028	$465,000	$6,085,000	$6,550,000
FY 2029	$490,000		$490,000
FY 2030	$515,000		$515,000
FY 2031	$545,000		$545,000
FY 2032	$570,000		$570,000
FY 2033	$600,000		$600,000
FY 2034	$635,000		$635,000
FY 2035	$665,000		$665,000
FY 2036	$700,000		$700,000
FY 2037	$740,000		$740,000
FY 2038	$780,000		$780,000
FY 2039	$820,000		$820,000
FY 2040	$865,000		$865,000
FY 2041	$915,000		$915,000
Total	$13,185,000	$45,525,000	$58,710,000