LAS VIRGENES MUNICIPAL WATER DISTRICT

2016 Water, Recycled Water, and Sanitation Capacity Fee Study

LAS VIRGENES
MUNICIPAL
WATER DISTRICT
EST. 1958

RAFTELIS
FINANCIAL CONSULTANTS, INC.

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February 1, 2016

Mr. Douglas Anders
Administrative Services Coordinator
Las Virgenes Municipal Water District
4232 Las Virgenes Road
Calabasas, CA 1302

Subject: 2016 Water, Recycled Water, and Sanitation Capacity Fee Study

Dear Mr. Anders,

Raftelis Financial Consultants, Inc. (RFC) is pleased to provide this Water, Recycled Water, and Sanitation Capacity Fee Study Report (Report) for the Las Virgenes Municipal Water District (District) to develop a defensible and equitable nexus for the water, recycled water, and sanitation fees for new developments within its service area.

The major objectives of the study include the following:

» Develop a basis and rationale for individual capacity fees for the District's water and sanitation utilities;
» Develop a conservation fee to be added to the water fee in lieu of a recycled water capacity fee;
» Develop a report describing the nexus between the capacity fees and future development for water, recycled water, and sanitation services

The Report summarizes the key findings and recommendations related to the development of the capacity fees for water, recycled water, and sanitation services.

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

Sincerely,
RAFTELIS FINANCIAL CONSULTANTS, INC.

Sanjay Gaur
Vice President

Corrine Schrall
Consultant

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1. INTRODUCTION

1.1 BACKGROUND OF THE STUDY

1.1.1 District Background

In 2016, the Las Virgenes Municipal Water District (District) contracted with Raftelis Financial Consultants, Inc. (RFC) to conduct a Water, Recycled Water, and Sanitation Capacity Fee Study (Study). This report provides a detailed summary of the analysis in which RFC determined updated capacity fees, the basis of which are in accordance with the rules and regulations of California State Assembly Bill 1600 (AB 1600) and, more specifically, Government Code Section 66013. This report serves as formal technical documentation in support of modifications to the capacity fees for both the water and sanitation services, with a recycled water component included in the water capacity fee. The District's last Capacity Fee Study for the Water, Recycled Water, and Sanitation Services was conducted in 2004.

The District is organized under the Municipal Water District Act of 1911 (California Water Code Section 71000). A five-member Board of Directors, each elected by geographic divisions, provides governance. Directors serve overlapping four-year terms, and every two years - concurrent with the installation of the newly elected board – they select Board Officers. The Board also selects a local representative from the District to serve on the Board of Directors of the Metropolitan Water District of Southern California. Las Virgenes Municipal Water District serves customers in Los Angeles County and near the boundary with Ventura County across an area of 122-square miles, including the Cities of Agoura Hills, Calabasas, Hidden Hills, and Westlake Village.

The District both imports water from Metropolitan Water District of Southern California (MWD), one of the world's largest water wholesalers, and a smaller amount from the City of Simi Valley/Ventura County Waterworks District 8. It also has the ability to purchase water from the Los Angeles Department of Water and Power. Providing reliable water service to customers in elevated areas requires 25 storage tanks and 24 pump stations. The District also operates two wells in the Russell Valley Basin, but treats this groundwater along with wastewater for recycled water production during high summer demand. The District is the sole owner and operator of all water facility assets.

About 20 percent of the total water served to District customers is recycled water used to irrigate streetscapes, golf courses, school grounds, and other public and commercial landscapes. This recycled water is produced through extensive treatment of wastewater and is delivered through 66 miles of recycled water lines, three storage tanks, one reservoir, and four pumping stations. Las Virgenes - Triunfo Joint Powers Authority (JPA) manages this recycled water production.

The District provides sanitation services to most residents in its service area, with a system of 56 miles of trunk sewer lines and two lift stations which pump wastewater to the Tapia Water Reclamation Facility (TWRF), operated by the JPA. The District co-owns assets with Triunfo Sanitation District for sanitation services. The JPA also operates the Rancho Las Virgenes Composting Facility, which processes the biosolids removed from wastewater during treatment for compost.

1.1.2   Objectives of the Study

The major objectives of the study include the following:

» Develop a basis and rationale for individual capacity fees for the District's water and sanitation utilities;

» Develop a conservation fee to be added to the water fee in lieu of a recycled water capacity fee;

» Develop a report describing the nexus between the capacity fees and future development for water, recycled water, and sanitation services

1.2   ECONOMIC AND LEGAL FRAMEWORK

For publicly owned water and sanitation 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 toward 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, in turn, new connectors will typically buy into the existing and pre-funded facilities based on the percentage of remaining available system capacity, effectively putting them on par with existing customers. In other words, the new users are buying into the existing system through a payment for the portion of facilities that has already been constructed in advance of new development.

1.2.1   Economic Framework

The basic economic philosophy behind capacity fees is that the costs of providing water and sanitation 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 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-[connection fees] is to prevent or reduce the inequity to existing customers that results when these customers must pay the increase in water rates that are needed to pay for added plant costs for new customers. Contributed capital reduces the need for new outside sources of capital, which ordinarily has been serviced from the revenue stream. Under a system of contributed capital, many water utilities are able to finance required facilities by use of a 'growth-pays-for-growth' policy."

1.2.2   Legal Framework[1]

The District reserves broad authority over the pricing of water and sanitation 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 water and sanitation 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 sanitation capacity fees:

> *"Capacity charge" means 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. A "capacity charge" does not include a commodity charge.*

Section 66013 also requires that:

» 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

1.3   METHODOLOGIES

There are two primary steps in calculating Capacity Fees: (1) determining the cost of capital related to either new service connections or expansions that increase density or require the installation of a larger meter, and (2) allocating those costs equitably to various types of connections. 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 four general approaches that are widely accepted and appropriate for water and sanitation capacity fees. They are the "system buy-in", "capacity buy-in", "incremental-cost" and "hybrid" method.

1.3.1   System Buy-in Approach

The system 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. 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 demand of the system – number of customers (or equivalent units) – to determine the buy-in cost per EDU.

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[1] 1 RFC does not practice law nor does it provide legal advice. The above discussion means to provide a general review of apparent state institutional constraints and is labeled "legal framework" for literary convenience only. The District should consult with its counsel for clarification and/or specific review of any of the above or other matters.

For example, if the existing system has 100 units of average usage 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 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 build-out. **Figure 1-1** shows the framework for calculating the equity buy-in capacity fee.

Figure 1-1: Formula for Equity Buy-In Approach
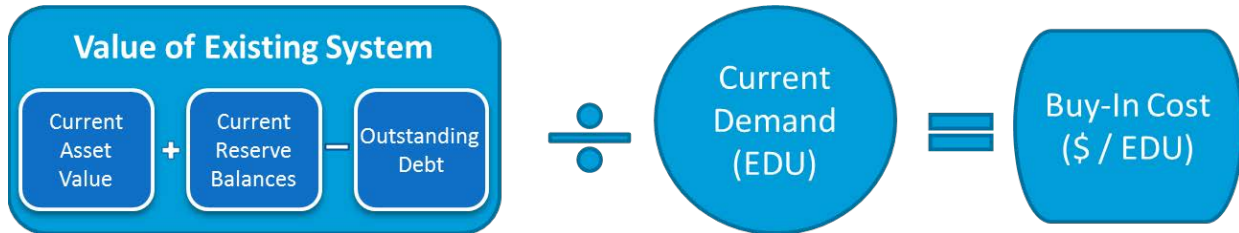
1.3.1.1 Asset Valuation Approaches

As stated earlier, the first step is to determine the asset value of the capital improvements required to provide services to new users. However, under the system 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 furnish services to new users, 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 to 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 property addition was paid for with dollars of different purchasing power. When these outlays are added together to obtain a plant value the result can be misleading.

2. **Replacement Cost (RC).** Changes in the value of the dollar over time, at least as considered by the impacts 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 replacement cost valuation measures can also be expressed on an OCLD and 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.

1.3.2   Capacity Buy-In Approach

The capacity buy-in approach is based on the same premise as that for the system buy-in approach – that new customers are entitled to service at the same rates as existing customers. The difference between the two approaches is that for the capacity buy-in approach, for each major asset, the value is divided by its capacity. This approach presents a major challenge as determining the capacity of each major asset may be problematic or not available. The system is designed for peak use and customer behavior fluctuates based on economic and weather conditions. **Figure 1-2** shows the framework for calculating the Capacity Buy-In Fee.

Figure 1-2: Formula for Capacity Buy-In Approach
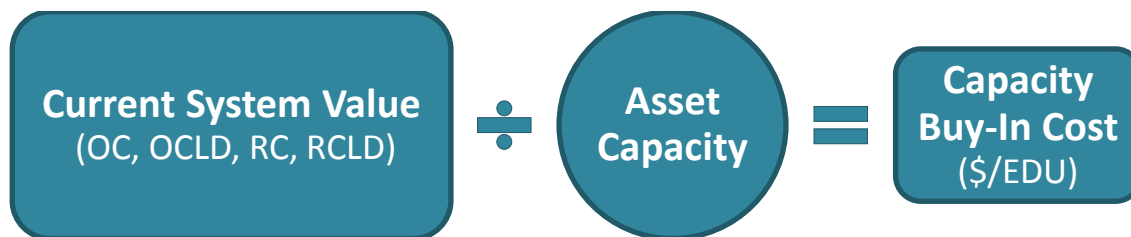
1.3.3   Incremental Cost Approach

The incremental method is based on the premise that new development (new users) should pay for the additional capacity and expansions necessary to serve the new development. This method is typically used where there is little or no capacity available to accommodate growth and expansion is needed to service the new development. Under the incremental 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 100 additional equivalent 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 buy-in approach, new connectors will effectively acquire a financial position that is on par with existing customers. Use of this method is generally considered to be most appropriate when a significant portion of the capacity required to serve new customers must be provided by the construction of new facilities. **Figure 1-3** shows the framework for calculating the incremental cost capacity fee.

Figure 1-3: Formula for Incremental Cost Approach

$$\text{Growth-Related Capital Improvements} \div \text{Incremental Increase in Capacity (EDU)} = \text{Incremental Cost (\$/EDU)}$$
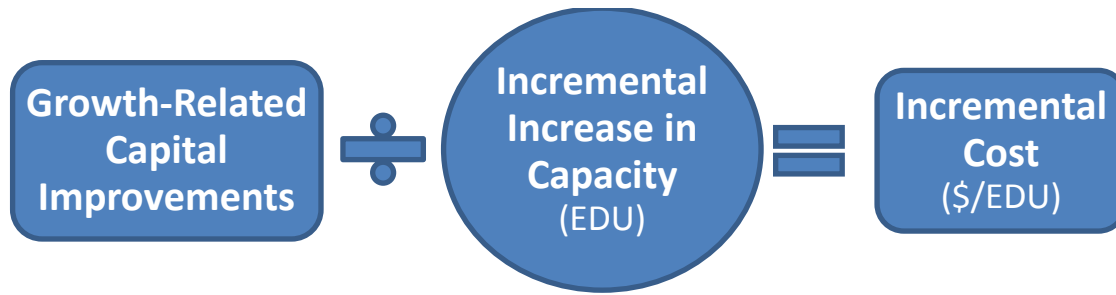
1.3.4 Hybrid Approach

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 Capital Improvement Program (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 customers may be included in proportion to the percentage of the cost specifically required for expansion of the system. **Figure 1-4** summarizes the framework for calculating the hybrid Capacity Fee.

Figure 1-4: Formula for Hybrid Approach

$$\text{Buy-In Component (\$ / EDU)} + \text{Incremental Component (\$ / EDU)} = \text{Hybrid Cost (\$ / EDU)}$$

1.3.5 Proposed Methods

1.3.5.1 Water Services

The District's water system has capacity within the existing system to serve future growth; however, there are also specific growth-related capital projects necessary for growth to occur. Therefore, the hybrid approach was used to determine the capacity fees for the water utility.

1.3.5.2 Recycled Water Services

In addition, the water utility will continue to include the recycled water capacity fee, or conservation fee, in its own capacity fees. Future water customers benefit by recycled water services. Recycled water supply reduces demand on potable water. This increases the security of the potable water supply in an area facing ongoing drought. In examining the District's recycled water utility, RFC determined that the equity buy-in approach most appropriately fit the system as it was developed to accommodate demands at build out, with no projects planned.

1.3.5.3 Sanitation Services

Likewise, the District's sanitation system was constructed to meet the demands at expected build-out. Therefore, the system has extra capacity available to serve future customers. RFC thus determined that the equity buy-in approach best suited this utility as well.

2. WATER CAPACITY FEE

2.1 CURRENT WATER CAPACITY FEES

Water capacity fees are currently charged by the District based on meter size. These fees consist of five components: construction, conservation, administration, meter cost, and installation. The study solely developed the basis for the construction and conservation components. Therefore, this report will not discuss the development of these components and all further references to water capacity fees should be assumed to only include the construction and conservation components.

The District intends to maintain the current structure of the water capacity fees. They were developed by the District in 2003 and effective 2004. They were not updated to account for inflation or changes in the system. Therefore, they are no longer reflective of new developments' share of the facilities. The current water capacity fees are shown in **Table 2-1**.

Table 2-1: Current Water Capacity Fee Construction and Conservation Components

Meter Size	Current Water Capacity Fee (as of 2004)
3/4"	$7,400
1"	$12,333
1 1/2"	$24,667
2"	$39,467
3"	$78,933
4"	$123,333
6"	$246,667
8"	$394,667
10"	$616,667

2.2 PROPOSED WATER CAPACITY FEES

2.2.1 Construction Component

2.2.1.1 Construction Buy-in Component

2.2.1.1.1 Value of the System

2.2.1.1.1.1 Asset Valuation and 5-Year Capital Improvements Plan

The first step in determining the buy-in component of the hybrid capacity fee is to determine the value of the existing system. As mentioned above, there are several methods of determining the current value of assets, but, for the purposes of this Study, Replacement Cost was used to account for today's replacement cost for

system improvements. RFC also incorporated a 5-year Capital Improvements Plan (CIP) component to account for near-term capital improvements to the system and avoid double charging customers who join the system during construction of these projects.

RFC considered several factors, such as the age and condition of the system and the detail and availability of asset records, to determine which method would best reflect the value of the system. As with most water systems, the District's water system was constructed over the course of many years. The study revealed that some legacy assets could show low carrying values despite having been well-maintained, being fully operational, and providing significant value to the system. It was also determined that newer assets within these groupings would be over-depreciated, potentially artificially reducing the current value of the system if Replacement or Original Cost Less Depreciation were to be used in the model.

Due to these factors, the Replacement Cost method was used to determine the value of the water system. To accomplish this, the District provided fixed asset records on the original cost of the system. Replacement cost was then estimated by adjusting original costs to reflect what might be expected if a similar facility were constructed today. This is achieved by escalating the original construction costs by a construction cost index. Engineering News-Record's average Construction Cost Index for 20-cities (ENR CCI) is commonly used for this purpose. It reflects the average costs of a particular basket of construction goods over time. RFC used a CCI value of 10,034 for 2015 to estimate the replacement costs. RFC chose 2015 to match the other data provided for the Study.

Table 2-2: Water System Value

Asset Category	Original Cost	Replacement Cost (2015)
Distribution/Transmission	$70,987,132	$176,898,674
Fire	$3,682,724	$7,320,678
General/Admin	$50,221,441	$191,384,062
Land	$6,800,693	$21,080,677
Meters	$13,892,613	$24,086,530
Pumping	$19,555,898	$34,793,788
Storage	$9,082,619	$11,934,021
Treatment	$15,448,982	$29,286,422
Total	$189,672,103	$496,784,851

The total water system replacement cost in **Table 2-2** of $496,784,851 represents the estimated cost of replacing the entire system in 2015 dollars. However, the replacement cost does not take into consideration the required repairs and maintenance to the system and essentially overstates the value of the system. Therefore, to better reflect the current value of the system, the District also provided RFC the current 5-year CIP in 2016 dollars, projecting outward through Fiscal Year 2021 (FY 2021). By reducing the replacement cost by the 5-year CIP, the District acknowledges the system needs repairs and accounts for the use of the system by existing customers. Additionally, capital improvements are typically financed by those receiving benefit

from the assets, in other words, the rate payers or water customers, and therefore, should not be recovered through capacity fees. **Table 2-3** provides the summary CIP as provided by Staff, with a total of $30,542,615 in 2015 dollars in capital improvements to be subtracted from the system value.

Table 2-3: Water System 5-year CIP Summary

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Total
Administrative	$4,414,200	$3,337,702	$1,065,900	$401,100	$0	$9,218,902
Potable Water	$15,247,897	$2,419,923	$2,200,230	$2,623,900	$6,400,574	$28,892,524
Program Expense Offset	-$10,399,255	-$255,448	$741,536	$723,597	$705,119	-$8,484,451
Programs	$486,300	$175,000	$175,000	$175,000	$175,000	$1,186,300
SCADA	$43,100	$0	$0	$0	$0	$43,100
Westlake	$0	$147,900	$0	$0	$0	$147,900
Total (2016)	**$9,792,242**	**$5,825,077**	**$4,182,666**	**$3,923,597**	**$7,280,693**	**$31,004,275**
Total (2015)	**$9,646,433**	**$5,738,341**	**$4,120,385**	**$3,865,174**	**$7,172,282**	**$30,542,615**

2.2.1.1.1.2 Current Reserves Balance

The next component of the buy-in calculation is the addition of current reserves. Such reserves are established and paid for by existing customers through water sales. Reserves are typically used to help pay for necessary capital improvements as well as any operating shortfalls or unforeseen expenditures. Adequate reserves can help mitigate the impacts from expenditure fluctuations on the water customers. Both existing and future customers will benefit from the reserves. Therefore, upon connection, new users should contribute their fair share in order to establish equity in the reserves. The water utility has operations, replacement, and water stabilization reserves, which were all applied to the rate calculation. The reserve balances as of June 30, 2015 are shown below in **Table 2-4** and total $27,836,737. The total of these reserves is added to the value of the assets.

Table 2-4: FY 2015 Water Utility Reserve Balances

Reserve	FY 2015
Operations	$6,232,292
Replacement	$13,604,445
Water Stabilization	$8,000,000
Total Reserves	**$27,836,737**

2.2.1.1.1.3 Outstanding Debt Principal

Lastly, new users will pay their share of any outstanding debt through water rates after joining the system. Therefore, the value of the system should be reduced by the amount of the outstanding principal. The water system does not currently have any outstanding debt. Therefore, none was subtracted in the buy-in calculation.

2.2.1.1.2 Current Demand

The second step in calculating the buy-in fee is to determine the current demand or capacity of the system. Dividing the value of the system by the capacity provides a unit cost for the capacity fee. For water systems, capacity is usually expressed in meter equivalents, or Equivalent Residential Units (ERUs) rather than the number of service connections. The benefit of using meter equivalents is that it relates the relative capacity of service connections with meters of various sizes i.e. accounts for the larger meters generating more demand.

RFC utilized consumption data provided by the District to determine the number of meters by meter size. Next, the American Water Works Association (AWWA) Standards for Maximum Rated Safe Operating Flow in gallons per minute (GPM) were used to determine the equivalent meter ratios. For each meter size there is a corresponding maximum safe operating capacity, which provides the basis for calculating the meter equivalency ratios (AWWA Meter Ratio). The typical single-family residential or base meter for the District is a ¾" meter. The safe operating capacity of a ¾" meter is 30 gallons GPM. Capacity ratios for larger meters are calculated from this base meter flow and reflect these meters' capacity in relation to the base meter.

The formula below illustrates the calculation of the capacity ratio using the base meter and a 2" meter.

$$160 \; gpm \; (2 \; inch \; Meter) / 30 \; gpm \; (3/4 \; inch \; Meter) = 5.33 \; (AWWA \; Capacity \; Ratio)$$

This ratio states that one 2" meter is the equivalent of 5.33 ¾" meters. This ratio is then multiplied by the total number of meters of that size to arrive at the equivalent residential units represented by meters of that size. **Table 2-5** lists the District's meters by meter size and shows the calculation of the total equivalent residential units in FY 2015.

Table 2-5: District Equivalent Residential Units

Meter Size	2015 Total Meters	AWWA Operating Capacity	Capacity Ratio	2015 ERUs
3/4"	16,825	30	1.00	16,825
1"	2,154	50	1.67	3,590
1 1/2"	594	100	3.33	1,980
2"	412	160	5.33	2,197
3"	51	350	11.67	595
4"	91	630	21.00	1,911
6"	161	1,600	53.33	8,587
8"	119	2,800	93.33	11,107
10"	23	4,200	140.00	3,220
Total	20,430			50,012

2.2.1.1.3 Buy-in Component Calculation

Once the value of the system is assessed and the equivalent residential units are calculated, the buy-in component calculation can be completed. Current Reserve Balances are added to the Asset Valuation. Outstanding Debt Principal and the 5-year CIP are then subtracted from this total. The water utility's buy-in

calculation is shown below in **Table 2-6**. This component is then inflated to 2017, as the calculation is based on 2015 data, but the capacity fees will be implemented in FY 2017. This is done by taking the CCI index value for 2017, 10,186, and dividing it by the value for 2015, 10,034, resulting in inflation of 1.02%.

Table 2-6: Water Buy-in Calculation

Buy-in Calculation	
Assets (+)	$496,784,851
Current Reserves Balance (+)	$27,836,737
Outstanding Debt Principal (-)	$0
5-year CIP (-)	$30,542,615
ERUs (/)	50,012
2015 Buy-in Component	**$9,879**
2017 Buy-in Component	**$10,029**

2.2.1.2 Construction Incremental Component

2.2.1.2.1 Future Demand Capital Improvement Projects

The incremental component is intended to address the additional capacity and expansions necessary to serve the new development. In the Potable Water Master Plan Update 2014, the District identified long-term capital improvements associated with this additional development, shown in **Table 2-7**. These costs are then inflated to 2015 values. In addition, there are no expansion projects constructed or in progress since the development of the 2014 master plan update. Therefore, the total value of the expansion plan is included below.

Table 2-7: Long-term Future Demand Capital Improvements Plan

CIP Description	2014 Expansion Cost	2015 Expansion Cost
Pipe CIP	$13,548,600	$13,863,619
Storage CIP	$13,853,000	$14,175,097
Pumping CIP	$4,757,450	$4,868,066
Total	**$32,159,050**	**$32,906,782**

2.2.1.2.2 Debt

Growth-related debt is added to the future demand capital improvements. However, the water system currently has no debt associated with expansion projects.

2.2.1.2.3 Incremental Increase in Capacity

RFC next calculates the incremental increase in capacity that is afforded the District by these expansion projects. RFC again utilized the 2014 update to the master plan to examine the demand on the system at its build-out. The District expects the water utility to be fully built out in 2035. In that year, water demand is projected to be 33,750 acre feet per year (AFY). Upon examination of the consumption data, Staff determined that the total actual demand in FY 2015 was not reflective of normal annual demand due to the drought. Resultantly, Staff chose to utilize FY 2014, which represents the normal annual demand on the system, in lieu

of FY 2015 actual consumption. **Table 2-8** shows the projected usage from 2015 to build out, per the 2014 master plan update.

Table 2-8: Water Demand Projection FYs 2015-2035

	2015	2020	2025	2030	2035
Water Demand	23,638	24,700	27,710	30,730	33,750

In addition, the 2014 update to the master plan includes the average people per household for different areas within the District. These values will be used to calculate the incremental residents from 2015 to buildout and the resulting equivalent residential units. This provides a common unit ($/ERU) through which the buy-in and incremental components can be combined into one fee per ERU.

Table 2-9 shows the persons per household (Column A) and projected additional population from 2010-2035 (Column B). Column C calculates the percent each area represents of the total growth in that period. These percentages are then multiplied by the relevant Applicable Persons per Household to arrive at a Weighted Average Persons per Household of 3.12 (Column D).

Table 2-9: Weighted Average Persons per Household Calculation

Area	Applicable Persons per Household	Projected Annual Population (2010-2035)	% of Additional Population	Weighted Average Persons per Household
	Column A	Column B	Column C	Column D
Agoura Hills	3.345	1,224	7%	0.25
Calabasas	3.045	2,272	14%	0.42
Hidden Hills	3.23	110	1%	0.02
Westlake Village	3.01	253	2%	0.05
Westlake Village Business	3.01	1,207	7%	0.22
Unincorporated LA County	3.15	8,773	53%	1.66
Vacant HSE Units	3.03	2,816	17%	0.51
Total		16,655	100%	3.12

Utilizing the incremental increase in demand in acre feet, the weighted average persons per household, and the per capita per day water usage of 238 gallons provided by the master plan update, RFC can then calculate the incremental ERUs. This calculation is shown below in **Table 2-10**.

Table 2-10: Incremental ERU Calculation

	AFY	Gallons	Incremental Residents	Persons per Household Used	Incremental ERUs
	A	B = A*325,851 gals/AF	C = B/ (238 gals/ capita/day* 365 days)	D	E = C/D
Total District Increase in Demand	10,112	3,295,070,482	37,931	3.12	12,165

The incremental acre feet per year between 2035 and 2015 (using 2014 usage data provided by staff) of 10,112 (A) is converted to gallons (B). Since each resident is estimated to use 238 gallons per day and there are 365 days in a year, the total incremental gallons per year is divided by this amount to arrive at how many individual residents (C) are represented by these gallons in a year. Next, the average persons per household in the District is 3.12 (D). To find the equivalent residential units represented by these incremental residents, they are divided by this average (E). RFC calculates that the incremental ERUs represented by this change in water demand form 2015 to buildout in 2035 is 12,165 ERUs.

2.2.1.2.4 Incremental Component Calculation

Once the value of the expansion capital projects and debt are assessed and the incremental ERUs are calculated, the incremental component of the water utility capacity fee can also be determined. Future Demand Capital Improvements are added to any debt associated with expansion. These expenses are then divided by the incremental increase in capacity. This provides a per unit cost to expand the system to server additional demand through system build out. The water utility's incremental calculation is shown below in **Table 2-11**. As with the buy-in component, it is also inflated to 2017 from 2015.

Table 2-11: Incremental Component Calculation

Incremental Calculation	
Future Demand Capital Improvements (+)	$32,906,782
Debt (+)	$0
Incremental ERUs (/)	12,165
2015 Incremental Component	$2,705
2017 Incremental Component	$2,746

2.2.2 Conservation Component

The District also provides recycled water services. Supplementing potable water service with recycled water provides some insurance of potable water supply for uses where it cannot be substituted by recycled water. Recycled water both protects water supply for current users as well as allows for expansion by reducing demands on the available potable water. This is of particular importance due to issues that the State is facing, such as the ongoing drought. In addition, recycled water provides a stable water source for non-potable uses. Therefore, current and future potable water users benefit from the existence of the recycled water system.

As policy, the District wishes to forgo charging recycled water customers a capacity fee in order to encourage recycled water connections. Since potable water customers benefit directly from the recycled water system, the District charges potable water customers a conservation component in their capacity fees. This conservation component is calculated as a capacity fee per water ERU.

RFC and staff determined that the recycled water system was essentially built out. Thus, the buy-in methodology applies to the development of the conservation component of the water capacity fees.

2.2.2.1 *Value of the System*

2.2.2.1.1 Asset Valuation

2.2.2.1.1.1 *District Sole-ownership Recycled Water Assets and 5-year Capital Improvement Plan*

The District's recycled water system consists of assets solely owned by the District as well as assets under joint ownership by the District through the Las Virgenes – Triunfo Joint Powers Authority (JPA). Consistent with the water utility's buy-in component for the water system, Replacement Cost was used to account for today's replacement cost for system improvements. As with the water assets, recycled water assets were not consistently accounted for within asset listings. This similarly resulted in the potential over-depreciation of asset groupings that were depreciated based on the service date of the first asset in the grouping.

Replacement cost was estimated by adjusting original costs to reflect what might be expected if a similar facility were constructed today. This is achieved by escalating the original construction costs by a construction cost index. As with the water costs, the Engineering News-Record's average Construction Cost Index for 20-cities (ENR CCI) was used. RFC used a CCI value of 10,034 for 2015 to estimate the replacement costs. RFC chose 2015 as the District provided 2015 data for the recycled water utility as well.

Table 2-12: Recycled Water System Value for Sole-ownership Assets

Asset Category	Original Cost	Replacement Cost (2015)
Distribution/Transmission	$6,649,487	$10,024,698
General/Admin	$28,015	$31,936
Land	$3,397	$10,530
Meters	$773,634	$1,294,394
Storage	$1,001,657	$1,412,596
Total	**$8,456,190**	**$12,774,154**

Table 2-12 shows a replacement cost of $12,774,154 for all assets owned solely by the District. As with the water system, this does not consider the required repairs and maintenance to the system through depreciation, therefore overstating the assets' value. RFC addressed this as with the water system by utilizing the current 5-year CIP through FY 2021. Again, by reducing the replacement cost by the 5-year CIP, the District acknowledges the need for repairs and use of the system by existing customers. The recycled water CIP was also current as of FY 2016 and reduced in the same way to match 2015 values. **Table 2-13** provides the summary CIP per Staff, totaling $2,417,918 through FY 2021.

Table 2-13: 5-year Recycled Water System Sole-ownership CIP Summary

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Total
Recycled Water	$853,038	$50,479	$50,479	$156,379	$1,175,490	$2,285,865
Tapia	$122,004	$46,596	$0	$0	$0	$168,600
2016 Total	$975,042	$97,075	$50,479	$156,379	$1,175,490	$2,454,465
2015 Total	$960,524	$95,630	$49,727	$154,050	$1,157,987	$2,417,918

2.2.2.1.1.2 *Recycled Water Joint Power Authority Shared Assets*

In addition to assets under the District's sole ownership, it owns additional assets through the JPA. The conservation component must also take into account these assets in order to ensure new water customers are paying their share of these assets.

The JPA owns recycled and sanitation assets, of which the District shares ownership. The District's share of the JPA assets were/are allocated to the recycled utility, sanitation utility, and certain shared assets were allocated to both based on their proportionate share of the JPA assets. **Table 2-14** shows the allocation of the District's share of JPA assets. Looking at the replacement cost, the recycled water utility owns 12% of the District's share as well as a portion of the assets shared between the recycled water and sanitation utilities.

Table 2-14: Utility Ownership of District's Share of JPA Assets

	Original Cost	Replacement Cost (RC)	Percent of RC Total
Sanitation Utility	$125,073,376	$274,655,024	82%
Recycled Water Utility	$21,097,184	$39,663,177	12%
Shared	$6,902,366	$20,745,824	6%
Total	$153,072,926	$335,064,026	100%

RFC proportionally allocated the shared assets based on the balance of the total assets individually allocated to the utilities. **Table 2-15** provides a summary of the asset values shared by the two utilities, both in their original cost and replacement cost.

Table 2-15: Summary of Recycled Water and Sanitation Shared JPA Assets

	Original Cost	Replacement Cost (RC)
Collection	$0	$0
Distribution/Transmission	$0	$0
General/Admin	$45,689	$50,545
Land	$6,525,852	$20,228,731
Meters	$0	$0
Pumping	$0	$0
Storage	$0	$0
Treatment	$330,825	$466,549
Total	**$6,902,366**	**$20,745,824**

To allocate these shared assets to the sanitation and recycled water utilities, RFC determined each utility's share of the total assets that were allocated to the utilities individually. **Table 2-16** below shows the calculation of the percent share for each based on the replacement cost values shown above in **Table 2-14**. Based on **Table 2-16**, sanitation is responsible for 87% of the shared assets, while recycled water is responsible for 13%.

Table 2-16: Utility Percentages of Single-Utility JPA Assets

	Replacement Cost (RC)	Percentage of Total
Sanitation Utility	$274,655,024	87%
Recycled Water	$39,663,177	13%
Total	**$314,318,201**	100%

The resulting allocation of the shared assets is shown below in **Table 2-17**. Combining recycled water's portion of the District's shared JPA with the assets for which it is solely responsible results in the utility's total share of the JPA assets, shown below in **Table 2-18**.

Table 2-17: Utility Allocation of Shared District JPA Assets

	Percentage of Total	Allocation of Shared Assets
Sanitation Utility	87%	$18,127,950.75
Recycled Water	13%	$2,617,873
Total	100%	**$20,745,824**

Table 2-18: Recycled Water Utility Share of District JPA Assets

	Original Cost	Replacement Cost
Sole Responsibility	$21,097,184	$39,663,177
Shared Responsibility	$996,236.71	$2,617,873
Total	**$22,093,421**	**$42,281,051**

The total recycled water utility JPA share replacement cost of $42,281,051 is added to the utility's sole-ownership assets of $12,774,154. The 5-year CIP for sole assets, $2,417,918, is then subtracted to arrive at a replacement cost asset value of $52,637,287.

Table 2-19: Recycled Water Utility Asset Value

	Replacement Cost
Recycled Water-only Assets (+)	$12,774,154
Recycled Water Share JPA Assets (+)	$42,281,051
5-year CIP (-)	$2,417,918
Total	**$52,637,287**

2.2.2.1.2   Current Reserves

Next, current reserves are added since they are paid for by existing recycled water customers. Reserves are typically used to help pay for necessary capital improvements as well as any operating shortfalls or unforeseen expenditures. Adequate reserves can help mitigate the impacts from expenditure fluctuations on the water customers. Both existing and future customers will benefit from the reserves, therefore, upon connection, new users should contribute their fair share in order to establish equity in the reserves. The recycled water utility maintains operations and replacement reserves, which were all added to the asset valuation. The reserve balances as of June 30, 2015 total $9,964,795, and are provided below in **Table 2-20**.

Table 2-20: FY 2015 Recycled Water

Reserve	FY 2015
Operations	$8,220,462
Replacement	$1,744,333
Total Reserves	**$9,964,795**

2.2.2.1.3   Outstanding Debt

Lastly, new users will pay their share of any outstanding debt through water rates after joining the system. Therefore, the value of the system should be reduced by the amount of the outstanding principal. The recycled water system does not currently have any outstanding debt. Therefore, none was subtracted in the conservation calculation.

2.2.2.2   Current Demand

Since the conservation component is part of the water capacity fee, it will utilize the same current demand as the water buy-in fee as represented by 50,012 ERUs.

2.2.2.3   Conservation Component Calculation

Using the asset valuation and the total reserves, RFC then calculated the conservation component of the water utility capacity fee. As described in the asset valuation, recycled water and JPA assets are added together, along with the current reserves balance. The 5-year CIP is then subtracted from the total so as not to charge new customers for improvements benefiting current customers. The conservation component is calculated below in **Table 2-21**. This component is also inflated to 2017 values from 2015 since the fee will be implemented in FY 2017. This is done by taking the CCI index value for 2017, 10,186, and dividing it by the value for 2015, 10.034, resulting in inflation of 1.02%. The component is then multiplied by the inflation rate to arrive at the FY 2017 conservation component.

Table 2-21: Conservation Component

Conservation Component Calculation	
Recycled-only Assets (+)	$12,774,154
JPA Assets (+)	$42,281,051
Subtotal Assets	**$55,055,205**
Current Reserves Balance (+)	$9,964,795
Outstanding Debt Principal (-)	$0
5-year CIP (-)	$2,417,918
ERUs (/)	50,012
2015 Conservation Component	**$1,252**
2017 Conservation Component	**$1,271**

2.2.3   Total Proposed Water Capacity Fee

The total water capacity fee developed in this study is comprised of the water construction buy-in, construction incremental, and conservation components. In addition, the District will charge administration, meter cost, and installation fees, which the District developed outside this study.

Table 2-22: Total Proposed Base Water Capacity Fee

Water Capacity Fee	
Construction	
Buy-in Component	$9,879
Incremental Component	$2,705
Conservation	$1,252
2015 Water Capacity Fee	$13,836
2017 Water Capacity Fee	**$14,045**

This base water capacity fee constitutes the total fee for a base, ¾" meter, or one ERU. To calculate the fees for the larger meters in the system, this base fee is multiplied by the capacity ratios. This creates fees that are proportionate to the flow of the larger meter in comparison to the base meter. Note that fire meters are not charged a fee. In addition to listing the proposed water capacity fees, **Table 2-23** compares them to the current water fees, which were set in 2004. The final column in the table lists what the fees would be if the District had been increasing the water capacity fees by the ENR-CCI each year through FY 2017.

Table 2-23: Water Capacity Fee by Meter Size

Meter Size	2017 Proposed Water Capacity Fee	Current Water Capacity Fee (as of 2004)	% Change in Fee	Current Water Capacity Fee (if inflated 2017)
3/4"	$14,045	$7,400	190%	$10,593
1"	$23,409	$12,333	190%	$17,655
1 1/2"	$46,817	$24,667	190%	$35,312
2"	$74,907	$39,467	190%	$56,500
3"	$163,860	$78,933	208%	$112,998
4"	$294,948	$123,333	239%	$176,560
6"	$749,074	$246,667	304%	$353,122
8"	$1,310,879	$394,667	332%	$564,996
10"	$1,966,318	$616,667	319%	$882,805

3. SANITATION CAPACITY FEE

3.1 CURRENT SANITATION CAPACITY FEES

The District's sanitation services cover five sanitation service areas, or districts. Districts U-3 and B are served by the City of Los Angeles for sanitation. Their rates are passed through directly to those customers. The current sanitation capacity fees were developed by the District in 2003 and implemented in 2004. They were not updated to account for inflation or changes in the system. Therefore, they are no longer reflective of new developments' share of the facilities. The current sanitation capacity fees are shown in **Table 3-1**.

Table 3-1: Current Sanitation Capacity Fees

Meter Size	Current Water Capacity Fee (as of 2004)
U-1	$7,000
U-2	$7,000
U-3	$3,900
B	$3,900
D	$7,000

3.2 PROPOSED SANITATION CAPACITY FEES

RFC and staff determined that the sanitation system was essentially built out, making the buy-in methodology the appropriate approach for the development of the sanitation capacity fees.

3.2.1 Value of the System

3.2.1.1 Asset Valuation

3.2.1.1.1 District Sole-ownership Sanitation Assets and 5-year Capital Improvement Plan

Much like the recycled water system, the sanitation system consists of assets solely owned by the District as well as assets under joint ownership by the District through the Joint Powers Authority with Triunfo Sanitation District. RFC used Replacement Cost to account for today's replacement cost for system improvements without consideration for asset depreciation. As with the water and recycled water assets, sanitation assets were not consistently accounted for within asset listings. This resulted in a similar potential over-depreciation of asset groupings depreciated based on the service date of the first asset in the grouping. Thus, assets were potentially over-depreciated to a varying degree based on their actual dates of service.

Replacement cost was estimated by adjusting original costs to reflect what might be expected if a similar facility were constructed today. This is achieved by escalating the original construction costs by a construction cost index. As with the water and recycled water costs, the Engineering News-Record's average Construction Cost Index for 20-cities (ENR CCI) was used. RFC used a CCI value of 10,034 for 2015 to estimate the replacement costs. RFC chose 2015 as the District provided 2015 data for the sanitation system as it did for the other utilities.

Table 3-2: Sanitation System Value for Sole-ownership Assets

Asset Category	Original Cost	Replacement Cost (2015)
Collection	$3,983,780	$13,280,284
General/Admin	$17,320	$17,723
Land	$111,235	$344,806
Meters	$0	$0
Pumping	$3,272,791	$5,489,924
Storage	$0	$0
Treatment	$0	$0
Total	**$7,385,126**	**$19,132,736**

Table 3-2 shows a replacement cost of $19,132,736 for all assets owned solely by the District. As with the water and recycled water systems, this does not consider the required repairs and maintenance to the system through depreciation, therefore overstating the assets' value. Consistent with the rest of the study, RFC subtracts current 5-year CIP through FY 2021. This reduces the asset valuation, acknowledging the need for repairs and use of the system by existing customers. The sanitation system CIP was deflated to 2015 values to remain consistent with the methodology utilized in the water buy-in and conservation components of the water capacity fee. **Table 3-3** provides the summary CIP through FY 2021.

Table 3-3: 5-year Sanitation System Sole-ownership CIP Summary

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Total
Administrative	$0	$47,557	$30,955	$0	$0	$78,511
Potable Water	$0	$0	$0	$0	$0	$0
Program Expense Offset	$0	$0	$0	$0	$0	$0
Programs	$13,979	$0	$0	$0	$0	$13,979
Rancho/Farm	$886,383	$526,676	$1,337,108	$485,022	$931,214	$4,166,403
Recycled Water	$617,750	$653,050	$617,750	$617,750	$247,100	$2,753,400
SCADA	$0	$0	$0	$0	$0	$0
Sewer/Lift Stations	$135,606	$97,395	$132,000	$132,000	$0	$497,001
Tapia	$2,894,847	$2,409,945	$1,052,575	$3,145,795	$4,252,944	$13,756,106

Westlake	$0	$0	$0	$0	$0	$0
2016 Total	$4,548,565	$3,734,623	$3,170,387	$4,380,567	$5,431,258	$21,265,400
2015 Total	$4,480,836	$3,679,014	$3,123,180	$4,315,339	$5,350,385	$20,948,754

3.2.1.1.2 Sanitation Joint Power Authority Shared Assets

As detailed in Section 2.2.2.1.1.2, the District co-owns recycled water and sanitation assets in the JPA with Triunfo Sanitation District. The sanitation-related assets were added to the valuation of the system using the same approach described in the conservation component section of this report. The District owns a share in assets solely associated with the sanitation system as well as assets that the sanitation and recycled water systems share joint responsibility.

Table 3-4 replicates **Table 2-14**, which shows that sanitation utility-related JPA assets comprise the majority of the District's share, with 82% of the value. Shared assets total 6% of the District's ownership.

Table 3-4: Utility Ownership of District's Share of JPA Assets

	Original Cost	Replacement Cost (RC)	Percent of RC Total
Sanitation Utility	$125,073,376	$274,655,024	82%
Recycled Water Utility	$21,097,184	$39,663,177	12%
Shared	$6,902,366	$20,745,824	6%
Total	**$153,072,926**	**$335,064,026**	**100%**

Table 3-5 replicates Table 2-15, which provides a summary of the shared assets with a replacement cost totaling $20,745,824.

Table 3-5: Summary of Recycled Water and Sanitation Shared JPA Assets

	Original Cost	Replacement Cost (RC)
Collection	$0	$0
Distribution/Transmission	$0	$0
General/Admin	$45,689	$50,545
Land	$6,525,852	$20,228,731
Meters	$0	$0
Pumping	$0	$0
Storage	$0	$0
Treatment	$330,825	$466,549
Total	**$6,902,366**	**$20,745,824**

To allocate these shared assets to the sanitation and recycled water utilities, RFC determined each utility's share of the total assets that were allocated to the utilities individually. Table 3-6 below shows the calculation of the percent share for each based on the replacement cost values shown above in Table 3-4. Sanitation is responsible for 87% of the shared assets.

Table 3-6: Utility Percentages of Single-Utility JPA Assets

	Replacement Cost (RC)	Percentage of Total
Sanitation Utility	$274,655,024	87%
Recycled Water	$39,663,177	13%
Total	**$314,318,201**	**100%**

The resulting allocation of the shared assets is shown below in Table 3-7. Combining recycled water's portion of the District's shared JPA with the assets for which it is solely responsible results in the utility's total share of the JPA assets, shown below in Table 3-8.

Table 3-7: Utility Allocation of Shared District JPA Assets

	Percentage of Total	Allocation of Shared Assets
Sanitation Utility	87%	$18,127,950
Recycled Water	13%	$2,617,873
Total	**100%**	**$20,745,824**

Table 3-8: Sanitation Utility Share of District JPA Assets

	Original Cost	Replacement Cost
Sole Responsibility	$125,073,376	$274,655,024
Shared Responsibility	$996,237	$18,127,950
Total	**$130,979,505**	**$292,782,975**

The total sanitation utility JPA share replacement cost of $292,782,975 is added to the utility's sole-ownership assets of $19,132,736. The 5-year CIP for sole assets, $20,948,754, is then subtracted to arrive at a replacement cost asset value of $290,966,956.

Table 3-9: Recycled Water Utility Asset Value

	Original Cost
Sanitation-only Assets	$19,132,736
Sanitation Share JPA Assets	$292,782,975
5-year CIP	$20,948,754
Total	**$290,966,956**

3.2.1.2   Current Reserves

The next component of the buy-in calculation is the addition of current reserves. Such reserves are established and paid for by existing customers through water sales. Reserves are typically used to help pay for necessary capital improvements as well as any operating shortfalls or unforeseen expenditures. Adequate reserves can help mitigate the impacts from expenditure fluctuations on the water customers. Both existing and future customers will benefit from the reserves, therefore, upon connection, new users should contribute their fair share in order to establish equity in the reserves. The sanitation utility has operations and replacement reserves, which were all applied to the rate calculation. The reserve balances as of June 30, 2015 are shown below in **Table 3-10** and total $23,742,764. The total of these reserves is added to the value of the assets.

Table 3-10: FY 2015 Sanitation Utility Reserve Balances

Reserve	FY 2015
Operations	$13,248,922
Replacement	$10,493,842
Total Reserves	**$23,742,764**

3.2.1.2.1 Outstanding Debt Principal

Lastly, new users will pay their share of any outstanding debt principal through water rates after joining the system. Therefore, the value of the system should be reduced by the amount of the outstanding principal. The sanitation system has $22,585,000 in debt principal as of FY 2015. The District splits the debt between replacement and construction, with replacement owning 67%, or $15,131,950. This outstanding debt principal will be subtracted along with the 5-year CIP from the sum of the asset valuation and the current reserves balance.

3.2.2 Current Demand

Staff provided the equivalent residential units for sanitation services. The District defines an ERU for sanitation services as 25 fixture units. **Table 3-11** provides the breakdown of ERUs by sanitation district. ERUs relevant to the Study are 25,664, which is the total ERUs (26,885) minus Districts U-3 (729) and B (492).

Table 3-11: Sanitation Equivalent Residential Units

Class	U-1	U-2	U-2E	U-3	B	D	Vacant	Total
Residential	10,119	2,583	2,425	280	212	-	81	15,700
Multifamily	5,226	290	635	445	280	-	-	6,876
Commercial								
Class 1	2,439	420	145	4	-	182	-	3,190
Class 2	780	201	3	-	-	-	-	984
Class 3	103	32	-	-	-	-	-	135
Total	**18,667**	**3,526**	**3,208**	**729**	**492**	**182**	**81**	**26,885**

3.2.3 Sanitation Capacity Fee Calculation

Once the value of the system is assessed and the equivalent residential units are determined, sanitation fee calculation can be completed. Current Reserve Balances are added to the Asset Valuation. Outstanding Debt Principal and the 5-year CIP are then subtracted from this total. The sanitation utility's buy-in calculation is shown below in **Table 3-12**. This component is then inflated to 2017, as the calculation is based on 2015 data, but the capacity fees will be implemented in FY 2017. This is done by taking the CCI index value for 2017, 10,186, and dividing it by the value for 2015, 10,034, resulting in inflation of 1.02%.

Table 3-12: Sanitation Buy-in Calculation

Sanitation Fee Calculation	
Sanitation-only Assets (+)	$19,132,736
JPA Assets (+)	$292,782,975
Subtotal Assets	**$311,915,711**
Current Reserves Balance (+)	$23,742,764
Outstanding Debt Principal (-)	$15,131,950
5-year CIP (-)	$20,948,754
ERUs (/)	25,664
2015 Sanitation Capacity Fee	**$11,673**
2017 Sanitation Capacity Fee	**$11,850**

3.2.4   Total Proposed Capacity Fee

As the District has determined that Sanitation Districts U-1, U-2, and D benefit equally from the system, customers in each sanitation district will pay the same sanitation capacity fee. **Table 3-13** below shows both the proposed fee for these three districts, along with the current fee and the percent increase. The final column of the table shows the current fee if the District had been increasing it by the ENR CCI through year FY 2017.

Table 3-13: Total Proposed Sanitation Capacity Fees

Sanitation District	2017 Proposed Sanitation Capacity Fee	Current Sanitation Capacity Fee (as of 2004)	% Change in Fee	Current Sanitation Capacity Fee (if inflated 2017)
U-1	$11,850	$7,000	169%	$10,021
U-2	$11,850	$7,000	169%	$10,021
D	$11,850	$7,000	169%	$10,021

4. CAPACITY FEE ADMINISTRATION

In conjunction with adopting updated Capacity Fees, RFC recommends that the District apply the Engineering News Record Construction Cost Index 20-Cities Average to adjust the fees in subsequent years to keep pace with inflation. The District should also conduct a comprehensive review of the capacity fees every three to five years to ensure appropriate funding of capital projects and equity among customers.