

**Agenda**  
**Sacramento Suburban Water District**  
**Finance and Audit Committee**

3701 Marconi Avenue, Suite 100  
Sacramento, CA 95821

Friday, August 28, 2015  
3:00 p.m.

Where appropriate or deemed necessary, the Committee may take action on any item listed on the agenda, including items listed as information items. Public documents relating to any open session item listed on this agenda that are distributed to members of the Finance and Audit Committee less than 72 hours before the meeting are available for public inspection in the customer service area of the District's Administrative Office at the address listed above.

The public may address the Committee concerning an agenda item either before or during the Committee's consideration of that agenda item. Persons who wish to comment on either agenda or non-agenda items should fill out a Comment Card and give it to the General Manager. The Committee Chair will call for comments at the appropriate time. Comments will be subject to reasonable time limits (3 minutes).

In compliance with the Americans with Disabilities Act, if you have a disability, and you need a disability-related modification or accommodation to participate in this meeting, then please contact Sacramento Suburban Water District Human Resources at 679.3972. Requests must be made as early as possible, and at least one full business day before the start of the meeting.

**Call to Order**

**Roll Call**

**Public Comment**

This is the opportunity for the public to comment on non-agenda items within the Committee's jurisdiction. Comments are limited to 3 minutes.

**Items for Discussion and Action**

1. **Cost-Basis of the District's Tiered and Seasonal Rates**  
Review and discuss report from HDR Engineering, Inc.
  
2. **Rate Subsidy for Low-Income Customers**  
Review and discuss implementation of rate subsidy for low-income customers.
  
3. **2016/17 Budget**
  - a. Budget Schedule
  - b. 2016/17 Budget Overview and Initial Assumptions
  - c. Reserve PolicyReview and discuss the initial 2016/17 budget.

\* \* \* \* \*

Finance and Audit Committee

August 28, 2015

Page 2 of 2

I certify that the foregoing agenda for the August 28, 2015, meeting of the Sacramento Suburban Water District Finance and Audit Committee was posted by August 24, 2015 at the Sacramento Suburban Water District office, 3701 Marconi Avenue, Suite 100, Sacramento, California, and was made available to the public during normal business hours.

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Robert S. Roscoe  
General Manager/Secretary  
Sacramento Suburban Water District



## Agenda Item: 1

**Date:** August 19, 2015

**Subject:** Cost-Basis of the District's Tiered and Seasonal Rates

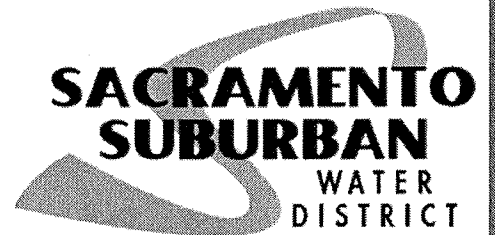
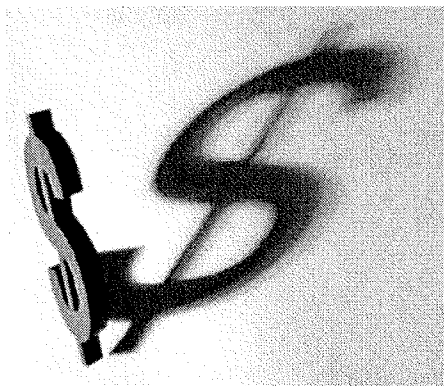
**Staff Contact:** Daniel A. Bills, Finance Director

In April this year, the State's 4<sup>th</sup> District Court of Appeals struck down a water pricing system used by the City of San Juan Capistrano that has similarities to the District's water pricing system. The Court of Appeals said a tiered water rate structure that is not based on the cost of providing service violates Proposition 218 and went on to "publish" its decision, extending the Court's ruling to the entire State. In June, officials at the State Water Resources Control Board along with the Secretary of State asked the State Supreme Court to "depublish" the ruling so it would not have a statewide impact. In July, the State Supreme Court refused to "depublish" the ruling.

SSWD utilizes a two-tiered water rate structure for its residential customers and a seasonal rate structure for its non-residential customers. In 2012/13, the District hired HDR Engineering, Inc. (HDR) to conduct a comprehensive water rate study (Study) for the District. That Study was completed and accepted by the Board on August 27, 2013, by unanimous vote.

In light of the Court of Appeals decision, staff engaged HDR to revisit the Study performed in 2012/13 for the purpose of analyzing District costs relative to its rate tiers and seasonal time periods. HDR has provided staff with a draft report of their analysis, which is attached for Director review and comment. Directors will note that on page 13 of the report, HDR concludes "Table 6 has demonstrated that the price differentials used within the District's residential tiers and non-residential seasonal rates are cost justified...Simply stated, the rates, as adopted by the District, did not exceed the cost basis for the price differential (i.e. the focus of the *Capistrano* decision)."

FINAL REPORT



**Review of the Cost-Basis of the District's  
Tiered and Seasonal Rates**

August 2015





August 12, 2015

Mr. Daniel A. Bills  
Finance Director  
Sacramento Suburban Water District  
3701 Marconi Avenue, Suite 100  
Sacramento, California 95821-5346

**Subject:** Review of the Cost-Basis of the District's Tiered and Seasonal Rates

Dear Mr. Bills:

The basis for establishing water rates which are fair, equitable and defensible has traditionally been cost of service principles and methodologies. While adhering to cost of service principles are important, the courts have historically recognized that municipal entities can take into account policy items other than strictly cost of service when establishing rates (e.g. conservation, efficient use, ability to pay, etc.). In most parts of the U.S., that policy latitude in establishing utility rates remains intact.

In contrast to the above discussion regarding policy latitude, the State of California has certain well established legal constraints regarding utility ratemaking, of which Proposition 218 is at the forefront. At its very core, Proposition 218 requires a water utility to establish cost-based rates for the services provided. However, like most propositions or voter's initiatives, Proposition 218 provided certain direction, but lacked clarity and definition in certain areas. Hence, there have been a number of lawsuits in recent years related to utility rates and Proposition 218. In the *Capistrano Taxpayers Association v. City of San Juan Capistrano*, the City was challenged, among other items, over the cost-basis for the prices (rates) within their residential tiered water rate structure. The City had limited water supply and had created a tiered (increasing) block rate structure specifically intended to encourage efficient use and penalize inefficient and wasteful users. The Appeals Court hearing this case upheld the lower court's decision as it pertained to the pricing of the tiers within the City's rates. The Court found the lack of a cost-basis for the City's tiered rates and thus in violation of Proposition 218. This ruling, to provide a cost-basis for the level of pricing within tiered rates, is unprecedented and raises important rate setting issues for all California utilities with tiered water rate structures.

The Capistrano decision did not find that tiered rates were illegal. Rather, the Capistrano decision stated that utilities must cost-justify the pricing used in each tier. Failure to do so would appear to violate Proposition 218's requirement for cost-based rates.

hdrinc.com

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(425) 450-6200

In 2012/13, prior to the Capistrano case, HDR Engineering, Inc. (HDR) conducted a comprehensive water rate study for the Sacramento Suburban Water District (District). The comprehensive water rate study conducted for the District included the development of a cost of service study. The study equitably allocated costs to the District's customer classes of service, but did not allocate costs to rate tiers within the residential customer class of service or to seasonal time periods (on-peak and off-peak) for non-residential customers. As a result of HDR's study, the District implemented tiered residential water rates and seasonal non-residential rates.

Given these recent developments, the District contacted HDR and has requested supplemental technical and professional services as it relates to justifying the cost-basis for the District's residential tiered rates and seasonal non-residential rates. To accomplish that, HDR utilized the analysis from the 2012/13 cost of service analysis and extended/expanded the analysis to equitably allocate costs to the residential tiers and non-residential seasonal time periods. The attached report discusses the technical analysis undertaken, along with our findings, conclusions and recommendations. In summary form, HDR found the District's rates were wisely conservative in their use of price differentials and as a result appear to have a clear cost-basis and justification for the residential tiered and non-residential seasonal rate designs. This report provides the technical analysis to clearly demonstrate that cost-basis.

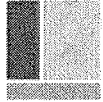
We appreciate the assistance provided by the District in the development of this study. More importantly, HDR appreciates the opportunity to provide these technical and professional services to the District.

Sincerely yours,  
HDR



Tom Gould  
Vice President  
HDR's Business Leader  
for Finance and Rates

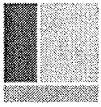




# Table of Contents

<b>Introduction</b> .....	1
<b>Tiered Pricing, Conservation and Efficient Use</b> .....	2
<b>San Juan Capistrano and Proposition 218</b> .....	2
<b>Overview of the District’s Current Tiered Pricing</b> .....	3
<b>Overview of the Cost of Service Methodology</b> .....	4
Establishing the Cost-Basis for Pricing Tiers .....	5
Modifications to the Model .....	6
Classification of Costs .....	9
Allocation of Classified Costs (Allocation Factors) .....	10
<b>Summary Findings and Conclusions</b> .....	11
Summary Conclusions .....	14

## Technical Appendix



# Review of the Cost-Basis of the District's Tiered and Seasonal Rates

## Introduction

In 2012/13, HDR Engineering, Inc. (HDR) was retained by the Sacramento Suburban Water District (District) to conduct a comprehensive water rate study. As a part of the study, HDR reviewed the District's water rates in the context of providing cost-based and equitable rates. The general framework used to analyze the District's rates was the generally accepted rate setting methodology of a revenue requirement analysis, a cost of service analysis and the design of cost-based rates. A revenue requirement analysis compares the revenues of the District to its expenses to determine the overall level of rate adjustment. Next, the cost of service analysis is a methodology to equitably allocate costs to the various customer classes of service of the District. Finally, given an overall level of revenues and a method to equitably assign costs, rates can be designed to collect the appropriate level of revenue.

The analysis conducted by HDR in 2012/13 for the District conformed to generally accepted water industry rate making principles and methodologies<sup>1</sup> and the study was also specifically developed to be compliant with the technical and legal requirements of Proposition 218, as were known at that time. Proposition 218, a California voter approved measure is related to property-related fees and taxes and adds an additional layer of complexity to the District's water rate setting analysis by requiring the development of proportional and cost-based rates. Like most propositions or voter's initiatives, Proposition 218 provided certain direction, but lacked clarity and definition in certain areas. Hence, there have been a number of lawsuits in recent years related to utility rates and Proposition 218.

In the *Capistrano Taxpayers Association v. City of San Juan Capistrano*, the City was challenged, among other items, over the cost-basis for the tiers (price blocks) of their tiered water rate structure. In June 2015, the 4<sup>th</sup> District Appeals Court hearing this case upheld the lower court's decision as it pertained to the pricing of the tiers within the City's water rate design. In short, the court ruled that the City's rates failed to demonstrate a cost-basis for the pricing of their tiers. The implication of this ruling is the District should be able to demonstrate the cost-basis for the pricing of their tiered or seasonal rate (price) differentials.

In the case of the District, the District's metered residential rate is composed of two tiers; 0 to 10 hundred cubic feet (CCF) and over 10 CCF. The price differential between the first tier and the second tier is 21¢/CCF or approximately a 24 percent differential. The District also has a seasonal rate for non-residential customers which has an on-peak and off-peak pricing differential similar to the residential rate differential. In both cases, these are not large rate differentials in comparison to many utilities with tiered rates, but as a result of the Capistrano

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<sup>1</sup> Generally-accepted cost of service principles and methodologies are best defined and discussed within the American Water Works Association M-1 Manual, [Principles of Water Rates, Fees and Charges](#).



decision, the District should be able to clearly demonstrate the cost basis for the pricing of their rate tiers.<sup>2</sup> To analytically demonstrate that cost-basis, HDR was retained by the District.

## **Tiered Pricing, Conservation and Efficient Use**

California has always recognized the importance and value of water supply. Efficient water use, and discouragement of inefficient or wasteful use, has been at the heart of many water utility conservation programs. In particular, one of the important conservation tools used by water utilities is conservation pricing and conservation-oriented rate structures to encourage efficient use through price signals<sup>3</sup>. It is a well recognized economic principle that as the price of a commodity increases the demand for the commodity will go down. By creating water rate structures which increase in per unit price as consumption becomes less efficient, the high use or inefficient water user is provided with a “price signal” to be more efficient in their usage. In *Capistrano*, the issue of penalty or punitive pricing for inefficient or wasteful users was a point of contention. In short, the *Capistrano* decision determined among other things that, in order to be compliant with Proposition 218, there must be a cost-basis for each of the pricing tiers.

The 2012/13 rate study conducted by HDR, which was prior to the *Capistrano* case, did not create the tiered or seasonal rate structures used by the District. These rate structures were already in place and the 2012/13 rate study maintained that pricing structure and simply updated them to reflect the costs of the District at that time. However, the study did not assign or allocate costs to a level which would provide the District with a clear connection or evidence as to the cost-basis of the price differential used within the rates.

## **San Juan Capistrano and Proposition 218<sup>4</sup>**

It has always been important for a utility to have cost-based rates that are fair, equitable, and defensible. As noted previously, the basis for establishing water rates that are fair, equitable, and defensible has traditionally been cost of service principles and methodologies. At the same time, the courts have historically recognized that municipal entities can take into account policy objectives other than strictly cost of service when establishing rates (e.g., conservation, efficient use, ability to pay, etc.). In most parts of the U.S., that policy latitude in establishing utility rates remains intact.

In contrast to above discussion regarding policy latitude, the State of California has certain well established legal constraints regarding utility ratemaking, of which Proposition 218 is at the forefront. At its very core, Proposition 218 requires a water utility to establish cost-based rates for the services provided. Since its inception, there have been numerous lawsuits related to utility rates and Proposition 218. In the *Capistrano Taxpayers Association, Inc. v. City of San*

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<sup>2</sup> The *Capistrano* decision focused only on the pricing of the tiers and not on the sizing or basis of the tiers (e.g. essential needs, efficient indoor use, efficient outdoor use, inefficient outdoor use, wasteful use, etc.).

<sup>3</sup> The California Urban Water Conservation Council (CUWCC) has best management practices as they relate to conservation pricing. The 2012/13 study discussed these conservation rate design BMPs.

<sup>4</sup> In providing this overview of the *Capistrano* decision, HDR is not providing legal advice or a legal opinion. This overview is based upon HDR’s understanding of the *Capistrano* decision and how it may impact the District’s rate setting process.

*Juan Capistrano*, the City of San Juan Capistrano (Capistrano) was challenged, among other items, over the cost-basis for prices (rates) used within their tiered water rate structure. In this specific case, it appears that the key issue was the pricing of the upper blocks (3<sup>rd</sup> and 4<sup>th</sup> blocks) and the price/cost difference between the prior tier's pricing. The differential in price between the Capistrano's tiers was significant, and was the main challenge by the plaintiffs claiming that the "punitive" pricing was not cost justified under Proposition 218. Capistrano believed that the pricing was justified under the constitutional requirement to use water efficiently and viewed the pricing as penalty blocks for inefficient or wasteful use. The initial ruling of the trial court in this case was not favorable to the City and, as a result, the City appealed the trial court's decision. In June 2015, the Appellate Court hearing this case upheld the lower court's decision as it pertained to the pricing of the tiers within the City's water rate design. In short, the court ruled that the City's rates failed to demonstrate a cost-basis for the pricing of their tiers. Last week, this case was essentially memorialized when the California Supreme Court declined to depublish the Capistrano decision, meaning that going forward, trial courts will be required to consider this decision in any challenge to an agency's water rates. However, in reviewing a water agency's rates, the court may also take into consideration, in the context of the rates being challenged, other past Proposition 218 decisions.

In summary, the Appellate Court ruled that tiered rates are a valid rate structure under Proposition 218. The Appellate Court specifically noted ". . . tiered, or inclined rates that go up progressively in relation to usage are perfectly consonant with article XIII D, section 6, subdivision (b)(3) . . ." However, what this means is that the pricing of the tiers must be cost-based and reflect the costs incurred to provide water service at the various tiers established by the utility. The Court's decision has diminished the latitude for policy input of the legislative body in establishing a local utility's rates, particularly as it relates to the pricing of the tiers to encourage conservation and efficient use. Simply stated, going forward, all water utilities within California will need to be able to demonstrate the cost-basis of the pricing differentials used within their tiered or seasonal water rate structures.

## **Overview of the District's Current Tiered Pricing**

At the present time, the District has residential and non-residential rates. The metered rates are composed of a meter service charge which varies by meter size and a usage charge billed in hundreds of cubic feet (\$/CCF). Provided below in Table 1 is a summary of the currently adopted rates of the District for the usage charges.

**Table 1**  
**Summary of the Present and Proposed**  
**Residential and Non-Residential Usage Charges (\$/CCF)**

Rate Component	1/1/15	1/1/16	1/1/17	1/1/18
<b>Usage Charges –</b>				
<i><b>Residential Customers</b></i>				
1 <sup>st</sup> Tier ( 0 – 10 CCF)	\$0.83	\$0.87	\$0.90	\$0.94
2 <sup>nd</sup> Tier (11+ CCF)	\$1.04	\$1.08	\$1.12	\$1.17
Residential Price Differential	\$0.21	\$0.21	\$0.22	\$0.23
<i><b>Non-Residential Customers</b></i>				
Off-Peak (Nov. – April)	\$0.84	\$0.88	\$0.91	\$0.95
On-Peak (May – Oct.)	\$1.05	\$1.09	\$1.14	\$1.18
Non-Residential Price Differential	\$0.21	\$0.21	\$0.23	\$0.23

As can be seen, the residential customers have a tiered rate structure based upon usage and the non-residential customers have a seasonal rate structure. Both rate structures are considered to be conservation-oriented rate structures.

The price differential for both residential and non-residential customers ranges from \$0.21/CCF to \$0.23/CCF. In comparison to many water utilities, this differential is not particularly large. By way of a comparison, the first block price of the Capistrano rates were \$3.18/CCF and their tail (last/4<sup>th</sup>) block was \$11.67/CCF, a 266% differential over the initial block price. In the case of the District, the price differential between the two blocks is approximately 25%.

While the price differential between the District’s price blocks are relatively minimal, they still must be cost-justified using a cost of service methodology.

## **Overview of the Cost of Service Methodology**

The cost of service study conducted for the District in 2012/13 equitably allocated the District’s 2014 revenue requirement over the time period of the initial rates for adoption. The study, at that time, provided two key pieces of information that provided the cost basis used to establish the District’s rates. These two key pieces of information were:

- The equitable allocation of the 2014 revenue requirement among the various customer classes of service
- Average unit costs, by class of service, used to develop rate designs

In equitably allocating costs, the District’s revenue requirements were allocated between residential, non-residential and fire protection. In developing the average unit costs (i.e. cost-based rates) the costs were established on a class-wide basis for commodity, capacity and customer-related costs. While this provided an understanding of the cost relationships on a

class-wide basis, the average unit costs did not have sufficient detail or “granularity” to establish a cost-differential for Tier 1 and Tier 2 usage (or seasonal rates).

In order to develop average unit costs by tier or seasonal time period, the cost of service analysis was modified to reflect how the analysis would have been conducted had the *Capistrano* decision been known or in place. In that sense, this study has not updated any costs or consumption information, but rather, simply “sliced the pie more thinly” to provide the needed detail and demonstrate the cost differentials between price tiers or seasonal periods.

### **Establishing the Cost-Basis for Pricing Tiers**

While there remains much discussion in the legal and rate community as to the impacts and stricter technical (legal) requirements as a result of *Capistrano*, HDR has concluded that utilities have at least three technical approaches to be able to cost justify the individual pricing of their tiered rate structures. These technical approaches encompass the following areas:

- Cost differences in water supply (i.e., “stacking” of water supply resources to tiers, alternative water supplies, etc.).
- Cost differences from high peak use consumers (relationship of average use to peak use).
- Direct assignment of costs to specific (upper) tiers (e.g., conservation program costs, etc.).

In certain cases, the costs differences may be related to the cost of water supply when a utility has more than one source of water supply. Interestingly, in the *Capistrano* case, the court focused on this aspect of the City’s costs to provide the cost justification for the price differential. At the same time, this approach or portion of the analysis may also include the cost of alternative water supplies (i.e. recycled or reuse water). For example, reuse water may be assigned to higher tiers to reflect outdoor use or the need for additional/alternative water supply to meet the demands of the high use customers.

The second possible source of cost differences is related to high-peak use customers. Customers that use more water create greater demands and costs on the system. A water supply and distribution system must be sized to meet these peak use requirements. Economic theory clearly states that equity is achieved when those that create the demand event pay for the demand event. This has implications upon the equitable allocation of capacity-related costs to the different tiers or seasonal periods.

Finally, certain costs may be directly assigned to specific tiers or seasonal time periods. For example, a conservation program which focuses on outdoor water use may be directly assigned to the water tiers which are related to outdoor use. The direct assignment to a specific tier will create a price differential.

For the District’s study, the focus of analysis was on the second method of considering the cost impacts of high peak use customers. While the first method of reviewing water supply costs was certainly possible, due to the District’s conjunctive use system, for purposes of establishing costs, it is not simple or straight-forward. The last approach of directly assigning costs was also

a viable approach, but the detail of the District’s revenue requirement, as shown in the 2012/13 study did not easily segregate out these costs. Had the District’s price differential on their tiers been greater than the current levels then HDR likely would have explored these other methods. However, in this case it appeared that considering the cost differences associated with high-peak users would provide sufficient cost justification for the District’s current rates.

### Modifications to the Model

In a cost of service analysis, the cost data is functionalized, classified and allocated. Functionalization is the arrangement of the cost data into functional categories (e.g. supply, treatment, transmission, distribution, etc.). Next, costs are classified between commodity, capacity, customer and fire-protection related. Finally, each of the classified costs are equitably allocated to each customer group. For example, commodity costs are related to total flow (usage) and they are allocated on the basis of consumption for each customer class of service.<sup>5</sup>

In the case of the District’s study, the model needed to be modified to allow for the classification and allocation of costs to the various residential tiers. A number of exhibits within the technical analysis were modified to accommodate these changes. In terms of classification of costs, the following table provides a summary overview of these modifications.

<b>Table 2 Comparison of the Cost Classifiers</b>	
<b>Original Study Cost Classifiers</b>	<b>Revised Cost Classifiers</b>
<ul style="list-style-type: none"> <li>● <b>Commodity – Related</b></li>   <li>● <b>Capacity – Related</b></li> <li>● <b>Customer – Related</b> <ul style="list-style-type: none"> <li>✓ Actual Customer</li> <li>✓ Customer Accounting</li> <li>✓ Meters and Services</li> </ul> </li> <li>● <b>Fire Protection – Related</b></li> <li>● <b>Revenue Related</b></li> <li>● <b>Direct Assignment</b></li> </ul>	<ul style="list-style-type: none"> <li>● <b>Commodity – Related</b> <ul style="list-style-type: none"> <li>✓ On-Peak</li> <li>✓ Off-Peak</li> </ul> </li> <li>● <b>Capacity – Related<sup>[1]</sup></b></li> <li>● <b>Customer – Related</b> <ul style="list-style-type: none"> <li>✓ Actual Customer</li> <li>✓ Customer Accounting</li> <li>✓ Meters and Services</li> </ul> </li> <li>● <b>Fire Protection – Related</b></li> <li>● <b>Revenue Related</b></li> <li>● <b>Direct Assignment</b></li> </ul>

[1] – Capacity related costs are segregated (assigned) between on-peak and off-peak in the allocation process.

In this case, the modification to the model (classification of costs) has changed the commodity cost classifier to segregate those costs between on-peak and off-peak to reflect the seasonal time periods. In other words, a cost that was considered a “commodity” or flow related cost in the original study is now split between commodity on-peak and commodity off-peak. The total

<sup>5</sup> A more detailed discussion of the methodology and approach of a cost of service analysis can be found in the District’s rate study conducted by HDR; Final Report, Comprehensive Water Rate Study, September 2013

cost classified remained the same; it was simply classified in greater detail. In the case of the District, the seasonal time periods (on-peak and off-peak) are related to the non-residential customers. By classifying costs to on-peak and off-peak time periods, the consumptive use for that time period can be used to establish the per unit cost in that time period (e.g., on-peak costs ÷ on peak CCF consumption = on-peak \$/CCF unit costs).

In addition to the classification of costs, the model was also modified within the allocation factors used to allocate costs. Once the costs have been classified, they are then equitably allocated to the various customer classes of service. For example, in the original model, commodity or flow related costs were allocated to the residential, non-residential and fire protection customers based upon their contributions to annual flow (i.e. annual consumptive use). Provided below in Table 3 is an overview of these changes to the allocation factors.

**Table 3  
Comparison of the Allocation Factors**

Original Study Cost Classifiers	Revised Cost Classifiers
<ul style="list-style-type: none"> <li>● <b>Commodity (Annual)</b> <ul style="list-style-type: none"> <li>✓ Residential</li> <li>✓ Non-Residential</li> <li>✓ Fire Protection</li> </ul> </li>   <li>● <b>Capacity – Related</b> <ul style="list-style-type: none"> <li>✓ Residential</li> <li>✓ Non-Residential</li> <li>✓ Fire Protection</li> </ul> </li>   <li>● <b>Customer – Related</b> <ul style="list-style-type: none"> <li>✓ Residential</li> <li>✓ Non-Residential</li> <li>✓ Fire Protection</li> </ul> </li>   <li>● <b>Fire Protection – Related</b> <ul style="list-style-type: none"> <li>✓ Residential</li> <li>✓ Non-Residential</li> <li>✓ Fire Protection</li> </ul> </li>   <li>● <b>Revenue Related</b> <ul style="list-style-type: none"> <li>✓ Residential</li> <li>✓ Non-Residential</li> <li>✓ Fire Protection</li> </ul> </li>   <li>● <b>Direct Assignment</b></li> </ul>	<ul style="list-style-type: none"> <li>● <b>Commodity</b> <ul style="list-style-type: none"> <li>✓ Residential <ul style="list-style-type: none"> <li>– Tier 1</li> <li>– Tier 2</li> </ul> </li> <li>✓ Non-Residential <ul style="list-style-type: none"> <li>– Peak [May – Oct.]</li> <li>– Off-Peak [Nov. – April]</li> </ul> </li> <li>✓ Fire Protection</li> </ul> </li>   <li>● <b>Capacity – Related</b> <ul style="list-style-type: none"> <li>✓ Residential <ul style="list-style-type: none"> <li>– Tier 1</li> <li>– Tier 2</li> </ul> </li> <li>✓ Non-Residential <ul style="list-style-type: none"> <li>– Peak [May – Oct.]</li> <li>– Off-Peak [Nov. – April]</li> </ul> </li> <li>✓ Fire Protection</li> </ul> </li>   <li>● <b>Customer – Related</b> <ul style="list-style-type: none"> <li>✓ Residential</li> <li>✓ Non-Residential</li> <li>✓ Fire Protection</li> </ul> </li>   <li>● <b>Fire Protection – Related</b> <ul style="list-style-type: none"> <li>✓ Residential</li> <li>✓ Non-Residential</li> <li>✓ Fire Protection</li> </ul> </li>   <li>● <b>Revenue Related</b> <ul style="list-style-type: none"> <li>✓ Residential</li> <li>✓ Non-Residential</li> <li>✓ Fire Protection</li> </ul> </li>   <li>● <b>Direct Assignment</b></li> </ul>

Similar to the classification of costs, the same amount of costs are being allocated, but in this case, they are being allocated to residential Tier 1 and Tier 2 usage, and non-residential costs are being allocated to the seasonal time periods (on-peak and off-peak). This allocation method allows for the development of average unit costs by Residential Tier 1 and 2 and Non-residential seasonal time periods.

With these modifications to the model, HDR was able to modify the analysis to reflect the changes in the model. This aspect of the analysis is discussed in more detail below.

## Classification of Costs

Classification is the assignment of costs to the various cost-classifiers. In this case, costs are split between commodity, capacity, customer, fire-protection, revenue-related and direct assignment (See Table 2). Of particular importance is the approach used to assign commodity costs between on-peak and off-peak.

Similar to the discussion above, the costs were not reassigned between commodity and capacity, but the commodity costs were further sub-classified to commodity on-peak and commodity off-peak. The basis for the sub-classification of commodity costs was the system consumptive usage between the on-peak and off-peak periods. This resulted in approximately 68% of the commodity-related costs being on-peak related and 32% being off-peak related<sup>6</sup>.

The capacity costs are not assigned between on-peak and off-peak at this point of the analysis. As will be seen in the allocation of costs, the capacity costs will be assigned to residential on the basis of Tier 1 and Tier 2 demands and non-residential capacity costs will be assigned based upon their total proportion of capacity costs (from the old study), segregated between on-peak and off-peak based upon the non-residential demands. This aspect of the study is discussed in more detail below.

Provided below in Table 4 is a summary of the revised cost classification of the 2014 net revenue requirement.

<b>Table 4</b>		
<b>Comparison of the Classification of Costs (\$000)<sup>[1]</sup></b>		
<b>Cost Classifiers</b>	<b>Original Study</b>	<b>Revised Study</b>
● <b>Commodity – Related</b>	\$9,553	
✓ On-Peak		\$6,359
✓ Off-Peak		3,194
● <b>Capacity – Related</b>	17,220	17,220 <sup>[2]</sup>
● <b>Customer – Related</b>		
✓ Actual Customer	5,097	5,097
✓ Customer Accounting	545	545
✓ Meters and Services	4,265	4,265
● <b>Fire Protection – Related</b>	3,910	3,910
● <b>Revenue Related</b>	(855)	(855)
● <b>Direct Assignment</b>	<u>645</u>	<u>645</u>
<b>Total Net Revenue Requirement</b>	<b>\$40,381</b>	<b>\$40,381</b>

[1] – See Exhibit 12 of the Technical Appendix for details

[2] – Capacity is further subcategorized between on-peak and off-peak within the allocation process.

<sup>6</sup> See Exhibit 5b of the Technical Appendix for details



As can be seen, the analysis has still assigned the same total net revenue requirements (\$40.4 million). The revised study, at this juncture, has simply further sub-classified the commodity costs from the original study.

### **Allocation of the Classified Costs (Allocation Factors)**

The final analytical step in the cost of service analysis is the allocation of costs to the various customer classes of service. For each classified cost (e.g. commodity, capacity, etc.) costs are equitably allocated to each customer class of service (See Table 3). In the revised study, the costs are allocated to the customer classes of service, but for residential they are assigned between Tier 1 (0 – 10 CCF) and Tier 2 (over 10 CCF), and for non-residential they are allocated to seasonal time periods; on-peak and off-peak.

To develop the allocation factors the commodity and capacity costs needed to be modified and the appropriate units of service determined for the residential and non-residential customers. Similar to all the other changes in the model, the total consumption units for a class of service were not changed, but simply subdivided into the appropriate units (tiers or peak periods).

For the commodity related costs, the assignment of costs to residential tiers or non-residential peak periods was relatively simple. Commodity costs are flow related and as such the total annual consumption can be easily segregated between Tier 1 and Tier 2 usage for the residential customers. During this time period, approximately 41% of residential usage was Tier 1 and the balance, or 59% was Tier 2 usage. For non-residential, the commodity costs are segregated between on-peak and off-peak time periods. As noted previously, on-peak is defined as usage during May – October, while off-peak is usage during November – April. Since this is simply monthly consumptive use, segregating consumption for non-residential during these time periods is very straight-forward. For this time period, 34% of the consumptive use for non-residential was off-peak (winter) usage, while the remainder or 66% was on-peak (summer) usage).

While the development of the commodity allocation factor was relatively simple, the development of the capacity allocation factors was a bit more complex. The capacity allocation factors are developed based upon each customer group's contribution to the peak day demand event. While the District understands the overall system peak demand, the available data to determine peak demands by class of service is limited. To estimate each customer class of services' contribution, a "peaking factor" is developed.<sup>7</sup> A peaking factor is the relationship between average day use and peak day use, for each customer class of service. In some cases, the peaking factor may be a known value, but in most cases, it must be estimated based upon the best available information. That is the case in this instance. In the original study, the relationships of average month use to peak month use was used as a reasonable surrogate for

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<sup>7</sup> A peaking factor is a measure of the relationship between peak use demand and average day demand (use). For example, a customer group may have with a peak use (demand) of 200,000 gallons per day, and an average day use of 100,000 gallons has a peaking factor of 2.0 (200,000 gallons ÷ 100,000 gallons = 2.0 peaking factor). Given an average day use (demand) and a peaking factor, a peak demand may be calculated (estimated).

this relationship.<sup>8</sup> In this case, a similar approach was utilized but slightly modified for purposes of establishing peaking factors for residential and non-residential. Similar to the prior portions of the analysis, the total demand of the class of service was not modified or changed, but simply segregated between the appropriate units. For example, in the original study, the residential average day use was 19.49 MGD with a peaking factor of 1.85 or a peak day demand of 36.05 MGD. In the revised analysis, the peaking factor for Tier 1 is 1.20 and for Tier 2 it is 2.30 producing peak day contributions of 9.53 MGD and 26.57 MGD respectively, or a total of 36.1 MGD. A similar approach was used for non-residential customers.

The development of the residential peaking factors for Tier 1 and Tier 2 was based upon an analysis of the customer consumption patterns within Tier 1 and Tier 2. As would be expected, a Tier 1 customer has relatively low consumption and low peak demands. When compared to the Tier 2 customer, which has high consumption and high peak demands, the difference becomes apparent. Similar to the original study, the Tier 1 and Tier 2 average month and peak month usage was analyzed and peaking factors developed. From that analysis, it was determined that a Tier 2 customer has a peak demand that is approximately 1.9 times greater than a Tier 1 customer. In other words, a Tier 2 customer's relationship of their average day use to their peak day use is about 2 times greater than that of a Tier 1 customer. Based upon that relationship, the peaking factors for residential Tier 1 of 1.20 and Tier 2 of 2.30 was developed (i.e. a peaking factor of 2.30 for Tier 2 is 1.9 times greater than the peaking factor of 1.20 for a Tier 1 customer).

The development of the non-residential peaking factors was based upon an analysis of the seasonal peaking characteristics of these customers. Similar to the residential analysis, the average month to peak month characteristics of the non-residential customers were analyzed for the on-peak and off-peak time periods. Our analysis indicated that the on-peak demands (i.e. peaking factors) appeared to be approximately 1.3 times greater than the off-peak peaking factors. Based upon that relationship, the peaking factors for non-residential off-peak was determined to be 1.46 and on-peak was 1.96 (i.e. a peaking factor of 1.96 for the on-peak period is approximately 1.3 times greater than the peaking factor of 1.46 for the off-peak time period).

Given the revised allocation factors for the commodity and capacity costs, the costs could be allocated and average unit costs developed. This aspect of the study is discussed below.

## Summary Findings and Conclusions

The final step in the model is to allocate the classified costs. This analytical step is summarized below in Table 5.

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<sup>8</sup> Appendix A of the Sixth Edition of the AWWA M-1 Manual, *Principles of Water Rates, Fees and Charges*, discusses this approach to estimate peaking factors.

**Table 5  
Allocation of the Classified Costs (\$000)**

Cost Classifiers	Total	Residential		Non-Resident.	Fire Protection
		Tier 1	Tier 2		
<b>Commodity – Related</b>					
On-Peak	\$6,358	–	–	\$2,819	–
Off-Peak	<u>3,194</u>	–	–	\$1,416	–
Annual	\$9,552	\$2,162	\$3,155		
<b>Capacity – Related</b>					
On-Peak		–	–	\$5,385	–
Off-Peak		–	–	\$2,104	–
Annual	\$17,220	\$2,570	\$7,162		
<b>Customer – Related</b>					
Actual Customer	\$5,097	\$2,091	\$2,091	\$820	\$100
Customer Accounting	545	224	224	88	10
Meters and Services	<u>4,265</u>	<u>1,363</u>	<u>1,363</u>	<u>1,424</u>	<u>117</u>
Total Customer Related	\$9,908	\$3,678	\$3,678	\$2,332	\$221
<b>Fire Protection – Related</b>	\$3,910	\$1,119	\$1,119	\$1,117	\$555
<b>Revenue Related</b>	(\$855)	(\$249)	(\$268)	(\$319)	(\$20)
<b>Direct Assignment</b>	<u>\$645</u>	<u>\$215</u>	<u>\$215</u>	<u>\$215</u>	<u>\$0</u>
<b>Total Net Rev. Requirement</b>	<b>\$40,381</b>	<b>\$9,494</b>	<b>\$15,062</b>	<b>\$15,068</b>	<b>\$756</b>
<b>Original Study Allocation</b>	<b>\$40,381</b>		<b>\$24,546</b>	<b>\$15,079</b>	<b>\$756</b>

The costs have been allocated to residential, non-residential and fire protection customers. This is the same process as the original cost of service study, but as can be seen, the commodity and capacity costs have been sub-classified and allocated to allow for the allocation of residential costs to Tier 1 and Tier 2 and for non-residential costs to on-peak and off-peak time periods. In total, the allocated costs for each customer class of service are nearly identical to the original cost allocations.

For the non-residential customers, the capacity related costs were assigned between on-peak and off-peak based upon the previous capacity allocation information developed. First, in the original study, 43.5% of the capacity costs were assigned to non-residential, which equates to approximately \$7.5 million. The \$7.5 million is then assigned between on-peak and off-peak based upon the demand relationships of the non-residential customers (See Exhibit 6). This assigned approximately 71.9% of the non-residential capacity costs to on-peak and the balance, or 28.1% to off-peak.

From these allocated costs, average unit costs can be developed. This aspect of the study was shown on Exhibit 15b of the original study Technical Appendices. For this study, a similar approach was used to calculate the average unit costs for the commodity and capacity costs in

order to determine the cost differential between the residential Tier 1 and Tier 2 costs and the non-residential on-peak and off-peak costs. Provided below in Table 6 is a summary of that portion of the analysis.

<b>Table 6</b>			
<b>Average Unit Costs (\$/CCF)</b>			
<b>Residential Cost Classifiers</b>	<b>Tier 1</b>	<b>Tier 2</b>	<b>\$ Difference</b>
<b>Residential –</b>			
Commodity	\$0.62	\$0.62	\$0.00
Capacity	<u>0.73</u>	<u>1.40</u>	<u>0.67</u>
Total	\$1.35	\$2.01	\$0.67
Existing Residential Rate	\$0.83	\$1.04	\$0.21
<b>Non-Residential Cost Classifiers</b>	<b>Off-Peak</b>	<b>On-Peak</b>	<b>\$ Difference</b>
<b>Non-Residential –</b>			
Commodity	\$0.60	\$0.62	\$0.02
Capacity	<u>0.89</u>	<u>1.19</u>	<u>0.31</u>
Annual	\$1.48	\$1.82	\$0.33
Existing Non-Residential Rate	\$0.84	\$1.05	\$0.21

As can be seen in Table 6, for the residential customers, there is a calculated price differential which is greater than the existing rate differential of \$0.21/CCF. This is primarily a result of the differences in capacity use between the Tier 1 and Tier 2 customer. In addition, it should be noted that the calculated average unit cost for each tier is greater than the existing residential rates thus cost-justifying the existing residential usage charges. For the non-residential customers, a similar result is noted. The calculated price differential between the on-peak and off-peak time periods is greater than the current rate differential. In addition, the calculated unit cost for time periods are greater than the current non-residential usage charges.

Table 6 has demonstrated that the price differentials used within the District’s residential tiers and non-residential seasonal rates are cost-justified. While there is a difference in the calculated differentials and the District’s existing rates, it is important to understand that the District’s rates are not “under-collecting” revenue. Rather, the District’s rates were designed to collect the appropriate level of total revenue for each class of service via the meter and usage charges. Simply stated, the rates, as adopted by the District, did not exceed the cost-basis for the price differential (i.e. the focus of the *Capistrano* decision). The District’s final adopted rate design collected slightly more from the fixed meter charges and slightly less from the usage (consumption) charges. Finally, it is also important to understand the dynamic nature of usage (demand) patterns and cost of service. The cost of service conducted for the District reflected a specific one-year time period. The analysis and results shown in Table 6 can vary from time

period to time period depending upon the peak demand usage of a particular customer class of service and tier. In other words, the results shown in Table 6 will have some variability around the result (both up and down). Given that, the District's adoption of a rate differential which is somewhat less than calculated rates shown in Table 6 simply means that the District, as a matter of policy, was not overly aggressive in establishing a price signal to encourage conservation and efficient use.<sup>9</sup> With the recent Capistrano decision, and in hindsight, the Board's choice to not be overly aggressive in establishing the pricing tiers now appears to be very prudent.

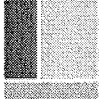
## Summary Conclusions

This analysis has utilized the District's cost of service analysis developed in 2012/13 and the basis for the District's currently adopted rates. As a result of the recent *Capistrano* decision, the District wanted to confirm that the rates adopted as a result of that prior study conformed to the Capistrano decision with regard to the pricing of tiered rates and the cost justification for such tiered rates.<sup>10</sup> In summary, this paper has demonstrated the cost-basis for the District's currently adopted residential tiered rates and non-residential seasonal rate structures.

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<sup>9</sup> This was the crux of the complaint by the Capistrano Taxpayers Association that the pricing of the residential tiers were "too aggressive/high" and had no cost-basis.

<sup>10</sup> In making this statement, HDR is not providing a legal opinion regarding the *Capistrano* decision, nor providing a legal opinion regarding the District's rates.



# Technical Appendix

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SACRAMENTO SUBURBAN WATER DISTRICT  
WATER - EXHIBIT 5a  
DEVELOPMENT OF THE COMMODITY ALLOCATION FACTOR

	Estimated Flat		Total Customer		Net Water Delivered		% of Total
	Consumption in CCF [1]	Customer Cons. in CCF	Consumption in CCF	Losses [2]	(Flow + Losses) in CCF	Average Day (MGD) [3]	
<u>Residential Customers</u>							
Tier 1	1,972,827	1,541,828	3,514,655	351,465	3,866,120	7.92	22.6%
Tier 2	2,879,604	2,250,503	<u>5,130,107</u>	513,011	<u>5,643,118</u>	11.56	<u>33.0%</u>
			8,644,762		9,509,239		55.7%
<u>Non-Residential Customers</u>							
Peak	3,806,273	709,843	4,516,116	451,612	4,967,727	10.18	29.1%
Off-Peak	1,998,143	372,639	<u>2,370,782</u>	237,078	<u>2,607,861</u>	5.34	<u>15.3%</u>
			6,886,898		7,575,588		44.3%
<u>Private Fire Accounts</u>	0	0	0	0	0	0.00	0.0%
<b>Total Consumption</b>	<b>10,656,847</b>	<b>4,874,813</b>	<b>15,531,660</b>	<b>1,553,166</b>	<b>17,084,826</b>	<b>35.01</b>	<b>100.0%</b>
<b>Allocation Factor</b>	Total Plant Production [4]				16,745,156	34.32	
	<b>(COMM)</b>						

NOTES:  
[1] Estimated flat customer consumption is calculated by using the monthly average of metered customers and multiplying by the total number of flat rate customers. Difference of the total consumption and total plant production may be a function of billing cycles.  
[2] Losses are estimated by the District.  
[3] = (Consumption\*748)/365/1000000  
[4] Total production provided in *Water Production 10-2012*.

SACRAMENTO SUBURBAN WATER DISTRICT  
 Water - Exhibit 5b

Commodity Allocation	Usage (CCF)	% of Total	Allocation Factor
Peak	7,234,438	67.9%	(COMM-P)
Off-Peak	3,422,409	32.1%	(COMM-OP)
	-----	-----	
	<b>10,656,847</b>	<b>100.0%</b>	



**SACRAMENTO SUBURBAN WATER DISTRICT  
WATER - EXHIBIT 6  
DEVELOPMENT OF THE CAPACITY ALLOCATION FACTOR**

	Average Consumption (MGD)	Peaking Factor 1 [1]	Peaking Factor 2 [2]	Peak Day Use (MGD)	% of Total
<u>Residential Customers</u>					
Tier 1	7.9	1.20		9.53	14.9%
Tier 2	11.6	2.30		26.57	<u>41.6%</u> 56.5%
<u>Non-Residential Customers</u>					
Peak	10.2		1.96	19.97	31.3%
Off-Peak	5.3		1.46	7.80	<u>12.2%</u> 43.5%
<u>Private Fire Accounts</u>					
	0.0	0.00		0.00	0.0%
<b>Total</b>	<b>35.0</b>			<b>63.87</b>	<b>100.0%</b>
<i>Historical 2012 Peak Month Average [3]</i>					
				56.30	
<b>Allocation Factor</b>					<b>(CAP)</b>

NOTES: [1] Based on Nov 2011-Oct 2012 consumption data provided by the District; derived from the peak month to average month for each tier over the 12-month period  
 [2] Based on actual system data; peak day and average day production for seasonal periods  
 [3] In District files provided, 2010 and 2012 were dry years. 2010 peak month was

SACRAMENTO SUBURBAN WATER DISTRICT  
 WATER - EXHIBIT 7  
 DEVELOPMENT OF THE CUSTOMER ALLOCATION FACTOR

	Actual Customer		Customer Service & Accounting		Meters & Services [1]		
	Number of Meters	% of Total	Weighting Factor	Weighted Customer	Weighting Factor	Weighted Customer	% of Total
<u>Residential Customers</u>							
Residential	36,375	82.1%	1.00	36,375	\$131	\$4,751,211	63.9%
<u>Non-Residential Customers</u>							
Multi-Family	4,182	9.4%	1.00	4,182	\$278	1,161,026	15.6%
Commercial	2,005	4.5%	1.00	2,005	\$383	768,809	10.3%
Irrigation	506	1.1%	1.00	506	\$446	225,611	3.0%
Industrial	11	0.0%	1.00	11	\$798	8,449	0.1%
Institution	430	1.0%	1.00	430	\$741	318,418	4.3%
		16.1%					33.4%
<u>Private Fire Accounts</u>	816	1.8%	1.00	816	\$250	204,000	2.7%
<b>Total</b>	<b>44,324</b>	<b>100.0%</b>		<b>44,324</b>		<b>\$7,437,524</b>	<b>100.0%</b>
<b>Allocation Factor</b>		<b>(AC)</b>					<b>(WCMS)</b>

NOTES: [1] District provided meter costs through 4-inch meter, all others are estimated based on experience with other utilities.

SACRAMENTO SUBURBAN WATER DISTRICT  
 WATER - EXHIBIT 8A  
 DEVELOPMENT OF THE PUBIC FIRE PROTECTION ALLOCATION FACTOR

	Fire Protection			Total FP	% of
Number of Meters	Requirements (gals/min) [1]	Duration (minutes) [1]	Requirements (1,000 g/min)	Total	Total
<u>Residential Customers</u>					
Residential	36,375	1,500	120	6,547,425	66.7%
<u>Non-Residential Customers</u>					
Multi-Family	4,182	2,000	180	1,505,400	15.3%
Commercial	2,005	3,000	240	1,443,660	14.7%
Irrigation	506	0	0	0	0.0%
Industrial	11	3,000	240	7,620	0.1%
Institution	430	3,000	240	309,360	3.2%
				33.3%	
<u>Private Fire Accounts</u>					
	816	0	0	0	0.0%
<b>Total</b>	<b>44,324</b>			<b>9,813,465</b>	<b>100.0%</b>
<b>Allocation Factor</b>					<b>(FP)</b>

**SACRAMENTO SUBURBAN WATER DISTRICT  
 WATER - EXHIBIT 9  
 DEVELOPMENT OF THE REVENUE RELATED ALLOCATION FACTOR**

	<u>Projected</u> <u>2014 [1]</u>	<u>% of</u> <u>Total</u>
<u>Residential Customers</u>		
Tier 1	\$11,304,699	29.1%
Tier 2	12,143,026	<u>31.3%</u>
		60.4%
<u>Non-Residential Customers</u>		
Peak	\$8,356,346	21.5%
Off-Peak	6,115,824	<u>15.8%</u>
		37.3%
<u>Private Fire Accounts</u>	\$907,726	2.3%
<b>Total Rate Revenues</b>	<b>\$38,827,621</b>	<b>100.0%</b>
<b>Allocation Factor</b>		<b>(RR)</b>

NOTES:

[1] Facilities charge revenue is included in each customer classes total projected revenue for 2013.

SACRAMENTO SUBURBAN WATER DISTRICT  
 WATER - EXHIBIT 12  
 FUNCTIONALIZATION AND CLASSIFICATION OF REVENUE REQUIREMENTS

	2014	Commodity [1]		Capacity		Customer Related		Fire Protection (FP)	Revenue Related (RR)	Direct Assign. (DA)	Basis of Classification
		Peak (COMM-P)	Off-Peak (COMM-OP)	Peak (CAP)	Actual Customer (AC)	Weighted for: Cust. Acctg. (WCA)	Meters & Services (WCMS)				
<b>EXPENSES</b>											
<b>Water Costs</b>											
Purchased Water [1] [2]	\$2,729,277	\$1,129,310	\$534,245	\$1,065,722	\$0	\$0	\$0	\$0	\$0	\$0	As Source of Supply
Electrical Costs	1,848,413	1,254,802	593,611	0	0	0	0	0	0	0	100.0% COMM
Chemical & Delivery	309,939	128,245	60,669	121,024	0	0	0	0	0	0	As Source of Supply
Sacramento Ground Water Authority	104,000	43,033	20,358	40,610	0	0	0	0	0	0	As Source of Supply
<b>Total Water Costs</b>	<b>\$4,991,629</b>	<b>\$2,555,390</b>	<b>\$1,208,883</b>	<b>\$1,227,356</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	
<b>Water O&amp;M Costs</b>											
Salaries & Wages	\$4,700,997	\$428,553	\$202,736	\$2,325,591	\$570,507	\$0	\$459,707	\$604,629	\$0	\$109,273	As Plant In Service
Medical Insurance	844,963	77,029	36,440	418,005	102,544	0	82,628	108,677	0	19,641	As Plant In Service
Dental Insurance	88,403	8,059	3,813	43,733	10,729	0	8,645	11,370	0	2,055	As Plant In Service
Vision Insurance	17,438	1,590	752	8,626	2,116	0	1,705	2,243	0	405	As Plant In Service
Life Insurance	17,392	1,585	750	8,604	2,111	0	1,701	2,237	0	404	As Plant In Service
LTD Insurance	23,994	2,187	1,035	11,870	2,912	0	2,346	3,086	0	558	As Plant In Service
PERS Retirement	1,034,219	94,282	44,602	511,630	125,511	0	101,136	133,018	0	24,040	As Plant In Service
Miscellaneous Employee Benefit	35,920	3,275	1,549	17,770	4,359	0	3,513	4,620	0	835	As Plant In Service
Employer Taxes and Insurance	476,581	43,446	20,553	235,765	57,837	0	46,605	61,297	0	11,078	As Plant In Service
OPEB	595,000	54,242	25,660	294,347	72,208	0	58,185	76,527	0	13,831	As Plant In Service
Operating Supplies	459,509	41,890	19,817	227,320	55,765	0	44,835	59,101	0	10,681	As Plant In Service
Inventory/Issuances	490,280	44,695	21,144	242,542	59,500	0	47,944	63,058	0	11,396	As Plant In Service
Office Supplies	24,321	2,217	1,049	12,032	2,952	0	2,378	3,128	0	565	As Plant In Service
Legal Services	234,840	21,409	10,128	116,176	28,500	0	22,965	30,204	0	5,459	As Plant In Service
Financial Services	276,988	0	0	0	276,988	0	0	0	0	0	100.0% WCA
Consulting Services	433,902	39,555	18,713	214,652	52,658	0	42,431	55,807	0	10,086	As Plant In Service
Contract Services	540,045	49,232	23,290	267,161	65,539	0	52,811	69,459	0	12,553	As Plant In Service
Other Services	808,550	73,709	34,870	399,991	98,125	0	79,068	103,993	0	18,795	As Plant In Service
Licenses, Permits, & Fees	448,804	40,914	19,355	222,024	54,466	0	43,888	57,724	0	10,432	As Plant In Service
Inspection and Testing	84,048	7,662	3,625	41,579	10,200	0	8,219	10,810	0	1,954	As Plant In Service
Service Laterals	129,780	0	0	0	0	0	129,780	0	0	0	100.0% WCMS
Miscellaneous Repairs	150,792	13,747	6,503	74,597	18,300	0	14,746	19,394	0	3,505	As Plant In Service
HR Costs	14,240	1,298	614	7,044	1,728	0	1,392	1,831	0	331	As Plant In Service
Temporary Help	37,912	3,456	1,635	18,755	4,601	0	3,707	4,876	0	881	As Plant In Service
Training	41,105	3,747	1,773	20,335	4,988	0	4,020	5,287	0	955	As Plant In Service
Uniforms	35,020	3,192	1,510	17,324	4,250	0	3,425	4,504	0	814	As Plant In Service
BMP Rebates	103,000	42,619	20,162	40,219	0	0	0	0	0	0	As Source of Supply
Memberships & Dues	215,291	19,626	9,285	106,505	26,127	0	21,053	27,690	0	5,004	As Plant In Service
Public Relations	38,552	3,514	1,663	19,072	4,679	0	3,770	4,958	0	896	As Plant In Service
Printing	151,115	13,776	6,517	74,757	18,339	0	14,777	19,436	0	3,513	As Plant In Service
Postage/Shipping/UPS/Feed Ex	268,830	0	0	0	0	0	268,830	0	0	0	100.0% WCA
Utilities	19,552	13,273	6,279	0	0	0	0	0	0	0	100.0% COMM
Communication	123,394	11,249	5,322	61,043	14,975	0	12,067	15,871	0	2,868	As Plant In Service
NE Treatment Plant Lease	27,810	11,566	5,472	10,772	0	0	0	0	0	0	As Treatment Plant
Equipment Rental/Lease	21,527	1,962	928	10,649	2,612	0	2,105	2,769	0	500	As Plant In Service
Equipment Maintenance Supplies&Services	77,670	7,081	3,350	38,424	9,426	0	7,595	9,990	0	1,805	As Plant In Service
Vehicle Maintenance Supplies&Services	86,520	7,887	3,731	42,802	10,500	0	8,451	11,128	0	2,011	As Plant In Service
Building Service Exp. - Office&Yard	149,350	13,615	6,441	73,884	18,125	0	14,605	19,209	0	3,472	As Plant In Service
Building Maintenance - Office&Yard	61,800	5,634	2,665	30,573	7,500	0	6,043	7,949	0	1,437	As Plant In Service
Miscellaneous Repairs&Maintenance	9,270	845	400	4,586	1,125	0	907	1,192	0	215	As Plant In Service
Hazardous Waste Disposal	11,440	1,043	493	5,659	1,388	0	1,119	1,471	0	266	As Plant In Service
Travel Conferences	74,188	6,763	3,199	36,701	9,003	0	7,255	9,542	0	1,724	As Plant In Service
Property Taxes	22,660	2,066	977	11,210	2,750	0	2,216	2,914	0	527	As Plant In Service
Miscellaneous	7,156	652	309	3,540	868	0	700	920	0	166	As Plant In Service
<b>Total Water O&amp;M Expenses</b>	<b>\$13,514,169</b>	<b>\$1,224,143</b>	<b>\$579,108</b>	<b>\$6,327,868</b>	<b>\$1,539,824</b>	<b>\$545,818</b>	<b>\$1,370,552</b>	<b>\$1,631,923</b>	<b>\$0</b>	<b>\$294,834</b>	

SACRAMENTO SUBURBAN WATER DISTRICT  
 WATER - EXHIBIT 12  
 FUNCTIONALIZATION AND CLASSIFICATION OF REVENUE REQUIREMENTS

	2014	Commodity [1]					Capacity			Customer Related				Direct Assign. (DA)	Basis of Classification
		Peak (COMM-P)		Off-Peak (COMM-OP)		Peak (CAP)	Actual Customer (AC)	Cust. Actg. (WCA)	Meters & Services (WCM/S)	Fire Protection (FP)	Revenue Related (RR)				
		\$	%	\$	%							\$	\$		
<b>Total Operations &amp; Maintenance</b>	\$18,505,798	\$3,779,533	\$1,787,991	\$7,555,224	\$1,539,824	\$545,818	\$1,370,552	\$1,631,923	\$0	\$294,934					
<b>CAPITAL FUNDED THROUGH RATES</b>	\$16,315,000	\$1,627,748	\$770,042	\$7,973,575	\$1,950,904	\$0	\$1,574,015	\$2,047,044	\$0	\$373,671					As Plant Before General Plant
<b>Debt Service</b>															
2009 A [2]	\$1,680,000	\$492,343	\$232,914	\$677,682	\$191,942	\$0	\$0	\$85,119	\$0	\$0					As 2009A Bond Allocations
2009 B [3]	3,251,700	570,152	269,723	538,048	351,173	0	1,382,135	140,469	0	0					As 2009B Bond Allocations
2012 A [4]	2,908,775	374,785	177,300	987,238	1,188,816	0	41,886	138,749	0	0					As 2012A Bond Allocations
New Revenue Bond	0	0	0	0	0	0	0	0	0	0					As Plant Before General
<b>Total Debt Service</b>	\$7,840,475	\$1,437,280	\$679,937	\$2,202,969	\$1,731,932	\$0	\$1,424,021	\$364,336	\$0	\$0					
Less: Facilities Development Charges	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0					As Total Debt Service
<b>NET DEBT SERVICE</b>	\$7,840,475	\$1,437,280	\$679,937	\$2,202,969	\$1,731,932	\$0	\$1,424,021	\$364,336	\$0	\$0					
<b>CHANGE IN WORKING CAPITAL (+/-)</b>															
Operating Fund (Assigned Fund)	\$223,268	\$22,275	\$10,538	\$109,117	\$26,698	\$0	\$21,513	\$28,013	\$0	\$5,114					As Plant Before General Plant
Capital Asset Fund (Assigned Fund)	0	0	0	0	0	0	0	0	0	0					As Plant Before General Plant
Rate Stabilization Fund (Assigned Fund)	0	0	0	0	0	0	0	0	0	0					As Plant Before General Plant
<b>TOTAL CHANGE IN WORKING CAPITAL</b>	\$223,268	\$22,275	\$10,538	\$109,117	\$26,698	\$0	\$21,513	\$28,013	\$0	\$5,114					
<b>TOTAL REVENUE REQUIREMENTS</b>	\$42,884,541	\$6,866,837	\$3,248,507	\$17,840,886	\$5,249,358	\$545,818	\$4,388,101	\$4,071,317	\$0	\$673,718					
<b>Less: Miscellaneous Revenues</b>															
Interest (O&M)	\$855,395	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$855,395	\$0					100.0% RR
Other Services	969,600	88,391	41,815	479,663	117,669	0	94,817	124,707	0	22,538					As Plant In Service
Other Revenue (leases)	284,820	25,965	12,283	140,901	34,565	0	27,852	36,633	0	6,621					As Plant In Service
Wheeling (Cal/m 2,000 AF)	394,000	394,000	0	0	0	0	0	0	0	0					100.0% COMM
<b>Total Miscellaneous Revenues</b>	\$2,503,815	\$508,356	\$54,098	\$620,564	\$152,235	\$0	\$122,669	\$161,340	\$855,395	\$29,159					
<b>NET REVENUE REQUIREMENTS</b>	\$40,380,726	\$6,358,481	\$3,194,409	\$17,220,322	\$5,097,123	\$545,818	\$4,265,432	\$3,909,977	(\$855,395)	\$644,560					

[1] Allocated based on system use; see Figure 1  
 [2] 2009 A Revenue Bond allocations  
 [3] 2009 B Revenue Bond allocations  
 [4] 2012 A Revenue Bond allocations

SACRAMENTO SUBURBAN WATER DISTRICT  
WATER - EXHIBIT 13  
ALLOCATION OF REVENUE REQUIREMENTS

Classification Components	Net Revenue Requirement	Residential		Non-Residential	Private Fire Accounts	Allocation Factor
		Tier 1	Tier 2			
Commodity - Peak	\$6,358,481	-	-	\$2,819,416	-	(COMM)
Commodity - Off-Peak	3,194,409	-	-	1,416,434	-	(COMM)
Annual	\$9,552,890	2,161,721	3,155,320	-	0	(COMM - Tier 1/Tier 2)
Capacity - Peak [1]		-	-	\$5,384,669	-	(CAP)
Capacity - Off-Peak [1]		-	-	2,103,606	-	(CAP)
Annual	\$17,220,322	2,569,616	7,162,432	-	0	(CAP - Tier 1/Tier 2)
Customer Related						
-Actual Customer	\$5,097,123	\$2,091,482	\$2,091,482	\$820,321	\$93,837	(AC)
-Weighted for Cust. Acctg.	545,818	223,963	223,963	87,843	10,048	(WCA)
-Weighted for Meters & Services	4,265,432	1,362,414	1,362,414	1,423,610	116,994	(WCMS)
Total Customer Related	\$9,908,373	\$3,677,859	\$3,677,859	\$2,331,774	\$220,880	
Fire Protection Related (Joint Facilities)	\$3,909,977	\$1,119,136	\$1,119,136	\$1,116,513	\$555,192	(FP) 85.8% / (FP-2) 14.2%
Revenue Related	(\$855,395)	(\$249,049)	(\$267,518)	(\$318,830)	(\$19,998)	(RR)
Direct Assignment	\$644,560	\$215,021	\$215,021	\$214,517	\$0	(DA) [Pub. Fire]
<b>NET REVENUE REQUIREMENT</b>	<b>\$40,380,726</b>	<b>\$9,494,303</b>	<b>\$15,062,249</b>	<b>\$15,068,098</b>	<b>\$756,075</b>	

[1] - Non-Residential allocated 43.5% of capacity costs (see Exhibit 6) and then allocated to on-peak and off-peak based on demand (exhibit 6)

SACRAMENTO SUBURBAN WATER DISTRICT  
 WATER - EXHIBIT 14A  
 SUMMARY OF THE COST OF SERVICE ANALYSIS

	2014 Expenses	Residential		Non-Residential	Private Fire Accounts
		Tier 1	Tier 2		
Revenues at Present Rates	\$38,827,621	\$11,304,699	\$12,143,026	\$14,472,170	\$907,726
Allocated Revenue Requirement	\$40,380,726	\$9,494,303	\$15,062,249	\$15,068,098	\$756,075
Balance/(Deficiency) of Funds	(\$1,553,105)	\$1,810,396	(\$2,919,224)	(\$595,928)	\$151,651
<b>Required % Change in Rates</b>	<b>4.0%</b>	<b>-16.0%</b>	<b>24.0%</b>	<b>4.1%</b>	<b>-16.7%</b>

NOTES: [1] Within cost of service when required % change in rates is +/- 5% of the total required % change in rates.



SACRAMENTO SUBURBAN WATER DISTRICT  
WATER - EXHIBIT 15A  
AVERAGE UNIT COSTS

	Total	Residential			Private Fire Accounts
		Tier 1	Tier 2	Non-Residential	
Commodity - Peak (\$ / CCF)	\$2.68	-	-	\$0.62	-
Commodity - Off Peak (\$ / CCF)	0.71	-	-	0.60	-
Commodity - Annual (\$ / CCF)	0.62	0.62	0.62	-	0.00
Capacity - Peak (\$ / CCF)	\$0.00	-	-	\$1.19	-
Capacity - Off Peak (\$ / CCF)	0.00	-	-	0.89	-
Capacity - Annual (\$ / CCF)	1.11	0.73	1.40	-	0.00
Fire/Revenue/Direct (\$ / CCF)	\$0.24	\$0.31	\$0.21	\$0.15	\$0.00
Total (\$ / CCF)	\$5.35	\$1.65	\$2.22	\$3.45	\$0.00
Customer Costs - \$/Account/Month [1]	\$10.21	\$8.43	\$8.43	\$27.24	\$64.28
Average Total Cost (\$ / CCF)	\$2.60	\$2.70	\$2.94	\$2.19	\$0.00
Current Unit Revenue (\$ / CCF)	\$2.50	\$3.22	\$2.37	\$2.10	\$0.00
<b>Basic Data:</b>					
Off Peak Water Consumption (\$ / CCF)	2,370,782	-	-	2,370,782	-
Peak Water Consumption (\$ / CCF)	4,516,116	-	-	4,516,116	-
Annual Water Consumption (\$ / CCF) [2]	15,531,660	3,514,655	5,130,107	6,886,898	0
Number of Accounts [3]	80,863	36,375	36,375	7,133	980

[1] Private fire protection cost is stated as the cost per equivalent 6" connection

[2] Includes estimated water consumption for flat rate customers @ average customer ccf per month.

[3] Private fire is the number of 6" equivalent connections - See Common Facilities Fire Protection Allocation Factor

**SACRAMENTO SUBURBAN WATER DISTRICT**

**Tier Pricing**

	<i>Tier 1</i>	<i>Tier 2</i>	<i>Differential</i>
<b>Residential</b>			
Commodity	\$0.62	\$0.62	\$0.00
Capacity	0.73	1.40	0.67
	-----	-----	
<b>Total</b>	<b>\$1.35</b>	<b>\$2.01</b>	<b>\$0.67</b>
<b>Current Price</b>	<b>\$0.83</b>	<b>\$1.04</b>	<b>\$0.21</b>
<b>Non-Residential</b>			
Commodity	\$0.60	\$0.62	\$0.03
Capacity	0.89	1.19	0.31
	-----	-----	
<b>Total</b>	<b>\$1.48</b>	<b>\$1.82</b>	<b>\$0.33</b>
<b>Current Price</b>	<b>\$0.84</b>	<b>\$1.05</b>	<b>\$0.21</b>



## Agenda Item: 2

**Date:** August 19, 2015

**Subject:** Rate Subsidy for Low-Income Customers

**Staff Contact:** Daniel A. Bills, Finance Director

Pursuant to Board direction, staff is investigating the potential of establishing a fund for providing assistance to low-income residents.

Prior to staff pursuing this matter in earnest, it is important to note the constraints and legal limitations that the District operates under when it comes to setting customer rates. Generally speaking, it is problematic for California public agencies to subsidize water or other utility rates for low income customers. The problem is due to Proposition 218's substantive requirements (Article XIII D, section 6 of the California Constitution) that requires water rates be imposed in proportion to the cost of service to provide water to each property and cannot exceed that cost of service to each parcel. Practically, this means that each customer must pay his or her fair share of the District's costs of providing water service and that one group of customers cannot be charged a higher rate in order to reduce the costs of service (i.e., subsidize the cost) for another group. This is because any "discount" afforded to low income customers or another group is necessarily diverted to other water customers who do not benefit from a subsidized rate. In such a case, those other customers would be paying more than their proportionate share of the costs required to serve their parcels and therefore would have a claim against the District that their rates violate Proposition 218's requirements. This could lead to refund claims and a claim that the increment of additional cost to provide discounted service to low income customers is really a special tax that requires a two-thirds vote of all District customers.

In addition, it is equally important to note that SSWD is a public agency and while there are some public utilities providing subsidized rates to their customers, most such utilities are private utilities regulated by the California Public Utilities Commission (CPUC). Private utilities are not subject to Proposition 218 and can properly be subject to CPUC regulations requiring them to offer subsidized rates as a condition of service. Some public agencies, for example SMUD, also offer subsidies. But in such cases, those programs are funded by voluntary customer contributions and general fund revenues obtained from property tax allocations, power generation revenues and other non-rate revenue sources. SSWD has few sources of funds other than those collected from customers.

Therefore, staff proposes pursuing two potential options:

1. The first is the District could propose a special tax to fund a low income rate program. The proposed tax would need to be placed on the ballot and approved by at least two-thirds of SSWD's voters.
2. A second option would be for the District to set up a program using voluntary customer contributions or non-rate general fund revenues, or both. In the District's case, a problem exists in that the District has little or no general fund revenues such as power generation revenues or property tax allocations, so we would have to rely heavily on customer contributions and any available non-traditional income sources like grants. (It also should be noted that the Legislature and State Water Resources Control Board are looking at this issue, but any legislation or regulations would need to comply with Proposition 218 so any state program would also have to rely on general fund funding unless a new tax is proposed and approved.) Further, all current non-customer revenues (lease income, interest, grant income, etc.) is attributed to the existing rate structure applicable to all customers. Any "reassignment" would require district-wide rate increases or cost reductions.

With either option, additional remaining issues would be - the method to qualify a customer for the subsidy, who certifies income levels, and how frequently would a customer have to requalify.

Staff will begin by surveying other water districts which may have existing programs in place to learn what has proven to work successfully and what lessons have been learned by others.



## Agenda Item: 3

**Date:** August 21, 2015

**Subject:** 2016/17 Budget Assumptions

**Staff Contact:** Daniel A. Bills, Finance Director

### **Recommended Committee Action:**

Proposed 2016/17 key Budget<sup>1</sup> assumptions are attached. The timeline approved by the Board in August presumes passage of the Budget in November. Staff seeks Committee input and direction.

### **Discussion:**

Each year at the inception of the annual budget process, staff provides the Committee with certain key assumptions that are necessary in order to begin the Budget preparation process. These assumptions are based on either historical experience or reflect current or expected economic and climatic conditions. While such assumptions are necessary in order to provide an initial draft for Board/Committee review, such assumptions are subject to change at Board discretion throughout the Budget preparation process.

Beginning with the 2016/17 Budget cycle, staff is proposing a 2 year planning process. District revenues and expenses will be evaluated over a 2 year horizon; a formal budget adopted for the first year, and a “forecast” for the second year. CIP and OCB projects are expected to be approved over the 2 year planning period. Staff is of the opinion that such planning provides for improved District operations.

<sup>1</sup> The Budget is comprised of the Operations and Maintenance Budget (O&M), Operating Capital Budget (OCB), and the Capital Improvement Program Budget (CIP).

**AGENDA ITEM 3A**  
**BUDGET SCHEDULE**



**Date:** August 19, 2015

**Subject:** 2016 Budget Preparation Schedule

**Staff Contact:** Daniel A. Bills, Finance Director

Based on Director comments received through August 17, the budget schedule for the 2016 budget is outlined below. The necessary preparation tasks and their corresponding due dates are listed. Please note the schedule presumes Budget adoption in November.

<u>Meeting</u>	<u>Purpose</u>	<u>Due</u>	<u>Date</u>	<u>Time</u>
Kick-Off Meeting	Marconi Staff Training	Tuesday	August 11	Noon
Kick-Off Meeting	Walnut Staff Training	Wednesday	August 12	Noon
<b>Board Meeting</b>	Approve Schedule	Monday	August 17	6:30 pm
<b>Finance Committee</b>	Review Assumptions	Friday	August 28	3:00 pm
1st Draft Due	Send to Finance Dept	Friday	September 4	COB
AGM/FD	Review 1 <sup>st</sup> Draft	Friday	September 11	10:00 am
Budget Preparers	Informed of Changes	Monday	September 14	Noon
2 <sup>nd</sup> Draft Due	Send to Finance Dept	Friday	September 18	COB
<b>Board Meeting</b>	Status Report	Monday	September 21	6:30 pm
Ex Comm Review	Review 2 <sup>nd</sup> Draft	Wednesday	September 23	1:00 pm
Delivery & Posting	Board Workshop	Wednesday	September 30	1:00 pm
<b>Board Workshop</b>	Budget Presentation	Monday	October 5	3:00 pm
<b>Board Meeting</b>	Follow-up From Workshop	Monday	October 19	6:30 pm
Ex Comm Review	Review Final Draft	Tuesday	October 27	8:30 am
<b>Board Meeting</b>	Approve Final Budget	Monday	November 16	6:30 pm
Budget Preparers	Final Budgets Provided	Tuesday	November 17	COB

COB – Close of business

(Note: the budget is comprised of the Operations and Maintenance Budget (O&M), Operating Capital Budget (OCB), and the Capital Improvement Program Budget (CIP)).

**AGENDA ITEM 3B**  
**BUDGET OVERVIEW AND**  
**INITIAL ASSUMPTIONS**



# 2016/17 Budget

Finance & Audit Committee

August 28, 2015

## Mission Statement

- *To deliver a high quality, reliable supply of water and superior customer service at a reasonable price.*

# Strategic Plan Goals

- **Water Supply:**
  - Assure a present and long-term safe and reliable supply of high quality water in an environmentally responsible and sustainable manner for District customers.
- **Facilities and Operations:**
  - Plan, construct, operate and maintain the District water system facilities embracing sustainable practices to provide reliable delivery of high quality water.
- **Customer Service:**
  - Assure superior customer service.
- **Finance:**
  - Ensure effective and efficient management and public reporting of all District financial processes.
- **Leadership:**
  - Provide leadership on regional, statewide and national water management issues that affect the District.

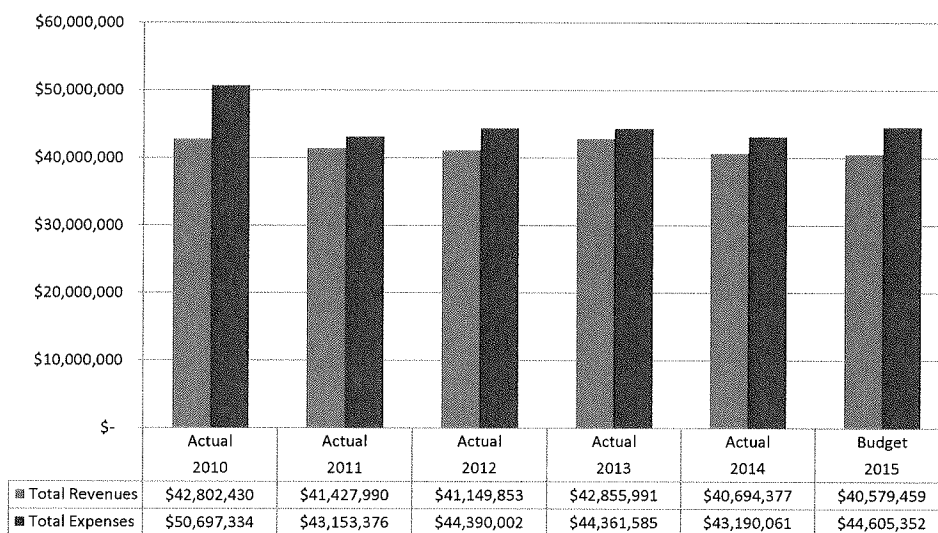
## 2016/17 Budget Development Process

- Staff Development of Budgets
- Finance and Audit Committee – 08/28/15, 3:00 pm
  - Initial Presentation and Provide Direction to Staff
- September Board Meeting – 09/21/15
  - Discuss Budgets and Provide Direction to Staff
- Board Workshop – 10/05/15, 3:00 pm
  - Initial Presentation; Provide Direction to Staff
- October Board Meeting – 10/19/15
  - 2<sup>nd</sup> Draft Presentation; Provide Additional Direction to Staff
- November Board Meeting – 11/16/15
  - Budget Approval or Additional Direction to Staff

## 2016/17 Budget Changes

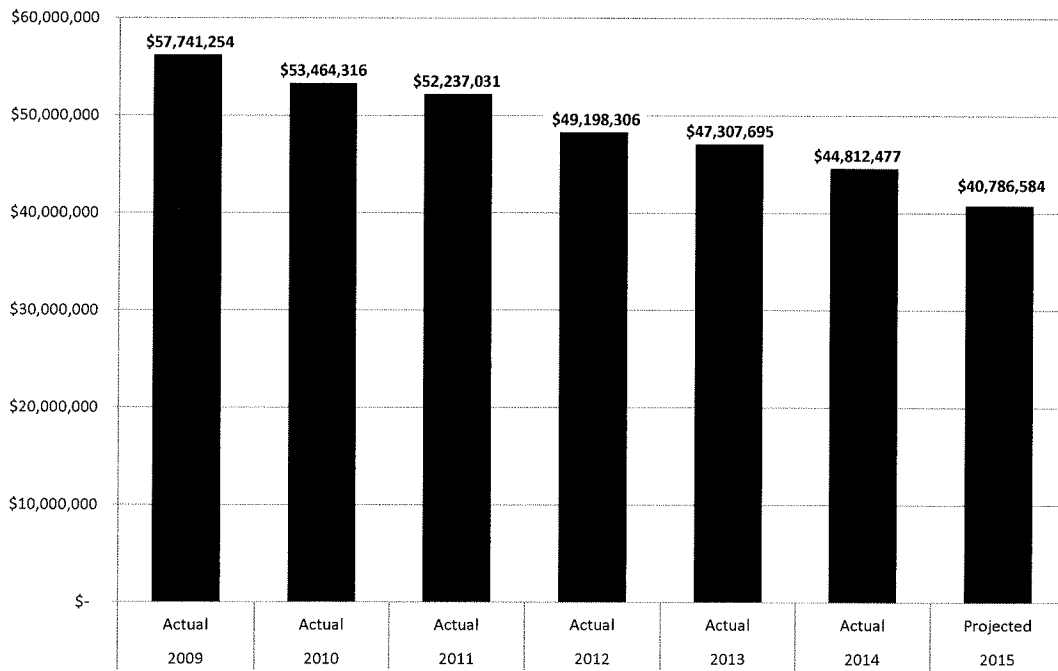
- Two Year Planning Process
  - Revenue and Expenses Projected over a 2 Year Horizon
  - Budget Adopted for First Year
  - Forecast Provided for Second Year
  
- CIP and OCB Projects Approved for 2 Year Period
  - Initial Presentation and Provide Direction to Staff

## Total Revenues Vs Total Expenditures 2010 to 2015



District expenses continue to exceed revenues.

## Reserve Balance 2009 to 2015



As District expenditures continue to exceed revenues, cash reserves continue to decline.  
Seventh year in a row for reserve balance decreases.

## 2015 Budget

	<b>2013</b> Actual	<b>2014</b> Actual	<b>Actual</b> As Of 7/31/2015	<b>Original</b> 2015 Budget	<b>Amended</b> 2015 Budget
Income From Customers	\$ 40,825,043	\$ 38,929,472	\$ 21,614,290	\$ 41,290,000	\$ 38,962,459
Total Other Income	<u>2,030,948</u>	<u>1,764,905</u>	<u>1,112,436</u>	<u>1,742,000</u>	<u>1,617,000</u>
Total Revenue	42,855,991	40,694,377	22,726,726	43,032,000	40,579,459
<b>Operations and Maintenance (O&amp;M)</b>	<b>16,483,643</b>	<b>15,192,256</b>	<b>8,133,731</b>	<b>18,025,427</b>	<b>17,282,427</b>
<b>Capital Improvement Program (CIP)</b>	<b>19,973,984</b>	<b>19,773,751</b>	<b>7,737,402</b>	<b>18,257,000</b>	<b>18,332,000</b>
<b>Operating Capital Program (OCB)</b>	<b>474,602</b>	<b>740,059</b>	<b>72,907</b>	<b>1,140,925</b>	<b>1,140,925</b>
<b>Debt Service</b>	<b>7,429,356</b>	<b>7,483,995</b>	<b>2,066,903</b>	<b>7,850,000</b>	<b>7,850,000</b>
	44,361,585	43,190,061	18,010,943	45,273,352	44,605,352
Net Revenue	<u>(1,505,594)</u>	<u>(2,495,684)</u>	<u>4,715,783</u>	<u>(2,241,352)</u>	<u>(4,025,893)</u>
Reserve (Cash) Balance	<u>\$ 47,307,695</u>	<u>\$ 44,812,477</u>	<u>\$ 47,275,526</u>	<u>\$ 40,692,355</u>	<u>\$ 40,786,584</u>

Note: Bolded lines are the budgets – O&M, CIP, OCB and Debt Service



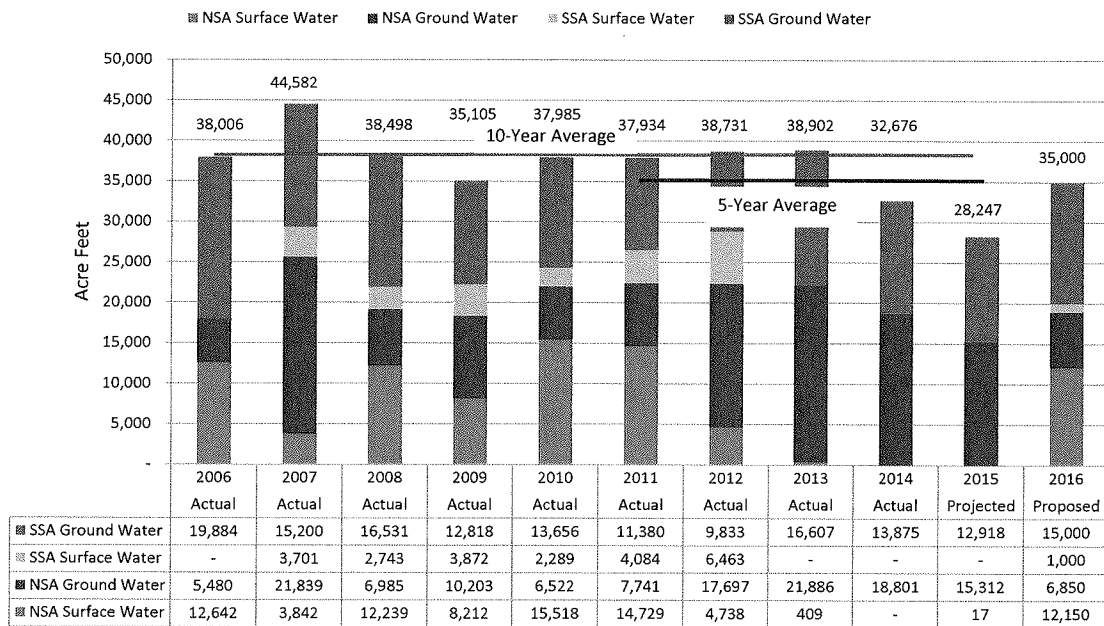
# 2016/17 Budget Assumptions

Sacramento Suburban Water District Budget Assumptions									
Key Assumptions		2014		2015		2016		2017	
1	Rate Increase			4.00%	\$1,553,000	4.00%	\$1,615,000	4.00%	\$1,680,000
2	No Change in SSWD Service Boundaries								
3	New Service Connections (Growth)	Increase	0.43%	Increase	0.43%	Increase	0.43%	Increase	0.43%
4	Water Production: (A)	Cost/AF	AF	Cost/AF	AF	Cost/AF	AF	Cost/AF	AF
	a. Water Supply Forecast Based on 5 Year Average								
	b. SSA Surface Water (City)	\$ 276.77	3,500 AF	\$ 332.00	1,000 AF	\$ 332.00	1,000 AF	\$ 332.00	1,000 AF
	c. SSA Groundwater (Electricity, Chemicals, SGA, etc.)	\$ 103.54	15,000 AF	\$ 108.60	16,500 AF	\$ 107.80	15,000 AF	\$ 107.80	15,000 AF
	d. NSA Surface Water (PCWA)	\$ 35.00	15,000 AF	\$ 35.00	12,000 AF	\$ 35.00	12,000 AF	\$ 35.00	12,000 AF
	e. NSA Surface Water (Wheeling)	\$ 18.36	15,000 AF	\$ 19.00	12,000 AF	\$ 19.00	12,000 AF	\$ 19.00	12,000 AF
	f. NSA Surface Water (Treatment)	\$ 62.10	15,000 AF	\$ 65.00	12,150 AF	\$ 65.00	12,150 AF	\$ 65.00	12,150 AF
	g. NSA Groundwater (Electricity, Chemicals, SGA, etc.)	\$ 87.72	6,500 AF	\$ 96.33	8,350 AF	\$ 95.52	6,850 AF	\$ 95.52	6,850 AF
	h. NSA Bureau 215 Water	\$ 68.30	150 AF	\$ 71.00	150 AF	\$ 71.00	150 AF	\$ 71.00	150 AF
	i. NSA Wheel Water from Citrus Heights	\$ 24.20	300 AF	\$ 24.20	300 AF	\$ 24.20	300 AF	\$ 24.20	300 AF
	j. NSA Wheel Water to Citrus Heights (Revenue)	\$ (24.20)	300 AF	\$ (24.20)	300 AF	\$ (24.20)	300 AF	\$ (24.20)	300 AF
	k. NSA Wheel Water to Cal-AM (Revenue)	\$ (196.48)	2,000 AF	\$ (196.48)	2,000 AF	\$ (196.48)	2,000 AF	\$ (196.48)	2,000 AF
	l. NSA Wheel Water to RLECWD (Revenue)	\$ (439.96)	500 AF	\$ (439.96)	500 AF	\$ (439.96)	500 AF	\$ (439.96)	500 AF
5	Other Outside Water Sales		None		None		None		None
6	Investment Yield		1.50%		1.50%		1.70%		2.00%
7	Variable Debt Interest Rate (Reduced LOC Fee in 2015)		4.00%		4.00%		3.86%		3.86%
8	Electrical Cost Increase		2.50%		2.50%		2.50%		2.50%
9	COLA (As of June 30, 2015)		1.60%		1.80%		0.50%		2.00%
10	Merit Program		2.50%		3.00%		3.00%		3.00%
11	Construction Inflation (B)		2.10%		2.70%		2.10%		2.50%
12	Health Care Cost (C)		9.00%		4.90%		2.60%		3.00%
13	Tier 1 Pension Cost (% of Salaries)		24.77%		25.82%	\$317,000	21.70%	\$ 340,000	22.00%
14	Tier 2 Pension Cost (% of Salaries)		16.10%		19.84%	\$ 5,000	16.20%	\$ 10,000	16.50%
15	Tier 3 Pension Cost (% of Salaries)		6.70%		6.70%		6.73%		6.73%
16	New Hires		1		None		None		None
17	Funding of Post Retirement Benefits		\$ 592,700		\$ 591,000		\$ 620,000		\$ 640,000

**Footnote:**

- (A) SSA = South Service Area; NSA = North Service Area
- (B) 20 Cities CCI Index, Source: ENR
- (C) From PERS Select PPO to UnitedHealthcare HMO

# O&M Expense Detail Water Production

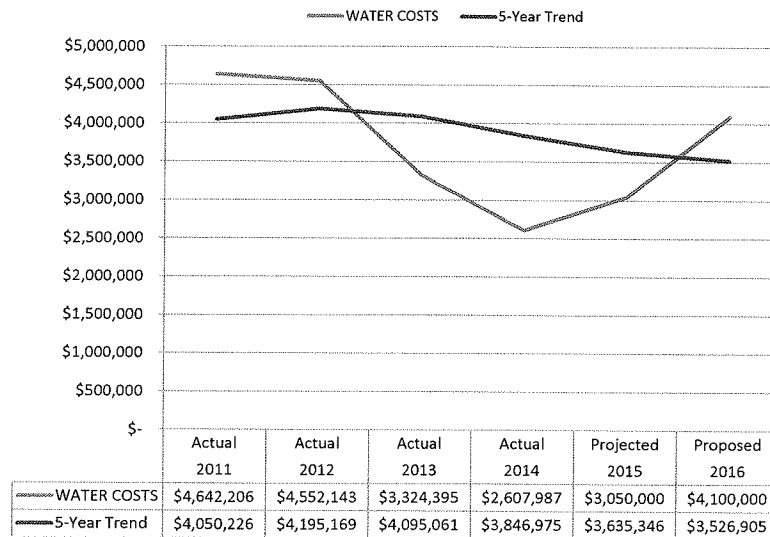


Production amounts for 2016 based on prior 5 year average. Equals SGA Sustainable Pumping Goal per the Water Accounting Framework.

## 2016 Water Production Budget Options

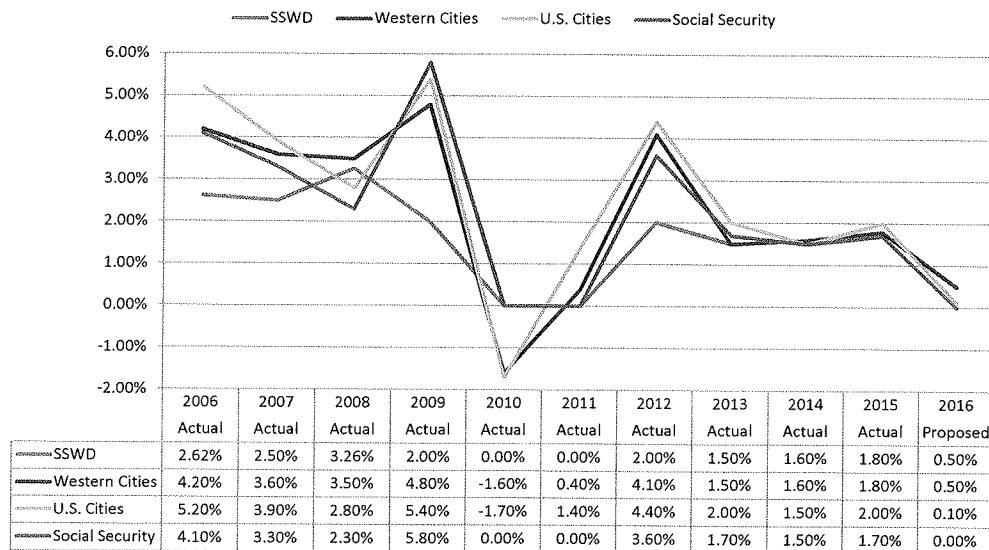
	Average	Average	2015	Options			
	<u>Prior 10 Years</u>	<u>Prior 5 Years</u>	<u>Estimate</u>	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>
SSA Ground Water	14,270	12,923	12,918	16,500	16,000	15,000	16,000
SSA Surface Water	2,315	2,109	-	1,000	1,000	1,000	-
NSA Ground Water	13,247	16,287	15,312	8,350	7,850	6,850	19,000
NSA Surface Water	7,235	3,979	17	12,150	12,150	12,150	-
<b>Total Production</b>	<b>37,067</b>	<b>35,298</b>	<b>28,247</b>	<b>38,000</b>	<b>37,000</b>	<b>35,000</b>	<b>35,000</b>

## O&M Expense Detail Water Costs



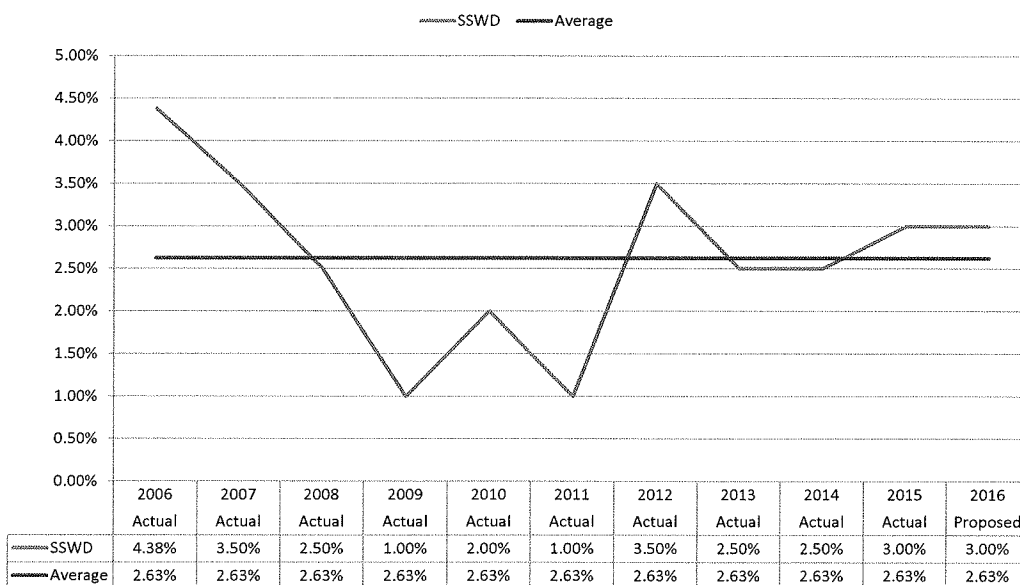
Water costs fluctuate based on hydrological conditions. Due to the conditions in 2013, 14 and 15, surface water was unavailable. 2016 assumes the purchase of 13,150 AF of surface water (1,000 in SSA and 12,150 AF in NSA.)

## O&M Expense Detail COLA



SSWD COLA is intended to be equal to the Western Cities Index. Comparison is also shown to National CPI and SS Indices.

## O&M Expense Detail Merit



Staff's recommendation is consistent with 2015 and average of prior years.

**AGENDA ITEM 3C**  
**RESERVE POLICY**

Sacramento Suburban Water District

**Reserve Policy**

Adopted: August 18, 2003

Revised: September 20, 2004; August 21, 2006; August 18, 2008, November 19, 2012,  
January 27, 2014

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**100.00 Purpose of the Policy**

The District will maintain reserve funds where required by law, ordinance or bond covenant, and revenue stability, so as to provide the necessary cash flow for normal and ordinary operations, while also providing the ability to address economic downturns and limited system emergencies.

The primary purposes of this policy are: to establish a reserve fund level that is specific to the needs and risks of the District; to identify when and how reserve funds are utilized and replenished; and to recognize the long-term nature of such funds and their relationship to current and projected customer rates. The District's financial reserve fund comprises various funds established for specific purposes and to reduce certain risks. Collectively, these funds enable the District to operate in a prudent manner, while allowing for transparency of reserve fund balances.

**200.00 Policy**

**200.10 Fund Classification Types**

The District shall maintain three fund classifications that collectively comprise the District's reserve fund balance. Fund classifications are a hierarchy based primarily on the extent to which the District is bound to observe constraints imposed upon it. The fund classifications are - Restricted funds, Committed funds and Assigned funds, with distinction among the funds based on the relative strength of the constraints that control how amounts can be spent.

Restricted funds include amounts that can be spent only for specific purposes stipulated by law or third parties, such as grantors or creditors. Committed funds include amounts that can be used only for specific purposes as determined by Board action. Amounts in the assigned fund balance classification are intended to be used by the District for specific purposes but do not meet the criteria to be classified as restricted or committed.



## **200.20 Restricted Funds Classification**

Restricted funds are those financial assets subject to enforceable third party constraints, such as those imposed by creditors, grantors, laws or regulation.

### ***Debt Service Reserve Fund***

Financial assets held by the District per bond or certificate-of-participation (COP) debt covenants. The amount of assets to be held as debt service reserves is determined at the time of debt issuance. Such assets may only be used to repay the outstanding bond or COP for which the assets were placed in reserve as long as the bond or COP remains outstanding.

## **200.30 Committed Funds Classification**

Committed funds are those financial assets identified by the Board for specific purposes as determined by Board resolution or ordinance. Such financial assets are to be utilized only as directed by the Board.

### ***Facilities Reimbursement Fund***

As established by the Board in the District's Regulations Governing Water Service (Regulations), the District will retain a percentage of Facility Development Charges collected each fiscal year for the purpose of repaying individuals or businesses who were required to install up-sized lines or extension facilities at the request of the District. Disbursements will be made in accordance with the Regulations, including the release of unexpended funds into the District's unrestricted net position.

## **200.40 Assigned Funds Classification**

Assigned funds are those financial assets determined necessary to be retained for specific risk-mitigation purposes as determined by the Board as needs arise.

### ***Emergency/Contingency Fund***

Financial assets held for purposes of continued operations during times of severe economic distress due to events that require an immediate and/or significant use of cash. Such severe economic situations may include otherwise insurable events for which the timely receipt of cash may be delayed. The District shall target a balance of twenty-five percent (25%) of its following year's anticipated annual revenues in this fund. Conditions for utilization of such reserves and a plan for fund replenishment will be approved by the Board.

Prior to amounts being expended from this fund, the District shall establish a contingency plan that addresses, at a minimum:

1. The reason(s) for expenditures from this fund.
2. Amounts expected to be expended.
3. The funds replenishment timeline and funding source.

### ***Operating Fund***

Financial assets held primarily in the form of cash and cash-equivalents for the purpose of debt avoidance due to unexpected expenditures of a non-recurring nature or to meet unexpected increases in operating costs. The District shall target a minimum balance in short-term investments and/or cash equal to twenty-five percent (25%) of its current year's budgeted annual expenditures for operating costs and debt service in this fund. Conditions for utilization of these reserves and a plan for fund replenishment will be determined by the Board at annual budget time.

The operating fund reflects the timing difference between billing for revenues and payment of expenses. The target level is a financial measure or guideline. If the fund level drops below the twenty-five percent target balance, that is a sign for staff to review the fund and, if necessary, bring recommendations to the Board to assure the fund will not continue to decline.

### ***Rate Stabilization Fund***

Financial assets held for purposes of managing cost variability in obtaining, treating and delivering potable surface water and groundwater. This Fund is focused on consumption fluctuations related to customer demand and purchasing of surface water as part of the District's conjunctive use efforts. Consumption charges established in the rate setting process forecast customer demand based on a repeat of average, recent climactic conditions. Financial fluctuations occur when situations vary from the assumption. The District shall target a balance of fifty percent (50%) of its expected upcoming year consumption revenues in this fund. Conditions for utilization of such reserves and a plan for fund replenishment will be directed by the Board at annual budget time.

### ***Interest Rate Risk Management Fund***

This fund is derived from earnings based on financial assets held as short-term investments pursuant to interest rate risk exposure assumed by the District upon the issuance of floating-rate debt. The amount of investments from which earnings are derived and accumulated will be determined at the time of debt issuance. Earnings on such investments will be used to repay a portion of the interest expense on the outstanding floating-rate bond or COP as long as the bond or COP is subject to interest rate risk exposure. This fund will be reduced in line with the amortized balance of the interest-rate swap(s).

### ***Grant Fund***

Financial assets held for purposes of funding the "local cost share" and advance payment of eligible reimbursable costs on capital projects funded partially from grant awards. As eligibility for potential grant awards requires the District to demonstrate financial viability to fund anticipated project costs, the District shall maintain a minimum balance equal to the combined sum of anticipated costs for those projects considered grant eligible in the upcoming biennial period. Conditions for utilization of such reserves and a plan for fund replenishment will be determined at the time of grant award.

***Capital Asset Fund***

Financial assets held for purposes of funding District capital asset replacements and capital projects necessary to meet regulatory requirements and/or system reliability needs. Through the annual budget process, staff shall recommend capital replacement projects and any necessary appropriations from this fund. The District shall target a balance to sufficiently fund anticipated capital improvement project replacement cost deviations above the CIP funding level. Fund replenishment will be determined by the Board periodically through the rate setting process and annually through the budget process.

***Facilities Development Charge Fund***

Financial assets held for expenditure on growth/capacity-related capital asset projects only. Amounts deposited into this fund come from unexpended facility development charges collected from developers (see related Facilities Reimbursement Fund in section 200.30 above.) These growth/capacity-related capital asset projects form the cost-basis and legal nexus for the establishment and collection of the Facility Development Charges. This fund is dependent upon customer growth. Therefore, there is no prescribed target or minimum balance.

**300.00 Disposition of “One-Time” Revenues**

“One-time” revenues are revenues of an unusual or infrequent nature which are likely not the result of the District providing services and producing and delivering goods in connection with the District’s principal ongoing operations (e.g. legal settlement). Unless specifically earmarked by Board action otherwise, “one-time” revenues should be transferred to the appropriate reserve fund which best represents the reason for the “one-time” revenue.

**400.00 Authority**

The General Manager is responsible for the appropriate accounting and regular reporting of the District’s reserve fund balance. Board oversight will be accomplished through regular reporting and review of this Policy.

**500.00 Procedure**

District staff will maintain procedures for each fund classification, to be approved by the General Manager, and in conformance with this Policy.

In any case where the reserves are drawn below target minimums, a report shall be developed containing the reasons for withdrawals and any impacts to programs or rates due to such withdrawals. If reserves are depleted, the reserves shall be replenished over a maximum five (5) year period to the established or re-established target as directed by the Board.

Maintenance of minimum reserves should not, on its own, trigger the need for a rate adjustment. Rates will be reviewed after two consecutive years of revenue dropping below established minimums balances, or diminishing reserves as a result of covering unanticipated costs.

**600.00 Policy Review**

This Policy will be reviewed ~~at least biennially~~ annually as part of the budget adoption process.