

**HANSFORD ECONOMIC
CONSULTING**

**Donner Summit
Public Utility District**

Wastewater Treatment Plant
Upgrade and Expansion Project
Financing Plan

and

Wastewater System
Cost of Service Study

October 2011

HEC Project #10069

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Section 1: INTRODUCTION AND SUMMARY

1.1 BACKGROUND TO THE DISTRICT AND OVERVIEW OF THE PROJECT

The Donner Summit Public Utility District (District) is a California special district that provides water and wastewater services to the community of Soda Springs and the larger Donner Summit area, including several ski resorts. The District serves customers located within both Nevada and Placer Counties. The District also provides wastewater treatment services to the Sierra Lakes County Water District (SLCWD) by way of agreement.

Over the past several years the District has not been able to consistently meet its waste discharge permit requirements for discharge to the South Yuba River for ammonia, nitrate, and other constituents. The District must upgrade and expand the existing wastewater treatment plant (WWTP) to meet their National Pollution Discharge Elimination System (NPDES) Permit No. CA0081621 stipulations, and provide sufficient treatment for effluent flows for existing and projected future customers. Throughout the report “The Project” refers to this upgrade and expansion of the WWTP.

Consistent with the General Plan for Nevada and Placer Counties, the expansion of the WWTP will accommodate a moderate pace of growth through the following twenty years.

The Project is due to commence construction in spring of 2012. Several major steps have been accomplished to date to commence the Project and bring the District into compliance by April 2014, the NPDES Permit deadline. Environmental documentation and preliminary design are complete. Final design is currently underway. In addition, the District operates under a special use permit (Special Use Permit) issued by the U.S. Forest Service, Tahoe National Service (USFS). USFS plans to reissue the authorization for the existing District facilities once the National Environmental Policy Act (NEPA) and design processes are complete.

The District owns and operates the WWTP, and as the holder of the NPDES Permit, it is responsible for ensuring the Project is completed. The District shares in the cost of the Project with SLCWD, which agency is entitled to 44% of the existing WWTP capacity, and which is by agreement responsible for funding its share of Project costs.

1.2 PURPOSE OF THE FINANCING PLAN AND COST OF SERVICE STUDY

The purpose of this financing plan and cost of service study is to demonstrate the District’s ability to meet its cost share of the Project as well as projected operations and maintenance costs of its entire wastewater system over the next five years. The report provides an explanation and justification of the calculated wastewater rates and charges through fiscal year ending June 30th, 2016. Support tables are provided in Appendix A.

1.3 MAJOR ASSUMPTIONS

Several major assumptions influence the scope of the report and findings herein. They are summarized here:

- **The District’s cost share is financed through a loan from the State Water Resources Control Board (SWRCB) Clean Water State Revolving Fund (CWSRF) program.** DSPUD has held on-site meetings with both CWSRF program staff and USDA Rural Utilities staff regarding the Project, has remained in close contact with staff throughout the Project planning phase, and filed an application for a CWSRF construction loan. CWSRF staff has indicated that financing will be available for the Project.
- **The CWSRF loan includes rolling the existing CWSRF planning loan into a 30-year construction loan term.** The District secured a planning loan in July 2010 for the planning costs of the Project. Per the CWSRF current policies, the planning loan can be rolled into the construction loan. The rate model also assumes that the District will be offered a loan with a 30-year term “Extended Term Financing” in order to help alleviate the community of the heavy cost burden associated with the Project. Extended Term Financing (ETF) is only available to Disadvantaged communities. The District is categorized as a Disadvantaged community because it requires substantial water quality investment for a total population of less than 20,000 with a cost burden that exceeds 4 percent of the community’s median household income (MHI). No other ETF incentives such as principal forgiveness are assumed in this model.
- **The CWSRF loan does not refinance existing debt.** As a Disadvantaged community, the District may be able to refinance existing debt for the WWTP. Since it is unknown whether the facilities originally financed with the existing debt are all eligible under the CWSRF program at this time, the rate model does not incorporate refinancing. If refinancing is approved, wastewater rates would be reduced from those calculated in this report.
- **System rehabilitation costs for the WWTP are incorporated into rates.** The District does not currently include system rehabilitation costs in its rate-setting. In this cost of service study system rehabilitation is calculated based on existing and estimated Project assets depreciation schedules. System rehabilitation cost increases from 13% to 20% of estimated depreciation costs between 2013 and 2016.
- **Total cost share of the District is 56% of the total estimated Project cost in 2011 dollars.** Under the existing service agreement between the District and SLCWD, DSPUD is responsible for 56% of costs. The terms of the service agreement will likely be renegotiated as a result of the proposed Project; however, since the agreement has not yet been renegotiated, the cost of service allocates Project cost and operations and maintenance costs of the treatment plant 56% to the District and 44% to SLCWD.

- **District customers are either “Inside CFD No. 1” or “Outside CFD No. 1”.** The District formed Community Facilities District (CFD) No. 1 and the election was canvassed September 20th, 2011. All properties within the District were included in the CFD boundary. Properties paying rates currently for wastewater EDUs and properties that requested EDUs for future growth identified as immediately taxable were given the opportunity to vote for the CFD. As provided in greater detail in the report, not all properties approved of the CFD. As a result, properties are either Inside the CFD or Outside the CFD with differing rates. Inside CFD No. 1 customers will pay for the Project with special taxes. Outside CFD No. 1 customers will pay for the Project with wastewater rates.
- **Properties outside CFD No. 1 must pay a connection fee.** To pay for the expansion cost portion of the WWTP, new users must pay a connection fee (if they are Outside CFD No. 1) or a one-time special tax (if they are Inside CFD No. 1). One-time special taxes become a lien on the property with the full rights of the County to collect in an expeditious manner. Connection fees are not enforceable; as such, although 61 EDUs were requested by Outside CFD No. 1 properties for future growth in 2011, the rate model assumes only 49 EDUs pay the connection fee within the next five years.

Connection fees must be paid before April 1, 2012 to avoid financing charges. The CWSRF will offer a funding agreement contingent on applicant cash and total amount to be borrowed before the Project is awarded. The District must know how much cash is raised from connection fees for the Project prior to executing the final funding agreement.

- **The connection fee will increase each year by the amount that the property would have paid in rates for the Project since January 2012.** The WWTP design includes 61 EDUs for future growth outside CFD No. 1. Since the WWTP designed capacity cannot be reduced if the demand for EDUS does not materialize, all Outside CFD No. 1 customers paying rates will carry the cost share for the additional (unallocated) EDUs. The connection fee must therefore increase by the amount paid in rates by EDU holders /customers for the unallocated EDUs.

1.3.1 User Definitions

In addition to these major assumptions, the following definitions are used to describe the types of customers that will pay wastewater rates. An EDU refers to an 'equivalent dwelling unit'. One EDU is the typical wastewater characteristic of one home.

“Existing EDUs” means EDUs that are currently connected to the WWTP.

“Future EDUs” means EDUs that have been purchased by property owners in order to connect to the WWTP in the future and for which there is current capacity in the WWTP.

“Expansion EDUs” means EDUs that will be served with available capacity from the expansion of the WWTP.

1.4 SUMMARY OF CALCULATED RATES, CHARGES, AND SPECIAL TAXES

Calculated wastewater rates through 2016 are shown below in **Table 1**. Wastewater rates are calculated on a per EDU basis for Inside CFD No. 1 customers and Outside CFD No. 1 customers. Existing customers pay full rates because they currently send wastewater flow to the WWTP. Future customers include customers that have purchased an EDU but do not yet send wastewater flow to the WWTP; as such, this category includes both Future EDUs and Expansion EDUs as defined above. Future customers pay reduced rates to cover their share of debt service and a portion of operations and maintenance expenses.

Wastewater rates for Inside CFD No. 1 customers increase primarily due to the inclusion of rehabilitation costs for the WWTP upon completion of the Project, and also small increases in operations and maintenance costs for the entire wastewater system. Project costs (the debt service for a CWSRF loan) for Inside CFD No. 1 customers are paid for through special tax payments.

Wastewater rates for Outside CFD No. 1 customers also increase due to the inclusion of rehabilitation costs for the WWTP upon completion of the Project, and small increases in operations and maintenance costs for the entire wastewater system; however their rates are primarily driven by servicing their share of the CWSRF loan repayments.

The calculated connection fee for Outside CFD No. 1 customers is also provided in **Table 1**.

Table 1
Calculated Wastewater Rates and Connection Fees through 2016

Rates by Customer	Current	Calculated Rates				
		2012	2013	2014	2015	2016
	<i>Effective Date</i>	<i>1/1/2012</i>	<i>7/1/2012</i>	<i>7/1/2013</i>	<i>7/1/2014</i>	<i>7/1/2015</i>
Existing Customers						
			<i>Charge per EDU per Month</i>			
Inside CFD No. 1	\$110.32	\$110.32	\$110.32	\$114.83	\$116.24	\$117.58
Outside CFD No. 1	\$110.32	\$127.03	\$143.06	\$164.28	\$165.69	\$167.02
Future Customers						
Inside CFD No. 1	\$45.72	\$45.72	\$46.12	\$47.99	\$48.58	\$49.13
Outside CFD No. 1 [1]	\$45.72	\$62.43	\$78.86	\$97.44	\$98.02	\$98.58

"sum in out"

[1] Connection Fee:	\$1,070	prior to April 1, 2012
Outside CFD No. 1 Only	\$1,772	Apr 2012 - Jun 2012
	\$2,362	Jul 2012 - Jun 2013
	\$3,542	Jul 2013 - Jun 2014
	\$5,312	Jul 2014 - Jun 2015
	\$7,672	Jul 2015 - Jun 2016

1.5 IMPACT TO RESIDENTIAL WASTEWATER CUSTOMERS

The total cost impact of the Project to wastewater customers is substantial, even assuming ETF (a 30-year loan). As demonstrated in **Table 2**, customer costs will increase from \$110.32 per month per EDU to approximately \$165.70 per month per EDU upon Project completion in 2014. The cost increase represents an increase of 50% to customers, and it pushes the amount of monthly income spent on wastewater service from 3.2% of MHI to 4.9% of MHI.

Table 2
Wastewater Service Costs per Residential Customer at Project Completion

Item	Current	Projected at 2014-2015	
		Inside CFD No. 1	Outside CFD No. 1
Existing Residential Customers			
Current Monthly Sewer Rate	\$110.32	\$110.32	\$110.32
Estimated Additional Sewer Rates @ Project Completion		\$5.92	\$55.37
CFD No. 1 Special Tax		\$49.42	\$0.00
Estimated Total Monthly Burden	\$110.32	\$165.66	\$165.69
<i>Percentage Increase</i>		<i>50%</i>	<i>50%</i>
2009 monthly MHI (per CWSRF)	\$3,401.42	\$3,401.42	\$3,401.42
Sewer Bill as % of MHI	3.2%	4.9%	4.9%

Source: HEC and CWSRF July 2010 Planning Loan

"afford"

Section 2: DESCRIPTION OF THE DISTRICT AND THE PROJECT

2.1 SERVICE TERRITORY AND CUSTOMER BASE

The District’s service territory comprises approximately 13 square miles encompassing the I-80 corridor and communities of Norden and Soda Springs in the Donner Summit region. Illustration of the District’s service territory is provided in Section 3 of this report. The District’s customer base is limited to residential users and commercial activity including the CalTrans rest stops along I-80 and several ski resorts that operate on the summit. The District has no industrial users.

Currently, the District serves 818.5 wastewater EDUs, and treats wastewater from 816 EDUs in SLCWD. There are 102 EDUs within the District currently allocated to properties that have paid connection fees but not yet connected to the WWTP. Early in 2011, the District sent a letter to its customers advising that if a property owner wanted to buy capacity in the WWTP Project, the property owner needed to notify the District of its intent to do so. The WWTP has been sized for DSPUD based on the response to that survey. In total, an additional 162 DSPUD EDUs are incorporated into the design for the WWTP. The SLCWD estimate of expansion EDUs is based on land use designations within its service territory and anticipated buildout per Placer County’s General Plan. In total the new WWTP is designed to serve 2,136 EDUs with a safety margin, as shown in **Table 3**.

Table 3
Total Number of EDUs Served by the Project

District EDUs	Total EDUs			Total
	Existing	Future	Expansion	
Existing Plant				
Donner Summit PUD	818.5	102.0	0.0	920.5
Sierra Lakes CWD	816.0	0.0	0.0	816.0
Total Existing Plant	1,634.5	102.0	0.0	1,736.5
Expansion				
Donner Summit PUD	0.0	0.0	162.0	162.0
Sierra Lakes CWD	0.0	0.0	238.0	238.0
Total Expansion	0.0	0.0	400.0	400.0
Total Donner Summit PUD	818.5	102.0	162.0	1,082.5
Total Sierra Lakes CWD	816.0	0.0	238.0	1,054.0
Total EDUs Served [1]	1,634.5	102.0	400.0	2,136.5

Source: DSPUD and SLCWD.

"edus"

[1] Total EDUs potentially served by plant upon Project completion.

Table 4 projects the number of DSPUD customers inside and outside CFD No. 1 through 2016. The projection of number of Future and Expansion EDUs becoming Existing EDUs is based on interviews with major landowners.

Table 4
Current and Projected Wastewater Customers (in EDUs)

EDU Type	2011	Projected				
		2012	2013	2014	2015	2016
Inside CFD No. 1		<i>All figures are EDUs</i>				
Existing	342.8	343.8	346.8	351.8	355.8	360.8
Future and Expansion	42.4	142.4	139.4	134.4	130.4	125.4
Total Inside CFD No. 1 EDUs	385.3	486.3	486.3	486.3	486.3	486.3
Outside CFD No. 1						
Existing	475.7	476.7	477.7	478.7	479.7	480.7
Future and Expansion	59.0	119.0	118.0	117.0	116.0	115.0
less Outside CFD No. 1 Expansion EDUs	0.0	-61.0	-61.0	-61.0	-61.0	-61.0
plus Outside CFD No. 1 Expansion EDUs paid [1]	0.0	49.0	49.0	49.0	49.0	49.0
Total Outside CFD No. 1 EDUs	534.7	583.7	583.7	583.7	583.7	583.7
Total Rate-payers						
Existing	818.5	820.5	824.5	830.5	835.5	841.5
Future	101.4	249.4	245.4	239.4	234.4	228.4
Total Rate-paying EDUs	919.9	1,069.9	1,069.9	1,069.9	1,069.9	1,069.9

Source: DSPUD and HEC.

"proj cust"

[1] Assumed number of EDUs that pay the connection fee by April 1, 2012.

The WWTP improvements are designed to accommodate projected peak week average demand from DSPUD and SLCWD. During the peak week, flow per EDU is currently just over 417 gallons per day from DSPUD customers¹. Total capacity of the WWTP is 0.8 million gallons per day (MGD), of which 0.452 MGD is anticipated from DSPUD, and 0.348 MGD from SLCWD.

Table 5 on the following page summarizes the number of EDUs and wastewater user characteristics.

¹ Although not elaborated on in this report, an EDU is not equal in terms of flow and load for DSPUD and SLCWD. Please refer to the Engineering Report for further information. A safety margin is necessary for this location; given the extreme weather conditions and peaking use of the facilities during the ski season, the improvements may not perform to the specifications achieved in more stable environmental and demand conditions.

**Table 5
Summary of Wastewater User Characteristics**

Customer Category	Basis of Charge	Units/ EDUs	Flow per EDU	Flow MGD
		<i>(A)</i>	<i>(B)</i>	<i>C= Ax B</i>
Existing			[1]	
Residential	per EDU	252.0	417.1	0.105
Commercial	per EDU	541.5	417.1	0.226
CalTrans [2]		25.0	417.1	0.010
SubTotal Existing		818.5		0.341
Future and Expansion				
Future	per EDU	102.0	417.1	0.043
Expansion	per EDU	162.0	417.1	0.068
Subtotal Future and Expansion		264.0		0.110
Total Donner Summit PUD [3]		1,082.5		0.452
Sierra Lakes CWD [3]				0.348
Total Wastewater Plant [3]				0.800

Source: Stantec and DSPUD.

"user char"

[1] Peak Week Average Gallons per Day per EDU. Only flow is considered in this rate analysis.

This is typical for smaller cities/districts.

[2] Includes Caltrans rest areas, which is paid by separate contract.

[3] Totals include infiltration and inflow.

2.2 PROJECT DESCRIPTION AND ESTIMATED COST

The WWTP effluent disposal is regulated under a NPDES permit and waste discharge requirements (WDRs) adopted by the California Regional Water Quality Control Board, Central Valley Region Quality Control Board (CVRWQCB) and must be updated every five years. The CVRWQCB adopted new waste discharge requirements for the District's facilities with the adoption of WDRs Order No. R5-2009-0034 (adopted on April 24, 2009). Concurrent with the adoption of new WDRs, the CVRWQCB adopted Cease and Desist Order (CDO) No. R5-2009-0035, which provided a new schedule to achieve compliance with effluent limitations on a number of chemical constituents, including ammonia and nitrate. The District's Facilities Plan accounts for the requirements of the CDO and the current WDRs. As a result, the District proposes to implement several improvements to the existing WWTP in order to comply with WDR and CDO requirements. The proposed improvements are expected to bring the WWTP into compliance with final effluent limitations for ammonia, nitrate and disinfection by-products within the ordered time schedule in the CDO and current WDRs. The upgrades will increase capacity of the WWTP to 0.8 MGD but will not increase the regulated flow of effluent from the WWTP to the South Yuba River above the 0.52 MGD limit adopted by the CVRWQCB in the current WDRs.

The proposed WWTP upgrades would occur on National Forest System (NFS) lands within the existing area permitted to DSPUD under a special-use permit by the United States Forest Service (Forest Service), Tahoe National Forest. The project also includes the proposed expansion of the existing effluent irrigation disposal on a parcel owned by Boreal Ridge Corporation, which lies adjacent to the west of the Soda Springs Ski Area.

The District is requesting an amended Special Use Permit for the next 30 years of WWTP operation once the WWTP is upgraded. The proposed wastewater facilities improvements will provide upgraded treatment to meet new discharge requirements and increased capacity to accommodate moderate growth in the service area consistent with Nevada and Placer counties General Plans.

2.2.1 Project Cost Estimate

The total estimated \$23.5 million Project cost is shown in **Table 6**. Of this amount, approximately \$1.5 million is for planning costs funded through a planning loan with the CWSRF, and \$22.0 million for construction costs including both hard and soft costs.

**Table 6
Project Cost Estimate**

Item	Cost
	2011 \$
Planning Costs	
Feasibility Study	\$311,900
Financial Strategy and Applications	\$207,000
Environmental Documents and Permitting	\$537,500
Preliminary Design Report	\$382,200
Public Outreach and Education	\$39,400
Total Planning Costs	\$1,478,000
Construction Costs	
Wastewater Treatment Plant	\$14,512,800
Expanded Irrigation Spray System	\$230,400
Contingency	\$2,211,000
2-year Project Cost Escalation	\$685,000
Soft Costs	\$4,410,000
Total Construction Costs	\$22,049,200
TOTAL PROJECT COST ESTIMATE	\$23,527,200

Source: Stantec and HEC.

"tot cost"

Section 3: PROJECT FINANCING PLAN

Total Project costs are allocated first between the District and SLCWD. Under the existing service agreement between the District and SLCWD, DSPUD is responsible for 56% of costs. The terms of the service agreement will likely be renegotiated as a result of the proposed Project; however, since the agreement has not yet been renegotiated, the cost of service allocates Project cost and operations and maintenance costs of the treatment plant 56% to the District and 44% to SLCWD. The Project cost share for DSPUD is \$12.35 million for construction and \$0.83 million for planning costs for a total of \$13.17 million.

3.1 SOURCES AND USES OF FUNDS

Table 7 shows the sources of funding for the \$23.5 million project. The District will fund its cost share through a combination of CWSRF loan(s) and cash. It is anticipated that SLCWD will fund its cost share with USDA bond funding and other sources of financing.

Table 7
Projected Sources and Uses of Funds

Item	Amount
Sources of Funds	
Estimated CWSRF Loan	\$13,014,732
Estimated SLCWD Financing (through USDA / other)	\$10,351,968
New Growth Up-Front Contribution (DSPUD Customers)	\$160,500
Total Sources	\$23,527,200
Uses of Funds	
Planning	\$1,478,000
Construction	\$22,049,200
Total Uses of Funds	\$23,527,200

Source: CWSRF July 2010 planning loan, HEC.

"source"

3.2 DSPUD FUNDING SOURCES

As described further in this section, the District's cost share will be funded by cash and a CWSRF loan. Cash will be accumulated from one-time special taxes and connection fees. The CWSRF loan will be repaid through a combination of CFD No. 1 special taxes and rates.

3.2.1. Donner Summit PUD Community Facilities District No. 1

DSPUD's Board initiated proceedings to form a Community Facilities District (CFD) in February 2011 to fund the Project for the following reasons:

- The District was exploring the possibility of financing with USDA, which would require a land-secured source of repayment for such a large project,
- The District was seeking a way to minimize total cost burden to its customers; since CFDs levy special taxes, and taxes are deductible from income, this would be advantageous to customers,
- A CFD could be structured in any way desired and tailored to the advantage of the different economic interests of the District's customers,
- By voting to be levied special taxes, expansion EDUs would be committed to pay for the cost of the WWTP expansion.
- Special taxes are approved by a two-thirds majority and are not subject to the requirements of proposition 218, making the future revenue stream very secure.
- CFD special taxes would be collected by Nevada and Placer counties. Any special tax delinquencies would be pursued by the counties with faster recoupment of income than collection of rate delinquencies by placement on the tax roll.

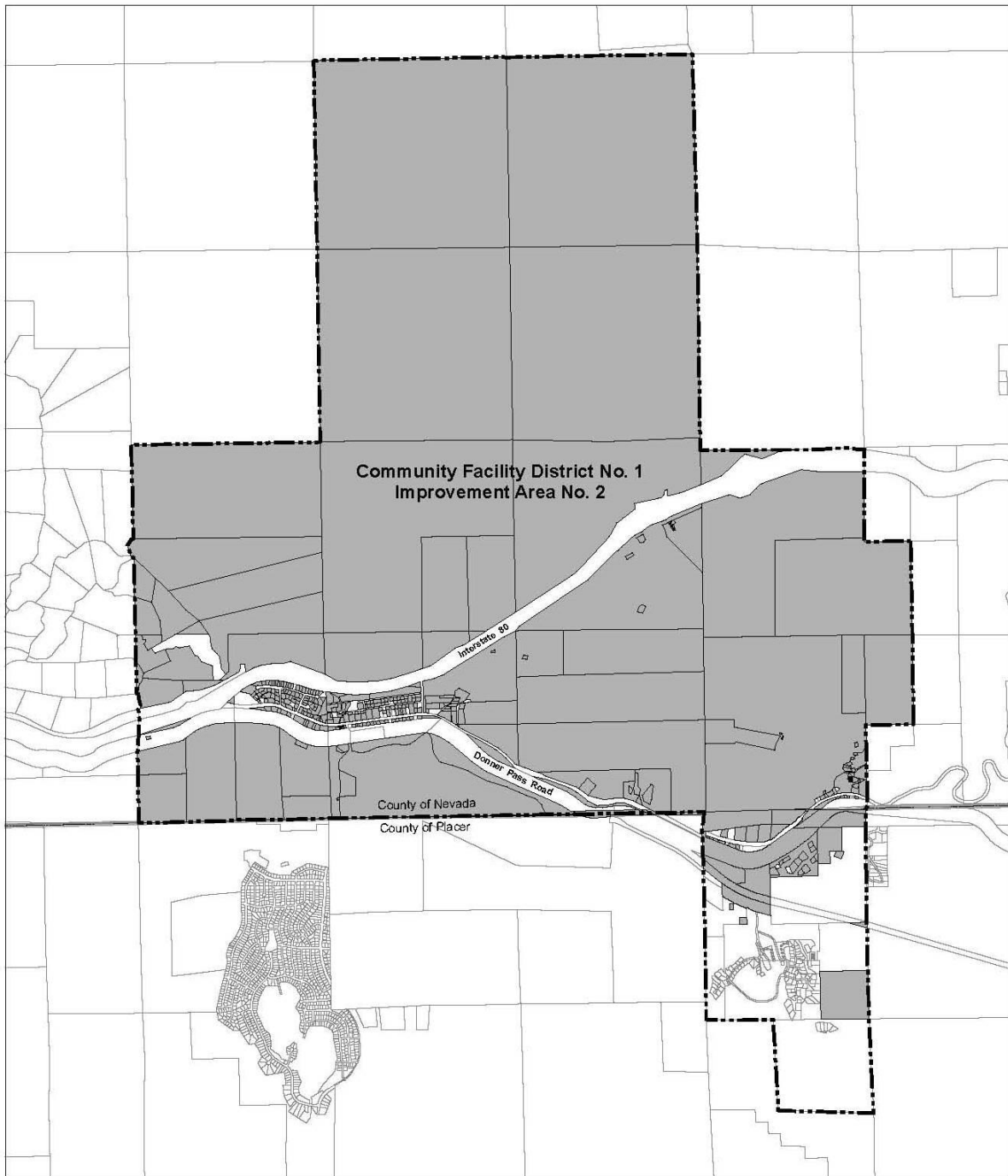
To maximize votes by landowners rather than tenants, minimize the potential for one economic interest to outweigh another, and stay within the confines of the Mello-Roos law, three separate improvement areas were designated. Improvement area 1 encompassed the Sugar Bowl resort area and Sugar Bowl holdings along Donner Pass Road, Area 2 encompassed the landowners that have either commercial interests or are part-time residences with or without tenants. Area 3 encompassed properties with registered voters to include the majority of properties with full-time residents. A hearing report describing the CFD's authority and function was prepared for the Resolution of Formation of CFD No. 1 in May 2011. Please refer to this document for specific details about the CFD.

Ballots were opened and tabulated September 20, 2011. The results of the election were that Areas 1 and 3 approved of the special tax but Area 2 did not. All customers within Area 2 are Outside CFD No. 1, and will pay for their share of the Project with rates. Inside CFD No. 1 customers will pay with special taxes. **Map 1** shows the District's service territory with the failed Area 2 parcels shaded. All parcels in Area 2 are the Outside CFD No. 1 properties.

3.1.2 CWSRF Loan Repayment

DSPUD's total cost share is allocated to Inside and Outside CFD No. 1 customers per the number of EDUs within each area. About 45% of all EDUs, including Existing, Future, and Expansion EDUs are Inside CFD No. 1, and 55% Outside CFD No. 1. Accordingly, \$5.92 million is allocated Inside CFD No. 1 and \$7.25 million is allocated Outside CFD No. 1. After deducting the amount of cash estimated to be raised through connection fees and one-time special taxes, \$13.01 million must be financed.

Map 1
District Service Territory and Outside CFD No. 1 Parcels (Shaded)



The District anticipates the CWSRF loan will include both construction and refinancing of the existing planning loan. The refinanced planning loan excludes SLCWD’s share which will be repaid immediately to the CWSRF using payments already received from SLCWD.

The calculated annual CWSRF debt service payment is approximately \$638,500, of which Inside CFD No. 1 customers are responsible for \$287,400 (rounded) and Outside CFD No. 1 customers are responsible for \$351,100 (rounded), as calculated in **Table 12** below. The CWSRF debt service payment is calculated using the current program interest rate of 2.7% and extended term financing of 30 years (conventional loans are 20 years) because the community is classified as Disadvantaged.

**Table 8
Project Costs and Revenue Source by Customer Type**

Calculation	EDU Type			Total
	Existing	Future	Expansion	
Number of EDUs				
Inside CFD No. 1	342.81	42.44	101.00	486.25
Outside CFD No. 1 (includes CalTrans)	475.69	59.00	61.00	595.69
Total Number of EDUs	818.50	101.44	162.00	1,081.94
<i>% Inside CFD No. 1</i>	<i>42%</i>	<i>42%</i>	<i>62%</i>	<i>45%</i>
Estimated Costs				
Construction	\$9,143,965	\$1,139,505	\$2,064,082	\$12,347,552
Planning (DSPUD share only)	\$625,825	\$77,989	\$123,865	\$827,680
Total Estimated Costs	\$9,769,791	\$1,217,494	\$2,187,948	\$13,175,232
Costs Inside CFD No. 1	\$4,091,853	\$509,369	\$1,364,091	\$5,921,268
less one-time special taxes			(\$108,070)	(\$108,070)
CFD No. 1 Costs Financed	\$4,091,853	\$509,369	\$1,256,021	\$5,813,198
Outside CFD No.1	\$5,677,937	\$708,124	\$823,857	\$7,253,964
less connection fees paid			(\$52,430)	(\$52,430)
Total Costs Financed	\$9,769,791	\$1,217,494	\$2,027,448	\$13,014,732
Financing Charges [1]	\$4,609,629	\$574,436	\$956,592	\$6,140,658
Total Costs with Financing Charges [1]	\$14,379,420	\$1,791,930	\$2,984,040	\$19,155,390
Annual CWSRF Debt Service Payment				
A. Inside CFD No. 1 Debt Service	\$479,314	\$59,731	\$99,468	\$638,513
B. Outside CFD No. 1 Debt Service	\$200,750	\$24,990	\$61,621	\$287,361
	\$278,564	\$34,741	\$37,847	\$351,152

cost by type

[1] Loan Terms:

Current CWSRF Interest Rate	2.70%
Term (years)	30

Table 13 demonstrates a) CFD No.1 maximum special tax revenue and b) repayment of the CWSRF loan over the next five years. Per the CFD tax formula, if annual costs of the CFD are less than revenues that would be raised by levying the maximum special taxes, the special tax shall be lowered. If annual costs are greater than revenues, the maximum special tax shall be levied, and additional rates shall be charged to cover debt service. Outside CFD No. 1 customers will pay all debt service with rates.

Under the assumption that the District's Project cost share is 56%, total annual costs (debt service plus other administrative costs) for Inside CFD No. 1 customers are slightly greater than projected revenue. In **Table 13** this is shown as collection of an additional \$4,015 per year. If actual Project costs are less than estimated in 2011 or the District pays less than 56% of total Project cost, Inside CFD No. 1 properties will not pay for any Project costs in rates.

Table 9
CFD No. 1 Special Taxes and Repayment of CWSRF Loan

Item	Fiscal / Tax Year Ending				
	2012	2013	2014	2015	2016
CFD No. 1 Share of Debt Service		\$287,361	\$287,361	\$287,361	\$287,361
Estimated Other Costs (<i>CFD administration</i>)	\$0	\$5,000	\$5,000	\$5,000	\$5,000
Total Estimated Annual Costs CFD No. 1	\$0	\$292,361	\$292,361	\$292,361	\$292,361
<u>Expansion EDUs One-Time Special Taxes</u>	101.00				
One-time Expansion Special Tax	\$1,070	\$0	\$0	\$0	\$0
Expansion Special Tax Revenue [1]	\$108,070	\$0	\$0	\$0	\$0
		<u>Annual Special Taxes</u>			
Taxable EDUs		486.3	486.3	486.3	486.3
Calculated Maximum Special Tax		\$593	\$593	\$593	\$593
Total Maximum Special Taxes		\$288,346	\$288,346	\$288,346	\$288,346
<i>Annual Costs as % of Maximum Special Taxes</i>		101%	101%	101%	101%
Calculated Special Tax Levy per EDU		\$593	\$593	\$593	\$593
		<u>Repayment of CWSRF Loan</u>			
	<i>CWSRF Payments Due November</i>		<i>Reserve Fund 1st Debt Service</i>		
		[2]			
Estimated November CWSRF Payment		\$638,513	\$638,513	\$638,513	\$638,513
Revenue	\$0	\$117,051	\$0	\$0	\$0
CFD No. 1 Special Tax Revenue	\$0	\$288,346	\$288,346	\$288,346	\$288,346
Outside CFD No. 1 Rate Revenue	\$117,051	\$234,101	\$351,152	\$351,152	\$351,152
Total Revenues for Debt Service	\$117,051	\$639,498	\$639,498	\$639,498	\$639,498
Special Tax Revenue Remaining for future		\$0	\$0	\$0	\$0
Inside CFD No. 1 Debt Service paid by Rates		\$4,015	\$4,015	\$4,015	\$4,015
Total Revenues	\$117,051	\$643,513	\$643,513	\$643,513	\$643,513
Debt Service	\$0	\$638,513	\$638,513	\$638,513	\$638,513
Administrative Charges	\$0	\$5,000	\$5,000	\$5,000	\$5,000
Total Costs	\$0	\$643,513	\$643,513	\$643,513	\$643,513
End Balance	\$117,051	\$0	\$0	\$0	\$0

Source: HEC.

"cfd flow"

[1] One-time special taxes hand-billed by Donner Summit PUD make cash payment toward Project cost.

[2] CWSRF loan Reserve Fund must be collected by June 2013.

SECTION 4: WASTEWATER OPERATIONS HISTORICAL AND PROJECTED FINANCIALS

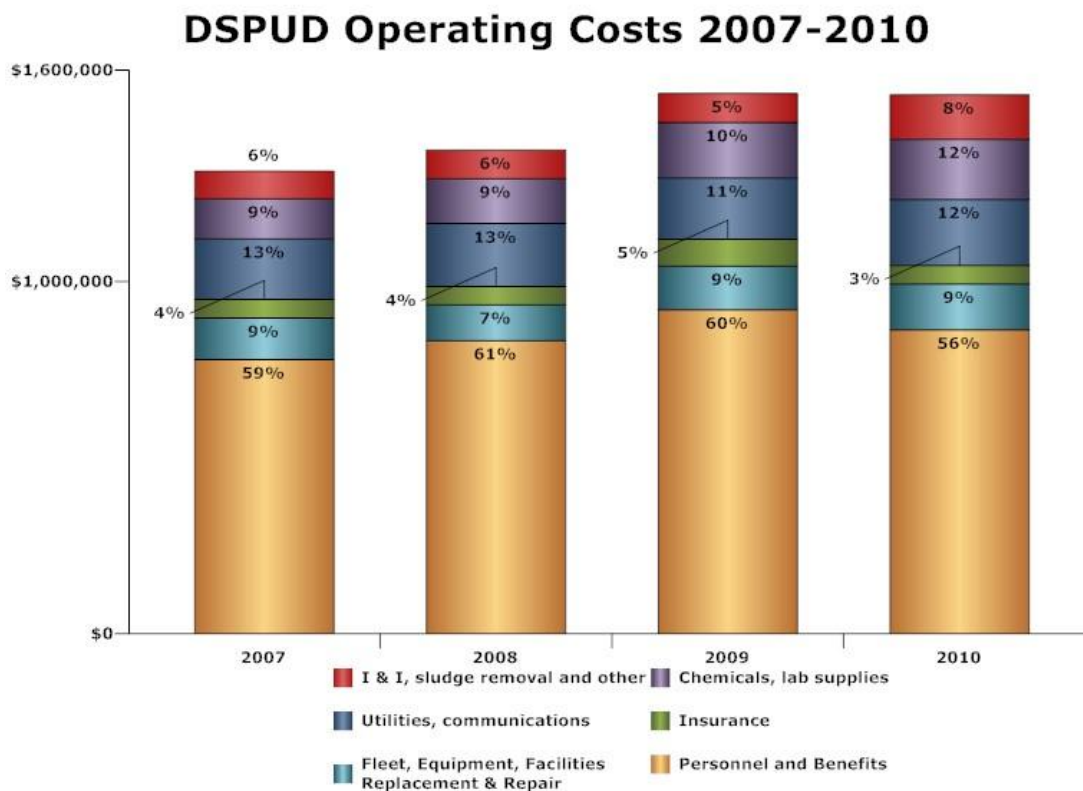
4.1 CUSTOMER BILLING AND RATE SCHEDULE

As the District serves a small community with no industrial users, they have a very simplified rate structure based on flow per equivalent dwelling unit (EDU). Each Existing EDU (the EDU holder /customer is connected and sends wastewater flow to the WWTP) is currently charged a flat fee of \$110.32 per month. Each Future EDU (the EDU holder /customer has paid for capacity at the WWTP but not yet connected) is currently charged a flat fee of \$45.72 per month. Future customers pay 41% of existing customers to cover their share of debt service for the WWTP and a portion of operation and maintenance costs. Customers are billed each quarter.

4.2 HISTORICAL OPERATING COSTS AND REVENUES

Detailed historical budgeted operating costs for the wastewater collection system and WWTP, and actual costs since 2007 are provided in Appendix A **Tables A-1** through **A-3**. **Figure 1** below shows the District’s actual wastewater system operating costs since 2007.

Figure 1



Between 2007 and 2010 operating expenses increased at an average of 2.0% per year with the exclusion of costs for infiltration/inflow expenditures, which vary significantly from year to year, and chemical costs which will change in the future with modification of the WWTP. The District's average annual percentage increase in costs mirror the California and San Francisco Consumer Price Indices, as shown in **Table A-3**.

4.3 PROJECTED WASTEWATER SYSTEM EXPENSES AND REVENUES

The calculated rates are based on a projection of annual wastewater costs and revenues for operations and maintenance and capital costs of wastewater operations. The projection of costs by year uses 2011 as the base year. Budgeted 2011 non-operating revenues and expenses were adjusted in consideration of the continuing economic recession, the removal of an existing G.O. Bond which was paid off, and other minor adjustments. Base year 2011 financials and assumptions for projecting each expense and revenue category through 2016 are shown in **Table 10** on the following page.

All operating expenses are projected by applying the District's historical average annual increase of 2.0% with the exception of chemical costs and infiltration/inflow costs, which are held constant. Utilities costs, which comprise a large portion of operating costs, are increased by the District's historical average annual utilities expense increase of 2.9%. Additional operating costs for the WWTP upon completion of the Project are captured in section 4.3.2 below.

Table A-4 shows the projection of revenues and costs by wastewater collection and WWTP functions through 2016. In addition, District administration costs are shared by wastewater and water operations. The allocation of administration costs through 2016 is projected in **Table A-5**.

4.3.1 System Rehabilitation Costs

The District does not currently include depreciation to fund major capital replacement costs in its rate-setting. System rehabilitation funding is typically driven by Board policy. It is recommended that some inclusion of costs for system rehabilitation be incorporated into the rates upon completion of the Project to demonstrate fiscal responsibility toward the assets to CWSRF and to establish good credit².

For purposes of this rate study, system rehabilitation funding needs are calculated based on existing assets and estimated Project assets depreciation schedules. The level of system rehabilitation funds is phased in from 13% in fiscal year ending 2013 to 20% in fiscal year ending 2015, and each year thereafter.

² Per Governmental Accounting Standards Board (GASB) 34, local governments must report on the value of their infrastructure assets and plan for asset maintenance (including collecting sufficient revenue) to obtain good credit when issuing bonds or procuring other forms of financing for long-term construction projects.

Table 10
Revenue and Expenses Projections Assumptions

Revenues and Expenses	2011			Total 2011 Base	Projection Assumptions
	Budget	Operations	Admin		
Revenues					
Sewer service charges	\$1,113,912	na	na	na	Determined by revenue requirement
Cal Trans service charges	\$21,336	na	na	na	Determined by revenue requirement
Sierra Lakes CWD charges	\$395,099	na	na	na	44% of operating expense excluding debt, plus 14% administration
Non-Operating Revenue					
Property tax	\$134,501	\$110,597	[1]	\$110,597	Average of past 4 years, increase by 2% per year
GO Bond revenue	\$8,000	\$0	\$0	\$0	Ceases after June 2011
Other	\$11,076	\$0	\$29,456	\$29,456	Average of past 4 years, hold constant
Interest	\$0	\$0	\$1,073	\$1,073	Uses 2010 actual for base, increase by California CPI (see Table A-3)
Connection fees	\$0	\$0	\$0	\$0	Applied to applicant share of total cost
Operating Expense					See Table A-3 for historical annual increases
Salaries	\$499,477	\$276,948	\$222,529	\$499,477	Inflated by historical District expenses excluding infiltration and chemicals
Employee Benefits	\$144,488	\$105,036	\$39,452	\$144,488	Inflated by historical District expenses excluding infiltration and chemicals
Board Expense	\$15,189	\$0	\$15,189	\$15,189	Inflated by historical District expenses excluding infiltration and chemicals
Professional fees	\$59,580	\$12,000	\$47,580	\$59,580	Inflated by historical District expenses excluding infiltration and chemicals
IRS Payroll Back Taxes	\$17,316	\$0	\$17,316	\$17,316	Inflated by historical District expenses excluding infiltration and chemicals
Dues and Subscriptions	\$4,006	\$660	\$3,346	\$4,006	Inflated by historical District expenses excluding infiltration and chemicals
Fees, permits, certifications, leases	\$36,249	\$21,771	\$14,478	\$36,249	Inflated by historical District expenses excluding infiltration and chemicals
Training and education	\$2,750	\$2,750	\$0	\$2,750	Inflated by historical District expenses excluding infiltration and chemicals
Travel	\$0	\$0	\$0	\$0	Inflated by historical District expenses excluding infiltration and chemicals
Insurance	\$46,680	\$42,000	\$4,680	\$46,680	Inflated by historical District expenses excluding infiltration and chemicals
Office supplies	\$2,810	\$1,250	\$1,560	\$2,810	Inflated by historical District expenses excluding infiltration and chemicals
Utilities, communication	\$180,844	\$161,500	\$19,344	\$180,844	Inflated by historical District expenses excluding infiltration and chemicals
Chemicals and lab supplies	\$119,656	\$119,656	\$0	\$119,656	Held constant
Lab testing	\$89,330	\$89,330	\$0	\$89,330	Inflated by historical District expenses excluding infiltration and chemicals
Equipment maintenance / repair	\$26,780	\$26,000	\$780	\$26,780	Inflated by historical District expenses excluding infiltration and chemicals
Small equipment and rental	\$1,700	\$1,700	\$0	\$1,700	Inflated by historical District expenses excluding infiltration and chemicals
Operating supplies	\$4,500	\$4,500	\$0	\$4,500	Inflated by historical District expenses excluding infiltration and chemicals
Infiltration - Inflow	\$15,000	\$15,000	\$0	\$15,000	Held constant
Sludge removal	\$7,000	\$7,000	\$0	\$7,000	Inflated by historical District expenses excluding infiltration and chemicals
Fleet maintenance	\$36,576	\$36,576	\$0	\$36,576	Inflated by historical District expenses excluding infiltration and chemicals
Facilities maintenance	\$30,460	\$25,000	\$5,460	\$30,460	Inflated by historical District expenses excluding infiltration and chemicals
Non-Operating Expense					
Interest expense	\$0	\$0	\$0	\$0	None anticipated
Land leases [2]	\$21,622	\$20,000	\$1,622	\$21,622	Held constant
Long term debt [3]	\$260,046	\$238,429	\$0	\$238,429	Per debt schedule (see Table A-8)

Source: HEC. "base"

[1] Non-operating revenue allocated to sewer operations. See Table A-2.

[2] Spray irrigation lease amortization under wastewater operations, administration lease costs allocated to wastewater operations.

[3] Long term debt for sewer facilities only.

Of the total system rehabilitation funding needs, 44% of the wastewater treatment plant and irrigation system is allocated to SLCWD per the terms of the service agreement between the two agencies. **Table 11** summarizes the projection of system rehabilitation funding needs and cost share based on information provided in support **tables A-6 and A-7**.

Table 11
Summary Estimated System Rehabilitation Funding Needs

Asset Type	2012	2013	2014	2015	2016
Existing Assets					
Wastewater Plant	\$110,700	\$110,700	\$110,700	\$110,700	\$110,700
Sewer Collection	\$29,000	\$29,000	\$29,000	\$29,000	\$29,000
Vehicles and Equipment	\$30,600	\$30,600	\$30,600	\$30,600	\$30,600
Total Existing Assets	\$170,300	\$170,300	\$170,300	\$170,300	\$170,300
New (Project) Assets					
Treatment Plant			\$207,500	\$414,900	\$414,900
Irrigation System			\$2,800	\$5,500	\$5,500
Total Project Assets	\$0	\$0	\$210,300	\$420,400	\$420,400
Estimated Total Annual Depreciation	\$170,300	\$170,300	\$380,600	\$590,700	\$590,700
	0%	13%	15%	20%	20%
System Rehabilitation Funding in Rates	\$0	\$76,800	\$88,600	\$118,100	\$118,100
DSPUD Share	\$0	\$70,468	\$67,414	\$71,363	\$71,363
SLCWD Share [1]	\$0	\$7,219	\$24,152	\$53,280	\$53,280

Source: Donner Summit PUD Audited Financial Statements 2010 and HEC.

"tot depr"

[1] Calculated as treatment plant and irrigation system expenses multiplied by cost allocation factors:

Percentage of expenses	44%
Administrative expenses	14%

4.3.2 Additional Future Operations Costs

Projected costs of wastewater operations must include additional costs likely incurred upon completion of the Project.

Table 12 below provides the Project engineer's estimates of additional operating costs of the improved WWTP in current and inflated dollars. Additional operating costs are allocated between DSPUD and SLCWD using the current contract percentage split of 56% DSPUD and 44% SLCWD.

Table 12
Estimated Additional Operations Costs from Project

Additional Cost Description	2011 Estimate	Projected Cost				
		2012	2013	2014	2015	2016
Additional Power Costs						
Membrane System Power	\$10,000	\$0	<i>half costs</i> \$5,000	<i>full costs</i> \$10,000	<i>full costs</i> \$10,000	<i>full costs</i> \$10,000
UV System Power	\$8,000	\$0	\$4,000	\$8,000	\$8,000	\$8,000
Propane for Heating Wastewater	\$40,000	\$0	\$20,000	\$40,000	\$40,000	\$40,000
Power for Mxing/Aerating New EQ Tank	\$20,000	\$0	\$10,000	\$20,000	\$20,000	\$20,000
Power for Mxing/Aerating Digester	\$25,000	\$0	\$12,500	\$25,000	\$25,000	\$25,000
Subtotal Additional Power	\$103,000	\$0	\$51,500	\$103,000	\$103,000	\$103,000
Other Additional Costs						
Membrane System Maintenance	\$6,000	\$0	\$3,000	\$6,000	\$6,000	\$6,000
Membrane System Chemicals	\$1,000	\$0	\$500	\$1,000	\$1,000	\$1,000
UV System Other	\$9,000	\$0	\$4,500	\$9,000	\$9,000	\$9,000
Microglycerine for Denitrification	\$17,000	\$0	\$8,500	\$17,000	\$17,000	\$17,000
Other	\$10,000	\$0	\$5,000	\$10,000	\$10,000	\$10,000
Subtotal Other	\$43,000	\$0	\$21,500	\$43,000	\$43,000	\$43,000
Total Additional Operating Costs - 2011 \$	\$146,000	\$0	\$73,000	\$146,000	\$146,000	\$146,000
Inflated Costs - Power	2.9%	\$0	\$54,500	\$112,200	\$115,500	\$118,900
Inflated Costs - Other	2.0%	\$0	\$22,400	\$45,600	\$46,500	\$47,500
Total - Inflated	Rounded	\$0	\$76,900	\$157,800	\$162,000	\$166,400
SLCWD Share [1]	44%	\$0	\$38,573	\$79,152	\$81,259	\$83,466

Source: Stantec

"add ops"

[1] Calculated as total expenses multiplied by cost allocation factors:

Percentage of expenses 44%
Administrative expenses 14%

4.3.3 Existing and Future Debt Service

Existing debt service for the AccuWeb projects completed in 2006 total \$238,429 per year. Existing debt service continues through 2026. The CWSRF planning loan debt service begins June 2014; however, the rate model assumes the planning loan will be rolled into the construction loan, therefore no debt service payments are projected for the CWSRF planning loan. The estimated debt service schedule through 2016 for existing debt is shown in **Table A-8**.

If existing debt can be refinanced, the total debt service to CWSRF will increase; however, the existing debt service will be eliminated. The total potential savings to the District are estimated at approximately \$124,600 per year, as calculated in **Table 13**. The rate model assumes that existing debt service is not refinanced.

As already described in Section 3, the estimated annual debt service payment for the CWSRF construction loan is approximately \$638,500.

Table 13
Refinancing Existing Debt with CWSRF Loan

Source / Assumption	Calculation
Existing Loans Outstanding Principal (January 2012)	
MSG Loan #1	\$1,309,910
MSG Loan #2	\$1,009,750
Total Existing Debt Refinanced [1]	\$2,319,660
Principal Amount	
Rate	2.70%
Term	30 Years
Cost of Refinancing (estimate)	1.00
Annual CWSRF Debt Service Payment	\$113,804
Annual Accuweb Loans Payments	\$238,429
Difference (Potential Savings)	\$124,625
<hr/> <i>Source: Loan and Security Agreements</i>	
	<i>"existing"</i>
[1] No prepayment penalties.	

Section 5: WASTEWATER RATES ANALYSIS

5.1 METHODOLOGY OVERVIEW

Per California constitution Article 13D, wastewater rates³ shall not be extended, imposed, or increased by any agency unless it meets all of the following requirements:

- (1) Revenues derived from the fee or charge shall not exceed the funds required to provide the property related service.
- (2) Revenues derived from the fee or charge shall not be used for any purpose other than that for which the fee or charge was imposed.
- (3) The amount of a fee or charge imposed upon any parcel or person as an incident of property ownership shall not exceed the proportional cost of the service attributable to the parcel.
- (4) No fee or charge may be imposed for a service unless that service is actually used by, or immediately available to, the owner of the property in question. Fees or charges based on potential or future use of a service are not permitted.

The following four steps outline how wastewater rates are calculated such that the monthly wastewater rates meet these legal requirements. Steps 1 and 2 were conducted in sections 3 and 4 of this report. Steps 3 and 4 are described further in this section of the report.

- 1. Establish the Wastewater Customer Base and User Characteristics (section 3)** – The wastewater customer base includes residential and commercial accounts. Because of the small size of the District and lack of industrial users, it was determined that the rate model would be based on flow only.
- 2. Project Wastewater System Annual Costs and Non-Rate Revenue (section 4)** – Annual costs include treatment operations and maintenance (O&M), collection O&M, debt service, capital improvement, and depreciation.
- 3. Determine Projected Revenue Requirement and Allocate based on Flow (section 5)** – Revenue requirement is allocated based on flow only in this model. All EDUs have a peak week average day flow of 417.1 gallons; therefore, allocating the revenue requirement based on number of EDUs or flow equates to the same calculation.
- 4. Determine Revenue Requirement per Unit and Customer Type (section 5)** – Per unit (per EDU) revenue requirement for each projected year is determined by dividing the allocated revenue requirement by the demand (expressed in number of

³ Wastewater connection fees are not subject to the same legal requirements since they are not considered a property-related fee.

EDUs) for each customer type. Total annual charges are divided by 12 to calculate the monthly charge per unit.

5.2 REVENUE REQUIREMENT

Table 14 on the following page provides the projection of annual costs and revenues and the resulting revenue requirement (amount of revenues generated through wastewater rates) through 2016. Total revenue requirement is projected to increase from a 2011 base of \$1.07 million to \$1.88 million in 2016. Of the total revenue requirement in 2016, \$1.31 million will be raised through quarterly charges paid by all District customers, and an additional \$351,000 million in rates will be raised by Outside CFD No. 1 customers.

5.3 CALCULATED WASTEWATER RATES

Table 15 presents the calculated rates per EDU for all customers (Inside and Outside CFD No. 1) excluding Project costs. By 2016 existing customer rates are projected to increase from \$110.32 per month to \$116.89 per month, and future customer rates are projected to increase from \$45.72 per month to \$48.44 per month.

Additional rates to cover the Project costs are calculated in **Table 16**.

5.3.1 Inside CFD No. 1 Rates

Total wastewater rates for Inside CFD No. 1 customers include the calculated rates for all EDUs in **Table 15** plus monthly rates for Project costs not funded by special taxes, as calculated in **Table 16**.

Total Projected Wastewater Rates per EDU for Inside CFD No. 1 Customers

Inside CFD No. 1	2012	2013	2014	2015	2016
Existing	\$110.32	\$110.32	\$114.83	\$116.24	\$117.58
Future	\$45.72	\$46.12	\$47.99	\$48.58	\$49.13

5.3.2 Outside CFD No. 1 Rates

Total wastewater rates for Outside CFD No. 1 customers include the calculated rates for all EDUs in **Table 15** plus monthly rates for all Project costs allocated to Outside CFD No. 1 customers, as calculated in **Table 16**.

Total Projected Wastewater Rates per EDU for Outside CFD No. 1 Customers

Outside CFD No. 1	2012	2013	2014	2015	2016
Existing	\$127.03	\$143.06	\$164.28	\$165.69	\$167.02
Future	\$62.43	\$78.86	\$97.44	\$98.02	\$98.58

Table 14
Projected Revenue Requirement

Item	Source / Other	Base 2011	Projected					Year 5 2016
			Year 1 2012	Year 2 2013	Year 3 2014	Year 4 2015		
Operating Expenses								
Salaries	Table A-4	\$276,948	\$282,500	\$288,200	\$294,000	\$299,900	\$305,900	
Benefits	Table A-4	\$105,036	\$107,100	\$109,200	\$111,400	\$113,600	\$115,900	
Professional Services	Table A-4	\$12,000	\$12,200	\$12,400	\$12,600	\$12,900	\$13,200	
Fleet, Equipment, Facilities Replacement & Repair	Table A-4	\$87,576	\$89,300	\$91,100	\$92,900	\$94,800	\$96,700	
Operating supplies	Table A-4	\$4,500	\$4,600	\$4,700	\$4,800	\$4,900	\$5,000	
Insurance	Table A-4	\$42,000	\$42,800	\$43,700	\$44,600	\$45,500	\$46,400	
Utilities, communications	Table A-4	\$161,500	\$166,200	\$171,000	\$176,000	\$181,100	\$186,400	
Chemicals, lab supplies	Table A-4	\$119,656	\$119,700	\$119,700	\$119,700	\$119,700	\$119,700	
Lab testing	Table A-4	\$89,330	\$91,100	\$92,900	\$94,800	\$96,700	\$98,600	
Inflow / Infiltration and sludge removal	Table A-4	\$22,000	\$22,000	\$22,000	\$22,000	\$22,000	\$22,000	
Other	Table A-4	\$28,131	\$28,700	\$29,300	\$29,900	\$30,500	\$31,100	
Administration Department Costs Allocated	Table A-5	\$393,335	\$401,377	\$409,585	\$417,961	\$426,511	\$435,238	
Subtotal Operating Expenses		\$1,342,012	\$1,367,577	\$1,393,785	\$1,420,661	\$1,448,111	\$1,476,138	
Estimated Additional Expenses from Project		\$0	\$0	\$76,900	\$157,800	\$162,000	\$166,400	
Total Operating Expenses		\$1,342,012	\$1,367,577	\$1,470,685	\$1,578,461	\$1,610,111	\$1,642,538	
Debt Service								
MSG AccuWeb Existing Debt	Table A-8	\$238,429	\$238,429	\$238,429	\$238,429	\$238,429	\$238,429	
SRF Loan paid by Customers Outside CFD No. 1	Table 16	\$0	\$117,051	\$234,101	\$351,152	\$351,152	\$351,152	
SRF Loan Refinancing MSG AccuWeb Existing Debt		\$0	\$0	\$0	\$0	\$0	\$0	
Subtotal Debt Service		\$238,429	\$355,480	\$472,530	\$589,581	\$589,581	\$589,581	
System Rehabilitation	Table 11	\$0	\$0	\$76,800	\$88,600	\$118,100	\$118,100	
Operating Reserve		\$0	\$0	\$7,200	\$10,000	\$10,000	\$10,000	
Non-Operating Credits (Expenses)								
Lease of Land	Table 10	(\$20,000)	(\$20,000)	(\$20,000)	(\$20,000)	(\$20,000)	(\$20,000)	
Administration Department Revenues Allocated	Table A-5	\$23,812	\$23,829	\$23,847	\$23,865	\$23,883	\$23,902	
Property tax	[1]	\$110,597	\$112,800	\$115,100	\$117,400	\$119,700	\$122,100	
Connection fees for Project Debt Service Outside CFD No. 1	[2]	\$0	\$0	\$0	\$0	\$0	\$0	
Total Non-operating Credits (expenses)		\$114,409	\$116,629	\$118,947	\$121,265	\$123,583	\$126,002	
Sierra Lakes CWD								
Operating Expenses	Table A-4	\$395,099	\$402,382	\$409,828	\$417,442	\$425,228	\$433,189	
Additional Operating Expenses from Project	Table 12	\$0	\$0	\$38,573	\$79,152	\$81,259	\$83,466	
System Rehabilitation	Table 11	\$0	\$0	\$7,219	\$24,152	\$53,280	\$53,280	
Total Sierra Lakes CWD Revenue		\$395,099	\$402,382	\$455,620	\$520,747	\$559,767	\$569,935	
Total Revenue Requirement		\$1,070,933	\$1,204,046	\$1,452,649	\$1,624,630	\$1,644,442	\$1,664,282	
Revenue Requirement All Customers		\$1,070,933	\$1,086,995	\$1,218,547	\$1,273,478	\$1,293,290	\$1,313,130	

*rev req"

[1] Property taxes may only be increased by a maximum of 2% per year in California until the property is sold, at which time the new market value is established.
 [2] The model assumes no additional EDUs pay the connection fee outside CFD No. 1 within the rate study period. Expansion user connection fees inside CFD No. 1 paid with one-time special tax.

Table 15
Calculated Monthly Rates per EDU (All Customers)

Cost	Fiscal Year Ending				
	2012	2013	2014	2015	2016
	[1]				
Projected Cost		\$2,027,215	\$2,266,642	\$2,327,792	\$2,360,219
Credits		\$808,668	\$993,164	\$1,034,502	\$1,047,089
Revenue Requirement	n.a.	\$1,218,547	\$1,273,478	\$1,293,290	\$1,313,130
Revenue Requirement Components					
Operating Costs		\$1,470,685	\$1,578,461	\$1,610,111	\$1,642,538
less credits		\$808,668	\$993,164	\$1,034,502	\$1,047,089
Net Operating Costs	n.a.	\$662,017	\$585,297	\$575,609	\$595,449
Debt Service		\$472,530	\$589,581	\$589,581	\$589,581
System Rehabilitation		\$76,800	\$88,600	\$118,100	\$118,100
Operating Reserve		\$7,200	\$10,000	\$10,000	\$10,000
Total Revenue Requirement	n.a.	\$1,218,547	\$1,273,478	\$1,293,290	\$1,313,130
Rate-payers					
Existing EDUs		820.50	824.50	830.50	835.50
Future EDUs		249.44	245.44	239.44	234.44
Future EDUs weighted [2]	41%	103.38	101.72	99.23	97.16
Total Existing plus Weighted Future EDUs		923.88	926.22	929.73	932.66
Projected Cost per Existing EDU					
Net Operating Costs		\$715	\$630	\$617	\$636
Debt Service		\$510	\$634	\$632	\$630
System Rehabilitation		\$83	\$95	\$127	\$126
Operating Reserve		\$8	\$11	\$11	\$11
Projected Annual Cost per EDU	n.a.	\$1,316	\$1,370	\$1,387	\$1,403
Monthly Service Charge per Existing EDU		\$109.63	\$114.14	\$115.56	\$116.89
Projected Cost per Future EDU					
Net Operating Costs		\$296.22	\$260.90	\$255.77	\$263.60
Debt Service		\$211.43	\$262.81	\$261.98	\$261.00
System Rehabilitation		\$34.36	\$39.49	\$52.48	\$52.28
Operating Reserve		\$3.22	\$4.46	\$4.44	\$4.43
Projected Annual Cost per EDU	n.a.	\$545.23	\$567.66	\$574.68	\$581.30
Monthly Service Charge per Future EDU		\$45.44	\$47.30	\$47.89	\$48.44

Source: HEC

"calc rate"

[1] Not applicable. The 2012 budget is based on the current rates through fiscal year ending 2012.

[2] Historical weighting for future EDUs.

Table 16
Calculated Additional Monthly Rates per EDU for Project Costs

Calculation	Projected				
	2012	2013	2014	2015	2016
A. Inside CFD No. 1					
<i>Inside CFD No. 1 Additional Rates</i>					
Maximum Special Tax Revenue	\$0	\$288,346	\$288,346	\$288,346	\$288,346
less Administrative Charges	\$0	\$5,000	\$5,000	\$5,000	\$5,000
Maximum Taxes for Debt Service	\$0	\$283,346	\$283,346	\$283,346	\$283,346
Project Costs Paid with Rates <i>see Table 9</i>	\$0	\$4,015	\$4,015	\$4,015	\$4,015
Rate-paying EDUs					
Existing	343.81	346.81	351.81	355.81	360.81
Future and Expansion	142.44	139.44	134.44	130.44	125.44
Rate-paying EDUs weighted [1]	100%	486.25	486.25	486.25	486.25
Annual Cost per Existing EDU	\$0.00	\$8.26	\$8.26	\$8.26	\$8.26
Annual Cost per Future EDU	\$0.00	\$8.26	\$8.26	\$8.26	\$8.26
Inside CFD No. 1					
Monthly Service Charge per Existing EDU	\$0.00	\$0.69	\$0.69	\$0.69	\$0.69
Monthly Service Charge per Future EDU	\$0.00	\$0.69	\$0.69	\$0.69	\$0.69
B. Outside CFD No. 1					
<i>Outside CFD No. 1 Additional Rates</i>					
Rates from Properties Outside CFD No. 1	\$117,051	\$234,101	\$351,152	\$351,152	\$351,152
Rate-paying EDUs					
Existing	476.69	477.69	478.69	479.69	480.69
Future and Expansion	107.00	106.00	105.00	104.00	103.00
Rate-paying EDUs weighted [1]	100%	583.69	583.69	583.69	583.69
Annual Cost per Existing EDU	\$200.54	\$401.07	\$601.61	\$601.61	\$601.61
Annual Cost per Future EDU	\$200.54	\$401.07	\$601.61	\$601.61	\$601.61
Outside CFD No. 1					
Monthly Service Charge per Existing EDU	\$16.71	\$33.42	\$50.13	\$50.13	\$50.13
Monthly Service Charge per Future EDU	\$16.71	\$33.42	\$50.13	\$50.13	\$50.13

[1] Future and expansion EDUs pay the same as existing EDUs for Project debt service.

"add rates"

5.4 OUTSIDE CFD NO. 1 CONNECTION FEE

Properties outside CFD No. 1 purchasing wastewater treatment capacity must pay a connection fee. Properties inside CFD No. 1 pay for capacity with a one-time special tax.

Table 17 shows the calculation of the connection fee for Outside CFD No. 1 properties. If property owners pay for their capacity before April 1, 2012 the cash can be committed to the Project costs reducing the total amount borrowed from the CWSRF program. After that date, financing charges will apply. Each year the connection fee increases by the Project cost share carried by the existing and future ratepayers.

Table 17
Calculated Connection Fee for Expansion EDUs Outside CFD No. 1

Cost Type	Effective Dates	Cumulative Fee Increase	Connection Fee per EDU
			[1]
			<i>Outside CFD No. 1 Only</i>
Connection Fee	prior to April 1, 2012		\$1,070
Financing Charge			\$505
Connection Fee with Financing	Apr 2012 - Jun 2012	\$197	\$1,772
	Jul 2012 - Jun 2013	\$590	\$2,362
	Jul 2013 - Jun 2014	\$1,180	\$3,542
	Jul 2014 - Jun 2015	\$1,770	\$5,312
	Jul 2015 - Jun 2016	\$2,360	\$7,672

"conn fee"

[1] Fee increases each year for plant upgrade cost share carried by the existing and future ratepayers.

5.5 PROJECTED CASH FLOW AND DEBT SERVICE COVERAGE

The projected annual cash flow for the District is shown in **Table 18** on the following page. Both the current AccuWeb loans and the CWSRF loan have requirements of debt service coverage of at least 110%, which is attained as shown in **Table 19**.

Table 19
Debt Service Coverage Projection

Item	Budget 2011	Projected by Fiscal Year				
		2012	2013	2014	2015	2016
Net Revenue						
Revenues Before Debt Service and System Rehabilitation	\$321,912	\$447,640	\$565,364	\$697,015	\$726,515	\$726,515
CFD No. 1 Special Taxes [1]	\$0	\$0	\$0	\$288,346	\$288,346	\$288,346
Total Revenue Available for Debt Service	\$321,912	\$447,640	\$565,364	\$985,361	\$1,014,861	\$1,014,861
Debt Service						
MSG AccuWeb Existing Debt	\$238,428	\$238,429	\$238,429	\$238,429	\$238,429	\$238,429
SRF Loan Refinancing MSG AccuWeb Existing Debt	\$0	\$0	\$0	\$0	\$0	\$0
CWSRF Construction Loan (<i>est. first payment Nov. 2014</i>)	\$0	\$0	\$0	\$0	\$638,513	\$638,513
Total Debt Service	\$238,428	\$238,429	\$238,429	\$238,429	\$876,942	\$876,942
<i>Debt Service Coverage [2]</i>	<i>1.35</i>	<i>1.88</i>	<i>2.37</i>	<i>4.13</i>	<i>1.16</i>	<i>1.16</i>

Source: HEC and SWRCB financial agreements.

"cov"

[1] Excludes CFD administration costs estimate. A reserve fund equal to one year's debt service will be collected by June 2013.

The first CWSRF debt service payment is estimated to be due one year after completion of construction in November 2014.

[2] Per the MSG AccuWeb loan documents and CWSRF policy, parity debt must maintain coverage of at least 110%.

**Table 18
Projected Wastewater Operations Cash Flow**

Revenues and Expenses	Projected by Fiscal Year					
	Budget 2011	2012	2013	2014	2015	2016
Revenues						
Sewer Service Charges						
First half of fiscal year	na	\$567,624	\$1,091,533	\$1,144,416	\$1,165,461	\$1,187,285
Existing Customers (includes CalTrans)	na	\$543,105	\$135,848	\$137,897	\$136,663	\$134,679
Future Customers	na	\$68,426	\$234,101	\$351,152	\$351,152	\$351,152
Charges for Customers Outside CFD No. 1	na	\$117,051	\$1,461,483	\$1,633,464	\$1,653,276	\$1,673,116
Subtotal Sewer Service Charges	\$1,135,248	\$1,296,206	\$1,461,483	\$1,633,464	\$1,653,276	\$1,673,116
Sierra Lakes CWD	\$395,099	\$402,382	\$465,620	\$520,747	\$559,767	\$569,935
Total Charges	\$1,530,347	\$1,698,588	\$1,917,102	\$2,154,211	\$2,213,043	\$2,243,051
Non-Operating Revenues (Expenses)						
Lease of Land	(\$20,000)	(\$20,000)	(\$20,000)	(\$20,000)	(\$20,000)	(\$20,000)
Administration Department Revenues Allocated	\$19,076	\$23,829	\$23,847	\$23,865	\$23,883	\$23,902
Property tax	\$134,501	\$112,800	\$115,100	\$117,400	\$119,700	\$122,100
Connection fees for Project Debt Service Outside CFD No. 1	\$0	\$0	\$0	\$0	\$0	\$0
Total Non-Operating Revenues	\$133,577	\$116,629	\$118,947	\$121,265	\$123,583	\$126,002
Total Revenues	\$1,663,924	\$1,815,217	\$2,036,049	\$2,275,476	\$2,336,626	\$2,369,053
Expenses						
Salaries	\$276,948	\$282,500	\$288,200	\$294,000	\$299,900	\$305,900
Benefits	\$105,036	\$107,100	\$109,200	\$111,400	\$113,600	\$115,900
Professional Services	\$12,000	\$12,200	\$12,400	\$12,600	\$12,900	\$13,200
Fleet, Equipment, Facilities Replacement & Repair	\$87,576	\$89,300	\$91,100	\$92,900	\$94,800	\$96,700
Operating supplies	\$4,500	\$4,600	\$4,700	\$4,800	\$4,900	\$5,000
Insurance	\$42,000	\$42,800	\$43,700	\$44,600	\$45,500	\$46,400
Utilities, communications	\$161,500	\$166,200	\$171,000	\$176,000	\$181,100	\$186,400
Chemicals, lab supplies	\$119,656	\$119,700	\$119,700	\$119,700	\$119,700	\$119,700
Lab testing	\$89,330	\$91,100	\$92,900	\$94,800	\$96,700	\$98,600
Inflow / Infiltration and sludge removal	\$22,000	\$22,000	\$22,000	\$22,000	\$22,000	\$22,000
Other	\$28,131	\$28,700	\$29,300	\$29,900	\$30,500	\$31,100
Administration Department Costs Allocated	\$393,335	\$401,377	\$409,585	\$417,961	\$426,511	\$435,238
Subtotal Expenses	\$1,342,012	\$1,367,577	\$1,393,785	\$1,420,661	\$1,448,111	\$1,476,138
Estimated Additional Expenses from Project	\$0	\$0	\$76,900	\$157,800	\$162,000	\$166,400
Total Expenses	\$1,342,012	\$1,367,577	\$1,470,685	\$1,578,461	\$1,610,111	\$1,642,538
Debt Service						
MSG AccuWeb Existing Debt	\$238,428	\$238,429	\$238,429	\$238,429	\$238,429	\$238,429
SRF Loan paid by Customers Outside CFD No. 1	\$0	\$0	\$0	\$351,152	\$351,152	\$351,152
SRF Loan Refinancing MSG AccuWeb Existing Debt	\$0	\$0	\$0	\$0	\$0	\$0
Subtotal Debt Service	\$238,428	\$238,429	\$238,429	\$589,581	\$589,581	\$589,581
System Rehabilitation	\$0	\$0	\$76,800	\$88,600	\$118,100	\$118,100
Total Expense	\$1,580,440	\$1,606,006	\$1,765,914	\$2,256,642	\$2,317,792	\$2,350,219
Net Revenues	\$83,484	\$209,211	\$250,135	\$18,834	\$18,834	\$18,834
Beginning Fund Balance [1]	\$241,250	\$324,734	\$416,894	\$428,914	\$447,747	\$466,581
Net Revenues	\$83,484	\$209,211	\$250,135	\$18,834	\$18,834	\$18,834
less Reserve Fund paid by Rates		(\$117,051)	(\$238,116)			
Ending Fund Balance	\$324,734	\$416,894	\$428,914	\$447,747	\$466,581	\$485,415
Target Fund Balance [2]	\$447,337	\$455,859	\$490,228	\$526,154	\$536,704	\$547,513

"flow"

[1] Total unrestricted cash and cash equivalents as of June 30, 2010 was \$309,295. Of this, 78% was allocated to sewer.
 [2] Per District Policy 2.19.0 two (2) months expenses must be maintained where monies can be made available within three (3) business days and an additional two (2) months expenses must be maintained in an account which can be liquidated within 60 days. The Target Fund balance is therefore calculated as four (4) months of operating expenses before debt service and system rehabilitation funding.

Source: HEC and DSPUD.

Attachment A

Support Tables

Table A-1
Donner Summit PUD Wastewater Cost of Service
Historical Budget Information

Revenues and Expenses	Budget for Fiscal Year Ending															
	2008				2009				2010				2011			
	Collection	Plant	Admin	Total	Collection	Plant	Admin	Total	Collection	Plant	Admin	Total	Collection	Plant	Admin	Total
REVENUES	78%				78%				78%				78%			
Operating Revenue																
Sewer service charges	\$173,625	\$694,502	\$0	\$868,127	\$230,725	\$692,175	\$0	\$922,900	\$263,600	\$790,799	\$0	\$1,054,399	\$278,478	\$835,434	\$0	\$1,113,912
Cal Trans service charges	\$0	\$0	\$0	\$0	\$7,985	\$23,956	\$0	\$31,941	\$7,929	\$23,878	\$0	\$31,807	\$5,334	\$16,002	\$0	\$21,336
Sierra Lakes CWD charges	\$0	\$298,737	\$0	\$298,737	\$0	\$371,307	\$0	\$371,307	\$0	\$405,190	\$0	\$405,190	\$0	\$395,099	\$0	\$395,099
Total Operating Revenue	\$173,625	\$993,239	\$0	\$1,166,864	\$238,710	\$1,087,438	\$0	\$1,326,148	\$271,529	\$1,219,867	\$0	\$1,491,396	\$283,812	\$1,246,535	\$0	\$1,530,347
Non-Operating Revenue																
Property tax	\$17,400	\$69,600	\$0	\$87,000	\$24,883	\$80,028	\$0	\$104,911	\$24,883	\$109,618	\$0	\$134,501	\$24,883	\$109,618	\$0	\$134,501
GO Bond revenue	\$21,618	\$0	\$0	\$21,618	\$8,000	\$0	\$0	\$8,000	\$8,000	\$0	\$0	\$8,000	\$8,000	\$0	\$0	\$8,000
Late charges and other	\$8,000	\$0	\$7,800	\$15,800	\$0	\$12,000	\$0	\$12,000	\$0	\$0	\$7,176	\$7,176	\$0	\$0	\$7,176	\$7,176
Station 97 Utilities	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$6,240	\$6,240	\$0	\$0	\$3,900	\$3,900
Connection fees	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total Non-Operating Revenue	\$47,018	\$69,600	\$7,800	\$124,418	\$32,883	\$92,028	\$0	\$124,911	\$32,883	\$109,618	\$13,416	\$155,917	\$32,883	\$109,618	\$11,076	\$153,577
Total Revenues	\$220,643	\$1,062,839	\$7,800	\$1,291,282	\$271,593	\$1,179,466	\$0	\$1,451,059	\$304,412	\$1,329,485	\$13,416	\$1,647,313	\$316,695	\$1,356,153	\$11,076	\$1,683,924
EXPENSES																
Operating Expense																
Salaries	\$51,246	\$164,818	\$59,873	\$275,937	\$65,137	\$209,494	\$218,767	\$493,398	\$66,322	\$213,306	\$222,529	\$502,157	\$65,686	\$211,262	\$222,529	\$499,477
Employee Benefits	\$15,647	\$50,326	\$38,346	\$104,319	\$18,596	\$62,664	\$36,643	\$117,903	\$23,691	\$76,197	\$38,449	\$138,337	\$24,912	\$80,124	\$39,452	\$144,488
Board Expense	\$0	\$0	\$16,536	\$16,536	\$0	\$0	\$16,507	\$16,507	\$0	\$0	\$15,189	\$15,189	\$0	\$0	\$15,189	\$15,189
Professional fees	\$2,000	\$36,500	\$159,900	\$198,400	\$2,000	\$2,000	\$47,970	\$51,970	\$2,000	\$2,000	\$44,850	\$48,850	\$2,000	\$10,000	\$47,580	\$59,580
IRS Payroll Back Taxes	\$0	\$0	\$0	\$0	\$0	\$0	\$17,316	\$17,316	\$0	\$0	\$17,316	\$17,316	\$0	\$0	\$17,316	\$17,316
Dues and Subscriptions	\$0	\$500	\$2,615	\$3,115	\$0	\$750	\$3,666	\$4,416	\$0	\$660	\$3,346	\$4,006	\$0	\$660	\$3,346	\$4,006
Fees, permits, certifications, leases	\$5,000	\$10,000	\$23,381	\$38,381	\$3,000	\$10,000	\$14,301	\$27,301	\$3,000	\$18,771	\$14,478	\$36,249	\$3,000	\$18,771	\$14,478	\$36,249
Training and education	\$0	\$2,500	\$624	\$3,124	\$500	\$3,500	\$1,560	\$5,560	\$250	\$1,750	\$0	\$2,000	\$250	\$2,500	\$0	\$2,750
Travel	\$0	\$500	\$390	\$890	\$0	\$0	\$0	\$0	\$0	\$750	\$0	\$750	\$0	\$0	\$0	\$0
Insurance	\$9,831	\$24,577	\$3,834	\$38,242	\$10,814	\$27,035	\$4,247	\$42,096	\$12,000	\$30,000	\$4,680	\$46,680	\$12,000	\$30,000	\$4,680	\$46,680
Office supplies	\$0	\$500	\$2,886	\$3,386	\$0	\$500	\$2,730	\$3,230	\$500	\$750	\$1,560	\$2,810	\$500	\$750	\$1,560	\$2,810
Utilities, communication	\$20,000	\$123,500	\$12,558	\$156,058	\$23,500	\$148,000	\$21,255	\$192,755	\$23,500	\$148,000	\$19,344	\$190,844	\$23,500	\$138,000	\$19,344	\$180,844
Chemicals and lab supplies	\$0	\$100,000	\$0	\$100,000	\$500	\$115,000	\$0	\$115,500	\$500	\$119,156	\$0	\$119,656	\$500	\$119,156	\$0	\$119,656
Lab testing	\$0	\$0	\$0	\$0	\$0	\$40,000	\$0	\$40,000	\$0	\$109,330	\$0	\$109,330	\$0	\$89,330	\$0	\$89,330
Equipment maintenance / repair	\$10,000	\$15,000	\$6,072	\$31,072	\$10,000	\$40,720	\$780	\$51,500	\$9,000	\$17,000	\$780	\$26,780	\$9,000	\$17,000	\$780	\$26,780
Small equipment and rental	\$300	\$1,200	\$0	\$1,500	\$300	\$1,500	\$0	\$1,800	\$200	\$1,500	\$0	\$1,700	\$200	\$1,500	\$0	\$1,700
Operating supplies	\$2,000	\$2,500	\$0	\$4,500	\$2,000	\$2,500	\$0	\$4,500	\$2,000	\$2,500	\$0	\$4,500	\$2,000	\$2,500	\$0	\$4,500
Infiltration - Inflow	\$10,000	\$0	\$0	\$10,000	\$10,000	\$0	\$0	\$10,000	\$10,000	\$0	\$0	\$10,000	\$15,000	\$0	\$0	\$15,000
Sludge removal	\$0	\$4,500	\$0	\$4,500	\$2,000	\$5,000	\$0	\$7,000	\$2,000	\$5,000	\$0	\$7,000	\$2,000	\$5,000	\$0	\$7,000
Fleet maintenance	\$3,000	\$9,520	\$0	\$12,520	\$4,000	\$12,000	\$0	\$16,000	\$3,451	\$33,125	\$0	\$36,576	\$3,451	\$33,125	\$0	\$36,576
Facilities maintenance	\$2,500	\$3,000	\$0	\$5,500	\$2,500	\$8,000	\$5,756	\$16,256	\$2,000	\$8,000	\$5,460	\$15,460	\$17,000	\$8,000	\$5,460	\$30,460
Total Operating Expense	\$131,524	\$549,441	\$327,013	\$1,007,978	\$154,847	\$688,663	\$391,498	\$1,235,008	\$160,414	\$787,795	\$387,980	\$1,336,189	\$180,999	\$767,678	\$391,714	\$1,340,391
Non-Operating Expense																
Interest expense	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Land lease amortization	\$0	\$14,108	\$2,535	\$16,643	\$0	\$11,784	\$1,622	\$13,406	\$0	\$20,000	\$1,622	\$21,622	\$0	\$20,000	\$1,622	\$21,622
Long term debt payments	\$21,618	\$238,428	\$0	\$260,046	\$21,618	\$238,428	\$0	\$260,046	\$21,618	\$238,428	\$0	\$260,046	\$21,618	\$238,428	\$0	\$260,046
Total Non-Operating Expenses	\$21,618	\$252,536	\$2,535	\$276,689	\$21,618	\$250,212	\$1,622	\$273,452	\$21,618	\$258,428	\$1,622	\$281,668	\$21,618	\$258,428	\$1,622	\$281,668
Total Expenses	\$153,142	\$801,977	\$329,548	\$1,284,667	\$176,465	\$938,875	\$393,120	\$1,508,460	\$182,032	\$1,046,223	\$389,601	\$1,617,856	\$202,617	\$1,026,106	\$393,335	\$1,622,058
Net Revenues (Loss)	\$67,501	\$260,862	(\$321,748)	\$6,615	\$95,128	\$240,591	(\$393,120)	(\$57,401)	\$122,380	\$283,262	(\$376,185)	\$29,457	\$114,078	\$330,047	(\$382,259)	\$61,866

Table A-2
Donner Summit PUD Wastewater Cost of Service
Historical Non-Operating (General) Revenues Allocated to Sewer

Source		2007	2008	2009	2010	Average
Revenues		<i>Figures from Audited Financial Statements</i>				
Property Taxes (includes GO bond revenue)		\$145,953	\$151,509	\$128,708	\$140,993	\$141,791
Sewer Share of Property Taxes	78%	\$113,843	\$118,177	\$100,392	\$109,975	\$110,597
Interest		\$19,591	\$3,628	\$3,458	\$1,375	\$7,013
Sewer Share of Interest	78%	\$15,281	\$2,830	\$2,697	\$1,073	\$5,470
Other (Station 97 utility payments, late fees)		\$24,479	\$62,975	\$44,540	\$19,060	\$37,764
Sewer Share of Other	78%	\$19,094	\$49,121	\$34,741	\$14,867	\$29,456
Sewer Share of Non-Operating Revenue		\$148,218	\$170,127	\$137,831	\$125,914	\$145,522

Source: DSPUD audited financial statements.

"non op rev"

**Table A-3
Donner Summit PUD Wastewater Cost of Service
Comparison of Historical Operating Expenses to Standard Indices**

Operating Expense	Fiscal Year Ending				Change	
	2007	2008	2009	2010	Total	Avg. Annual
Salaries [1]	\$215,037	\$507,616	\$640,614	\$594,211	\$86,595	8.2%
Benefits [1]	\$84,527	\$152,299	\$194,056	\$194,243	\$41,944	12.9%
Professional services [1]	\$478,310	\$172,059	\$84,947	\$74,355	(\$97,704)	-34.3%
Subtotal Salaries, Benefits and Professional Services	\$777,874	\$831,974	\$919,617	\$862,809	\$30,835	1.8%
Other Operating Expense						
Board expense	\$16,393	\$16,822	\$17,754	\$18,384	\$1,991	3.9%
Fleet, Equipment, Facilities Replacement & Repair	\$118,096	\$102,300	\$123,977	\$130,154	\$12,058	3.3%
Operating supplies	\$9,408	\$7,264	\$5,501	\$9,092	(\$316)	-1.1%
Insurance	\$52,421	\$51,025	\$76,064	\$53,386	\$965	0.6%
Utilities, communications	\$171,918	\$179,251	\$173,957	\$187,337	\$15,419	2.9%
Chemicals, lab supplies	\$114,187	\$127,919	\$157,479	\$170,484	\$56,297	14.3%
Inflow / Infiltration and sludge removal	\$5,460	\$6,546	\$1,160	\$41,670	\$36,210	96.9%
Other	\$46,887	\$50,163	\$58,090	\$57,161	\$10,274	6.8%
Subtotal Other Operating Expense [2]	\$534,770	\$541,290	\$613,982	\$667,668	\$132,898	7.7%
Total excluding Inflow / Infiltration and Chemicals [3]	\$1,192,997	\$1,238,799	\$1,374,960	\$1,318,323	\$71,226	2.0%
Engineering News Record	<i>Dec 06</i>	<i>Dec 07</i>	<i>Dec 08</i>	<i>Dec 09</i>		
ENR Construction Cost Index 20-City	7,888.00	8,089.00	8,551.00	8,641.00	753.00	3.1%
ENR Construction Cost Index San Francisco	9,108.66	9,131.81	9,781.67	9,722.17	613.51	2.2%
Bureau of Labor Statistics						
Consumer Price Index - California	211.00	219.59	219.78	224.35	13.35	2.1%
Consumer Price Index - San Francisco	210.40	218.49	218.53	224.24	13.84	2.1%

Source: HEC, California Department of Finance, and the Engineering News Record.

"indices"

[1] Contracted staff brought in-house in 2007 therefore the change in these line items is only calculated from 2008 to 2010.

[2] Excludes depreciation, interest, and amortization of land lease.

[3] Inflow / infiltration excluded due to high annual variability in cost. Chemicals excluded because the Project will have different chemical requirements.

**Table A-4
Donner Summit PUD Wastewater Cost of Service
Projection of Sewer Collection and Treatment Plant Operating Costs**

Revenue and Expense		2011		2012		2013		2014		2015		2016	
		Collection	Plant	Collection	Plant	Collection	Plant	Collection	Plant	Collection	Plant	Collection	Plant
REVENUES													
Property tax	2.0%	\$20,461	\$90,136	\$20,870	\$91,939	\$21,287	\$93,778	\$21,713	\$95,653	\$22,147	\$97,566	\$22,590	\$99,518
GO Bond revenue		\$8,000	\$0	\$8,000	\$0	\$8,000	\$0	\$8,000	\$0	\$8,000	\$0	\$8,000	\$0
Late charges and other		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Station 97 Utilities		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Connection fees		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total Revenues		\$28,461	\$90,136	\$28,870	\$91,939	\$29,287	\$93,778	\$29,713	\$95,653	\$30,147	\$97,566	\$30,590	\$99,518
EXPENSES													
Salaries	2.0%	\$65,686	\$211,262	\$67,000	\$215,487	\$68,340	\$219,797	\$69,707	\$224,193	\$71,101	\$228,677	\$72,523	\$233,250
Employee Benefits	2.0%	\$24,912	\$80,124	\$25,410	\$81,726	\$25,918	\$83,361	\$26,437	\$85,028	\$26,966	\$86,729	\$27,505	\$88,463
Board Expense	2.0%	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Professional fees	2.0%	\$2,000	\$10,000	\$2,040	\$10,200	\$2,081	\$10,404	\$2,122	\$10,612	\$2,165	\$10,824	\$2,208	\$11,041
IRS Payroll Back Taxes	2.0%	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Dues and Subscriptions	2.0%	\$0	\$660	\$0	\$673	\$0	\$687	\$0	\$700	\$0	\$714	\$0	\$729
Fees, permits, certifications, leases	2.0%	\$3,000	\$18,771	\$3,060	\$19,146	\$3,121	\$19,529	\$3,184	\$19,920	\$3,247	\$20,318	\$3,312	\$20,725
Training and education	2.0%	\$250	\$2,500	\$255	\$2,550	\$260	\$2,601	\$265	\$2,653	\$271	\$2,706	\$276	\$2,760
Travel	2.0%	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Insurance	2.0%	\$12,000	\$30,000	\$12,240	\$30,600	\$12,485	\$31,212	\$12,734	\$31,836	\$12,989	\$32,473	\$13,249	\$33,122
Office supplies	2.0%	\$500	\$750	\$510	\$765	\$520	\$780	\$531	\$796	\$541	\$812	\$552	\$828
Utilities, communication	2.9%	\$23,500	\$138,000	\$24,183	\$142,008	\$24,885	\$146,133	\$25,608	\$150,377	\$26,351	\$154,745	\$27,117	\$159,239
Chemicals and lab supplies		\$500	\$119,156	\$500	\$119,156	\$500	\$119,156	\$500	\$119,156	\$500	\$119,156	\$500	\$119,156
Lab testing	2.0%	\$0	\$89,330	\$0	\$91,117	\$0	\$92,939	\$0	\$94,798	\$0	\$96,694	\$0	\$98,628
Equipment maintenance / repair	2.0%	\$9,000	\$17,000	\$9,180	\$17,340	\$9,364	\$17,687	\$9,551	\$18,041	\$9,742	\$18,401	\$9,937	\$18,769
Small equipment and rental	2.0%	\$200	\$1,500	\$204	\$1,530	\$208	\$1,561	\$212	\$1,592	\$216	\$1,624	\$221	\$1,656
Operating supplies	2.0%	\$2,000	\$2,500	\$2,040	\$2,550	\$2,081	\$2,601	\$2,122	\$2,653	\$2,165	\$2,706	\$2,208	\$2,760
Infiltration - Inflow		\$15,000	\$0	\$15,000	\$0	\$15,000	\$0	\$15,000	\$0	\$15,000	\$0	\$15,000	\$0
Sludge removal		\$2,000	\$5,000	\$2,000	\$5,000	\$2,000	\$5,000	\$2,000	\$5,000	\$2,000	\$5,000	\$2,000	\$5,000
Fleet maintenance	2.0%	\$3,451	\$33,125	\$3,520	\$33,788	\$3,590	\$34,463	\$3,662	\$35,153	\$3,735	\$35,856	\$3,810	\$36,573
Facilities maintenance	2.0%	\$17,000	\$8,000	\$17,340	\$8,160	\$17,687	\$8,323	\$18,041	\$8,490	\$18,401	\$8,659	\$18,769	\$8,833
Interest expense		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Land lease amortization	2.0%	\$0	\$20,000	\$0	\$20,400	\$0	\$20,808	\$0	\$21,224	\$0	\$21,649	\$0	\$22,082
Total Expenses less long-term Debt		\$180,999	\$787,678	\$184,482	\$802,197	\$188,040	\$817,042	\$191,676	\$832,221	\$195,391	\$847,742	\$199,187	\$863,614
<i>Sierra Lakes CWD Share of Expenses [1]</i>			\$395,099		\$402,382		\$409,828		\$417,442		\$425,228		\$433,189

Source: HEC.

"ops proj"

[1] Calculation of Sierra Lakes CWD Share of Treatment Plant Operations is total expenses less long term debt payment multiplied by cost allocation factors:

Percentage of expenses 44%
Administrative expenses 14%

**Table A-5
Donner Summit PUD Wastewater Cost of Service
Projection of Administration Revenues and Expenses**

Revenues and Expenses	Assumptions	2011	Estimated				
			2012	2013	2014	2015	2016
Revenue		Base Year	Year 1	Year 2	Year 3	Year 4	Year 5
Other (late charges, Station 97 utilities)		\$29,456	\$29,456	\$29,456	\$29,456	\$29,456	\$29,456
Interest	2.1%	\$1,073	\$1,095	\$1,117	\$1,140	\$1,164	\$1,188
Total Revenues		\$30,528	\$30,550	\$30,573	\$30,596	\$30,619	\$30,643
Sewer Department Share	18.5%	\$5,648	\$5,652	\$5,656	\$5,660	\$5,665	\$5,669
Wastewater Plant Department Share	59.5%	\$18,164	\$18,177	\$18,191	\$18,205	\$18,219	\$18,233
Total Allocated Administration Revenues	78.0%	\$23,812	\$23,829	\$23,847	\$23,865	\$23,883	\$23,902
Expenses							
Salaries	2.0%	\$285,293	\$290,999	\$296,819	\$302,755	\$308,810	\$314,987
Employee Benefits	2.0%	\$50,580	\$51,592	\$52,623	\$53,676	\$54,749	\$55,844
Board Expense	2.0%	\$19,473	\$19,862	\$20,260	\$20,665	\$21,078	\$21,500
Professional fees	2.0%	\$61,000	\$62,220	\$63,464	\$64,734	\$66,028	\$67,349
IRS Payroll Back Taxes	2.0%	\$22,200	\$22,644	\$23,097	\$23,559	\$24,030	\$24,511
Dues and Subscriptions	2.0%	\$4,290	\$4,376	\$4,463	\$4,553	\$4,644	\$4,737
Fees, permits, certifications, leases	2.0%	\$18,561	\$18,932	\$19,311	\$19,697	\$20,091	\$20,493
Training and education	2.0%	\$0	\$0	\$0	\$0	\$0	\$0
Travel	2.0%	\$0	\$0	\$0	\$0	\$0	\$0
Insurance	2.0%	\$6,000	\$6,120	\$6,242	\$6,367	\$6,495	\$6,624
Office supplies	2.0%	\$2,000	\$2,040	\$2,081	\$2,122	\$2,165	\$2,208
Utilities, communication	2.9%	\$24,800	\$25,520	\$26,262	\$27,024	\$27,809	\$28,617
Chemicals and lab supplies		\$0	\$0	\$0	\$0	\$0	\$0
Lab testing	2.0%	\$0	\$0	\$0	\$0	\$0	\$0
Equipment maintenance / repair	2.0%	\$1,000	\$1,020	\$1,040	\$1,061	\$1,082	\$1,104
Small equipment and rental	2.0%	\$0	\$0	\$0	\$0	\$0	\$0
Operating supplies	2.0%	\$0	\$0	\$0	\$0	\$0	\$0
Infiltration - Inflow		\$0	\$0	\$0	\$0	\$0	\$0
Sludge removal		\$0	\$0	\$0	\$0	\$0	\$0
Fleet maintenance	2.0%	\$0	\$0	\$0	\$0	\$0	\$0
Facilities maintenance	2.0%	\$7,000	\$7,140	\$7,283	\$7,428	\$7,577	\$7,729
Total Operating Expense		\$502,197	\$512,465	\$522,945	\$533,642	\$544,559	\$555,702
Non-operating Expense - Land lease	2.0%	\$2,079	\$2,121	\$2,163	\$2,206	\$2,250	\$2,295
Total Expenses		\$504,276	\$514,586	\$525,108	\$535,848	\$546,809	\$557,997
Sewer Department Share	18.5%	\$93,291	\$95,198	\$97,145	\$99,132	\$101,160	\$103,229
Wastewater Plant Department Share	59.5%	\$300,044	\$306,179	\$312,439	\$318,830	\$325,352	\$332,008
Total Allocated Administration Costs	78.0%	\$393,335	\$401,377	\$409,585	\$417,961	\$426,511	\$435,238

Source: DSPUD and HEC.

"admin real"

**Table A-6
Donner Summit PUD Wastewater Cost of Service
Estimated Annual Depreciation of Existing Facilities**

Item (a)	Replacement Cost Calculations					Current Value Calculations				Annual Depreciation
	Units	No. Units	Unit Cost	Extended Cost	Year Const.	Total Life, yrs	Remaining Life in 2012	Current Value		
Treatment Plant and Disposal Facilities										
Influent Equalization Tank	gal	200,000	\$1	\$200,000	1987	50	25	\$100,000	\$4,000	
Treatment Plant 1 (Main Structure Only)	gal	301,000	\$1	\$376,250	1974	50	12	\$90,300	\$7,525	
Treatment Plant 2 (Main Structure Only)	gal	210,000	\$1	\$262,500	1987	50	25	\$131,250	\$5,250	
Equipment Building (Structure Only)	sf	2,000	\$150	\$300,000	1974	50	12	\$72,000	\$6,000	
Advanced Treatment Building (Structure Only)	sf	3,500	\$200	\$700,000	1987	50	25	\$350,000	\$14,000	
Emergency Storage Tank	gal	1,560,000	\$1	\$936,000	1987	50	25	\$468,000	\$18,720	
Storage Return and Irrigation Pump Station Building	sf	630	\$200	\$126,000	1987	50	25	\$63,000	\$2,520	
Sludge Storage Tank	gal	600,000	\$1	\$600,000	1974	50	12	\$144,000	\$12,000	
1974 Sludge Drying Beds	sf	5,600	\$35	\$196,000	1974	50	12	\$47,040	\$3,920	
1987 Sludge Drying Beds	sf	4,800	\$35	\$168,000	1987	50	25	\$84,000	\$3,360	
Soda Ash Silo and Feed System	ls	1	\$250,000	\$250,000	2004	30	22	\$183,333	\$8,333	
Plant Piping to Remain	ls	1	\$500,000	\$500,000	1987	50	25	\$250,000	\$10,000	
Effluent Pipeline to Old Leach Field Area	lf	3,000	\$60	\$180,000	1974	50	12	\$43,200	\$3,600	
Effluent Pipeline Extension to River and Rock Diffuser	lf	1,000	\$75	\$75,000	1987	50	25	\$37,500	\$1,500	
Irrigation Pipeline	lf	3,500	\$100	\$350,000	1987	50	25	\$175,000	\$7,000	
Runoff Recovery Pond and Ancillary	ls	1	\$150,000	\$150,000	1987	50	25	\$75,000	\$3,000	
Total Treatment Plant and Disposal Facilities	A			\$5,369,750				\$2,313,623	\$110,728	
Sewer Collection System	B	lf	58,080	\$25	\$1,452,000	1990	50	28	\$813,120	\$29,040
Water and Sewer Assets										
Water and sewage equipment							15	\$279,455	\$18,630	
Vehicles							10	\$180,265	\$18,027	
Office furniture and equipment							20	\$50,504	\$2,525	
Total Shared Assets								\$510,224	\$39,182	
Water and Sewer Assets Allocated	C	78% of total						\$397,975	\$30,562	
Total Existing Facilities (rounded)								\$3,524,700	\$170,300	

Source: Stantec and DSPUD.

"exist depr"

Note: Depreciation estimate excludes construction in progress since benefit of any facilities currently underway will not be realized by current ratepayers until completion of the project(s).

**Table A-7
Donner Summit PUD Wastewater Cost of Service
Estimated Annual Depreciation for Project Facilities**

Facility	Total Facilities Cost	Add 20% (General Conditions, Overhead & Profit)	Add 20% Engineering, Administration, Other Soft Costs	Total Estimated Cost of Facilities	Useful Life (years)	Annual Replacement Cost
Wastewater Treatment Plant		2011 \$s				rounded
Equalization Storage Modifications and Expansion	\$875,000	\$175,000	\$210,000	\$1,260,000	50	\$25,200
New Headworks / Fine Screens	\$514,000	\$102,800	\$123,360	\$740,160	50	\$14,803
Reactor Basins 1 and 2 Mod's and Aeration Facil.	\$675,000	\$135,000	\$162,000	\$972,000	50	\$19,440
Membrane System Equipment Installed and Related Piping	\$3,164,000	\$632,800	\$759,360	\$4,556,160	50	\$91,123
Reactor Influent Splitter Box	\$50,000	\$10,000	\$12,000	\$72,000	50	\$1,440
Carbon Feed System	\$80,000	\$16,000	\$19,200	\$115,200	50	\$2,304
Ammonia Feed System Modifications	\$112,000	\$22,400	\$26,880	\$161,280	50	\$3,226
Alkalinity Feed System Modifications	\$20,000	\$4,000	\$4,800	\$28,800	50	\$576
Wastewater Heating System	\$406,000	\$81,200	\$97,440	\$584,640	50	\$11,693
UV Disinfection Equipment, Installed	\$630,000	\$126,000	\$151,200	\$907,200	50	\$18,144
Reclaimed Water Pump System	\$40,000	\$8,000	\$9,600	\$57,600	50	\$1,152
Solids Handling System	\$684,000	\$136,800	\$164,160	\$984,960	50	\$19,699
Equipment Building Modifications	\$120,000	\$24,000	\$28,800	\$172,800	50	\$3,456
Advanced Treatment Building Modifications	\$135,000	\$27,000	\$32,400	\$194,400	50	\$3,888
Membrane Equipment Building	\$1,300,000	\$260,000	\$312,000	\$1,872,000	50	\$37,440
Chemical Electrical Building	\$270,000	\$54,000	\$64,800	\$388,800	50	\$7,776
Site Piping Not Included in Other Items	\$300,000	\$60,000	\$72,000	\$432,000	50	\$8,640
Sitework	\$300,000	\$60,000	\$72,000	\$432,000	15	\$28,800
Electrical and Instrumentation	\$2,419,000	\$483,800	\$580,560	\$3,483,360	30	\$116,112
Subtotal Wastewater Treatment Plant	\$12,094,000	\$2,418,800	\$2,902,560	\$17,415,360		\$414,912
Expand Spray Irrigation Disposal System	\$192,000	\$38,400	\$46,080	\$276,480	50	\$5,530
Total Project Facilities	\$12,286,000	\$2,457,200	\$2,948,640	\$17,691,840		\$420,400

Source: Stantec and HEC.

"new depr"

**Table A-8
Donner Summit PUD Wastewater Cost of Service
Existing Debt Payment Schedule**

Fiscal Year	Payment by Fiscal Year			Total
	MSG Loan #1	MSG Loan #2	CWSRF Loan	
2011	\$105,141	\$133,288	<i>estimate</i> \$0	\$238,429
2012	\$105,141	\$133,288	\$0	\$238,429
2013	\$105,141	\$133,288	\$0	\$238,429
2014	\$105,141	\$133,288	\$319,829	\$558,258
2015	\$105,141	\$133,288	\$319,829	\$558,258
2016	\$105,141	\$133,288	\$319,829	\$558,258

Source: MSG Loan and Security Agreements and 2010 CWSRF Planning Loan

"debt"