City of St. Helena
Ad Hoc Committee
Special Meeting

Carnegie Building, 1360 Oak Ave., St. Helena, CA 94574

Wednesday, May 17, 2017 @ 9:00 AM

Page

1. CALL TO ORDER

2. ROLL CALL
   Ad Hoc Utility Rate Committee Members:
   Chair Bonnie Long, Vice Chair Tom Vence
   Committee Members Chris Dann, Lester Hardy, Joel Gott, Doug Cutting and Mark Smithers

   City Council Liaisons: Mayor Galbraith and Councilmember Mary Koberstein

3. PUBLIC COMMENT PERTAINING TO AD HOC UTILITY RATE COMMITTEE:
   Please observe the three minute limit.

4. NEW BUSINESS

   4.1. Review of CIP Funding Mechanisms and Assumptions – Kenneth Dieker — 3 - 21

   Public Comment
   Waterfall Category
   Task Request from Bonnie Long and Tom Vence
   Framework to Council Recommendations from Tom Vence
   Ad Hoc considerations from Mayor Galbraith
   Handout from Finance Consultant

   4.2. Discussion by Ad Hoc Committee members on “Road Map” to recommendations to City Council

5. DISCUSSION OF ITEMS TO BE PLACED ON THE NEXT MEETING AGENDA:

   5.1. 1. 5/20/17 - Model Update by Catherine Hansford
   2. 5/20/17 - Review of Escalation Rate Assumptions included in the Utility Rate Study Adopted on November 29, 2016
   3. What is an assessment district and how does it work?
   4. Questions

6. ADJOURNMENT

The next Ad Hoc Utility Rate Committee meeting is scheduled for Saturday, May 20, 2017 at 9:00 am, Vintage Hall Board Room located at 465 Main

Street.

This agenda was posted at City Hall, 1480 Main Street, and at Carnegie Building, 1360 Oak Ave., St. Helena, California on May 15, 2017.

Cindy Black, City Clerk

In Compliance with the Americans with Disabilities Act, if you need special assistance to participate in this meeting, please call the City Clerk's Office (707) 967-2792. Notification 72 hours prior to the meeting as required by Section 202 of the Americans with Disabilities Act will enable the City to make reasonable arrangements to ensure accessibility to this meeting

May 15, 2017

Members of Ad Hoc Rate Committee and Council Advisors

My apologies for a hand-scratched spread sheet, but I find that a $10,000/yr. subscription to Moody's a bit of a burden in retirement, so there is no tidy printout.

My apologies to April – the Budget Line Item on page 29 cited as Measure A is indeed the 2012B bond – so there is no shoe-in. However, lots of cash flow in the General Fund to assume a new debt obligation.

I have 40 years of experience in finance and analytic methods – local farm girl, honors graduate Stanford, MBA, and topped by US Senate where I have served 2 permanent committees for 25 years until recent retirement. Furthermore, I believe my 2-page letter is clear enough, pointing you to Line 23 of the spread sheet,

Lois Ann Battuello
963-8960

City of St Helena, City Hall
Received

MAY 1 5 2017

1480 Main St.
St Helena, CA 94574

May 12, 2017

AN ANALYSIS OF WATER RATES AND FUTURE NEEDS ADDING CASH FLOWS FROM DEPRECIATION TO SCHEDULED CAPITAL PROJECTS

I took some time to look at where we are on Water Rates before we jump into the new year.

A 3rd Quarter Finance Report dated April 25, 2017 states: "The original Water revenue estimate for FY 2016/17 was $3,783,308; however this has been revised to $4,640,215." The difference in revenue for the first five months under new rates imposed in February through the end of the year is an increase of $856,907.

If this new rate continues, the Water Enterprise will have captured far more cash than is necessary just from the first adjustment. The increase in forecast revenues is $1,610,176. Do we need to be charged an additional $1.6 million, let alone millions more with future adjustments? No.

Replacing old annual debt payments of $412,000 with new payments of $600,000 requires an increase of $188,000 per year, not $1,610,176. Add to the debt service about $589,000 annually for small projects paid for with cash, and outlays are still about half of the $1,610,176 projected in April.

The $856,907 captured from the February rate increase covers the planned capital projects listed for 2017-18 provided for the rate study as presented on May 8 by Public Works. Exclusive of major projects, the planned outlays require $841,798.

Think of St. Helena as a City with a lot of capital assets - $58 million plus. Depreciation from new projects is accumulated, and each year this figure on the Balance Sheet decreases and a portion is then expensed to pop up on the Statement of Revenues and Expenses. No one writes out a check to "depreciation" for that expense, therefore it provides a cash benefit that is used to cover, or in part pay for, debt obligations.

From page 32 in the audited financial statements for FY 2015-16, the Water Enterprise has an annual depreciation expense of $1,021,523. This benefit goes on for years, at least through 2035. The benefit will increase by $356,000 per year ($8.5 million/25 years SL depreciation), for a combined total depreciation expense (cash benefit) of $1,377,523 per year beginning as early as 2020. In a sense, depreciation expense is like cash in the bank, and over the years contributes to reserves.

I have completed a spread sheet including all projects listed by Public Works from 2017-18 through 2023-24 and new major capital project debt service ($600,000 est. for an $8.5 million loan). A copy is attached to illustrate why I arrived at various conclusions.

1. There is no need to increase rates advised by the Hansford Economic Group's Rate Study with the July 2017 billing cycle.

2. Rates from February 8, 2017 should be rolled back in favor of rates based on increases in the Consumer Price Index (2.6%) effective July, 2017, and estimated in the budget to increase each year through 2022 at 3%.

3. We have already captured more than enough cash ($856,907 noted on Line 21) to pay for this year's capital projects that are otherwise not financed by long term debt, so rather than a roll-back and credit to us, let that one go and start fresh on July 1. There is no need to pay millions of dollars more each year when most of our new projects are financed.

4. "Cash Flow" exceeds annual obligations, including budget increases and capital outlay, through 2024, two years into the next rate review period.

5. Public Works can advise you regarding the pipeline project. Should it begin in 2021-22, or be delayed five years to allow cash to accrue? Or is there a crisis?

I think you can see where Cash Flow Analysis is leading us. We need only project our capital outlays and debt payments. And we won't be leaving ourselves with a huge bill to pay for the following five years. Cash flow is cash flow. A new Rate Study would be in order in 2021-22, as the ongoing capital needs for Replacing Main Line ($600,000/year) and the 1% Per Year Line replacement programs ($400,000/year) kick off. Then our rates will and should go up for those improvements.

Post MBA I was recruited by an international bank and put on a mentored fast track in forensic analytic methods. I recall a co-trainee saying "This company has been losing money for the past three years due to a down cycle, and yet just as they plunged, they kept up with their regular program of buying a new fleet of trucks. With no profits and little cash coming in, how could they do this, how is it they are current on their loan payments when they haven't put any money into the business?" The answer: Cash flow. Losses can be offset by depreciation as well, often leaving a positive cash flow that allows routine capital programs to continue through down cycles. And we are not in a down cycle, rather a comfortable upswing with a bright future of increased water demand. You will see the magic on Line 23.

Lois Ann Battuello (963-8960)

Water Enterprise CIP Schedule (5/8/17)
Cash Flow and Debt Service

	Prepared By	Approved By
Initials		
Date		

		2017-18	2018-19	2019-2020	2020-21	2021-22	2022-23	2023-24	
	Maintenance	50000 -	50000 -	50000 -	50000 -	50000 -	50000 -	50000 -	→
	Stonebridge Wells	11103 -							
	Lower York Creek	480695 -						480695 -	
	Spill e Bell	150000 -							
	Spill e Stonebridge	78000 -							
	Rutherford Pump	150000 -							
	SCADA (Holmes)				150000 -				
	GIS Map Update				50000 -				
	WaterMaster "				150000 -				
	WTP Assessment				150000 -				
	Replace 12" Trans						400000 -		
	" 6" Mains				400000 -	400000	400000 -	400000 -	→
	Replace Mains					600000	600000	600000 -	→
	Replace 1% (2027)								150000 (202
	Added storage						1000000 (1)		
	Total:	841798 -	50000 -	50000 -	950000 -	1050000 -	2450000 -	1530495 -	
(2)	Depreciation Exp.	<1021523>	<1021523>	<1021523>	<1021523>	<1021523>	<1021523>	<1021523>	
(3)	Add New " "			<356000>	<356000>	<356000>	<356000>	<356000>	
	Subtotal:	179725	971523	1327523	427523	327523	<1072477>	153172	
(4)	Reserves	856907 -							
	New Debt P+I		<600000>	<600000>	<600000>	<600000>	<600000>	<600000>	
	Cumulative Reserve	1036632	1408155	2475678	2503201	2230724	558247	111419	

(1) Lease Finance to improve cash flow when rates are reviewed for adjustment in 2021-22, and begin program of pipeline financing

(2) Depreciation expense from 6/30/16 audited Financial Report

(3) Est. new depreciation expense with completion of $8.5 million in new projects with $600,000 annual debt service. York Creek Project removed to General Fund improving cash flow by $412,000/year

(4) Reserves - See 3rd Quarter Finance Report (4/23/17) showing an increase in water revenues for 5 months through June 30 from Feb. 8, 2017 water rate increase. The current balance of other reserves is not known at this time, therefore these figures are conservative and positive cash flow may be understated

Waterfall Category	No GF Capital Contribution	GF Capital Contribution
Gross Revenue (Rates and Charges)	$100,000	$100,000
Less: O&M	($60,000)	($60,000)
Net Revenue	$40,000	$40,000
Less Debt Service	($25,000)	($25,000)
Debt Service Coverage	*1.50x*	*1.50x*
Net Revenue Available for Capital and Other	$15,000	$15,000
Less: Capital Projects[1]	(10,000)	($10,000)
Plus: Capital Contributions[1]	$0	$10,000
Reserve Fund Balance[2]	$5,000	$15,000

"Below the Line"

(1) The funding of capital projects and capital contributions are considered "below the line" transactions meaning they are taken into account after the calculation of debt service coverage

(2) The net impact of capital contributions is to reduce the reliance on net revenues needed to fund capital projects enhancing reserves available to the system

Memo to April Mitts May10,2017
Re: Task request to Kenneth Diekert related Ad Hoc Utility Rate Committee CIP Funding issues
From: Bonnie Long and Tom Vence

On behalf of the Ad Hoc committee we request the tasks presented below to be performed under the scope of work agreed upon by Kenneth Diekert and the City of St. Helena.
It is our understanding based on an AD Hoc meeting held on April 26 that Enterprise Fund Bond financing is feasible for CIP's identified in the Utility Water and Waste Water Rate Study performed for the City by Hansford Consulting in fall of 2016.
We therefore request the following to be performed with assistance from City Public works Director, City Finance Director and City Utility consultant, Hansford Consulting:

1. Obtain CIP project list for projects to be funded over the next 10 years.
2. Prioritize projects in terms of regulatory and infrastructure needs. Rely on input from Public works
3. Determine whether water and wastewater CIP bond issues need to be separate
4. Bundle projects to meet a reasonable dollar value and scheduling requirement
5. Recommend sequencing of bond issues to match CIP implementation requirements
6. Consider strategies to minimize idle cash related to bond issues
7. Recommend sinking fund, rehabilitation and reserves
8. Incorporate recommendations for debt financing of selected CIP into Hansford rate model and determine effect on rates and system revenue. Include recommendation in task 6 in the model
9. Provide results in terms of effect on revenue and rates.
10. Recommend further scenarios if appropriate
11. Provide estimated costs and timing of various bond issues
12. Provide guidance and overview of advantages and disadvantages of Enterprise debt financing for current and future rate payers.
13. Please be prepared to discuss this scope at the May 17th AD Hoc meeting

CBLACK@cityofsthelena.org

Staff fix

May 17,2017 Prepared by Tom Vence, Vice Chair

TO: AD Hoc Committee members.

Draft Framework for Ad hoc Utility Committee to present recommendations to Council regarding Water and Wastewater Rates that went into effect February 2017

Background: The City's W&WW utility was faced in 2016 with a financial crisis brought on by the gross neglect regarding infrastructure improvements, deferred maintenance, minimal rehabilitation, all of which drove up maintenance costs; lack of sufficient regulatory oversight, a drought which encouraged conservation then resulted in historically reduced revenues. The combination of high operating costs and capital Improvement projects (CIP) as well as a major deferred CIP (York Creek Dam) contributed to the recommendation in the October 2016 Utility Rate Study to raise rates in the next 5 years at an average of 23%,16%,20%,4%and ending in 2021 at 4%. This amounts to almost a doubling of the rates in 5 years.

Ad hoc Committee:

An ad hoc committee was appointed by City Council to review the rate study and make recommendations. The direction from Council to the committee was to assess:

1. Funding issues
2. Capital improvement projects
3. Perceived inequities between customer classifications
4. Proposition 218
5. Rate Allocation

The Committee is to make recommendations, if any, to Council for revisions to the Study and potential adjustments to the rates adopted by the City Council on November 29,2016.
The committee must complete its review and submit recommendations to Council such that if Council determines to revise the Rate Study and currently adapted rates, the work must be completed in time for Council to meet Prop 218 requirements and put the new rates into effect as of the date of the rate increases currently scheduled for November 2017.

Rate Architecture

The rate structure is set up to include a **Base** or fixed costs portion and a **Use** or variable costs portion. Together they make up what residents and others pay for services.

The **Base** portion includes such areas as Salary Benefits, Maintenance, Taxes /insurance, and Debt Service.
The **Use** portion includes Supplies and Services, Napa water, Capital Projects, System Rehabilitation(Depreciation), and Operating Reserves.

Water Rates are set up with approximately 30% **Bas**e and 70% **Use** starting in 2017 and reaching 36 % **Base** in 2021.
Waste Water Rates have a 59 % **Base** and 41% **Use** on average through 2021.

The rate study identifies the components of the water and wastewater revenue requirements averaged over 6 rate periods as follows:

	Operation & Maintenance (Primarily **Use)**	Debt Service **(Base)**	Capital Replacement/Repair **(Use)**	Operating Reserves **(Use**)	
Water	61%	15%	18%	6%	100%
Waste Water	54%	15%	14%	17%	100%

The rate architecture leads us to **cost** areas that the committee should be spending the most effort …ie components that have the largest impact on moderating the rates. These components include Capital Replacement/ Repair and Operating Reserves and to some extent looking at escalation rates.

Operating expenses that are driven by escalation rates like Salaries, Maintenance, Supplies and Services although they make up a large portion of costs, hence rates, have a smaller opportunity for rate moderation than Capital Projects, System Rehabilitation and Operating Reserves since these cost centers can be looked from the standpoint of funding options ie cash vs debt, reasonableness in the amount of Reserves needed and scheduling of CIP. However, it is reasonable for the committee to assess the basis and escalation of Operation and Maintenance cost over the 5-year term that effect the rate increases,

Napa water agreement is a “take or pay”, that is, the City either accepts the agreed upon amount of water or pays the agreed upon dollar value. So not much we can do to affect rates.

Rate Methodology and Allocation

Another area of assessment the Committee should look at is how were the rates applied and is methodology for different categories defensible or appropriate for the customer class. For example, would the modified rate structure for Base WW service charge produce a better outcome for customers than the current rate structure; could the current mix of **Base** and **Use** rates be improved to benefit rate payers.

Finally

After looking at the issues discussed above the committee still needs to keep in mind that the Utility needs a revenue stream sufficient to maintain operations, have reasonable reserves, fund critical CIP and at the same time incur rates that are acceptable to the community.

Issues and opportunities identified by Committee so far:

1. CIP Funding: Cash vs Debt (discussion at May 17 meeting)
2. WW Base service charge is big issue for city businesses, multifamily and Vineyard Valley mobile home park. Hansford coming up with options (discussion at May 20th meeting)
3. Water Base service charge does not seem to line up with usage and charges for industrial user's vs residential users (Hansford discussion on May 20th meeting)
4. Water rate should shift more than 30% to base because of potential drought and other issues affecting revenue. Similar issue as # 3 (Hansford discussion at May20th meeting)
5. Are customers outside city, including Meadowood, being appropriately charged for cost of service. (discussion by Hansford May 20th meeting)
6. Is 2016 an appropriate year to base escalation rates in future rate setting and are the escalation % reasonable (Hansford discussion on May 20th)
7. Others to be identified

Recommendation to Council

Issues for Ad Hoc Committee Consideration

1. Whether accepted public policy strongly cautions against using General Fund funds to support the financing needs of water or wastewater enterprises?

   Note: The Council's charter to the Ad Hoc Committee requires that policy recommendations accord with "generally accepted financial principles."

2. Whether a General Fund contribution by the City of Saint Helena to the Water Enterprise can be taken into account in determining whether the (currently s eriously delinquent) Water Enterprise is satisfying the 120% System Net Revenue requirement as defined in section 1.1 and further specified in section 6.8 of the 2012B Installment Purchase Agreement?

   Note: Importance: a principal rationale of proponents for a General Fund contribution to the Water Enterprise.

3. Whether the City must come into compliance with the 120% System Net Revenue Requirement as quickly as practicable to maximize its opportunity to borrow at an early date from the State Revolving Fund?

   Premise: The State Revolving Fund is the City's cheapest source of capital.

   Further premise (as to immediacy): The Water and Wastewater Enterprises each require large borrowings in the near term (to avoid cash financing of major, long term water and wastewater projects).

4. Whether section 6.8(b) of the 2012B Installment Purchase Agreement prevents the City from reducing rates (including adopted increases) when not in compliance with the 120% Net Revenue Requirement?

5. Does the 120% Net Revenue Requirement limit our borrowing capacity?

   Premise: Debt service is a component of operating expense; increased debt service therefore requires higher revenues and hence rates to meet the 120% Net Revenue Requirement. In our case, at what point do rates become too high to accommodate significant higher levels of debt service?

6. Assuming the City was to make contribution(s) from the General Fund to the Water and/or Wastewater Enterprises, is the City at risk that a lender to the Enterprises might also seek a guarantee of loan repayment secured by the General Fund?

Alan Galbraith
Mayor, City of Saint Helena
May 17, 2017

City of St. Helena
Water and Wastewater Pro Forma Bonding Assumptions

Water Fund

Scenario	Issue Amount (1)	Project Fund	Costs of Issuance	Gross Spread (2)	Total Debt Service	Avg. Annual Debt Service	Final Maturity	"All-In" TIC (3,4)
Series 2017	$1,455,000	$1,272,385	$75,000	$14,550	$2,574,428	$90,000	2047	4.74%
Series 2020	$1,225,000	$1,047,554	$75,000	$12,250	$2,431,425	$85,000	2050	5.88%

Wastewater Fund

Scenario	Issue Amount (1)	Project Fund	Costs of Issuance	Gross Spread (2)	Total Debt Service	Average Annual Debt Service	Final Maturity	"All-In" TIC (3,4)
Series 2017	$8,370,000	$7,526,188	$250,000	$83,700	$14,806,758	$510,000	2047	4.54%
Series 2020	$2,325,000	$1,989,067	$150,000	$23,250	$4,622,458	$160,000	2050	5.92%

Notes

(1) Assumes S&P A rating, no insurance and fully funded cash reserve fund.
(2) Assumed to be 1.00% ($10.00/bond) of the par amount of bonds.
(3) Series 2017 interest rates are assumed to be current market plus 100bp. All other series are assumed to be current market plus 200bp.
(4) Includes all the costs associated with issuing the bonds.

WATER CASH FLOW - OPERATING & CAPITAL

Revenues and Expenses	2018 Year 1	2019 Year 2	2020 Year 3	2021 Year 4	2022 Year 5	2023 Year 6	2024 Year 7	2025 Year 8	2026 Year 9	2027 Year 10
Revenues										
Water Sales	$6,149,821	$7,099,310	$7,637,297	$7,954,330	$8,272,645	$8,614,580	$8,911,374	$9,150,344	$9,352,463	$9,547,242
Meadowood Surcharge	[redacted]	$0	$0	$0	$0	$0	$0	$0	$0	$0
Meter Replacement Fee	$47,612	$49,139	$50,715	$52,341	$54,019	$55,750	$57,537	$59,381	$61,283	$63,247
Other Revenues	$93,850	$93,850	$93,850	$93,850	$93,850	$93,850	$93,850	$93,850	$93,850	$93,850
Total Revenues	$6,291,284	$7,242,299	$7,781,862	$8,100,521	$8,420,513	$8,764,181	$9,062,761	$9,303,574	$9,507,596	$9,704,338
Operating Expenses	$4,128,126	$4,321,846	$4,582,439	$5,090,354	$4,968,197	$5,207,724	$5,460,595	$5,727,681	$6,009,921	$6,308,323
Net Revenue before Debt Service and System Rehabilitation	$2,163,157	$2,920,454	$3,199,423	$3,010,168	$3,452,317	$3,556,457	$3,602,166	$3,575,893	$3,497,675	$3,396,015
Debt Service	$1,024,503	$1,087,147	$1,084,000	$1,113,084	$1,164,815	$1,164,972	$1,168,722	$1,165,630	$1,162,102	$1,154,422
Debt Service Coverage	*2.11*	*2.69*	*2.95*	*2.70*	*2.96*	*3.05*	*3.08*	*3.07*	*3.01*	*2.94*
Net Revenues (Deficit)	$1,138,655	$1,833,306	$2,115,423	$1,897,084	$2,287,502	$2,391,485	$2,433,444	$2,410,263	$2,335,572	$2,241,593
Reserve Balance										
Beginning Balance	[redacted]	$4,128,126	$4,321,846	$5,185,607	$5,090,488	$4,981,971	$5,476,636	$6,094,427	$7,539,165	$8,743,397
Plus: Net Revenue	$1,138,655	$1,833,306	$2,115,423	$1,897,084	$2,287,502	$2,391,485	$2,433,444	$2,410,263	$2,335,572	$2,241,593
Less: Cash Funded Capital Projects	($2,459,834)	($1,639,587)	($1,251,662)	($1,992,203)	($2,396,019)	($1,916,820)	($1,835,653)	($985,525)	($1,151,341)	($1,117,001)
Transfer In from Impact Fee Fund	$0	$0	$0	$0	$0	$20,000	$20,000	$20,000	$20,000	$20,000
Ending Balance	$4,128,126	$4,321,846	$5,185,607	$5,090,488	$4,981,971	$5,476,636	$6,094,427	$7,539,165	$8,743,397	$9,887,989
% of Operating Expenses in Reserve	*100.00%*	*100.00%*	*113.16%*	*100.00%*	*100.28%*	*105.16%*	*111.61%*	*131.63%*	*145.48%*	*156.75%*
Months of Operating Expenses in Reserve	*12*	*12*	*14*	*12*	*12*	*13*	*13*	*16*	*17*	*19*
Capital Project Funding										
Total Capital Projects	$3,400,897	$2,319,626	$1,543,629	$3,093,869	$2,490,694	$1,916,820	$1,835,653	$985,525	$1,151,341	$1,117,001
Less Projects funded by Impact Fees	($98,440)	($250,277)	($291,967)	($54,111)	($94,675)	$0	$0	$0	$0	$0
Net CIP Costs to be Funded	$3,302,457	$2,069,349	$1,251,662	$3,039,758	$2,396,019	$1,916,820	$1,835,653	$985,525	$1,151,341	$1,117,001
Less: Available Bond Funding	($842,623)	($429,762)	$0	($1,047,554)	$0	$0	$0	$0	$0	$0
Cash Funded Projects	$2,459,834	$1,639,587	$1,251,662	$1,992,203	$2,396,019	$1,916,820	$1,835,653	$985,525	$1,151,341	$1,117,001
Total Bond Funded Amount by Series			($1,272,385)			($1,047,554)				

City of St. Helena
Water Fund Debt Service

	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
Series 2006A	589,125	591,625	588,419	589,281	589,300	587,275	588,025	587,775	586,525	584,275
Series 2012	406,291	407,348	408,092	406,213	407,857	406,526	406,252	405,391	405,215	401,987
Series 2017	29,087	88,174	87,490	86,749	85,978	90,147	89,115	88,026	86,868	85,653
Series 2020	-	-	-	30,840	81,680	81,024	85,330	84,438	83,495	82,508
Total DS	1,024,503	1,087,147	1,084,000	1,113,084	1,164,815	1,164,972	1,168,722	1,165,630	1,162,102	1,154,422

Existing 2006A Bonds Debt Service

Date	Principal	Rate	Interest	Periodic DS	Annual Total	Fiscal Total
10/1/2017	305,000	4.000	145,112.50	450,112.50	450,112.50	
4/1/2018			139,012.50	139,012.50		589,125.00
10/1/2018	320,000	4.000	139,012.50	459,012.50	598,025.00	
4/1/2019			132,612.50	132,612.50		591,625.00
10/1/2019	330,000	4.125	132,612.50	462,612.50	595,225.00	
4/1/2020			125,806.25	125,806.25		588,418.75
10/1/2020	345,000	4.250	125,806.25	470,806.25	596,612.50	
4/1/2021			118,475.00	118,475.00		589,281.25
10/1/2021	360,000	4.250	118,475.00	478,475.00	596,950.00	
4/1/2022			110,825.00	110,825.00		589,300.00
10/1/2022	375,000	5.000	110,825.00	485,825.00	596,650.00	
4/1/2023			101,450.00	101,450.00		587,275.00
10/1/2023	395,000	5.000	101,450.00	496,450.00	597,900.00	
4/1/2024			91,575.00	91,575.00		588,025.00
10/1/2024	415,000	5.000	91,575.00	506,575.00	598,150.00	
4/1/2025			81,200.00	81,200.00		587,775.00
10/1/2025	435,000	5.000	81,200.00	516,200.00	597,400.00	
4/1/2026			70,325.00	70,325.00		586,525.00
10/1/2026	455,000	5.000	70,325.00	525,325.00	595,650.00	
4/1/2027			58,950.00	58,950.00		584,275.00
10/1/2027	480,000	4.500	58,950.00	538,950.00	597,900.00	
4/1/2028			48,150.00	48,150.00		587,100.00
10/1/2028	500,000	4.500	48,150.00	548,150.00	596,300.00	
4/1/2029			36,900.00	36,900.00		585,050.00
10/1/2029	525,000	4.500	36,900.00	561,900.00	598,800.00	
4/1/2030			25,087.50	25,087.50		586,987.50
10/1/2030	545,000	4.500	25,087.50	570,087.50	595,175.00	
4/1/2031			12,825.00	12,825.00		582,912.50
10/1/2031	570,000	4.500	12,825.00	582,825.00	595,650.00	
4/1/2032			-	-		582,825.00
10/1/2032	-	-	-	-	-	
4/1/2033						0
Totals	6,355,000		2,451,500	8,806,500	8,806,500	8,806,500

Existing 2012 Bonds Debt Service

Date	Principal	Rate	Interest	Periodic DS	Annual Total	Fiscal Total
10/1/2017	223,043	4.00	93,854.34	316,897.34	316,897.34	
4/1/2018			89,393.48	89,393.48		406,290.83
10/1/2018	230,870	2.00	89,393.48	320,263.48	409,656.97	
4/1/2019			87,084.78	87,084.78		407,348.27
10/1/2019	238,696	4.00	87,084.78	325,780.78	412,865.57	
4/1/2020			82,310.86	82,310.86		408,091.65
10/1/2020	246,522	4.00	82,310.86	328,832.86	411,143.73	
4/1/2021			77,380.42	77,380.42		406,213.29
10/1/2021	258,261	4.00	77,380.42	335,641.42	413,021.85	
4/1/2022			72,215.20	72,215.20		407,856.63
10/1/2022	266,087	3.00	72,215.20	338,302.20	410,517.41	
4/1/2023			68,223.90	68,223.90		406,526.10
10/1/2023	273,913	3.00	68,223.90	342,136.90	410,360.80	
4/1/2024			64,115.20	64,115.20		406,252.10
10/1/2024	281,739	3.25	64,115.20	345,854.20	409,969.41	
4/1/2025			59,536.95	59,536.95		405,391.15
10/1/2025	293,478	5.00	59,536.95	353,014.95	412,551.89	
4/1/2026			52,200.00	52,200.00		405,214.94
10/1/2026	305,217	5.00	52,200.00	357,417.00	409,616.99	
4/1/2027			44,569.57	44,569.57		401,986.57
10/1/2027	320,870	5.00	44,569.57	365,439.57	410,009.14	
4/1/2028			36,547.82	36,547.82		401,987.39
10/1/2028	336,522	4.00	36,547.82	373,069.82	409,617.64	
4/1/2029			29,817.38	29,817.38		402,887.20
10/1/2029	352,174	4.00	29,817.38	381,991.38	411,808.76	
4/1/2030			22,773.90	22,773.90		404,765.28
10/1/2030	363,913	4.00	22,773.90	386,686.90	409,460.80	
4/1/2031			15,495.64	15,495.64		402,182.54
10/1/2031	379,565	4.00	15,495.64	395,060.64	410,556.28	
4/1/2032			7,904.34	7,904.34		402,964.98
10/1/2032	395,217	4.00	7,904.34	403,121.34	411,025.68	
4/1/2033						403,121.34
Totals	4,766,087		1,712,993	6,479,080	6,479,080	6,479,080

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SEWER CASH FLOW - OPERATING & CAPITAL

Revenues and Expenses	2018 Year 1	2019 Year 2	2020 Year 3	2021 Year 4	2022 Year 5	2023 Year 6	2024 Year 7	2025 Year 8	2026 Year 9	2027 Year 10
Operating Revenues										
Charges For Services	$3,282,705	$3,996,014	$4,410,951	$4,520,363	$4,589,140	$4,802,027	$5,039,172	$5,259,709	$5,472,228	$5,670,901
Growth in Services	$4,850	$5,578	$7,081	$7,373	$7,489	$7,596	$8,050	$8,408	$8,768	$9,100
Total Sewer Sales	**$3,287,555**	**$4,001,591**	**$4,418,032**	**$4,527,736**	**$4,596,629**	**$4,809,622**	**$5,047,222**	**$5,268,118**	**$5,480,997**	**$5,680,001**
Investment Earnings	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Sewer Connection Fee	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Total Operating Revenues	**$3,287,555**	**$4,001,591**	**$4,418,032**	**$4,527,736**	**$4,596,629**	**$4,809,622**	**$5,047,222**	**$5,268,118**	**$5,480,997**	**$5,680,001**
Operating Expenses	**$1,973,928**	**$2,246,507**	**$2,140,652**	**$2,260,874**	**$2,478,589**	**$2,524,375**	**$2,668,756**	**$2,822,367**	**$2,985,876**	**$3,160,007**
Operating Revenue before Capital Improvements and Debt Service	**$1,313,627**	**$1,755,084**	**$2,277,380**	**$2,266,862**	**$2,118,047**	**$2,285,247**	**$2,378,466**	**$2,445,751**	**$2,495,120**	**$2,519,994**
Debt Service	**$421,172**	**$760,566**	**$758,550**	**$818,734**	**$919,251**	**$913,360**	**$917,099**	**$914,781**	**$911,752**	**$917,043**
Debt Service Coverage	*3.12*	*2.31*	*3.00*	*2.77*	*2.30*	*2.50*	*2.59*	*2.67*	*2.74*	*2.75*
Net Revenues (Deficit)	**$892,454**	**$994,518**	**$1,518,830**	**$1,448,127**	**$1,198,796**	**$1,371,887**	**$1,461,367**	**$1,530,970**	**$1,583,368**	**$1,602,952**
Reserve Balance										
Beginning Fund Balance	$1,054,742	$1,947,196	$2,246,507	$2,140,652	$3,067,670	$2,499,614	$2,524,375	$3,603,634	$4,878,695	$6,008,300
Net Revenues (Deficit)	$892,454	$994,518	$1,518,830	$1,448,127	$1,198,796	$1,371,887	$1,461,367	$1,530,970	$1,583,368	$1,602,952
Less: Cash Funded Capital Improvements	$0	($695,207)	($1,624,685)	($521,109)	($1,766,852)	($1,347,127)	($382,109)	($255,908)	($453,763)	($271,920)
Ending Fund Balance	**$1,947,196**	**$2,246,507**	**$2,140,652**	**$3,067,670**	**$2,499,614**	**$2,524,375**	**$3,603,634**	**$4,878,695**	**$6,008,300**	**$7,339,332**
% of Operating Expenses in Reserve	*98.65%*	*100.00%*	*100.00%*	*135.69%*	*100.85%*	*100.00%*	*135.03%*	*172.86%*	*201.22%*	*232.26%*
Months of Operating Expenses in Reserve	*12*	*12*	*12*	*16*	*12*	*12*	*16*	*21*	*24*	*28*
Capital Project Funding										
Total Capital Projects	$1,245,330	$4,215,833	$4,402,174	$527,219	$1,773,150	$3,342,686	$388,801	$262,807	$494,399	$279,250
Less Projects funded by Impact Fees	($5,578)	($5,750)	($5,928)	($6,110)	($6,298)	($6,492)	($6,692)	($6,899)	($40,636)	($7,330)
Net CIP Costs to be Funded	**$1,239,752**	**$4,210,083**	**$4,396,246**	**$521,109**	**$1,766,852**	**$3,336,194**	**$382,109**	**$255,908**	**$453,763**	**$271,920**
Less: Available Bond Funding	($1,239,752)	($3,514,875)	($2,771,561)	$0	$0	($1,989,067)	$0	$0	$0	$0
Cash Funded Projects	**$0**	**$695,207**	**$1,624,685**	**$521,109**	**$1,766,852**	**$1,347,127**	**$382,109**	**$255,908**	**$453,763**	**$271,920**
Total Bond Funded Amount by Series			**($7,526,188)**			**($1,989,067)**				

City of St. Helena
Sewer Fund Debt Service

	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
Series 2005B	141,045	142,878	139,531	140,986	142,099	138,014	138,821	139,414	139,750	139,828
Series 2012	112,859	113,152	113,358	112,837	113,293	112,924	112,848	112,609	112,560	111,663
Series 2017	167,268	504,537	505,661	506,338	506,712	506,588	505,983	504,918	503,298	506,185
Series 2020	-	-	-	58,574	157,147	155,835	159,447	157,841	156,144	159,367
Total DS	421,172	760,566	758,550	818,734	919,251	913,360	917,099	914,781	911,752	917,043

Existing 2005B Bonds Debt Service

Date	Principal	Rate	Interest	Periodic DS	Annual Total	Fiscal Total
10/1/2017	80,000	3.800	31,282.50	111,282.50	111,282.50	
4/1/2018			29,762.50	29,762.50		141,045.00
10/1/2018	85,000	3.875	29,762.50	114,762.50	144,525.00	
4/1/2019			28,115.63	28,115.63		142,878.13
10/1/2019	85,000	4.000	28,115.63	113,115.63	141,231.25	
4/1/2020			26,415.63	26,415.63		139,531.25
10/1/2020	90,000	4.100	26,415.63	116,415.63	142,831.25	
4/1/2021			24,570.63	24,570.63		140,986.25
10/1/2021	95,000	4.300	24,570.63	119,570.63	144,141.25	
4/1/2022			22,528.13	22,528.13		142,098.75
10/1/2022	95,000	4.300	22,528.13	117,528.13	140,056.25	
4/1/2023			20,485.63	20,485.63		138,013.75
10/1/2023	100,000	4.300	20,485.63	120,485.63	140,971.25	
4/1/2024			18,335.63	18,335.63		138,821.25
10/1/2024	105,000	4.300	18,335.63	123,335.63	141,671.25	
4/1/2025			16,078.13	16,078.13		139,413.75
10/1/2025	110,000	4.375	16,078.13	126,078.13	142,156.25	
4/1/2026			13,671.88	13,671.88		139,750.00
10/1/2026	115,000	4.375	13,671.88	128,671.88	142,343.75	
4/1/2027			11,156.25	11,156.25		139,828.13
10/1/2027	120,000	4.375	11,156.25	131,156.25	142,312.50	
4/1/2028			8,531.25	8,531.25		139,687.50
10/1/2028	125,000	4.375	8,531.25	133,531.25	142,062.50	
4/1/2029			5,796.88	5,796.88		139,328.13
10/1/2029	130,000	4.375	5,796.88	135,796.88	141,593.75	
4/1/2030			2,953.13	2,953.13		138,750.00
10/1/2030	135,000	4.375	2,953.13	137,953.13	140,906.25	
4/1/2031			-	-		137,953.13
10/1/2031	-	-	-	-	-	
4/1/2032			-	-		-
10/1/2032	-	-	-	-	-	
4/1/2033						-
Totals	1,470,000		488,085	1,958,085	1,958,085	1,958,085

Existing 2012 Bonds Debt Service

Date	Principal	Rate	Interest	Periodic DS	Annual Total	Fiscal Total
10/1/2017	61,957	4.00	26,070.66	88,027.66	88,027.66	
4/1/2018			24,831.52	24,831.52		112,859.17
10/1/2018	64,130	2.00	24,831.52	88,961.52	113,793.03	
4/1/2019			24,190.22	24,190.22		113,151.73
10/1/2019	66,304	4.00	24,190.22	90,494.22	114,684.43	
4/1/2020			22,864.14	22,864.14		113,358.35
10/1/2020	68,478	4.00	22,864.14	91,342.14	114,206.27	
4/1/2021			21,494.58	21,494.58		112,836.71
10/1/2021	71,739	4.00	21,494.58	93,233.58	114,728.15	
4/1/2022			20,059.80	20,059.80		113,293.37
10/1/2022	73,913	3.00	20,059.80	93,972.80	114,032.59	
4/1/2023			18,951.10	18,951.10		112,923.90
10/1/2023	76,087	3.00	18,951.10	95,038.10	113,989.20	
4/1/2024			17,809.80	17,809.80		112,847.90
10/1/2024	78,261	3.25	17,809.80	96,070.80	113,880.59	
4/1/2025			16,538.06	16,538.06		112,608.85
10/1/2025	81,522	5.00	16,538.06	98,060.06	114,598.11	
4/1/2026			14,500.01	14,500.01		112,560.06
10/1/2026	84,783	5.00	14,500.01	99,283.01	113,783.01	
4/1/2027			12,380.43	12,380.43		111,663.44
10/1/2027	89,130	5.00	12,380.43	101,510.43	113,890.86	
4/1/2028			10,152.18	10,152.18		111,662.61
10/1/2028	93,478	4.00	10,152.18	103,630.18	113,782.36	
4/1/2029			8,282.62	8,282.62		111,912.80
10/1/2029	97,826	4.00	8,282.62	106,108.62	114,391.24	
4/1/2030			6,326.10	6,326.10		112,434.72
10/1/2030	101,087	4.00	6,326.10	107,413.10	113,739.20	
4/1/2031			4,304.36	4,304.36		111,717.46
10/1/2031	105,435	4.00	4,304.36	109,739.36	114,043.72	
4/1/2032			2,195.66	2,195.66		111,935.02
10/1/2032	109,783	4.00	2,195.66	111,978.66	114,174.32	
4/1/2033						111978.66
Totals	1,323,913		475,832	1,799,745	1,799,745	1,799,745