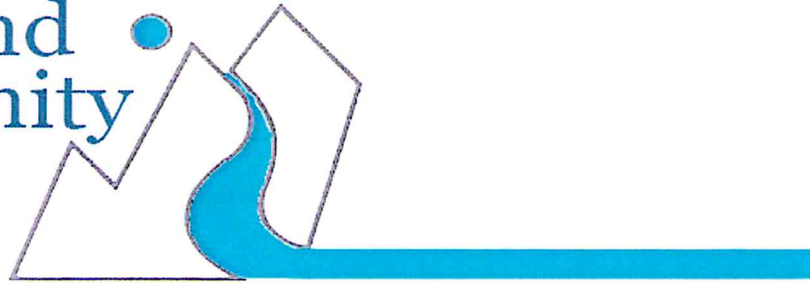


Groveland
Community
Services
District



**Draft Wastewater Rate Study
Base Scenario**

10/5/2017



Bartle Wells Associates
1889 Alcatraz Avenue
Berkeley, CA 94703

**Table 1: Fixed and Variable Cost Allocation
Groveland Community Services District
Sewer Rate Study**

Budget Category	Actuals		Fixed Cost	Variable Cost
	2016/17	2017/18		
Administration & Board	510,336	576,673	100%	0%
<u>Operations</u>				
Employee Salaries and Benefits	209,500	258,500	100%	0%
Overhead [1]	46,451	31,947	100%	0%
Chemicals	20,647	25,462	0%	100%
Laboratory	19,957	27,370	50%	50%
Repairs and Maintenance	28,663	35,000	25%	75%
Biosolids	9,084	12,200	0%	100%
SCADA	276	8,013	0%	100%
Irrigation Fields	0	0	0%	100%
Groundwater Monitoring	660	5,305	100%	0%
Utilities	<u>80,715</u>	<u>92,828</u>	0%	100%
Total Operations	415,953	496,625		
<u>Maintenance</u>				
Employee Salaries and Benefits	252,408	232,385	100%	0%
Fuel	10,019	22,438	0%	100%
Chemical/Odor Control	8,170	10,609	0%	100%
Maintenance and Repair	21,617	26,523	25%	75%
Emergency Repair Sewer Lines	157	5,305	100%	0%
Conservation Crew Expenses	2,492	3,000	100%	0%
Annual Collect System TV Insp	48,000	55,000	100%	0%
Utilities	25,495	21,086	0%	100%
Overhead [1]	<u>24,157</u>	<u>50,546</u>	100%	0%
Total Maintenance	392,514	426,892		
Equipment Leases	6,986	41,100	100%	0%
Debt	324,310	324,310	90%	10%
Capital Improvement Funding	0	0	90%	10%
Total	1,650,100	1,865,600	1,580,706	284,894
Allocation			85%	15%
Total			\$1,580,706	\$284,894
Allocation				

[1] Small tools, supplies, office expenses, misc.

Table 2 : Customer Information
Groveland Community Services District
Sewer Rate Study

Code	Customer Information	Number of Accounts	Total Number of Bills	Ratio [1]	Equivalent Number of Bills
S01	Sewer Monthly Fixed Rate	1,499	17,988	1.00	17,988
S01FC	Fixed Consump Fee 3100 ga	15	180	0.41	73
S02	Sewer Coml Monthly Fixed Ra	91	1,092	1.00	1,092
S02S	Coml w/stdby	1	12	1.00	12
S03	Sewer Coml Monthly Fixed Ra	1	12	1.00	12
S04	Coml 2 Conn Fixed	5	60	2.00	120
S04S	Coml 2 Conn w/Stdby	5	60	2.00	120
S06	Coml 4 Conn Fixed	1	12	4.00	48
	Total	1,618	19,416		19,465

Table 3: Current Monthly Rates
Groveland Community Services District
Sewer Rate Study

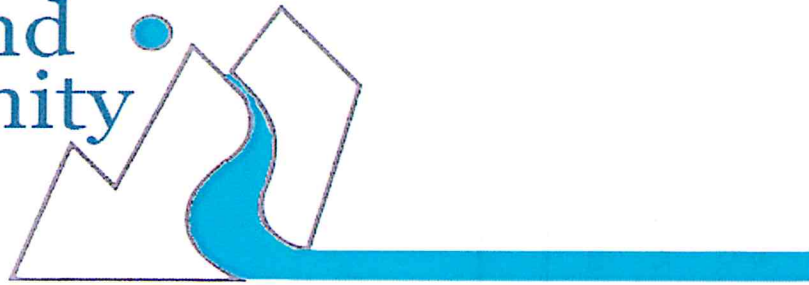
Rate Category	FY2017 Current Rates		
Monthly Minimum Charge	\$53.10		
2014 Wastewater Debt Service Charge [1]	\$25.75	0.793	\$20.42 Resturctured
Volume Usage Charge (\$/gallon metered water use)			
Residential	\$0.00698		
Commercial	\$0.01121		

[1] Not applicable to Groveland/Big Oak Flat accounts not tributary to Lift Station 7

Table 3 : "Updated CIP" 50% Grant Funding
 Groveland Community Services District
 Sewer Rate Study

Description	2023/24	2024/25	2025/26	2026/27	2027/28	10 Year Total
Force Main Inspection	-	-	-	-	-	91,876
A. LS 7 to Treatment Plant	-	-	-	-	-	343,850
B. LS 13	-	-	-	-	-	551,000
C. LS 2	-	-	-	-	-	82,000
D. LS 1	-	-	-	-	-	24,660
E. LS 14	-	-	-	-	-	147,960
F. LS 15	-	-	-	-	-	41,100
G. LS 8	-	-	-	-	-	123,300
H. LS10	-	-	-	-	-	419,220
I. LS 11	-	-	-	-	-	493,200
J. LS 3	-	-	-	-	-	73,980
K. LS 4	-	-	-	-	-	16,440
L. LS 9	-	-	-	-	-	106,860
M. LS 12	-	-	-	-	-	73,980
N. LS 5	-	-	-	-	-	279,480
O. LS 6	-	-	-	-	-	197,280
P. LS 16 [1]	-	-	-	-	-	-
Flume 1400' [1]	-	-	-	-	-	-
WWTP Headworks	-	-	-	-	-	250,000
WWTP Repair	275,000	-	-	-	-	1,715,000
Gravity Sewer Line Rehab	344,531	344,531	344,531	344,531	344,531	3,100,779
Satellite lift station rehab	100,000	100,000	100,000	100,000	100,000	700,000
Admin Building	25,000	25,000	25,000	25,000	25,000	325,000
HUB Lift Station 6	-	-	-	250,000	250,000	250,000
TOTAL	\$744,531	\$469,531	\$469,531	\$719,531	\$719,531	\$9,406,965
Base Funding	\$0	\$0	\$0	\$0	\$0	\$7,055,224

Groveland
Community
Services
District



Scenario 1
Updated CIP Financed through Debt Issuance

10/5/2017



Bartle Wells Associates
1889 Alcatraz Avenue
Berkeley, CA 94703

Scenario 1: Debt Funding Updated CIP
Table 4a: Preliminary Debt Estimates

GCS D

Sewer Rate Study

Description	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23
2014 Bond	324,300	324,300	324,300	324,300	324,300	324,300	324,300
Proposed Loans							
2018 Debt [1]	0	0	277,110	277,110	277,110	277,110	277,110
2022 Debt [2]						0	0
Total	324,300	324,300	601,410	601,410	601,410	601,410	601,410

[1] \$2.8 Million 15 yr Bond at 5%

Proposed Loans	
Amount to be Financed	2,800,000
Interest	5%
years	15
semi-annual	2
Issuance Costs	100,000
Total Issuance	2,900,000
	277,110

Scenario 1: Debt Funding Updated CIP
 Table 4a: Preliminary Debt Estimates

GCSD

Sewer Rate Study

Description	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31	2031/32
2014 Bond	324,300	324,300	324,300	324,300	-	-	-	-	-
Proposed Loans									
2018 Debt [1]	277,110	277,110	277,110	277,110	277,110	277,110	277,110	277,110	277,110
2022 Debt [2]	0	0	0	0	0	0	0	0	0
Total	601,410	601,410	601,410	601,410	277,110	277,110	277,110	277,110	277,110

[1] \$2.8 Million 15 yr Bond at 5%

Proposed Loans

Amount to be Financed

Interest

years

semi-annual

Issuance Costs

Total Issuance

Scenario 1: Debt Funding Updated CIP
 Table 5a : Cash Flow Scenario 1
 Groveland Community Services District
 Sewer Rate Study

	Projected					UPDATE
	Current	2018/19	2019/20	2020/21	2021/22	
Beginning Fund Balance						
Opening Balance [1]	\$368,541	\$1,372,409	\$3,466,944	\$2,719,287	\$2,288,730	\$1,604,942
Rate Adjustment	0%	34%	15%	15%	5%	5%
Growth	0%	0%	0%	0%	0%	0%
Debt service charge	25.75	20.42	20.42	20.42	20.42	20.42
Revenues						
Sewer rate revenues [3]	1,404,700	1,882,300	2,164,600	2,489,300	2,613,800	2,744,500
Debt service charge revenues	410,000	325,000	325,000	325,000	325,000	325,000
Misc. revenues [4]	35,400	32,000	32,000	32,000	32,000	32,000
Grants	520,684	17,691	0	0	0	0
Loan Proceeds	0	2,800,000	0	0	0	0
Total Revenues	2,370,784	5,056,991	2,521,600	2,846,300	2,970,800	3,101,500
Expenses						
Administration & Board	598,700	610,700	622,900	635,400	648,100	661,100
Operations	496,600	506,500	516,600	526,900	537,400	548,100
Maintenance	426,900	435,400	444,100	453,000	462,100	471,300
Equipment Leases	41,100	41,900	42,700	43,600	44,500	45,400
Total Operating Expenses	1,563,300	1,594,500	1,626,300	1,658,900	1,692,100	1,725,900
Debt Service Payment	324,300	601,410	601,410	601,410	601,410	601,410
Capital Improvement Projects	0	766,547	1,041,547	1,016,547	1,361,078	649,531
Operating Revenue	2,370,784	2,256,991	2,521,600	2,846,300	2,970,800	3,101,500
Loan Proceeds	520,684	2,800,000	0	0	0	0
Total Expenses	1,887,600	2,962,457	3,269,257	3,276,857	3,654,588	2,976,841
Net Revenues	1,003,868	2,094,534	(747,657)	(430,557)	(683,788)	124,659
Ending Fund Balance	1,372,409	3,466,944	2,719,287	2,288,730	1,604,942	1,729,601
Debt Service Coverage						
Net Operating Revenues	807,484	662,491	895,300	1,187,400	1,278,700	1,375,600
Debt Service Payment	324,300	601,410	601,410	601,410	601,410	601,410
Debt Coverage	2.49	1.10	1.49	1.97	2.13	2.29
1 - FY2016/17 Actual Opening Fund Balance						
2 - Fixed Charge + Debt Service Charge + 1900 gallons Consumption						
3 - Does not include 2014 Wastewater Debt Service Charge revenues						
4 - Includes 2016 Grant Revenues						

Scenario 1: Debt Funding Updated CIP
 Table 5a : Cash Flow Scenario 1
 Groveland Community Services District
 Sewer Rate Study

	2023/24	2024/25	2025/26	2026/27	2027/28
Beginning Fund Balance					
Opening Balance [1]	\$1,729,601	\$1,724,760	\$1,959,718	\$2,158,777	\$2,071,236
Rate Adjustment	0%	0%	0%	0%	0%
Growth	20.42	20.42	20.42	20.42	20.42
Debt service charge					
Revenues	2,744,500	2,744,500	2,744,500	2,744,500	2,744,500
Sewer rate revenues [3]	325,000	325,000	325,000	325,000	325,000
Debt service charge revenues	32,000	32,000	32,000	32,000	32,000
Misc. revenues [4]	0	0	0	0	0
Grants	0	0	0	0	0
Loan Proceeds	0	0	0	0	0
Total Revenues	3,101,500	3,101,500	3,101,500	3,101,500	2,776,500
Expenses					
Administration & Board	674,300	687,800	701,600	715,600	729,900
Operations	559,100	570,300	581,700	593,300	605,200
Maintenance	480,700	490,300	500,100	510,100	520,300
Equipment Leases	46,300	47,200	48,100	49,100	50,100
Total Operating Expenses	1,760,400	1,795,600	1,831,500	1,868,100	1,905,500
Debt Service Payment	601,410	601,410	601,410	601,410	277,110
Capital Improvement Projects	744,531	469,531	469,531	719,531	719,531
Operating Revenue	3,101,500	3,101,500	3,101,500	3,101,500	2,776,500
Loan Proceeds	0	0	0	0	0
Total Expenses	3,106,341	2,866,541	2,902,441	3,189,041	2,902,141
Net Revenues	(4,841)	234,959	199,059	(87,541)	(125,641)
Ending Fund Balance	1,724,760	1,959,718	2,158,777	2,071,236	1,945,594
Debt Service Coverage					
Net Operating Revenues	1,341,100	1,305,900	1,270,000	1,235,400	871,000
Debt Service Payment	501,410	501,410	501,410	501,410	277,110
Debt Coverage	2.23	2.17	2.11	2.05	3.14
1 - FY2016/17 Actual Opening Fund Balance					
2 - Fixed Charge + Debt Service Charge + 1900 gallons Consumption					
3 - Does not include 2014 Wastewater Debt Service Charge revenues					
4 - Includes 2016 Grant Revenues					

**Scenario 1: Debt Funding Updated CIP
 Table 6a : 100% Fixed
 Groveland Community Services District
 Sewer Rate Study**

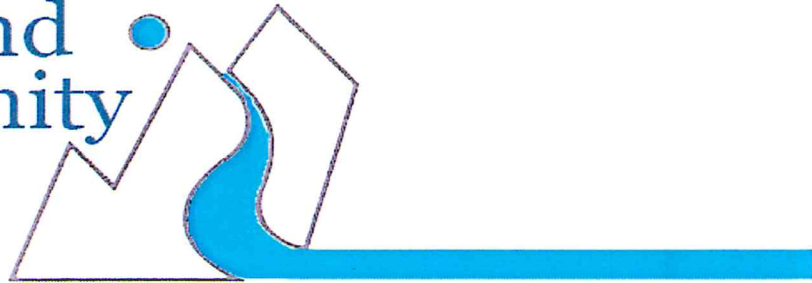
	Current	2018/19	2019/20	2020/21	2021/22	2022/23
Total Revenue Requirement		\$1,882,300	\$2,164,600	\$2,489,300	\$2,613,800	\$2,744,500
Total Number of Billing Units		19,465	19,465	19,465	19,465	19,465
Fixed Rate per Unit		\$96.70	\$111.20	\$127.88	\$134.28	\$140.99
Debt Service	\$92.11	\$20.42	\$20.42	\$20.42	\$20.42	\$20.42
		\$117.12	\$131.62	\$148.30	\$154.70	\$161.41

Scenario 1

Table 6a: 100% Fixed Typical Bills

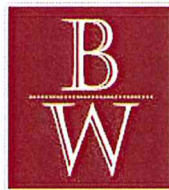


Groveland
Community
Services
District



Scenario 2
Pay-Go Funding with Updated CIP

10/5/2017



Bartle Wells Associates
1889 Alcatraz Avenue
Berkeley, CA 94703

Scenario 2: Pay-Go Funding Updated CIP
 Table 5 b: Cash Flow Projection for All Scenarios
 Groveland Community Services District
 Sewer Rate Study

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	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23
Beginning Fund Balance						
Opening Balance [1]	\$368,541	\$862,166	\$518,950	\$244,542	\$198,535	(\$147,304)
Typical Monthly Bill [2]	\$92.11	\$128.96	\$154.75	\$170.22	\$175.33	\$179.71
Rate Adjustment	0%	40%	20%	10.0%	3.0%	3%
Growth	0%	0%	0%	0%	0%	0%
Revenues						
Sewer rate revenues [3]	1,404,700	1,966,600	2,359,900	2,595,900	2,673,800	2,740,600
Debt service charge revenues	410,000	325,000	325,000	325,000	325,000	325,000
Misc. revenues	35,400	32,000	32,000	32,000	32,000	32,000
Total Revenues	1,850,100	2,323,600	2,716,900	2,952,900	3,030,800	3,097,600
Grants [4]	530,286	17,691	0	0	0	0
Expenses						
Administration & Board	598,700	610,700	622,900	635,400	648,100	661,100
Operations	496,600	506,500	516,600	526,900	537,400	548,100
Maintenance	426,900	435,400	444,100	453,000	462,100	471,300
Equipment Leases	41,100	41,900	42,700	43,600	44,500	45,400
Total Operating Expenses	1,563,300	1,594,500	1,626,300	1,658,900	1,692,100	1,725,900
Debt Service Payment	323,461	323,461	323,461	323,461	323,461	323,461
Capital Improvement Projects	0	766,547	1,041,547	1,016,547	1,361,078	649,531
Revenues	2,380,386	2,341,291	2,716,900	2,952,900	3,030,800	3,097,600
Total Expenses	1,886,761	2,684,508	2,991,308	2,998,908	3,376,639	2,698,892
Net Revenues	493,625	(343,216)	(274,408)	(46,008)	(345,839)	398,708
Ending Fund Balance	862,166	518,950	244,542	198,535	(147,304)	251,404
Debt Service Coverage						
Net Operating Revenues	817,086	746,791	1,090,600	1,294,000	1,338,700	1,371,700
Debt Service Payment	323,461	323,461	323,461	323,461	323,461	323,461
Debt Coverage	2.53	2.31	3.37	4.00	4.14	4.24

1 - FY2016/17 Actual Opening Fund Balance
 2 - Fixed Charge + Debt Service Charge + 1900 gallons Consumption
 3 - Does not include 2014 Wastewater Debt Service Charge revenues
 4- Includes 2016 Grant Revenues

Scenario 2: Pay-Go Funding Updated CIP
 Table 5 b: Cash Flow Projection for All Scenarios
 Groveland Community Services District
 Sewer Rate Study

	2023/24	2024/25	2025/26	2026/27	2027/28
Beginning Fund Balance					
Opening Balance [1]	\$251,404	\$520,612	\$1,029,620	\$1,502,728	\$1,689,236
Typical Monthly Bill [2]	\$179.71	\$179.71	\$179.71	\$179.71	\$179.71
Rate Adjustment	0%	0%	0%	0%	0%
Growth	0%	0%	0%	0%	0%
Revenues					
Sewer rate revenues [3]	2,740,600	2,740,600	2,740,600	2,740,600	2,740,600
Debt service charge revenues	325,000	325,000	325,000	325,000	325,000
Misc. revenues	32,000	32,000	32,000	32,000	32,000
Total Revenues	3,097,600	3,097,600	3,097,600	3,097,600	2,772,600
Grants [4]	0	0	0	0	0
Expenses					
Administration & Board	674,300	687,800	701,600	715,600	729,900
Operations	559,100	570,300	581,700	593,300	605,200
Maintenance	480,700	490,300	500,100	510,100	520,300
Equipment Leases	46,300	47,200	48,100	49,100	50,100
Total Operating Expenses	1,760,400	1,795,600	1,831,500	1,868,100	1,905,500
Debt Service Payment	323,461	323,461	323,461	323,461	0
Capital Improvement Projects	744,531	469,531	469,531	719,531	719,531
Revenues	3,097,600	3,097,600	3,097,600	3,097,600	2,772,600
Total Expenses	2,828,392	2,588,592	2,624,492	2,911,092	2,625,031
Net Revenues	269,208	509,008	473,108	186,508	147,569
Ending Fund Balance	520,612	1,029,620	1,502,728	1,689,236	1,836,805
Debt Service Coverage					
Net Operating Revenues	1,337,200	1,302,000	1,266,100	1,229,500	867,100
Debt Service Payment	323,461	323,461	323,461	323,461	0
Debt Coverage	4.13	4.03	3.91	3.80	

1 - FY2016/17 Actual Opening Fund Balance
 2 - Fixed Charge + Debt Service Charge + 1900 gallons Consumption
 3 - Does not include 2014 Wastewater Debt Service Charge revenues
 4- Includes 2016 Grant Revenues

Scenario 2: Pay-Go Funding Updated CIP
Table 6b : 100% Fixed
Groveland Community Services District
Sewer Rate Study

	Current	2018/19	2019/20	2020/21	2021/22	2022/23
Total Revenue Requirement		\$1,966,600	\$2,359,900	\$2,595,900	\$2,673,800	\$2,740,600
% increase		40%	20%	10%	3%	3%
Total Number of Billing Units		19,465	19,465	19,465	19,465	19,465
Fixed Rate per Unit		\$101.03	\$121.24	\$133.36	\$137.36	\$140.79
Debt Service		\$25.75	\$25.75	\$25.75	\$25.75	\$25.75
	\$92.11	\$126.78	\$146.99	\$159.11	\$163.11	\$166.54

Scenario 2
Table 6b: 100% Fixed Typical Bills



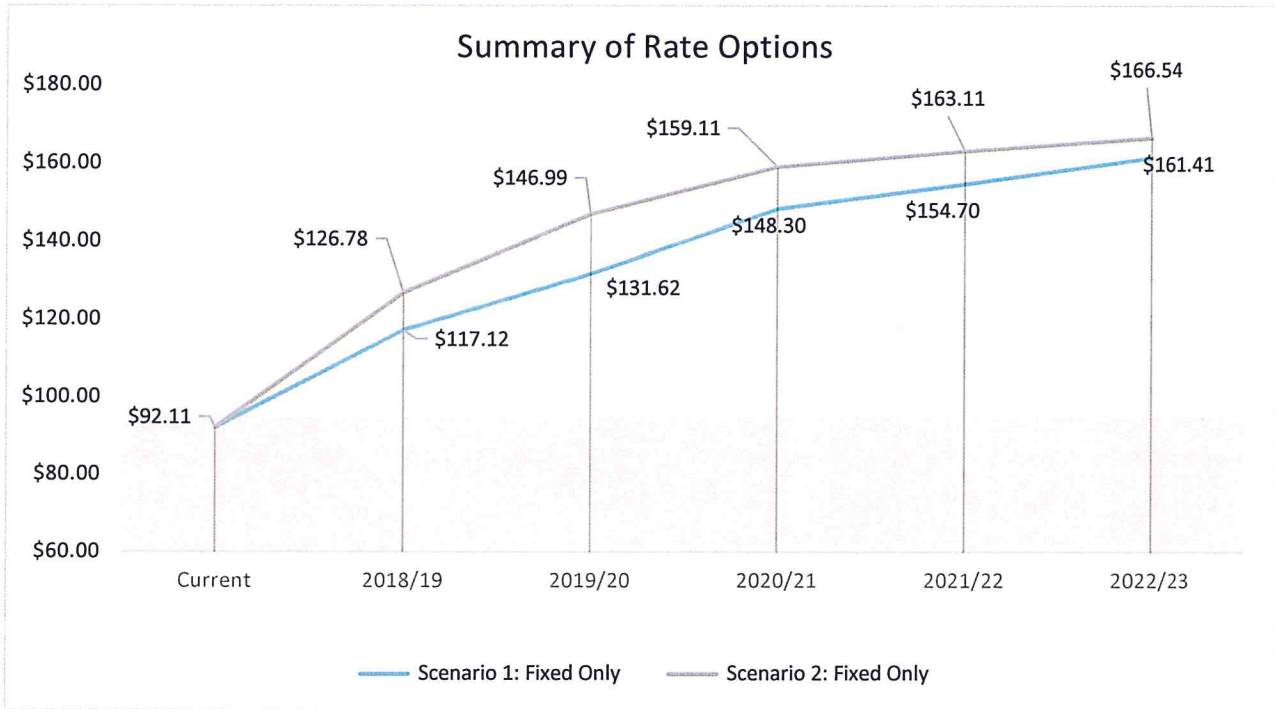
Table 8: Scenario Rate Summary
Groveland Community Services District
Sewer Rate Study

Scenario 1 Updated CIP Financed Through Debt Issuance

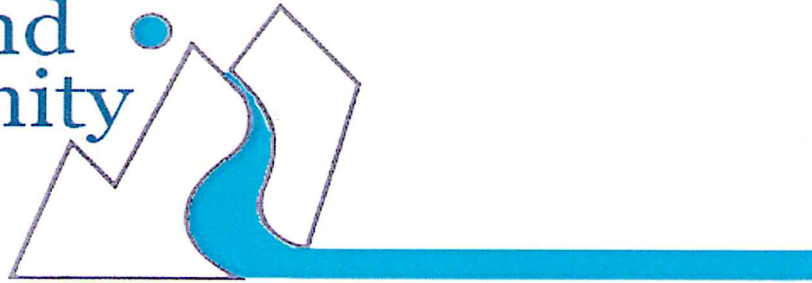
	Current	2017/18	2018/19	2019/20	2020/21	2021/22
Scenario 1: Fixed Only	\$92.11	\$117.12	\$131.62	\$148.30	\$154.70	\$161.41

Scenario 2 Pay-Go Funding with Updated CIP

	Current	2017/18	2018/19	2019/20	2020/21	2021/22
Scenario 2: Fixed Only	\$92.11	\$126.78	\$146.99	\$159.11	\$163.11	\$166.54



Groveland
Community
Services
District



**Draft Wastewater Rate Study
50% Grant Funding**

10/5/2017



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Groveland Community Services District
Sewer Rate Study**

Budget Category	Actuals		Fixed Cost	Variable Cost
	2016/17	2017/18		
Administration & Board	510,336	576,673	100%	0%
<u>Operations</u>				
Employee Salaries and Benefits	209,500	258,500	100%	0%
Overhead [1]	46,451	31,947	100%	0%
Chemicals	20,647	25,462	0%	100%
Laboratory	19,957	27,370	50%	50%
Repairs and Maintenance	28,663	35,000	25%	75%
Biosolids	9,084	12,200	0%	100%
SCADA	276	8,013	0%	100%
Irrigation Fields	0	0	0%	100%
Groundwater Monitoring	660	5,305	100%	0%
Utilities	<u>80,715</u>	<u>92,828</u>	0%	100%
Total Operations	415,953	496,625		
<u>Maintenance</u>				
Employee Salaries and Benefits	252,408	232,385	100%	0%
Fuel	10,019	22,438	0%	100%
Chemical/Odor Control	8,170	10,609	0%	100%
Maintenance and Repair	21,617	26,523	25%	75%
Emergency Repair Sewer Lines	157	5,305	100%	0%
Conservation Crew Expenses	2,492	3,000	100%	0%
Annual Collect System TV Insp	48,000	55,000	100%	0%
Utilities	25,495	21,086	0%	100%
Overhead [1]	<u>24,157</u>	<u>50,546</u>	100%	0%
Total Maintenance	392,514	426,892		
Equipment Leases	6,986	41,100	100%	0%
Debt	324,310	324,310	90%	10%
Capital Improvement Funding	0	0	90%	10%
Total	1,650,100	1,865,600	1,580,706	284,894
Allocation			85%	15%
Total			\$1,580,706	\$284,894
Allocation				

[1] Small tools, supplies, office expenses, misc.

Table 2 : Customer Information
Groveland Community Services District
Sewer Rate Study

Code	Customer Information	Number of Accounts	Total Number of Bills	Ratio [1]	Equivalent Number of Bills
S01	Sewer Monthly Fixed Rate	1,499	17,988	1.00	17,988
S01FC	Fixed Consump Fee 3100 ga	15	180	0.41	73
S02	Sewer Coml Monthly Fixed Ra	91	1,092	1.00	1,092
S02S	Coml w/stdby	1	12	1.00	12
S03	Sewer Coml Monthly Fixed Ra	1	12	1.00	12
S04	Coml 2 Conn Fixed	5	60	2.00	120
S04S	Coml 2 Conn w/Stdby	5	60	2.00	120
S06	Coml 4 Conn Fixed	1	12	4.00	48
	Total	1,618	19,416		19,465

Table 3: Current Monthly Rates
Groveland Community Services District
Sewer Rate Study

Rate Category	FY2017 Current Rates			
Monthly Minimum Charge	\$53.10			
2014 Wastewater Debt Service Charge [1]	\$25.75	0.793	\$20.42	Resturctured
Volume Usage Charge (\$/gallon metered water use)				
Residential	\$0.00698			
Commercial	\$0.01121			

[1] Not applicable to Groveland/Big Oak Flat accounts not tributary to Lift Station 7

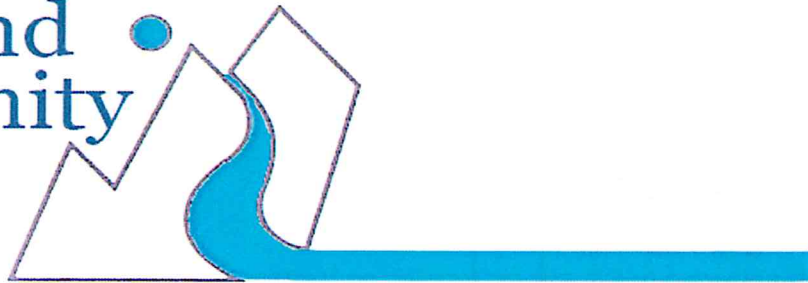
Table 3 : "Updated CIP" 50% Grant Funding
 Groveland Community Services District
 Sewer Rate Study

Description	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	5 Year Total
Force Main Inspection	-	22,969	22,969	22,969	22,969	-	\$91,876
A. LS 7 to Treatment Plant	-	85,963	85,963	85,963	85,963	-	343,850
B. LS 13	-	137,750	137,750	137,750	137,750	-	551,000
C. LS 2	-	20,500	20,500	20,500	20,500	-	82,000
D. LS 1	-	6,165	6,165	6,165	6,165	-	24,660
E. LS 14	-	36,990	36,990	36,990	36,990	-	147,960
F. LS 15	-	10,275	10,275	10,275	10,275	-	41,100
G. LS 8	-	30,825	30,825	30,825	30,825	-	123,300
H. LS10	-	104,805	104,805	104,805	104,805	-	419,220
I. LS 11	-	123,300	123,300	123,300	123,300	-	493,200
J. LS 3	-	18,495	18,495	18,495	18,495	-	73,980
K. LS 4	-	4,110	4,110	4,110	4,110	-	16,440
L. LS 9	-	26,715	26,715	26,715	26,715	-	106,860
M. LS 12	-	18,495	18,495	18,495	18,495	-	73,980
N. LS 5	-	69,870	69,870	69,870	69,870	-	279,480
O. LS 6	-	49,320	49,320	49,320	49,320	-	197,280
P. LS 16 [1]	-	-	-	-	-	-	-
Flume 1400' [1]	-	-	-	-	-	-	-
WWTP Headworks	-	-	250,000	-	-	-	250,000
WWTP Repair	-	-	-	225,000	225,000	180,000	630,000
Gravity Sewer Line Rehab	-	-	-	-	344,531	344,531	689,062
Satellite lift station rehab	-	-	-	-	-	100,000	100,000
Admin Building	-	-	25,000	25,000	25,000	25,000	100,000
HUB Lift Station 6	-	-	-	-	-	-	-
TOTAL	-	\$766,547	\$1,041,547	\$1,016,547	\$1,361,078	\$649,531	\$4,835,248
50% Grant Funding	-	\$383,273	\$520,773	\$508,273	\$680,539	\$324,766	\$2,417,624

Table 3 : "Updated CIP" 50% Grant Funding
 Groveland Community Services District
 Sewer Rate Study

Description	2023/24	2024/25	2025/26	2026/27	2027/28	10 Year Total
Force Main Inspection	-	-	-	-	-	91,876
A. LS 7 to Treatment Plant	-	-	-	-	-	343,850
B. LS 13	-	-	-	-	-	551,000
C. LS 2	-	-	-	-	-	82,000
D. LS 1	-	-	-	-	-	24,660
E. LS 14	-	-	-	-	-	147,960
F. LS 15	-	-	-	-	-	41,100
G. LS 8	-	-	-	-	-	123,300
H. LS10	-	-	-	-	-	419,220
I. LS 11	-	-	-	-	-	493,200
J. LS 3	-	-	-	-	-	73,980
K. LS 4	-	-	-	-	-	16,440
L. LS 9	-	-	-	-	-	106,860
M. LS 12	-	-	-	-	-	73,980
N. LS 5	-	-	-	-	-	279,480
O. LS 6	-	-	-	-	-	197,280
P. LS 16 [1]	-	-	-	-	-	-
Flume 1400' [1]	-	-	-	-	-	-
WWTP Headworks	-	-	-	-	-	250,000
WWTP Repair	275,000	-	-	-	-	1,715,000
Gravity Sewer Line Rehab	344,531	344,531	344,531	344,531	344,531	3,100,779
Satelite lift station rehab	100,000	100,000	100,000	100,000	100,000	700,000
Admin Building	25,000	25,000	25,000	25,000	25,000	325,000
HUB Lift Station 6	-	-	-	250,000	250,000	250,000
TOTAL	\$744,531	\$469,531	\$469,531	\$719,531	\$719,531	\$9,406,965
50% Grant Funding	\$372,266	\$234,766	\$234,766	\$359,766	\$359,766	\$7,055,224

Groveland
Community
Services
District



Scenario 1
Updated CIP Financed through Debt Issuance

10/5/2017



Bartle Wells Associates
1889 Alcatraz Avenue
Berkeley, CA 94703

Scenario 1: Debt Funding Updated CIP
Table 4a: Preliminary Debt Estimates

GCSB
 Sewer Rate Study

Description	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23
2014 Bond	324,300	324,300	324,300	324,300	324,300	324,300	324,300
Proposed Loans							
2018 Debt [1]	0	0	124,222	124,222	124,222	124,222	124,222
2022 Debt [2]						86,000	86,000
Total	324,300	324,300	448,522	448,522	448,522	534,522	534,522

[1] \$1.2 Million 15 yr Bond at 5%

[2] \$800 Thousand 15yr Bond at 5%

Proposed Loans

Amount to be Financed	1,200,000	800,000
Interest	5%	5%
years	15	15
semi-annual	2	2
Issuance Costs	100,000	100,000
Total Issuance	1,300,000	900,000
	124,222	86,000

Scenario 1: Debt Funding Updated CIP
Table 4a: Preliminary Debt Estimates

GCSB

Sewer Rate Study

Description	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31	2031/32
2014 Bond	324,300	324,300	324,300	324,300	-	-	-	-	-
Proposed Loans									
2018 Debt [1]	124,222	124,222	124,222	124,222	124,222	124,222	124,222	124,222	124,222
2022 Debt [2]	86,000	86,000	86,000	86,000	86,000	86,000	86,000	86,000	86,000
Total	534,522	534,522	534,522	534,522	210,222	210,222	210,222	210,222	210,222

[1] \$1.2 Million 15 yr Bond at 5%

[2] \$800 Thousand 15yr Bond at 5%

Proposed Loans

Amount to be Financed

Interest

years

semi-annual

Issuance Costs

Total Issuance

Scenario 1: Debt Funding Updated CIP
 Table 5a : Cash Flow Scenario 1
 Groveland Community Services District
 Sewer Rate Study

	Projected					UPDATE
	Current	2018/19	2019/20	2020/21	2021/22	
Beginning Fund Balance						
Opening Balance [1]	\$368,541	\$851,725	\$775,521	\$785,426	\$661,631	\$617,071
Rate Adjustment	0%	15%	7%	5%	5%	4%
Growth	0%	0%	0%	0%	0%	0%
Debt service charge	25.75	\$20.42	\$20.42	\$20.42	\$20.42	\$20.42
Revenues						
Sewer rate revenues [2]	1,404,700	1,615,400	1,728,500	1,814,900	1,905,600	1,981,800
Debt service charge revenues	410,000	325,000	325,000	325,000	325,000	325,000
Misc. revenues [4]	35,400	32,000	32,000	32,000	32,000	32,000
Grants	520,684	400,964	520,773	508,273	680,539	324,766
Loan Proceeds	0	360,000	520,000	320,000	600,000	100,000
Total Revenues	2,370,784	2,733,364	3,126,273	3,000,173	3,543,139	2,763,566
Expenses						
Administration & Board	598,700	610,700	622,900	635,400	648,100	661,100
Operations	496,600	506,500	516,600	526,900	537,400	548,100
Maintenance	426,900	435,400	444,100	453,000	462,100	471,300
Equipment Leases	51,100	41,900	42,700	43,600	44,500	45,400
Total Operating Expenses	1,563,300	1,594,500	1,626,300	1,658,900	1,692,100	1,725,900
Debt Service Payment	324,300	448,522	448,522	448,522	534,522	534,522
Capital Improvement Projects	0	766,547	1,041,547	1,016,547	1,361,078	649,531
Operating Revenue	2,370,784	2,373,364	2,606,273	2,680,173	2,943,139	2,663,566
Loan Proceeds	0	360,000	520,000	320,000	600,000	100,000
Total Expenses	1,887,600	2,809,568	3,116,368	3,123,968	3,587,699	2,909,953
Net Revenues	483,184	(76,204)	9,905	(123,795)	(44,560)	(146,387)
Ending Fund Balance	851,725	775,521	785,426	661,631	617,071	470,683
Debt Service Coverage						
Net Operating Revenues	807,484	778,864	979,973	1,021,273	1,251,039	937,666
Debt Service Payment	324,300	448,522	448,522	448,522	534,522	534,522
Debt Coverage	2.49	1.74	2.18	2.28	2.34	1.75
1 - FY2016/17 Actual Opening Fund Balance						
2 - Fixed Charge + Debt Service Charge + 1900 gallons Consumption						
3 - Does not include 2014 Wastewater Debt Service Charge revenues						
4 - Includes 2016 Grant Revenues						

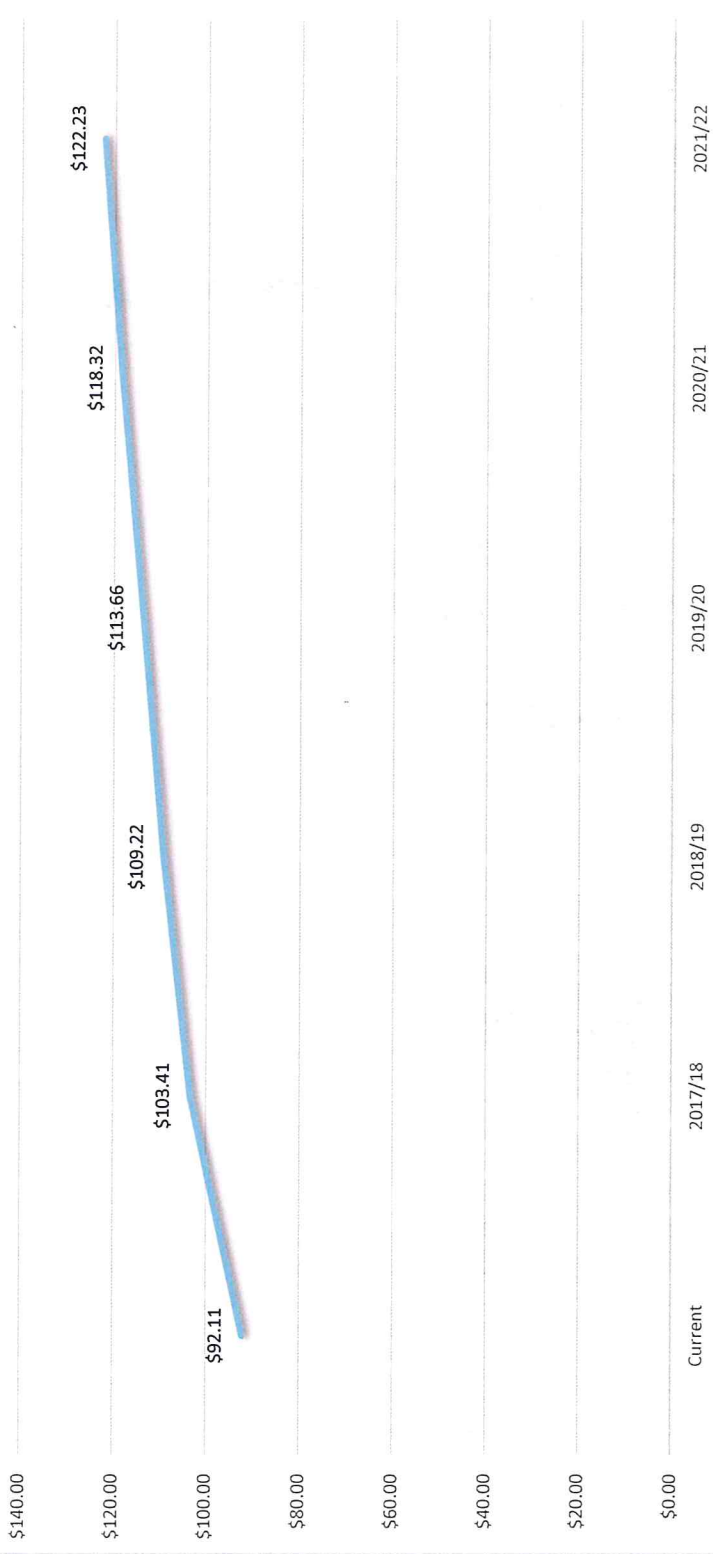
Scenario 1: Debt Funding Updated CIP
 Table 5a : Cash Flow Scenario 1
 Groveland Community Services District
 Sewer Rate Study

	2023/24	2024/25	2025/26	2026/27	2027/28
Beginning Fund Balance					
Opening Balance [1]	\$470,683	\$242,296	\$16,209	(\$245,778)	(\$669,365)
Rate Adjustment	0%	0%	0%	0%	0%
Growth	0%	0%	0%	0%	0%
Debt service charge	\$20.42	\$20.42	\$20.42	\$20.42	\$20.42
Revenues					
Sewer rate revenues [3]	1,981,800	1,981,800	1,981,800	1,981,800	1,981,800
Debt service charge revenues	325,000	325,000	325,000	325,000	325,000
Misc. revenues [4]	32,000	32,000	32,000	32,000	32,000
Grants	372,266	234,766	234,766	359,766	359,766
Loan Proceeds	100,000	0	0	0	0
Total Revenues	2,811,066	2,573,566	2,573,566	2,698,566	2,373,566
Expenses					
Administration & Board	674,300	687,800	701,600	715,600	729,900
Operations	559,100	570,300	581,700	593,300	605,200
Maintenance	480,700	490,300	500,100	510,100	520,300
Equipment Leases	46,300	47,200	48,100	49,100	50,100
Total Operating Expenses	1,760,400	1,795,600	1,831,500	1,868,100	1,905,500
Debt Service Payment	534,522	534,522	534,522	534,522	210,222
Capital Improvement Projects	744,531	469,531	469,531	719,531	719,531
Operating Revenue	2,711,066	2,573,566	2,573,566	2,698,566	2,373,566
Loan Proceeds	100,000	0	0	0	0
Total Expenses	3,039,453	2,799,653	2,835,553	3,122,153	2,835,253
Net Revenues	(228,387)	(226,087)	(261,987)	(423,587)	(461,687)
Ending Fund Balance	242,296	16,209	(245,778)	(669,365)	(1,131,052)
Debt Service Coverage					
Net Operating Revenues	950,666	777,966	742,066	830,466	468,066
Debt Service Payment	534,522	534,522	534,522	534,522	210,222
Debt Coverage	1.78	1.46	1.39	1.55	2.23
1 - FY2016/17 Actual Opening Fund Balance					
2 - Fixed Charge + Debt Service Charge + 1900 gallons Consumption					
3 - Does not include 2014 Wastewater Debt Service Charge revenues					
4 - Includes 2016 Grant Revenues					

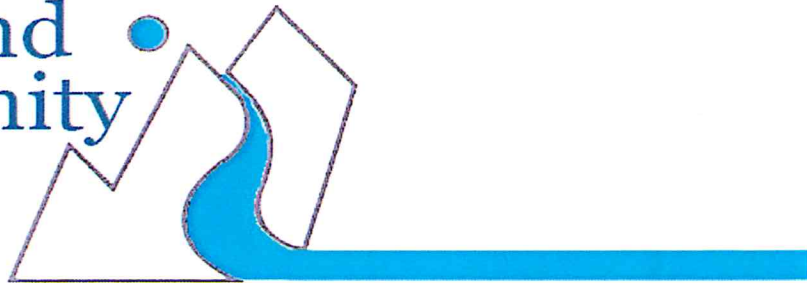
Scenario 1: Debt Funding Updated CIP
Table 6a : 100% Fixed
Groveland Community Services District
Sewer Rate Study

	Current	2018/19	2019/20	2020/21	2021/22	2022/23
Total Revenue Requirement		\$1,615,400	\$1,728,500	\$1,814,900	\$1,905,600	\$1,981,800
Total Number of Billing Units		19,465	19,465	19,465	19,465	19,465
Fixed Rate per Unit		\$82.99	\$88.80	\$93.24	\$97.90	\$101.81
Debt Service	\$92.11	\$20.42	\$20.42	\$20.42	\$20.42	\$20.42
		\$103.41	\$109.22	\$113.66	\$118.32	\$122.23

Scenario 1
Table 6a: 100% Fixed Typical Bills



Groveland
Community
Services
District



Scenario 2
Pay-Go Funding with Updated CIP

10/5/2017



Bartle Wells Associates
1889 Alcatraz Avenue
Berkeley, CA 94703

Scenario 2: Pay-Go Funding Updated CIP
 Table 5 b: Cash Flow Projection for All Scenarios
 Groveland Community Services District
 Sewer Rate Study

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	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23
Beginning Fund Balance						
Opening Balance [1]	\$368,541	\$862,166	\$761,723	\$748,189	\$798,555	\$730,855
Typical Monthly Bill [2]	\$92.11	\$119.75	\$137.71	\$143.22	\$148.94	\$148.94
Rate Adjustment	0%	30%	15%	4.0%	4.0%	0%
Growth	0%	0%	0%	0%	0%	0%
Revenues						
Sewer rate revenues [3]	1,404,700	1,826,100	2,100,000	2,184,000	2,271,400	2,271,400
Debt service charge revenues	410,000	325,000	325,000	325,000	325,000	325,000
Misc. revenues	35,400	32,000	32,000	32,000	32,000	32,000
Total Revenues	1,850,100	2,183,100	2,457,000	2,541,000	2,628,400	2,628,400
Grants [4]	530,286	400,964	520,773	508,273	680,539	324,766
Expenses						
Administration & Board	598,700	610,700	622,900	635,400	648,100	661,100
Operations	496,600	506,500	516,600	526,900	537,400	548,100
Maintenance	426,900	435,400	444,100	453,000	462,100	471,300
Equipment Leases	41,100	41,900	42,700	43,600	44,500	45,400
Total Operating Expenses	1,563,300	1,594,500	1,626,300	1,658,900	1,692,100	1,725,900
Debt Service Payment	323,461	323,461	323,461	323,461	323,461	323,461
Capital Improvement Projects	0	766,547	1,041,547	1,016,547	1,361,078	649,531
Revenues	2,380,386	2,584,064	2,977,773	3,049,273	3,308,939	2,953,166
Total Expenses	1,886,761	2,684,508	2,991,308	2,998,908	3,376,639	2,698,892
Net Revenues	493,625	(100,443)	(13,534)	50,366	(67,700)	254,274
Ending Fund Balance	862,166	761,723	748,189	798,555	730,855	985,128
Debt Service Coverage						
Net Operating Revenues	817,086	989,564	1,351,473	1,390,373	1,616,839	1,227,266
Debt Service Payment	323,461	323,461	323,461	323,461	323,461	323,461
Debt Coverage	2.53	3.06	4.18	4.30	5.00	3.79

1 - FY2016/17 Actual Opening Fund Balance
 2 - Fixed Charge + Debt Service Charge + 1900 gallons Consumption
 3 - Does not include 2014 Wastewater Debt Service Charge revenues
 4- Includes 2016 Grant Revenues

Scenario 2: Pay-Go Funding Updated CIP
 Table 5 b: Cash Flow Projection for All Scenarios
 Groveland Community Services District
 Sewer Rate Study

	2023/24	2024/25	2025/26	2026/27	2027/28
Beginning Fund Balance					
Opening Balance [1]	\$985,128	\$1,157,402	\$1,431,975	\$1,670,649	\$1,747,722
Typical Monthly Bill [2]	\$148.94	\$148.94	\$148.94	\$148.94	\$148.94
Rate Adjustment	0%	0%	0%	0%	0%
Growth	0%	0%	0%	0%	0%
Revenues					
Sewer rate revenues [3]	2,271,400	2,271,400	2,271,400	2,271,400	2,271,400
Debt service charge revenues	325,000	325,000	325,000	325,000	325,000
Misc. revenues	32,000	32,000	32,000	32,000	32,000
Total Revenues	2,628,400	2,628,400	2,628,400	2,628,400	2,628,400
Grants [4]					
Expenses	372,266	234,766	234,766	359,766	359,766
Administration & Board	674,300	687,800	701,600	715,600	729,900
Operations	559,100	570,300	581,700	593,300	605,200
Maintenance	480,700	490,300	500,100	510,100	520,300
Equipment Leases	46,300	47,200	48,100	49,100	50,100
Total Operating Expenses	1,760,400	1,795,600	1,831,500	1,868,100	1,905,500
Debt Service Payment	323,461	323,461	323,461	323,461	0
Capital Improvement Projects	744,531	469,531	469,531	719,531	719,531
Revenues	3,000,666	2,863,166	2,863,166	2,988,166	2,663,166
Total Expenses	2,828,392	2,588,592	2,624,492	2,911,092	2,625,031
Net Revenues	172,274	274,574	238,674	77,074	38,135
Ending Fund Balance	1,157,402	1,431,975	1,670,649	1,747,722	1,785,857
Debt Service Coverage					
Net Operating Revenues	1,240,266	1,067,566	1,031,666	1,120,066	757,666
Debt Service Payment	323,461	323,461	323,461	323,461	323,461
Debt Coverage	3.83	3.30	3.19	3.46	2.34

1 - FY2016/17 Actual Opening Fund Balance
 2 - Fixed Charge + Debt Service Charge + 1900 gallons Consumption
 3 - Does not include 2014 Wastewater Debt Service Charge revenues
 4- Includes 2016 Grant Revenues

Scenario 2: Pay-Go Funding Updated CIP
Table 6b : 100% Fixed
Groveland Community Services District
Sewer Rate Study

	Current	2018/19	2019/20	2020/21	2021/22	2022/23
Total Revenue Requirement		\$1,826,100	\$2,100,000	\$2,184,000	\$2,271,400	\$2,271,400
% increase		30%	15%	4%	4%	0%
Total Number of Billing Units		19,465	19,465	19,465	19,465	19,465
Fixed Rate per Unit		\$93.81	\$107.88	\$112.20	\$116.69	\$116.69
Debt Service		\$20.42	\$20.42	\$20.42	\$20.42	\$20.42
	\$92.11	\$114.23	\$128.30	\$132.62	\$137.11	\$137.11

Scenario 2
Table 6b: 100% Fixed Typical Bills

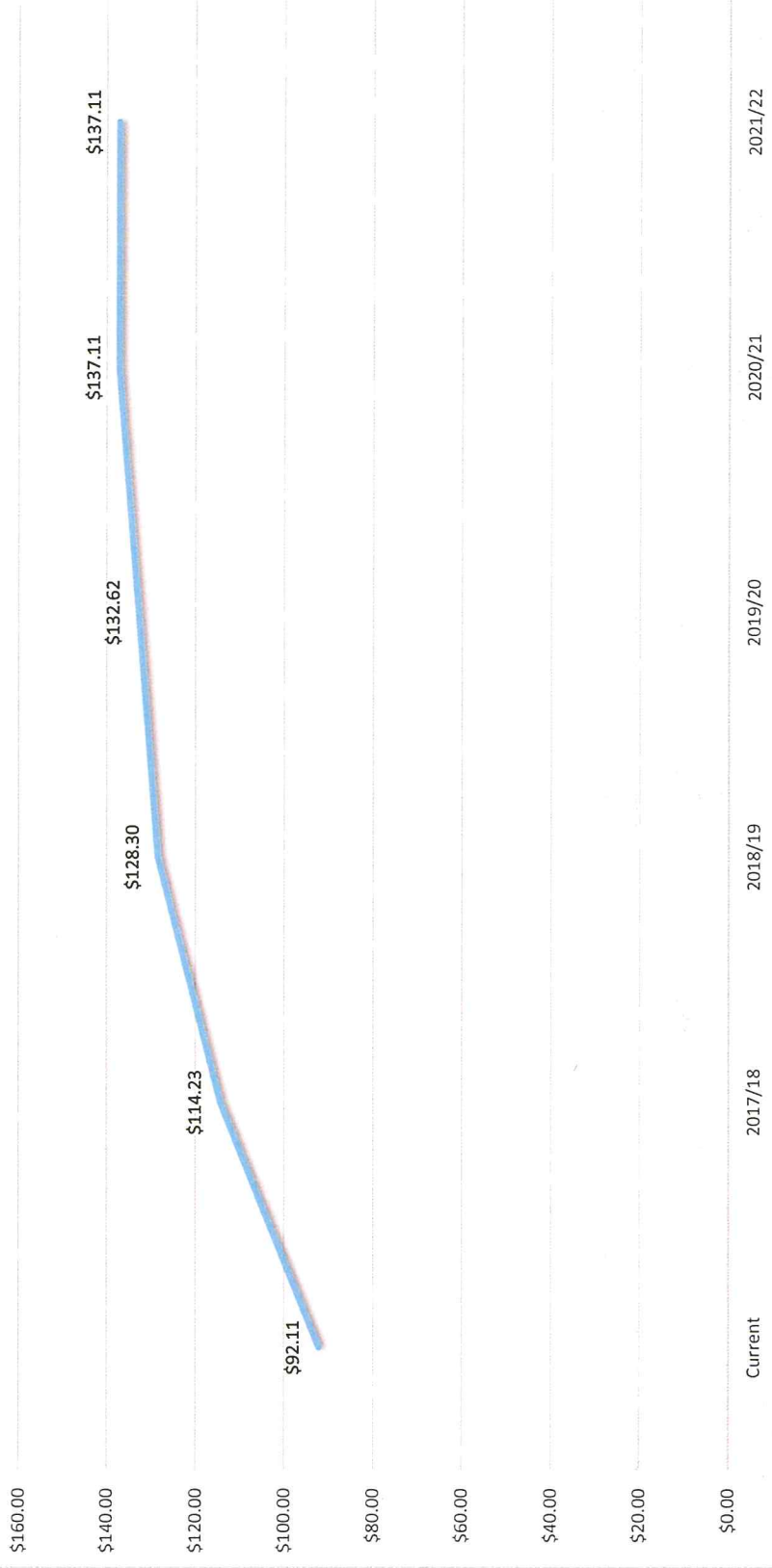


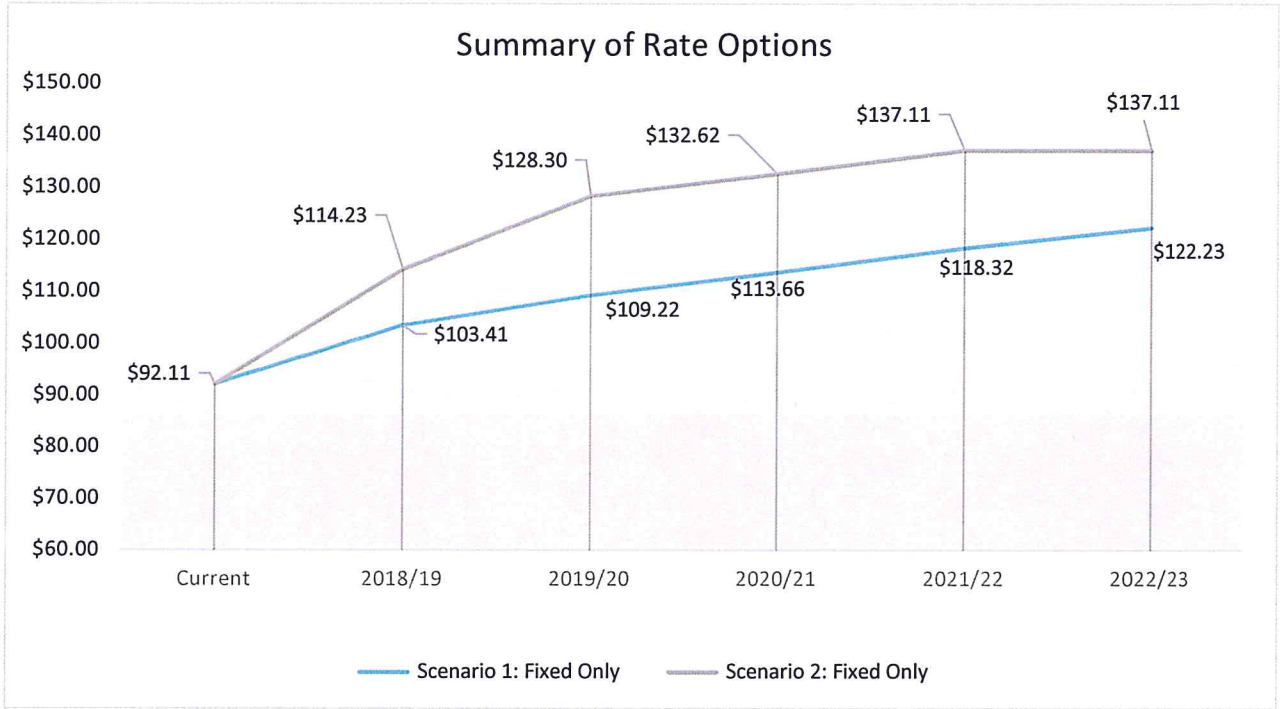
Table 8: Scenario Rate Summary
Groveland Community Services District
Sewer Rate Study

Scenario 1 Updated CIP Financed Through Debt Issuance

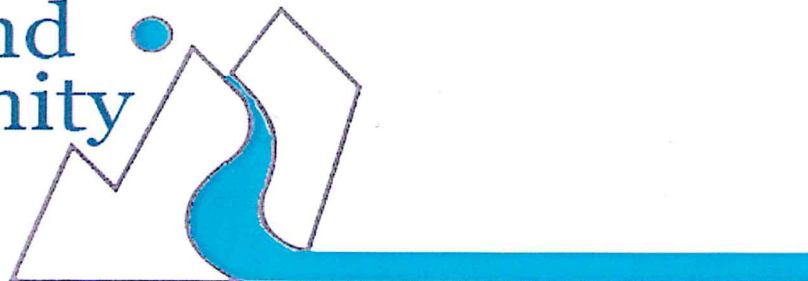
	Current	2017/18	2018/19	2019/20	2020/21	2021/22
Scenario 1: Fixed Only	\$92.11	\$103.41	\$109.22	\$113.66	\$118.32	\$122.23

Scenario 2 Pay-Go Funding with Updated CIP

	Current	2017/18	2018/19	2019/20	2020/21	2021/22
Scenario 2: Fixed Only	\$92.11	\$114.23	\$128.30	\$132.62	\$137.11	\$137.11



Groveland
Community
Services
District



**Draft Wastewater Rate Study
75% Grant Funding**

10/5/2017



Bartle Wells Associates
1889 Alcatraz Avenue
Berkeley, CA 94703

**Table 1: Fixed and Variable Cost Allocation
Groveland Community Services District
Sewer Rate Study**

Budget Category	Actuals		Fixed Cost	Variable Cost
	2016/17	2017/18		
Administration & Board	510,336	576,673	100%	0%
Operations				
Employee Salaries and Benefits	209,500	258,500	100%	0%
Overhead [1]	46,451	31,947	100%	0%
Chemicals	20,647	25,462	0%	100%
Laboratory	19,957	27,370	50%	50%
Repairs and Maintenance	28,663	35,000	25%	75%
Biosolids	9,084	12,200	0%	100%
SCADA	276	8,013	0%	100%
Irrigation Fields	0	0	0%	100%
Groundwater Monitoring	660	5,305	100%	0%
Utilities	<u>80,715</u>	<u>92,828</u>	0%	100%
Total Operations	415,953	496,625		
Maintenance				
Employee Salaries and Benefits	252,408	232,385	100%	0%
Fuel	10,019	22,438	0%	100%
Chemical/Odor Control	8,170	10,609	0%	100%
Maintenance and Repair	21,617	26,523	25%	75%
Emergency Repair Sewer Lines	157	5,305	100%	0%
Conservation Crew Expenses	2,492	3,000	100%	0%
Annual Collect System TV Insp	48,000	55,000	100%	0%
Utilities	25,495	21,086	0%	100%
Overhead [1]	<u>24,157</u>	<u>50,546</u>	100%	0%
Total Maintenance	392,514	426,892		
Equipment Leases	6,986	41,100	100%	0%
Debt	324,310	324,310	90%	10%
Capital Improvement Funding	0	0	90%	10%
Total	1,650,100	1,865,600	1,580,706	284,894
Allocation			85%	15%
Total			\$1,580,706	\$284,894
Allocation				

[1] Small tools, supplies, office expenses, misc.

Table 2 : Customer Information
Groveland Community Services District
Sewer Rate Study

Code	Customer Information	Number of Accounts	Total Number of Bills	Ratio [1]	Equivalent Number of Bills
S01	Sewer Monthly Fixed Rate	1,499	17,988	1.00	17,988
S01FC	Fixed Consump Fee 3100 ga	15	180	0.41	73
S02	Sewer Coml Monthly Fixed Ra	91	1,092	1.00	1,092
S02S	Coml w/stdby	1	12	1.00	12
S03	Sewer Coml Monthly Fixed Ra	1	12	1.00	12
S04	Coml 2 Conn Fixed	5	60	2.00	120
S04S	Coml 2 Conn w/Stdby	5	60	2.00	120
S06	Coml 4 Conn Fixed	1	12	4.00	48
	Total	1,618	19,416		19,465

Table 3: Current Monthly Rates
Groveland Community Services District
Sewer Rate Study

Rate Category	FY2017 Current Rates		
Monthly Minimum Charge	\$53.10		
2014 Wastewater Debt Service Charge [1]	\$25.75	0.793	\$20.42 Resturctured
Volume Usage Charge (\$/gallon metered water use)			
Residential	\$0.00698		
Commercial	\$0.01121		

[1] Not applicable to Groveland/Big Oak Flat accounts not tributary to Lift Station 7

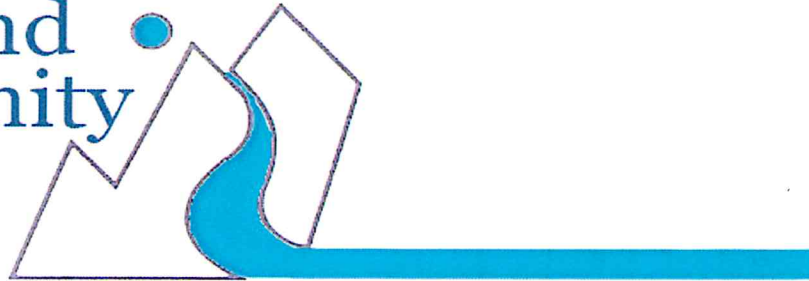
Table 3 : "Updated CIP" 75% Grant Funding
 Groveland Community Services District
 Sewer Rate Study

Description	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	5 Year Total
Force Main Inspection	-	22,969	22,969	22,969	22,969	-	\$91,876
A. LS 7 to Treatment Plant	-	85,963	85,963	85,963	85,963	-	343,850
B. LS 13	-	137,750	137,750	137,750	137,750	-	551,000
C. LS 2	-	20,500	20,500	20,500	20,500	-	82,000
D. LS 1	-	6,165	6,165	6,165	6,165	-	24,660
E. LS 14	-	36,990	36,990	36,990	36,990	-	147,960
F. LS 15	-	10,275	10,275	10,275	10,275	-	41,100
G. LS 8	-	30,825	30,825	30,825	30,825	-	123,300
H. LS10	-	104,805	104,805	104,805	104,805	-	419,220
I. LS 11	-	123,300	123,300	123,300	123,300	-	493,200
J. LS 3	-	18,495	18,495	18,495	18,495	-	73,980
K. LS 4	-	4,110	4,110	4,110	4,110	-	16,440
L. LS 9	-	26,715	26,715	26,715	26,715	-	106,860
M. LS 12	-	18,495	18,495	18,495	18,495	-	73,980
N. LS 5	-	69,870	69,870	69,870	69,870	-	279,480
O. LS 6	-	49,320	49,320	49,320	49,320	-	197,280
P. LS 16 [1]	-	-	-	-	-	-	-
Flume 1400' [1]	-	-	-	-	-	-	-
WWTP Headworks	-	-	250,000	-	-	-	250,000
WWTP Repair	-	-	-	225,000	225,000	180,000	630,000
Gravity Sewer Line Rehab	-	-	-	-	344,531	344,531	689,062
Satellite lift station rehab	-	-	-	-	-	100,000	100,000
Admin Building	-	-	-	-	-	25,000	100,000
HUB Lift Station 6	-	-	25,000	25,000	25,000	-	100,000
TOTAL	-	\$766,547	\$1,041,547	\$1,016,547	\$1,361,078	\$649,531	\$4,835,248
75% Grant Funding	-	\$574,910	\$781,160	\$762,410	\$1,020,808	\$487,148	\$3,626,436

Table 3 : "Updated CIP" 75% Grant Funding
 Groveland Community Services District
 Sewer Rate Study

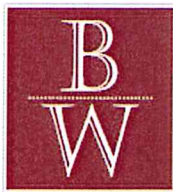
Description	2023/24	2024/25	2025/26	2026/27	2027/28	10 Year Total
Force Main Inspection	-	-	-	-	-	91,876
A. LS 7 to Treatment Plant	-	-	-	-	-	343,850
B. LS 13	-	-	-	-	-	551,000
C. LS 2	-	-	-	-	-	82,000
D. LS 1	-	-	-	-	-	24,660
E. LS 14	-	-	-	-	-	147,960
F. LS 15	-	-	-	-	-	41,100
G. LS 8	-	-	-	-	-	123,300
H. LS10	-	-	-	-	-	419,220
I. LS 11	-	-	-	-	-	493,200
J. LS 3	-	-	-	-	-	73,980
K. LS 4	-	-	-	-	-	16,440
L. LS 9	-	-	-	-	-	106,860
M. LS 12	-	-	-	-	-	73,980
N. LS 5	-	-	-	-	-	279,480
O. LS 6	-	-	-	-	-	197,280
P. LS 16 [1]	-	-	-	-	-	-
Flume 1400' [1]	-	-	-	-	-	-
WWTP Headworks	-	-	-	-	-	250,000
WWTP Repair	275,000	-	-	-	-	1,715,000
Gravity Sewer Line Rehab	344,531	344,531	344,531	344,531	344,531	3,100,779
Satellite lift station rehab	100,000	100,000	100,000	100,000	100,000	700,000
Admin Building	25,000	25,000	25,000	25,000	25,000	325,000
HUB Lift Station 6	-	-	-	250,000	250,000	250,000
TOTAL	\$744,531	\$469,531	\$469,531	\$719,531	\$719,531	\$9,406,965
75% Grant Funding	\$558,398	\$352,148	\$352,148	\$539,648	\$539,648	\$7,055,224

**Groveland
Community
Services
District**



**Scenario 1
Updated CIP Financed through Debt Issuance**

10/5/2017



**Bartle Wells Associates
1889 Alcatraz Avenue
Berkeley, CA 94703**

Scenario 1: Debt Funding Updated CIP
Table 4a: Preliminary Debt Estimates

GCSB

Sewer Rate Study

Description	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23
2014 Bond	324,300	324,300	324,300	324,300	324,300	324,300	324,300
Proposed Loans							
2018 Debt [1]	0	0	86,000	86,000	86,000	86,000	86,000
2022 Debt [2]						57,333	57,333
Total	324,300	324,300	410,300	410,300	410,300	467,633	467,633

[1] \$800 Thousand 15 yr Bond at 5%

[2] \$500 Thousand 15 yr Bond at 5%

Proposed Loans	
Amount to be Financed	800,000
Interest	5%
years	15
semi-annual	2
Issuance Costs	100,000
Total Issuance	900,000
	86,000
	57,333
	500,000
	5%
	15
	2
	100,000
	600,000
	57,333

Scenario 1: Debt Funding Updated CIP
Table 4a: Preliminary Debt Estimates

GCSD

Sewer Rate Study

Description	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31	2031/32
2014 Bond	324,300	324,300	324,300	324,300	-	-	-	-	-
Proposed Loans									
2018 Debt [1]	86,000	86,000	86,000	86,000	86,000	86,000	86,000	86,000	86,000
2022 Debt [2]	57,333	57,333	57,333	57,333	57,333	57,333	57,333	57,333	57,333
Total	467,633	467,633	467,633	467,633	143,333	143,333	143,333	143,333	143,333

[1] \$800 Thousand 15 yr Bond at 5%

[2] \$500 Thousand 15 yr Bond at 5%

Proposed Loans

Amount to be Financed

Interest

years

semi-annual

Issuance Costs

Total Issuance

Scenario 1: Debt Funding Updated CIP
 Table 5a - Cash Flow Scenario 1
 Groveland Community Services District
 Sewer Rate Study

	Current	Projected				2021/22	2022/23
		2018/19	2019/20	2020/21	2021/22		
Beginning Fund Balance							
Opening Balance [1]	\$369,541	\$851,725	\$1,045,380	\$1,001,594	\$999,257	\$990,855	
Rate Adjustment	0%	15%	5%	4%	4%	4%	
Growth	0%	0%	0%	0%	0%	0%	
Debt service charge	25.75	\$20.42	\$20.42	20.42	\$20.42	20.42	
Revenues							
Sewer rate revenues [3]	1,404,700	1,615,400	1,696,200	1,764,000	1,834,600	1,908,000	
Debt service charge revenues	410,000	325,000	325,000	325,000	325,000	325,000	
Misc. revenues [4]	35,400	32,000	32,000	32,000	32,000	32,000	
Grants	520,684	592,601	781,160	762,410	1,020,808	487,148	
Loan Proceeds	0	400,000	200,000	200,000	300,000	100,000	
Total Revenues	2,370,784	2,965,001	3,034,360	3,083,410	3,512,408	2,852,148	
Expenses							
Administration & Board	598,700	610,700	622,900	655,400	648,100	661,100	
Operations	496,600	506,500	516,600	526,900	537,400	548,100	
Maintenance	426,900	435,400	444,100	453,000	462,100	471,300	
Equipment Leases	41,100	41,500	42,700	43,600	44,500	45,400	
Total Operating Expenses	1,563,300	1,594,500	1,626,300	1,658,900	1,692,100	1,725,900	
Debt Service Payment	324,300	410,300	410,300	410,300	467,633	467,633	
Capital Improvement Projects	0	766,547	1,041,547	1,016,547	1,361,078	649,531	
Operating Revenue	2,370,784	2,565,001	2,834,360	2,883,410	3,212,408	2,752,148	
Loan Proceeds	0	400,000	200,000	200,000	300,000	100,000	
Total Expenses	1,887,600	2,771,346	3,028,146	3,085,746	3,520,810	2,843,064	
Net Revenues	483,184	193,655	(43,786)	(2,336)	(6,402)	9,084	
Ending Fund Balance	851,725	1,045,380	1,001,594	999,257	990,855	999,939	
Debt Service Coverage							
Net Operating Revenues	286,800	970,501	1,208,060	1,224,510	1,520,308	1,026,248	
Debt Service Payment	324,300	410,300	410,300	410,300	467,633	467,633	
Debt Coverage	0.88	2.37	2.94	2.98	3.25	2.19	
1 - FY2016/17 Actual Opening Fund Balance							
2 - Fixed Charge + Debt Service Charge + 1900 gallons Consumption							
3 - Does not include 2014 Wastewater Debt Service Charge revenues							
4 - Includes 2016 Grant Revenues							

Scenario 1: Debt Funding Updated CIP
 Table 5a - Cash Flow Scenario 1
 Groveland Community Services District
 Sewer Rate Study

	2023/24	2024/25	2025/26	2026/27	2027/28
Beginning Fund Balance					
Opening Balance [1]	\$999,939	\$950,774	\$835,158	\$683,642	\$433,027
Rate Adjustment	0%	0%	0%	0%	0%
Growth	0%	0%	0%	0%	0%
Debt service charge	20.42	20.42	20.42	20.42	-
Revenues					
Sewer rate revenues [3]	1,908,000	1,908,000	1,908,000	1,908,000	1,908,000
Debt service charge revenues	325,000	325,000	325,000	325,000	0
Misc. revenues [4]	32,000	32,000	32,000	32,000	32,000
Grants	558,398	352,148	352,148	539,648	539,648
Loan Proceeds	100,000	0	0	0	0
Total Revenues	<u>2,923,398</u>	<u>2,617,148</u>	<u>2,617,148</u>	<u>2,804,648</u>	<u>2,479,648</u>
Expenses					
Administration & Board	674,300	687,800	701,600	715,600	729,900
Operations	559,100	570,300	581,700	593,300	605,200
Maintenance	480,700	490,300	500,100	510,100	520,300
Equipment Leases	46,300	47,200	48,100	49,100	50,100
Total Operating Expenses	<u>1,760,400</u>	<u>1,795,600</u>	<u>1,831,500</u>	<u>1,868,100</u>	<u>1,905,500</u>
Debt Service Payment	467,633	467,633	467,633	467,633	467,633
Capital Improvement Projects					
	<u>744,531</u>	<u>469,531</u>	<u>469,531</u>	<u>719,531</u>	<u>719,531</u>
Operating Revenue	2,823,398	2,617,148	2,617,148	2,804,648	1,940,000
Loan Proceeds	100,000	0	0	0	539,648
Total Expenses	2,872,564	2,732,764	2,768,664	3,055,264	2,768,364
Net Revenues	<u>(49,166)</u>	<u>(115,616)</u>	<u>(151,516)</u>	<u>(250,616)</u>	<u>(288,716)</u>
Ending Fund Balance	950,774	835,158	683,642	433,027	144,311
Debt Service Coverage					
Net Operating Revenues	1,062,998	821,548	785,648	936,548	574,148
Debt Service Payment	<u>467,633</u>	<u>467,633</u>	<u>467,633</u>	<u>467,633</u>	<u>467,633</u>
Debt Coverage	2.27	1.76	1.68	2.00	4.01

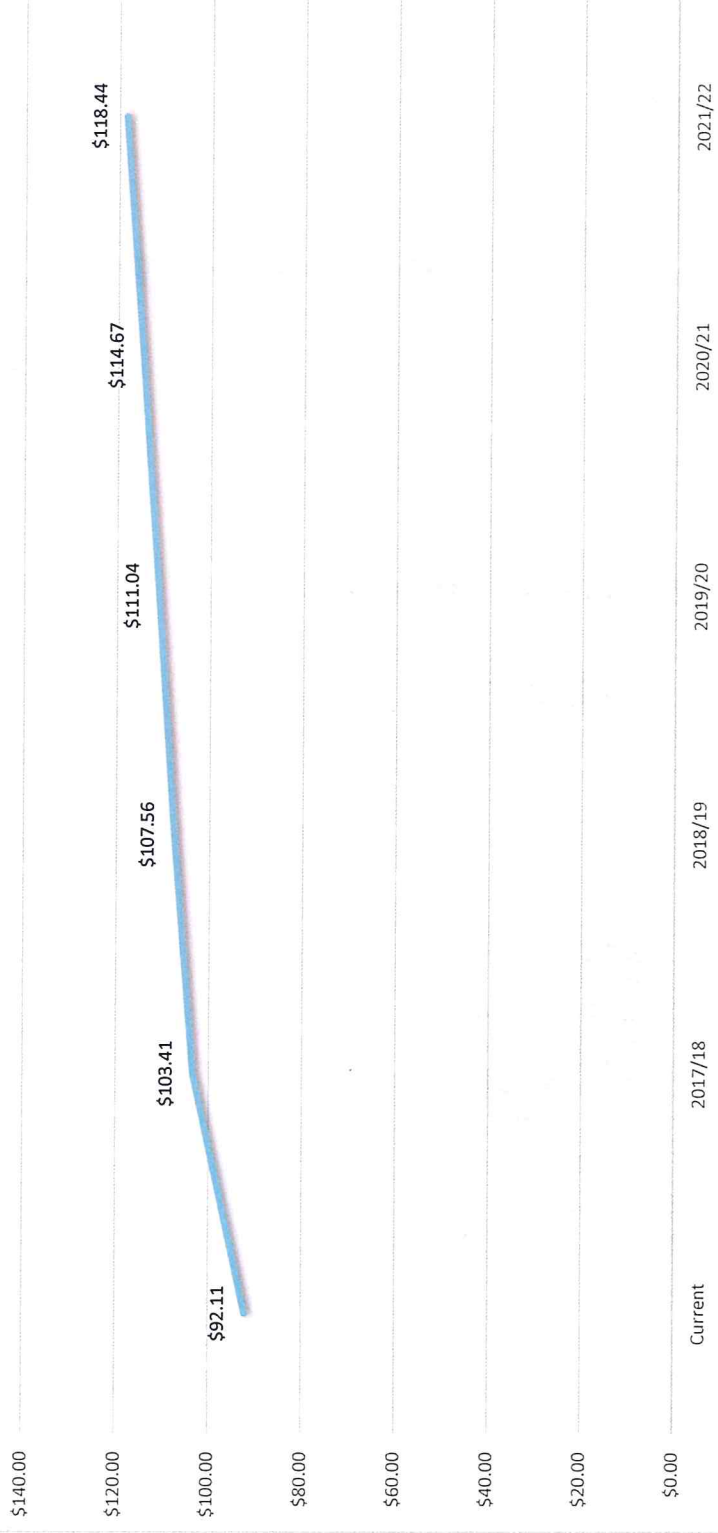
1 - FY2016/17 Actual Opening Fund Balance
 2 - Fixed Charge + Debt Service Charge + 1900 gallons Consumption
 3 - Does not include 2014 Wastewater Debt Service Charge revenues
 4 - Includes 2016 Grant Revenues

Scenario 1: Debt Funding Updated CIP
Table 6a : 100% Fixed
Groveland Community Services District
Sewer Rate Study

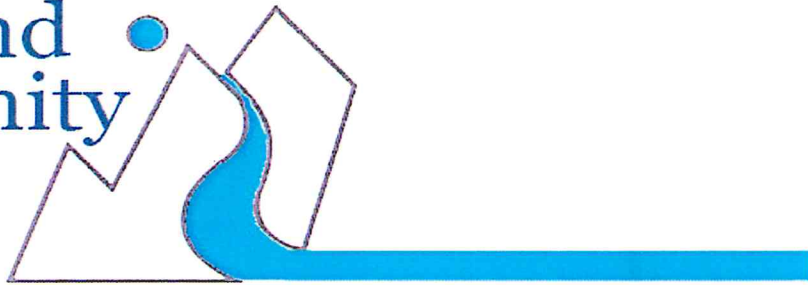
	Current	2018/19	2019/20	2020/21	2021/22	2022/23
Total Revenue Requirement		\$1,615,400	\$1,696,200	\$1,764,000	\$1,834,600	\$1,908,000
Total Number of Billing Units		19,465	19,465	19,465	19,465	19,465
Fixed Rate per Unit		\$82.99	\$87.14	\$90.62	\$94.25	\$98.02
Debt Service	\$92.11	\$20.42	\$20.42	\$20.42	\$20.42	\$20.42
		\$103.41	\$107.56	\$111.04	\$114.67	\$118.44

Scenario 1

Table 6a: 100% Fixed Typical Bills

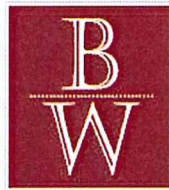


Groveland
Community
Services
District



Scenario 2
Pay-Go Funding with Updated CIP

10/5/2017



Bartle Wells Associates
1889 Alcatraz Avenue
Berkeley, CA 94703

Scenario 2: Pay-Go Funding Updated CIP
 Table 5 b: Cash Flow Projection for All Scenarios
 Groveland Community Services District
 Sewer Rate Study

	2017/18	2018/19	Projected			2022/23
			2019/20	2020/21	2021/22	
Beginning Fund Balance						
Opening Balance [1]	\$368,541	\$862,166	\$728,660	\$637,012	\$589,514	\$495,984
Typical Monthly Bill [2]	\$92.11	\$105.01	\$115.51	\$120.13	\$124.93	\$129.93
Rate Adjustment	0%	14%	10%	4.0%	4.0%	4%
Growth	0%	0%	0%	0%	0%	0%
Revenues						
Sewer rate revenues [3]	1,404,700	1,601,400	1,761,500	1,832,000	1,905,300	1,981,500
Debt service charge revenues	410,000	325,000	325,000	325,000	325,000	324,300
Misc. revenues	35,400	32,000	32,000	32,000	32,000	32,000
Total Revenues	<u>1,850,100</u>	<u>1,958,400</u>	<u>2,118,500</u>	<u>2,189,000</u>	<u>2,262,300</u>	<u>2,337,800</u>
Grants [4]						
Expenses	<u>530,286</u>	<u>592,601</u>	<u>781,160</u>	<u>762,410</u>	<u>1,020,808</u>	<u>487,148</u>
Administration & Board	598,700	610,700	622,900	635,400	648,100	661,100
Operations	496,600	506,500	516,600	526,900	537,400	548,100
Maintenance	426,900	435,400	444,100	453,000	462,100	471,300
Equipment Leases	41,100	41,900	42,700	43,600	44,500	45,400
Total Operating Expenses	<u>1,563,300</u>	<u>1,594,500</u>	<u>1,626,300</u>	<u>1,658,900</u>	<u>1,692,100</u>	<u>1,725,900</u>
Debt Service Payment	323,461	323,461	323,461	323,461	323,461	323,461
Capital Improvement Projects						
Revenues	0	766,547	1,041,547	1,016,547	1,361,078	649,531
Total Expenses	2,380,386	2,551,001	2,899,660	2,951,410	3,283,108	2,824,948
Net Revenues	<u>1,886,761</u>	<u>2,684,508</u>	<u>2,991,308</u>	<u>2,998,908</u>	<u>3,376,639</u>	<u>2,698,892</u>
Ending Fund Balance	<u>862,166</u>	<u>728,660</u>	<u>637,012</u>	<u>589,514</u>	<u>495,984</u>	<u>126,056</u>
Debt Service Coverage						
Net Operating Revenues	286,800	956,501	1,273,360	1,292,510	1,591,008	1,099,048
Debt Service Payment	<u>323,461</u>	<u>323,461</u>	<u>323,461</u>	<u>323,461</u>	<u>323,461</u>	<u>323,461</u>
Debt Coverage	<u>0.89</u>	<u>2.96</u>	<u>3.94</u>	<u>4.00</u>	<u>4.92</u>	<u>3.40</u>
1 - FY2016/17 Actual Opening Fund Balance						
2 - Fixed Charge + Debt Service Charge + 1900 gallons Consumption						
3 - Does not include 2014 Wastewater Debt Service Charge revenues						
4- Includes 2016 Grant Revenues						

DRAFT

Scenario 2: Pay-Go Funding Updated CIP
 Table 5 b: Cash Flow Projection for All Scenarios
 Groveland Community Services District
 Sewer Rate Study

	2023/24	2024/25	2025/26	2026/27	2027/28
Beginning Fund Balance					
Opening Balance [1]	\$622,040	\$689,847	\$791,203	\$856,659	\$823,015
Typical Monthly Bill [2]	\$129.93	\$129.93	\$129.93	\$129.93	\$129.93
Rate Adjustment	0%	0%	0%	0%	0%
Growth	0%	0%	0%	0%	0%
Revenues					
Sewer rate revenues [3]	1,981,500	1,981,500	1,981,500	1,981,500	1,981,500
Debt service charge revenues	324,300	324,300	324,300	324,300	324,300
Misc. revenues	<u>32,000</u>	<u>32,000</u>	<u>32,000</u>	<u>32,000</u>	<u>32,000</u>
Total Revenues	2,337,800	2,337,800	2,337,800	2,337,800	2,013,500
Grants [4]	<u>558,398</u>	<u>352,148</u>	<u>352,148</u>	<u>539,648</u>	<u>539,648</u>
Expenses					
Administration & Board	674,300	687,800	701,600	715,600	729,900
Operations	559,100	570,300	581,700	593,300	605,200
Maintenance	480,700	490,300	500,100	510,100	520,300
Equipment Leases	<u>46,300</u>	<u>47,200</u>	<u>48,100</u>	<u>49,100</u>	<u>50,100</u>
Total Operating Expenses	1,760,400	1,795,600	1,831,500	1,868,100	1,905,500
Debt Service Payment	323,461	323,461	323,461	323,461	0
Capital Improvement Projects	744,531	469,531	469,531	719,531	719,531
Revenues	2,896,198	2,689,948	2,689,948	2,877,448	2,553,148
Total Expenses	<u>2,828,392</u>	<u>2,588,592</u>	<u>2,624,492</u>	<u>2,911,092</u>	<u>2,625,031</u>
Net Revenues	67,806	101,356	65,456	(33,644)	(71,883)
Ending Fund Balance	689,847	791,203	856,659	823,015	751,133
Debt Service Coverage					
Net Operating Revenues	1,135,798	894,348	858,448	1,009,348	647,648
Debt Service Payment	<u>323,461</u>	<u>323,461</u>	<u>323,461</u>	<u>323,461</u>	<u>0</u>
Debt Coverage	3.51	2.76	2.65	3.12	

1 - FY2016/17 Actual Opening Fund Balance
 2 - Fixed Charge + Debt Service Charge + 1900 gallons Consumption
 3 - Does not include 2014 Wastewater Debt Service Charge revenues
 4- Includes 2016 Grant Revenues

Scenario 2: Pay-Go Funding Updated CIP
Table 6b : 100% Fixed
Groveland Community Services District
Sewer Rate Study

	Current	2018/19	2019/20	2020/21	2021/22	2022/23
Total Revenue Requirement	\$1,601,400	\$1,761,500	\$1,832,000	\$1,905,300	\$1,981,500	\$1,981,500
% increase	14%	10%	4%	4%	4%	4%
Total Number of Billing Units	19,465	19,465	19,465	19,465	19,465	19,465
Fixed Rate per Unit	\$82.27	\$90.49	\$94.12	\$97.88	\$101.80	\$101.80
Debt Service	\$20.42	\$20.42	\$20.42	\$20.42	\$20.42	\$20.42
	\$92.11	\$110.91	\$114.54	\$118.30	\$122.22	\$122.22

Scenario 2
 Table 6b: 100% Fixed Typical Bills

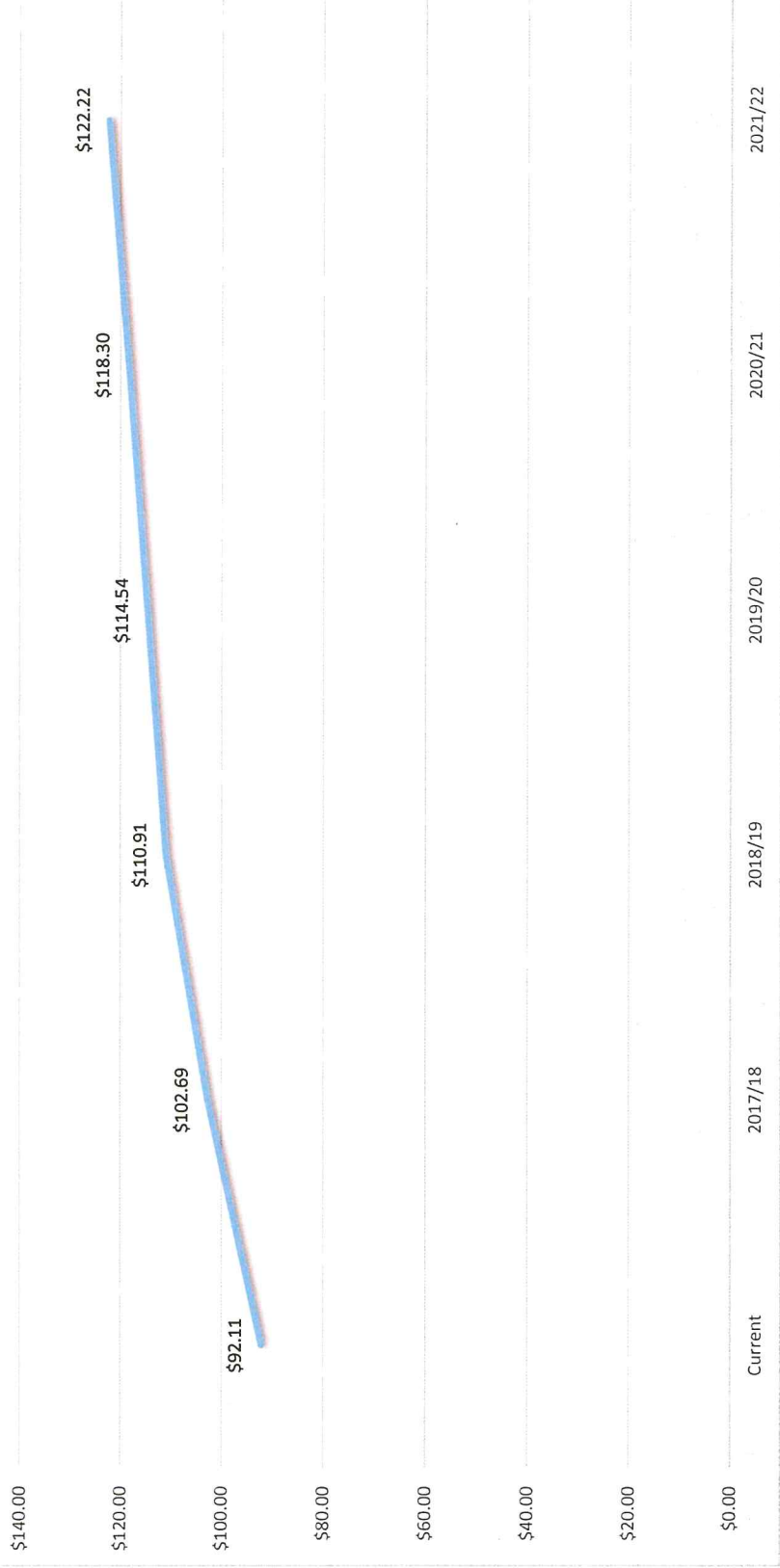


Table 8: Scenario Rate Summary
Groveland Community Services District
Sewer Rate Study

Scenario 1 Updated CIP Financed Through Debt Issuance

	Current	2017/18	2018/19	2019/20	2020/21	2021/22
Scenario 1: Fixed Only	\$92.11	\$103.41	\$107.56	\$111.04	\$114.67	\$118.44

Scenario 2 Pay-Go Funding with Updated CIP

	Current	2017/18	2018/19	2019/20	2020/21	2021/22
Scenario 2: Fixed Only	\$92.11	\$102.69	\$110.91	\$114.54	\$118.30	\$122.22

