STEGE SANITARY DISTRICT BOARD OF DIRECTORS
LONG RANGE PLANNING WORKSHOP
SATURDAY, MARCH 6, 2021, 9:00AM - 4:00PM
DISTRICT BOARD ROOM, 7500 SCHMIDT LANE, EL CERRITO, CA

********* AGENDA *********

Items on the agenda may be taken out of order.

Public comment is limited to three (3) minutes for each individual speaker.

In accordance with California Government Code Section 54957.5, any writing that is a public record and relates to an open session agenda item which is distributed less than 72 hours prior to the meeting shall be available for public inspection at the District Office, 7500 Schmidt Lane, El Cerrito, during regular business hours. Copies of the agenda are posted on the District website at www.stegesan.org. Those disabled persons requiring auxiliary aids or services in attending or participating in this meeting should notify the District at least 48 hours prior to the meeting at 510/524-4668.

Members of the public can observe the live stream of the meeting by accessing ***https://zoom.us/j/84090509848*** *or by calling* ***(669) 900-9128*** *and entering the Meeting ID#* ***840 9050 9848*** *followed by the pound (#) key.*

Public comment can be sent remotely by delivering to ***7500 Schmidt Lane, El Cerrito, CA 94530*** *or via email to* ***comments@stegesan.org*** *with "Public Comment" in the subject line. To provide written comment on an item on the agenda or to address the Board during Public Comment, please note the agenda item number that you want to address or whether you intend for the comment to be included in Public Comment. Comments timely received 15 minutes before the starting time of the meeting will either be provided as written comment or be read into the record, with a maximum allowance of 3 minutes per individual comment read into the record, subject to the Board President's discretion. Copies of all timely received written comments will be provided to the Board and will be added to the official record.*

Pursuant to Executive Order N-29-20, Board Members Christian-Smith, Gilbert-Snyder, Merrill, Miller, and O'Keefe may be attending this meeting via remote conferencing. In the event that any Board Member elects to attend remotely, all votes conducted during the remote conferencing session will be conducted by roll call vote.

I. Call To Order

II. Roll Call

Agenda Items: Directors and Officers of the Board will consider and announce if they have any conflicts of interest posted by items on the meeting agenda.

III. Public Comment

STEGE SANITARY DISTRICT BOARD OF DIRECTORS
LONG RANGE PLANNING WORKSHOP
SATURDAY, MARCH 6, 2021, 9:00AM - 4:00PM
DISTRICT BOARD ROOM, 7500 SCHMIDT LANE, EL CERRITO, CA

(Members of the public are invited to address the Board concerning topics that are **not** on the agenda)

Info/Motion **IV. Long Range Planning Workshop**

(The Board will discuss the following items as listed below at the approximate times.)

REVIEW AGENDA AND LAST ACTION PLAN	9:00 – 9:15 AM
• Past 5 Years Expenditures Review	9:15 – 9:45
• Salary Survey	9:45 – 10:15
BREAK	10:15– 10:30
• USEPA Consent Decree Progress and Planning	10:30 – 11:15
• Self-Assessment of Governance	11:15 – 12:00 PM
LUNCH	12:00– 12:30
• San Pablo Avenue Specific Plan Area	12:30 – 1:30
• Future Funding Considerations	1:30 – 2:15
BREAK	2:15 – 2:30
• Tiered Pricing	2:30 – 3:15
• Strategic Plan	3:15 – 3:45
WRAP–UP, REVIEW, ACTION ITEMS	3:45 – 4:00 PM

V. Adjournment

(The next regular meeting of the Stege Sanitary District Board of Directors will be held on Thursday, March 18, 2021 at 7:00 P.M. at the District Board Room, 7500 Schmidt Lane, El Cerrito, California)

9:00 – 9:15 A.M.

REVIEW AGENDA AND LAST ACTION PLAN

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Stege Sanitary District
Long Range Planning Workshop Agenda
Saturday, March 6, 2021 @9:00am

TIME	TOPIC
9:00 AM	*Review of Agenda & Last Action Plan*
9:15 AM	**Past 5 Years Expenditures Review [0.5 hr.]**
9:30 AM	The Board will review and discuss trends from the past 5 years.
9:45 AM	**Salary Survey [0.5 hr.]**
10:00 AM	The Board will review and consider implementing the salary survey information.
10:15 AM	*Break*
10:30 AM	**USEPA Consent Decree Progress and Planning [0.75 hr.]**
10:45 AM	The Board will review and discuss the progress
11:00 AM	and planning of the USEPA Consent Decree.
11:15 AM	
11:30 AM	**Self Assessment Of Governance - Review & Discussion [0.75 hr.]**
11:45 AM	
12:00 PM	*Lunch*
12:15 PM	
12:30 PM	**San Pablo Ave. Specific Plan Area (SPASPA) Progress and Planning [1.0 hr.]**
12:45 PM	The Board will review and discuss the progress
1:00 PM	and planning of the San Pablo Ave. Specific Plan Area.
1:15 PM	
1:30 PM	**Future Funding Considerations [0.75 hr.]**
1:45 PM	The Board will review and discuss future funding considerations.
2:00 PM	
2:15 PM	*Break*
2:30 PM	**Tiered Pricing [0.75 hr.]**
2:45 PM	The Board will discuss considering tiered pricing.
3:00 PM	
3:15 PM	**Strategic Plan [0.5 hr.]**
3:30 PM	The Board will review and discuss the plan.
3:45 PM	*Wrap Up, Review, Action Items*

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STEGE SANITARY DISTRICT
ACTION PLAN FOR 2020

The following is the status of the items discussed at the March 7, 2020 Long-Range Planning (LRP) Workshop:

1. Mission Statement
   The Board reviewed and discussed the District's mission statement and several mission statements from other Districts. The Board agreed on a revision that would more accurately represent the District's mission. Staff will bring back a resolution to implement the revised mission statement.

   Action Item: Prepare a resolution to implement the revised mission statement at a future board meeting by May 2020.

   STATUS: COMPLETE
   On April 9, 2020, Resolution No. 2135-0420 revising the mission statement was adopted by the Board by a 5-0 vote.

2. San Pablo Avenue Specific Plan Progress Report
   City of El Cerrito Community Development Director, Melanie Mintz, gave a presentation to the Board and answered questions on current and expected development along the San Pablo Avenue corridor. The Board then reviewed and discussed the progress report and proposed sewer improvement strategy presented by staff. The Board requested staff coordinate the District's sewer work along the San Pablo Avenue with the City's San Pablo Avenue "Complete Street" improvements, consider opportunities to up-size sewer work where appropriate, consider working with the City on a case-by-case permit fee deferral when practical, and continue monitoring legislation regarding impact fee restrictions for new developments.

   Action Item: Coordinate the District's sewer work along the San Pablo Avenue with the City's San Pablo Avenue "Complete Street" improvements, consider opportunities to up-size sewer work where appropriate, consider working with the City on a case-by-case permit fee deferral when practical, and continue monitoring legislation regarding impact fee restrictions for new developments.

   STATUS: ON-GOING
   Continuing to participate in collaborative dialogues with City of El Cerrito Community Development Director, Melanie Mintz, Public Works Director/City Engineer, Yvetteh Ortiz, and Planning Manager, Sean Moss, to work through future sewer capacity plans

along the corridor outlined in the City of El Cerrito's San Pablo Avenue Specific Plan. Continuing to have discussions to anticipate development in the area and prudently plan for capacity upgrades. Continuing to provide updates to the Board on a quarterly basis.

3. USEPA Consent Decree Progress and Planning

The Board reviewed and discussed the Consent Decree Work Requirements, Stipulated Penalties, and latest Annual Report. The Board then reviewed and discussed the 2018-19 Flow Model Calibration, Wet Weather Facilities (WWF) Output Ratios and Output Test Results, and planning going forward. The Board asked staff to follow up on using future stipulated penalties on Supplemental Environmental Projects (SEPs) such as PSL incentives and/or non-profit programs, report back with suggested plans for funds that exceed the District's working capital and reserve targets, and also report back with the District's daily flows and consider including peak 15-minute instantaneous flows and +/- % accuracy.

Action Item: Follow up on using future stipulated penalties on Supplemental Environmental Projects (SEPs) such as PSL incentives and/or non-profit programs, report back with suggested plans for funds that exceed the District's working capital and reserve targets, and also report back with the District's daily flows and consider including peak 15-minute instantaneous flows and +/- % accuracy at a future board meeting by June 2020.

STATUS: COMPLETE

On May 29, 2020, received an email response from Robert Schlipf, Senior Water Resource Control Engineer from the San Francisco Bay Regional Water Quality Control Board, indicating the need to amend the Consent Decree to allow the District to use any portion of the stipulated penalty towards a Supplemental Environmental Project (SEP). Given that the policy only allows 50% of the penalty for this purpose and half of the State portion would be $750, they would not attempt a SEP for such a small amount due to the associated overhead cost.

On October 16, 2020, re-iterated our request at a group Consent Decree Annual Meeting with representatives from USEPA Region 9, the San Francisco Regional Water Quality Control Board, EBMUD, and each of the 7 satellite agencies to the EBMUD wastewater interceptor system and main wastewater treatment plant. USEPA indicated they are no longer allowing funding towards SEPs. The Regional Water Board stated they are aware of our request and will continue to discuss using penalty funds for environmentally beneficial projects when appropriate.

On June 18, 2020, the Board adopted the FY 2020-21 Annual Budget which included a $1,000,000 line item to use a majority of the funds that exceed the District's working

capital and reserve targets to replace force mains at both the Burlingame Pump Station and the Canon Pump Station.

On September 3, 2020, after a delay due to the COVID-19 pandemic, the Board reviewed a staff report on the flow data for the period from January 2019 to May 2020.

4. Self-Assessment of Governance

   Each Board Member completed a 54 question survey on self-assessment of board governance. The results were summarized, reviewed, and compared to previous years. The Board then reviewed and discussed the 6 specific questions concerning "productivity" and asked staff to bring back the other questions concerning "roles," "supportive framework," "staff relationships," and "chairperson leadership" for discussion at a future Board meeting. The Board also asked staff to find out how often the Board Governance Manual is required to be reviewed.

   Action Item: Bring back the self-assessment of board governance questions concerning "roles," "supportive framework," "staff relationships," and "chairperson leadership" for discussion at future Board meetings by February 2021. Report on how often the Board Governance Manual is required to be reviewed by May 2020.

   STATUS: COMPLETE

   On April 9, 2020, the Manager reported that the District of Distinction re-accreditation every 2 years requires a Board minute action adopting and/or having reviewed the policies and procedures manual within the past year.

   On April 23, 2020, the Board began discussing the board governance statements but, before completing the task, decided to table the discussion for a future Board meeting so staff could supply additional information.

   On May 7, 2020, the Board continued the discussion but, due to time constraints, decided to table the discussion for the next future Long Range Planning Workshop and allowed Board members to submit any specific statements to staff for consideration by the Board at any upcoming regular Board meeting.

5. Strategic Plan

   The Board reviewed and discussed the strategic plan and asked staff to add the District's Emergency Preparation Plan Review as a work plan item under Goal/Objective #2, Maintain and Improve Infrastructure.

Action Item: Update the strategic plan with the Board's suggested addition and bring the item back for review at a future Board meeting by June 2020.

STATUS: COMPLETE

On April 23, 2020, the Board approved the updated Stege Sanitary District Strategic Plan.

9:15 – 9:45 A.M.

PAST 5 YEARS EXPENDITURES REVIEW

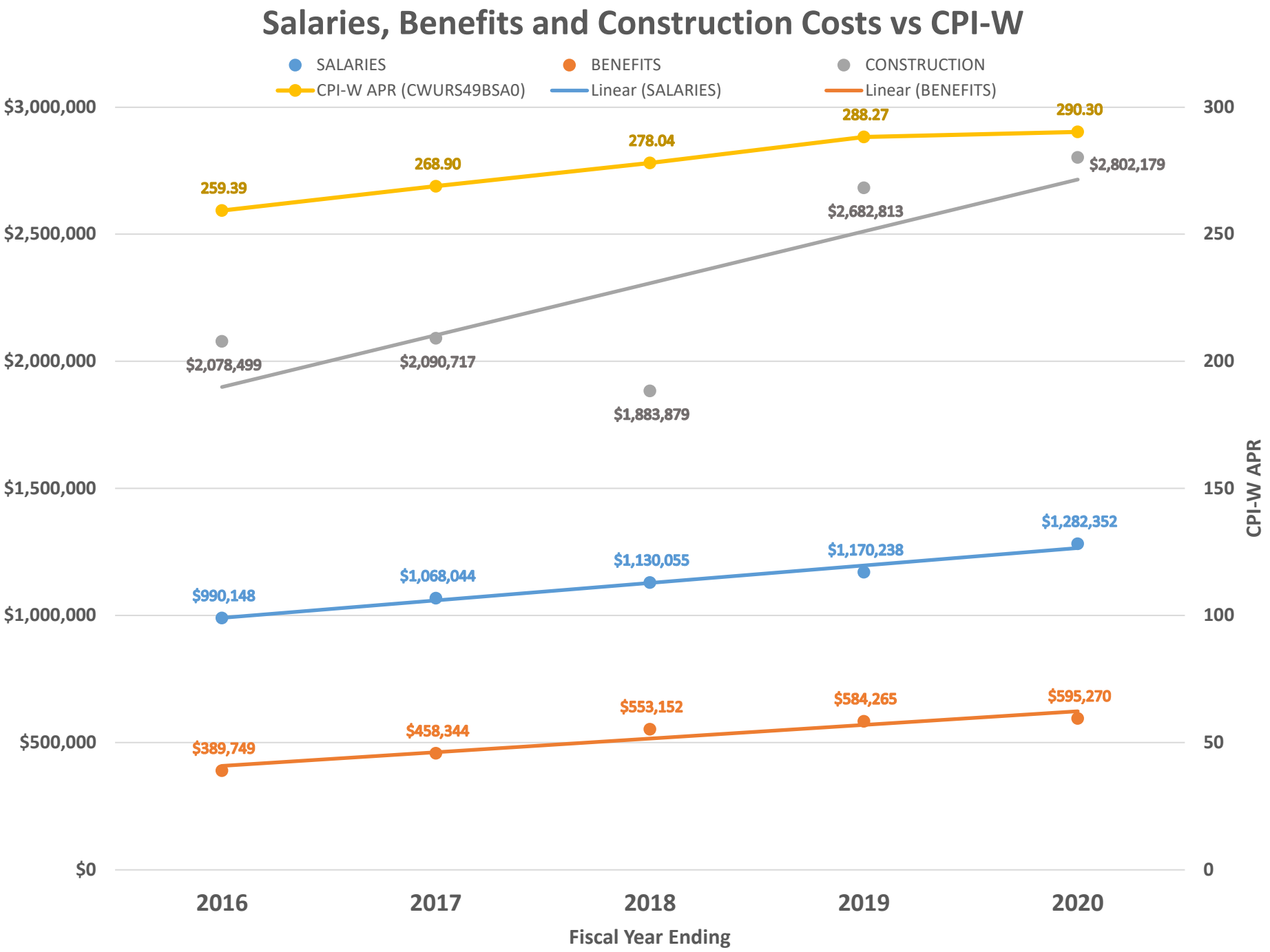
The Board will review and discuss trends from the past 5 years.

COMPOSITE 5 YEAR EXPENDITURES REVIEW (YEAR TO YEAR COMPARISON) **STEGE SANITARY DISTRICT**

ITEM	FINAL EXPENSE 2015-2016	FINAL EXPENSE 2016-2017	FINAL EXPENSE 2017-2018	FINAL EXPENSE 2018-2019	FINAL EXPENSE 2019-2020	*5yr Avg EXPENSE*	% Inc/(Dec) 14/15 to 15/16 EXPENSE	% Inc/(Dec) 15/16 to 16/17 EXPENSE	% Inc/(Dec) 16/17 to 17/18 EXPENSE	% Inc/(Dec) 17/18 to 18/19 EXPENSE	% Inc/(Dec) 18/19 to 19/20 EXPENSE	*5yr Avg % Inc/(Dec) EXPENSE*
OPERATING EXPENSES:												
010 Salaries & Wages	$ 990,148	$ 1,068,044	$ 1,130,055	$ 1,170,238	$ 1,282,352	*$ 1,128,167*	-1%	8%	6%	4%	10%	*5%*
020 Employee Benefits	$ 389,749	$ 458,344	$ 553,152	$ 584,265	$ 595,270	*$ 516,156*	-12%	18%	21%	6%	2%	*7%*
030 Directors' Expenses	$ 26,915	$ 32,478	$ 23,530	$ 35,158	$ 24,521	*$ 28,520*	6%	21%	-28%	49%	-30%	*4%*
040 Election Expense	$ -	$ 300	$ -	$ 22,965	$ -	*$ 4,653*	-100%	0%	-100%	0%	0%	*-40%*
060 Gasoline, Oil, Fuel	$ 18,332	$ 18,524	$ 14,010	$ 25,065	$ 21,534	*$ 19,493*	-19%	1%	-24%	79%	-14%	*5%*
070 Insurance	$ 128,090	$ 73,077	$ 109,144	$ 109,822	$ 131,545	*$ 110,336*	145%	-43%	49%	1%	20%	*34%*
080 Memberships	$ 11,448	$ 12,571	$ 14,370	$ 15,489	$ 14,046	*$ 13,585*	-24%	10%	14%	8%	-9%	*0%*
090 Office Expense	$ 6,329	$ 7,629	$ 5,517	$ 16,378	$ 6,166	*$ 8,404*	17%	21%	-28%	197%	-62%	*29%*
100 Operating Supplies	$ 28,182	$ 10,805	$ 11,848	$ 23,500	$ 24,680	*$ 19,803*	-20%	-62%	10%	98%	5%	*6%*
110 Contractual Services	$ 86,201	$ 102,168	$ 71,566	$ 88,469	$ 81,375	*$ 85,956*	15%	19%	-30%	24%	-8%	*4%*
120 Professional Services	$ 74,118	$ 91,401	$ 88,269	$ 124,976	$ 121,002	*$ 99,953*	-24%	23%	-3%	42%	-3%	*7%*
130 Printing & Publications	$ 23,402	$ 23,491	$ 17,483	$ 18,483	$ 15,240	*$ 19,620*	3%	0%	-26%	6%	-18%	*-7%*
140 Rents & Leases	$ 723	$ 677	$ 619	$ 253	$ 1,091	*$ 673*	19%	-6%	-9%	-59%	332%	*55%*
150 Repairs & Maintenance	$ 75,697	$ 71,188	$ 82,600	$ 102,201	$ 92,986	*$ 84,934*	-13%	-6%	16%	24%	-9%	*2%*
160 Revenue Collection Expenses	$ 11,191	$ 11,227	$ 11,071	$ 10,875	$ 10,868	*$ 11,046*	-22%	0%	-1%	-2%	0%	*-5%*
170 Travel & Meetings	$ 5,145	$ 6,465	$ 11,580	$ 8,944	$ 5,783	*$ 7,583*	-31%	26%	79%	-23%	-35%	*3%*
190 Utilities	$ 33,826	$ 31,865	$ 34,036	$ 38,105	$ 37,645	*$ 35,095*	24%	-6%	7%	12%	-1%	*7%*
200 Other Expenses	$ 23,387	$ 18,811	$ 45,269	$ 29,958	$ 29,655	*$ 29,416*	-73%	-20%	141%	-34%	-1%	*3%*
204 Safety Equipment and Gloves	$ 1,440	$ 1,707	$ 1,642	$ 1,163	$ 4,054	*$ 2,001*	-54%	19%	-4%	-29%	248%	*36%*
205 Uniforms and Boots	$ 9,875	$ 13,351	$ 18,688	$ 13,986	$ 14,450	*$ 14,070*	-12%	35%	40%	-25%	3%	*8%*
206 Safety Incentive Program	$ -	$ 587	$ 959	$ 513	$ 357	*$ 483*	-100%	0%	63%	-46%	-30%	*-23%*
410 Pump Stations	$ 25,606	$ 11,062	$ 17,411	$ 62,788	$ 30,949	*$ 29,563*	332%	-57%	57%	261%	-51%	*109%*
207 Contracted Repairs	$ 47,213	$ 60,901	$ 56,224	$ 92,204	$ 75,211	*$ 66,351*	-2%	29%	-8%	64%	-18%	*13%*
TOTAL OPERATING EXPENSES	**$ 2,017,018**	**$ 2,126,675**	**$ 2,319,042**	**$ 2,595,797**	**$ 2,620,779**	***$ 2,335,862***	**-4%**	**5%**	**9%**	**12%**	**1%**	***5%***
CAPITAL EXPENSES:												
650 DEBT REPAYMENT	$ 148,220	$ 148,220	$ 148,220	$ 148,220	$ 148,220	*$ 148,220*	0%	0%	0%	0%	0%	*0%*
300 CAPITAL EQUIPMENT	$ 41,760	$ 279,883	$ 7,239	$ 33,332	$ 443,358	*$ 161,115*	50%	570%	-97%	360%	1230%	*423%*
400 CONSTRUCTION	$ 2,078,499	$ 2,090,717	$ 1,883,879	$ 2,682,813	$ 2,802,179	*$ 2,307,617*	20%	1%	-10%	42%	4%	*11%*
TOTAL CAPITAL EXPENSES	**$ 2,268,479**	**$ 2,518,819**	**$ 2,039,338**	**$ 2,864,366**	**$ 3,393,757**	***$ 2,616,952***	19%	11%	-19%	40%	18%	***14%***
TOTAL EXPENSE	**$ 4,285,497**	**$ 4,645,495**	**$ 4,358,380**	**$ 5,460,163**	**$ 6,014,536**	***$ 4,952,814***	**7%**	**8%**	**-6%**	**25%**	**10%**	***9%***

COMPOSITE 5 YEAR EXPENDITURES REVIEW (5 YR AVG BASELINE COMPARISON) **STEGE SANITARY DISTRICT**

ITEM	FINAL EXPENSE 2015-2016	FINAL EXPENSE 2016-2017	FINAL EXPENSE 2017-2018	FINAL EXPENSE 2018-2019	FINAL EXPENSE 2019-2020	*5yr Avg EXPENSE*	% Inc/(Dec) 5yr to 15/16 EXPENSE	% Inc/(Dec) 5yr to 16/17 EXPENSE	% Inc/(Dec) 5yr to 17/18 EXPENSE	% Inc/(Dec) 5yr to 18/19 EXPENSE	% Inc/(Dec) 5yr to 19/20 EXPENSE	*5yr Avg % Inc/(Dec) EXPENSE*
OPERATING EXPENSES:												
010 Salaries & Wages	$ 990,148	$ 1,068,044	$ 1,130,055	$ 1,170,238	$ 1,282,352	*$ 1,128,167*	-12%	-5%	0%	4%	14%	*0%*
020 Employee Benefits	$ 389,749	$ 458,344	$ 553,152	$ 584,265	$ 595,270	*$ 516,156*	-24%	-11%	7%	13%	15%	*0%*
030 Directors' Expenses	$ 26,915	$ 32,478	$ 23,530	$ 35,158	$ 24,521	*$ 28,520*	-6%	14%	-17%	23%	-14%	*0%*
040 Election Expense	$ -	$ 300	$ -	$ 22,965	$ -	*$ 4,653*	-100%	-94%	-100%	394%	-100%	*0%*
060 Gasoline, Oil, Fuel	$ 18,332	$ 18,524	$ 14,010	$ 25,065	$ 21,534	*$ 19,493*	-6%	-5%	-28%	29%	10%	*0%*
070 Insurance	$ 128,090	$ 73,077	$ 109,144	$ 109,822	$ 131,545	*$ 110,336*	16%	-34%	-1%	0%	19%	*0%*
080 Memberships	$ 11,448	$ 12,571	$ 14,370	$ 15,489	$ 14,046	*$ 13,585*	-16%	-7%	6%	14%	3%	*0%*
090 Office Expense	$ 6,329	$ 7,629	$ 5,517	$ 16,378	$ 6,166	*$ 8,404*	-25%	-9%	-34%	95%	-27%	*0%*
100 Operating Supplies	$ 28,182	$ 10,805	$ 11,848	$ 23,500	$ 24,680	*$ 19,803*	42%	-45%	-40%	19%	25%	*0%*
110 Contractual Services	$ 86,201	$ 102,168	$ 71,566	$ 88,469	$ 81,375	*$ 85,956*	0%	19%	-17%	3%	-5%	*0%*
120 Professional Services	$ 74,118	$ 91,401	$ 88,269	$ 124,976	$ 121,002	*$ 99,953*	-26%	-9%	-12%	25%	21%	*0%*
130 Printing & Publications	$ 23,402	$ 23,491	$ 17,483	$ 18,483	$ 15,240	*$ 19,620*	19%	20%	-11%	-6%	-22%	*0%*
140 Rents & Leases	$ 723	$ 677	$ 619	$ 253	$ 1,091	*$ 673*	8%	1%	-8%	-62%	62%	*0%*
150 Repairs & Maintenance	$ 75,697	$ 71,188	$ 82,600	$ 102,201	$ 92,986	*$ 84,934*	-11%	-16%	-3%	20%	9%	*0%*
160 Revenue Collection Expenses	$ 11,191	$ 11,227	$ 11,071	$ 10,875	$ 10,868	*$ 11,046*	1%	2%	0%	-2%	-2%	*0%*
170 Travel & Meetings	$ 5,145	$ 6,465	$ 11,580	$ 8,944	$ 5,783	*$ 7,583*	-32%	-15%	53%	18%	-24%	*0%*
190 Utilities	$ 33,826	$ 31,865	$ 34,036	$ 38,105	$ 37,645	*$ 35,095*	-4%	-9%	-3%	9%	7%	*0%*
200 Other Expenses	$ 23,387	$ 18,811	$ 45,269	$ 29,958	$ 29,655	*$ 29,416*	-20%	-36%	54%	2%	1%	*0%*
204 Safety Equipment and Gloves	$ 1,440	$ 1,707	$ 1,642	$ 1,163	$ 4,054	*$ 2,001*	-28%	-15%	-18%	-42%	103%	*0%*
205 Uniforms and Boots	$ 9,875	$ 13,351	$ 18,688	$ 13,986	$ 14,450	*$ 14,070*	-30%	-5%	33%	-1%	3%	*0%*
206 Safety Incentive Program	$ -	$ 587	$ 959	$ 513	$ 357	*$ 483*	-100%	22%	98%	6%	-26%	*0%*
410 Pump Stations	$ 25,606	$ 11,062	$ 17,411	$ 62,788	$ 30,949	*$ 29,563*	-13%	-63%	-41%	112%	5%	*0%*
207 Contracted Repairs	$ 47,213	$ 60,901	$ 56,224	$ 92,204	$ 75,211	*$ 66,351*	-29%	-8%	-15%	39%	13%	*0%*
TOTAL OPERATING EXPENSES	**$ 2,017,018**	**$ 2,126,675**	**$ 2,319,042**	**$ 2,595,797**	**$ 2,620,779**	***$ 2,335,862***	**-14%**	**-9%**	**-1%**	**11%**	**12%**	***0%***
CAPITAL EXPENSES:												
650 DEBT REPAYMENT	$ 148,220	$ 148,220	$ 148,220	$ 148,220	$ 148,220	*$ 148,220*	0%	0%	0%	0%	0%	*0%*
300 CAPITAL EQUIPMENT	$ 41,760	$ 279,883	$ 7,239	$ 33,332	$ 443,358	*$ 161,115*	-74%	74%	-96%	-79%	175%	*0%*
400 CONSTRUCTION	$ 2,078,499	$ 2,090,717	$ 1,883,879	$ 2,682,813	$ 2,802,179	*$ 2,307,617*	-10%	-9%	-18%	16%	21%	*0%*
TOTAL CAPITAL EXPENSES	**$ 2,268,479**	**$ 2,518,819**	**$ 2,039,338**	**$ 2,864,366**	**$ 3,393,757**	***$ 2,616,952***	-13%	-4%	-22%	9%	30%	***0%***
TOTAL EXPENSE	**$ 4,285,497**	**$ 4,645,495**	**$ 4,358,380**	**$ 5,460,163**	**$ 6,014,536**	***$ 4,952,814***	**-13%**	**-6%**	**-12%**	**10%**	**21%**	***0%***


Salaries, Benefits and Construction Costs vs CPI-W
SALARIES
BENEFITS
CONSTRUCTION
CPI-W APR (CWURS49BSA0)
Linear (SALARIES)
Linear (BENEFITS)
$3,000,000
$2,500,000
$2,000,000
$1,500,000
$1,000,000
$500,000
$0
300
250
200
150
100
50
0
CPI-W APR
259.39
268.90
278.04
288.27
290.30
$2,078,499
$2,090,717
$1,883,879
$2,682,813
$2,802,179
$990,148
$1,068,044
$1,130,055
$1,170,238
$1,282,352
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$458,344
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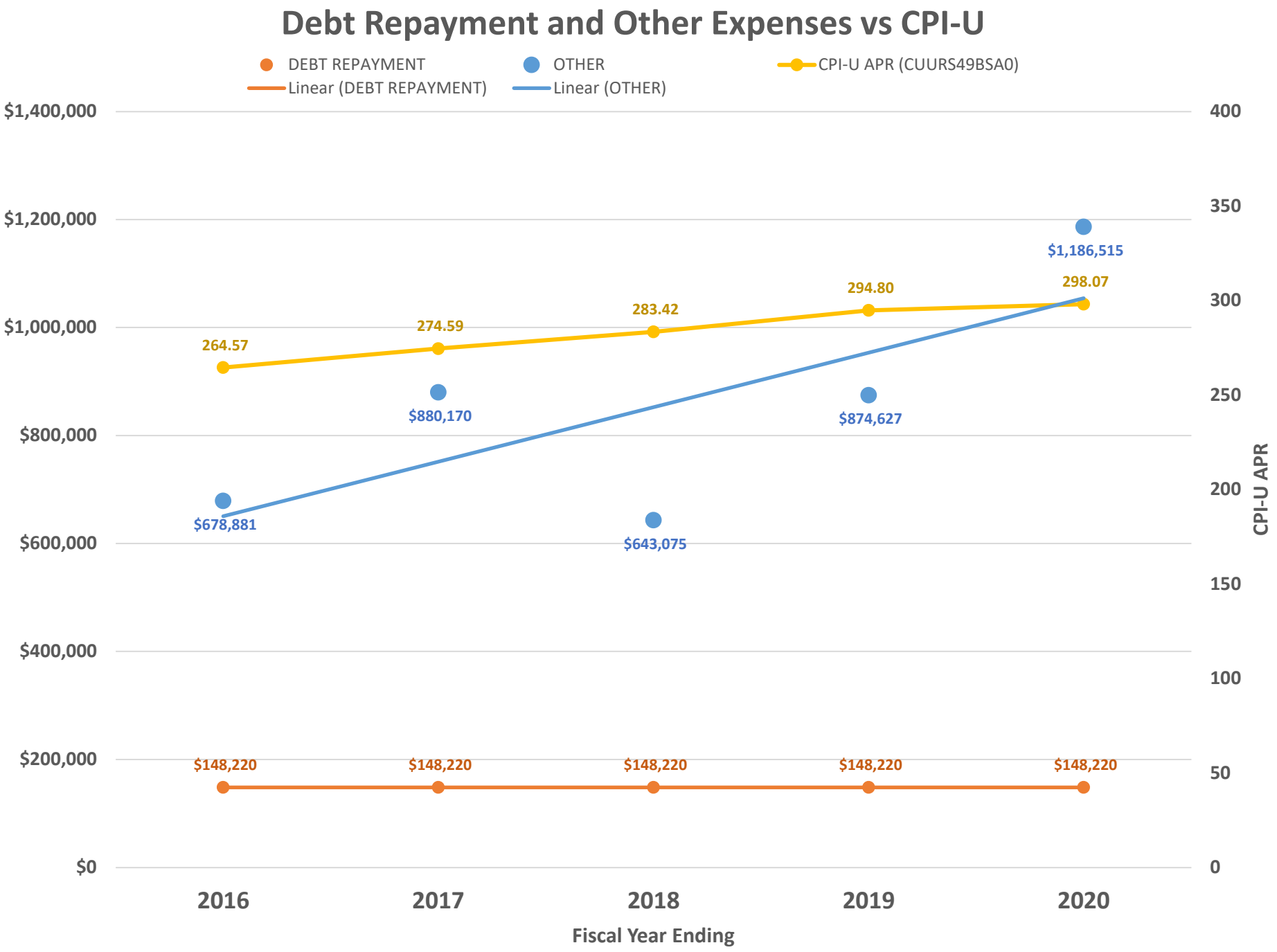
$584,265
$595,270
2016
2017
2018
2019
2020
Fiscal Year Ending


Debt Repayment and Other Expenses vs CPI-U
DEBT REPAYMENT
OTHER
CPI-U APR (CUURS49BSA0)
Linear (DEBT REPAYMENT)
Linear (OTHER)
$1,400,000
$1,200,000
$1,000,000
$800,000
$600,000
$400,000
$200,000
$0
400
350
300
250
200
150
100
50
0
CPI-U APR
264.57
274.59
283.42
294.80
298.07
$678,881
$880,170
$643,075
$874,627
$1,186,515
$148,220
$148,220
$148,220
$148,220
$148,220
2016
2017
2018
2019
2020
Fiscal Year Ending

9:45 – 10:15 A.M.

SALARY SURVEY

The Board will review and consider implementing the salary survey information.

FY2020-21 Monthly Salary Survey Data (+$1000)

Job Title	Number of Positions	Average Range Min	Average Range Max	Median Range Min	Median Range Max	Range + $1000 Min	Range + $1000 Max
Collection System Worker I	7	5,465	6,843	5,467	6,954	6,466	7,899
Collection System Crew Member I	1	6,097	7,512	6,097	7,512	7,097	8,512
Maintenance Worker I	3	5,483	7,289	5,493	7,361	6,488	8,325
Operator I	1	5,561	6,313	5,561	6,313	6,561	7,313
Senior Operator I	1	7,774	7,774	7,774	7,774	8,774	8,774
All CSW I Comparable Positions	**13**	**5,703**	**7,028**	**5,561**	**7,165**	**6,632**	**8,097**
					Current Salary Range	5,991	7,730
					Suggested	**6,275**	**8,097**
							+4.7%
Collection System Worker II	7	6,286	7,867	6,319	7,883	7,303	8,875
Maintenance Repair II	1	8,539	8,966	8,539	8,966	9,539	9,966
Maintenance Worker II	2	5,993	7,835	5,993	7,835	6,993	8,835
Operator II	1	6,372	7,152	6,372	7,152	7,372	8,152
Senior Operator II	1	8,164	8,164	8,164	8,164	9,164	9,164
All CSW II Comparable Positions	**12**	**6,589**	**7,918**	**6,345**	**7,974**	**7,467**	**8,946**
					Current Salary Range	6,642	8,570
					Suggested	**6,933**	**8,946**
							+4.4%
Collection System Worker III	5	6,956	8,808	7,133	8,670	8,045	9,739
Collection System Worker	1	5,781	7,747	5,781	7,747	6,781	8,747
Collection System Crew Member II	1	6,351	7,826	6,351	7,826	7,351	8,826
Collection System Crew Lead I	4	7,272	9,067	7,205	8,886	8,238	9,976
Operator III	1	8,570	8,570	8,570	8,570	9,570	9,570
All CSW III Comparable Positions	**12**	**7,047**	**8,704**	**6,990**	**8,575**	**8,019**	**9,640**
					Current Salary Range	7,146	9,220
					Suggested	**7,471**	**9,640**
							+4.6%
Maint Superintendent (CSW IV)	3	9,558	12,518	9,409	12,356	10,484	13,437
Collection System Manager	5	10,028	13,111	9,809	12,982	10,918	14,047
Plant Operations Supervisor	2	9,578	11,782	9,578	11,782	10,578	12,782
Maint Supervisor	2	9,873	12,272	9,873	12,272	10,873	13,272
Collection System Sup	4	9,399	11,469	9,258	11,253	10,329	12,361
Lead Maintenance Repair Worker	1	10,379	10,898	10,379	10,898	11,379	11,898
Supervisor Maintenance Lead	2	7,499	9,114	7,499	9,114	8,499	10,114
All Maint Super Comparable Positions	**19**	**9,510**	**11,906**	**9,687**	**12,140**	**10,599**	**13,023**
					Current Salary Range	9,409	12,140
					Suggested	**10,093**	**13,023**
							+7.3%
Tech/ Inspector	2	8,059	10,342	8,059	10,342	9,059	11,342
District Inspector	3	7,286	9,475	7,429	9,880	8,357	10,678
District Inspector II	1	7,285	9,764	7,285	9,764	8,285	10,764
Construction Inspector I	3	7,245	9,260	7,326	8,905	8,286	10,083
Construction Inspector II	1	7,602	9,242	7,602	9,242	8,602	10,242
Assist. Eng/Plan Checker	2	7,093	8,621	7,093	8,621	8,093	9,621
Engineering Tech	3	7,242	9,400	7,149	9,124	8,196	10,262
Field Engineer	1	7,459	9,996	7,459	9,996	8,459	10,996
All Tech/Insp Comparable Positions	**16**	**7,373**	**9,458**	**7,444**	**9,774**	**8,409**	**10,616**
					Current Salary Range	8,029	10,360
					Suggested	**8,228**	**10,616**
							+2.5%

FY2020-21 Monthly Salary Survey Data (+$1000)

Job Title	Number of Positions	Average Range Min	Average Range Max	Median Range Min	Median Range Max	Range + $1000 Min	Range + $1000 Max
Senior Engineer	**7**	**11,046**	**13,950**	**11,307**	**14,590**	**12,176**	**15,270**
					Current Salary Range	11,307	14,590
					Suggested	**11,834**	**15,270**
							+4.7%
District Manager	6	19,620	20,156	18,931	19,234	20,275	20,695
General Manager	8	21,028	21,028	21,554	21,554	22,291	22,291
All Manager Comparable Positions	**14**	**20,424**	**20,654**	**20,655**	**20,655**	**21,540**	**21,655**
					Current Salary Range	19,167	19,167
					Suggested	**-**	**-**
Administrative Assistant	**7**	**5,280**	**6,541**	**5,431**	**6,651**	**6,355**	**7,596**
					Current Salary Range	5,417	6,990
					Suggested	**5,887**	**7,596**
							+8.7%
Administrative Supervisor	1	9,858	12,720	9,858	12,720	10,858	13,720
Senior Accountant	3	9,073	11,197	9,543	11,600	10,308	12,399
Finance Supervisor/Manager	5	10,605	13,821	10,374	14,467	11,489	15,144
Business Services Manager	2	10,665	13,113	10,665	13,113	11,665	14,113
Administrative Services Manager	4	11,162	14,578	11,001	14,686	12,081	15,632
Accountant	1	6,899	9,244	6,899	9,244	7,899	10,244
Director Administrative Services	2	11,402	14,277	11,402	14,277	12,402	15,277
District Secretary/Office Administrative	1	8,400	10,210	8,400	10,210	9,400	11,210
All Admin Sup Comparable Positions	**19**	**10,220**	**13,051**	**10,374**	**13,020**	**11,297**	**14,035**
					Current Salary Range	9,858	12,720
					Suggested	**10,877**	**14,035**
							+10.3%

List of Comparable Agencies Surveyed		
Castro Valley SD	*Napa SD*	*West Bay SD*
Central Marin SA	*Novato SD*	*West County SD*
Ironhouse SD	*Oro Loma SD*	*West Valley SD*
Las Gallinas Valley SD	*Rodeo SD*	
Mt. View SD	*Ross Valley SD*	

FY2020-21 Monthly Salary Survey Data (Percentile)

Job Title	Number of Positions	Average Range Min	Average Range Max	Median Range Min	Median Range Max	85th Percentile Min	85th Percentile Max
Collection System Worker I	7	5,465	6,843	5,467	6,954	5,914	7,232
Collection System Crew Member I	1	6,097	7,512	6,097	7,512	6,097	7,512
Maintenance Worker I	3	5,483	7,289	5,493	7,361	5,604	7,554
Operator I	1	5,561	6,313	5,561	6,313	5,561	6,313
Senior Operator I	1	7,774	7,774	7,774	7,774	7,774	7,774
All CSW I Comparable Positions	**13**	**5,703**	**7,028**	**5,561**	**7,165**	**6,012**	**7,656**
					Current Salary Range	5,991	7,730
					Suggested	**5,991**	**7,730**
							+0.0%
Collection System Worker II	7	6,286	7,867	6,319	7,883	6,698	8,589
Maintenance Repair II	1	8,539	8,966	8,539	8,966	8,539	8,966
Maintenance Worker II	2	5,993	7,835	5,993	7,835	6,150	8,032
Operator II	1	6,372	7,152	6,372	7,152	6,372	7,152
Senior Operator II	1	8,164	8,164	8,164	8,164	8,164	8,164
All CSW II Comparable Positions	**12**	**6,589**	**7,918**	**6,345**	**7,974**	**7,539**	**8,635**
					Current Salary Range	6,642	8,570
					Suggested	**6,692**	**8,635**
							+0.8%
Collection System Worker III	5	6,956	8,808	7,133	8,670	7,292	9,367
Collection System Worker	1	5,781	7,747	5,781	7,747	5,781	7,747
Collection System Crew Member II	1	6,351	7,826	6,351	7,826	6,351	7,826
Collection System Crew Lead I	4	7,272	9,067	7,205	8,886	7,954	9,668
Operator III	1	8,570	8,570	8,570	8,570	8,570	8,570
All CSW III Comparable Positions	**12**	**7,047**	**8,704**	**6,990**	**8,575**	**7,812**	**9,348**
					Current Salary Range	7,146	9,220
					Suggested	**7,245**	**9,348**
							+1.4%
Maint Superintendent (CSW IV)	3	9,558	12,518	9,409	12,356	10,344	12,848
Collection System Manager	5	10,028	13,111	9,809	12,982	11,059	14,877
Plant Operations Supervisor	2	9,578	11,782	9,578	11,782	10,153	12,099
Maint Supervisor	2	9,873	12,272	9,873	12,272	10,534	12,885
Collection System Sup	4	9,399	11,469	9,258	11,253	10,380	12,713
Lead Maintenance Repair Worker	1	10,379	10,898	10,379	10,898	10,379	10,898
Supervisor Maintenance Lead	2	7,499	9,114	7,499	9,114	7,897	9,598
All Maint Super Comparable Positions	**19**	**9,510**	**11,906**	**9,687**	**12,140**	**10,673**	**13,123**
					Current Salary Range	9,409	12,140
					Suggested	**9,765**	**12,600**
							+3.8%
Tech/ Inspector	2	8,059	10,342	8,059	10,342	8,080	10,355
District Inspector	3	7,286	9,475	7,429	9,880	7,842	9,933
District Inspector II	1	7,285	9,764	7,285	9,764	7,285	9,764
Construction Inspector I	3	7,245	9,260	7,326	8,905	7,541	10,118
Construction Inspector II	1	7,602	9,242	7,602	9,242	7,602	9,242
Assist. Eng/Plan Checker	2	7,093	8,621	7,093	8,621	7,763	9,436
Engineering Tech	3	7,242	9,400	7,149	9,124	7,489	10,183
Field Engineer	1	7,459	9,996	7,459	9,996	7,459	9,996
All Tech/Insp Comparable Positions	**16**	**7,373**	**9,458**	**7,444**	**9,774**	**8,026**	**10,351**
					Current Salary Range	8,029	10,360
					Suggested	**8,029**	**10,360**
							+0.0%

FY2020-21 Monthly Salary Survey Data (Percentile)

Job Title	Number of Positions	Average Range Min	Average Range Max	Median Range Min	Median Range Max	85th Percentile Min	85th Percentile Max
Senior Engineer	**7**	**11,046**	**13,950**	**11,307**	**14,590**	**12,149**	**14,957**
				Current Salary Range		11,307	14,590
					Suggested	**11,470**	**14,800**
							+1.4%
District Manager	6	19,620	20,156	18,931	19,234	22,029	22,029
General Manager	8	21,028	21,028	21,554	21,554	23,128	23,128
All Manager Comparable Positions	**14**	**20,424**	**20,654**	**20,655**	**20,655**	**23,206**	**23,206**
				Current Salary Range		19,167	19,167
					Suggested	**-**	**-**
Administrative Assistant	**7**	**5,280**	**6,541**	**5,431**	**6,651**	**5,639**	**6,854**
				Current Salary Range		5,417	6,990
					Suggested	**5,417**	**6,990**
							+0.0%
Administrative Supervisor	1	9,858	12,720	9,858	12,720	9,858	12,720
Senior Accountant	3	9,073	11,197	9,543	11,600	10,158	12,062
Finance Supervisor/Manager	5	10,605	13,821	10,374	14,467	11,186	14,732
Business Services Manager	2	10,665	13,113	10,665	13,113	12,210	15,095
Administrative Services Manager	4	11,162	14,578	11,001	14,686	12,167	15,828
Accountant	1	6,899	9,244	6,899	9,244	6,899	9,244
Director Administrative Services	2	11,402	14,277	11,402	14,277	12,013	14,391
District Secretary/Office Administrative	1	8,400	10,210	8,400	10,210	8,400	10,210
All Admin Sup Comparable Positions	**19**	**10,220**	**13,051**	**10,374**	**13,020**	**11,923**	**15,232**
				Current Salary Range		9,858	12,720
					Suggested	**10,773**	**13,900**
							+9.3%

List of Comparable Agencies Surveyed		
Castro Valley SD	*Napa SD*	*West Bay SD*
Central Marin SA	*Novato SD*	*West County SD*
Ironhouse SD	*Oro Loma SD*	*West Valley SD*
Las Gallinas Valley SD	*Rodeo SD*	
Mt. View SD	*Ross Valley SD*	

California Special Districts Association
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SPECIAL DISTRICT
Administrative Salary & Benefits Survey

FY2019-20 Survey Results

Stege Sanitary District	My District's Data (Percentile)	Benchmarking Results 25th Percentile	Median/ Selection Rate	75th Percentile	# of Responses
Overview					
Approx. Pop./Cust. Served	35,000 (56th)	4,216	26,000	98,715	110
No. of Full Time Employees	10.00 (39th)	5.00	13.50	31.00	111
Total Operating Revenue	$4,641,779 (58th)	$1,218,626	$3,309,546	$9,388,828	109
Compensation Details: General Manager					
Annual Base Salary: Minimum	$212,688 (78th)	$98,160	$145,000	$203,703	78
Annual Base Salary: Maximum	$212,688 (75th)	$114,682	$158,434	$213,554	80
Number of FTEs in this Position	1.00 (50th)	1.00	1.00	1.00	85
Years in Position	7 (75th)	2	4	7	84
Compensation Details: Office/Administrative Services Manager					
Annual Base Salary: Minimum	$108,159 (79th)	$53,143	$70,886	$100,066	35
Annual Base Salary: Maximum	$139,560 (86th)	$68,988	$90,044	$118,205	36
Number of FTEs in this Position	1.00 (50th)	1.00	1.00	1.00	37
Years in Position	8 (53rd)	1	7	12	37
Compensation Details: Administrative Assistant					
Annual Base Salary: Minimum	$55,242 (76th)	$41,164	$46,072	$54,749	38
Annual Base Salary: Maximum	$71,280 (68th)	$46,609	$61,030	$77,295	38
Number of FTEs in this Position	1.00 (50th)	1.00	1.00	2.00	39
Years in Position	7 (65th)	2	4	8	38
Compensation Details: Engineering/District Engineer					
Annual Base Salary: Minimum	$125,457 (28th)	$122,809	$131,220	$158,532	19
Annual Base Salary: Maximum	$161,880 (39th)	$156,564	$170,128	$183,512	19
Number of FTEs in this Position	1.00 (50th)	1.00	1.00	1.00	19
Years in Position	7 (50th)	2	7	11	19
Compensation Details: Maintenance Supervisor					
Annual Base Salary: Minimum	$102,858 (79th)	$56,175	$75,760	$99,242	40
Annual Base Salary: Maximum	$132,720 (85th)	$69,525	$95,730	$125,088	41
Number of FTEs in this Position	1.00 (50th)	1.00	1.00	1.00	41
Years in Position	4 (26th)	4	11	15	40
Compensation Details: Maintenance Worker					
Annual Base Salary: Minimum	$62,124 (88th)	$39,151	$46,122	$52,150	44
Annual Base Salary: Maximum	$97,920 (93rd)	$50,471	$66,395	$77,314	44
Number of FTEs in this Position	4.00 (50th)	2.00	4.00	8.00	44
Years in Position	11 (79th)	3	6	10	44

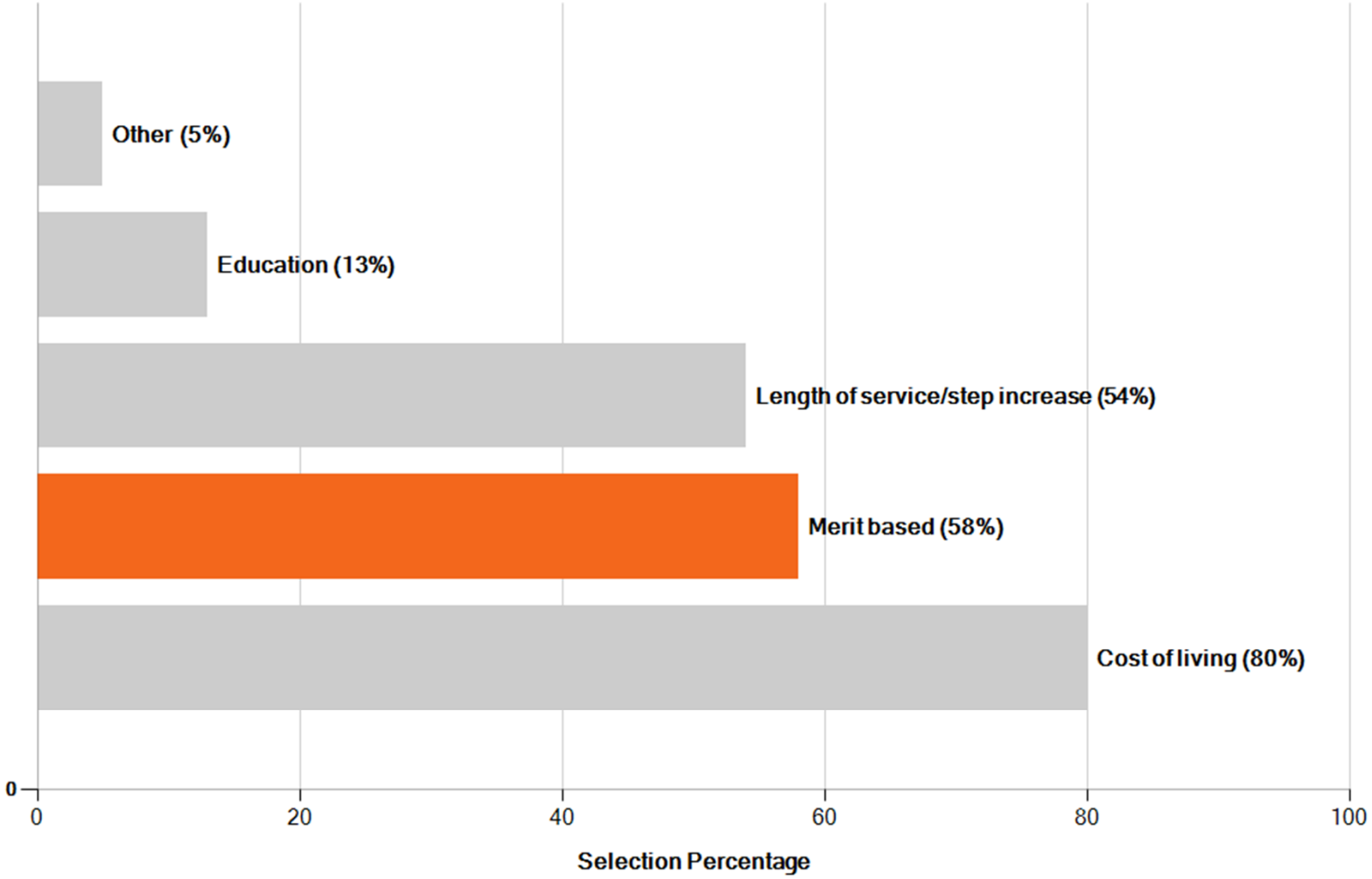
SPECIAL DISTRICT Administrative Salary & Benefits Survey

When reading the following charts:

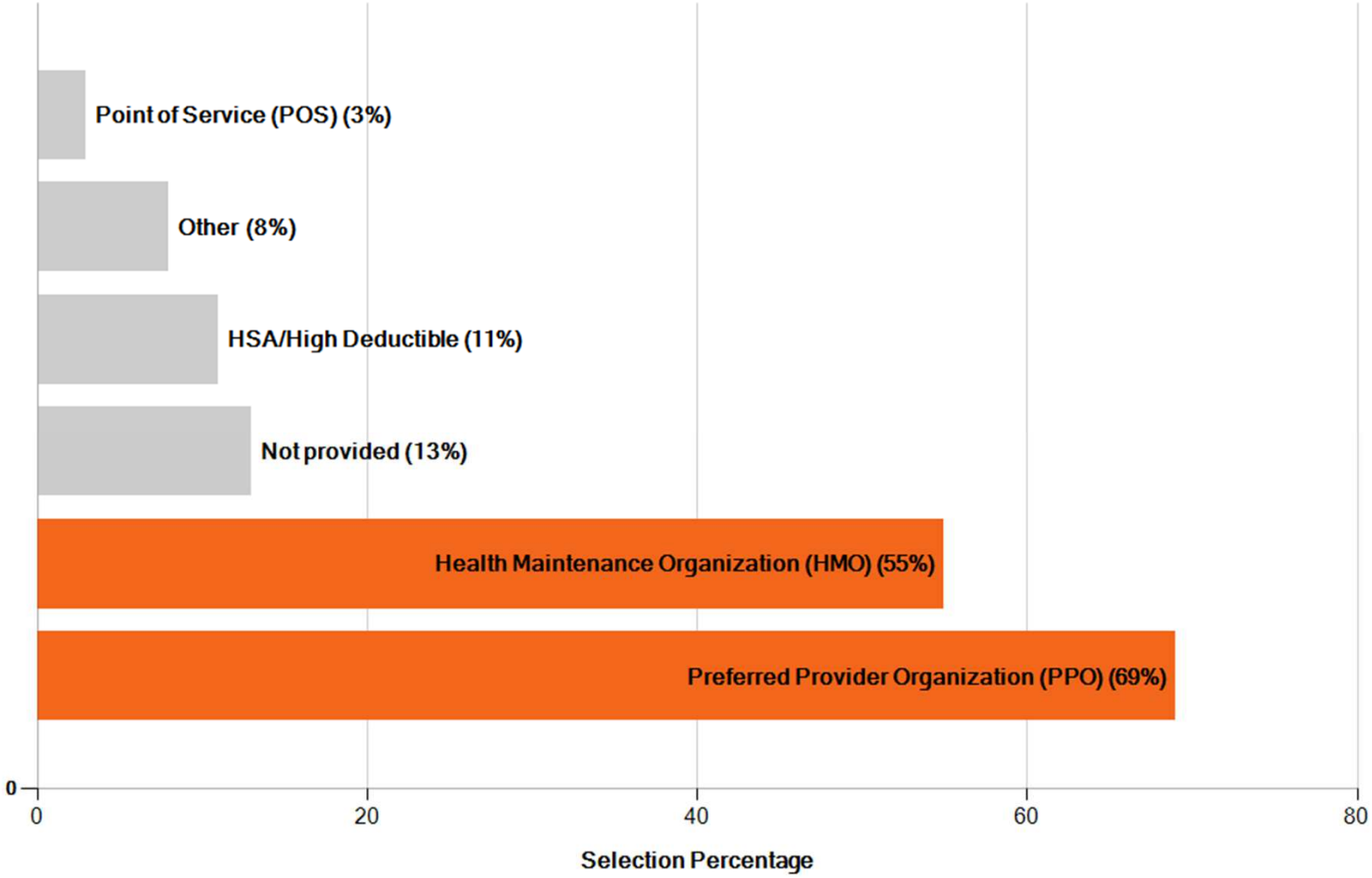
- Numeric results are present in quartiles, values that divide a list of numbers into quarters.
  - 25th Percentile/first quartile = 25% of the data fall below this percentile.
  - 50th Percentile/median = The median represents the middle number where 50% of answers are lower and 50% are higher.
  - 75th Percentile/third quartile = 75% of the data fall below this percentile.
- On each column chart and horizontal bar graph, the answers you provided are indicated in orange.

SPECIAL DISTRICT Administrative Salary & Benefits Survey

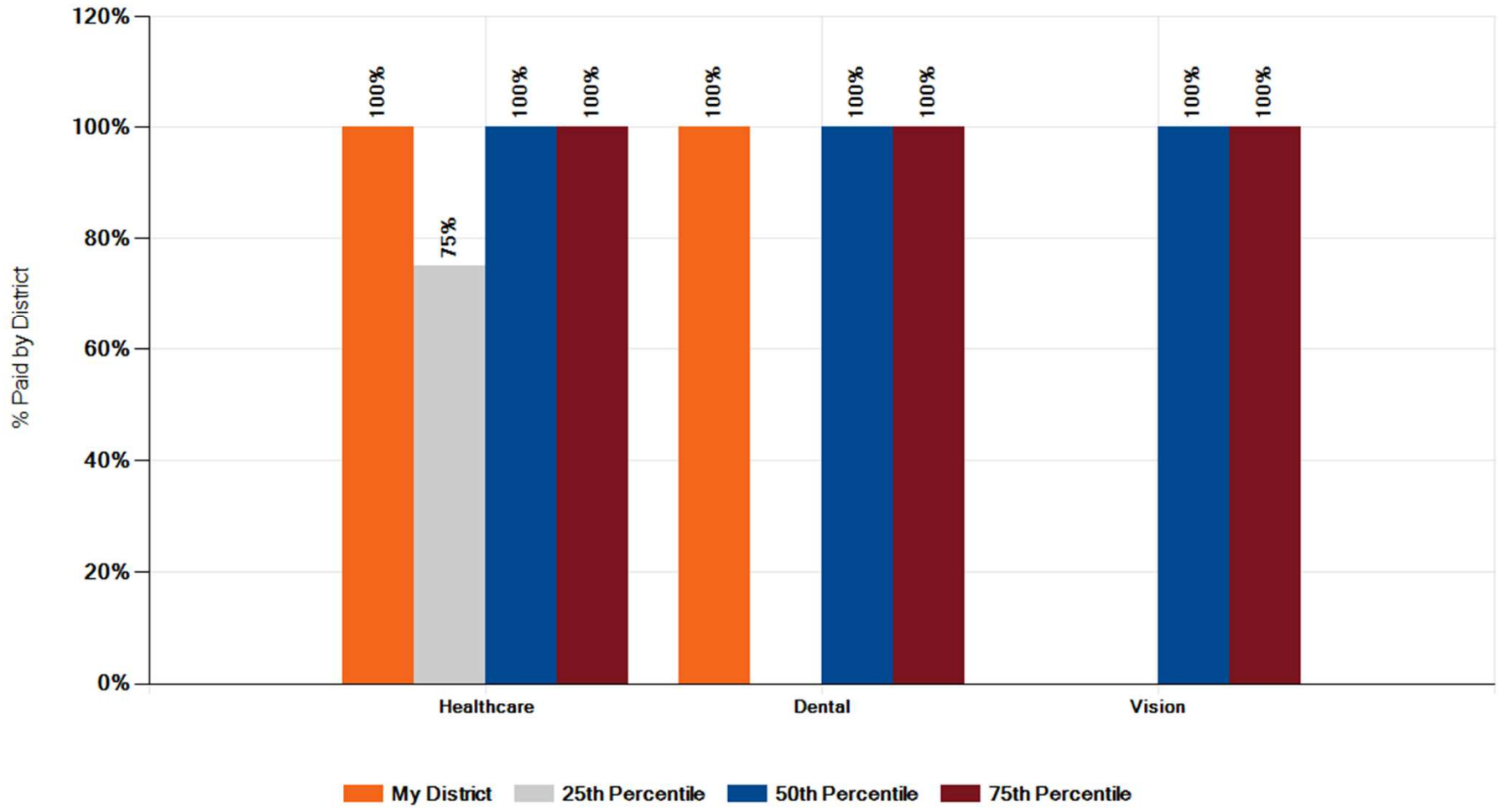
Salary Increases Granted to Staff



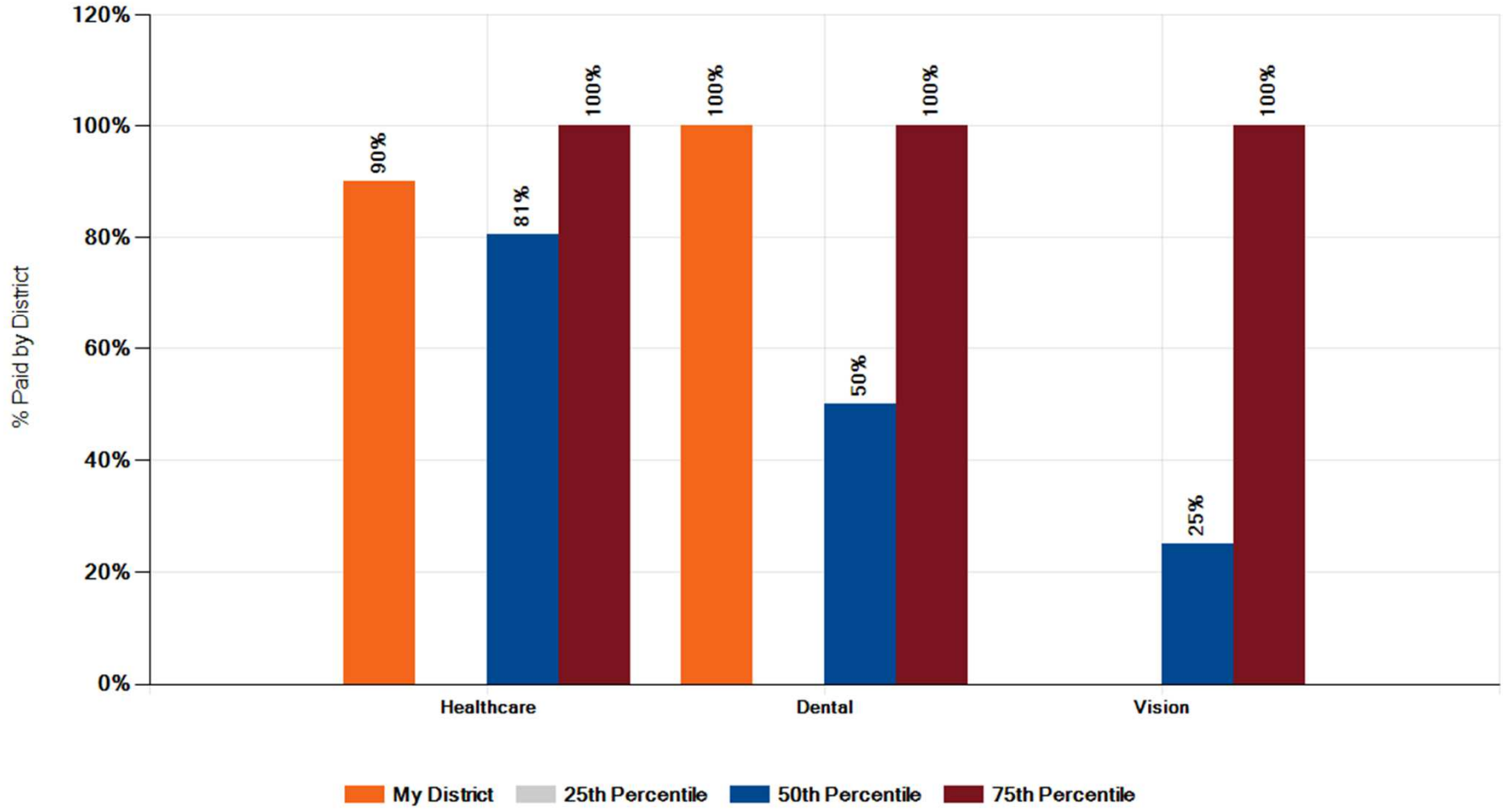
Healthcare Plans Provided



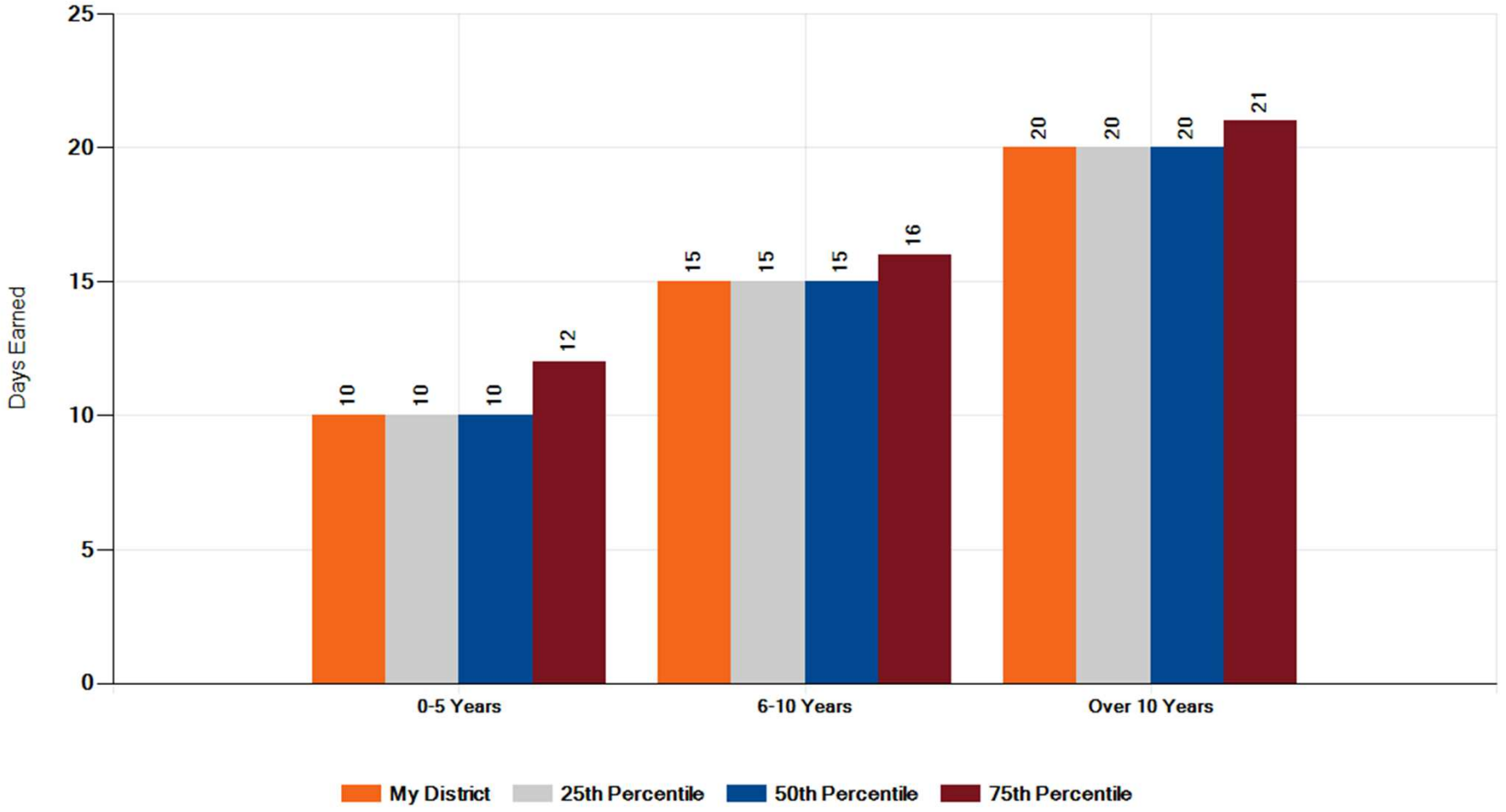
Employee Insurance Paid by District



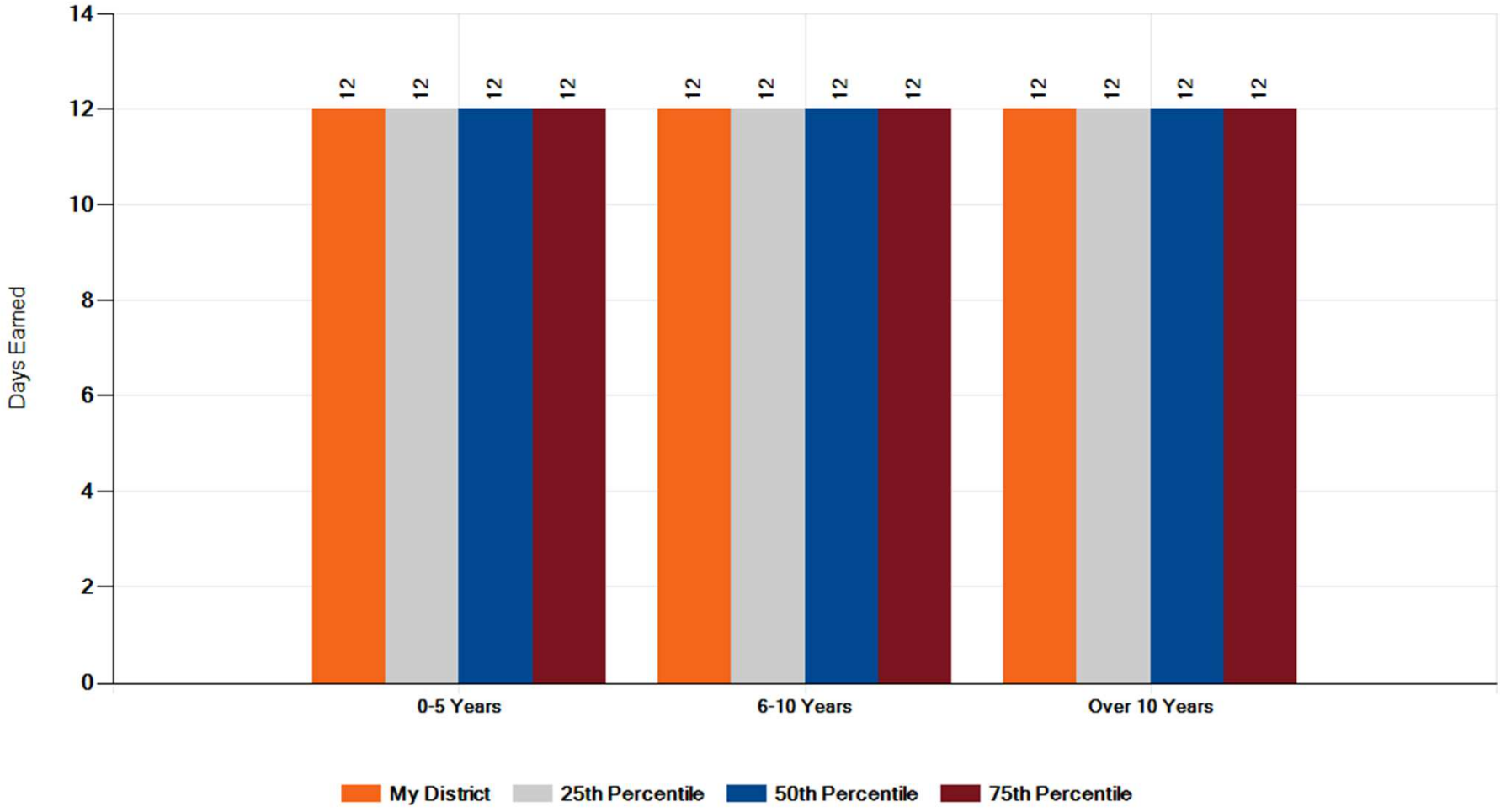
Dependent Insurance Paid by District



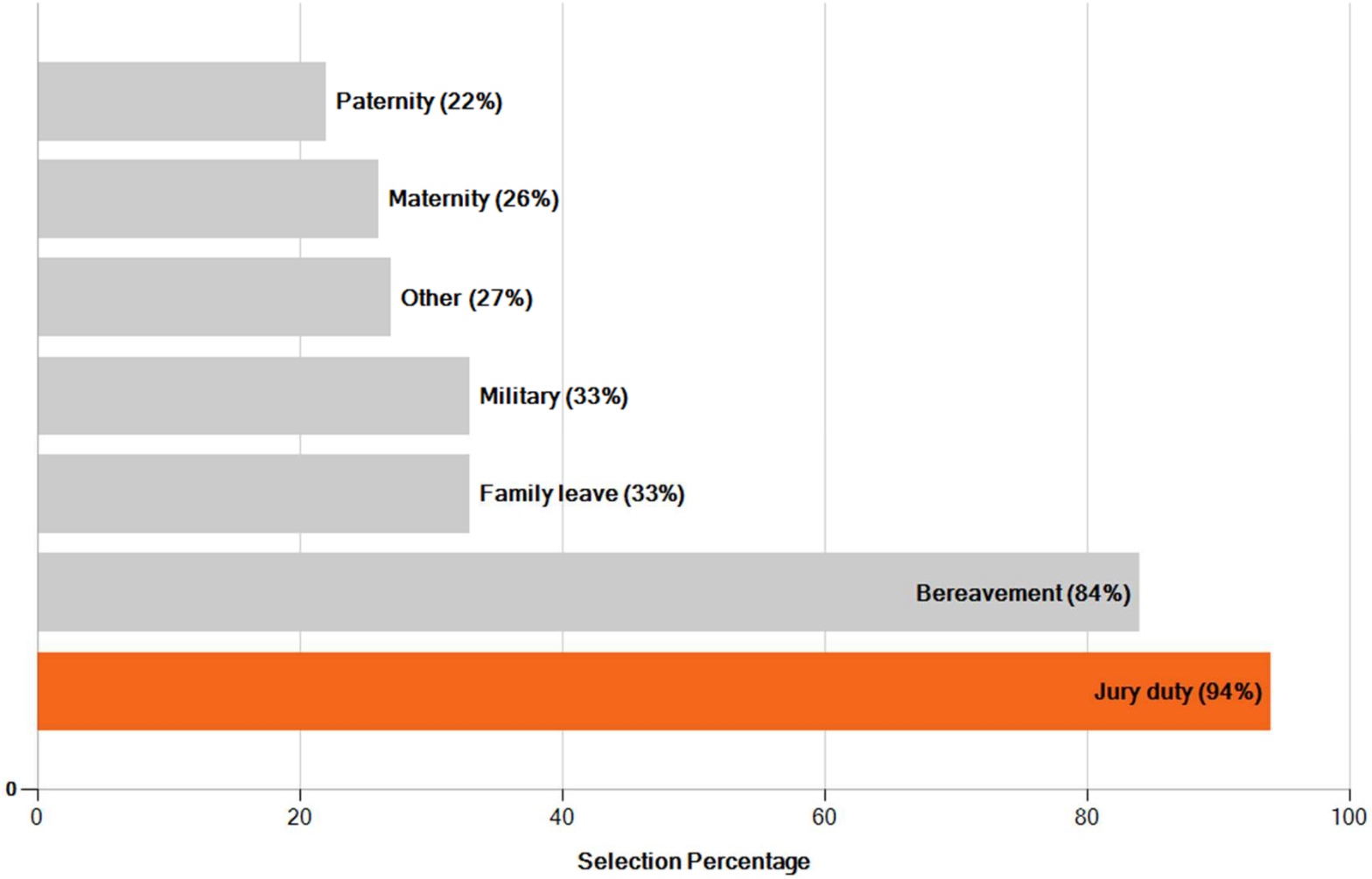
Vacation Days Earned Annually by Years of Service



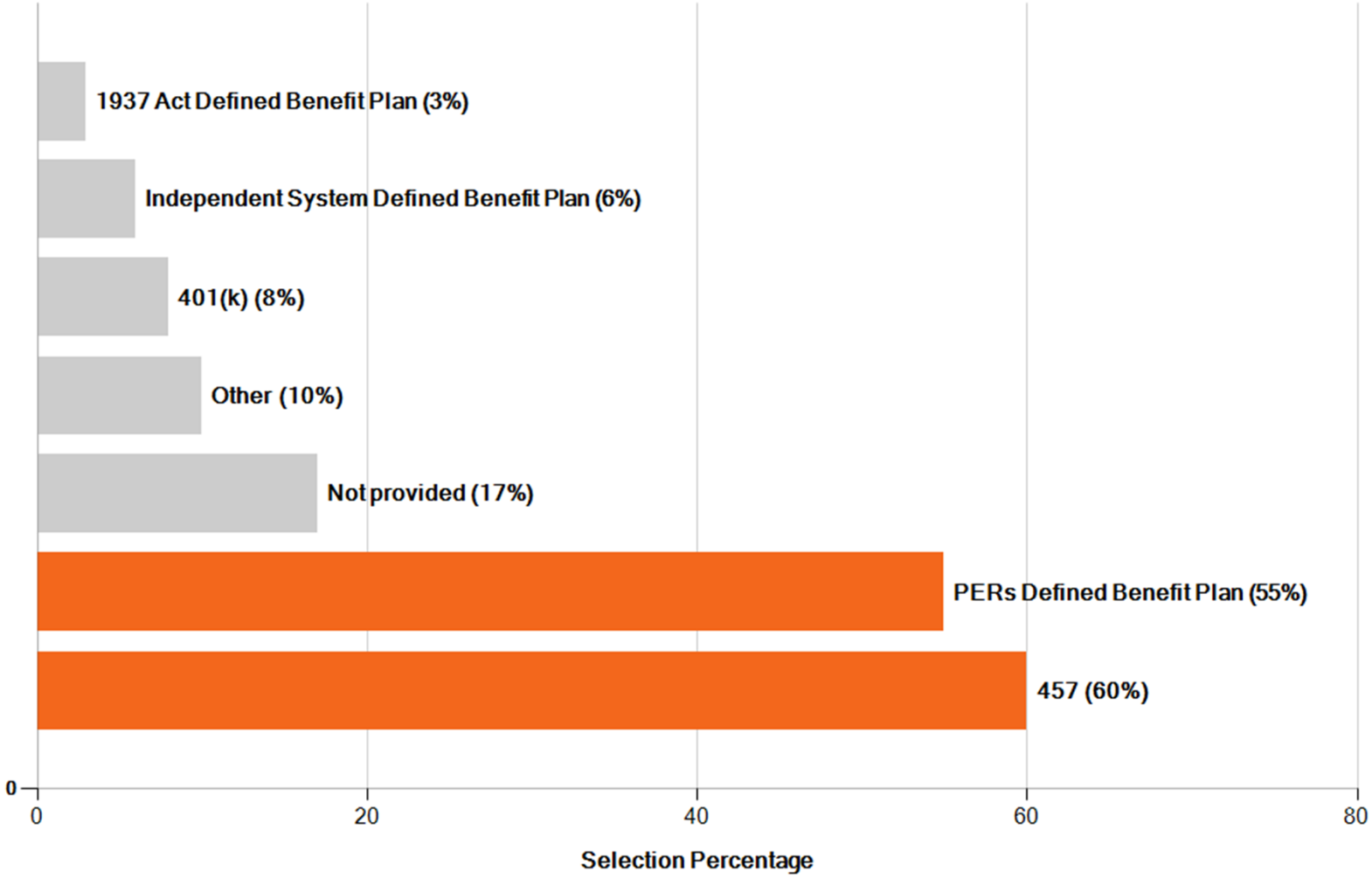
Sick Days Earned Annually by Years of Service



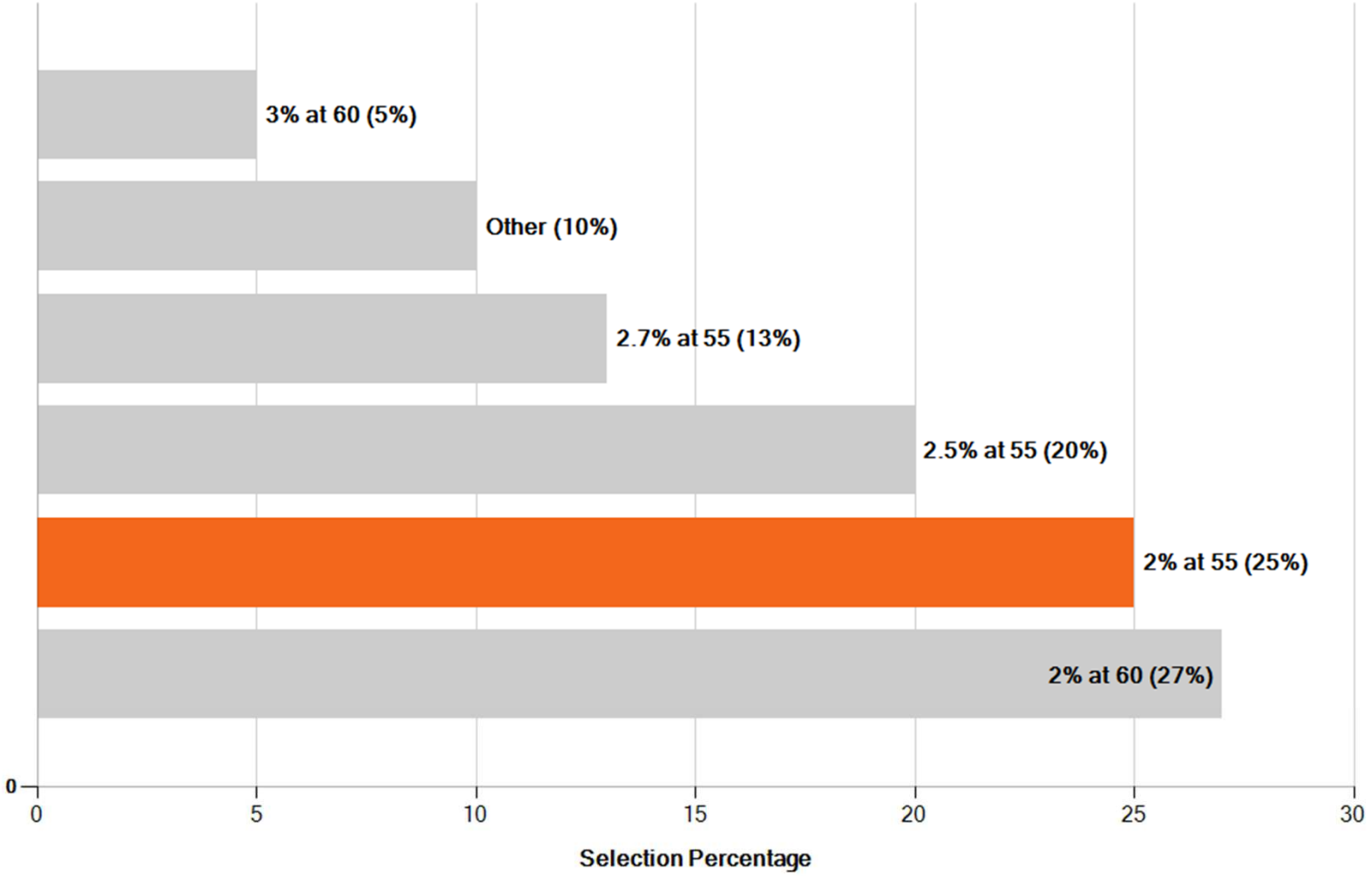
Other Paid Time Off Provided



Retirement Plans Offered



PERS Retirement Plan Formula



10:30 – 11:15 P.M.

USEPA CONSENT DECREE PROGRESS AND PLANNING

The Board will review and discuss the progress and planning of the USEPA Consent Decree.

STEGE SANITARY DISTRICT

District Manager/Engineer:
Rex Delizo, P.E.

District Counsel:
Kristopher Kokotaylo

Board of Directors:
Juliet Christian-Smith
Paul Gilbert-Snyder
Dwight Merrill
Alan C. Miller
Beatrice R. O'Keefe

Monday, September 28, 2020

Chief, Clean Water Act, Water Section I, (ENF 3-1)
Enforcement Division
U.S. Environmental Protection Agency, Region 9
75 Hawthorne Street
San Francisco, CA 94105

Executive Officer
San Francisco Bay Regional Water Quality Control Board
1515 Clay Street, Suite 1400
Oakland, CA 94612

Legal Counsel
San Francisco Bay Regional Water Quality Control Board
1515 Clay Street, Suite 1400
Oakland, CA 94612

Daniel S. Harris
Deputy Attorney General
455 Golden Gate Avenue, Suite 11000
San Francisco, CA 94102

Chief, Environmental Enforcement Section
Environment and Natural Resources Division
U.S. Department of Justice
Box 7611 Ben Franklin Station
Washington, D.C. 20044-7611
Re: DOJ No. 90-5-1-1-09361/2

Executive Director
State Water Resources Control Board
P.O. Box 100
Sacramento, CA 95812-0100

RE: Stege Sanitary District FY 2019-20 Sanitary Sewer Annual Report
Consent Decree - Consolidated Case Nos. C 09-00186-RS and C 09-05684-RS

As required by the Annual Reporting Requirements section of the United States Environmental Protection Agency (EPA) Consent Decree - Consolidated Case Nos. C 09-00186-RS and C 09-05684-RS, the Stege Sanitary District hereby submits by the deadline date of September 30, 2020, its FY 2019-20 Sanitary Sewer Annual Report for the period of July 1, 2019 to June 30, 2020.

I certify under penalty of law that this document and its attachments were prepared either by me personally or under my direction or supervision in a manner designed to ensure that qualified and knowledgeable personnel properly gathered and presented the information contained therein. I further certify, based on my personal knowledge or on my inquiry of those individuals immediately responsible for obtaining the information, that to the best of my knowledge and belief the information is true, accurate and complete. I am aware that there are

significant penalties for submitting false information, including the possibility of fines and imprisonment for knowing and willful submission of a materially false statement.

If you have any questions or concerns, please feel free to contact me.

Very truly yours,
STEGE SANITARY DISTRICT

Rex Delizo
District Manager

Attachments

Transmitted via email:
Patricia Hurst, USDOJ (patricia.hurst@usdoj.gov)
Daniel Harris, USDOJ (daniel.harris@doj.ca.gov)
Eric Magnan, EPA (magnan.eric@epa.gov)
Mike Weiss, EPA (weiss.michael@epa.gov)
Fatima Ty, EPA (Ty.Fatima@epa.gov)
Eileen Sobeck, State Water Board (eileen.sobeck@waterboards.ca.gov)
Michael Montgomery, State Water Board (michael.montgomery@waterboards.ca.gov)
Marnie Ajello, State Water Board (marnie.ajello@waterboards.ca.gov)
Robert Schlipf, Regional Water Board (rschlipf@waterboards.ca.gov)
Sam Plummer, Regional Water Board (sam.plummer@waterboards.ca.gov)
Nicole Sasaki, Baykeeper (nicole@baykeeper.org)
Sejal Choksi-Chugh, Baykeeper (sejal@baykeeper.org)
Chris Sproul, Environmental Advocates (csproul@enviroadvocates.com)
Kristopher Kokotaylo, Meyers Nave (kkokotaylo@meyersnave.com)
Erin Smith, City of Alameda (esmith@alamedaca.gov)
Mark Hurley, City of Albany (mhurley@albanyca.org)
Liam Garland, City of Berkeley (lgarland@cityofberkeley.info)
Christine Daniel, City of Emeryville (cdaniel@emeryville.org)
David Ferguson, City of Oakland (DFerguson @oaklandca.gov)
Chester Nakahara, City of Piedmont (cnakahara@piedmont.ca.gov)
Eileen White, EBMUD (eileen.white@ebmud.com)

STEGE SANITARY DISTRICT
FY 2019-20 Sanitary Sewer Annual Report

The following FY 2019-20 Sanitary Sewer Annual Report corresponds directly to the respective paragraphs of the Annual Reporting Requirements in the United States Environmental Protection Agency (EPA) Consent Decree - Consolidated Case Nos. C 09-00186-RS and C 09-05684-RS.

C. FOR EACH DEFENDANT:

141. A list of all Deliverables submitted to Plaintiffs and a description of the Work performed pursuant to all Deliverables submitted to Plaintiffs and approved or commented on by EPA, as well as a list of Deliverables submitted to Plaintiffs but not yet approved or commented on by EPA.

- *COLLECTION SYSTEM COMPLIANCE EVALUATION INSPECTION: On July 17, 2019, the San Francisco Bay Regional Water Quality Control Board (Regional Water Board) and EPA jointly inspected the Stege Sanitary District collection system. A detailed report dated August 9, 2019 was transmitted to the District which included a request to provide the Regional Water Board with a response to "Section VII – Findings" of the report by September 30, 2019. On September 25, 2019, a response to each item in "Section VII – Findings" of the report was submitted by email. On September 26, 2019, Samuel Plummer of the Regional Water Board confirmed by email that all the responses adequately addressed the items listed in the inspection report.*

- *STEGE SANITARY DISTRICT FY 2018-19 SANITARY SEWER ANNUAL REPORT: On September 26, 2019, as required by the Annual Reporting Requirements section of the Consent Decree, the Stege Sanitary District submitted to the Plaintiffs its FY 2018-19 Sanitary Sewer Annual Report for the period of July 1, 2018 to June 30, 2019 by the deadline date of September 30, 2019.*

- *In an email from Samuel Plummer of the Regional Water Board on November 21, 2019, the District was directed to provide in this FY 2019-20 Sanitary Sewer Annual Report a response to the following comment:*

  Sewer Lateral Inspection, ¶ 170.b.i.A. Did the District perform any follow-up actions regarding the identified defective PSLs beyond notification for the 31 sewer laterals identified in FY17-18 and the 27 sewer laterals identified in FY18-19?

There is no requirement in the Consent Decree for the District to perform follow-up actions regarding the identified defective PSLs beyond notification. Sewer Laterals ¶109.a states as follows:

> *Within 30 Days of identifying a Sewer Lateral as defective, the District shall notify the affected owner in writing. The notice shall provide the owner with all information necessary for prompt correction of the defect, including a list of contractors, and information about how to apply for any grant or loan programs for which the owner may be eligible. The notice shall also provide a discussion of the environmental and legal consequences of failure to correct the defect.*

Notwithstanding, all notified defective PSLs are monitored for any reoccurrence of issues and, as needed, subject to further notification and/or increased enforcement. For the 31 sewer laterals identified in FY17-18 and the 27 sewer laterals identified in FY18-19, no further notification nor increased enforcement was necessary.

142. A description of any known noncompliance by that Defendant with this Consent Decree during the reporting period.

See Exhibit A (attached) for a list of all sanitary sewer overflows for Fiscal Year 2019-20. Otherwise, the Stege Sanitary District does not know of any non-compliance with the Consent Decree during the reporting Fiscal Year.

143. Any recommended changes to the Work required of that Defendant by this Consent Decree, including any proposed material modifications to any Deliverable.

The minimum requirement of 19,756 feet of Sewer Main to be treated for root control, consistent with paragraph 117 of the Consent Decree, should be reduced to 14,236 feet. In addition to the reduction of 20,244 feet to the minimum requirement of Sewer Main approved in an email from Samuel Plummer of the Regional Water Board on November 21, 2019, an additional 5,520 feet of Sewer Main is proposed to be removed from the root control program due to the sewer mains being rehabilitated during the reporting Fiscal Year and no longer having excessive roots requiring treatment.

144. A Sanitary Sewer Overflow Report that includes the location of SSOs; the start and end date and time of each SSO; the SSO volume including gross volume, amount recovered, and amount not recovered; the destination of each SSO; the probable cause(s) of the SSOs; the location(s) of repeat SSOs; a list of any SSOs at locations where the Sewer Main had been Rehabilitated in the previous ten (10) Fiscal Years; and a description of measures taken to help prevent these SSOs in the future.

See Exhibit A (attached) for the Stege Sanitary District Sanitary Sewer Overflow Report for Fiscal Year 2019-20.

145. If a Satellite makes a request to begin or cease participating in EBMUD's Regional Sewer Lateral Program, it shall provide an update on its request and describe any progress in adopting necessary Local Ordinance revisions. When the Satellite makes the necessary Local Ordinance revisions to cease participation in EBMUD's Regional Sewer Lateral Program, the Satellite shall thereafter report on its implementation of its Sewer Lateral Program, including the information required of Berkeley by subparagraph 157(b)(i)(A).

The Stege Sanitary District did not make a request to cease participating in EBMUD's Regional Sewer Lateral Program during the reporting Fiscal Year.

I. FOR THE STEGE SANITARY DISTRICT ONLY:

169. AMIP Implementation. The District shall summarize implementation of each element of its AMIP not addressed below. The summary shall include any proposed revisions to the AMIP, along with any accompanying changes to its financial plan.

The implementation of each element of the AMIP is addressed below. There are no proposed revisions requiring changes to the financial plan.

170. I&I Reduction Work. The District shall summarize its Work to reduce I&I in its service area in the reporting Fiscal Year. The summary shall include, but not be limited to, the following:

a. Sewer Main and Maintenance Hole Rehabilitation

i. Rehabilitation: all Sewer Main and Maintenance Hole Repair and Rehabilitation activities completed, including:

A. the number of feet of Sewer Main Rehabilitated, and the cumulative total feet of Sewer Main Rehabilitated since the Effective Date;

- *<u>12,547</u> feet of Sewer Main have been Rehabilitated during the reporting Fiscal Year.*
- *<u>76,096</u> cumulative total feet of Sewer Main have been Rehabilitated since the Sewer Main Rehabilitation Effective Date of July 1, 2013 as specified in Appendix E of the Consent Decree.*

B. the number of Maintenance Holes Rehabilitated associated with Rehabilitated Sewer Mains and the number of Maintenance Holes Rehabilitated;

- *52 Maintenance Holes associated with Rehabilitated Sewer Mains have been Rehabilitated during the reporting Fiscal Year.*
- *55 Maintenance Holes have been Rehabilitated during the reporting Fiscal Year.*

C. the number of abandoned Sewer Laterals found to be connected to the Sewer Main and the number of abandoned Sewer Laterals disconnected from the Sewer Main;

- *0 abandoned Sewer Laterals have been found to be connected to the Sewer Main during the reporting Fiscal Year.*
- *0 abandoned Sewer Laterals have been disconnected from the Sewer Main during the reporting Fiscal Year.*

D. if the District did not achieve its Rehabilitation requirement in Paragraph 107(a), an explanation of why it did not achieve the Rehabilitation requirement and a description of what changes to the Work will be made in order to correct the deficiency and achieve the Rehabilitation requirement in subsequent Fiscal Years;

- *The Stege Sanitary District achieved its Sewer Main Rehabilitation requirement of 67,020 feet of Sewer Main for the reporting Fiscal Year.*
- *76,096 cumulative total feet of Sewer Main have been Rehabilitated since the Sewer Main Rehabilitation Effective Date of July 1, 2013 as specified in Appendix E of the Consent Decree*

E. the Rehabilitation budget and dollars spent on Sewer Main Rehabilitation;

- *The Sewer Main Rehabilitation budget for the reporting Fiscal Year is $2,689,000.*
- *Actual dollars spent on Sewer Main Rehabilitation for the reporting Fiscal Year is $2,746,639 (102% of budgeted amount).*

F. the Collection System Rehabilitation projects targeted to be completed in the next Fiscal Year; and

As stated in the Stege Sanitary District Asset Management Implementation Plan (AMIP) approved on May 14, 2013, the Collection System Rehabilitation project will target line segments with the highest Damage Severity Index (DSI) ratings that are located in District sub-basins that have high I/I contribution rates ("R" values), in order to maximize and accelerate I/I reduction. Engineering staff has updated the pipe reaches presently planned as priorities for rehabilitation, with the understanding that these identified priorities are likely to be further developed and revised through the inspection and assessment process and as a result of changing conditions.

G. an explanation of any revisions that were made to the Capital Improvement Plan or the financial plan associated with future Repair and Rehabilitation projects, including what revisions, if any, that were made based on information from the EBMUD RTSP.

No revisions were made to the Capital Improvement Plan or the financial plan associated with future Repair and Rehabilitation projects during the reporting Fiscal Year. No revisions were made based on information from the EBMUD RTSP during the reporting Fiscal Year.

ii. Inspections: inspection and condition assessment activities completed, including:

A. the rate of Sewer Main inspection and condition assessment;

- *The Sewer Main inspection and condition assessment rate equates to <u>15%</u> of the collection system for the reporting Fiscal Year.*

B. the total feet of Sewer Main inspected with completed condition assessment and the cumulative total feet of Sewer Main inspected with completed condition assessment since the Effective Date;

- *<u>116,889</u> feet of Sewer Main have been inspected with completed condition assessment during the reporting Fiscal Year.*
- *<u>1,162,717</u> cumulative total feet of Sewer Main have been inspected with completed condition assessment since the Consent Decree Effective Date of September 22, 2014.*

C. if the District conducts inspection of Sewer Mains using a method other than CCTV, the District shall identify the method, explain how that method is as

equally effective as CCTV and identify the total feet of Sewer Main that was inspected using that method;

- *No other method, other than CCTV, was conducted by the Stege Sanitary District to inspect Sewer Mains during the reporting Fiscal Year.*

D. the number of Maintenance Holes associated with Sewer Mains that were inspected and the number of Maintenance Holes inspected;

- *689 Maintenance Holes associated with Sewer Mains have been inspected during the reporting Fiscal Year*
- *689 Maintenance Holes have been inspected during the reporting Fiscal Year*

E. if the District did not achieve its inspection and condition assessment requirement in Paragraph 107(b), an explanation of why it did not achieve the inspection and condition assessment requirement and a description of what changes to the Work will be made in order to correct the deficiency and achieve the inspection and condition assessment requirement in subsequent Fiscal Years; and

- *The Stege Sanitary District achieved its inspection and condition assessment cumulative requirement of 504,504 feet by June 30, 2020 for the reporting Fiscal Year.*
- *1,162,717 cumulative total feet of Sewer Main have been inspected with completed condition assessment since the Consent Decree Effective Date of September 22, 2014.*

F. The Collection System inspection and condition assessment Work to be completed in the next Fiscal Year.

- *The Stege Sanitary District will complete no less than the minimum requirement of 77,616 feet of inspection and condition assessment Work in the next Fiscal Year.*

iii. Regional Standards: a description of the activities to develop – and, beginning in 2017, the extent of compliance with – Regional Standards.

As of July 1, 2016, Stege Sanitary District capital improvement projects are in compliance with the Regional Standards as submitted on June 30, 2016. The Stege

Sanitary District continues to discuss the Regional Standards, their effectiveness, and potential revisions and improvements with the other Defendants at coordination meetings held regularly throughout the year.

b. Sewer Lateral Inspection and Repair or Rehabilitation

i. Sewer Laterals: a description of activities and materials to notify property owners of defective Sewer Laterals, including:

A. the number of Sewer Laterals identified as defective outside of the triggering actions to test Sewer Laterals pursuant to the Amended Regional Ordinance;

- *27 Sewer Laterals have been identified as defective outside of the triggering actions to test Sewer Laterals pursuant to the Amended Regional Ordinance during the reporting Fiscal Year*

B. the number of property owners notified that their Sewer Laterals are defective;

- *All 27 property owners have been notified that their Sewer Laterals were found defective during the reporting Fiscal Year*

C. a copy of a representative notice that was sent to property owners notifying them that their Sewer Lateral is defective;

See Exhibit B (attached) for a copy of a representative notice that was sent to property owners notifying them that their Sewer Lateral was defective during the reporting Fiscal Year.

D. a description and the number of any administrative, civil or criminal enforcement actions taken against property owners for defective Sewer Laterals;

There were 0 other administrative, civil or criminal enforcement actions taken against property owners for defective Sewer Laterals during the reporting Fiscal Year.

E. the number of District-owned and Non-Defendant Permitting Agency-owned Sewer Laterals, the number of District-owned and Non-Defendant Permitting Agency-owned Sewer Laterals inspected and Repaired or Rehabilitated and the cumulative number of District-owned and Non-Defendant Permitting Agency-

owned Sewer Laterals inspected and Repaired or Rehabilitated from the Effective Date;

- *There is 1 Stege Sanitary District-owned Sewer Lateral and 23 Non-Defendant Permitting Agency-owned Sewer Laterals*
- *0 Stege Sanitary District-owned and Non-Defendant Permitting Agency-owned Sewer Laterals have been inspected and Repaired or Rehabilitated during the reporting Fiscal Year*
- *0 cumulative number of Stege Sanitary District-owned and Non-Defendant Permitting Agency-owned Sewer Laterals have been inspected and Repaired or Rehabilitated from the Consent Decree Effective Date of September 22, 2014*

F. the address and name of the owner of any property owned by a Public Entity, or the State or federal government, that has an identified defective Sewer Lateral, including a description of the defect; and

There were 0 properties owned by a Public Entity, or the State or federal government that had an identified defective Sewer Lateral during the reporting Fiscal Year.

G. a summary of the District's assistance to EBMUD in the development of a Sewer Lateral education and outreach program.

The Stege Sanitary District assisted EBMUD in the development of the Sewer Lateral education and outreach program by participating in a meeting with EBMUD in January 2015, when the development of the program and educational materials was reviewed and discussed. Additional review and comments occurred in February 2015, prior to EBMUD's submittal of the plan to EPA for review and comment in March 2015. The District continues to assist EBMUD in the development of the Sewer Lateral education and outreach program designed to encourage Sewer Lateral owners to inspect and, if necessary, Repair or Rehabilitate Sewer Laterals before owners are required to under the Regional or Local Ordinances by attending meetings and providing feedback on EBMUD's implementation of the program.

c. Inflow and Rapid Infiltration Identification and Elimination:

i. a description of the District's cooperation with EBMUD's implementation of the RTSP;

By letter dated January 20, 2015, EBMUD provided a draft of its Regional Technical Support program (RTSP) plan to the East Bay Collection System Advisory Committee (EBCSAC) for review and comment. EBCSAC's comments on the EBMUD draft RTSP were provided to EBMUD by letter dated February 19, 2015. EBMUD submitted the RTSP Plan to EPA, RWQCB, SWRCB, and DOJ on March 23, 2015. Based on comments from EPA received on May 19, 2015, EBMUD resubmitted a revised RTSP Plan on July 20, 2015. The revised RTSP Plan was conditionally approved by EPA on April 14, 2016. EBCSAC agencies have also discussed RTSP issues with EBMUD at regular meetings from January 2015 to the present time.

The Stege Sanitary District continues to cooperate with EBMUD's implementation of the RTSP including providing all requested system information in a timely manner and participating in meetings to discuss continued and proposed work within our service area.

ii. Linear High Priority Sources

A. a cumulative list of all Linear High Priority Sources, including the date that the District eliminated or plans to eliminate the source, and EBMUD's unique identifier;

- *<u>0</u> Linear High Priority Sources have been identified by EBMUD's RTSP during the reporting Fiscal Year.*

B. the number of feet of Linear High Priority Sources eliminated in the Fiscal Year, and the cumulative total feet of Linear High Priority Sources eliminated since EPA's approval of the RTSP;

- *<u>0</u> Linear High Priority Sources have been identified by EBMUD's RTSP during the reporting Fiscal Year and, subsequently, <u>0</u> have been eliminated in the reporting Fiscal Year.*
- *<u>0</u> cumulative total feet of Linear High Priority Sources have been identified by EBMUD's RTSP and, subsequently, <u>0</u> have been eliminated since EPA's approval of the EBMUD's RTSP.*

C. the number of feet of Linear High Priority Sources that the District counted towards its Sewer Main Rehabilitation requirement in subparagraph 107(a);

- *0 Linear High Priority Sources have been identified by EBMUD's RTSP during the reporting Fiscal Year and, subsequently, 0 have been counted towards the Sewer Main Rehabilitation requirement during the reporting Fiscal Year.*

D. for those Linear High Priority Sources that were not eliminated within twenty-four (24) months, an explanation of why the Linear High Priority Sources were not eliminated and a description of the actions that will be taken in order to eliminate the Linear High Priority Sources.

- *0 Linear High Priority Sources have been identified by EBMUD's RTSP during the reporting Fiscal Year.*

iii. Non-Linear High Priority Sources

A. a cumulative list of all Non-Linear High Priority Sources, including the date that the District eliminated or plans to eliminate the source, and EBMUD's unique identifier;

- *0 Non-Linear High Priority Sources have been identified by EBMUD's RTSP during the reporting Fiscal Year.*

B. the number of Non-Linear High Priority Sources eliminated in the Fiscal Year, and the cumulative number of Non-Linear High Priority Sources eliminated since EPA's approval of the RTSP;

- *0 Non-Linear High Priority Sources have been identified by EBMUD's RTSP during the reporting Fiscal Year and, subsequently, 0 have been eliminated in the reporting Fiscal Year*
- *0 cumulative total feet of Non-Linear High Priority Sources have been identified by EBMUD's RTSP and, subsequently, 0 have been eliminated since EPA's approval of the EBMUD's RTSP.*

C. for those Non-Linear High Priority Sources that were not eliminated within twenty-four (24) months, an explanation of why the Non-Linear High Priority Sources were not eliminated and a description of the actions that will be taken in order to eliminate the Non-Linear High Priority Sources.

- *0 Non-Linear High Priority Sources have been identified by EBMUD's RTSP during the reporting Fiscal Year.*

iv. For sources of Inflow and Rapid Infiltration in the Collection System that are not identified as High Priority, the date that the District incorporated each source into its Capital Improvement Plan, and EBMUD's unique identifier;

- *13 sources of Inflow and Rapid Infiltration in the Collection System were identified by EBMUD's RTSP during the reporting Fiscal Year.*

EBMUD's Unique Identifier	Date Incorporated into CIP	Source Type
SRC-1819-SSD-007	7/1/2019	Manhole
SRC-1819-SSD-008	7/1/2019	Manhole
SRC-1819-SSD-009	7/1/2019	Manhole
SRC-1819-SSD-010	7/1/2019	Manhole
SRC-1819-SSD-011	7/1/2019	Manhole
SRC-1819-SSD-012	7/1/2019	Manhole
SRC-1819-SSD-013	7/1/2019	Manhole
SRC-1819-SSD-014	7/1/2019	Manhole
SRC-1819-SSD-015	7/1/2019	Sewer Main
SRC-1819-SSD-016	7/1/2019	Sewer Main
SRC-1819-SSD-017	7/1/2019	Sewer Main
SRC-1819-SSD-018	7/1/2019	Sewer Main
SRC-1819-SSD-019	7/1/2019	Manhole

v. Sources of Inflow and Rapid Infiltration not in the Collection System

A. a cumulative list of all Private High Priority Sources, including the date that the District notified or plans to notify each owner of a source,

- *0 Private High Priority Sources were identified by EBMUD's RTSP during the reporting Fiscal Year.*

B. the date of any administrative, civil, or criminal enforcement actions initiated by District to eliminate the source, the status of the enforcement actions to eliminate the source, and EBMUD's unique identifier;

- *0 Private High Priority Sources were identified by EBMUD's RTSP during the reporting Fiscal Year. 0 subsequent administrative, civil, or criminal enforcement actions were initiated by the Stege Sanitary District during the reporting Fiscal Year.*

C. for all other sources of Inflow and Rapid Infiltration (including illicit connections) not in the Collection System and not owned by the District, the date

that the District notified each owner of the source, the date of any administrative enforcement actions initiated by the District, the status of the administrative enforcement to eliminate the source, and EBMUD's unique identifier.

- *8 other sources of Inflow and Rapid Infiltration (including illicit connections) not in the Collection System and not owned by the Stege Sanitary District were identified by EBMUD's RTSP during the reporting Fiscal Year.*

EBMUD's Unique Identifier	Owner Notified	Administrative Enforcement Actions Date	Administrative Enforcement Status
SRC-1819-SSD-006	12/11/2018	Notice of Violation issued 12/11/2019	Resolved 1/30/2019
SRC-1920-SSD-001	7/6/2020	Notice of Violation issued 7/6/2020 & 9/8/2020	In Progress
SRC-1920-SSD-002	7/6/2020	Notice of Violation issued 7/6/2020 & 9/8/2020	In Progress
SRC-1920-SSD-003	7/6/2020	Notice of Violation issued 7/6/2020	Resolved 8/18/2020
SRC-1920-SSD-004	7/6/2020	Notice of Violation issued 7/6/2020 & 9/8/2020	In Progress
SRC-1920-SSD-005	7/6/2020	Notice of Violation issued 7/6/2020 & 9/8/2020	In Progress
SRC-1920-SSD-006	7/6/2020	Notice of Violation issued 7/6/2020 & 9/8/2020	In Progress
SRC-1920-SSD-007	7/6/2020	Notice of Violation issued 7/6/2020 & 9/8/2020	In Progress

171. SSO Reduction Work. The District shall summarize its Work to reduce SSOs in its service area, describe the success of the Work at preventing blockages and SSOs, and describe any changes to be made to further reduce blockages and SSOs. The summary shall include, but not be limited to, the following:

a. Capacity Assurance: a description of activities performed in order to monitor the locations in Paragraph 113 during rain events, including:

i. the highest water level in relation to the Maintenance Hole that was observed in the reporting Fiscal Year;

The District utilized the water level monitoring method specified in paragraph 113 of coating the wall of the Maintenance Hole with chalk to indicate if the maximum water level reached within (1) foot of the Maintenance Hole rim during a rain event.

After each rain event of the reporting Fiscal Year, District staff inspected the chalk coating on the wall of the Maintenance Holes at the locations listed in Paragraph 113 of the Consent Decree. At all locations, the chalk showed no instance of the water level reaching within one (1) foot of the Maintenance Hole rim.

ii. identify if there was an SSO or the water level reaches within one (1) foot of the Maintenance Holes rim and whether the event(s) occurred during a rain event that was greater than the December 5, 1952 Storm;

There was no SSO or instance of the water level reaching within one (1) foot of the Maintenance Holes rim at the locations listed in Paragraph 113 of the Consent Decree during the reporting Fiscal Year.

iii. a description of all activity the District performed to prevent an SSO from occurring at a location that the District had reason to believe an SSO was likely to occur;

There were no locations that the Stege Sanitary District had reason to believe an SSO was likely to occur during the reporting Fiscal Year.

iv. a list of sewer segments improved pursuant to Paragraph 113, including the date the capacity was improved, and certification that any improved Sewer Main has sufficient capacity; and

The Sewer Main for item "i. Kearny Street and Conlon Avenue" on the list of locations in Paragraph 113 has been replaced and upsized from 8"Ø and 10"Ø to 12"Ø in June 2016. As approved in an email from Samuel Plummer of the Regional Water Board on November 21, 2019, this location no longer requires monitoring since the District assessed the location for two Wet Weather Seasons following the replacement with no evidence of a potential capacity deficiency.

The Sewer Main for item "viii. Pomona Avenue and Ward Avenue" on the list of locations in Paragraph 113 has been mitigated by the installation of an 8"Ø sewer main relief line in December 2016. As approved in an email from Samuel Plummer of the Regional Water Board on November 21, 2019, this location no longer requires monitoring since the District assessed the location for two Wet Weather Seasons following the replacement with no evidence of a potential capacity deficiency.

v. the identification of any capacity-related SSOs and the SSO date and location.

There were 0 capacity-related SSOs during the reporting Fiscal Year.

b. Inspections: a certification that the District completed CCTV inspections downstream of each SSO location under Paragraph 114;

See Exhibit A (attached) for Stege Sanitary District Sanitary Sewer Overflow Report for Fiscal Year 2018-19 which includes the CCTV certification dates of each SSO location.

c. Acute Defects: a description of the activities to Repair Acute Defects under Paragraph 115, including:

i. the number of Acute Defects found;

- *0 Acute Defects have been found during the reporting Fiscal Year.*

ii. the number of Acute Defects Repaired; and

- *0 Acute Defects have been repaired.*

iii. for Acute Defects that were not Repaired within twelve (12) months, provide an explanation why they were not Repaired on time and describe the actions that will be taken and/or the schedules that will be established in order to Repair the Defects as soon as possible;

- *The 0 Acute Defects have been repaired within twelve (12) months of discovery as follows:*

d. Sewer Main Cleaning: a description of activities conducted under its sewer cleaning program pursuant to Paragraph 116, including the feet of Sewer Main cleaned and percent of feet of Sewer Main in the District's Collection System cleaned that are: (i) less than eighteen (18) inches in diameter and (ii) eighteen inches or greater in diameter as part of the routine and hot spot cleaning programs, reporting both unique footage and total footage (i.e., including repeat cleanings);

Sewer Main cleaned during the reporting Fiscal Year in the Stege Sanitary District's Collection System that are:

(i) less than eighteen (18) inches in diameter

- *688,093 unique feet which equates to 88% of the collection system*
- *931,739 total feet, including repeat cleanings, which equates to 120% percent of the collection system*

(ii) greater than eighteen (18) inches in diameter

- *33,949 unique feet which equates to 4% of the collection system*
- *35,241 total feet, including repeat cleanings, which equates to 6% percent of the collection system*

e. Root Cleaning: a description of the activities conducted under its root control program pursuant to Paragraph 117, including the feet of Sewer Main treated for root control (i.e., unique feet) reported as an annual total feet and the cumulative total of feet treated for root control since the Effective Date;

- *46,755 annual total (unique) feet of Sewer Main were treated for root control during the reporting Fiscal Year*
- *288,172 cumulative total of feet were treated for root control since the beginning of the Fiscal Year of the Consent Decree Effective Date of September 22, 2014*
- *As stated earlier in response to paragraph 143, the minimum requirement of 19,756 feet of Sewer Main to be treated for root control, consistent with paragraph 117 of the Consent Decree, should be reduced to 14,236 feet. In addition to the reduction of 20,244 feet to the minimum requirement of Sewer Main approved in an email from Samuel Plummer of the Regional Water Board on November 21, 2019, an additional 5,520 feet of Sewer Main is proposed to be removed from the root control program due to the sewer mains being rehabilitated during the reporting Fiscal Year and no longer having excessive roots requiring treatment.*

f. Hot Spot Cleaning: description of activities conducted under its hot spot program pursuant to Paragraph 118, including feet of Sewer Mains in the hot spot cleaning program, the range of cleaning frequencies for pipe in the hot spot cleaning program, feet of hot spot pipe cleaned once or more during the reporting Fiscal Year (i.e., unique feet), the total feet of hot spot cleaning during the reporting Fiscal Year, including repeat cleanings;

- *49,505 feet of Sewer Mains are in the hot spot cleaning program as of 6/30/2020*
- *The range of cleaning frequencies for pipe in the hot spot cleaning program is up to 6 months*
- *50,145 unique feet of hot spot pipe were cleaned once or more during the reporting Fiscal Year*
- *238,888 total feet of hot spot pipe, including repeat cleanings, were cleaned during the reporting Fiscal Year, which equates to 31% percent of the collection system*

g. FOG: a description of activities to control FOG in the Collection System pursuant to Paragraph 119 and a list of any SSOs that were thought to be associated with FOG or

excessive buildup of grease and that were investigated; and any actions that were taken against food service establishments related to inadequate FOG controls;

The Stege Sanitary District works closely with EBMUD to implement the Regional FOG Control Program. The program was established to reduce FOG related blockages and consists of FOG hotspot investigations, food service establishment (FSE) reviews, gravity grease interceptor (GI) inspections, enforcement support, hotspot reporting, FOG information database management, and outreach. A key element of the program includes hotspot response which is a targeted response to grease-related blockages and consequent SSOs. Response activities include facility inspections at FSEs upstream of the problem area, camera investigations, recommendations for corrective actions and enforcement procedures, as needed. Similar response activities are also undertaken by EBMUD for residential hotspots.

There was two (2) SSOs thought to be associated with FOG during the reporting Fiscal Year.

On November 9, 2019, a FOG-related hotspot associated with a residential area at 6101 Santa Cruz Ave. in Richmond, CA was reported to the Regional FOG Control Program for further investigation, public education, and targeted outreach on proper handling and disposal of residential FOG. On November 20, 2019, EBMUD and Stege Sanitary District staff targeted distribution of residential FOG outreach brochures to the 8 residences upstream of the overflow location.

On November 30, 2019, a FOG-related hotspot associated with a residential area at 35 Franciscan Way in Kensington, CA was reported to the Regional FOG Control Program for further investigation, public education, and targeted outreach on proper handling and disposal of residential FOG. On December 3, 2019, EBMUD and Stege Sanitary District staff targeted distribution of residential FOG outreach brochures to the 11 residences upstream of the overflow location.

h. SSO Prevention and Outreach: a report on the measures it has taken pursuant to Paragraph 120.

The Stege Sanitary District continues to participate in the Underground Service Alert (USA) North damage prevention service that is designed to protect underground facilities in Northern California and continues to provide outreach to inform plumbers, contractors and utility companies of the need for care and protection when working on or around the sanitary sewer system. The Stege Sanitary District also continues public education efforts to inform its residents how their actions can help prevent SSOs through targeted outreach

after each SSO, newsletters twice a year, information on the Stege Sanitary District website, additional awareness via twitter, and educational pamphlets distributed at our office counter and at public events such as the City of El Cerrito's 4th of July Fair.

J. MISCELLANEOUS

172. If the Annual Report documents that any of the obligations subject to stipulated penalties may not have been complied with, and a Defendant takes the position that potentially applicable stipulated penalties should not be assessed, that Defendant may include in the Annual Report an explanation as to why Plaintiffs should forego collecting such penalties; provided, however, that not including such information does not prejudice the Defendant from providing such or additional information to Plaintiffs or the Court in the "Dispute Resolution" Section of this Consent Decree.

- *The Stege Sanitary District should NOT be assessed stipulated penalties for the "Category 2" and "Category 3" SSOs that did not reach waters of the United States as shown in Exhibit A - Stege Sanitary District Sanitary Sewer Overflow Report for Fiscal Year 2019-20.*

ATTACHMENTS

- Exhibit A – Stege Sanitary District Sanitary Sewer Overflow Report for Fiscal Year 2019-20
- Exhibit B – Representative Notice of a Sewer Lateral Overflow (Defective Sewer Lateral)

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STEGE SANITARY DISTRICT
Sanitary Sewer Overflow Report

9/28/2020

SPILL TYPE	LOCATION	START	END	GROSS VOLUME (gals)	AMOUNT RECOVERED (gals)	NOT RECOVERED (gals)	DESTINATION	PROBABLE CAUSE	REPEAT?	REHAB'D w/in last 10 YRS?	CCTV Cert. Date
Category 3	1307 BREWSTER COURT, EL CERRITO, CA 94530	2019.08.02 12.00.00	2019.08.17 12.17.00	562	0	562	Unpaved surface	Pipe Structural Problem/Failure	NO	NO	8/16/2019
	MEASURES TAKEN:	**Mainline repaired on 8/17/2020.**									
Category 3	7722 Curry Ave., El Cerrito, CA 94530	2019.08.16 10.25.00	2019.08.16 10.50.00	10	10	0	Street/Curb and Gutter	Debris from Construction	NO	YES (2019)	8/16/2019
	MEASURES TAKEN:	**Concrete from new lamphole installation seeped into mainline and caused a blockage at the downstream manhole. Maintenance crews cleaned the mainline and were able to remove the concrete blockage. Educated the contractor on the best practices to prevent overflows including protecting the sewer mainline from construction debris.**									
Category 3	610 Beloit Ave. Kensington, CA 94707	2019.09.01 17.10.00	2019.09.01 18.30.00	1	1	0	Unpaved surface	Pipe Structural Problem/Failure	YES (2014)	NO	9/9/2019
	MEASURES TAKEN:	**Replaced mainline on 2/2020 (Project #19201).**									
Category 3	6101 Santa Cruz Ave., Richmond, CA 94804	2019.11.09 08.00.00	2019.11.09 09.30.00	154	40	114	Unpaved surface	Grease Deposition (FOG)	NO	YES (2011)	11/9/2019
	MEASURES TAKEN:	**Increased cleaning frequency to 6 months. On November 9, 2019, a FOG-related hotspot associated with a residential area at 6101 Santa Cruz Ave. in Richmond, CA was reported to the Regional FOG Control Program for further investigation, public education, and targeted outreach on proper handling and disposal of residential FOG. On November 20, 2019, EBMUD and Stege Sanitary District staff targeted distribution of residential FOG outreach brochures to the 8 residences upstream of the overflow location.**									
Category 2	35 FRANCISCAN WAY, KENSINGTON, CA 94707	2019.11.30 09.00.00	2019.11.30 13.30.00	1512	0	1512	Unpaved surface	Grease Deposition (FOG)	NO	NO	11/30/2019
	MEASURES TAKEN:	**Increased cleaning frequency to 3 months. On November 30, 2019, a FOG-related hotspot associated with a residential area at 35 Franciscan Way in Kensington, CA was reported to the Regional FOG Control Program for further investigation, public education, and targeted outreach on proper handling and disposal of residential FOG. On December 3, 2019, EBMUD and Stege Sanitary District staff targeted distribution of residential FOG outreach brochures to the 11 residences upstream of the overflow location.**									
Category 3	1212 King Drive, El Cerrito, CA 94530	2019.12.27 13.15.00	2019.12.27 13.35.00	42	42	0	Separate Storm Drain;Unpaved surface	Root Intrusion	NO	NO	1/2/2020
	MEASURES TAKEN:	**Scheduled for chemical root treatment in 7/2020.**									

STEGE SANITARY DISTRICT
Sanitary Sewer Overflow Report

9/28/2020

SPILL TYPE	LOCATION	START	END	GROSS VOLUME (gals)	AMOUNT RECOVERED (gals)	NOT RECOVERED (gals)	DESTINATION	PROBABLE CAUSE	REPEAT?	REHAB'D w/in last 10 YRS?	CCTV Cert. Date
Category 3	1531 San Joaquin St. Richmond, CA 94804	2020.01.23 10.45.00	2020.01.23 13.00.00	10	10	0	Building or Structure	Pipe Structural Problem/Failure	NO	NO	1/23/2020
	MEASURES TAKEN: **SSO due to broken lateral connection of 1528 San Joaquin St. (neighbor). Mainline repaired on 2/3/2020.**										
Category 3	1338 S 56th St, Richmond, CA 94804	2020.03.23 19.57.00	2020.03.23 20.45.00	5	5	0	Paved Surface	Debris-Rags	NO	NO	3/24/2020
	MEASURES TAKEN: **On 3/30/2020, mailed notices to educate all residents upstream of SSO on the proper disposal of rags and flushable wipes.**										
Category 3	651 KEARNEY ST., EL CERRITO, CA 94530	2020.04.17 12.00.00	2020.04.19 13.05.00	151	26	125	Building or Structure	Damage by Others Not Related to CS Construction/Maintenance (Specify Below)	NO	NO	4/19/2020
	MEASURES TAKEN: **During construction of a storm drain catchbasin and ADA accessible curb ramp, the City of El Cerrito contractor damaged the sewer mainline, never notified the District, and made an unpermitted repair with unapproved pipe material. Educated the City and the City's contractor on best practices to prevent overflows including protecting the sewer main during construction work and to notify the District immediately whenever there are any sewer issues. Mainline repaired by the City's contractor with proper permit, inspection, and approved pipe material on 4/24/2020.**										

9

STEGE SANITARY DISTRICT

District Manager/Engineer:
Rex Delizo, P.E.

District Counsel:
Kristopher Kokotaylo

Board of Directors:
Juliet Christian-Smith
Paul Gilbert-Snyder
Dwight Merrill
Alan C. Miller
Beatrice R. O'Keefe

July 1, 2020

Resident
7500 Schmidt Lane
El Cerrito, CA 94530

RE: NOTICE OF A SEWER LATERAL OVERFLOW (DEFECTIVE SEWER LATERAL)

Dear Resident,

The Stege Sanitary District provides sanitary sewer collection service for the communities of El Cerrito, Kensington and the Richmond Annex. The District is responsible for maintaining the sanitary sewer main lines in order to prevent sewage overflows, protect the environment, and safeguard public health.

A recent service call indicated that a defect within your property's sanitary sewer lateral (the sewer pipe from a building or home) created an overflow of raw sewage on your property. You may need to call a plumber to clear and/or repair your sanitary sewer lateral. A District list of registered plumbers is attached for your convenience.

When a plumber clears a blockage from a sanitary sewer lateral, they may push roots and debris downstream causing a subsequent problem in the larger main sewer in the street.

PLEASE HELP US! If you hire a plumber to clean your home's sanitary sewer lateral, kindly let us know, so we may check the main sewer and prevent any subsequent blockages downstream**.** We will inspect and clean our sewer main lines at **no charge to you**.

In order to prevent future blockages and/or backups within your sanitary sewer lateral, do not flush solid waste such as hand towels, wipes, or rags into toilets – they should be placed in the trash. You may also want to consider repairing or replacing your sanitary sewer lateral if you experience frequent blockages or other maintenance issues due to structural problems or root intrusion.

Thank you for your cooperation. Please feel free to call our District office at **(510) 524-4667** if you have any questions, comments or information.

Very truly yours,

STEGE SANITARY DISTRICT

East Bay Municipal Utility District

Consent Decree (Case Nos. CV 09-00186 and CV 09-05684, N.D. Cal.)

2019/2020 Flow Model Calibration, WWF Output Ratios and Output Test Results

December 2020

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Executive Summary

The East Bay Municipal Utility District (EBMUD) conveys and treats wastewater generated by seven Satellite Agencies (the Cities of Alameda, Albany, Berkeley, Emeryville, Oakland, and Piedmont, plus the Stege Sanitary District, which serves El Cerrito, Kensington, and Richmond Annex). Each Satellite Agency (or "Satellite") owns and operates its own sanitary sewer system that collects wastewater generated in its respective community and conveys the flows to EBMUD's Interceptor System. The Interceptor System then conveys the flows to the Main Wastewater Treatment Plant (MWWTP) where they are treated. Treated effluent from the MWWTP is discharged through an outfall located near the eastern span of the San Francisco-Oakland Bay Bridge.

During significant precipitation events, excessive amounts of rain and groundwater improperly enter the collection system through multiple avenues, such as deteriorated and defective pipes or illicit storm drain connections. This extraneous water entering the collection system, known as inflow and infiltration (I&I), causes an increase in the flows and volumes that must be conveyed by EBMUD's Interceptor System. Currently, during certain significant wet weather events, the volume of I&I entering the Interceptor System exceeds its conveyance capacity. In these instances, the MWWTP is relieved by, and primary treatment is provided at, EBMUD's three wet weather facilities (WWFs), located at Point Isabel (PI WWF), Oakport (OAK WWF), and San Antonio Creek (SAC WWF) and.

On September 22, 2014, EBMUD and the Satellites entered into a Consent Decree (CD) in *United States, et al. v. East Bay Municipal Utility District, et al.* (Case Nos. CV 09-00186 and CV 09-05684, N.D. Cal.) with the United States Environmental Protection Agency (EPA), state and regional water boards, San Francisco Baykeeper, and Our Children's Earth Foundation. The CD requires EBMUD and the Satellites to eliminate most discharges from EBMUD's three WWFs by 2036 through the removal of I&I from the regional collection system. Compliance is determined by simulating system performance during a specified high-intensity storm using a hydrologic and hydraulic model of the Interceptor System (known as the "Flow Model") maintained by EBMUD.

EBMUD is required to update and calibrate the Flow Model each year. EBMUD uses the updated, calibrated model to determine the rate of progress towards the CD's WWF discharge reduction goals in the manner described below.

<u>Annual Model Update and Calibration</u>

Each update of the hydrologic model accounts for rehabilitation work performed since the last update, including both the work performed on public sewer mains and maintenance holes (MH) by the Satellites, and the work performed on sewer laterals by private property owners via compliance with the Private Sewer Lateral Programs. The hydraulic model update includes adjustments to the model's operational logic to account for any changes in how EBMUD operated the Interceptor System that year. Each update also incorporates physical infrastructure improvements made in the previous year, if any. Prior to the first rainfall event of fiscal year 2020 (FY20), EBMUD had completed two capital projects within the Interceptor System, the Pump Station Q (PSQ) bi-directional flow project and the Third Street Interceptor Improvements project. Both of these projects resulted in updates being made to the Flow Model.

The PSQ bi-directional flow project allows the existing PSQ forcemain conduits to be used either as a forcemain or as gravity flow conduits. During moderate wet weather flows, the PSQ bi-directional flow project uses the sewer line as a gravity flow pipe, resulting in more flows being conveyed to the MWWTP. During more significant wet weather flows, the PSQ bi-directional flow project can still be used to pump flows north to the PI WWF, thereby providing relief and protection from uncontrolled sanitary sewer overflows (SSOs) in the downstream portions of the North Interceptor. The PSQ bi-directional flow project required updates to both the model-defined operational logic and to the model network configuration.

The Third Street Interceptor Improvements project entailed lining of approximately 7,300 feet of large diameter pipe and MH rehabilitation in the South Interceptor between Myrtle Street and 9th Street. The lined conduit cross-sectional geometry and updated pipe roughness factor value were included in the FY20 Flow Model updates.

The FY20 adjustments increase the model's ability to accurately simulate discharges based on the current condition of the region's sewer infrastructure. Finally, the model is calibrated over the period of the preceding Wet Season to be volumetrically conservative, as the CD requires, which ensures the model does not underpredict WWF discharge volumes. As the Wet Season is defined as the period from December 1 of one calendar year through April 15 of the following calendar year, the annual work is performed on a FY basis.

EBMUD continually evaluates the quality of data incorporated into the model. Potential improvements to data sources are considered on an ongoing basis. For the FY20 season, as part of the Regional Technical Support Program (RTSP), EBMUD collected data from widespread Interceptor Tributary Areas (ITAs). ITAs are distinct geographical areas that contribute flows into the Interceptor System. The metering data from FY20 data were incorporated into the model calibration that supported hydrologic calibration of 68 ITAs, representing 84% of the service area and 88% of the flows generated within the regional collection system. The widespread collection of ITA-scale data allows for an enhanced resolution in modeling the generation of flows entering the Interceptor System. It permits an evaluation of where flow volumes have been reduced, thus measuring progress towards achieving the CD's WWF discharge reduction goals.

Output Ratio Testing Methodology

The updated and calibrated model is used each year to simulate system performance in the prescribed high-intensity December 5, 1952 Storm, as specified in the CD. Each year, the discharge volumes predicted by the model from EBMUD's three WWFs from the prescribed storm are compared to the volume of discharges from a model run representing the Baseline conditions. The Baseline condition model was calibrated using flow data from the FY10 and FY11 Wet Seasons, and its purpose was to establish a baseline for evaluating future discharge volume reductions over time. In the Baseline model run, the predicted volume of discharge for the storm event at each WWF is known as the Baseline WWF Output. This comparison of the annually calculated discharge volumes to the Baseline WWF Output is referred to as the Output Ratio. For example, an Output Ratio of 100% for a given WWF demonstrates that the WWF's discharge volume, as simulated by the updated and calibrated model, is equal to its discharge volume from the Baseline WWF Output, meaning that there has been neither an increase nor a decrease in discharge volume from the WWF since the baseline was calculated. An Output Ratio greater than 100% for a WWF indicates the WWF is predicted by the updated and calibrated model to discharge a volume

that exceeds the Baseline WWF Output. Conversely, an Output Ratio less than 100% for a WWF indicates that the WWF's discharge volume simulated by the updated and calibrated model is less than its Baseline WWF Output.

The Output Ratios are used to measure compliance with the CD. By a specified date, the CD requires each WWF to show that it would not discharge from the prescribed high-intensity 1952 storm. A WWF may demonstrate compliance with that requirement by showing it has an Output Ratio of 0%. The deadline to demonstrate a 0% Output Ratio varies by WWF. The SAC WWF, PI WWF, and OAK WWF must meet that requirement by the end of calendar years 2028, 2034, and 2036, respectively. Output Ratios are also used to assess the interim progress toward the CD's ultimate WWF discharge reduction goal at Mid-Course Check-Ins, occurring in 2022 and 2030. The CD defines two benchmark WWF Output Ratios for the WWFs at the Mid-Course Check-Ins. These benchmarks will inform a determination of whether an acceptable rate of progress has been achieved. For example, the benchmark Output Ratio for the OAK WWF for 2022 compares the OAK WWF's Baseline discharge volume in the prescribed high-intensity storm with the volume predicted to be discharged from the OAK WWF if an identical storm occurred again in 2022, based on assumptions made at the time the baseline model was finalized regarding the quantity of public and private rehabilitation work that would be completed by 2022, and the expected rate of I&I reduction that would be achieved from the performance of that rehabilitation work. At the 2022 Mid-Course Check-In, the SAC WWF, PI WWF, and OAK WWF are to demonstrate benchmark Output Ratios of 43%, 53%, and 65%, respectively. At the 2030 Mid-Course Check-In, the PI WWF and OAK WWF are to demonstrate benchmark Output Ratios of 18% and 31%, respectively; the SAC WWF must have already demonstrated a 0% Output Ratio at the end of 2028. Compliance with these benchmarks will be determined in the 2022 Mid-Course Check-In by averaging a WWF's Output Ratios from FY20, FY21, and FY22 into a single number known as a Three-Year-Average Output Ratio, which is then compared against the benchmark percentage specified in the CD for that WWF for 2022. The same process will be done for each WWF in the 2030 Mid-Course Check-In by using a WWF's FY28, FY29, and FY30 Output Ratios to calculate the WWF's Three-Year-Average Output Ratio, which will be compared in turn with the 2030 benchmark for that WWF defined in the CD.

Output Ratios can also be used to measure ongoing progress in the years before and after each Mid-Course Check-In. However, because the CD defines WWF Output Ratio benchmarks only for the Mid-Course Check-Ins, a target Output Ratio for other years must be determined using another method. Target Output Ratios have been interpolated using a straight-line projection from the Baseline WWF Output Ratios to the benchmark Output Ratios. Stated another way, a straight, sloping line can be drawn on a graph to connect the Baseline discharge volume in 2011 and the expected discharge volume at the 2022 Mid-Course Check-In. The point where that line crosses 2020 is the target Output Ratio for FY20. A target Output Ratio derived in this manner can assist with understanding the sufficiency of the rate of progress of WWF discharge volume reduction. The Three-Year-Average Output Ratio is calculated by averaging the Output Ratios determined for the previous three years. For example, the FY20 Three-Year-Average Output Ratio, calculated from the FY18, FY19, and FY20 Output Ratios, is then compared against that WWF's target Output Ratio for FY20. If the calculated Three-Year-Average Output Ratio at the WWF is larger than the target Output Ratio – that is, if it would fall above the interpolated line on the graph – then the WWF discharge reductions are not meeting projections and the WWF would be at risk of not meeting

compliance. Conversely, if the calculated Three-Year-Average Output Ratio is less than the target Output Ratio – that is, if it would fall below the interpolated line on the graph – then the WWF discharge reductions are exceeding projections and the WWF would be on pace to be in compliance.

FY20 Output Ratio Results

Following the described Output Ratio testing methodology, the FY20 Output Ratios were determined for each WWF. The FY20 Output Ratio is reflective of the documented Work including the implementation of the PSQ bi-directional flow project. The calculated discharge volumes from each WWF for the Baseline and FY20 conditions are shown in Table ES-1 below.

Table ES-1 Baseline & FY20 Discharge Volumes

Facility	Baseline Discharge Volume[1] (Million Gallons)	FY20 Discharge Volume (Million Gallons)	FY20 Output Ratio[2]
PI WWF	23.3	11.3	48%
OAK WWF	53.7	35.3	66%
SAC WWF	13.2	5.2	39%

1 Baseline volume is the model predicted discharge volume from the December 5, 1952 Storm resulting from Baseline Flow Model calibration to observed flow data from the FY10 and FY11 Wet Seasons.

2 FY20 Output Ratio is calculated as the FY20 Volume divided by the Baseline volume, expressed as a percentage.

The FY20 Three-Year-Average Output Ratio is calculated at each WWF. Table ES-2 presents the calculated Output Ratios from FY18, FY19, and FY20 for each WWF, plus the three-year average of those values. For comparison, Table ES-2 also presents the Mid-Course Check-In and final compliance Output Ratios defined in the CD for each WWF.

Table ES-2: Computed WWF Output Ratios

	Output Ratios					CD Benchmarks		
Facility	FY18	FY19	FY20	Three-Year-Average	FY20 Target[1]	2022	2030	Final Compliance
PI WWF	97%	96%	48%	81%	62%	53%	18%	0% by 2034
OAK WWF	77%	75%	66%	73%	71%	65%	31%	0% by 2036
SAC WWF	82%	74%	39%	65%	53%	43%	--[2]	0% by 2028

1 FY20 target Output Ratio is estimated based on a straight-line interpolation from the Baseline WWF Output Ratio and the 2022 Mid-Course Check-In Benchmark Output Ratio.

2 The compliance date for the SAC WWF precedes 2030.

At the PI WWF, the FY20 Output Ratio is 48% and the FY20 Three-Year-Average Output Ratio is 81%. The FY20 target Output Ratio is 62% based on the straight-line interpolation method. The FY20 Output Ratio at the PI WWF is influenced by both the low rainfall totals in the Wet Season and the implementation of the PSQ bi-directional flow project, which was operational during FY20 ahead of the CD-required implementation date. The PSQ bi-directional flow project provides additional conveyance capacity along the North Interceptor to the MWWTP and resulted in a decrease in discharge volume from the PI WWF during the December 5, 1952 Storm. Based on FY20 results, the Three-Year-Average Output Ratio is greater than the target Output Ratio, so the PI WWF remains at risk of not meeting the required reductions in 2022. The PI WWF was originally determined to be at risk of not meeting the 2022 Mid-Course Check-In in FY17.

At the OAK WWF, the FY20 Output Ratio is 66% and the FY20 Three-Year-Average Output Ratio is 73%. The FY20 target Output Ratio is 71% based on the straight-line interpolation method. At this time, as the Three-Year-Average Output Ratio is greater than the target Output Ratio, the OAK WWF remains at risk of not meeting the required reductions in 2022. The OAK WWF was originally determined to be at risk of not meeting the 2022 Mid-Course Check-In in FY18.

At the SAC WWF, the FY20 Output Ratio is 39% and the FY20 Three-Year-Average Output Ratio is 65%. The FY20 target Output Ratio is 53% based on the straight-line interpolation method. At this time, as the Three-Year-Average Output Ratio is greater than the target Output Ratio, the SAC WWF remains at risk of not meeting the required reductions in 2022. The SAC WWF was originally determined to be at risk of not meeting the 2022 Mid-Course Check-In in FY18.

FY20 System-Wide Volume Ratio Results

As a secondary assessment of the effect of rehabilitation work in reducing discharge volumes from the Interceptor System service area, a system-wide volume ratio was computed, as the Output Ratio for a specific WWF can be locally influenced by the ITAs that are directly tributary to the facility. The system-wide volume ratio provides a broader overview of the I&I reductions realized within the system. Similar to the Output Ratio calculation, the volume ratio is determined by dividing the model-predicted system-wide volume of flows from each facility from the most recent FY by the model-predicted system-wide volumes from the Baseline conditions. The system-wide volumes are determined by summing the volumes arriving at the MWWTP and flows discharged from the PI WWF, OAK WWF, and SAC WWF. The system-wide volume ratios include the impacts of climatological conditions present in that year. To mitigate the impacts from climatological variations from year to year, the system-wide volume ratio has also been calculated with the Baseline groundwater conditions imposed in the model. Table ES-3 shows the calculated system-wide volume ratio as well as the climatologically normalized system-wide volume ratio. The system-wide volume ratios with Baseline groundwater conditions demonstrate a consistent and expected reduction in volumes. Additionally, they provide a secondary measure for assessing effectiveness of work performed.

Table ES-3: Computed System-Wide Volume Ratios for Calibrated and Baseline Groundwater Conditions

Year	Computed System-Wide Volume Ratio with Calibrated FY Groundwater Conditions	Computed System-Wide Volume Ratio with Baseline Groundwater Conditions[1]
FY15	86%	100%
FY16	92%	97%
FY17	95%	95%
FY18	92%	90%
FY19	92%	91%
FY20	80%	82%

[1] For FY20, the system-wide volume ratio is calculated based on model-simulated flows from each WWF and flow to the MWWTP. In previous reports, the system-wide volume ratio was calculated based on model-simulated flows to each WWF and flow to the MWWTP. The FY20 change removes the potential to double count volume that is stored at a WWF during the peak of the December 5, 1952 Storm, and subsequently routed to the MWWTP after the peak flows have subsided.

System-wide, through FY20, a 20% reduction in calibrated total discharge volume has been calculated; this is slightly greater decrease than that determined using the Baseline groundwater conditions, demonstrating the impact of the exceptionally dry FY20 Wet Season. The total system-wide year-over-year reductions demonstrate that the rehabilitative work performed within the regional wastewater collection system is removing I&I. However, as expected and previously demonstrated at both an ITA-scale and WWF tributary area scale, the amount of reductions varies throughout the collection area, and this variation has a direct impact on the rate of progress towards reducing discharges from each WWF.

Considerations Regarding Output Ratio Assessment

The Output Ratio has shown and is anticipated to continue to show a significant variation from year to year at each WWF due to multiple factors. These factors should be given consideration in assessing the overall effectiveness sewer system rehabilitation in reducing the WWF discharges. Factors contributing to potential variations in the calculated Output Ratios include the following:

1. Conservative Flow Model Calibration Bias: The CD requires that the Flow Model be calibrated to overpredict the flows to and from the WWFs and the MWWTP. While this requirement avoids underprediction in discharged volumes, it may result in the Flow Model predicting discharges for events where actual discharge may not occur, as well as predicting a greater volume being discharged than would be expected to occur. The conservative bias factor would contribute to elevating the Output Ratio.
2. Climatological Conditions: The variations in rainfall and climatological conditions observed in the first six years of the Flow Model calibration and Output Ratio testing have affected the calculated Output Ratios. The FY15 Output Ratios showed a reduction in discharges from WWFs that exceeded expectations, likely due to the presence of multi-year drought conditions. Conversely, the reduction in discharge from WWFs calculated for FY17 was less than expected, likely due to the precipitation being 65% greater than the mean annual precipitation (23.45-inches).

   Similar to FY15, the FY20 Output Ratios, computed in a Wet Season with significantly less total rainfall than the long-term average, show reduction in discharges from WWFs that exceed expectations. For the current analytical period used for the determination of the Three-Year-Average Output Ratio, the cumulative precipitation received in the regional collection area is 57.65-inches, 12.71-inches less than the historical average. While impacts from extreme variations in climatological conditions would be expected to be minimized over an extended period of time, the effects have been observed to be significant in a shorter timeframe, such as over a period of one, two, or three Wet Seasons. While the FY15 and FY20 Output Ratios both exceeded the expected I&I reductions based on reported sewer rehabilitation, there is a noted decrease in the hydrologic response to rainfall present in the observed flow data. The Flow Model calibration is influenced by the decreased RDII flow volumes observed during these Wet Seasons with low rainfall totals. In FY15, it was noted that the GWI response after multiple years of drought conditions was depressed, but the model calibration in FY15 did not require significant reductions in RDII volumes to achieve calibration. In FY20, both the GWI and the RDII flow components were depressed in the observed flow data. This indicates that the climatologic conditions present in FY20 may have influenced both the observed GWI and RDII responses within the Collection Systems. In FY20, for the first time since the start of the annual Flow Model update and

calibration, the model-generated rates of RDII generation required significant reductions to achieve calibration to observed flows.

3. Persistent Groundwater Conditions: Variations in climatological conditions also affect groundwater, and impacts on GWI processes may persist for more than a single Wet Season. In the year after an extreme wet year, elevated GWI processes may still be evident, adversely affecting the WWF discharge volumes. As with climatological conditions, impacts from persistent groundwater conditions would be expected to decrease over an extended period of time, but these conditions may affect the Output Ratio for more than one Wet Season. The groundwater factor would contribute to elevating the Output Ratio in and after wetter than average seasons and reducing the Output Ratio in drought-like seasons.
4. Quantity, Methodology and Location of Sewer Rehabilitation: In FY20, as in all previous years, the amount of I&I reduction that has been realized relative to the amount of reported sewer rehabilitation has shown a high degree of variability. This is evident in the variation between the expected and calibrated I&I reductions determined from the Flow Model update and calibration efforts, respectively. There are several possible explanations for the differences between the expected and actual I&I reductions. The locations where sewer rehabilitation is performed will influence the I&I reduction, as rehabilitation in areas with higher rates of I&I production would be expected to have a larger impact on I&I reduction than that in areas where less I&I is evident. The concentration of sewer rehabilitation can also be expected to affect the I&I reduction. Sewer rehabilitation that targets contiguous sewer assets may be more effective, especially in earlier years, than sewer rehabilitation that is highly distributed. Lastly, the presence and significance of I&I migration is another potential explanation for the difference between the expected and calibrated reductions. There is likely a minimum amount of rehabilitation that is required before I&I reduction is observable, and this minimum amount is also variable from one ITA to the next. For I&I reductions to approach the expected values, these considerations likely need to be addressed. The sewer rehabilitation factor would contribute to variability in the Output Ratio.

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11:15 – 12:00 P.M.

SELF-ASSESSMENT OF GOVERNANCE

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Individual Board Member Self-Evaluation

[Be prepared to discuss your answers to the following questions.]

1. Are you satisfied with your own personal performance as a board member in the following areas:

   a. Preparation for Board Meetings
      [ ] Poor [ ] Fair [ ] Good [ ] Very Good [ ] Excellent

   b. Active listening and participation in meetings
      [ ] Poor [ ] Fair [ ] Good [ ] Very Good [ ] Excellent

   c. Directing policy development and decision making vs. micro-managing process and procedure
      [ ] Poor [ ] Fair [ ] Good [ ] Very Good [ ] Excellent

   d. Acting as a good-will ambassador, public outreach
      [ ] Poor [ ] Fair [ ] Good [ ] Very Good [ ] Excellent

   e. Interaction with other board members, manager, and staff
      [ ] Poor [ ] Fair [ ] Good [ ] Very Good [ ] Excellent

   f. Understanding the District's financial situation
      [ ] Poor [ ] Fair [ ] Good [ ] Very Good [ ] Excellent

2. What factors contributed to your performance or lack of performance in the above areas.

3. What is your greatest strength as a board member? Your greatest weakness?

4. What from the District would be helpful to support your role as a board member?

5. Other comments or suggestions that will help the board be more effective.

12:30 – 1:30 P.M.

SAN PABLO AVENUE SPECIFIC PLAN AREA

The Board will review and discuss the progress and planning of the San Pablo Ave. Specific Plan Area.

THE CITY OF EL CERRITO

El Cerrito San Pablo Avenue Corridor, Major Projects:

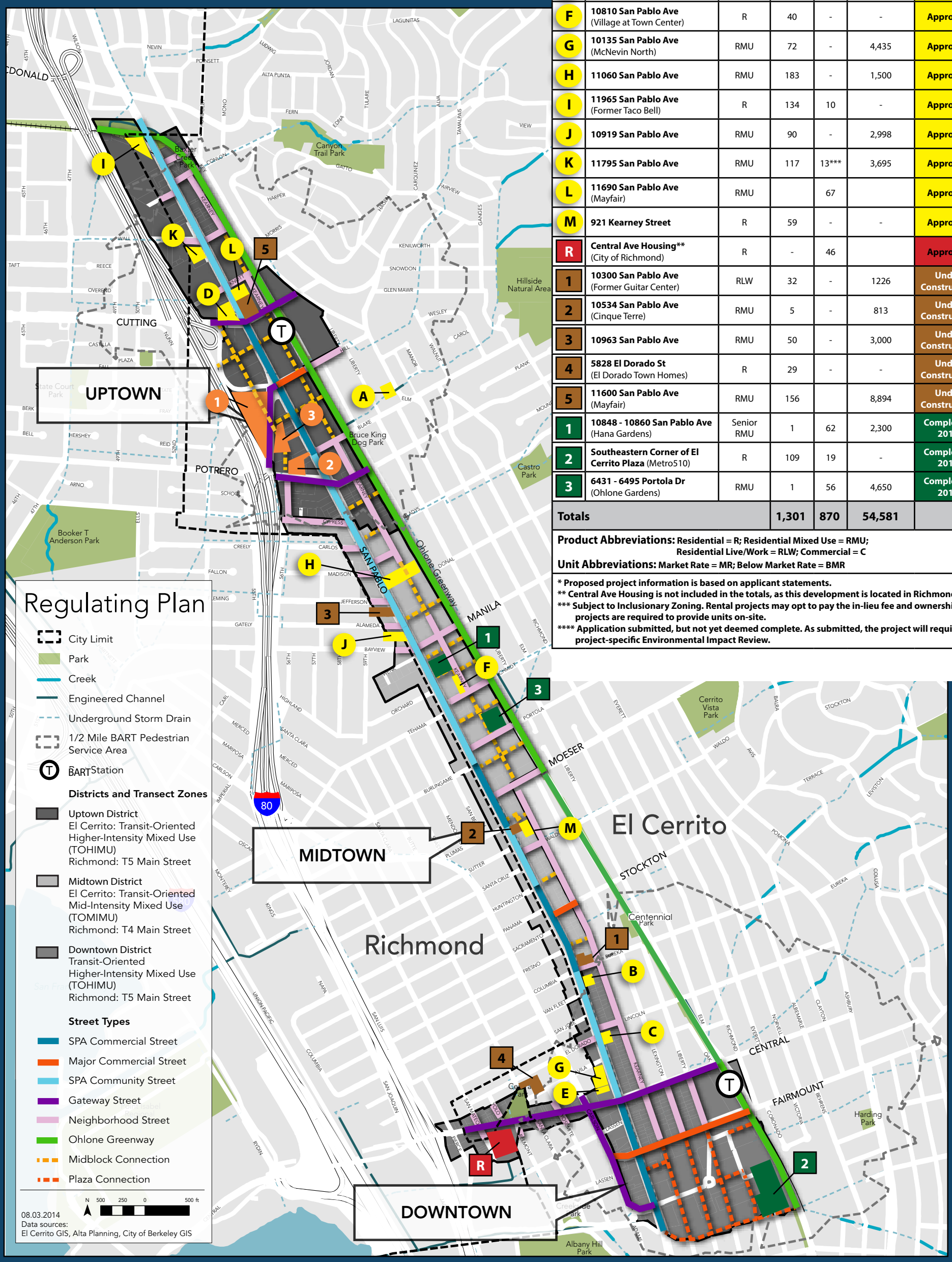
Proposed, Approved, Under Construction, and Completed (as of 3/9/2020)

Key	Project	Product	Units		Commercial Space (SF)	Status
			MR	BMR		
1	**1755 Eastshore Blvd** (Former OSH)	RMU	-	629****	3150	**Proposed***
2	**6115 Potrero Ave & 11335-41 San Pablo Ave**	RMU	54	6***	7,450	**Proposed**
3	**1612 & 1718 Eastshore Blvd (TRU by Hilton)**	RMU & Hotel (84 rooms)	18	2***	4,839 office; 1,005 retail	**Proposed**
A	**1715 Elm St**	R	14	-	-	**Approved**
B	**10290 San Pablo Ave**	RLW	49	6***	1,195	**Approved**
C	**10192 San Pablo Ave**	R	26	-	-	**Approved**
D	**11645 San Pablo Ave** (Hampton Inn)	Hotel (124 Rms)	-	-	3,431	**Approved**
E	**10167 San Pablo Ave** (McNevin South)	R	62		-	**Approved**
F	**10810 San Pablo Ave** (Village at Town Center)	R	40	-	-	**Approved**
G	**10135 San Pablo Ave** (McNevin North)	RMU	72	-	4,435	**Approved**
H	**11060 San Pablo Ave**	RMU	183	-	1,500	**Approved**
I	**11965 San Pablo Ave** (Former Taco Bell)	R	134	10	-	**Approved**
J	**10919 San Pablo Ave**	RMU	90	-	2,998	**Approved**
K	**11795 San Pablo Ave**	RMU	117	13***	3,695	**Approved**
L	**11690 San Pablo Ave** (Mayfair)	RMU		67		**Approved**
M	**921 Kearney Street**	R	59	-	-	**Approved**
R	**Central Ave Housing**** (City of Richmond)	R	-	46		**Approved**
1	**10300 San Pablo Ave** (Former Guitar Center)	RLW	32	-	1226	**Under Construction**
2	**10534 San Pablo Ave** (Cinque Terre)	RMU	5	-	813	**Under Construction**
3	**10963 San Pablo Ave**	RMU	50	-	3,000	**Under Construction**
4	**5828 El Dorado St** (El Dorado Town Homes)	R	29	-	-	**Under Construction**
5	**11600 San Pablo Ave** (Mayfair)	RMU	156		8,894	**Under Construction**
1	**10848 - 10860 San Pablo Ave** (Hana Gardens)	Senior RMU	1	62	2,300	**Completed; 2018**
2	**Southeastern Corner of El Cerrito Plaza** (Metro510)	R	109	19	-	**Completed; 2018**
3	**6431 - 6495 Portola Dr** (Ohlone Gardens)	RMU	1	56	4,650	**Completed; 2015**
Totals			**1,301**	**870**	**54,581**	

Product Abbreviations: Residential = R; Residential Mixed Use = RMU; Residential Live/Work = RLW; Commercial = C

Unit Abbreviations: Market Rate = MR; Below Market Rate = BMR

* Proposed project information is based on applicant statements.
** Central Ave Housing is not included in the totals, as this development is located in Richmond.
*** Subject to Inclusionary Zoning. Rental projects may opt to pay the in-lieu fee and ownership projects are required to provide units on-site.
**** Application submitted, but not yet deemed complete. As submitted, the project will require a project-specific Environmental Impact Review.



For more information on these development projects, visit **www.el-cerrito.org/CommDev/MajorProjects** or contact the Community Development Department at (510) 215-4362. For a copy of the San Pablo Avenue Specific Plan/Complete Streets Plan, visit **www.el-cerrito.org/SPASP**.

Stege Sanitary Sewer District Capacity Analysis - Supplemental Calculations

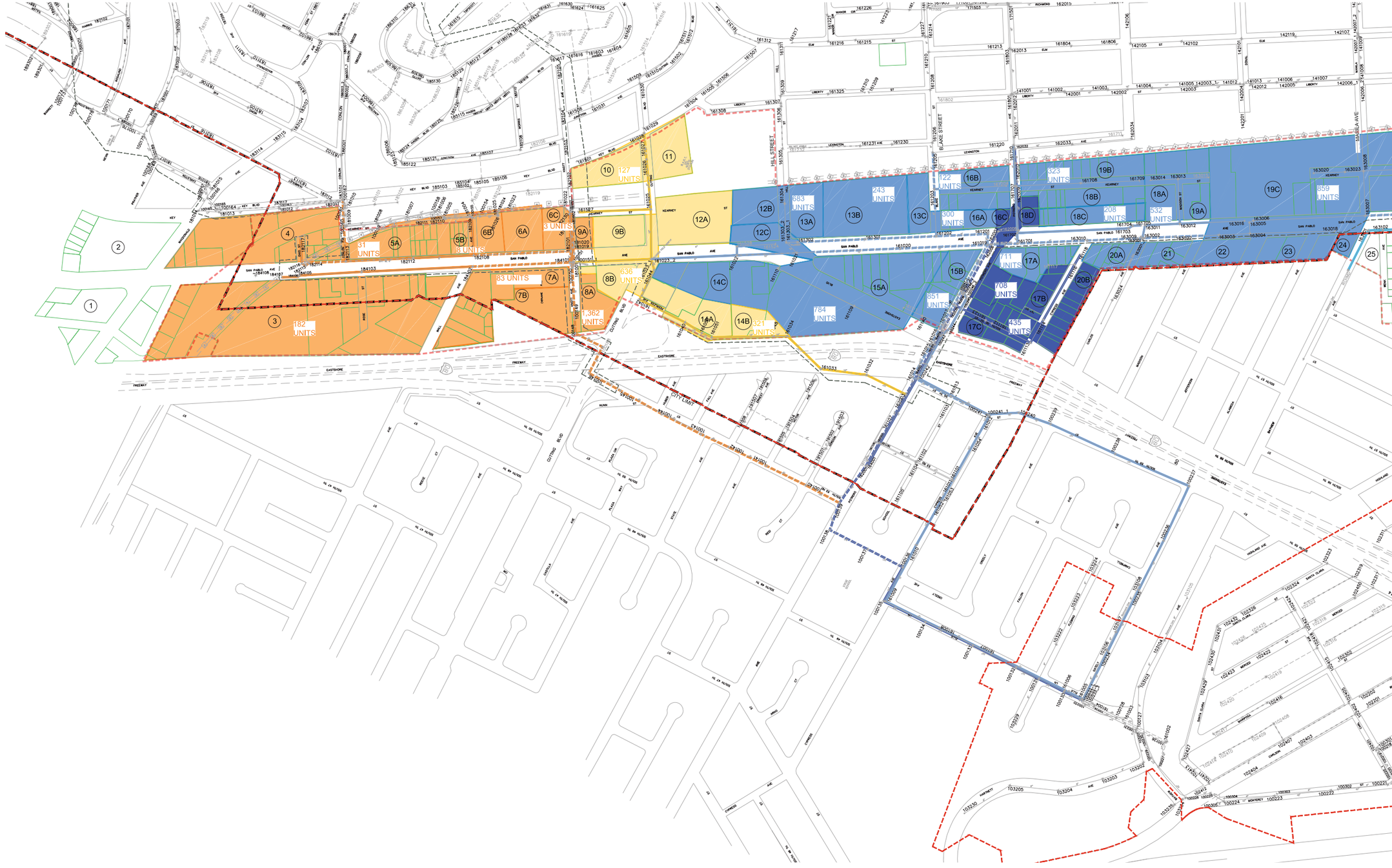
Preliminary Unit Calculations (01.30.18)

Existing Condition		Growth Model Analysis (BKF 7.28.17)				Post Upsizing Capacity Analysis (BKF 1.30.18)				
Block	Tributary Area	Growth Scenario by Block			Sewer Demand (GPD)	Choking Point[1]		Remaining Capacity (GPD)[1]	Max Additional Units[2]	Total Units
		Housing Units	Commercial (SF)	Hotel (Rooms)		US Node ID	DS Node ID			
3	Knott	175	-	-	52,560	184102	184101	1,960	7	182
4/5A/6A		-	-	-	-	184101	100151	9,317	31	31
5B/6B		-	-	-	-	182109	182108	2,287	8	8
6C/9A		-	-	-	-	182130	182101	775	3	3
7A		76	-	-	22,680	184102	184101	1,960	7	83
7B/8A		76	-	-	22,680	100140	100139	385,874	1286	1,362
8B/9B/12A/14A	Cutting	460	38,686	140	185,149	161040	164050	10,882	36	636
10/11		120	-	-	36,000	161028	161027	2,072	7	127
14B					-	161032	162003	96,432	321	321
12B/13A	Potrero (12in)	148	4,000		44,920	161304	161303_2	160,610	535	683
12C/14C/15A		108	-	40	44,400	161020	161019	190,698	636	784
13B		40	4,000	-	12,520	161301	161202	60,818	203	243
13C/16A		40	4,000		12,520	161201	161019	78,055	260	300
15B					-	161015	161014	255,191	851	851
16B					-	161204	161203	36,628	122	122
17A					-	163010	161701	213,165	711	711
18A/19A		21	-	-	6,300	163011	163001_1	153,416	511	532
18B/19B		21			6,300	161708	161707	90,655	302	323
18C		3	-	-	900	161705	161704	61,432	205	208
19C/20A/21/22/23/24/27/28		328	5,760	-	99,149	163009	163010	159,333	531	859
16C/17B/18D	Potrero (18in)	3	-	40	12,900	162035	162005_1	199,551	665	708
17C/20B		6			1,800	161113	161112	128,705	429	435
29/32/33	Waldo	196	6,556	-	59,652	291001	281007	312,764	1043	1,239
30/31/34/35/36	Santa Cruz	28	-	-	8,400	101005	101004	4,364	15	43
37/38/41/42/43/44/45/46	San Jose	21	-	-	6,300	212308	212301	42,332	141	162
49/50A	Central (6in)	92	2,633	-	27,942	212202	212201	120,852	403	495
50B		92	2,633	-	27,942	212201	212004	151,453	505	597
51A	Central (36in)	27		-	8,100	200119	200118	2,227,676	7426	7,453
60/62		11	-	-	3,300	203102	203101	66,104	220	231
61A		120	-	-	36,000	200202	200201	17,827,632	59425	59,545
39/40/47/48/55A	Lassen	112	-	-	33,600	222002	222001	5,674	19	131
51B/52/53B/55B/56/57/58/59		601	37,200	-	185,136	211008	211007	156,568	522	1,123
53A/54		-	-	-	-	211215	211214	29,021	97	97
61B		120	-	-	36,000	211002	21101	990,901	3303	3,423

Notes:

[1] ***Remianing Capacity*** **and** ***Choking Point*** **from "Knott Tributary Preliminary Capacity Calculations" dated 01.30.18.**

[2] ***Max Additional Units*** **based on 300 GPD per unit from "Stege Sanitary Sewer District Capacity Analysis to Support the Plan Area of San Pablo Specific Plan" technical memorandum by BKF Engineers dated 7.28.17.**



LEGEND

FLOW MONITOR LOCATION
(INSTALLED FEB - MARCH 2017)

15 GROWTH FORECASTING BY BLOCK

KNOTT TRIBUTARY: 18-INCH PRIMARY FLOW PATH

KNOTT TRIBUTARY: 18-INCH PRIMARY FLOW PATH (UPSIZE AS SHOWN)

CUTTING TRIBUTARY: 10-INCH PRIMARY FLOW PATH

CUTTING TRIBUTARY: 10-INCH PRIMARY FLOW PATH (UPSIZE AS SHOWN)

POTRERO TRIBUTARY: 18-INCH PRIMARY FLOW PATH

POTRERO TRIBUTARY: 18-INCH PRIMARY FLOW PATH (UPSIZE AS SHOWN)

POTRERO TRIBUTARY: 12-INCH PRIMARY FLOW PATH

POTRERO TRIBUTARY: 12-INCH PRIMARY FLOW PATH (UPSIZE AS SHOWN)

BAYVIEW TRIBUTARY: 6-INCH PRIMARY FLOW PATH

BAYVIEW TRIBUTARY: 6-INCH PRIMARY FLOW PATH (UPSIZE AS SHOWN)

SANTA CRUZ TRIBUTARY: 6-INCH PRIMARY FLOW PATH

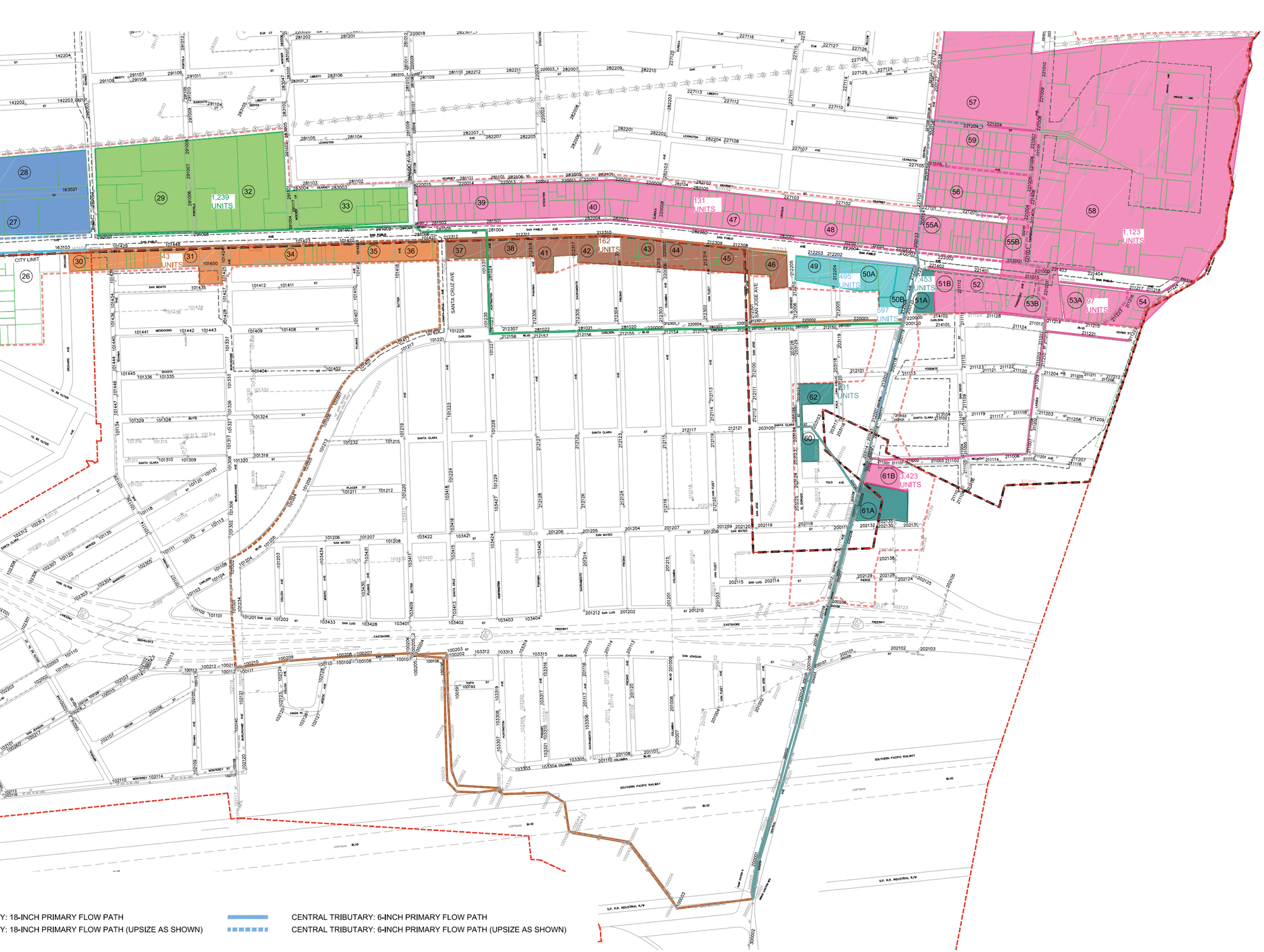
SANTA CRUZ TRIBUTARY: 6-INCH PRIMARY FLOW PATH (UPSIZE AS SHOWN)

WALDO TRIBUTAR

WALDO TRIBUTAR

SAN JOSE TRIBUT

SAN JOSE TRIBUT



Y: 18-INCH PRIMARY FLOW PATH
Y: 18-INCH PRIMARY FLOW PATH (UPSIZE AS SHOWN)

ARY: 6-INCH PRIMARY FLOW PATH
ARY: 6-INCH PRIMARY FLOW PATH (UPSIZE AS SHOWN)

CENTRAL TRIBUTARY: 6-INCH PRIMARY FLOW PATH
CENTRAL TRIBUTARY: 6-INCH PRIMARY FLOW PATH (UPSIZE AS SHOWN)

CENTRAL TRIBUTARY: 36-INCH PRIMARY FLOW PATH
CENTRAL TRIBUTARY: 36-INCH PRIMARY FLOW PATH (UPSIZE AS SHOWN)

LASSEN TRIBUTARY: PRIMARY FLOW PATH
LASSEN TRIBUTARY (UPSIZE AS SHOWN)

1:30 – 2:15 P.M.

FUTURE FUNDING CONSIDERATIONS

The Board will review and discuss future funding considerations.

Future Funding Considerations to (pre)pay for all or part of:

1. Clean Water State Revolving Fund (SRF) Loan remaining balance of $306,358.

2. Other Postemployment Benefits (OPEB) Net Unfunded Accrued Liability (UAL) of $307,992.

3. California Public Employees' Retirement System (CalPERS) Unfunded Accrued Liability (UAL) of $1,812,803.

4. Consent Decree required sewer main and maintenance hole rehabilitation.

State of California - State Water Resources Control Board
Clean Water State Revolving Fund Payment Schedule

Recipient: Stege Sanitary District
Project No.: C-06-4665-110
Agreement No.: 00802-550-0

Date: 1/12/2021
Amount: 1,586,165
Interest rate: 1.600%
Service charge rate: 1%
Term: 20 Years

Date	Disbursement/ Payment	No.	Beginning Balance	Draw Amount	Construction Period Interest (CPI) Amount Accrued	Amt. Trans. to Principal	Annual Interest Accrued	Principal Paid/Due	Interest Paid/Due	Service Charge Paid/Due	Total Payment	Ending Balance
25-May-2001	Disbursement	1	0.00	141,536.00	0.00						0.00	141,536.00
30-Jun-2001	End FY		141,536.00		357.77						0.00	141,536.00
14-Aug-2001	Disbursement	2	141,536.00	250,616.00	449.77						0.00	392,152.00
20-Sep-2001	Disbursement	3	392,152.00	393,040.00	1,019.60						0.00	785,192.00
5-Dec-2001	Disbursement	4	785,192.00	518,940.00	4,253.12						0.00	1,304,132.00
21-Feb-2002	Const. Compl.		1,304,132.00		7,158.24	13,238.50					0.00	1,317,370.50
30-Jun-2002	End FY		1,317,370.50				12,273.50				0.00	1,317,370.50
21-Feb-2003	Payment	1	1,317,370.50				21,978.13	51,054.21	34,251.63	0.00	85,305.84	1,266,316.29
28-Feb-2003	Disbursement	5	1,266,316.29	282,033.00			823.11				0.00	1,548,349.29
30-Jun-2003	End FY		1,548,349.29				13,419.03				0.00	1,548,349.29
21-Feb-2004	Payment	2	1,548,349.29				25,831.63	64,390.20	39,890.85	0.00	104,281.05	1,483,959.09
21-Feb-2005	Payment	3	1,483,959.09				38,582.94	65,698.11	38,582.94	0.00	104,281.05	1,418,260.98
21-Feb-2006	Payment	4	1,418,260.98				36,874.79	67,406.26	36,874.79	0.00	104,281.05	1,350,854.72
21-Feb-2007	Payment	5	1,350,854.72				35,122.22	69,158.83	35,122.22	0.00	104,281.05	1,281,695.89
21-Feb-2008	Payment	6	1,281,695.89				33,324.09	70,956.96	33,324.09	0.00	104,281.05	1,210,738.93
21-Feb-2009	Payment	7	1,210,738.93				19,371.82	72,801.84	19,371.82	12,107.39	104,281.05	1,137,937.09
21-Feb-2010	Payment	8	1,137,937.09				18,206.99	74,694.69	18,206.99	11,379.37	104,281.05	1,063,242.40
21-Feb-2011	Payment	9	1,063,242.40				17,011.88	76,636.75	17,011.88	10,632.42	104,281.05	986,605.65
21-Feb-2012	Payment	10	986,605.65				15,785.69	78,629.30	15,785.69	9,866.06	104,281.05	907,976.35
21-Feb-2013	Payment	11	907,976.35				14,527.62	80,673.67	14,527.62	9,079.76	104,281.05	827,302.68
21-Feb-2014	Payment	12	827,302.68				13,236.84	82,771.18	13,236.84	8,273.03	104,281.05	744,531.50
21-Feb-2015	Payment	13	744,531.50				11,912.50	84,923.23	11,912.50	7,445.32	104,281.05	659,608.27
21-Feb-2016	Payment	14	659,608.27				10,553.73	87,131.24	10,553.73	6,596.08	104,281.05	572,477.03
21-Feb-2017	Payment	15	572,477.03				9,159.63	89,396.65	9,159.63	5,724.77	104,281.05	483,080.38
21-Feb-2018	Payment	16	483,080.38				7,729.29	91,720.96	7,729.29	4,830.80	104,281.05	391,359.42
21-Feb-2019	Payment	17	391,359.42				6,261.75	94,105.71	6,261.75	3,913.59	104,281.05	297,253.71
21-Feb-2020	Payment	18	297,253.71				4,756.06	96,552.45	4,756.06	2,972.54	104,281.05	200,701.26
21-Feb-2021	Payment	19	200,701.26				3,211.22	99,062.82	3,211.22	2,007.01	104,281.05	101,638.44
21-Feb-2022	Payment	20	101,638.44				1,626.22	101,638.44	1,626.22	1,016.38	104,281.04	0.00
						Calculation Adjustment	-182.92					
				1,586,165.00	**13,238.50**	**13,238.50**	**371,397.76**	**1,599,403.50**	**371,397.76**	**95,844.52**	**2,066,645.78**	

Outstanding Disbursement Balance: **0.00**

State of California - State Water Resources Control Board
Clean Water State Revolving Fund Payment Schedule

Recipient: Stege Sanitary District
Project No.: C-06-4665-210
Agreement No.: 05809-550-0

Date: 11/2/2020
Amount: 706,004
Interest rate: 1.400%
Service charge rate: 1%
Term: 20 Years

Date	Disbursement/ Payment	No.	Beginning Balance	Draw Amount	Construction Period Interest (CPI) Amount Accrued	Construction Period Interest (CPI) Amt. Trans. to Principal	Annual Interest Accrued	Principal Paid/Due	Interest Paid/Due	Service Charge Paid/Due	Total Payment	Ending Balance
7-Nov-2006	Disbursement	1	0.00	706,004.00			0.00				0.00	706,004.00
21-Dec-2006	Payment	1	706,004.00				2,070.95	41,867.56	2,070.95	0.00	43,938.51	664,136.44
21-Dec-2007	Payment	2	664,136.44				15,939.27	27,999.24	15,939.27	0.00	43,938.51	636,137.20
21-Dec-2008	Payment	3	636,137.20				15,267.29	28,671.22	15,267.29	0.00	43,938.51	607,465.98
21-Dec-2009	Payment	4	607,465.98				8,504.52	29,359.33	8,504.52	6,074.66	43,938.51	578,106.65
21-Dec-2010	Payment	5	578,106.65				8,093.49	30,063.95	8,093.49	5,781.07	43,938.51	548,042.70
21-Dec-2011	Payment	6	548,042.70				7,672.60	30,785.48	7,672.60	5,480.43	43,938.51	517,257.22
21-Dec-2012	Payment	7	517,257.22				7,241.60	31,524.34	7,241.60	5,172.57	43,938.51	485,732.88
21-Dec-2013	Payment	8	485,732.88				6,800.26	32,280.92	6,800.26	4,857.33	43,938.51	453,451.96
21-Dec-2014	Payment	9	453,451.96				6,348.33	33,055.66	6,348.33	4,534.52	43,938.51	420,396.30
21-Dec-2015	Payment	10	420,396.30				5,885.55	33,849.00	5,885.55	4,203.96	43,938.51	386,547.30
21-Dec-2016	Payment	11	386,547.30				5,411.66	34,661.38	5,411.66	3,865.47	43,938.51	351,885.92
21-Dec-2017	Payment	12	351,885.92				4,926.40	35,493.25	4,926.40	3,518.86	43,938.51	316,392.67
21-Dec-2018	Payment	13	316,392.67				4,429.50	36,345.08	4,429.50	3,163.93	43,938.51	280,047.59
21-Dec-2019	Payment	14	280,047.59				3,920.67	37,217.36	3,920.67	2,800.48	43,938.51	242,830.23
21-Dec-2020	Payment	15	242,830.23				3,399.62	38,110.59	3,399.62	2,428.30	43,938.51	204,719.64
21-Dec-2021	Payment	16	204,719.64				2,866.07	39,025.24	2,866.07	2,047.20	43,938.51	165,694.40
21-Dec-2022	Payment	17	165,694.40				2,319.72	39,961.85	2,319.72	1,656.94	43,938.51	125,732.55
21-Dec-2023	Payment	18	125,732.55				1,760.26	40,920.92	1,760.26	1,257.33	43,938.51	84,811.63
21-Dec-2024	Payment	19	84,811.63				1,187.36	41,903.03	1,187.36	848.12	43,938.51	42,908.60
21-Dec-2025	Payment	20	42,908.60				600.72	42,908.60	600.72	429.09	43,938.41	0.00
				706,004.00			**114,645.84**	**706,004.00**	**114,645.84**	**58,120.26**	**878,770.10**	

Outstanding Disbursement Balance: **0.00**

Stege Sanitary District

Actuarial Study of
Retiree Health Liabilities Under GASB 74/75
Valuation Date: June 30, 2020
Measurement Date: June 30, 2020
For Fiscal Year-End: June 30, 2021

Prepared by:
Total Compensation Systems, Inc.

Date: January 25, 2021

Table of Contents

Stege Sanitary District
Actuarial Study of Retiree Health Liabilities

PART I: EXECUTIVE SUMMARY

A. Introduction

This report was produced by Total Compensation Systems, Inc. for Stege Sanitary District to determine the liabilities associated with its current retiree health program as of a June 30, 2020 measurement date and to provide the necessary information to determine accounting entries for the fiscal year ending June 30, 2021. This report may not be suitable for other purposes such as determining employer contributions or assessing the potential impact of changes in plan design.

Different users of this report will likely be interested in different sections of information contained within. We anticipate that the following portions may be of most interest depending on the reader:

- A high level comparison of key results from the current year to the prior year is shown on this page.
- The values we anticipate will be disclosed in the June 30, 2021 year-end financials are shown on pages 2 and 3.
- Additional accounting information is shown on page 12 and Appendices C and D.
- Description and details of measured valuation liabilities can be found beginning on page 10.
- Guidance regarding the next actuarial valuation for the June 30, 2021 measurement date is provided on page 13.

B. Key Results

Stege Sanitary District uses an Actuarial Measurement Date that is 12 months prior to its Fiscal Year-End. This means that these actuarial results measured as of June 30, 2020 will be used on a look back basis for the June 30, 2021 Fiscal Year-End.

Key Results	**Current Year** *June 30, 2020 Measurement Date* *for June 30, 2021 Fiscal Year-End*	**Prior Year** *June 30, 2019 Measurement Date* *for June 30, 2020 Fiscal Year-End*
Total OPEB Liability (TOL)	$540,603	$291,966
Fiduciary Net Position (FNP)	$232,611	$224,781
Net OPEB Liability (NOL)	$307,992	$67,185
Service Cost *(for year following)*	$13,820	$4,521
Estimated Pay-as-you-go Cost *(for year following)*	$21,028	$18,227
GASB 75 OPEB Expense *(for year ending)*	$252,983	$9,743

Refer to results section beginning on page 10 or the glossary on page 27 for descriptions of the above items.

Key Assumptions	**Current Year** *June 30, 2020 Measurement Date* *for June 30, 2021 Fiscal Year-End*	**Prior Year** *June 30, 2019 Measurement Date* *for June 30, 2020 Fiscal Year-End*
Valuation Interest Rate	7.00%	7.00%
Expected Rate of Return on Assets	7.00%	7.00%
Long-Term Medical Trend Rate	4.00%	4.00%
Projected Payroll Growth	2.75%	2.75%

C. Summary of GASB 75 Accounting Results

1. Changes in Net OPEB Liability

The following table shows the reconciliation of the June 30, 2019 Net OPEB Liability (NOL) in the prior valuation to the June 30, 2020 NOL. A more detailed version of this table can be found on page 12.

	TOL	***FNP***	***NOL***
Balance at June 30, 2019 Measurement Date	**$291,966**	**$224,781**	**$67,185**
Service Cost	$4,521	$0	$4,521
Interest on TOL / Return on FNP	$19,958	$7,940	$12,018
Employer Contributions	$0	$20,302	($20,302)
Benefit Payments	($20,302)	($20,302)	$0
Administrative Expenses	$0	($110)	$110
Experience (Gains)/Losses	$4,092	$0	$4,092
Changes in Assumptions	($1,319)	$0	($1,319)
Changes in Benefit Terms	$241,687	$0	$241,687
Net Change during 2019-20	$248,637	$7,830	$240,807
Actual Balance at June 30, 2020 Measurement Date	**$540,603**	**$232,611**	**$307,992**

2. Deferred Inflows and Outflows

Changes in the NOL arising from certain sources are recognized on a deferred basis. The following tables show the balance of each deferral item as of the measurement date and the scheduled future recognition. A reconciliation of these balances can be found on page 12 while the complete deferral history is shown beginning on page 24.

Balances at June 30, 2021 Fiscal Year-End	*Deferred Outflows*	*Deferred Inflows*
Differences between expected and actual experience	$7,749	$0
Changes in assumptions	$0	($1,169)
Differences between projected and actual return on assets	$7,284	($760)
Total	$15,033	($1,929)

To be recognized fiscal year ending June 30:	*Deferred Outflows*	*Deferred Inflows*
2022	$2,970	($532)
2023	$2,970	($528)
2024	$2,966	($150)
2025	$2,614	($150)
2026	$1,059	($150)
Thereafter	$2,454	($419)
Total	$15,033	($1,929)

3. OPEB Expense

Under GASB 74 and 75, OPEB expense includes service cost, interest cost, administrative expenses, and change in TOL due to plan changes, adjusted for deferred inflows and outflows. OPEB expense can also be derived as change in net position, adjusted for employer contributions, which can be found on page 12.

To be recognized fiscal year ending June 30, 2020	*Expense Component*
Service Cost	$4,521
Interest Cost	$19,958
Expected Return on Assets	($15,731)
Administrative Expenses	$110
Recognition of Experience (Gain)/Loss Deferrals	$1,059
Recognition of Assumption Change Deferrals	($150)
Recognition of Investment (Gain)/Loss Deferrals	$1,529
Employee Contributions	$0
Changes in Benefit Terms	$241,687
Net OPEB Expense for fiscal year ending June 30, 2020	$252,983

***** May include a slight rounding error.

4. Adjustments

The above OPEB expense includes all deferred inflows and outflows except any contributions after the measurement date. Contributions from July 1, 2020 to June 30, 2021 minus prior contributions after the measurement date of $20,302 should also be reflected in OPEB expense. June 30, 2021 deferred outflows should include contributions from July 1, 2020 to June 30, 2021.

5. Trend and Interest Rate Sensitivities

The following presents what the Net OPEB Liability would be if it were calculated using a discount rate assumption or a healthcare trend rate assumption one percent higher or lower than the current assumption.

Net OPEB Liability at June 30, 2020 Measurement Date	*Discount Rate*	*Healthcare Trend Rate*
1% Decrease in Assumption	$385,605	$235,740
Current Assumption	$307,992	$307,992
1% Increase in Assumption	$244,245	$397,828

D. Description of Retiree Benefits

Following is a description of the current retiree benefit plan. For this 2020 valuation, the District cap was increased from a fixed $280 per month to $324.48 per month (assumed to increase in future years with medical trend):

	All Participants
Benefit types provided	Medical only
Duration of Benefits	Lifetime
Required Service	CalPERS Retirement
Minimum Age	CalPERS Retirement
Dependent Coverage	Spouse only
District Contribution %	100% of cap
District Cap	$324.48 in 2021

E. Summary of Valuation Data

This report is based on census data provided to us as of January, 2021. Distributions of participants by age and service can be found on page 18.

	Current Year *June 30, 2020 Valuation Date* *June 30, 2020 Measurement Date*	**Prior Year** *June 30, 2018 Valuation Date* *June 30, 2019 Measurement Date*
Active Employees eligible for future benefits		
Count	10	10
Average Age	45.8	44.2
Average Years of Service	12.3	10.5
Retirees currently receiving benefits		
Count	6	6
Average Age	70.3	68.3

We were not provided with information about any terminated, vested employees.

F. Certification

The actuarial information in this report is intended solely to assist Stege Sanitary District in complying with Governmental Accounting Standards Board Accounting Statement 74 and 75 and, unless otherwise stated, fully and fairly discloses actuarial information required for compliance. Nothing in this report should be construed as an accounting opinion, accounting advice or legal advice. TCS recommends that third parties retain their own actuary or other qualified professionals when reviewing this report. TCS's work is prepared solely for the use and benefit of Stege Sanitary District. Release of this report may be subject to provisions of the Agreement between Stege Sanitary District and TCS. No third party recipient of this report product should rely on the report for any purpose other than accounting compliance. Any other use of this report is unauthorized without first consulting with TCS.

This report is for fiscal year July 1, 2020 to June 30, 2021, using a measurement date of June 30, 2020. The calculations in this report have been made based on our understanding of plan provisions and actual practice at the time we were provided the required information. We relied on information provided by Stege Sanitary District. Much or all of this information was unaudited at the time of our evaluation. We reviewed the information provided for reasonableness, but this review should not be viewed as fulfilling any audit requirements. We relied on the following materials to complete this study:

- We used paper reports and digital files containing participant demographic data from the District personnel records.
- We used benefit descriptions provided by the District.

All costs, liabilities, and other estimates are based on actuarial assumptions and methods that comply with all applicable Actuarial Standards of Practice (ASOPs). Each assumption is deemed to be reasonable by itself, taking into account plan experience and reasonable future expectations and in combination represent our estimate of anticipated experience of the Plan.

This report contains estimates of the Plan's financial condition and future results only as of a single date. Future results can vary dramatically and the accuracy of estimates contained in this report depends on the actuarial assumptions used. This valuation cannot predict the Plan's future condition nor guarantee its future financial soundness. Actuarial valuations do not affect the ultimate cost of Plan benefits, only the timing of Plan contributions. While the valuation is based on individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. Determining results using alternative assumptions (except for the alternate discount and trend rates shown in this report) is outside the scope of our engagement.

Future actuarial measurements may differ significantly from those presented in this report due to factors such as, but not limited to, the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the measurement methodology (such as the end of an amortization period or additional cost or contribution requirements based on the plan's funded status); and changes in plan provisions or applicable law. We were not asked to perform analyses to estimate the potential range of such future measurements.

The signing actuary is independent of Stege Sanitary District and any plan sponsor. TCS does not intend to benefit from and assumes no duty or liability to other parties who receive this report. TCS is not aware of any relationship that would impair the objectivity of the opinion.

On the basis of the foregoing, I hereby certify that, to the best of my knowledge and belief, this report is complete and has been prepared in accordance with generally accepted actuarial principles and practices and all applicable Actuarial Standards of Practice. My experience and continuing education are consistent with the

requirements described for actuaries under the Qualification Standards of the American Academy of Actuaries.

Respectfully submitted,

Geoffrey L. Kischuk
Actuary
Total Compensation Systems, Inc.
(805) 496-1700

PART II: LIABILITIES AND COSTS FOR RETIREE BENEFITS

A. Introduction.

We calculated the actuarial present value of projected benefit payments (APVPBP) separately for each participant. We determined eligibility for retiree benefits based on information supplied by Stege Sanitary District. We then selected assumptions that, based on plan provisions and our training and experience, represent our best prediction of future plan experience. For each participant, we applied the appropriate assumption factors based on the participant's age, sex, length of service, and employee classification.

The actuarial assumptions used for this study are summarized beginning on page 14.

B. Liability for Retiree Benefits.

For each participant, we projected future premium costs using an assumed trend rate (see Appendix C). To the extent Stege Sanitary District uses contribution caps, the influence of the trend factor is further reduced. We multiplied each year's benefit payments by the probability that benefits will be paid; i.e. based on the probability that the participant is living, has not terminated employment, has retired and remains eligible. The probability that benefit will be paid is zero if the participant is not eligible. The participant is not eligible if s/he has not met minimum service, minimum age or, if applicable, maximum age requirements.

The product of each year's benefit payments and the probability the benefit will be paid equals the expected cost for that year. We multiplied the above expected cost figures by the probability that the retiree would elect coverage. A retiree may not elect to be covered if retiree health coverage is available less expensively from another source (e.g. Medicare risk contract) or the retiree is covered under a spouse's plan. Finally, we discounted the expected cost for each year to the measurement date June 30, 2020 at 7.00% interest.

For any ***current retirees***, the approach used was similar. The major difference is that the probability of payment for current retirees depends only on mortality and age restrictions (i.e. for retired employees the probability of being retired and of not being terminated are always both 100%).

The value generated from the process described above is called the actuarial present value of projected benefit payments (APVPBP). We added APVPBP for each participant to get the total APVPBP for all participants which is the estimated present value of all future retiree health benefits for all **current** participants. The APVPBP is the amount on June 30, 2020 that, if all actuarial assumptions are exactly right, would be sufficient to expense all promised benefits until the last participant dies or reaches the maximum eligibility age. However, for most actuarial and accounting purposes, the APVPBP is not used directly but is instead apportioned over the lifetime of each participant as described in the following sections.

C. Actuarial Accrual

Accounting principles provide that the cost of retiree benefits should be "accrued" over employees' working lifetime. For this reason, the Governmental Accounting Standards Board (GASB) issued in June of 2015 Accounting Standards 74 and 75 for retiree health benefits. These standards apply to all public employers that pay any part of the cost of retiree health benefits for current or future retirees (including early retirees), whether they pay directly or indirectly (via an "implicit rate subsidy").

To actuarially accrue retiree health benefits requires determining the amount to expense each year so that the liability accumulated at retirement is, on average, sufficient (with interest) to cover all retiree health expenditures without the need for additional expenses. There are many different ways to determine the annual accrual amount. The calculation method used is called an "actuarial cost method" and uses the APVPBP to develop expense and liability figures. Furthermore, the APVPBP should be accrued over the working lifetime of employees.

In order to accrue the APVPBP over the working lifetime of employees, actuarial cost methods apportion the APVPBP into two parts: the portions attributable to service rendered prior to the measurement date (the past service liability or Total OPEB Liability (TOL) under GASB 74 and 75) and to service after the measurement date but prior to retirement (the future service liability or present value of future service costs). Of the future service liability, the portion attributable to the single year immediately following the measurement date is known as the normal cost or Service Cost under GASB 74 and 75.

The service cost can be thought of as the value of the benefit earned each year if benefits are accrued during the working lifetime of employees. The actuarial cost method mandated by GASB 75 is the "entry age actuarial cost method". Under the entry age actuarial cost method, the actuary determines the service cost as the annual amount needing to be expensed from hire until retirement to fully accrue the cost of retiree health benefits. Under GASB 75, the service cost is calculated to be a level percentage of each employee's projected pay.

D. Actuarial Assumptions

The APVPBP and service cost are determined using several key assumptions:

- The current ***cost of retiree health benefits*** (often varying by age, Medicare status and/or dependent coverage). The higher the current cost of retiree benefits, the higher the service cost.
- The ***"trend" rate*** at which retiree health benefits are expected to increase over time. A higher trend rate increases the service cost. A "cap" on District contributions can reduce trend to zero once the cap is reached thereby dramatically reducing service costs.
- ***Mortality rates*** varying by age and sex (and sometimes retirement or disability status). If employees die prior to retirement, past contributions are available to fund benefits for employees who live to retirement. After retirement, death results in benefit termination or reduction. Although higher mortality rates reduce service costs, the mortality assumption is not likely to vary from employer to employer.
- ***Employment termination rates*** have the same effect as mortality inasmuch as higher termination rates reduce service costs. Employment termination can vary considerably between public agencies.
- The ***service requirement*** reflects years of service required to earn full or partial retiree benefits. While a longer service requirement reduces costs, cost reductions are not usually substantial unless the service period exceeds 20 years of service.

- ***Retirement rates*** determine what proportion of employees retire at each age (assuming employees reach the requisite length of service). Retirement rates often vary by employee classification and implicitly reflect the minimum retirement age required for eligibility. Retirement rates also depend on the amount of pension benefits available. Higher retirement rates increase service costs but, except for differences in minimum retirement age, retirement rates tend to be consistent between public agencies for each employee type.

- ***Participation rates*** indicate what proportion of retirees are expected to elect retiree health benefits if a significant retiree contribution is required. Higher participation rates increase costs.

- The ***discount rate*** estimates investment earnings for assets earmarked to cover retiree health benefit liabilities. The discount rate depends on the nature of underlying assets for funded plans. The rate used for a funded plan is the **real** rate of return expected for plan assets plus the long term inflation assumption. For an unfunded plan, the discount rate is based on an index of 20 year General Obligation municipal bonds rated AA or higher. For partially funded plans, the discount rate is a blend of the funded and unfunded rates.

E. Total OPEB Liability

The assumptions listed above are not exhaustive, but are the most common assumptions used in actuarial cost calculations. If all actuarial assumptions are exactly met and an employer expensed the service cost every year for all past and current employees and retirees, a sizeable liability would have accumulated (after adding interest and subtracting retiree benefit costs). The liability that would have accumulated is called the Total OPEB Liability (TOL). The excess of TOL over the value of plan assets is called the Net OPEB Liability (NOL). Under GASB 74 and 75, in order for assets to count toward offsetting the TOL, the assets have to be held in an irrevocable trust that is safe from creditors and can only be used to provide OPEB benefits to eligible participants.

Changes in the TOL can arise in several ways - e.g., as a result of plan changes or changes in actuarial assumptions. Change in the TOL can also arise from actuarial gains and losses. Actuarial gains and losses result from differences between actuarial assumptions and actual plan experience. GASB 75 allows certain changes in the TOL to be deferred (i.e. deferred inflows and outflows of resources).

Under GASB 74 and 75, a portion of actuarial gains and losses can be deferred as follows:

- Investment gains and losses are deferred five years.

- Experience gains and losses are deferred over the Expected Average Remaining Service Lives (EARSL) of plan participants. In calculating the EARSL, terminated employees (primarily retirees) are considered to have a working lifetime of zero. This often makes the EARSL quite short.

- Liability changes resulting from changes in economic and demographic assumptions are also deferred based on the EARSL.

- Liability changes resulting from plan changes, for example, cannot be deferred.

F. Valuation Results

This section details the measured values of the concepts described on the previous pages.

1. Actuarial Present Value of Projected Benefit Payments (APVPBP)

Actuarial Present Value of Projected Benefit Payments as of June 30, 2020 Valuation Date

	Total
Active: Pre-65 Benefit	$94,033
Post-65 Benefit	$271,425
Subtotal	$365,458
Retiree: Pre-65 Benefit	$22,257
Post-65 Benefit	$266,147
Subtotal	$288,404
Grand Total	$653,862
Subtotal Pre-65 Benefit	$116,290
Subtotal Post-65 Benefit	$537,572

2. Service Cost

The service cost represents the value of the benefit earned during a single year of employment. It is the APVPBP spread over the expected working lifetime of the employee and divided into annual segments. We applied an "entry age" actuarial cost method to determine funding rates for active employees. The table below summarizes the calculated service cost.

Service Cost Valuation Year Beginning July 1, 2020

	Total
# of Eligible Employees	10
First Year Service Cost	
Pre-65 Benefit	$2,710
Post-65 Benefit	$11,110
Total	$13,820

Accruing retiree health benefit costs using service costs levels out the cost of retiree health benefits over time and more fairly reflects the value of benefits "earned" each year by employees. While the service cost for each employee is targeted to remain level as a percentage of covered payroll, the service cost as a dollar amount would increase each year based on covered payroll. Additionally, the overall service cost may grow or shrink based on changes in the demographic makeup of the employees from year to year.

3. Total OPEB Liability and Net OPEB Liability

If actuarial assumptions are borne out by experience, the District will fully accrue retiree benefits by expensing an amount each year that equals the service cost. If no accruals had taken place in the past, there would be a shortfall of many years' accruals, accumulated interest and forfeitures for terminated or deceased employees. This shortfall is called the Total OPEB Liability. We calculated the Total OPEB Liability (TOL) as the APVPBP minus the present value of future service costs. To the extent that benefits are funded through a GASB 74 qualifying trust, the trust's Fiduciary Net Position (FNP) is subtracted to get the NOL. The FNP is the value of assets adjusted for any applicable payables and receivables as shown in the table on page 15.

Total OPEB Liability and Net OPEB Liability as of June 30, 2020 Valuation Date

	Total
Active: Pre-65 Benefit	$68,526
Active: Post-65 Benefit	$183,673
Subtotal	$252,199
Retiree: Pre-65 Benefit	$22,257
Retiree: Post-65 Benefit	$266,147
Subtotal	$288,404
Subtotal: Pre-65 Benefit	$90,783
Subtotal: Post-65 Benefit	$449,820
Total OPEB Liability (TOL)	$540,603
Fiduciary Net Position as of June 30, 2020	$232,611
Net OPEB Liability (NOL)	$307,992

4. "Pay As You Go" Projection of Retiree Benefit Payments

We used the actuarial assumptions shown in Appendix C to project the District's ten year retiree benefit outlay. Because these cost estimates reflect average assumptions applied to a relatively small number of participants, estimates for individual years are **certain** to be ***in***accurate. However, these estimates show the size of cash outflow.

The following table shows a projection of annual amounts needed to pay the District's share of retiree health costs.

Year Beginning July 1	***Total***
2020	$21,028
2021	$22,072
2022	$23,619
2023	$25,256
2024	$26,976
2025	$28,830
2026	$31,116
2027	$33,275
2028	$35,680
2029	$38,274

G. Additional Reconciliation of GASB 75 Results

The following table shows the reconciliation of the June 30, 2019 Net OPEB Liability (NOL) in the prior valuation to the June 30, 2020 NOL. For some plans, it will provide additional detail and transparency beyond that shown in the table on Page 2.

	TOL	*FNP*	*NOL*
Balance at June 30, 2019	**$291,966**	**$224,781**	**$67,185**
Service Cost	$4,521	$0	$4,521
Interest on Total OPEB Liability	$19,958	$0	$19,958
Expected Investment Income	$0	$15,731	($15,731)
Administrative Expenses	$0	($110)	$110
Employee Contributions	$0	$0	$0
Employer Contributions to Trust	$0	$0	$0
Employer Contributions as Benefit Payments	$0	$20,302	($20,302)
Actual Benefit Payments from Trust	$0	$0	$0
Actual Benefit Payments from Employer	($20,302)	($20,302)	$0
Expected Minus Actual Benefit Payments**	$2,075	$0	$2,075
Expected Balance at June 30, 2020	**$298,218**	**$240,402**	**$57,816**
Experience (Gains)/Losses	$2,017	$0	$2,017
Changes in Assumptions	($1,319)	$0	($1,319)
Changes in Benefit Terms	$241,687	$0	$241,687
Investment Gains/(Losses)	$0	($7,791)	$7,791
Other	$0	$0	$0
Net Change during 2020	$248,637	$7,830	$240,807
Actual Balance at June 30, 2020*	**$540,603**	**$232,611**	**$307,992**

***** May include a slight rounding error.
****** Deferrable as an Experience Gain or Loss.

Changes in the NOL arising from certain sources are recognized on a deferred basis. The deferral history for Stege Sanitary District is shown beginning on page 24. The following table summarizes the beginning and ending balances for each deferral item. The current year expense reflects the change in deferral balances for the measurement year.

Deferred Inflow/Outflow Balances Fiscal Year Ending June 30, 2021

	Beginning Balance	*Change Due to New Deferrals*	*Change Due to Recognition*	*Ending Balance*
Experience (Gains)/Losses	$4,716	$4,092	($1,059)	$7,749
Assumption Changes	$0	($1,319)	$150	($1,169)
Investment (Gains)/Losses	$262	$7,791	($1,529)	$6,524
Deferred Balances	$4,978	$10,564	($2,438)	$13,104

The following table shows the reconciliation of Net Position (NOL less the balance of any deferred inflows or outflows). When adjusted for contributions, the change in Net Position is equal to the OPEB expense shown previously on page 3.

Preliminary OPEB Expense Fiscal Year Ending June 30, 2021

	Beginning Net Position	*Ending Net Position*	*Change*
Net OPEB Liability (NOL)	$67,185	$307,992	$240,807
Deferred Balances	$4,978	$13,104	$8,126
Net Position	$62,207	$294,888	$232,681
Adjust Out Employer Contributions			$20,302
OPEB Expense			$252,983

H. Procedures for Future Valuations

GASB 74/75 require annual measurements of liability with a full actuarial valuation required every two years. This means that for the measurement date one year following a full actuarial valuation, a streamlined "roll-forward" valuation may be performed in place of a full valuation. The following outlines the key differences between full and roll-forward valuations.

	Full Actuarial Valuation	Roll-Forward Valuation
Collect New Census Data	Yes	No
Reflect Updates to Plan Design	Yes	No
Update Actuarial Assumptions	Yes	Typically Not
Update Valuation Interest Rate	Yes	Yes
Actual Assets as of Measurement Date	Yes	Yes
Timing	4-6 weeks after information is received	1-2 weeks after information is received
Fees	Full	Reduced
Information Needed from Employer	Moderate	Minimal
Required Frequency	At least every two years	Each year, unless a full valuation is performed

The majority of employers use an alternating cycle of a full valuation one year followed by a roll-forward valuation the next year. However, a full valuation may be required or preferred under certain circumstances. Following are examples of actions that could cause the employer to consider a full valuation instead of a roll-forward valuation.

- The employer considers or puts in place an early retirement incentive program.
- The employer considers or implements changes to retiree benefit provisions or eligibility requirements.
- The employer desires the measured liability to incorporate more recent census data or assumptions.
- The employer forms a qualifying trust or changes its investment policy.
- The employer adds or terminates a group of participants that constitutes a significant part of the covered group.

We anticipate that the next valuation we perform for Stege Sanitary District will be a roll-forward valuation with a measurement date of June 30, 2021 which will be used for the fiscal year ending June 30, 2022. Please let us know if Stege Sanitary District would like to discuss whether another full valuation would be preferable based on any of the examples listed above.

PART III: ACTUARIAL ASSUMPTIONS AND METHODS

Following is a summary of actuarial assumptions and methods used in this study. The District should carefully review these assumptions and methods to make sure they reflect the District's assessment of its underlying experience. It is important for Stege Sanitary District to understand that the appropriateness of all selected actuarial assumptions and methods are Stege Sanitary District's responsibility. Unless otherwise disclosed in this report, TCS believes that all methods and assumptions are within a reasonable range based on the provisions of GASB 74 and 75, applicable actuarial standards of practice, Stege Sanitary District's actual historical experience, and TCS's judgment based on experience and training.

A. ACTUARIAL METHODS AND ASSUMPTIONS:

ACTUARIAL COST METHOD: GASB 74 and 75 require use of the entry age actuarial cost method.

Entry age is based on the age at hire for eligible employees. The attribution period is determined as the difference between the expected retirement age and the age at hire. The APVPBP and present value of future service costs are determined on a participant by participant basis and then aggregated.

SUBSTANTIVE PLAN: As required under GASB 74 and 75, we based the valuation on the substantive plan. The formulation of the substantive plan was based on a review of written plan documents as well as historical information provided by Stege Sanitary District regarding practices with respect to employer and employee contributions and other relevant factors.

B. ECONOMIC ASSUMPTIONS:

Economic assumptions are set under the guidance of Actuarial Standard of Practice 27 (ASOP 27). Among other things, ASOP 27 provides that economic assumptions should reflect a consistent underlying rate of general inflation. For that reason, we show our assumed long-term inflation rate below.

INFLATION: We assumed 2.75% per year used for pension purposes. Actuarial standards require using the same rate for OPEB that is used for pension.

INVESTMENT RETURN / DISCOUNT RATE: We assumed 7.00% per year net of expenses. This is based on assumed long-term return on employer assets.. We used the "Building Block Method". (See Appendix C, Paragraph 53 for more information). Our assessment of long-term returns for employer assets is based on long-term historical returns for surplus funds invested pursuant to California Government Code Sections 53601 et seq.

TREND: We assumed 4.00% per year. Our long-term trend assumption is based on the conclusion that, while medical trend will continue to be cyclical, the average increase over time cannot continue to outstrip general inflation by a wide margin. Trend increases in excess of general inflation result in dramatic increases in unemployment, the number of uninsured and the number of underinsured. These effects are nearing a tipping point which will inevitably result in fundamental changes in health care finance and/or delivery which will bring increases in health care costs more closely in line with general inflation. We do not believe it is reasonable to project historical trend vs. inflation differences several decades into the future.

PAYROLL INCREASE: We assumed 2.75% per year. Since benefits do not depend on salary (as they do for pensions), using an aggregate payroll assumption for the purpose of calculating the service cost results in a negligible error.

FIDUCIARY NET POSITION (FNP): The following table shows the beginning and ending FNP numbers that were provided by Stege Sanitary District.

Fiduciary Net Position as of June 30, 2020

	06/30/2019	*06/30/2020*
Cash and Equivalents	$0	$0
Contributions Receivable	$0	$0
Total Investments	$224,781	$232,611
Capital Assets	$0	$0
Total Assets	$224,781	$232,611
Benefits Payable	$0	$0
Fiduciary Net Position	$224,781	$232,611

C. NON-ECONOMIC ASSUMPTIONS:

Economic assumptions are set under the guidance of Actuarial Standard of Practice 35 (ASOP 35). See Appendix C, Paragraph 52 for more information.

MORTALITY

Participant Type	*Mortality Tables*
Miscellaneous	2017 CalPERS Mortality for Miscellaneous and Schools Employees

RETIREMENT RATES

Employee Type	*Retirement Rate Tables*
All Participants	Hired 2012 and earlier: 2017 CalPERS 2.0%@55 Rates for Miscellaneous Employees Hired 2013 and later: 2017 CalPERS 2.0%@62 Rates for Miscellaneous Employees

COSTS FOR RETIREE COVERAGE

Actuarial Standard of Practice 6 (ASOP 6) provides that, as a general rule, retiree costs should be based on actual claim costs or age-adjusted premiums. This is true even for many medical plans that are commonly considered to be "community-rated." However, ASOP 6 contains a provision – specifically section 3.7.7(c) – that allows use of unadjusted premiums in certain circumstances.

It is my opinion that the section 3.7.7(c)(4) exception allows use of unadjusted premium for PEMHCA agencies if certain conditions are met. Following are the criteria we applied to Stege Sanitary District to determine that it is reasonable to assume that Stege Sanitary District's future participation in PEMHCA is likely and that the CalPERS medical program as well as its premium structure are sustainable. (We also have an extensive white paper on this subject that provides a basis for our rationale entirely within the context of ASOP 6. We will make this white paper available upon request.)

- **Plan qualifies as a "pooled health plan."** ASOP 6 defines a "pooled health plan" as one in which premiums are based at least in part on the claims experience of groups other than the one being valued." Since CalPERS rates are the same for all employers in each region, rates are clearly based on the experience of many groups.

- **Rates not based to any extent on the agency's claim experience.** As mentioned above, rates are the same for all participating employers regardless of claim experience or size.

- **Rates not based to any extent on the agency's demographics.** As mentioned above, rates are the same for all participating employers regardless of demographics.

- **No refunds or charges based on the agency's claim experience or demographics.** The terms of operation of the CalPERS program are set by statute and there is no provision for any refunds and charges that vary from employer to employer for any reason. The only charges are uniform administrative charges.

- **Plan in existence 20 or more years.** Enabling legislation to allow "contracting agencies" to participate in the CalPERS program was passed in 1967. The CalPERS medical plan has been successfully operating for almost 50 years. As far back as we can obtain records, the rating structure has been consistent, with the only difference having been a move to regional rating which is unrelated to age-adjusted rating.

- **No recent large increases or decreases in the number of participating plans or enrollment.** The CalPERS medical plan has shown remarkably stable enrollment. In the past 10 years, there has been small growth in the number of employers in most years – with the maximum being a little over 2% and

a very small decrease in one year. Average year over year growth in the number of employers over the last 10 years has been about 0.75% per year. Groups have been consistently leaving the CalPERS medical plan while other groups have been joining with no disruption to its stability.

- **Agency is not expecting to leave plan in foreseeable future.** The District does not plan to leave CalPERS at present.

- **No indication the plan will be discontinued.** We are unaware of anything that would cause the CalPERS medical plan to cease or to significantly change its operation in a way that would affect this determination.

- **The agency does not represent a large part of the pool.** The District is in the CalPERS Bay Area region. Based on the information we have, the District constitutes no more than 0.02% of the Bay Area pool. In our opinion, this is not enough for the District to have a measurable effect on the rates or viability of the Bay Area pool.

Retiree liabilities are based on actual retiree costs. Liabilities for active participants are based on the first year costs shown below. Subsequent years' costs are based on first year costs adjusted for trend and limited by any District contribution caps.

Participant Type	*Future Retirees Pre-65*	*Future Retirees Post-65*
All Participants	$3,894	$3,894

PARTICIPATION RATES

Employee Type	*<65 Non-Medicare Participation %*	*65+ Medicare Participation %*
Miscellaneous	90%	90%

TURNOVER

Employee Type	*Turnover Rate Tables*
Miscellaneous	2017 CalPERS Turnover for Miscellaneous Employees

SPOUSE PREVALENCE

To the extent not provided and when needed to calculate benefit liabilities, 80% of retirees assumed to be married at retirement. After retirement, the percentage married is adjusted to reflect mortality.

SPOUSE AGES

To the extent spouse dates of birth are not provided and when needed to calculate benefit liabilities, female spouse assumed to be three years younger than male.

PART IV: APPENDICES

APPENDIX A: DEMOGRAPHIC DATA BY AGE

ELIGIBLE ACTIVE EMPLOYEES BY AGE AND SERVICE

	Total	*Under 5 Years of Service*	*5 – 9 Years of Service*	*10 – 14 Years of Service*	*15 –19 Years of Service*	*20 – 24 Years of Service*	*25 – 29 Years of Service*	*30 – 34 Years of Service*	*Over 34 Years of Service*
Under 25	1	1							
25 – 29	0								
30 – 34	0								
35 – 39	1			1					
40 – 44	2		2						
45 – 49	3		1			2			
50 – 54	1			1					
55 – 59	1						1		
60 – 64	1	1							
65 and older	0								
Total	10	2	3	2	0	2	1	0	0

ELIGIBLE RETIREES BY AGE AND EMPLOYEE CLASS

Age	*Total*
Under 50	0
50 – 54	0
55 – 59	1
60 – 64	0
65 – 69	2
70 – 74	1
75 – 79	1
80 – 84	1
85 – 89	0
90 and older	0
Total	6

APPENDIX B: ADMINISTRATIVE BEST PRACTICES

It is outside the scope of this report to make specific recommendations of actions Stege Sanitary District should take to manage the liability created by the current retiree health program. The following items are intended only to allow the District to get more information from this and future studies. Because we have not conducted a comprehensive administrative audit of Stege Sanitary District's practices, it is possible that Stege Sanitary District is already complying with some or all of these suggestions.

- We suggest that Stege Sanitary District maintain an inventory of all benefits and services provided to retirees – whether contractually or not and whether retiree-paid or not. For each, Stege Sanitary District should determine whether the benefit is material and subject to GASB 74 and/or 75.

- Under GASB 75, it is important to isolate the cost of retiree health benefits. Stege Sanitary District should have all premiums, claims and expenses for retirees separated from active employee premiums, claims, expenses, etc. To the extent any retiree benefits are made available to retirees over the age of 65 – ***even on a retiree-pay-all basis*** – all premiums, claims and expenses for post-65 retiree coverage should be segregated from those for pre-65 coverage. Furthermore, Stege Sanitary District should arrange for the rates or prices of all retiree benefits to be set on what is expected to be a self-sustaining basis.

- Stege Sanitary District should establish a way of designating employees as eligible or ineligible for future OPEB benefits. Ineligible employees can include those in ineligible job classes; those hired after a designated date restricting eligibility; those who, due to their age at hire cannot qualify for District-paid OPEB benefits; employees who exceed the termination age for OPEB benefits, etc.

- Several assumptions were made in estimating costs and liabilities under Stege Sanitary District's retiree health program. Further studies may be desired to validate any assumptions where there is any doubt that the assumption is appropriate. (See Part III of this report for a summary of assumptions.) For example, Stege Sanitary District should maintain a retiree database that includes – in addition to date of birth, gender and employee classification – retirement date and (if applicable) dependent date of birth, relationship and gender. It will also be helpful for Stege Sanitary District to maintain employment termination information – namely, the number of OPEB-eligible employees in each employee class that terminate employment each year for reasons other than death, disability or retirement.

APPENDIX C: GASB 74/75 ACCOUNTING ENTRIES AND DISCLOSURES

This report does not necessarily include the entire accounting values. As mentioned earlier, there are certain deferred items that are employer-specific. The District should consult with its auditor if there are any questions about what, if any, adjustments may be appropriate.

GASB 74/75 include a large number of items that should be included in the Note Disclosures and Required Supplementary Information (RSI) Schedules. Many of these items are outside the scope of the actuarial valuation. However, following is information to assist the District in complying with GASB 74/75 disclosure requirements:

Paragraph 50: **Information about the OPEB Plan**

Most of the information about the OPEB plan should be supplied by Stege Sanitary District. Following is information to help fulfill Paragraph 50 reporting requirements.

50.c: Following is a table of plan participants

	Number of Participants
Inactive Employees Currently Receiving Benefit Payments	6
Inactive Employees Entitled to But Not Yet Receiving Benefit Payments*	0
Participating Active Employees	10
Total Number of participants	16

*We were not provided with information about any terminated, vested employees

Paragraph 51: **Significant Assumptions and Other Inputs**

Shown in Appendix C.

Paragraph 52: **Information Related to Assumptions and Other Inputs**

The following information is intended to assist Stege Sanitary District in complying with the requirements of Paragraph 52.

52.b: Mortality Assumptions Following are the tables the mortality assumptions are based upon. Inasmuch as these tables are based on appropriate populations, and that these tables are used for pension purposes, we believe these tables to be the most appropriate for the valuation.

Mortality Table	2017 CalPERS Mortality for Miscellaneous and Schools Employees
Disclosure	The mortality assumptions are based on the 2017 CalPERS Mortality for Miscellaneous and Schools Employees table created by CalPERS. CalPERS periodically studies mortality for participating agencies and establishes mortality tables that are modified versions of commonly used tables. This table incorporates mortality projection as deemed appropriate based on CalPERS analysis.

Mortality Table	2017 CalPERS Retiree Mortality for All Employees
Disclosure	The mortality assumptions are based on the 2017 CalPERS Retiree Mortality for All Employees table created by CalPERS. CalPERS periodically studies mortality for participating agencies and establishes mortality tables that are modified versions of commonly used tables. This table incorporates mortality projection as deemed appropriate based on CalPERS analysis.

52.c: Experience Studies Following are the tables the retirement and turnover assumptions are based upon. Inasmuch as these tables are based on appropriate populations, and that these tables are used for pension purposes, we believe these tables to be the most appropriate for the valuation.

Retirement Tables

Retirement Table	2017 CalPERS 2.0%@55 Rates for Miscellaneous Employees
Disclosure	The retirement assumptions are based on the 2017 CalPERS 2.0%@55 Rates for Miscellaneous Employees table created by CalPERS. CalPERS periodically studies the experience for participating agencies and establishes tables that are appropriate for each pool.

Retirement Table	2017 CalPERS 2.0%@62 Rates for Miscellaneous Employees
Disclosure	The retirement assumptions are based on the 2017 CalPERS 2.0%@62 Rates for Miscellaneous Employees table created by CalPERS. CalPERS periodically studies the experience for participating agencies and establishes tables that are appropriate for each pool.

Turnover Tables

Turnover Table	2017 CalPERS Turnover for Miscellaneous Employees
Disclosure	The turnover assumptions are based on the 2017 CalPERS Turnover for Miscellaneous Employees table created by CalPERS. CalPERS periodically studies the experience for participating agencies and establishes tables that are appropriate for each pool.

For other assumptions, we use actual plan provisions and plan data.

52.d: The alternative measurement method was not used in this valuation.

52.e: NOL using alternative trend assumptions The following table shows the Net OPEB Liability with a healthcare cost trend rate 1% higher and 1% lower than assumed in the valuation.

	Trend 1% Lower	Valuation Trend	Trend 1% Higher
Net OPEB Liability	$235,740	$307,992	$397,828

Paragraph 53: **Discount Rate**

The following information is intended to assist Stege Sanitary District to comply with

Paragraph 53 requirements.

53.a: A discount rate of 7.00% was used in the valuation. The interest rate used in the prior valuation was 7.00%.

53.b: We assumed that all contributions are from the employer.

53.c: We used historic 30 year real rates of return for each asset class along with our assumed long-term inflation assumption to set the discount rate. We offset the expected investment return by investment expenses of 25 basis points.

53.d: The interest assumption does not reflect a municipal bond rate.

53.e: Not applicable.

53.f: Following is the assumed asset allocation and assumed rate of return for each.
CERBT - Strategy 1

Asset Class	Percentage of Portfolio	Assumed Gross Return
All Equities	59.0000	7.7950
All Fixed Income	25.0000	4.5000
Real Estate Investment Trusts	8.0000	7.5000
All Commodities	3.0000	7.7950
Treasury Inflation Protected Securities (TIPS)	5.0000	3.2500

We looked at rolling periods of time for all asset classes in combination to appropriately reflect correlation between asset classes. That means that the average returns for any asset class don't necessarily reflect the averages over time individually, but reflect the return for the asset class for the portfolio average. We used geometric means.

53.g: The following table shows the Net OPEB liability with a discount rate 1% higher and 1% lower than assumed in the valuation.

	Discount Rate 1% Lower	Valuation Discount Rate	Discount Rate 1% Higher
Net OPEB Liability	$385,605	$307,992	$244,245

Paragraph 55: **Changes in the Net OPEB Liability**

Please see reconciliation on pages 2 or 12.

Paragraph 56: **Additional Net OPEB Liability Information**

The following information is intended to assist Stege Sanitary District to comply with Paragraph 56 requirements.

56.a: The valuation date is June 30, 2020.
The measurement date is June 30, 2020.
56.b: We are not aware of a special funding arrangement.
56.c: Assumed rates of retirement, termination, and mortality have been updated to align with those currently being used by the statewide pension systems.
56.d: The District cap was increased from a fixed $280 per month to $324.48 per month which is assumed to increase in future years with medical trend.

56.e: Not applicable
56.f: To be determined by the employer
56.g: To be determined by the employer
56.h: Other than contributions after the measurement, all deferred inflow and outflow balances are shown on page 12 and in Appendix D
56.i: Future recognition of deferred inflows and outflows is shown in Appendix D

Paragraph 57: **Required Supplementary Information**

57.a: Please see reconciliation on pages 2 or 12. Please see the notes for Paragraph 244 below for more information.
57.b: These items are provided on pages 2 and 12 for the current valuation, except for covered payroll, which should be determined based on appropriate methods.
57.c: We have not been asked to calculate an actuarially determined contribution amount. We assume the District contributes on an ad hoc basis, but in an amount sufficient to fully fund the obligation over a period not to exceed 30 years.
57.d: We are not aware that there are any statutorily or contractually established contribution requirements.

Paragraph 58: **Actuarially Determined Contributions**

We have not been asked to calculate an actuarially determined contribution amount. We assume the District contributes on an ad hoc basis, but in an amount sufficient to fully fund the obligation over a period not to exceed 30 years.

Paragraph 244: **Transition Option**

Prior periods were not restated due to the fact that prior valuations were not rerun in accordance with GASB 75. It was determined that the time and expense necessary to rerun prior valuations and to restate prior financial statements was not justified.

APPENDIX D: DEFERRED OUTFLOWS OF RESOURCES AND DEFERRED INFLOWS OF RESOURCES

EXPERIENCE GAINS AND LOSSES

				Increase (Decrease) in OPEB Expense Arising from the Recognition of Effects of Experience Gains and Losses (Measurement Periods)								
Measurement Period	Experience (Gain)/Loss	Original Recognition Period (Years)	Amounts Recognized in OPEB Expense through 2019	2020	Amounts to be Recognized in OPEB Expense after 2020	2021	2022	2023	2024	2025	Thereafter
2017-18	$3,703	9.6	$772	$386	$2,545	$386	$386	$386	$386	$386	$615
2018-19	$1,993	9.6	$208	$208	$1,577	$208	$208	$208	$208	$208	$537
2019-20	$4,092	8.8	$0	$465	$3,627	$465	$465	$465	$465	$465	$1,302
Net Increase (Decrease) in OPEB Expense			**$980**	**$1,059**	**$7,749**	**$1,059**	**$1,059**	**$1,059**	**$1,059**	**$1,059**	**$2,454**

CHANGES OF ASSUMPTIONS

			Increase (Decrease) in OPEB Expense Arising from the Recognition of Effects of Changes of Assumptions (Measurement Periods)								
Measurement Period	Changes of Assumptions	Original Recognition Period (Years)	Amounts Recognized in OPEB Expense through 2019	2020	Amounts to be Recognized in OPEB Expense after 2020	2021	2022	2023	2024	2025	Thereafter
2019-20	($1,319)	8.8	$0	($150)	($1,169)	($150)	($150)	($150)	($150)	($150)	($419)
Net Increase (Decrease) in OPEB Expense			**$0**	**($150)**	**($1,169)**	**($150)**	**($150)**	**($150)**	**($150)**	**($150)**	**($419)**

INVESTMENT GAINS AND LOSSES

				Increase (Decrease) in OPEB Expense Arising from the Recognition of Effects of Investment Gains and Losses (Measurement Periods)								
Measurement Period	Investment (Gain)/Loss	Original Recognition Period (Years)	Amounts Recognized in OPEB Expense through 2019	2020	Amounts to be Recognized in OPEB Expense after 2020	2021	2022	2023	2024	2025	Thereafter
2017-18	($1,906)	5	($764)	($382)	($760)	($382)	($378)				
2018-19	$1,756	5	$352	$352	$1,052	$352	$352	$348			
2019-20	$7,791	5	$0	$1,559	$6,232	$1,559	$1,559	$1,559	$1,555		
Net Increase (Decrease) in OPEB Expense			**($412)**	**$1,529**	**$6,524**	**$1,529**	**$1,533**	**$1,907**	**$1,555**	**$0**	**$0**

APPENDIX E: GLOSSARY OF RETIREE HEALTH VALUATION TERMS

Note: The following definitions are intended to help a *non*-actuary understand concepts related to retiree health valuations. Therefore, the definitions may not be actuarially accurate.

Actuarial Cost Method:	A mathematical model for allocating OPEB costs by year of service. The only actuarial cost method allowed under GASB 74/75 is the entry age actuarial cost method.
Actuarial Present Value of Projected Benefit Payments:	The projected amount of all OPEB benefits to be paid to current and future retirees discounted back to the valuation or measurement date.
Deferred Inflows/Outflows of Resources:	A portion of certain items that can be deferred to future periods or that weren't reflected in the valuation. The former includes investment gains/losses, actuarial gains/losses, and gains/losses due to changes in actuarial assumptions or methods. The latter includes contributions made to a trust subsequent to the measurement date but before the statement date.
Discount Rate:	Assumed investment return net of all investment expenses. Generally, a higher assumed interest rate leads to lower service costs and total OPEB liability.
Fiduciary Net Position:	Net assets (liability) of a qualifying OPEB "plan" (i.e. qualifying irrevocable trust or equivalent arrangement).
Implicit Rate Subsidy:	The estimated amount by which retiree rates are understated in situations where, for rating purposes, retirees are combined with active employees and the employer is expected, in the long run, to pay the underlying cost of retiree benefits.
Measurement Date:	The date at which assets and liabilities are determined in order to estimate TOL and NOL.
Mortality Rate:	Assumed proportion of people who die each year. Mortality rates always vary by age and often by sex. A mortality table should always be selected that is based on a similar "population" to the one being studied.
Net OPEB Liability (NOL):	The Total OPEB Liability minus the Fiduciary Net Position.
OPEB Benefits:	Other Post Employment Benefits. Generally, medical, dental, prescription drug, life, long-term care or other postemployment benefits that are not pension benefits.
OPEB Expense:	This is the amount employers must recognize as an expense each year. The annual OPEB expense is equal to the Service Cost plus interest on the Total OPEB Liability (TOL) plus change in TOL due to plan changes minus projected investment income; all adjusted to reflect deferred inflows and outflows of resources.
Participation Rate:	The proportion of retirees who elect to receive retiree benefits. A lower participation rate results in lower service cost and a TOL. The participation rate often is related to retiree contributions.

Pay As You Go Cost:	The projected benefit payments to retirees in a given year as estimated by the actuarial valuation. Actual benefit payments are likely to differ from these estimated amounts. For OPEB plans that do not pre-fund through an irrevocable trust, the Pay As You Go Cost serves as an estimated amount to budget for annual OPEB payments.
Retirement Rate:	The proportion of active employees who retire each year. Retirement rates are usually based on age and/or length of service. (Retirement rates can be used in conjunction with the service requirement to reflect both age and length of service). The more likely employees are to retire early, the higher service costs and actuarial accrued liability will be.
Service Cost:	The annual dollar value of the "earned" portion of retiree health benefits if retiree health benefits are to be fully accrued at retirement.
Service Requirement:	The proportion of retiree benefits payable under the OPEB plan, based on length of service and, sometimes, age. A shorter service requirement increases service costs and TOL.
Total OPEB Liability (TOL):	The amount of the actuarial present value of projected benefit payments attributable to participants' past service based on the actuarial cost method used.
Trend Rate:	The rate at which the employer's share of the cost of retiree benefits is expected to increase over time. The trend rate usually varies by type of benefit (e.g. medical, dental, vision, etc.) and may vary over time. A higher trend rate results in higher service costs and TOL.
Turnover Rate:	The rate at which employees cease employment due to reasons other than death, disability or retirement. Turnover rates usually vary based on length of service and may vary by other factors. Higher turnover rates reduce service costs and TOL.
Valuation Date:	The date as of which the OPEB obligation is determined by means of an actuarial valuation. Under GASB 74 and 75, the valuation date does not have to coincide with the statement date, but can't be more than 30 months prior.

Stege Sanitary District Retiree Medical Plan

per Actuarial Valuation of Retiree Health Benefits Summary as of June 30, 2020

Fiscal Year	Number Retired	Premiums Paid by District on Cash Basis	District Contribution (ARC)	Premiums paid over/(under) ARC	Assets End of Year
2020-21	6	$21,761	$21,028	$733	$233,380
2021-22	6	$23,363	$22,072	$1,291	$234,671
2022-23	7	$27,256	$23,619	$3,637	$238,308
2023-24	8	$31,150	$25,256	$5,894	$244,202
2024-25	8	$31,150	$26,976	$4,174	$248,376
2025-26	9	$35,044	$28,830	$6,214	$254,590
2026-27	9	$35,044	$31,116	$3,928	$258,518
2027-28	9	$35,044	$33,275	$1,769	$260,287
2028-29	10	$38,938	$35,680	$3,258	$263,544
2029-30	10	$38,938	$38,274	$664	$264,208

California Public Employees' Retirement System
Actuarial Office
400 Q Street, Sacramento, CA 95811 |Phone: (916) 795-3000 | Fax: (916) 795-2744
888 CalPERS (or **888**-225-7377) | TTY: (877) 249-7442 | **www.calpers.ca.gov**

July 2020

Miscellaneous Plan of the Stege Sanitary District
(CalPERS ID: 2595946637)
Annual Valuation Report as of June 30, 2019

Dear Employer,

Attached to this letter, you will find the June 30, 2019 actuarial valuation report of your CalPERS pension plan. **Provided in this report is the determination of the minimum required employer contributions for fiscal year 2021-22**. In addition, the report contains important information regarding the current financial status of the plan as well as projections and risk measures to aid in planning for the future.

Because this plan is in a risk pool, the following valuation report has been separated into two sections:

- Section 1 contains specific information for the plan including the development of the current and projected employer contributions, and
- Section 2 contains the Risk Pool Actuarial Valuation appropriate to the plan as of June 30, 2019.

Section 2 can be found on the CalPERS website (www.calpers.ca.gov). From the home page, go to "*Forms & Publications*" and select "*View All*". In the search box, enter "*Risk Pool*" and from the results list download the Miscellaneous or Safety Risk Pool Actuarial Valuation Report as appropriate.

Your June 30, 2019 actuarial valuation report contains important actuarial information about your pension plan at CalPERS. Your assigned CalPERS staff actuary, whose signature appears in the Actuarial Certification section on page 1, is available to discuss the report with you after August 1, 2020.

Actuarial valuations are based on assumptions regarding future plan experience including investment return and payroll growth, eligibility for the types of benefits provided, and longevity among retirees. The CalPERS Board of Administration adopts these assumptions after considering the advice of CalPERS actuarial and investment teams and other professionals. Each actuarial valuation reflects all prior differences between actual and assumed experience and adjusts the contribution rates as needed. This valuation is based on an investment return assumption of 7.0% which was adopted by the board in December 2016. Other assumptions used in this report are those recommended in the CalPERS Experience Study and Review of Actuarial Assumptions report from December 2017.

Required Contribution

The exhibit below displays the minimum employer contributions, before any cost sharing, for fiscal year 2021-22 along with estimates of the required contributions for fiscal year 2022-23. Member contributions other than cost sharing (whether paid by the employer or the employee) are in addition to the results shown below. **The employer contributions in this report do not reflect any cost sharing arrangements you may have with your employees**.

Fiscal Year	Employer Normal Cost Rate	Employer Amortization of Unfunded Accrued Liability
2021-22	10.88%	$175,208
Projected Results		
2022-23	*10.9%*	*$143,000*

The actual investment return for fiscal year 2019-20 was not known at the time this report was prepared. The projections above assume the investment return for that year would be 7.00%. ***To the extent the actual investment return for fiscal year 2019-20 differs from 7.00%, the actual contribution requirements for fiscal year 2022-23 will differ from those shown above.*** For additional details regarding the assumptions and methods used for these projections please refer to the "Projected Employer Contributions" in the "Highlights and Executive Summary" section. This section also contains projected required contributions through fiscal year 2026-27.

Changes from Previous Year's Valuation

The CalPERS Board of Administration has adopted a new amortization policy effective with the June 30, 2019 actuarial valuation. The new policy shortens the period over which actuarial gains and losses are amortized from 30 years to 20 years with the payments computed as a level dollar amount. In addition, the new policy does not utilize a 5-year ramp-up and ramp-down on Unfunded Accrued Liability (UAL) bases attributable to assumption and method changes and non-investment gains/losses. The new policy does not utilize a 5-year ramp-down on investment gains/losses. These changes apply only to new UAL bases established on or after June 30, 2019.

Further descriptions of general changes are included in the "Highlights and Executive Summary" section and in Appendix A, "Actuarial Methods and Assumptions." The effects of the changes on the required contributions are included in the "Reconciliation of Required Employer Contributions" section.

Questions

We understand that you might have some questions about these results. While we are very interested in discussing these results with your agency, in the interest of allowing us to give every public agency their results, we ask that you wait until after August 1, 2020 to contact us with actuarial questions. If you have other questions, you may call the Customer Contact Center at (888)-CalPERS or (**888-225-7377**).

Sincerely,

SCOTT TERANDO
Chief Actuary

Actuarial Valuation
as of June 30, 2019

for the
Miscellaneous Plan
of the
Stege Sanitary District
(CalPERS ID: 2595946637)

Required Contributions
for Fiscal Year
July 1, 2021 - June 30, 2022

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Section 1

CALIFORNIA PUBLIC EMPLOYEES' RETIREMENT SYSTEM

Plan Specific Information for the Miscellaneous Plan of the Stege Sanitary District

(CalPERS ID: 2595946637)
(Valuation Rate Plan ID: 1546)

Table of Contents

Actuarial Certification

Section 1 of this report is based on the member and financial data contained in our records as of June 30, 2019 which was provided by your agency and the benefit provisions under your contract with CalPERS. Section 2 of this report is based on the member and financial data as of June 30, 2019 provided by employers participating in the Miscellaneous Risk Pool to which the plan belongs and benefit provisions under the CalPERS contracts for those agencies.

As set forth in Section 2 of this report, the pool actuaries have certified that, in their opinion, the valuation of the risk pool containing your Miscellaneous Plan has been performed in accordance with generally accepted actuarial principles consistent with standards of practice prescribed by the Actuarial Standards Board, and that the assumptions and methods are internally consistent and reasonable for the risk pool as of the date of this valuation and as prescribed by the CalPERS Board of Administration according to provisions set forth in the California Public Employees' Retirement Law.

Having relied upon the information set forth in Section 2 of this report and based on the census and benefit provision information for the plan, it is my opinion as the plan actuary that the Unfunded Accrued Liability amortization bases as of June 30, 2019 and employer contribution as of July 1, 2021 have been properly and accurately determined in accordance with the principles and standards stated above.

The undersigned is an actuary for CalPERS, a member of both the American Academy of Actuaries and Society of Actuaries and meets the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein.

TONY CUNY, ASA, MAAA
Associate Pension Actuary, CalPERS

Highlights and Executive Summary

- **Introduction**
- **Purpose of Section 1**
- **Required Employer Contributions**
- **Additional Discretionary Employer Contributions**
- **Plan's Funded Status**
- **Projected Employer Contributions**
- **Cost**
- **Changes Since the Prior Year's Valuation**
- **Subsequent Events**

Introduction

This report presents the results of the June 30, 2019 actuarial valuation of the Miscellaneous Plan of the Stege Sanitary District of the California Public Employees' Retirement System (CalPERS). This actuarial valuation sets the required employer contributions for fiscal year 2021-22.

Purpose of Section 1

This Section 1 report for the Miscellaneous Plan of the Stege Sanitary District of CalPERS was prepared by the plan actuary in order to:

- Set forth the assets and accrued liabilities of this plan as of June 30, 2019;
- Determine the minimum required employer contribution for this plan for the fiscal year July 1, 2021 through June 30, 2022; and
- Provide actuarial information as of June 30, 2019 to the CalPERS Board of Administration and other interested parties.

The pension funding information presented in this report should not be used in financial reports subject to GASB Statement No. 68 for a Cost Sharing Employer Defined Benefit Pension Plan. A separate accounting valuation report for such purposes is available from CalPERS and details for ordering are available on our website.

The measurements shown in this actuarial valuation may not be applicable for other purposes. The employer should contact their actuary before disseminating any portion of this report for any reason that is not explicitly described above.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; changes in actuarial policies; and changes in plan provisions or applicable law.

Assessment and Disclosure of Risk

This report includes the following risk disclosures consistent with the recommendations of Actuarial Standards of Practice No. 51 and recommended by the California Actuarial Advisory Panel (CAAP) in the Model Disclosure Elements document:

- A "Scenario Test," projecting future results under different investment income returns.
- A "Sensitivity Analysis," showing the impact on current valuation results using alternative discount rates of 6.0% and 8.0%.
- A "Sensitivity Analysis," showing the impact on current valuation results assuming rates of mortality are 10% lower or 10% higher than our current mortality assumptions adopted in 2017.
- Plan maturity measures indicating how sensitive a plan may be to the risks noted above.

Required Employer Contributions

	Fiscal Year
Required Employer Contributions	**2021-22**
Employer Normal Cost Rate	**10.88%**
Plus, Either	
1) Monthly Employer Dollar UAL Payment	**$14,600.67**
Or	
2) Annual UAL Prepayment Option*	**$169,380**

*The total minimum required employer contribution is the **sum** of the Plan's Employer Normal Cost Rate (expressed as a percentage of payroll) **plus** the Employer Unfunded Accrued Liability (UAL) Contribution Amount (billed monthly in dollars).*

** Only the UAL portion of the employer contribution can be prepaid **(which must be received in full no later than July 31)**. Any prepayment totaling over $5 million requires a 72-hour notice email to FCSD_public_agency_wires@calpers.ca.gov. Plan Normal Cost contributions will be made as part of the payroll reporting process. If there is contractual cost sharing or other change, this amount will change.*

In accordance with Sections 20537 and 20572 of the Public Employees' Retirement Law, if a contracting agency fails to remit the required contributions when due, interest and penalties may apply.

	Fiscal Year 2020-21	Fiscal Year 2021-22
Development of Normal Cost as a Percentage of Payroll[1]		
Base Total Normal Cost for Formula	17.392%	17.25%
Surcharge for Class 1 Benefits[2]		
a) FAC 1	0.547%	0.54%
Phase out of Normal Cost Difference[3]	0.000%	0.00%
Plan's Total Normal Cost	17.939%	17.79%
Formula's Expected Employee Contribution Rate	6.908%	6.91%
Employer Normal Cost Rate	11.031%	10.88%
Projected Payroll for the Contribution Fiscal Year	$941,359	$892,478
Estimated Employer Contributions Based on Projected Payroll		
Plan's Estimated Employer Normal Cost	$103,841	$97,102
Plan's Payment on Amortization Bases[4]	152,316	175,208
% of Projected Payroll (illustrative only)	16.180%	19.63%
Estimated Total Employer Contribution	$256,157	$272,310
% of Projected Payroll (illustrative only)	27.211%	30.51%

[1] The results shown for fiscal year 2020-21 reflect the prior year valuation and may not take into account any lump sum payment, side fund payoff, or rate adjustment made after April 30, 2019.

[2] Section 2 of this report contains a list of Class 1 benefits and corresponding surcharges for each benefit.

[3] The normal cost difference is phased out over a five-year period. The phase out of normal cost difference is 100% for the first year of pooling and is incrementally reduced by 20% of the original normal cost difference for each subsequent year. This is non-zero only for plans that joined a pool within the past 5 years. Most plans joined a pool June 30, 2003, when risk pooling was implemented.

[4] See Schedule of Plan's Amortization Bases.

Additional Discretionary Employer Contributions

The minimum required employer contribution towards the Unfunded Accrued Liability (UAL) for this rate plan for the 2021-22 fiscal year is $175,208. CalPERS allows employers to make additional discretionary payments (ADPs) at any time and in any amount. These optional payments serve to reduce the UAL and future required contributions and can result in significant long-term savings. Employers can also use ADPs to stabilize annual contributions as a fixed dollar amount, percent of payroll or percent of revenue.

Provided below are select ADP options for consideration. Making such an ADP during fiscal year 2021-22 does not require an ADP be made in any future year, nor does it change the remaining amortization period of any portion of unfunded liability. For information on permanent changes to amortization periods, see the "Amortization Schedule and Alternatives" section of the report.

If you are considering making an ADP, please contact your actuary for additional information.

Minimum Required Employer Contribution for Fiscal Year 2021-22

Estimated Normal Cost	Minimum UAL Payment	ADP	Total UAL Contribution	Estimated Total Contribution
$97,102	$175,208	$0	$175,208	$272,310

Alternative Fiscal Year 2021-22 Employer Contributions for Greater UAL Reduction

Funding Target	Estimated Normal Cost	Minimum UAL Payment	ADP[1]	Total UAL Contribution	Estimated Total Contribution
15 years	$97,102	$175,208	$16,835	$192,043	$289,145
10 years	$97,102	$175,208	$73,827	$249,035	$346,137
5 years	$97,102	$175,208	$251,385	$426,593	$523,695

[1] The ADP amounts are assumed to be made in the middle of the fiscal year. A payment made earlier or later in the fiscal year would have to be less or more than the amount shown to have the same effect on the UAL amortization.

Note that the calculations above are based on the projected Unfunded Accrued Liability as of June 30, 2021 as determined in the June 30, 2019 actuarial valuation. New unfunded liabilities can emerge in future years due to assumption or method changes, changes in plan provisions and actuarial experience different than assumed. Making an ADP illustrated above for the indicated number of years will not result in a plan that is exactly 100% funded in the indicated number of years. Valuation results will vary from one year to the next and can diverge significantly from projections over a period of several years.

Plan's Funded Status

	June 30, 2018	June 30, 2019
1. Present Value of Projected Benefits (PVB)	$8,016,630	$8,236,066
2. Entry Age Normal Accrued Liability (AL)	6,701,194	7,054,076
3. Plan's Market Value of Assets (MVA)	4,929,186	5,211,133
4. Unfunded Accrued Liability (UAL) [(2) - (3)]	1,772,008	1,842,943
5. Funded Ratio [(3) / (2)]	73.6%	73.9%

This measure of funded status is an assessment of the need for future employer contributions based on the selected actuarial cost method used to fund the plan. The UAL is the present value of future employer contributions for service that has already been earned and is in addition to future normal cost contributions for active members. For a measure of funded status that is appropriate for assessing the sufficiency of plan assets to cover estimated termination liabilities, please see "Hypothetical Termination Liability" in the "Risk Analysis" section.

Projected Employer Contributions

The table below shows the required and projected employer contributions (before cost sharing) for the next six fiscal years. The projection assumes that all actuarial assumptions will be realized and that no further changes to assumptions, contributions, benefits, or funding will occur during the projection period. As of the preparation date of this report, the year to date return for the 2019-20 fiscal year was well below the 7% assumed return. Actual contribution rates during this projection period could be significantly higher than the projection shown below.

	Required Contribution	Projected Future Employer Contributions (Assumes 7.00% Return for Fiscal Year 2019-20)				
Fiscal Year	**2021-22**	**2022-23**	**2023-24**	**2024-25**	**2025-26**	**2026-27**
Normal Cost %	10.88%	10.9%	10.9%	10.9%	10.9%	10.9%
UAL Payment	$175,208	$143,000	$153,000	$163,000	$167,000	$172,000

For some sources of UAL, the change in UAL is amortized using a 5-year ramp up. For more information, please see "Amortization of the Unfunded Actuarial Accrued Liability" under "Actuarial Methods" in Appendix A. This method phases in the impact of the change in UAL over a 5-year period in order to reduce employer cost volatility from year to year. As a result of this methodology, dramatic changes in the required employer contributions in any one year are less likely. However, required contributions can change gradually and significantly over the next five years. In years when there is a large increase in UAL, the relatively small amortization payments during the ramp up period could result in a funded ratio that is projected to decrease initially while the contribution impact of the increase in the UAL is phased in.

For projected contributions under alternate investment return scenarios, please see the "Future Investment Return Scenarios" in the "Risk Analysis" section.

Cost

Actuarial Determination of Pension Plan Cost

Contributions to fund the pension plan are comprised of two components:

- The Normal Cost, expressed as a percentage of total active payroll
- The Amortization of the Unfunded Accrued Liability (UAL), expressed as a dollar amount

For fiscal years prior to FY 2016-17, the Amortization of UAL component was expressed as a percentage of total active payroll. Starting with FY 2016-17, the Amortization of UAL component was expressed as a dollar amount and invoiced on a monthly basis. There continues to be an option to prepay this amount during July of each fiscal year.

The Normal Cost component will continue to be expressed as a percentage of active payroll with employer and employee contributions payable as part of the regular payroll reporting process.

The determination of both components requires complex actuarial calculations. The calculations are based on a set of actuarial assumptions which can be divided into two categories:

- Demographic assumptions (e.g., mortality rates, retirement rates, employment termination rates, disability rates)
- Economic assumptions (e.g., future investment earnings, inflation, salary growth rates)

These assumptions reflect CalPERS' best estimate of future experience of the plan and are long term in nature. We recognize that all assumptions will not be realized in any given year. For example, the investment earnings at CalPERS have averaged 5.8% over the 20 years ending June 30, 2019, yet individual fiscal year returns have ranged from -23.6% to +20.7%. In addition, CalPERS reviews all actuarial assumptions by conducting in-depth experience studies every four years, with the most recent experience study completed in 2017.

Changes Since the Prior Year's Valuation

Benefits

The standard actuarial practice at CalPERS is to recognize mandated legislative benefit changes in the first annual valuation following the effective date of the legislation. Voluntary benefit changes by plan amendment are generally included in the first valuation that is prepared after the amendment becomes effective, even if the valuation date is prior to the effective date of the amendment.

This valuation generally reflects plan changes by amendments effective before the date of the report. Please refer to the "Plan's Major Benefit Options" and Appendix B for a summary of the plan provisions used in this valuation. The effect of any mandated benefit changes or plan amendments on the unfunded liability is shown in the "(Gain)/Loss Analysis" and the effect on the employer contribution is shown in the "Reconciliation of Required Employer Contributions." It should be noted that no change in liability or contribution is shown for any plan changes which were already included in the prior year's valuation.

Actuarial Methods and Assumptions

The CalPERS Board of Administration adopted a new amortization policy effective with this actuarial valuation. The new policy shortens the period over which actuarial gains and losses are amortized from 30 years to 20 years with the payments computed as a level dollar amount. In addition, the new policy does not utilize a 5-year ramp-up and ramp-down on UAL bases attributable to assumption and method changes and non-investment gains/losses. The new policy also does not utilize a 5-year ramp-down on investment gains/losses. These changes will apply only to new UAL bases established on or after June 30, 2019.

For inactive employers, the new amortization policy imposes a maximum amortization period of 15 years for all unfunded accrued liabilities effective June 30, 2017. Furthermore, the plan actuary has the ability to shorten the amortization period on any valuation date based on the life expectancy of plan members and projected cash flow needs to the plan.

Subsequent Events

The contribution requirements determined in this actuarial valuation report are based on demographic and financial information as of June 30, 2019. Changes in the value of assets subsequent to that date are not reflected. Investment returns below the assumed rate of return will increase future required contributions while investment returns above the assumed rate of return will decrease future required contributions.

The projected employer contributions on Page 6 are calculated under the assumption that the discount rate remains at 7.0% going forward and that the realized rate of return on assets for fiscal year 2019-20 is 7.0%.

This actuarial valuation report reflects statutory changes, regulatory changes and CalPERS Board actions through January 2020. Any subsequent changes or actions are not reflected.

Assets and Liabilities

- **Breakdown of Entry Age Normal Accrued Liability**
- **Allocation of Plan's Share of Pool's Experience/Assumption Change**
- **Development of Plan's Share of Pool's Market Value of Assets**
- **Schedule of Plan's Amortization Bases**
- **Amortization Schedule and Alternatives**
- **Employer Contribution History**
- **Funding History**

Breakdown of Entry Age Normal Accrued Liability

Active Members	$3,311,500
Transferred Members	566,190
Terminated Members	10,306
Members and Beneficiaries Receiving Payments	3,166,080
Total	$7,054,076

Allocation of Plan's Share of Pool's Experience/Assumption Change

It is the policy of CalPERS to ensure equity within the risk pools by allocating the pool's experience gains/losses and assumption changes in a manner that treats each employer equitably and maintains benefit security for the members of the System while minimizing substantial variations in employer contributions. The Pool's experience gains/losses and impact of assumption/method changes is allocated to the plan as follows:

1.	Plan's Accrued Liability	$7,054,076
2.	Projected UAL balance at 6/30/2019	1,790,116
3.	Pool's Accrued Liability[1]	18,394,114,919
4.	Sum of Pool's Individual Plan UAL Balances at 6/30/2019[1]	4,268,374,183
5.	Pool's 2018/19 Investment (Gain)/Loss[1]	68,711,010
6.	Pool's 2018/19 Non-Investment (Gain)/Loss[1]	70,985,020
7.	Plan's Share of Pool's Investment (Gain)/Loss: [(1) - (2)] ÷ [(3) - (4)] × (5)	25,605
8.	Plan's Share of Pool's Non-Investment (Gain)/Loss: (1) ÷ (3) × (6)	27,222
9.	Plan's New (Gain)/Loss as of 6/30/2019: (7) + (8)	52,828
10.	Other Changes in the UAL[2]	0

[1] Does not include plans that transferred to Pool on the valuation date.

[2] May include Golden Handshakes, Service Purchases, etc. See Schedule of Plan's Amortization Bases for details.

Development of the Plan's Share of Pool's Market Value of Assets

11.	Plan's UAL: (2) + (9) + (10)	$1,842,943
12.	Plan's Share of Pool's MVA: (1) - (11)	$5,211,133

Schedule of Plan's Amortization Bases

Note that there is a two-year lag between the valuation date and the start of the contribution fiscal year.

- The assets, liabilities, and funded status of the plan are measured as of the valuation date: June 30, 2019.
- The required employer contributions determined by the valuation are for the fiscal year beginning two years after the valuation date: fiscal year 2021-22.

This two-year lag is necessary due to the amount of time needed to extract and test the membership and financial data, and the need to provide public agencies with their required employer contribution well in advance of the start of the fiscal year.

The Unfunded Accrued Liability (UAL) is used to determine the employer contribution and therefore must be rolled forward two years from the valuation date to the first day of the fiscal year for which the contribution is being determined. The UAL is rolled forward each year by subtracting the expected payment on the UAL for the fiscal year and adjusting for interest. The expected payment on the UAL for a fiscal year is equal to the Expected Employer Contribution for the fiscal year minus the Expected Normal Cost for the year. The Employer Contribution for the first fiscal year is determined by the actuarial valuation two years ago and the contribution for the second year is from the actuarial valuation one year ago. Additional discretionary payments are reflected in the Expected Payments column in the fiscal year they were made by the agency.

Reason for Base	Date Est.	Ramp Level 2021-22	Ramp Shape	Escala-tion Rate	Amort. Period	Balance 6/30/19	Expected Payment 2019-20	Balance 6/30/20	Expected Payment 2020-21	Balance 6/30/21	Minimum Required Payment 2021-22
Share of Pre-2013 Pool UAL	6/30/13	No Ramp		2.75%	16	371,438	29,821	366,592	30,249	360,964	31,081
Non-Investment (Gain)/Loss	6/30/13	100%	Up/Down	2.75%	24	(6,091)	(409)	(6,094)	(413)	(6,093)	(425)
Investment (Gain)/Loss	6/30/13	100%	Up/Down	2.75%	24	594,843	39,900	595,209	40,377	595,107	41,488
Non-Investment (Gain)/Loss	6/30/14	100%	Up/Down	2.75%	25	529	28	537	36	537	36
Investment (Gain)/Loss	6/30/14	100%	Up/Down	2.75%	25	(472,222)	(25,067)	(479,348)	(31,698)	(480,114)	(32,569)
Side Fund	2013 or Prior	No Ramp		2.75%	1	125,904	45,410	87,745	46,302	45,992	47,574
Assumption Change	6/30/14	100%	Up/Down	2.75%	15	300,318	22,336	298,236	28,359	289,778	29,139
Non-Investment (Gain)/Loss	6/30/15	100%	Up/Down	2.75%	26	(24,981)	(997)	(25,698)	(1,344)	(26,107)	(1,726)
Investment (Gain)/Loss	6/30/15	100%	Up/Down	2.75%	26	302,490	12,072	311,177	16,276	316,123	20,904
Non-Investment (Gain)/Loss	6/30/16	80%	Up/Down	2.75%	27	(46,473)	(1,255)	(48,428)	(1,903)	(49,849)	(2,607)
Investment (Gain)/Loss	6/30/16	80%	Up/Down	2.75%	27	373,754	10,097	389,472	15,306	400,902	20,969
Assumption Change	6/30/16	80%	Up/Down	2.75%	17	117,522	4,338	121,261	6,602	122,920	9,045
Non-Investment (Gain)/Loss	6/30/17	60%	Up/Down	2.75%	28	(9,829)	(137)	(10,375)	(276)	(10,816)	(425)
Investment (Gain)/Loss	6/30/17	60%	Up/Down	2.75%	28	(190,877)	(2,652)	(201,495)	(5,356)	(210,059)	(8,255)
Assumption Change	6/30/17	60%	Up/Down	2.75%	18	134,422	2,539	141,205	5,149	145,763	7,936
Non-Investment (Gain)/Loss	6/30/18	40%	Up/Down	2.75%	29	27,272	0	29,181	399	30,811	819
Investment (Gain)/Loss	6/30/18	40%	Up/Down	2.75%	29	(54,531)	0	(58,348)	(797)	(61,608)	(1,638)
Method Change	6/30/18	40%	Up/Down	2.75%	19	53,502	(416)	57,677	1,075	60,602	2,210

Schedule of Plan's Amortization Bases (continued)

Reason for Base	Date Est.	Ramp Level 2021-22	Ramp Shape	Escala-tion Rate	Amort. Period	Balance 6/30/19	Expected Payment 2019-20	Balance 6/30/20	Expected Payment 2020-21	Balance 6/30/21	Minimum Required Payment 2021-22
Assumption Change	6/30/18	40%	Up/Down	2.75%	19	193,126	(6,292)	213,153	3,974	223,963	8,167
Non-Investment (Gain)/Loss	6/30/19	No Ramp		0.00%	20	27,222	0	29,128	0	31,167	2,844
Investment (Gain)/Loss	6/30/19	20%	Up Only	0.00%	20	25,605	0	27,397	0	29,315	641
Total						**1,842,943**	**129,316**	**1,838,184**	**152,317**	**1,809,298**	**175,208**

The (gain)/loss bases are the plan's allocated share of the risk pool's (gain)/loss for the fiscal year as disclosed in "Allocation of Plan's Share of Pool's Experience/Assumption Change" earlier in this section. These (gain)/loss bases will be amortized in accordance with the CalPERS amortization policy in effect at the time the base was established.

Amortization Schedule and Alternatives

The amortization schedule on the previous page shows the minimum contributions required according to the CalPERS amortization policy. Many agencies have expressed interest in paying off the unfunded accrued liabilities more quickly than required. As such, we have provided alternative amortization schedules to help analyze the current amortization schedule and illustrate the potential savings of accelerating unfunded liability payments.

Shown on the following page are future year amortization payments based on 1) the current amortization schedule reflecting the individual bases and remaining periods shown on the previous page, and 2) alternative "fresh start" amortization schedules using two sample periods that would both result in interest savings relative to the current amortization schedule.

The Current Amortization Schedule typically contains both positive and negative bases. Positive bases result from plan changes, assumption changes, method changes or plan experience that increase unfunded liability. Negative bases result from plan changes, assumption changes, method changes, or plan experience that decrease unfunded liability. The combination of positive and negative bases within an amortization schedule can result in unusual or problematic circumstances in future years, such as:

- When a negative payment would be required on a positive unfunded actuarial liability; or
- When the payment would completely amortize the total unfunded liability in a very short time period, and results in a large change in the employer contribution requirement.

In any year when one of the above scenarios occurs, the actuary will consider corrective action such as replacing the existing unfunded liability bases with a single "fresh start" base and amortizing it over a reasonable period.

The Current Amortization Schedule on the following page may appear to show that, based on the current amortization bases, one of the above scenarios will occur at some point in the future. It is impossible to know today whether such a scenario will in fact arise since there will be additional bases added to the amortization schedule in each future year. Should such a scenario arise in any future year, the actuary will take appropriate action based on guidelines in the CalPERS amortization policy.

Amortization Schedule and Alternatives

	Current Amortization Schedule		Alternate Schedules			
			15 Year Amortization		10 Year Amortization	
Date	**Balance**	**Payment**	**Balance**	**Payment**	**Balance**	**Payment**
6/30/2021	1,809,298	175,208	1,809,298	192,043	1,809,298	249,035
6/30/2022	1,754,712	143,383	1,737,298	192,043	1,678,345	249,034
6/30/2023	1,729,225	152,635	1,660,258	192,043	1,538,226	249,034
6/30/2024	1,692,386	162,532	1,577,825	192,043	1,388,299	249,035
6/30/2025	1,642,731	167,493	1,489,622	192,044	1,227,876	249,034
6/30/2026	1,584,467	171,931	1,395,244	192,044	1,056,225	249,035
6/30/2027	1,517,533	176,493	1,294,259	192,043	872,557	249,035
6/30/2028	1,441,196	181,180	1,186,206	192,043	676,032	249,034
6/30/2029	1,354,665	185,994	1,070,590	192,044	465,751	249,034
6/30/2030	1,257,098	190,948	946,879	192,043	240,751	249,035
6/30/2031	1,147,577	196,030	814,510	192,044		
6/30/2032	1,025,133	193,399	672,874	192,043		
6/30/2033	896,836	190,482	521,324	192,044		
6/30/2034	762,578	184,046	359,165	192,043		
6/30/2035	625,583	173,247	185,656	192,044		
6/30/2036	490,165	153,925				
6/30/2037	365,255	94,437				
6/30/2038	293,137	80,855				
6/30/2039	230,021	70,149				
6/30/2040	173,558	63,224				
6/30/2041	120,309	44,617				
6/30/2042	82,577	42,831				
6/30/2043	44,053	33,939				
6/30/2044	12,030	12,444				
6/30/2045						
6/30/2046						
6/30/2047						
6/30/2048						
6/30/2049						
6/30/2050						
Total	**3,241,422**		**2,880,651**		**2,490,345**	
Interest Paid	**1,432,124**		**1,071,353**		**681,047**	
Estimated Savings			**360,771**		**751,077**	

Employer Contribution History

The table below provides a recent history of the required employer contributions for the plan, as determined by the annual actuarial valuation. It does not account for prepayments or benefit changes made during a fiscal year.

Fiscal Year	Employer Normal Cost	Unfunded Liability Payment ($)
2016 - 17	8.880%	$83,686
2017 - 18	8.921%	96,646
2018 - 19	9.409%	115,665
2019 - 20	10.221%	136,025
2020 - 21	11.031%	152,316
2021 - 22	10.88%	175,208

Funding History

The funding history below shows the plan's actuarial accrued liability, share of the pool's market value of assets, share of the pool's unfunded liability, funded ratio, and annual covered payroll.

Valuation Date	Accrued Liability (AL)	Share of Pool's Market Value of Assets (MVA)	Plan's Share of Pool's Unfunded Liability	Funded Ratio	Annual Covered Payroll
06/30/2011	$3,976,021	$2,998,253	$977,768	75.4%	$670,302
06/30/2012	4,340,309	3,119,193	1,221,116	71.9%	804,713
06/30/2013	4,617,530	3,523,392	1,094,138	76.3%	838,980
06/30/2014	5,174,460	4,189,597	984,863	81.0%	860,430
06/30/2015	5,561,615	4,352,390	1,209,225	78.3%	791,469
06/30/2016	5,927,020	4,340,661	1,586,359	73.2%	823,860
06/30/2017	6,398,172	4,847,870	1,550,302	75.8%	877,524
06/30/2018	6,701,194	4,929,186	1,772,008	73.6%	867,780
06/30/2019	7,054,076	5,211,133	1,842,943	73.9%	822,720

Risk Analysis

- **Future Investment Return Scenarios**
- **Discount Rate Sensitivity**
- **Mortality Rate Sensitivity**
- **Maturity Measures**
- **Maturity Measures History**
- **Hypothetical Termination Liability**

Future Investment Return Scenarios

Analysis was performed to determine the effects of various future investment returns on required employer contributions. The projections below provide a range of results based on five investment return scenarios assumed to occur during the next four fiscal years (2019-20, 2020-21, 2021-22 and 2022-23). The projections also assume that all other actuarial assumptions will be realized and that no further changes to assumptions, contributions, benefits, or funding will occur.

For fiscal years 2019-20, 2020-21, 2021-22, and 2022-23, each scenario assumes an alternate fixed annual return. The fixed return assumptions for the five scenarios are 1.0%, 4.0%, 7.0%, 9.0% and 12.0%.

These alternate investment returns were chosen based on stochastic analysis of possible future investment returns over the four-year period ending June 30, 2023. Using the expected returns and volatility of the asset classes in which the funds are invested, we produced five thousand stochastic outcomes for this period based on the most recently completed Asset Liability Management process. We then selected annual returns that approximate the 5th, 25th, 50th, 75th, and 95th percentiles for these outcomes. For example, of all the 4-year outcomes generated in the stochastic analysis, approximately 25% had an average annual return of 4.0% or less.

Required contributions outside of this range are also possible. In particular, whereas it is unlikely that investment returns will average less than 1.0% or greater than 12.0% over this four-year period, the likelihood of a single investment return less than 1.0% or greater than 12.0% in any given year is much greater.

Assumed Annual Return From 2019-20 through 2022-23	Projected Employer Contributions			
	2022-23	2023-24	2024-25	2025-26
1.0%				
Normal Cost	10.9%	10.9%	10.9%	10.9%
UAL Contribution	$151,000	$176,000	$210,000	$246,000
4.0%				
Normal Cost	10.9%	10.9%	10.9%	10.9%
UAL Contribution	$147,000	$165,000	$187,000	$208,000
7.0%				
Normal Cost	10.9%	10.9%	10.9%	10.9%
UAL Contribution	$143,000	$153,000	$163,000	$167,000
9.0%				
Normal Cost	11.1%	11.3%	11.5%	11.8%
UAL Contribution	$141,000	$147,000	$151,000	$148,000
12.0%				
Normal Cost	11.1%	11.3%	11.5%	11.8%
UAL Contribution	$137,000	$135,000	$126,000	$104,000

These projections reflect the impact of the CalPERS risk mitigation policy, which reduces the discount rate when investment returns exceed specified trigger points.

Discount Rate Sensitivity

The discount rate assumption is calculated as the sum of the assumed real rate of return and the assumed annual price inflation, currently 4.50% and 2.50%, respectively. Changing either the price inflation assumption or the real rate of return assumption will change the discount rate. The sensitivity of the valuation results to the discount rate assumption depends on which component of the discount rate is changed. Shown below are various valuation results as of June 30, 2019 assuming alternate discount rates by changing the two components independently. Results are shown using the current discount rate of 7.0% as well as alternate discount rates of 6.0% and 8.0%. The rates of 6.0% and 8.0% were selected since they illustrate the impact of a 1.0% increase or decrease to the 7.0% assumption.

Sensitivity to the Real Rate of Return Assumption

As of June 30, 2019	1% Lower Real Return Rate	Current Assumptions	1% Higher Real Return Rate
Discount Rate	**6.0%**	**7.0%**	**8.0%**
Inflation	2.5%	2.5%	2.5%
Real Rate of Return	**3.5%**	**4.5%**	**5.5%**
a) Total Normal Cost	22.17%	17.79%	14.43%
b) Accrued Liability	$8,123,542	$7,054,076	$6,176,755
c) Market Value of Assets	$5,211,133	$5,211,133	$5,211,133
d) Unfunded Liability/(Surplus) [(b) - (c)]	$2,912,409	$1,842,943	$965,622
e) Funded Status	64.1%	73.9%	84.4%

Sensitivity to the Price Inflation Assumption

As of June 30, 2019	1% Lower Inflation Rate	Current Assumptions	1% Higher Inflation Rate
Discount Rate	**6.0%**	**7.0%**	**8.0%**
Inflation	**1.5%**	**2.5%**	**3.5%**
Real Rate of Return	4.5%	4.5%	4.5%
a) Total Normal Cost	18.97%	17.79%	16.38%
b) Accrued Liability	$7,409,581	$7,054,076	$6,563,528
c) Market Value of Assets	$5,211,133	$5,211,133	$5,211,133
d) Unfunded Liability/(Surplus) [(b) - (c)]	$2,198,448	$1,842,943	$1,352,395
e) Funded Status	70.3%	73.9%	79.4%

Mortality Rate Sensitivity

The following table looks at the change in the June 30, 2019 plan costs and funded ratio under two different longevity scenarios, namely assuming post-retirement rates of mortality are 10% lower or 10% higher than our current mortality assumptions adopted in 2017. This type of analysis highlights the impact on the plan of improving or worsening mortality over the long-term.

As of June 30, 2019	10% Lower Mortality Rates	Current Assumptions	10% Higher Mortality Rates
a) Total Normal Cost	18.10%	17.79%	17.50%
b) Accrued Liability	$7,200,965	$7,054,076	$6,918,538
c) Market Value of Assets	$5,211,133	$5,211,133	$5,211,133
d) Unfunded Liability/(Surplus) [(b) - (c)]	$1,989,832	$1,842,943	$1,707,405
e) Funded Status	72.4%	73.9%	75.3%

Maturity Measures

As pension plans mature they become more sensitive to risks. Understanding plan maturity and how it affects the ability of a pension plan to tolerate risk is important in understanding how the plan is impacted by investment return volatility, other economic variables and changes in longevity or other demographic assumptions. One way to look at the maturity level of CalPERS and its plans is to look at the ratio of a plan's retiree liability to its total liability. A pension plan in its infancy will have a very low ratio of retiree liability to total liability. As the plan matures, the ratio starts increasing. A mature plan will often have a ratio above 60%-65%.

Ratio of Retiree Accrued Liability to Total Accrued Liability	**June 30, 2018**	**June 30, 2019**
1. Retired Accrued Liability	3,169,886	3,166,080
2. Total Accrued Liability	6,701,194	7,054,076
3. Ratio of Retiree AL to Total AL [(1) / (2)]	0.47	0.45

Another measure of maturity level of CalPERS and its plans is to look at the ratio of actives to retirees, also called the Support Ratio. A pension plan in its infancy will have a very high ratio of active to retired members. As the plan matures, and members retire, the ratio starts declining. A mature plan will often have a ratio near or below one. The average support ratio for CalPERS public agency plans is 1.25.

Support Ratio	**June 30, 2018**	**June 30, 2019**
1. Number of Actives	8	7
2. Number of Retirees	8	8
3. Support Ratio [(1) / (2)]	1.00	0.88

Maturity Measures (Continued)

The actuarial calculations supplied in this communication are based on various assumptions about long-term demographic and economic behavior. Unless these assumptions (e.g., terminations, deaths, disabilities, retirements, salary growth, and investment return) are exactly realized each year, there will be differences on a year-to-year basis. The year-to-year differences between actual experience and the assumptions are called actuarial gains and losses and serve to lower or raise required employer contributions from one year to the next. Therefore, employer contributions will inevitably fluctuate, especially due to the ups and downs of investment returns.

Asset Volatility Ratio (AVR)

Shown in the table below is the asset volatility ratio (AVR), which is the ratio of market value of assets to payroll. Plans that have higher AVR experience more volatile employer contributions (as a percentage of payroll) due to investment return. For example, a plan with an asset-to-payroll ratio of 8 may experience twice the contribution volatility due to investment return volatility than a plan with an asset-to-payroll ratio of 4. It should be noted that this ratio is a measure of the current situation. It increases over time but generally tends to stabilize as the plan matures.

Liability Volatility Ratio (LVR)

Also shown in the table below is the liability volatility ratio (LVR), which is the ratio of accrued liability to payroll. Plans that have a higher LVR experience more volatile employer contributions (as a percentage of payroll) due to investment return and changes in liability. For example, a plan with LVR ratio of 8 is expected to have twice the contribution volatility of a plan with LVR of 4. It should be noted that this ratio indicates a longer-term potential for contribution volatility. The AVR, described above, will tend to move closer to the LVR as a plan matures.

Contribution Volatility	June 30, 2018	June 30, 2019
1. Market Value of Assets	$4,929,186	$5,211,133
2. Payroll	867,780	822,720
3. Asset Volatility Ratio (AVR) [(1) / (2)]	5.7	6.3
4. Accrued Liability	$6,701,194	$7,054,076
5. Liability Volatility Ratio (LVR) [(4) / (2)]	7.7	8.6

Maturity Measures History

Valuation Date	Ratio of Retiree Accrued Liability to Total Accrued Liability	Support Ratio	Asset Volatility Ratio	Liability Volatility Ratio
06/30/2017	0.49	1.13	5.5	7.3
06/30/2018	0.47	1.00	5.7	7.7
06/30/2019	0.45	0.88	6.3	8.6

Hypothetical Termination Liability

The hypothetical termination liability is an estimate of the financial position of the plan had the contract with CalPERS been terminated as of June 30, 2019. The plan liability on a termination basis is calculated differently compared to the plan's ongoing funding liability. For the hypothetical termination liability calculation, both compensation and service are frozen as of the valuation date and no future pay increases or service accruals are assumed. This measure of funded status is not appropriate for assessing the need for future employer contributions in the case of an ongoing plan, that is, for an employer that continues to provide CalPERS retirement benefits to active employees.

A more conservative investment policy and asset allocation strategy was adopted by the CalPERS Board for the Terminated Agency Pool. The Terminated Agency Pool has limited funding sources since no future employer contributions will be made. Therefore, expected benefit payments are secured by risk-free assets and benefit security for members is increased while limiting the funding risk. However, this asset allocation has a lower expected rate of return than the PERF and consequently, a lower discount rate is assumed. The lower discount rate for the Terminated Agency Pool results in higher liabilities for terminated plans.

The effective termination discount rate will depend on actual market rates of return for risk-free securities on the date of termination. As market discount rates are variable, the table below shows a range for the hypothetical termination liability based on the lowest and highest interest rates observed during an approximate 19-month period from 12 months before the valuation date to 7 months after.

Market Value of Assets (MVA)	Hypothetical Termination Liability[1,2] @ 1.75%	Funded Status	Unfunded Termination Liability @ 1.75%	Hypothetical Termination Liability[1,2] @ 3.25%	Funded Status	Unfunded Termination Liability @ 3.25%
$5,211,133	$13,645,439	38.2%	$8,434,306	$10,572,332	49.3%	$5,361,199

[1] The hypothetical liabilities calculated above include a 5% mortality contingency load in accordance with Board policy. Other actuarial assumptions can be found in Appendix A of the Section 2 report.

[2] The current discount rate assumption used for termination valuations is a weighted average of the 10-year and 30-year U.S. Treasury yields where the weights are based on matching asset and liability durations as of the termination date. The discount rates used in the table are based on 20-year Treasury bonds, rounded to the nearest quarter percentage point, which is a good proxy for most plans. The 20-year Treasury yield was 2.31% on June 30, 2019, and was 1.83% on January 31, 2020.

In order to terminate the plan, you must first contact our Retirement Services Contract Unit to initiate a Resolution of Intent to Terminate. The completed Resolution will allow the plan actuary to give you a preliminary termination valuation with a more up-to-date estimate of the plan liabilities. CalPERS advises you to consult with the plan actuary before beginning this process.

Participant Data

The table below shows a summary of your plan's member data upon which this valuation is based:

	June 30, 2018	June 30, 2019
Reported Payroll	$867,780	$822,720
Projected Payroll for Contribution Purposes	$941,359	$892,478
Number of Members		
Active	8	7
Transferred	2	3
Separated	1	1
Retired	8	8

List of Class 1 Benefit Provisions

This plan has the additional Class 1 Benefit Provisions:

- One Year Final Compensation (FAC 1)

Plan's Major Benefit Options

Shown below is a summary of the major optional benefits for which your agency has contracted. A description of principal standard and optional plan provisions is in Section 2.

	Benefit Group		
Member Category	Misc	Misc	
Demographics			
Actives	Yes	No	
Transfers/Separated	Yes	No	
Receiving	Yes	Yes	
Benefit Provision			
Benefit Formula	2% @ 55		
Social Security Coverage	No		
Full/Modified	Full		
Employee Contribution Rate	7.00%		
Final Average Compensation Period	One Year		
Sick Leave Credit	Yes		
Non-Industrial Disability	Standard		
Industrial Disability	No		
Pre-Retirement Death Benefits			
Optional Settlement 2	Yes		
1959 Survivor Benefit Level	Indexed		
Special	No		
Alternate (firefighters)	No		
Post-Retirement Death Benefits			
Lump Sum	$500	$500	
Survivor Allowance (PRSA)	No	No	
COLA	2%	2%	

Section 2

CALIFORNIA PUBLIC EMPLOYEES' RETIREMENT SYSTEM

Risk Pool Actuarial Valuation Information

Section 2 may be found on the CalPERS website (www.calpers.ca.gov) in the Forms and Publications section

California Public Employees' Retirement System
Actuarial Office
400 Q Street, Sacramento, CA 95811 |Phone: (916) 795-3000 | Fax: (916) 795-2744
888 CalPERS (or **888**-225-7377) | TTY: (877) 249-7442 | **www.calpers.ca.gov**

July 2020

PEPRA Miscellaneous Plan of the Stege Sanitary District
(CalPERS ID: 2595946637)
Annual Valuation Report as of June 30, 2019

Dear Employer,

Attached to this letter, you will find the June 30, 2019 actuarial valuation report of your CalPERS pension plan. **Provided in this report is the determination of the minimum required employer contributions for fiscal year 2021-22**. In addition, the report contains important information regarding the current financial status of the plan as well as projections and risk measures to aid in planning for the future.

Because this plan is in a risk pool, the following valuation report has been separated into two sections:

- Section 1 contains specific information for the plan including the development of the current and projected employer contributions, and
- Section 2 contains the Risk Pool Actuarial Valuation appropriate to the plan as of June 30, 2019.

Section 2 can be found on the CalPERS website (www.calpers.ca.gov). From the home page, go to "*Forms & Publications*" and select "*View All*". In the search box, enter "*Risk Pool*" and from the results list download the Miscellaneous or Safety Risk Pool Actuarial Valuation Report as appropriate.

Your June 30, 2019 actuarial valuation report contains important actuarial information about your pension plan at CalPERS. Your assigned CalPERS staff actuary, whose signature appears in the Actuarial Certification section on page 1, is available to discuss the report with you after August 1, 2020.

Actuarial valuations are based on assumptions regarding future plan experience including investment return and payroll growth, eligibility for the types of benefits provided, and longevity among retirees. The CalPERS Board of Administration adopts these assumptions after considering the advice of CalPERS actuarial and investment teams and other professionals. Each actuarial valuation reflects all prior differences between actual and assumed experience and adjusts the contribution rates as needed. This valuation is based on an investment return assumption of 7.0% which was adopted by the board in December 2016. Other assumptions used in this report are those recommended in the CalPERS Experience Study and Review of Actuarial Assumptions report from December 2017.

Required Contribution

The exhibit below displays the minimum employer contributions, before any cost sharing, for fiscal year 2021-22 along with estimates of the required contributions for fiscal year 2022-23. Member contributions other than cost sharing (whether paid by the employer or the employee) are in addition to the results shown below. **The employer contributions in this report do not reflect any cost sharing arrangements you may have with your employees**.

Fiscal Year	Employer Normal Cost Rate	Employer Amortization of Unfunded Accrued Liability	PEPRA Employee Rate
2021-22	7.59%	$827	6.75%
Projected Results			
2022-23	*7.6%*	*$830*	*TBD*

The actual investment return for fiscal year 2019-20 was not known at the time this report was prepared. The projections above assume the investment return for that year would be 7.00%. ***To the extent the actual investment return for fiscal year 2019-20 differs from 7.00%, the actual contribution requirements for fiscal year 2022-23 will differ from those shown above.*** For additional details regarding the assumptions and methods used for these projections please refer to the "Projected Employer Contributions" in the "Highlights and Executive Summary" section. This section also contains projected required contributions through fiscal year 2026-27.

Changes from Previous Year's Valuation

The CalPERS Board of Administration has adopted a new amortization policy effective with the June 30, 2019 actuarial valuation. The new policy shortens the period over which actuarial gains and losses are amortized from 30 years to 20 years with the payments computed as a level dollar amount. In addition, the new policy does not utilize a 5-year ramp-up and ramp-down on Unfunded Accrued Liability (UAL) bases attributable to assumption and method changes and non-investment gains/losses. The new policy does not utilize a 5-year ramp-down on investment gains/losses. These changes apply only to new UAL bases established on or after June 30, 2019.

Further descriptions of general changes are included in the "Highlights and Executive Summary" section and in Appendix A, "Actuarial Methods and Assumptions." The effects of the changes on the required contributions are included in the "Reconciliation of Required Employer Contributions" section.

Questions

We understand that you might have some questions about these results. While we are very interested in discussing these results with your agency, in the interest of allowing us to give every public agency their results, we ask that you wait until after August 1, 2020 to contact us with actuarial questions. If you have other questions, you may call the Customer Contact Center at (888)-CalPERS or (**888-225-7377**).

Sincerely,

SCOTT TERANDO
Chief Actuary

Actuarial Valuation
as of June 30, 2019

for the
PEPRA Miscellaneous Plan
of the
Stege Sanitary District
(CalPERS ID: 2595946637)

Required Contributions
for Fiscal Year
July 1, 2021 - June 30, 2022

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Section 1

CALIFORNIA PUBLIC EMPLOYEES' RETIREMENT SYSTEM

Plan Specific Information for the PEPRA Miscellaneous Plan of the Stege Sanitary District

(CalPERS ID: 2595946637)
(Valuation Rate Plan ID: 27096)

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Actuarial Certification

Section 1 of this report is based on the member and financial data contained in our records as of June 30, 2019 which was provided by your agency and the benefit provisions under your contract with CalPERS. Section 2 of this report is based on the member and financial data as of June 30, 2019 provided by employers participating in the Miscellaneous Risk Pool to which the plan belongs and benefit provisions under the CalPERS contracts for those agencies.

As set forth in Section 2 of this report, the pool actuaries have certified that, in their opinion, the valuation of the risk pool containing your PEPRA Miscellaneous Plan has been performed in accordance with generally accepted actuarial principles consistent with standards of practice prescribed by the Actuarial Standards Board, and that the assumptions and methods are internally consistent and reasonable for the risk pool as of the date of this valuation and as prescribed by the CalPERS Board of Administration according to provisions set forth in the California Public Employees' Retirement Law.

Having relied upon the information set forth in Section 2 of this report and based on the census and benefit provision information for the plan, it is my opinion as the plan actuary that the Unfunded Accrued Liability amortization bases as of June 30, 2019 and employer contribution as of July 1, 2021 have been properly and accurately determined in accordance with the principles and standards stated above.

The undersigned is an actuary for CalPERS, a member of both the American Academy of Actuaries and Society of Actuaries and meets the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein.

TONY CUNY, ASA, MAAA
Associate Pension Actuary, CalPERS

Highlights and Executive Summary

- **Introduction**
- **Purpose of Section 1**
- **Required Employer Contributions**
- **Additional Discretionary Employer Contributions**
- **Plan's Funded Status**
- **Projected Employer Contributions**
- **Cost**
- **Changes Since the Prior Year's Valuation**
- **Subsequent Events**

Introduction

This report presents the results of the June 30, 2019 actuarial valuation of the PEPRA Miscellaneous Plan of the Stege Sanitary District of the California Public Employees' Retirement System (CalPERS). This actuarial valuation sets the required employer contributions for fiscal year 2021-22.

Purpose of Section 1

This Section 1 report for the PEPRA Miscellaneous Plan of the Stege Sanitary District of CalPERS was prepared by the plan actuary in order to:

- Set forth the assets and accrued liabilities of this plan as of June 30, 2019;
- Determine the minimum required employer contribution for this plan for the fiscal year July 1, 2021 through June 30, 2022; and
- Provide actuarial information as of June 30, 2019 to the CalPERS Board of Administration and other interested parties.

The pension funding information presented in this report should not be used in financial reports subject to GASB Statement No. 68 for a Cost Sharing Employer Defined Benefit Pension Plan. A separate accounting valuation report for such purposes is available from CalPERS and details for ordering are available on our website.

The measurements shown in this actuarial valuation may not be applicable for other purposes. The employer should contact their actuary before disseminating any portion of this report for any reason that is not explicitly described above.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; changes in actuarial policies; and changes in plan provisions or applicable law.

Assessment and Disclosure of Risk

This report includes the following risk disclosures consistent with the recommendations of Actuarial Standards of Practice No. 51 and recommended by the California Actuarial Advisory Panel (CAAP) in the Model Disclosure Elements document:

- A "Scenario Test," projecting future results under different investment income returns.
- A "Sensitivity Analysis," showing the impact on current valuation results using alternative discount rates of 6.0% and 8.0%.
- A "Sensitivity Analysis," showing the impact on current valuation results assuming rates of mortality are 10% lower or 10% higher than our current mortality assumptions adopted in 2017.
- Plan maturity measures indicating how sensitive a plan may be to the risks noted above.

Required Employer Contributions

	Fiscal Year
Required Employer Contributions	**2021-22**
Employer Normal Cost Rate	**7.59%**
Plus, Either	
1) Monthly Employer Dollar UAL Payment	**$68.92**
Or	
2) Annual UAL Prepayment Option*	**$799**

*The total minimum required employer contribution is the **sum** of the Plan's Employer Normal Cost Rate (expressed as a percentage of payroll) **plus** the Employer Unfunded Accrued Liability (UAL) Contribution Amount (billed monthly in dollars).*

** Only the UAL portion of the employer contribution can be prepaid **(which must be received in full no later than July 31)**. Any prepayment totaling over $5 million requires a 72-hour notice email to FCSD_public_agency_wires@calpers.ca.gov. Plan Normal Cost contributions will be made as part of the payroll reporting process. If there is contractual cost sharing or other change, this amount will change.*

In accordance with Sections 20537 and 20572 of the Public Employees' Retirement Law, if a contracting agency fails to remit the required contributions when due, interest and penalties may apply.

	Fiscal Year 2020-21	Fiscal Year 2021-22
Development of Normal Cost as a Percentage of Payroll[1]		
Base Total Normal Cost for Formula	14.482%	14.34%
Surcharge for Class 1 Benefits[2]		
None	0.000%	0.00%
Phase out of Normal Cost Difference[3]	0.000%	0.00%
Plan's Total Normal Cost	14.482%	14.34%
Plan's Employee Contribution Rate[4]	6.750%	6.75%
Employer Normal Cost Rate	7.732%	7.59%
Projected Payroll for the Contribution Fiscal Year	$126,595	$197,553
Estimated Employer Contributions Based on Projected Payroll		
Plan's Estimated Employer Normal Cost	$9,788	$14,994
Plan's Payment on Amortization Bases[5]	746	827
% of Projected Payroll (illustrative only)	0.589%	0.42%
Estimated Total Employer Contribution	$10,534	$15,821
% of Projected Payroll (illustrative only)	8.321%	8.01%

[1] The results shown for fiscal year 2020-21 reflect the prior year valuation and may not take into account any lump sum payment, side fund payoff, or rate adjustment made after April 30, 2019.

[2] Section 2 of this report contains a list of Class 1 benefits and corresponding surcharges for each benefit.

[3] The normal cost difference is phased out over a five-year period. The phase out of normal cost difference is 100% for the first year of pooling and is incrementally reduced by 20% of the original normal cost difference for each subsequent year. This is non-zero only for plans that joined a pool within the past 5 years. Most plans joined a pool June 30, 2003, when risk pooling was implemented.

[4] For detail regarding the determination of the required PEPRA employee contribution rate see Section on PEPRA Member Contribution Rates.

[5] See Schedule of Plan's Amortization Bases.

Additional Discretionary Employer Contributions

The minimum required employer contribution towards the Unfunded Accrued Liability (UAL) for this rate plan for the 2021-22 fiscal year is $827. CalPERS allows employers to make additional discretionary payments (ADPs) at any time and in any amount. These optional payments serve to reduce the UAL and future required contributions and can result in significant long-term savings. Employers can also use ADPs to stabilize annual contributions as a fixed dollar amount, percent of payroll or percent of revenue.

Provided below are select ADP options for consideration. Making such an ADP during fiscal year 2021-22 does not require an ADP be made in any future year, nor does it change the remaining amortization period of any portion of unfunded liability. For information on permanent changes to amortization periods, see the "Amortization Schedule and Alternatives" section of the report.

If you are considering making an ADP, please contact your actuary for additional information.

Minimum Required Employer Contribution for Fiscal Year 2021-22

Estimated Normal Cost	Minimum UAL Payment	ADP	Total UAL Contribution	Estimated Total Contribution
$14,994	$827	$0	$827	$15,821

Alternative Fiscal Year 2021-22 Employer Contributions for Greater UAL Reduction

Funding Target	Estimated Normal Cost	Minimum UAL Payment	ADP[1]	Total UAL Contribution	Estimated Total Contribution
5 years	N/A	N/A	N/A	N/A	N/A

[1] The ADP amounts are assumed to be made in the middle of the fiscal year. A payment made earlier or later in the fiscal year would have to be less or more than the amount shown to have the same effect on the UAL amortization.

Note that the calculations above are based on the projected Unfunded Accrued Liability as of June 30, 2021 as determined in the June 30, 2019 actuarial valuation. New unfunded liabilities can emerge in future years due to assumption or method changes, changes in plan provisions and actuarial experience different than assumed. Making an ADP illustrated above for the indicated number of years will not result in a plan that is exactly 100% funded in the indicated number of years. Valuation results will vary from one year to the next and can diverge significantly from projections over a period of several years.

Plan's Funded Status

	June 30, 2018	June 30, 2019
1. Present Value of Projected Benefits (PVB)	$224,539	$325,324
2. Entry Age Normal Accrued Liability (AL)	45,171	73,185
3. Plan's Market Value of Assets (MVA)	42,610	69,748
4. Unfunded Accrued Liability (UAL) [(2) - (3)]	2,561	3,437
5. Funded Ratio [(3) / (2)]	94.3%	95.3%

This measure of funded status is an assessment of the need for future employer contributions based on the selected actuarial cost method used to fund the plan. The UAL is the present value of future employer contributions for service that has already been earned and is in addition to future normal cost contributions for active members. For a measure of funded status that is appropriate for assessing the sufficiency of plan assets to cover estimated termination liabilities, please see "Hypothetical Termination Liability" in the "Risk Analysis" section.

Projected Employer Contributions

The table below shows the required and projected employer contributions (before cost sharing) for the next six fiscal years. The projection assumes that all actuarial assumptions will be realized and that no further changes to assumptions, contributions, benefits, or funding will occur during the projection period. As of the preparation date of this report, the year to date return for the 2019-20 fiscal year was well below the 7% assumed return. Actual contribution rates during this projection period could be significantly higher than the projection shown below.

	Required Contribution	Projected Future Employer Contributions (Assumes 7.00% Return for Fiscal Year 2019-20)				
Fiscal Year	**2021-22**	**2022-23**	**2023-24**	**2024-25**	**2025-26**	**2026-27**
Normal Cost %	7.59%	7.6%	7.6%	7.6%	7.6%	7.6%
UAL Payment	$827	$830	$830	$830	$830	$0

For some sources of UAL, the change in UAL is amortized using a 5-year ramp up. For more information, please see "Amortization of the Unfunded Actuarial Accrued Liability" under "Actuarial Methods" in Appendix A. This method phases in the impact of the change in UAL over a 5-year period in order to reduce employer cost volatility from year to year. As a result of this methodology, dramatic changes in the required employer contributions in any one year are less likely. However, required contributions can change gradually and significantly over the next five years. In years when there is a large increase in UAL, the relatively small amortization payments during the ramp up period could result in a funded ratio that is projected to decrease initially while the contribution impact of the increase in the UAL is phased in.

For projected contributions under alternate investment return scenarios, please see the "Future Investment Return Scenarios" in the "Risk Analysis" section.

Cost

Actuarial Determination of Pension Plan Cost

Contributions to fund the pension plan are comprised of two components:

- The Normal Cost, expressed as a percentage of total active payroll
- The Amortization of the Unfunded Accrued Liability (UAL), expressed as a dollar amount

For fiscal years prior to FY 2016-17, the Amortization of UAL component was expressed as a percentage of total active payroll. Starting with FY 2016-17, the Amortization of UAL component was expressed as a dollar amount and invoiced on a monthly basis. There continues to be an option to prepay this amount during July of each fiscal year.

The Normal Cost component will continue to be expressed as a percentage of active payroll with employer and employee contributions payable as part of the regular payroll reporting process.

The determination of both components requires complex actuarial calculations. The calculations are based on a set of actuarial assumptions which can be divided into two categories:

- Demographic assumptions (e.g., mortality rates, retirement rates, employment termination rates, disability rates)
- Economic assumptions (e.g., future investment earnings, inflation, salary growth rates)

These assumptions reflect CalPERS' best estimate of future experience of the plan and are long term in nature. We recognize that all assumptions will not be realized in any given year. For example, the investment earnings at CalPERS have averaged 5.8% over the 20 years ending June 30, 2019, yet individual fiscal year returns have ranged from -23.6% to +20.7%. In addition, CalPERS reviews all actuarial assumptions by conducting in-depth experience studies every four years, with the most recent experience study completed in 2017.

Changes Since the Prior Year's Valuation

Benefits

The standard actuarial practice at CalPERS is to recognize mandated legislative benefit changes in the first annual valuation following the effective date of the legislation. Voluntary benefit changes by plan amendment are generally included in the first valuation that is prepared after the amendment becomes effective, even if the valuation date is prior to the effective date of the amendment.

This valuation generally reflects plan changes by amendments effective before the date of the report. Please refer to the "Plan's Major Benefit Options" and Appendix B for a summary of the plan provisions used in this valuation. The effect of any mandated benefit changes or plan amendments on the unfunded liability is shown in the "(Gain)/Loss Analysis" and the effect on the employer contribution is shown in the "Reconciliation of Required Employer Contributions." It should be noted that no change in liability or contribution is shown for any plan changes which were already included in the prior year's valuation.

Actuarial Methods and Assumptions

The CalPERS Board of Administration adopted a new amortization policy effective with this actuarial valuation. The new policy shortens the period over which actuarial gains and losses are amortized from 30 years to 20 years with the payments computed as a level dollar amount. In addition, the new policy does not utilize a 5-year ramp-up and ramp-down on UAL bases attributable to assumption and method changes and non-investment gains/losses. The new policy also does not utilize a 5-year ramp-down on investment gains/losses. These changes will apply only to new UAL bases established on or after June 30, 2019.

For inactive employers, the new amortization policy imposes a maximum amortization period of 15 years for all unfunded accrued liabilities effective June 30, 2017. Furthermore, the plan actuary has the ability to shorten the amortization period on any valuation date based on the life expectancy of plan members and projected cash flow needs to the plan.

Subsequent Events

The contribution requirements determined in this actuarial valuation report are based on demographic and financial information as of June 30, 2019. Changes in the value of assets subsequent to that date are not reflected. Investment returns below the assumed rate of return will increase future required contributions while investment returns above the assumed rate of return will decrease future required contributions.

The projected employer contributions on Page 6 are calculated under the assumption that the discount rate remains at 7.0% going forward and that the realized rate of return on assets for fiscal year 2019-20 is 7.0%.

This actuarial valuation report reflects statutory changes, regulatory changes and CalPERS Board actions through January 2020. Any subsequent changes or actions are not reflected.

Assets and Liabilities

- **Breakdown of Entry Age Normal Accrued Liability**
- **Allocation of Plan's Share of Pool's Experience/Assumption Change**
- **Development of Plan's Share of Pool's Market Value of Assets**
- **Schedule of Plan's Amortization Bases**
- **Amortization Schedule and Alternatives**
- **Employer Contribution History**
- **Funding History**

Breakdown of Entry Age Normal Accrued Liability

Active Members	$73,185
Transferred Members	0
Terminated Members	0
Members and Beneficiaries Receiving Payments	0
Total	$73,185

Allocation of Plan's Share of Pool's Experience/Assumption Change

It is the policy of CalPERS to ensure equity within the risk pools by allocating the pool's experience gains/losses and assumption changes in a manner that treats each employer equitably and maintains benefit security for the members of the System while minimizing substantial variations in employer contributions. The Pool's experience gains/losses and impact of assumption/method changes is allocated to the plan as follows:

1.	Plan's Accrued Liability	$73,185
2.	Projected UAL balance at 6/30/2019	2,813
3.	Pool's Accrued Liability[1]	18,394,114,919
4.	Sum of Pool's Individual Plan UAL Balances at 6/30/2019[1]	4,268,374,183
5.	Pool's 2018/19 Investment (Gain)/Loss[1]	68,711,010
6.	Pool's 2018/19 Non-Investment (Gain)/Loss[1]	70,985,020
7.	Plan's Share of Pool's Investment (Gain)/Loss: [(1) - (2)] ÷ [(3) - (4)] × (5)	342
8.	Plan's Share of Pool's Non-Investment (Gain)/Loss: (1) ÷ (3) × (6)	282
9.	Plan's New (Gain)/Loss as of 6/30/2019: (7) + (8)	625
10.	Other Changes in the UAL[2]	0

[1] Does not include plans that transferred to Pool on the valuation date.

[2] May include Golden Handshakes, Service Purchases, etc. See Schedule of Plan's Amortization Bases for details.

Development of the Plan's Share of Pool's Market Value of Assets

11.	Plan's UAL: (2) + (9) + (10)	$3,437
12.	Plan's Share of Pool's MVA: (1) - (11)	$69,748

Schedule of Plan's Amortization Bases

Note that there is a two-year lag between the valuation date and the start of the contribution fiscal year.

- The assets, liabilities, and funded status of the plan are measured as of the valuation date: June 30, 2019.
- The required employer contributions determined by the valuation are for the fiscal year beginning two years after the valuation date: fiscal year 2021-22.

This two-year lag is necessary due to the amount of time needed to extract and test the membership and financial data, and the need to provide public agencies with their required employer contribution well in advance of the start of the fiscal year.

The Unfunded Accrued Liability (UAL) is used to determine the employer contribution and therefore must be rolled forward two years from the valuation date to the first day of the fiscal year for which the contribution is being determined. The UAL is rolled forward each year by subtracting the expected payment on the UAL for the fiscal year and adjusting for interest. The expected payment on the UAL for a fiscal year is equal to the Expected Employer Contribution for the fiscal year minus the Expected Normal Cost for the year. The Employer Contribution for the first fiscal year is determined by the actuarial valuation two years ago and the contribution for the second year is from the actuarial valuation one year ago. Additional discretionary payments are reflected in the Expected Payments column in the fiscal year they were made by the agency.

Reason for Base	Date Est.	Ramp Level 2021-22	Ramp Shape	Escala-tion Rate	Amort. Period	Balance 6/30/19	Expected Payment 2019-20	Balance 6/30/20	Expected Payment 2020-21	Balance 6/30/21	Minimum Required Payment 2021-22
Fresh Start	6/30/19	No Ramp		0.00%	5	3,437	(309)	3,997	746	3,506	827
Total						**3,437**	**(309)**	**3,997**	**746**	**3,506**	**827**

The (gain)/loss bases are the plan's allocated share of the risk pool's (gain)/loss for the fiscal year as disclosed in "Allocation of Plan's Share of Pool's Experience/Assumption Change" earlier in this section. These (gain)/loss bases will be amortized in accordance with the CalPERS amortization policy in effect at the time the base was established.

Amortization Schedule and Alternatives

The amortization schedule on the previous page shows the minimum contributions required according to the CalPERS amortization policy. Many agencies have expressed interest in paying off the unfunded accrued liabilities more quickly than required. As such, we have provided alternative amortization schedules to help analyze the current amortization schedule and illustrate the potential savings of accelerating unfunded liability payments.

Shown on the following page are future year amortization payments based on 1) the current amortization schedule reflecting the individual bases and remaining periods shown on the previous page, and 2) alternative "fresh start" amortization schedules using two sample periods that would both result in interest savings relative to the current amortization schedule.

The Current Amortization Schedule typically contains both positive and negative bases. Positive bases result from plan changes, assumption changes, method changes or plan experience that increase unfunded liability. Negative bases result from plan changes, assumption changes, method changes, or plan experience that decrease unfunded liability. The combination of positive and negative bases within an amortization schedule can result in unusual or problematic circumstances in future years, such as:

- When a negative payment would be required on a positive unfunded actuarial liability; or
- When the payment would completely amortize the total unfunded liability in a very short time period, and results in a large change in the employer contribution requirement.

In any year when one of the above scenarios occurs, the actuary will consider corrective action such as replacing the existing unfunded liability bases with a single "fresh start" base and amortizing it over a reasonable period.

The Current Amortization Schedule on the following page may appear to show that, based on the current amortization bases, one of the above scenarios will occur at some point in the future. It is impossible to know today whether such a scenario will in fact arise since there will be additional bases added to the amortization schedule in each future year. Should such a scenario arise in any future year, the actuary will take appropriate action based on guidelines in the CalPERS amortization policy.

Amortization Schedule and Alternatives

	Current Amortization Schedule		Alternate Schedules			
			0 Year Amortization		0 Year Amortization	
Date	**Balance**	**Payment**	**Balance**	**Payment**	**Balance**	**Payment**
6/30/2021	3,505	826	N/A	N/A	N/A	N/A
6/30/2022	2,896	827				
6/30/2023	2,243	826				
6/30/2024	1,546	827				
6/30/2025	799	826				
6/30/2026						
6/30/2027						
6/30/2028						
6/30/2029						
6/30/2030						
6/30/2031						
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6/30/2043						
6/30/2044						
6/30/2045						
6/30/2046						
6/30/2047						
6/30/2048						
6/30/2049						
6/30/2050						
Total	**4,132**		**N/A**		**N/A**	
Interest Paid	**627**		**N/A**		**N/A**	
Estimated Savings			**N/A**		**N/A**	

Employer Contribution History

The table below provides a recent history of the required employer contributions for the plan, as determined by the annual actuarial valuation. It does not account for prepayments or benefit changes made during a fiscal year.

Fiscal Year	Employer Normal Cost	Unfunded Liability Payment ($)
2017 - 18	6.533%	$24
2018 - 19	6.842%	1,263
2019 - 20	6.985%	593
2020 - 21	7.732%	746
2021 - 22	7.59%	827

Funding History

The funding history below shows the plan's actuarial accrued liability, share of the pool's market value of assets, share of the pool's unfunded liability, funded ratio, and annual covered payroll.

Valuation Date	Accrued Liability (AL)	Share of Pool's Market Value of Assets (MVA)	Plan's Share of Pool's Unfunded Liability	Funded Ratio	Annual Covered Payroll
06/30/2015	$413	$393	$20	95.2%	$50,400
06/30/2016	8,265	7,631	634	92.3%	52,800
06/30/2017	18,722	18,136	586	96.9%	59,400
06/30/2018	45,171	42,610	2,561	94.3%	116,700
06/30/2019	73,185	69,748	3,437	95.3%	182,112

Risk Analysis

- **Future Investment Return Scenarios**
- **Discount Rate Sensitivity**
- **Mortality Rate Sensitivity**
- **Maturity Measures**
- **Maturity Measures History**
- **Hypothetical Termination Liability**

Future Investment Return Scenarios

Analysis was performed to determine the effects of various future investment returns on required employer contributions. The projections below provide a range of results based on five investment return scenarios assumed to occur during the next four fiscal years (2019-20, 2020-21, 2021-22 and 2022-23). The projections also assume that all other actuarial assumptions will be realized and that no further changes to assumptions, contributions, benefits, or funding will occur.

For fiscal years 2019-20, 2020-21, 2021-22, and 2022-23, each scenario assumes an alternate fixed annual return. The fixed return assumptions for the five scenarios are 1.0%, 4.0%, 7.0%, 9.0% and 12.0%.

These alternate investment returns were chosen based on stochastic analysis of possible future investment returns over the four-year period ending June 30, 2023. Using the expected returns and volatility of the asset classes in which the funds are invested, we produced five thousand stochastic outcomes for this period based on the most recently completed Asset Liability Management process. We then selected annual returns that approximate the 5th, 25th, 50th, 75th, and 95th percentiles for these outcomes. For example, of all the 4-year outcomes generated in the stochastic analysis, approximately 25% had an average annual return of 4.0% or less.

Required contributions outside of this range are also possible. In particular, whereas it is unlikely that investment returns will average less than 1.0% or greater than 12.0% over this four-year period, the likelihood of a single investment return less than 1.0% or greater than 12.0% in any given year is much greater.

Assumed Annual Return From 2019-20 through 2022-23	Projected Employer Contributions			
	2022-23	2023-24	2024-25	2025-26
1.0%				
Normal Cost	7.6%	7.6%	7.6%	7.6%
UAL Contribution	$930	$1,100	$1,500	$1,900
4.0%				
Normal Cost	7.6%	7.6%	7.6%	7.6%
UAL Contribution	$880	$990	$1,100	$1,400
7.0%				
Normal Cost	7.6%	7.6%	7.6%	7.6%
UAL Contribution	$830	$830	$830	$830
9.0%				
Normal Cost	7.8%	7.9%	7.4%	7.5%
UAL Contribution	$810	$760	$0	$0
12.0%				
Normal Cost	7.8%	7.9%	7.4%	7.5%
UAL Contribution	$0	$0	$0	$0

These projections reflect the impact of the CalPERS risk mitigation policy, which reduces the discount rate when investment returns exceed specified trigger points.

Discount Rate Sensitivity

The discount rate assumption is calculated as the sum of the assumed real rate of return and the assumed annual price inflation, currently 4.50% and 2.50%, respectively. Changing either the price inflation assumption or the real rate of return assumption will change the discount rate. The sensitivity of the valuation results to the discount rate assumption depends on which component of the discount rate is changed. Shown below are various valuation results as of June 30, 2019 assuming alternate discount rates by changing the two components independently. Results are shown using the current discount rate of 7.0% as well as alternate discount rates of 6.0% and 8.0%. The rates of 6.0% and 8.0% were selected since they illustrate the impact of a 1.0% increase or decrease to the 7.0% assumption.

Sensitivity to the Real Rate of Return Assumption

As of June 30, 2019	1% Lower Real Return Rate	Current Assumptions	1% Higher Real Return Rate
Discount Rate	**6.0%**	**7.0%**	**8.0%**
Inflation	2.5%	2.5%	2.5%
Real Rate of Return	**3.5%**	**4.5%**	**5.5%**
a) Total Normal Cost	17.78%	14.34%	11.71%
b) Accrued Liability	$88,200	$73,185	$61,182
c) Market Value of Assets	$69,748	$69,748	$69,748
d) Unfunded Liability/(Surplus) [(b) - (c)]	$18,452	$3,437	($8,566)
e) Funded Status	79.1%	95.3%	114.0%

Sensitivity to the Price Inflation Assumption

As of June 30, 2019	1% Lower Inflation Rate	Current Assumptions	1% Higher Inflation Rate
Discount Rate	**6.0%**	**7.0%**	**8.0%**
Inflation	**1.5%**	**2.5%**	**3.5%**
Real Rate of Return	4.5%	4.5%	4.5%
a) Total Normal Cost	15.33%	14.34%	13.16%
b) Accrued Liability	$77,738	$73,185	$67,379
c) Market Value of Assets	$69,748	$69,748	$69,748
d) Unfunded Liability/(Surplus) [(b) - (c)]	$7,990	$3,437	($2,369)
e) Funded Status	89.7%	95.3%	103.5%

Mortality Rate Sensitivity

The following table looks at the change in the June 30, 2019 plan costs and funded ratio under two different longevity scenarios, namely assuming post-retirement rates of mortality are 10% lower or 10% higher than our current mortality assumptions adopted in 2017. This type of analysis highlights the impact on the plan of improving or worsening mortality over the long-term.

As of June 30, 2019	10% Lower Mortality Rates	Current Assumptions	10% Higher Mortality Rates
a) Total Normal Cost	14.61%	14.34%	14.09%
b) Accrued Liability	$74,878	$73,185	$71,660
c) Market Value of Assets	$69,748	$69,748	$69,748
d) Unfunded Liability/(Surplus) [(b) - (c)]	$5,130	$3,437	$1,912
e) Funded Status	93.1%	95.3%	97.3%

Maturity Measures

As pension plans mature they become more sensitive to risks. Understanding plan maturity and how it affects the ability of a pension plan to tolerate risk is important in understanding how the plan is impacted by investment return volatility, other economic variables and changes in longevity or other demographic assumptions. One way to look at the maturity level of CalPERS and its plans is to look at the ratio of a plan's retiree liability to its total liability. A pension plan in its infancy will have a very low ratio of retiree liability to total liability. As the plan matures, the ratio starts increasing. A mature plan will often have a ratio above 60%-65%.

Ratio of Retiree Accrued Liability to Total Accrued Liability	**June 30, 2018**	**June 30, 2019**
1. Retired Accrued Liability	0	0
2. Total Accrued Liability	45,171	73,185
3. Ratio of Retiree AL to Total AL [(1) / (2)]	0.00	0.00

Another measure of maturity level of CalPERS and its plans is to look at the ratio of actives to retirees, also called the Support Ratio. A pension plan in its infancy will have a very high ratio of active to retired members. As the plan matures, and members retire, the ratio starts declining. A mature plan will often have a ratio near or below one. The average support ratio for CalPERS public agency plans is 1.25.

Support Ratio	**June 30, 2018**	**June 30, 2019**
1. Number of Actives	2	3
2. Number of Retirees	0	0
3. Support Ratio [(1) / (2)]	N/A	N/A

Maturity Measures (Continued)

The actuarial calculations supplied in this communication are based on various assumptions about long-term demographic and economic behavior. Unless these assumptions (e.g., terminations, deaths, disabilities, retirements, salary growth, and investment return) are exactly realized each year, there will be differences on a year-to-year basis. The year-to-year differences between actual experience and the assumptions are called actuarial gains and losses and serve to lower or raise required employer contributions from one year to the next. Therefore, employer contributions will inevitably fluctuate, especially due to the ups and downs of investment returns.

Asset Volatility Ratio (AVR)

Shown in the table below is the asset volatility ratio (AVR), which is the ratio of market value of assets to payroll. Plans that have higher AVR experience more volatile employer contributions (as a percentage of payroll) due to investment return. For example, a plan with an asset-to-payroll ratio of 8 may experience twice the contribution volatility due to investment return volatility than a plan with an asset-to-payroll ratio of 4. It should be noted that this ratio is a measure of the current situation. It increases over time but generally tends to stabilize as the plan matures.

Liability Volatility Ratio (LVR)

Also shown in the table below is the liability volatility ratio (LVR), which is the ratio of accrued liability to payroll. Plans that have a higher LVR experience more volatile employer contributions (as a percentage of payroll) due to investment return and changes in liability. For example, a plan with LVR ratio of 8 is expected to have twice the contribution volatility of a plan with LVR of 4. It should be noted that this ratio indicates a longer-term potential for contribution volatility. The AVR, described above, will tend to move closer to the LVR as a plan matures.

Contribution Volatility	June 30, 2018	June 30, 2019
1. Market Value of Assets	$42,610	$69,748
2. Payroll	116,700	182,112
3. Asset Volatility Ratio (AVR) [(1) / (2)]	0.4	0.4
4. Accrued Liability	$45,171	$73,185
5. Liability Volatility Ratio (LVR) [(4) / (2)]	0.4	0.4

Maturity Measures History

Valuation Date	Ratio of Retiree Accrued Liability to Total Accrued Liability	Support Ratio	Asset Volatility Ratio	Liability Volatility Ratio
06/30/2017	0.00	N/A	0.3	0.3
06/30/2018	0.00	N/A	0.4	0.4
06/30/2019	0.00	N/A	0.4	0.4

Hypothetical Termination Liability

The hypothetical termination liability is an estimate of the financial position of the plan had the contract with CalPERS been terminated as of June 30, 2019. The plan liability on a termination basis is calculated differently compared to the plan's ongoing funding liability. For the hypothetical termination liability calculation, both compensation and service are frozen as of the valuation date and no future pay increases or service accruals are assumed. This measure of funded status is not appropriate for assessing the need for future employer contributions in the case of an ongoing plan, that is, for an employer that continues to provide CalPERS retirement benefits to active employees.

A more conservative investment policy and asset allocation strategy was adopted by the CalPERS Board for the Terminated Agency Pool. The Terminated Agency Pool has limited funding sources since no future employer contributions will be made. Therefore, expected benefit payments are secured by risk-free assets and benefit security for members is increased while limiting the funding risk. However, this asset allocation has a lower expected rate of return than the PERF and consequently, a lower discount rate is assumed. The lower discount rate for the Terminated Agency Pool results in higher liabilities for terminated plans.

The effective termination discount rate will depend on actual market rates of return for risk-free securities on the date of termination. As market discount rates are variable, the table below shows a range for the hypothetical termination liability based on the lowest and highest interest rates observed during an approximate 19-month period from 12 months before the valuation date to 7 months after.

Market Value of Assets (MVA)	Hypothetical Termination Liability[1,2] @ 1.75%	Funded Status	Unfunded Termination Liability @ 1.75%	Hypothetical Termination Liability[1,2] @ 3.25%	Funded Status	Unfunded Termination Liability @ 3.25%
$69,748	$152,039	45.9%	$82,291	$109,061	64.0%	$39,313

[1] The hypothetical liabilities calculated above include a 5% mortality contingency load in accordance with Board policy. Other actuarial assumptions can be found in Appendix A of the Section 2 report.

[2] The current discount rate assumption used for termination valuations is a weighted average of the 10-year and 30-year U.S. Treasury yields where the weights are based on matching asset and liability durations as of the termination date. The discount rates used in the table are based on 20-year Treasury bonds, rounded to the nearest quarter percentage point, which is a good proxy for most plans. The 20-year Treasury yield was 2.31% on June 30, 2019, and was 1.83% on January 31, 2020.

In order to terminate the plan, you must first contact our Retirement Services Contract Unit to initiate a Resolution of Intent to Terminate. The completed Resolution will allow the plan actuary to give you a preliminary termination valuation with a more up-to-date estimate of the plan liabilities. CalPERS advises you to consult with the plan actuary before beginning this process.

Participant Data

The table below shows a summary of your plan's member data upon which this valuation is based:

	June 30, 2018	June 30, 2019
Reported Payroll	$116,700	$182,112
Projected Payroll for Contribution Purposes	$126,595	$197,553
Number of Members		
Active	2	3
Transferred	0	0
Separated	0	0
Retired	0	0

List of Class 1 Benefit Provisions

This plan has the additional Class 1 Benefit Provisions:

- None

Plan's Major Benefit Options

Shown below is a summary of the major optional benefits for which your agency has contracted. A description of principal standard and optional plan provisions is in Section 2.

	Benefit Group	
Member Category	Misc	
Demographics		
Actives	Yes	
Transfers/Separated	No	
Receiving	No	
Benefit Provision		
Benefit Formula	2% @ 62	
Social Security Coverage	No	
Full/Modified	Full	
Employee Contribution Rate	6.75%	
Final Average Compensation Period	Three Year	
Sick Leave Credit	Yes	
Non-Industrial Disability	Standard	
Industrial Disability	No	
Pre-Retirement Death Benefits		
Optional Settlement 2	Yes	
1959 Survivor Benefit Level	Indexed	
Special	No	
Alternate (firefighters)	No	
Post-Retirement Death Benefits		
Lump Sum	$500	
Survivor Allowance (PRSA)	No	
COLA	2%	

PEPRA Member Contribution Rates

The California Public Employees' Pension Reform Act of 2013 (PEPRA) established new benefit formulas, final compensation period, and contribution requirements for "new" employees (generally those first hired into a CalPERS-covered position on or after January 1, 2013). In accordance with Government Code Section 7522.30(b), "new members … shall have an initial contribution rate of at least 50% of the normal cost rate." The normal cost rate is dependent on the plan of retirement benefits, actuarial assumptions and demographics of the risk pool, particularly members' entry age. Should the total normal cost rate change by more than 1% from the base total normal cost rate, the new member rate shall be 50% of the new normal cost rate rounded to the nearest quarter percent.

The table below shows the determination of the PEPRA member contribution rates effective July 1, 2021, based on 50% of the total normal cost rate as of the June 30, 2019 valuation.

		Basis for Current Rate		Rates Effective July 1, 2021			
Rate Plan Identifier	**Benefit Group Name**	**Total Normal Cost**	**Member Rate**	**Total Normal Cost**	**Change**	**Change Needed**	**Member Rate**
27096	Miscellaneous PEPRA Level	13.735%	6.75%	14.34%	0.605%	No	6.75%

Section 2

CALIFORNIA PUBLIC EMPLOYEES' RETIREMENT SYSTEM

Risk Pool Actuarial Valuation Information

Section 2 may be found on the CalPERS website (www.calpers.ca.gov) in the Forms and Publications section

The California Employers' Pension Prefunding Trust

Prefund future pension costs with a CalPERS trust fund

The CEPPT is designed to give public agencies who offer defined benefit pensions the opportunity to save money by investing now for their future pension contributions.

How can you use the CEPPT?

- Prefund normal cost contributions and unfunded liability payments
- Make additional discretionary payments
- As a contingency fund for future volatility

Advantages

The CEPPT is designed to save you money and stabilize your budget by offering:

- CalPERS investment management
- Low total participation costs
- Efficient and effective customer outreach and support
- Simple and streamlined account transactions

Participation Costs

The CEPPT is a self-funded, not-for-profit program where participating employers pay for the total cost of trust operation. The CEPPT has an all-inclusive fee rate of 25 basis points (0.25 percent) of employer account assets under management. There are no other fees. All employers pay the same fee rate, which may be higher or lower in the future.

> "The CEPPT program gives us a powerful tool to help ensure the stabilization and sustainability of our long-term retirement benefits. With its low fees, flexibility, risk diversification, and professional staff, it is the perfect program to save money for our agency and the ratepayers we serve."
>
> – *Robert Housley, Director of Finance and Human Resources Midway City Sanitary District*

The CEPPT is an employer pension contribution prefunding trust fund administered by CalPERS that was established by Senate Bill 1413 and formed under Section 115 of the Internal Revenue Code.

Figures as of October 2020

Portfolio Options

The CEPPT offers two broadly diversified, risk-efficient, and cost-effective investment options. You may choose one or both investment options based on your investment time horizon. You control the funding decisions as contributions and disbursements are voluntary.

CEPPT Portfolios	Strategy 1	Strategy 2
Expected Net Rate of Return	5.00%	4.00%
Standard Deviation	8.2%	5.2%

Asset Classification	Benchmark	Strategy 1	Strategy 2
Global Equity	MSCI ACWI IMI (Net)	40% ±5%	14% ±5%
Fixed Income	Bloomberg Barclays U.S. Aggregate Bond Index	47% ±5%	73% ±5%
Global Real Estate (REITs)	FTSE EPRA/ NAREIT Developed Liquid (Net)	8% ±5%	8% ±5%
Treasury Inflation Protected Securities (TIPS)	Bloomberg Barclays US TIPS Index (Series L)	5% ±3%	5% ±3%
Liquidity	91-Day Treasury Bill	0% +2%	0% +2%

Contact Us

For more information, visit us online at **www.calpers.ca.gov/ceppt**, call a CEPPT program representative at (916) 795-9071, or email **CEPPT4U@calpers.ca.gov**.

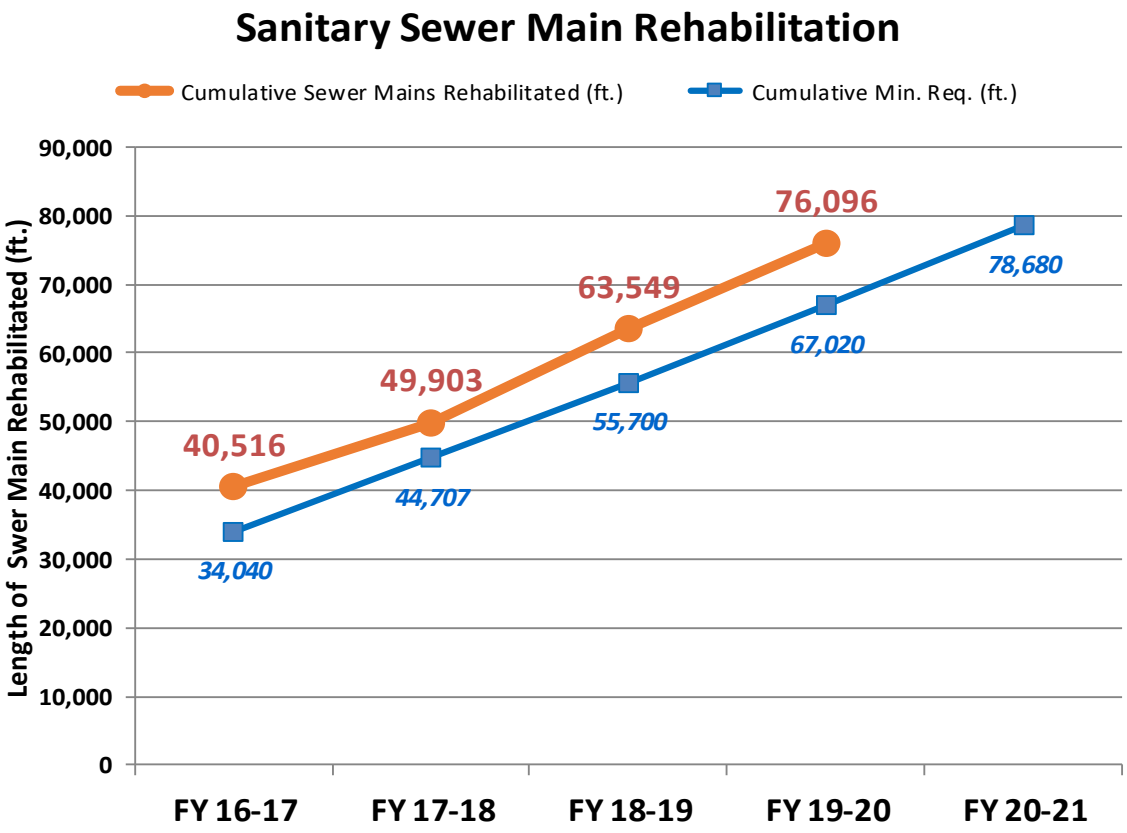
Ⓓ October 2020

CalPERS

Sanitary Sewer Main Rehabilitation

The minimum requirement, per the USEPA Consent Decree, is to complete rehabilitation of 67,020 feet of sewer main by the end of FY 2019-20 and to continue at no less than the feet of sewer main stated in the Consent Decree Appendix based on a cumulative total (e.g., 34,040 feet by June 30, 2017; 44,707 feet by June 30, 2018; etc.) for the duration of the Consent Decree.

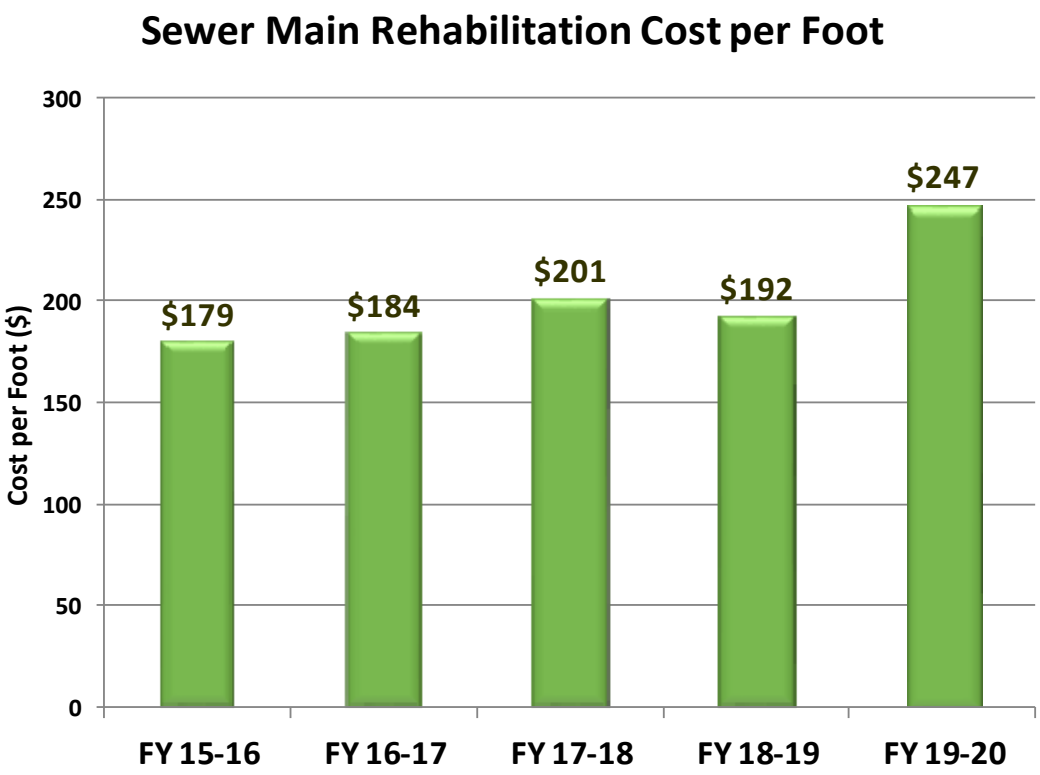
TABLE 14



ASSESSMENT: As shown in Table 14, the District's cumulative rehabilitation total of 76,096 feet at the end of FY 19-20 is 14% above the required cumulative rehabilitation total of 67,020 feet. The current total is already 97% of the Consent Decree requirement for FY 20-21 with more than 11,000 feet of rehabilitation work scheduled and still to be completed.

The cost to complete the required rehabilitation of sewer main is subject to market conditions and other external factors. Staff continues to adjust projects to try to stay one step ahead of the market to keep construction costs as low as possible.

TABLE 15



ASSESSMENT: The sewer main rehabilitation cost per foot increased to $247 for FY 2019-20 due to sections of sewer work requiring open trench replacement instead of the less costly pipe bursting method due to necessary capacity upsizing and/or utility conflicts. Engineering staff will continue to try to stay ahead of the required cumulative rehabilitation total and manage upcoming projects accordingly to try to protect against the high construction cost increases that our neighboring agencies are experiencing.

2:30 – 3:15 P.M.

TIERED PRICING

The Board will discuss considering tiered pricing.

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PUMP STATION COSTS

Burlingame Pump Station
Serving 130 parcels

O&M Costs (Maint., Repairs, Electricity, Comm.)		
FY 15-16	$	4,100.03
FY 16-17	$	5,357.25
FY 17-18	$	10,373.59
FY 18-19	$	50,027.66
FY 19-20	$	2,961.23
TOTAL	$	72,819.76
AVERAGE	$	14,563.95

Canon Pump Station
Serving 23 parcels

O&M Costs (Maint., Repairs, Electricity, Comm.)		
FY 15-16	$	21,505.77
FY 16-17	$	5,705.23
FY 17-18	$	7,037.25
FY 18-19	$	12,760.25
FY 19-20	$	27,987.27
TOTAL	$	74,995.77
AVERAGE	$	14,999.15

Capital Projects	**Estimate**	
Burlingame PS upgrades (completed 11-2014)	$	256,000
Forcemain upgrades (est.)*	$	1,000,000
Canon PS Replacement (est.)	$	700,000

**Assume 50% split between Burlingame PS & Canon PS.*

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Special Municipal Sewer Tax Rate
Tax Information
Municipal Services Special Tax Rate
Special Municipal Sewer Tax Rate
City of Piedmont » Services & Departments » Finance » Tax Information » Special Municipal Sewer Tax Rate

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Special Municipal Sewer Tax Rate

Each year the City Council decides whether to levy the Special Municipal Sewer Tax, and if so, at what rate. This tax is levied on all improved parcels in the City of Piedmont based upon their use and parcel size.

The tax rates for the fiscal year beginning on July 1, 2019, and running through June 30, 2020 are as follows:

Single Family Residence

0 to 4,999 sq. ft.	$599
5,000 to 9,999 sq. ft.	$682
10,000 to 14,999 sq. ft.	$786
15,000 to 20,000 sq. ft.	$917
Over 20,000 sq. ft.	$1,079

Commercial Properties

0 to 10,000 sq. ft.	$1,079
Over 10,000 sq. ft.	$1,487

Multi-Family Residence

Per unit	$499

Parcels Divided by Tax Code Area Line

$599

For more information, please contact the Finance Director at (510) 420-3045.

Print This Page

PUBLIC WORKS

Department of Public Works

Sewer Service Fees

Sewer Service Fees (SSF) effective July 1, 2019. SSFs are established to cover the cost of the operation, maintenance, and capital improvements to the sanitary sewer system. The rate for each user category is based on water usage and discharge factor, with a billing cap for residential customers. A description of the various user categories can be found in the Berkeley Municipal Code Section 17.04.010. SSFs are billed on the EBMUD water bill.

SSF RESIDENTIAL RATES		
Type of Dwelling	**Rate per Water Unit**	**Bi-Monthly Billing Cap**
Single Family - 1 dwelling unit	$7.14	$185.64
Duplex - 2 dwelling units	$7.61	$289.18
Triplex - 3 dwelling units	$7.71	$377.79
Quadruplex - 4 dwelling units	$8.05	$483.00
Multiple Family - 5+ dwelling units	$7.84	None
SSF NON-RESIDENTIAL RATES		
Category	**Rate per Water Unit**	**Bi-Monthly Billing Cap**
0.60 Discharge Factor	$4.82	None
0.70 Discharge Factor	$5.60	None
0.80 Discharge Factor	$6.40	None
0.90 Discharge Factor	$7.21	None

COMMENTS OF DWIGHT MERRILL ON TIERED RATES FOR MAR. 6TH 2021 LONG RANGE PLANNING SESSION

I am opposed to differential rates for three basic reasons.

First, sanitary sewers provide a general benefit to the entire community, not specific individuals. We benefit when we are connected to the sanitary sewer, but we also benefit when our neighbor is connected to the sewer, so we don't have to suffer downwind from his outhouse. The entire community reaps benefits from everyone being connected—better sanitation, better cleanliness. It seems a bit misguided to assess individuals differently when the most important benefit is not to the individual but to the entire community.

Second, it is very difficult to decide a "fair" allocation of costs. Should a customer far from Pt. Isabel pay more than a customer near Pt. Isabel because sewage flows through more miles of pipe which is costly to maintain? On the other hand, those up on the hills could argue that those down below should pay more because they are being protected from sewage flows from above. Should we charge customers in the Blakemont Slide area more since the mains in that area cost more to maintain than those in less geologically active areas? Should a customer with a long frontage pay more than a customer with a narrow lot because there is more main in front of the larger lot? Many differential costs are consequences of how we decided to build our system, not a result of each customer's initial situation, so it seems unfair to assess someone for our decisions. And even if we could come up with a "fair" allocation, billing and administration could be a continuing, expensive effort for our staff.

Third, there is considerable history over both Canon and Burlingame pump stations. Although the details of the creation may or may not be accessed in our past minutes, it is apparent that Canon was paid for by the developers of some of the properties using it. I recall that there was a reserve that the county was holding on to long after the bond issued to pay for the station had been paid off by the homeowners on their property tax bills. It took considerable effort on the part of Stege to force the county to return the sequestered funds. Burlingame must have been constructed right after WWII when Bay Area communities started treating sewage; before that it was simply dumped into the Bay. Federal Clean Water funds were probably used to construct this small pump station. Since others paid for these initial installations, and Stege accepted them without any caveat that there would be an extra charge for the service, I don't think we should renege on our acceptance. This approach seems to be the standard in our surrounding communities—Novato, West County Wastewater, Alameda.

We do have some differential in our rates. We are phasing in a different rate for multi-family units as opposed to single family dwellings. Here we have very clear evidence that a multi-family unit uses less water on average than a single family unit, and such multi-family are in higher density, thus requiring fewer miles of main to maintain per unit. This is also common industry practice, and for many years Stege had a reduced rate for apartments, so we are just returning to past practice. A small component of our rate is based on property tax, and here the more valuable property pays more, which is reasonable since the property value being protected by the sanitary sewer system is greater.

A final thought on Canon. The current upgrades and costs are being determined by Stege, not an independent third party. The 24 or so active connections could go to grinder pumps (or grinder in tandem with a positive displacement pump) and a two inch force main, eliminating the need for a pump station. The high cost of Canon is our decision, not really the customers.

One situation we might consider for a differential rate is the area over the crest of Rifle Range Road, currently served by Richmond, but pumped into our sewers. We could offer these potential customers a lower rate than Richmond is charging them, but a higher rate than other Stege customers to pay for the pump station maintenance and repair of the sliding pipes on Wildcat Road.

In conclusion, I think tiered rates are in general a bad idea. Charging different customers different rates based on small cost differences when everyone is receiving the major benefits of sanitary sewers is never going to be perceived as fair.

3:15 – 3:45 P.M.

STRATEGIC PLAN

The Board will review and discuss the plan.

STEGE SANITARY DISTRICT

STRATEGIC PLAN

APRIL 2020

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STEGE SANITARY DISTRICT
STRATEGIC PLAN

I. MISSION

To protect public health and the environment for the communities it serves through planning and operation of a safe, efficient, and economical wastewater collection system.

II. VISION

The District will continue to:

a. Protect public health and the environment
b. Meet all legal and regulatory requirements
c. Work in a safe and efficient manner
d. Provide excellent customer service
e. Employ our proactive asset management methods to provide a sustainably reliable collection system and reduce sewer system overflows (SSOs)
f. Utilize a Pay-as-you-go (PayGo) with existing funds rather than borrowed financial policy for maintenance and construction including prudent, justifiable reserves
g. Manage resources to accomplish our mission while maintaining a rate structure among the lowest in the San Francisco Bay Area
h. Provide a safe, enjoyable, and rewarding work environment that recognizes the worth and value of our employees
i. Use governance and transparency practices that qualify for the Special District Leadership Foundation District of Distinction Accreditation and the District Transparency Certificate of Excellence
j. Anticipate and plan for future changes
k. Keep customers informed through newsletters, public appearances, website and other appropriate outreach

III. VALUES

The District will adhere to the following set of core values in all aspects of operations:

a. Safety
b. Fiscal Responsibility
c. Fairness

d. Ethical and Transparent Governance
e. Professional Excellence
f. Education and Training
g. Appropriate, Safe and Secure Up-To-Date Technology and Equipment
h. Continued Improvement
i. Sustainable Environmental Practices (Reduce, Reuse, Recycle)

IV. GOALS/OBJECTIVES & WORK PLAN

1. Comply with State and Federal Regulations
   a. Meet United States Environmental Protection Agency Consent Decree requirements including submittal of an Annual Report by September 30th of each year
   b. Meet State of California Wastewater Discharge Requirements (WDR) requirements including electronic reporting of Sanitary Sewer Overflows (SSOs)
   c. Meet Regional Water Quality Control Board (Region 2) Sewer System Management Plan (SSMP) requirements including a documented self-audit every 2 years
   d. Complete a comprehensive legal review and update of the District's Ordinance Code by June 2028 and at least every ten (10) years thereafter
   e. Maintain a safety sensitive commercial driver program which includes a substance abuse policy for all employees who are required to possess a class B license
   f. Work with professional associations such as CWEA, CASA, CSDA and BACWA that monitor and advocate on behalf of wastewater agencies before state and federal regulators on pending and proposed legislation or regulations
2. Maintain and Improve Infrastructure
   a. Perform proactive maintenance and assessment of the sewer system through cleaning, CCTV inspection and chemical root control to eliminate "preventable" SSOs
   b. Update and implement sewer system master plan to prioritize sewer replacement, funding, and maintain a sewer system life cycle of 60+ years by June 2020 and at least every two (2) years thereafter
   c. Update and maintain the District's Asset Management and Data Collections Program which includes the Geographic Information System (GIS) and Computerized Maintenance Management System (CMMS)
   d. Work with the Regional Private Sewer Lateral (PSL) and Regional Technical Support Program (RTSP) to facilitate property owner replacement of leaky laterals and elimination of cross connections
   e. Conduct risk assessments for cyber security and natural disasters by June 2023 and at least every five (5) years thereafter
   f. Conduct risk assessments for pump stations, force mains, and siphon by June 2020

and at least every five (5) years thereafter

g. Work with local agencies to develop growth strategies that ensure necessary sewer collection infrastructure is prudently funded and installed
h. Annually review the District's Emergency Management Plan

3. Ensure Financial Stability and Efficiency
   a. Annually review the Sewer Service Charge
   b. Conduct a Financial Plan and Rate Study by June 2024 and at least every five (5) years thereafter
   c. Annually develop and implement a financial budget by June of each year
   d. Annually undertake an independent financial audit by December of each year
   e. Change auditors by June 2023 and at least every five (5) years thereafter
   f. Annually review the District's Connection Charge by January of each year
   g. Annually review the District's Long Term Financial Plan by June of each year
   h. Annually review the District's Working Capital and Reserve Policy by June of each year
   i. Annually review the District's Investment Policy by July of each year
   j. Conduct a retiree medical actuarial evaluation by March of every even year
   k. Annually compare service rates with East Bay agencies by January of each year
   l. Monthly Board review of financial statements
   m. Establish and follow a plan to fully fund retirement liabilities
   n. Annually review the District's San Pablo Avenue Specific Plan Impact Fee by June of each year
4. Provide a Safe and Rewarding Work Environment that Recognizes the Worth and Value of Employees
   a. Provide employees with the proper tools, resources and technology necessary to perform their duties safely, effectively and efficiently
   b. Annually review employee salary and benefits by July of each year and conduct a survey vs. comparable agencies by June 2023 and at least every five (5) years thereafter
   c. Encourage employee participation in professional organizations
   d. Provide effective training, professional development and quality educational opportunities at District expense to promote professional development and certification
   e. Provide a flexible work schedule as a benefit for employees to support employee morale, retention and recruitment
   f. Provide an incentive award program and safety awards to recognize employee achievements

g. Maintain a succession plan that will identify and cross-train back-up staff to mitigate the extended absence, loss or retirement of key employees and maintain institutional and technical knowledge
h. Provide a safety and wellness program that promotes a safe work environment and good health

5. Maintain and Improve Community Outreach and Communication
   a. Keep the District website updated with current information that maintains a high level of transparency for the public
   b. Publish the Endeavor Newsletter twice a year, mail to every District resident and provide copies to service area libraries, community centers, senior centers, cafés, coffee shops, donut shops, & waiting rooms
   c. Maintain a 24 hour "live" person contact phone number
   d. Send a customer service satisfaction survey after each service call to track fulfillment of expectations
   e. Participate in community events such as the 4th of July Fair
   f. Provide educational pamphlets, door hangers and notices, such as Proposition 218 notices, to inform the public of rate changes, proper disposal of "flushable" wipes & other non-flushables, Fats, Oils & Grease (FOG) disposal, Underground Service Alert (USA) damage prevention services, backflow prevention device (BPD) installation and maintenance, actions that can help prevent SSOs, construction notices and new owner information packets
   g. Work cooperatively with other agencies within and around our service area
   h. Maintain a presence on social media and online communities such as Facebook, Nextdoor and Yelp
   i. Maintain governance and transparency practices that qualify for the Special District Leadership Foundation District of Distinction Accreditation and the District Transparency Certificate of Excellence