1902 - Serving Our Community for over 120 Years - 2023

WEST BAY SANITARY DISTRICT
AGENDA OF BUSINESS
REGULAR MEETING OF THE DISTRICT BOARD
WEDNESDAY, JANUARY 11, 2023 AT 7:00 P.M.
RONALD W. SHEPHERD ADMINISTRATION BUILDING,
500 LAUREL STREET, MENLO PARK, CALIFORNIA 94025

Board Members
Fran Dehn, President
David Walker, Secretary
Roy Thiele-Sardiña, Treasurer
Edward P. Moritz, Member
George Otte, Member

General Manager
Sergio Ramirez

District General Counsel
Anthony Condotti, Esq.

AGENDA OF BUSINESS

NOTICE OF PUBLIC PARTICIPATION BY TELECONFERENCE or ZOOM ONLY

Pursuant to California Assembly Bill 361, members of the West Bay Sanitary District Board of Directors and Staff may participate in this meeting via a teleconference. In the interest of reducing the spread of COVID- 19, members of the public are allowed to participate telephonically only, and may submit comments in advance by email addressed to info@westbaysanitary.org by 4:00 p.m. on Wednesday, January 11th.

To participate by telephone or Zoom meeting, public comments can be made by joining Zoom meeting at:
https://us06web.zoom.us/j/87861435703?pwd=WUhqeEpmZnRlajhEdFh6NGROc2VkUT09
Meeting ID: 878 6143 5703 Passcode: 938220
or by phone, call: 1-669-900-6833 Meeting ID: 878 6143 5703 Passcode: 938220

Following receipt of public comment and open session items, the Board will adjourn to closed session. Reportable action, if any, will be available upon inquiry within twenty-four (24) hours.

NOTE: The Board may take action on any agendized item unless specifically designated a "discussion" item or a "report."

1. Call to Order and Roll Call

2. Communications from the Public

3. Consent Calendar

Matters listed under this item are considered routine and will be enacted by one motion. The motion, seconds, and vote are applicable to any included resolutions and recorded accordingly. There will be no separate discussion of these items unless specifically requested by a member of the Board.

A. Approval of Minutes for Regular meeting December 14, 2022 Pg. 3A-1
B. Approval of the Financial Activity Report Authorizing Payment of Certain Bills and Salaries and Consideration of Other Financial Matters thru December 31, 2022 Pg. 3B-1

C. WBSD Operations and Maintenance Report – December 2022 Pg. 3C-1
D. Town of Los Altos Hills Operations and Maintenance Report for Work Performed by WBSD – December 2022 Pg. 3D-1
E. Town of Woodside Operations and Maintenance Report for Work Performed by WBSD – December 2022 Pg. 3E-1
F. Consider Approval of Resolution Authorizing District to Implement Teleconferenced Public Meetings Pursuant to Assembly Bill 361 Pg. 3F-1

4. General Manager's Report Pg. 4-1

5. Consider Authorizing General Manager to Enter into an Agreement for the District's 2023 Master Plan with V.W. Housen & Associates Pg. 5-1

6. January 11th Update Report on District Response to Corona Virus Pg. 6-1

7. Discussion and Direction on Sharon Heights Recycled Water Plant Pg. 7-1

8. Discussion and Direction on Bayfront Recycled Water Project and Status Update Pg. 8-1

9. Report and Discussion on South Bayside Waste Management Authority (SBWMA) Pg. 9-1

10. Report and Discussion on Silicon Valley Clean Water (SVCW) Plant Pg. 10-1

11. Closed Session

A. PUBLIC EMPLOYEE PERFORMANCE EVALUATION/CONF. WITH LABOR NEGOTIATORS
Agency designated representatives: Board President/Legal Counsel
Unrepresented employee: General Manager

B. PUBLIC EMPLOYMENT/CONFERENCE WITH LABOR NEGOTIATORS
Agency Designated Representatives: Sergio Ramirez; Tony Condotti
Employees: All Represented and Unrepresented Employees

C. Property: 1101 Altschul Avenue
Agency negotiator: General Manager/General Counsel
Negotiating parties: District and Los Lomitas Elementary School District
Under negotiation: Price/terms of payment for Avy Altschul Pump Station Easement

12. Consider to Approve End-of-Year Goals and Objectives Performance Compensation for the General Manager

13. Comments or Reports from Members of the District Board and Consider Items to be Placed on Future Agenda

14. Adjournment

The West Bay Sanitary District does not discriminate against persons with disabilities. Upon request, the agenda and agenda packet can be provided in a format to accommodate special needs. If you require a copy of the agenda or related materials in an alternative format to accommodate a disability, or if you wish to attend this public meeting and will require special assistance or other special equipment, please call the District at (650) 321-0384 at least five days in advance and we will make every reasonable attempt to provide such an accommodation.

1902 - Serving Our Community for over 115 Years - 2022

WEST BAY SANITARY DISTRICT
MINUTES OF THE REGULAR MEETING OF THE DISTRICT BOARD
WEDNESDAY, DECEMBER 14, 2022 AT 7:00 P.M.

1. Call to Order

President Dehn called the meeting to order at 7:01 PM

Roll Call

BOARD MEMBERS PRESENT:	President Dehn, Secretary Walker, Director Moritz, Director Otte
BOARD MEMBERS ABSENT:	Treasurer Thiele-Sardiña
STAFF MEMBERS PRESENT:	Ramirez, Fisher, and Reese and Condotti by Zoom
Others Present:	Rich Laureta – Freyer & Laureta, By Zoom: Dave Hilton and Rick Simonson – HF&H, Tammy DeBene – Recology, Sheldon Chavan – Chavan & Associates, Eileen McLauhglin - CCR

2. Communications from the Public: None.

3. Public Hearing: Consideration of Proposed Solid Waste/Recycling Collection Rates for the Year 2023

Motion to Open by: Moritz 2nd by: Walker Vote: AYE: 4 NAY: 0 Abstain: 0

Discussion/Comments: General Manager Ramirez reported that a slight increase of rates for the residential 20, 32, and 64 gallon carts and 32 and 64 gallon carts for commercial customers is necessary. He also reported that no protest letters were received.

Motion to Close by: Moritz 2nd by: Walker Vote: AYE: 4 NAY: 0 Abstain: 0

4. Consideration of Resolution to Approve Solid Waste/Recycling Collection Rates and "Rates for Other Services" Effective January 1, 2023

Motion to Approve by: Walker 2nd by: Moritz Vote: AYE: 4 NAY: 0 Abstain: 0

Discussion/Comments: None.

5. *Consent Calendar*

CONSIDERATION OF ITEM(S) REMOVED FROM THE CONSENT CALENDAR

Discussion/Comments: None.

A. Approval of Minutes for Regular meeting November 9, 2022
B. Approval of the Financial Activity Report Authorizing Payment of Certain Bills and Salaries and Consideration of Other Financial Matters thru November 30, 2022
C. WBSD Operations and Maintenance Report – November 2022
D. Town of Los Altos Hills Operations and Maintenance Report for Work Performed by WBSD – November 2022
E. Town of Woodside Operations and Maintenance Report for Work Performed by WBSD – November 2022
F. Consider Approval of Resolution Authorizing District to Implement Teleconferenced Public Meetings Pursuant to Assembly Bill 361
G. Consider Approving Resolution of Intention to Annex Certain Territory (35 Possum Lane, Portola Valley) to the West Bay Sanitary District On-Site Wastewater Disposal Zone and to Establish the Date and Time of Public Hearing
H. Consider Approving Resolution of Intention to Annex Certain Territory (115 Sausal Drive, Portola Valley) to the West Bay Sanitary District On-Site Wastewater Disposal Zone and to Establish the Date and Time of Public Hearing
I. Consider Authorizing the General Manager to Issue Class 3 Sewer Permit No. 1627 for the Construction of Wastewater Facilities for 0 Alpine Road, Unincorporated Santa Clara, California
J. Consider Resolution Accepting Deed of Easement Pursuant to Class 3 Sewer Permit No. 1607 for Construction of Wastewater Facilities for 4 Navajo Pl, Portola Valley, California
K. Consider Accepting Sewer Facilities Constructed Pursuant to Class 3 Sewer Permit No. 1607 for Construction of Wastewater Facilities for 4 Navajo Place, Portola Valley, California
L. Bank of the West Monthly Investment Portfolio Statements
M. Consider Resolution Accepting Deed of Easement Pursuant to Class 3 Sewer Permit No. 1024 for Construction of Wastewater Facilities for 214 Grove Drive, Portola Valley, California

Motion to Approve by: Moritz 2nd by: Otte Vote: AYE: 4 NAY: 0 Abstain: 0

6. General Manager's Report

Discussion/Comments: General Manager Ramirez reported flow monitoring began in November. He reported the Master Plan Committee met on December 7th to review the proposal for the 2023 Master Plan. He also reported the Bayfront Park Sewer Improvements project has been awarded to Ranger Pipeline. He informed the Board recruitments for Project Manager and Associate Engineer are underway. He continued to report that the Board should consider cancelling the December 28th Board meeting due to a lack of a quorum. Board consensus was to cancel December 28th Board meeting. The next regular meetings are January 11th and January 25th. Lastly, General Manager Ramirez reported the annual Almanac Newsletter appeared in the December 9th edition and coincided with the District's 120th anniversary on December 10th. The complete General Manager's written report is in the December 14th, 2022 agenda packet.

7. Discussion and Direction with the Finance Advisory Committee

Discussion/Comments: Director Moritz reported on the recent meeting which included a discussion and review of the annual audit, report by Bank of the West on investments, and transferring funds from LAIF to Bank of the West.

8. Consider Adopting the District's Audited Financial Statements for the Year Ended June 30, 2022

Motion to Approve by: Moritz 2nd by: Walker Vote: AYE: 4 NAY: 0 Abstain: 0

Discussion/Comments: District Finance Manger Fisher and Sheldon Chavan of Chavan & Associates presented the FY 2021-22 audit highlights to the Board.

9. Consider Approving the Financial Statements FY 2021-22, Year Ending 6/30/2022

Motion to Approve by: Moritz 2nd by: Walker Vote: AYE: 4 NAY: 0 Abstain:

Discussion/Comments: Finance Manager Fisher reported on the District's Unaudited Financial Statements for the year ending June 30, 2022. She reported the District had $182,036,752 in total assets as of June 30, 2022, with total liabilities of $19,617,070, for a Net Position of $159,939,775, with Deferred Outflows and Inflows of Resources of $242,338 and $2,722,245, respectively. In Fiscal Year 2021-22, the District had a gross Revenue of $41,185,957 and gross Expenditures of $25,247,335, for a total $15,938,622, increase in Net Position, including non-operating income and expense, pension adjustments, and prior period adjustments, through the year ending June 30, 2022.

10. Consider Approving the Financial Statements FY 2022-23, 1st Quarter Ending 9/30/2022

Motion to Approve by: Moritz 2nd by: Otte Vote: AYE: 4 NAY: 0 Abstain: 0

Discussion/Comments: Finance Manager Fisher reported on the Unaudited Financial Statements for the year ending September 30, 2022, including Revenue, Expenses, and Changes in Net Position is reported by fund to better view the primary operations and other activities in; General, Capital, Solid Waste, and Recycled Water Funds.

The District had $181,691,641 in total assets as of September 30, 2022, with total liabilities of $20,138,695, for a Net Position of $159,034,226, with Deferred Outflows and Inflows of Resources of $203,525 and $2,722,245, respectively. The District had gross Revenue of $8,185,622 and gross Expenditures of $9,091,171, for a total $905,549 decrease in Net Position, including non-operating income and expense, through the quarter ending September 30, 2022 for all Funds. The District also expended $216,652 on capital construction.

11. Consider Approval of Additional Contributions from LAIF to the Reserves

Motion to Approve by: Moritz 2nd by: Walker Vote: AYE: 4 NAY: 0 Abstain: 0

Discussion/Comments: Finance Manager Fisher reported the Finance Committee recommended the District transfer $10M from LAIF to the investment reserves account at Bank of the West.

12. Consider Resolution to Elect to the District Board, President, and Secretary, and Appoint a Treasurer and Consider Appointment of Committee Appointees and Alternates

Motion to Approve by: Moritz 2nd by: Walker Vote: AYE: 4 NAY: 0 Abstain: 0

Discussion/Comments: The Board elected: Fran Dehn, President; David Walker Secretary; Roy Thiele-Sardiña, Treasurer; George Otte, SVCW Commissioner; Ned Moritz, SVCW Alternate; Fran Dehn, SBWMA Board of Directors, George Otte, Alternate SBWMA Board; Ned Moritz and Roy Thiele-Sardiña, Finance Advisory Committee; Fran Dehn and Roy Thiele-Sardiña, Recycled Water Advisory Committee; George Otte and David Walker, Master Plan Committee.

13. Consider Authorizing the General Manager to Issue the Call for Bids for the District's Capital Improvement Project – Point Repairs (High Frequency Pipeline Replacement and Repairs

Motion to Approve by: Moritz 2nd by: Walker Vote: AYE: 4 NAY: 0 Abstain: 0

Discussion/Comments: General Manager Ramirez reported Freyer & Laureta has identified $12.5M in point repairs over 3 phases. There is currently $2M budgeted for the project, however, $4.2M is needed for the first phase.

14. Consider Authorizing General Manager to Extend the Agreement for Engineering Staff Augmentation Services with Freyer & Laureta, Inc

Motion to Approve by: Moritz 2nd by: Otte Vote: AYE: 4 NAY: 0 Abstain: 0

Discussion/Comments: General Manager Ramirez reported this agreement is necessary to assist the District with engineering services until a Project Manager and Associate Engineer are hired.

15. December 14th Update Report on District Response to Corona Virus

Discussion/Comments: General Manager Ramirez reported staff is currently updating the COVID-19 policy and accessing the travel outside of state and required testing section.

16. Consider Resolution Authorizing General Manager to Submit for an increase to a Clean Water State Revolving Fund Application for the "Avy Altschul Pump Station" and Approve the Reimbursement Resolution to Manage the Funding if Awarded

Motion to Approve by: Otte 2nd by: Walker Vote: AYE: 4 NAY: 0 Abstain: 0

Discussion/Comments: General Manager Ramirez reported the Board previously approved to apply for $500,000 in an SRF application for the Aby Altschul Pump Station project. Costs are estimated at $750,000 to $950,000. General Manager Ramirez asked to increase the application request to $950,000.

17. Report and Discussion on Sharon Heights Recycled Water Plant

Discussion/Comments: General Manger Ramirez reported the plant treated 5.9 MGD and delivered 310,000 gallons. He also reported the PG&E application for the Avy Altschul Pump Station is approximately $18,000 and design for the project is nearly complete.

18. Consider Approval of an Agreement between West Bay Sanitary District and the City of Menlo Park Regarding Provision of Recycled Water Service within the Menlo Park Municipal Water District Service Area and Authorize the General Manager to Execute the Agreement

Motion to Approve by: Otte 2nd by: Walker Vote: AYE: 4 NAY: 0 Abstain: 0

Discussion/Comments: General Manager Ramirez reported the City of Menlo Park has approved the Willow Village Project and has agreed to designate West Bay as the recycled water provider in their water service area. He continued to report that approving this agreement with the City will allow the District to serve as the recycled water purveyor.

19. Discussion and Direction on Bayfront Recycled Water Project and Status Update

Discussion/Comments: General Manager Ramirez reported that permitting is underway for the project. He also reported that now that the Willow Village project is approved by the City there is a need to begin project management to obtain the 30% design required by a design-built team.

20. Report & Discussion on South Bayside Waste Management Authority (SBWMA)

Discussion/Comments: President Dehn reported on the legislative meeting and gave a summary on legislative items. She also reported the recent Board meeting in which the successor agreement for the operation of Shoreway Environmental Center is commencing January 1, 2024 and was awarded to ACI.

21. Report, Discussion & Direction on Silicon Valley Clean Water (SVCW) and Discussion on SVCW CIP Program and Financing

Discussion/Comments: Director Otte reported the gravity pipeline is complete for the RESCU project. The Front of plant project is expected to be completed in March of 2023 and pump station improvements are estimated for completion in October 2023. He also reported on some of the project highlights which include progressive design-build, a risk register used by SVCW, and the low interest financing for the projects.

22. Closed Session

Entered closed session at 8:54 p.m. Left closed session at 9:24 p.m.

A. PUBLIC EMPLOYMENT/CONFERENCE WITH LABOR NEGOTIATORS
Agency Designated Representatives: Sergio Ramirez; Tony Condotti
Employees: All Represented and Unrepresented Employees

B. PUBLIC EMPLOYEE PERFORMANCE EVALUATION/CONF. WITH LABOR NEGOTIATORS
Agency designated representatives: Board President/Legal Counsel
Unrepresented employee: General Manager

Reportable action: None.

23. Comments or Reports from Members of the District Board and Consider Items to be Placed on Future Agenda

Discussion/Comments: Finance Manager Fisher will present a detailed summary of personnel and the 5-year cash flow projections at a January meeting. In addition, the Board will consider the approval of the Master Plan 2023 consultant on January 11th.

24. Adjournment Time: The meeting was adjourned at 9:26 PM

WEST BAY SANITARY DISTRICT
Financial Activity Report
December 2022

Date: ***January 11, 2023***

To: ***Board of Directors***

From: ***Annette Bergeron, Personnel & Accounting Specialist***
Debra Fisher, Finance Manager

Subject: ***Approve Monthly Financial Activity Report***

Financial Activity for the month of December 2022.

	Receipt Summary:		
	Commercial Deposits		192,378.98
	Deposits in Transit/(Prior Period)		(120.00)
	Credit Cards		6,091.13
	Franchise Fees		9,127.49
	San Mateo County [Tax Roll]		15,269,981.82
	Other Receipts		223,490.24
	Transfers		1,500,000.00
		Total Receipts	**17,200,949.66**
	Withdrawal Summary		
	Total Checks		359,017.02
	Total Corp Cards		12,043.67
	Total Bank Wires/ACHs		1,216,516.01
	External Withdrawals		**1,587,576.70**
	Total Internal Bank Transfers		15,001,000.00
		Total Withdrawals	**16,588,576.70**
Fund	**Expenditure Summary by Budget Category**		
100	Operations		15,798,595.89
200	Capital		87,645.59
300	Solid Waste		4,080.00
500	Recycled Water		106,698.22
800	Silicon Valley Clean Water		591,557.00
		Expenditures by Fund	**16,588,576.70**

Presented to West Bay Sanitary District Board of Directors for review and approval.

President _____

Secretary _____

West Bay Sanitary District
Receipts
December 2022

RECEIPT NUMBER	RECEIPT DATE	DESCRIPTION	AMOUNT
462777	11/29/2022	Gary Pollack Construction: 84 Elena Dr, Ath, 4B Permit (correct amt)	(120.00)
462781	12/2/2022	Gary Pollack Construction: 68 Elena Dr, ATH, Permit	170.00
462782	12/2/2022	Ruacan Baris: 2016 Liberty Park Ave, MP, Permit	290.00
462783	12/2/2022	Pacific Plumbing & Sewer Service: 301 Walsh Rd, ATH, Permit	290.00
462784	12/5/2022	Bayshore Plumbers: 260 Erica Way, PV, Permit	290.00
462785	12/5/2022	Bayshore Plumbers: 645 Olive St, MP, Permit	290.00
462786	12/6/2022	Cal-West Sewer And Drain: 921 Cloud Ave, MP, Permit	290.00
462787	12/2/2022	WBSD: Transfer LAIF to BofW Checking	1,500,000.00
462788	12/5/2022	SHGCC: O&M 12/2022, SRF Loan Installment #9 & Avy PS Reim	109,960.59
462789	12/6/2022	Parisa Khorsand: 182-36-046, Alpine Rd, PA, Conn, Dep, RA	33,719.46
462790	12/7/2022	Neil & Brooke Day: 99 Hillbrook Dr, PV, Conn (1.4), Permit	11,480.40
462791	12/7/2022	Topcon Builders: 69 Yale Rd, MP, Permit	290.00
462792	12/7/2022	Pro Roto: 1555 Santa Cruz Ave, MP, Permit	65.00
462793	12/8/2022	MC Plumbing: 2142 Avy Ave, MP, Permit	290.00
462794	12/8/2022	Bayshore Plumbers: 48 Encino Rd, ATH, Permit	290.00
462795	12/8/2022	Town of Los Altos Hills: MSA 10/2022	99,798.92
462796	12/12/2022	Rebuild Green: 1262 Middle Ave, MP, Permit	170.00
462797	12/12/2022	Nicholas Rouse: 209 Marmona Dr, MP, Permit	290.00
462798	12/13/2022	OHC of California: Refund Health Screening Juan Hernandez	30.00
462799	12/13/2022	OHC of California: Refund Health Screening Andres Garcia	30.00
462800	12/13/2022	SHGCC: 2900 Sand Hill Rd, MP, SSC FY 2022-23	1,280.00
462801	12/14/2022	Jane E. Aaron: 10 Garland Place, MP, Permit	228.92
462802	12/14/2022	Discount Plumbing: 824 Woodland Ave, MP, Permit	355.00
462803	12/15/2022	Recology: Solid Waste Franchise Fees 11/2022	9,127.49
462804	12/20/2022	SMC: Sewer Service Charges FY 2022-23 (50% Advance)	15,269,981.82
462805	12/15/2022	Vijayendra Kumar: 2813 Georgetown St, EPA, Permit	290.00
462806	12/15/2022	John Urbanowicz: 4111 Alpine Rd, PV, SSC	1,025.00
462807	12/20/2022	O Brien Dr Portfolio: 1125 O'Brien, Willow PS & Cap Study	20,000.00
462808	12/20/2022	Level 10 Construction: Meta 2022 ORTP Application & License	16,600.00
462809	12/20/2022	Bayshore Plumbers: 440 Felton Drive, MP, Permit	290.00
462810	12/21/2022	Jared Ajlouny: 85 Willow Rd, MP, Permit	290.00
462811	12/22/2022	Bandel & Paula Carano Trust: 30 Meadow Ln, PV, SSC	2,050.00
462812	12/22/2022	Bandel & Paula Carano Trust: 20 Meadow Ln, PV, SSC	2,050.00
462813	12/22/2022	Pro Roto Inc.: 302 Stevick Dr, ATH, Permit	290.00
462814	12/13/2022	BofW: Refund Primepay Fee Charged in Error	16.50
462815	12/23/2022	Primepay: Refund Fee Charged in Error	16.50
462816	12/27/2022	Elite Rooter: 700 Menlo Oaks Dr, MP, Permit	290.00
462817	12/27/2022	Deborah Eula: 98 Ridge View Dr, ATH, Permit	582.21
462818	12/27/2022	SHGCC: O&M 1/2023, SRF Loan Installment #10 & Avy PS Reim	109,994.34
462819	12/28/2022	Verle And Carol Aebi Trust: 973 Roble Ave, MP, ADU Conn	5,595.20
462820	12/28/2022	Rebuild Green: 1235 San Mateo Dr, MP, Permit	170.00
462821	12/28/2022	Bayshore Plumbers: 1000 San Mateo Dr, MP, Permit	290.00
462822	12/29/2022	ADP: Refund Void PR Check 07416529	2,088.16
462823	12/30/2022	Primepay: Refund Fee Charged in Error	134.15
		Total Receipts	**$17,200,949.66**

West Bay Sanitary District
Financial Activity Report
Withdrawals
December 2022

CHECK	DATE	PAYEE	PURPOSE	AMOUNT
69798	12/1/2022	Airgas Usa, LLC	Tank Rentals 10/2022	49.10
69799	12/1/2022	Alpha Analytical Laboratories	Daily Coliform Samples - SHGCC RW Facility 11/2022	400.00
69800	12/1/2022	ReadyRefresh By Nestle	Water Delivery 10/11/22-11/10/22	318.69
69801	12/1/2022	Bay Alarm	Alarm Monitoring 12/1/22-2/28/23	795.00
69802	12/1/2022	Bayside Equipment Company	Generator Service & Repair 11/2022	790.22
69803	12/1/2022	California Water Service	Water Service - Stowe Ln 10/21/22-11/18/22	33.01
69804	12/1/2022	CalPERS Longterm Care Program	LTC Witholding 11/16/22-11/30/22	67.27
69805	12/1/2022	Comcast	Internet - Nov-Dec 2022	570.75
69806	12/1/2022	Core & Main	Couplers & Supplies 11/8/22	264.85
69807	12/1/2022	Dolphin Graphics	West Bay Apparel 11/2022	3,860.68
69808	12/1/2022	Navia Benefit Solutions	Commuter & FSA Fees 11/2022 & FSA Contributions PR 12/2/22	756.93
69809	12/1/2022	Freyer & Laureta	Avy Pump Station Design 10/2022	531.25
69810	12/1/2022	Grainger	Misc. Parts & Supplies Oct & Nov 2022	3,232.87
69811	12/1/2022	Kimball Midwest	Tools 11/2022	675.27
69812	12/1/2022	HF&H Consultants, LLC	Solid Waste Rate Study 2022 - 10/2022	4,080.00
69813	12/1/2022	City Of Menlo Park - Water	Water Service - Oct-Nov 2022	87.05
69814	12/1/2022	Morse Hydraulics	Hose & Hydraulic Fittings Replacement 11/2022	67.90
69815	12/1/2022	Napa Auto Parts	Vehicle Parts 11/2022	73.29
69816	12/1/2022	Occupational Health Centers	Health Screenings - Dominic N. 11/3/22	283.00
69817	12/1/2022	Ogasawara Landscape Maint.	Landscaping Maintenance 11/2022	700.00
69818	12/1/2022	Pacific Gas & Electric	Electric Service - Oct-Nov 2022	14,791.33
69819	12/1/2022	San Mateo Lawn Mower Shop	Lawn Mower Repair and Service 11/2022	858.12
69820	12/1/2022	Silicon Valley Clean Water	SHRWF Weekend Coliform Samples 10/1/22-11/1/22	150.00
69821	12/1/2022	Verizon Wireless	District Cellphones 10/16/22-11/15/22	1,284.31
69822	12/8/2022	AT&T	Telemetry & Alarms Sept-Nov 2022	2,327.55
69823	12/8/2022	Alpha Analytical Laboratories	Daily Coliform Samples - SHGCC RW Facility 11/2022	160.00
69824	12/8/2022	Atchison, Barisone & Condotti	Legal Services 10/2022	11,307.40
69825	12/8/2022	California Water Service	Water Service - Oct-Nov 2022	33.01
69826	12/8/2022	Cintas	Uniform Service 11/2022	1,892.00
69827	12/8/2022	City Of Foster City	CalOpps - Associate Engineer Posting 12/2022	540.00
69828	12/8/2022	Cleanserv Universal Services	Janitorial Service 12/2022	1,075.00
69829	12/8/2022	Ergoworks	ErgoWorks - Lower Armrests 11/2022	36.88
69830	12/8/2022	Freyer & Laureta	Staff Augmentation, Levee Design, CIP Point Repair Design, Bayfront Impr	104,758.25
69831	128/2022	Freyer & Laureta	Master RFP Prep, N. Bay Rd & Ringwood CIP Design 10/2022	25,900.00
69832	12/8/2022	Grainger	Misc.Parts & Supplies 11/2022	33.93
69833	12/8/2022	Home Depot Credit Services	Tools 11/2022	839.88
69834	12/8/2022	Kone Pasadena	Elevator Maintenance 12/2022	298.69
69835	12/8/2022	City Of Menlo Park-Fuel	Fuel: District Vehicles 11/2022	10,506.34
69836	12/8/2022	Occupational Health Centers	Health Screenings -11/2022	249.00
69837	12/8/2022	Pacific Gas & Electric	Electric Service - Oct-Nov 2022	4,977.33
69838	12/8/2022	PBM	Broom & Bucket, Asphalt 11/2022	1,430.85
69839	12/8/2022	Principal Life Insurance	Dental, Vision, Life, AD&D, Disability Ins 12/2022	6,078.49
69840	12/8/2022	Recology Peninsula Services	Recology Waste 2 Yard Bin - SHGCC 11/2022	249.39
69841	12/8/2022	San Mateo County Health	Env. Health Permit Pump Station - 2900 Sand Hill	777.00
69842	12/8/2022	Seekzen Systems	IT Consulting Service 11/2022	475.00
69843	12/8/2022	Sharp Business Systems	Monthly Lease for Copiers 12/2022	1,206.28
69844	12/8/2022	TPX Communications	District VoIP & Fiber Service 11/2022	3,188.37
69845	12/8/2022	Teamsters Local No. 350	Union Dues 12/2022	1,008.00
69846	12/8/2022	Teletrac Navman Us	GPS For District Vehicles 12/2022	271.96
69847	12/8/2022	Verizon Wireless	Internet 11/2/22-12/1/22	65.69
69848	12/8/2022	Woodard & Curran	Woodside Reclaimed Water Facility Plan 10/2022	20,481.75
69849	12/8/2022	Seth Avila	Seth Boot Reimbursement 12/2022	250.00
69850	12/14/2022	Matheson Tri-Gas, Inc.	Tank Rentals 11/2022	76.68
69851	12/14/2022	Alpha Analytical Laboratories	Daily Coliform Samples - SHGCC RW Facility 11/2022	240.00
69852	12/14/2022	Veolia Water North America	Water Service - 1805 Purdue Ave 11/02/22-12/01/22	38.66
69853	12/14/2022	Readyrefresh By Nestle	Water Delivery 11/2022	82.82
69854	12/14/2022	Bonny Doon Environmental	STEP System Pumps & Parts 12/2022	983.76
69855	12/14/2022	CSRMA C/O Alliant Insurance	WC Audit FY 2021-22	2,152.00
69856	12/14/2022	California Water Service	Water Service - Nov-Dec 2022	3,248.29
69857	12/14/2022	Calpers Longterm Care Program	LTC Witholding 12/1/22-12/15/22	67.27
69858	12/14/2022	Du-All Safety, LLC	DuAll Safety Maintenance Contract 11/2022	1,800.00
69859	12/14/2022	Navia Benefit Solutions	FSA Contributions PR 12/16/22	631.93
69860	12/14/2022	Grainger	Enclosure, Quick Release Latch 11/2022	148.34
69861	12/14/2022	Hach Company	Flo Dar Maintenance & Reporting 12/2022	12,993.75

West Bay Sanitary District
Financial Activity Report
Withdrawals
December 2022

69862	12/14/2022	Helix Laboratories, Inc.	Commander Odor Control 55gal (2)	2,764.03
69863	12/14/2022	City Of Menlo Park - Water	Water Service - Oct-Nov 2022	58.50
69864	12/14/2022	R.A. Nosek Investigations	New Hire Background Check 12/2022	320.00
69865	12/14/2022	Pacific Gas & Electric	Electric Service - Georgia Ln 10/28/22-11/29/22	603.47
69866	12/14/2022	Red Wing Shoe Store	Safety Boots 12/2022	941.07
69867	12/14/2022	County Of San Mateo	LSSA Recording Fee: 1555 Santa Cruz Ave, MP	20.00
69868	12/14/2022	V & A Consulting Engineers	Master Plan: V&A Flow Monitoring Study 10/3/22-11/30/22	11,276.13
69869	12/14/2022	Woodard & Curran	Woodside RWF Facilities Plan 12/2022	11,897.00
69870	12/21/2022	A-A Lock & Alarm	Keys for the New Building at FERRF 11/2022	51.84
69871	12/21/2022	Void		
69872	12/21/2022	Airgas Usa, LLC	Tank Rentals 11/2022	48.00
69873	12/21/2022	Alpha Analytical Laboratories	Daily Coliform Samples - SHGCC RW Facility 12/2022	160.00
69874	12/21/2022	American Highway Products	Manhole Sewer Seal Kit 9/2022	536.52
69875	12/21/2022	ReadyRefresh By Nestle	Water Delivery 8/11/22-9/10/22	359.45
69876	12/21/2022	Victor Garcia	Boot Reimbursement 12/2022	226.40
69877	12/21/2022	Blackburn Manufacturing Co	Utility Markers 11/2022	1,391.48
69878	12/21/2022	CWEA	CWEA Certification Renewal R.Sandoval 12/2022	100.00
69879	12/21/2022	California Car Sounds, Inc.	Unit 228: New Lights, Back Up Camera, Rear Directional Installation - 11/	8,187.34
69880	12/21/2022	California Water Service	Water Service - Nov-Dec 2022	105.27
69881	12/21/2022	Cintas	Uniform Service 12/2022	2,012.40
69882	12/21/2022	Corrosion Protection Solutions	Annual Cathodic Protection System Evaluation 12/2022	3,860.00
69883	12/21/2022	CPS HR Consulting	HR Consulting Services 10/2022	671.25
69884	12/21/2022	Fast Response On-Site Testing	Respirator Fit Testing 12/2022	1,742.40
69885	12/21/2022	Grainger	Misc.Parts, Supplies & PPE 12/2022	1,141.39
69886	12/21/2022	IEDA	Consulting Fees 12/2022	814.00
69887	12/21/2022	City Of Menlo Park - Water	Water Service - Nov-Dec 2022	970.48
69888	12/21/2022	R.A. Nosek Investigations	Investigation - 12/2022	275.00
69889	12/21/2022	Occupational Health Centers	Health Screenings 12/2022	134.00
69890	12/21/2022	Omega Industrial Supply, Inc.	Sewer Aide Chemicals 12/2022	981.20
69891	12/21/2022	Void		
69892	12/21/2022	Redwood General Tire Co., Inc.	Tire Repair (2) 12/2022	90.00
69893	12/21/2022	SWRCB	State Water Resources Control Board Annual Permit	18,512.00
69894	12/21/2022	County Of San Mateo	LSSA Recording Fee: 824 Woodland Ave, MP	20.00
69895	12/21/2022	Staples Credit Plan	Office Supplies 12/2022	813.63
69896	12/21/2022	Univar Solutions USA	12.5% Sodium Hypochlorite for SHGCC / RWF 12/2022	4,689.56
69897	12/21/2022	Leaf Capital Funding LLC	Fujitsu Scanner Monthly Lease 12/2022	462.99
69898	12/21/2022	Verizon Wireless	District Cellphones 11/16/22-12/15/22	1,418.25
69899	12/21/2022	Vision Communications Co.	Radio Air Time 12/2022	724.13
69900	12/21/2022	Weco Industries	Sewer Cleaning Equipment 11/2022	3,842.48
69901	12/21/2022	Pacific Gas & Electric	Electric - Tie Into Avy Altschul PS	18,954.68
69902	12/21/2022	Pacific Gas & Electric	Electric Service - Los Trancos Rd 11/15/22-12/13/22	238.25
				359,017.02

Corporate Cards:

54028	12/22/2022	Commuter Benefits	Fastrak: Communter Benefit	1,280.00
54080	12/22/2022	Memberships	Peloton Membership: Bike Membership 11/2022	44.00
54091	12/22/2022	Stationary and Office Supplies	Costco, Haikudeck: Office Supplies	347.85
54101	12/22/2022	Ops Supplies & Materials	P&F Distributors: SQ Artificial Turn Ex: 6x4 Tee, Turf for MH: J11039	332.41
54126	12/22/2022	Safety Training	Safety Committee Awards	35.00
54129	12/22/2022	Recruitment	Indeed: Job Posting	506.47
54131	12/22/2022	Advertisement & Legal Notices	Facebook: Public Outreach 11/2022	14.00
54174	12/22/2022	Mgmt Conf. & District Meetings	TST Alpine Inn: Business Meetings 11/18/22	222.44
54176	12/22/2022	Business Meetings	Safeway: Birthday Cake 11/11/22	16.99
54203	12/22/2022	Licenses & Permits	CMP, SMCO: Encroachment Permits | SMCO: Service Fee	2,185.66
Statement		**Bank of the West - Credit Cards**		**4,984.82**

West Bay Sanitary District
Financial Activity Report
Withdrawals
December 2022

GL	DATE	Account Name	Description	Amount
54080	12/29/2022	Memberships	CWEA Membership Renewals	472.00
54091	12/29/2022	Stationary and Office Supplies	San Mateo County Recorder: Easement Documents	49.00
54101	12/29/2022	Ops Supplies & Materials	Lowes, West Marine: Plastic Rolls, Aluminum Poles, Hose Rollers	418.71
54103	12/29/2022	Vehicle & Equipment Supplies	Custom Truck: Steps & Mats	1,090.41
54105	12/29/2022	Pump Station Parts & Supplies	Amazon: Fountain Pump	29.66
54119	12/29/2022	Misc Contract Services	San Mateo County Recorder: Multiple Document Scans 11/3/22	159.00
54151	12/29/2022	Fleet/Vehicle R&M	Home Depot, Meineke, ACE Parking, ChargePoint: Hose Replacement, Exh	188.00
54157	12/29/2022	Building Repairs & Maint.	Amazon, APD, Misco Water: Hot/Cold Water, Water Filter, Metering Pump	1,142.57
54158	12/29/2022	Computer Software R & M	Monthly Subscriptions - Duo.com, Zoom, Go to Meeting	118.55
54159	12/29/2022	Computer Hardware R & M	Apple: Tablet Upgrade & Accessories	1,116.28
54173	12/29/2022	Dept Training & EE Development	Five Star Pizza: Dinner for Crew 11/4/22	81.87
54174	12/29/2022	Mgmt Conf. & District Meetings	Costco, Safeway, Home Depot, Party City: PMPP Luncheon, Rolling Pin, Ro	1,849.14
54176	12/29/2022	Business Meetings	Café Borrone, Jeffreys, TFK PA: General Manager Meetings	176.90
54191	12/29/2022	Internet	Comcast: Internet SHRWF 11/2022	166.76
Statement		**US Bank - CalCards - Credit Cards**		**7,058.85**

Bank Transfers:

DATE	PAYEE	PURPOSE	AMOUNT
12/1/2022	ADP	Payroll Taxes - Board	507.17
12/1/2022	ADP	Director Fees Nov 2022	2,753.83
12/1/2022	ADP	Payroll Taxes - 12/2/2022	38,860.87
12/1/2022	ADP	Employee Payroll - Check Date: 12/2/2022	117,848.04
12/2/2022	MissionSquare	Deferred Compensation, Formerly: ICMA	10,365.93
12/2/2022	PayTrace	Credit Card Processing Fees	537.38
12/5/2022	SVCW	SVCW Monthly Operating Contribution	591,557.00
12/5/2022	NeoPost	Postage	300.00
12/7/2022	ADP	Payroll Taxes - 11/15	80.21
12/9/2022	CalPERS	PR Reporting Adjustment - PR 9/9	0.93
12/9/2022	ADP	ADP Fees	305.00
12/9/2022	CalPERS	Retirement Contributions PR 11/18/2022	23,268.11
12/9/2022	CalPERS	Retirement Contributions PR 12/2/2022	23,240.67
12/12/2022	PrimePay	Primepay Fees (BofW Refunded 12/13/22, CR-462814)	16.50
12/12/2022	CalPERS	Health Premiums	58,628.40
12/15/2022	ADP	Payroll Taxes - 12/16/2022	37,009.93
12/15/2022	ADP	Employee Payroll - Check Date: 12/16/2022	118,231.70
12/16/2022	MissionSquare	Deferred Compensation, Formerly: ICMA	12,626.33
12/20/2022	Bank of the West	Bank Fees	161.77
12/23/2022	ADP	ADP Fees	335.00
12/29/2022	ADP	Payroll Taxes - 12/30/2022	34,885.97
12/29/2022	ADP	Employee Payroll - Check Date: 12/30/2022	113,808.15
12/30/2022	MissionSquare	Deferred Compensation, Formerly: ICMA	7,644.14
12/30/2022	CalPERS	Retirement Contributions PR 12/16/2022	23,542.98
	Bank Wires/ACHs from BofW Checking		**1,216,516.01**

Internal Bank Transfers:

DATE	PAYEE	PURPOSE	AMOUNT
12/15/2022	WBSD Navia Checking	Transfer to Commuter Account	1,000.00
12/20/2022	Rate Stabilization Reserve	Transfer to Reserve Account	767,700.00
12/20/2022	Treatment Plant Reserve	Transfer to Reserve Account	7,916,100.00
12/20/2022	Capital Project Reserve	Transfer to Reserve Account	479,000.00
12/20/2022	Emergency Capital Reserve	Transfer to Reserve Account	381,100.00
12/20/2022	Recycled Water Cash Flow	Transfer to Reserve Account	456,100.00
12/21/2022	WBSD LAIF Account	Transfer from BofW Checking to LAIF	5,000,000.00
	Bank Transfers from BofW Checking		**15,001,000.00**

Summaries:

Withdrawal Summary	
Total Checks	359,017.02
Total Corp Card	12,043.67
Total Bank Wires / ACHs	1,216,516.01
Total Internal Bank Transfers	15,001,000.00
Total Withdrawals	**16,588,576.70**

West Bay Sanitary District
Expenditures By Vendor
7/01/2022 to 12/31/2022

Withdrawals	Total by Vendor YTD FY 2022-23	Withdrawals December 2022
AAA Fire Protection Services	1,323.05	-
AAA Rentals	11,433.50	-
A-A Lock & Alarm	564.48	51.84
Action Towing	1,157.75	-
Abila	4,952.07	-
ADP Fees	4,005.00	640.00
ADP-Wage Garnishment	5,721.53	-
Aerzen USA Corp.	2,400.00	-
Airgas Usa, LLC	647.45	97.10
Stephen Albano	39,231.90	-
Allied Crane	955.18	-
The Almanac	4,158.00	-
Alpha Analytical Laboratories	9,925.00	960.00
American Highway Products	536.52	536.52
Aqua Natural Solutions	1,211.04	-
Domenic Andrighetto	471.87	-
AT&T	5,909.00	2,327.55
Atchison, Barisone & Condotti	51,193.12	11,307.40
Seth Avila	500.00	250.00
Aztec Consultants	15,722.05	-
Bank of the West - Credit Cards	60,700.82	4,984.82
Bank of the West	1,400.25	161.77
Battery Junction Wholesale	2,477.43	-
Bay Alarm	14,308.65	795.00
Bay Area Air Quality Mgmt Dist	484.00	-
Bay Area Barricade Service Inc	1,936.33	-
Bay Area Paving Co. Inc.	23,273.00	-
Bay Reprographic, Inc.	530.48	-
Bayside Equipment Company	1,897.99	790.22
Annette Bergeron	7,571.48	-
Jed M. Beyer	96.50	-
Blackburn Manufacturing Co	1,391.48	1,391.48
Bonny Doon Environmental	983.76	983.76
Richard W. & Sandra W. Boyce	3,494.44	-
Bosco Oil Inc DBA Valley Oil	322.09	-
CA Dept Of Tax & Fee Admin	-	-
CASA	14,300.00	-
CA State Disbursement Unit	-	-
CPS HR Consulting	1,741.25	671.25
Calgon Carbon Corporation	3,084.16	-
Calif. Labor Law Poster Service	192.00	-
CA Regional Water Quality	25,637.00	-
California Car Sounds, Inc.	8,187.34	8,187.34
California Water Service	18,306.49	3,419.58
CalPERS - Actuary Fee	-	-
CalPERS - Admin Fees	600.00	-
CalPERS - Unfunded Accrued Liability	10,690.00	-
CalPERS - GASB Fee	1,050.00	-
CalPERS - Retirement	335,185.55	70,052.69
CalPERS - Health Premiums	337,735.53	58,628.40
CalPERS - 1959 Survivor Billing	1,677.90	-
CalPERS Longterm Care Program	645.40	134.54
Carla Carstens	5,521.53	-
Michael Chang	1,263.16	-
ChemsearchFE	625.57	-
George Choi & Michele Ono	3,494.44	-
Cintas	20,463.35	3,904.40
City of Foster City	2,140.00	540.00
City of Menlo Park	615.02	-
City of Menlo Park-Fuel	81,150.00	10,506.34
City of Menlo Park - Water	12,577.12	1,116.03

West Bay Sanitary District
Expenditures By Vendor
7/01/2022 to 12/31/2022

Withdrawals	Total by Vendor YTD FY 2022-23	Withdrawals December 2022
Cleanserv Universal Services	6,950.00	1,075.00
Comcast	2,854.22	570.75
The Concept Genie	8,236.37	-
Consolidated Parts, Inc	5,084.39	-
Core & Main	16,144.24	264.85
Corrosion Protection Solutions	3,860.00	3,860.00
Costco	60.00	-
CSDA	8,810.00	-
CSRMA c/o Alliant Insurance	222,790.37	2,152.00
Cues, Inc.	3,950.00	-
CWEA	595.00	100.00
Alan & Lauren Denenberg	3,494.44	-
Dewey Pest Control	9,000.00	-
Dolphin Graphics	5,662.34	3,860.68
Du-All Safety, LLC	10,800.00	1,800.00
Ronald Dalman & Jocelyn Dunn	471.87	-
Duke's Root Control, Inc	267,966.64	-
Ergoworks	36.88	36.88
Fast Response On-Site Testing	1,742.40	1,742.40
FedEx	1,700.21	-
Fischer Compliance LLC	8,225.00	-
Freyer & Laureta	434,917.92	131,189.50
Dorothy Garcia Bachler	3,494.44	-
Victor Garcia	476.40	226.40
Goldstreet Design Agency, Inc.	4,000.00	-
Govconnection, Inc.	1,697.76	-
Governmentjobs.Com, Inc	4,479.01	-
Grainger	24,866.59	4,556.53
Gurtner Living Trust	471.87	-
HF&H Consultants, LLC	20,238.75	4,080.00
Hach Company	86,001.87	12,993.75
Hadronex, Inc.	41,545.86	-
Harben California	5,769.81	-
Harrington Industrial Plastics	166.12	-
Yvonne Harrosh	25,848.00	-
Helix Laboratories, Inc.	2,764.03	2,764.03
Home Depot Credit Services	3,600.10	839.88
Bob Hulsmann	634.88	-
Mark & Rebecca Hilderbrand	3,494.44	-
ICMA	63,489.56	-
IEDA	4,884.00	814.00
Institute For Local Government	225.00	-
Interstate Traffic Control	153.13	-
Kimball Midwest	3,920.51	675.27
Bill Kitajima	30,768.33	-
Judy Klein	5,521.53	-
Kone Pasadena	1,792.14	298.69
Alison Krausz	471.87	-
Leaf Capital Funding LLC	2,824.24	462.99
Sione Lolohea	325.00	-
Mallory Co.	6,602.35	-
Matheson Tri-Gas, Inc.	442.21	76.68
Medco Supply Company	728.16	-
Menlo Park Hardware Co. #14016	139.69	-
Mid Peninsula Abstracts	830.00	-
Mid State Container Sales, Inc	5,185.00	-
Piterman Milanendra	-	-
Mission Clay Products, LLC	4,706.98	-
MissionSquare		30,636.40
Mission Valley Ford	5,957.00	-
Katrina Montinola	471.87	-

West Bay Sanitary District
Expenditures By Vendor
7/01/2022 to 12/31/2022

Withdrawals	Total by Vendor YTD FY 2022-23	Withdrawals December 2022
Morse Hydraulics	483.28	67.90
Municipal Maintenance Equip.	15,455.38	-
Napa Auto Parts	1,404.84	73.29
National Auto Fleet Club	131,650.66	-
Navia Benefit Solutions	8,508.16	1,388.86
Paul Andrew Nelson	385.00	-
NeoPost	1,200.00	300.00
Carrie Nevoli - Petty Cash	342.20	-
Keri Nicholas	471.87	-
North Bay Pensions	1,500.00	-
Occasions, Etc.	279.02	-
Occupational Health Centers	2,175.00	666.00
Ogasawara Landscape Maint.	5,330.00	700.00
Omega Industrial Supply, Inc.	6,364.49	981.20
Ovivo Usa, LLC	238.38	-
Paxxo (USA) Inc	568.46	-
PBM	2,070.48	1,430.85
Pacific Gas & Electric	174,042.70	39,565.06
Paytrace	3,579.67	537.38
Peninsula Truck Repair Inc.	5,760.77	-
Pier 2 Marketing	1,000.00	-
Charles A. Planje	1,584.00	-
Precise Printing And Mailing	2,211.35	-
Preferred Alliance	2,137.85	-
PrimePay Fees	956.25	16.50
Principal Life Insurance	37,102.39	6,078.49
Project Ergonomics	488.80	-
Quadient Leasing USA, Inc.	536.88	-
Quincy Compressor	2,161.19	-
R.A. Nosek Investigations	2,396.00	595.00
R.D. Kincaide, Inc.	13,122.14	-
Readyrefresh By Nestle	2,166.69	760.96
Recology Peninsula Services	1,496.34	249.39
Red Wing Shoe Store	4,318.03	941.07
Redwood General Tire Co., Inc.	1,775.23	90.00
City Of Redwood City	9,678.32	-
Todd Reese	225.00	-
Rich Voss Trucking	580.00	-
SVCW - Monthly Operating Contribution	3,549,342.00	591,557.00
SVCW 2018 Bonds	1,229,792.20	-
SVCW 2021 A-B Bonds	2,308,956.76	-
SVCW - SRF Debt	506,765.21	-
Silicon Valley Clean Water	2,925.00	150.00
Michael Scandalios	471.87	-
Rupert Sandoval	200.00	-
County of San Mateo	213.00	40.00
San Mateo County Assessor	-	-
San Mateo County Tax Collector	990.00	-
San Mateo County Health	2,724.00	777.00
County of San Mateo - LAFCO	22,323.00	-
San Mateo Lawn Mower Shop	858.12	858.12
County of Santa Clara	-	-
SWRCB	18,512.00	18,512.00
Robert J. Scheidt	821.03	-
Seekzen Systems	36,364.00	475.00
Sensera Systems	2,148.00	-
Sharp Business Systems	7,257.53	1,206.28
Bob Sick	1,587.36	-
Daniel Siegel	471.87	-
Spartan Tool	3,849.48	-
Staples Credit Plan	4,812.29	813.63

West Bay Sanitary District
Expenditures By Vendor
7/01/2022 to 12/31/2022

Withdrawals	Total by Vendor YTD FY 2022-23	Withdrawals December 2022
Steven Creek Quarry, Inc.	1,127.68	-
Sutter EAP	413.25	-
TJB Investments LLC	25,394.71	-
TPX Communications	18,868.07	3,188.37
Teamsters Local No. 350	5,975.00	1,008.00
Teletrac Navman US	1,903.72	271.96
Telstar Instruments, Inc.	2,934.00	-
Thomas & Associates	491.92	-
William & Susan Thomas	3,494.44	-
Towne Ford	76,782.80	-
Uline	955.33	-
Underground Service Alert	13,714.45	-
Univar Solutions USA	9,266.17	4,689.56
John Urbanowiqz	5,521.53	-
US Bank - CalCards - Credit Cards	11,900.39	7,058.85
U.S. Jetting, LLC.	2,018.52	-
US Standard Products Corp	942.32	-
V & A Consulting Engineers	11,276.13	11,276.13
Veolia Water North America	249.45	38.66
Verizon Wireless	8,826.76	2,768.25
Video Voice Data Communication	10,708.95	-
Ramon & Kelly W. Villareal	3,494.44	-
Vision Communications Co.	7,164.19	724.13
Andrew & Kathy L. Waddell	3,494.44	-
Weco Industries	48,400.86	3,842.48
The Weed Solution	3,500.00	-
West Yost & Associates	3,578.00	-
Western States Tool & Supply	523.42	-
Israel White	1,436.71	-
Blake Winchell	5,521.53	-
Woodard & Curran	188,464.81	32,378.75
Young's Auto Supply Center	666.47	-
Total Vendor Withdrawals	**11,188,252.81**	**1,123,590.83**
Wages & Payroll Taxes		
Salaries/Wages - Net Pay	1,849,646.57	349,887.89
Directors Fees - Net Pay	18,629.83	2,753.83
Payroll Taxes	657,746.35	111,344.15
Performance Merit Program - Net Pay	213,353.66	-
Total Payroll	**2,739,376.41**	**463,985.87**
Total External Withdrawals	**13,927,629.22**	**1,587,576.70**
WBSD Transfers:		
WBSD LAIF Account	5,000,000.00	5,000,000.00
WBSD Investment Accounts	12,202,111.08	10,000,000.00
Public Agency Retirement Services	-	-
Other Transfers	1,000.00	1,000.00
Total Transfers	**17,203,111.08**	**15,001,000.00**
Total Withdrawals	**31,130,740.30**	**16,588,576.70**

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WEST BAY
Sanitary District

WEST BAY SANITARY DISTRICT
AGENDA ITEM 3C

To: ***Board of Directors***

From: ***Bob Hulsmann, Operations Superintendent***

Subject: ***WBSD Operations and Maintenance Report – December 2022***

	Basin PM Pipe Clean-ing	High Freq. PM Pipe Clean-ing	Un-Sche. Pipe Clean-ing	WBSD CCTV Insp.	Pipe Patch Repairs	Open Trench Repairs	Pump Sta. PM	Pump Sta. Unsch. Repairs	SSO	SSO	Service Calls- Unit 208			
									Cat. 1	Cat. 2&3s	Call	Sch	Unsch.	USA's
Month	Miles	Miles	Miles	Miles	Qty.	Qty.	Qty.	Qty.			Outs	PM	PM	
January	9.4	4.8	0.1	0.7	3	3	64	0	0	0	83	10	1	164
February	10.2	7.3	1.2	2.8	3	10	46	0	0	0	76	5	0	165
March	14.5	0.2	0.3	2.8	3	12	63	0	0	0	84	14	0	225
April	17.3	3.8	0.5	2.7	6	8	63	0	0	1	48	9	0	224
May	7.3	8.6	0.5	3.4	6	11	60	0	0	0	47	6	1	193
June	17.2	0.3	0.5	2.1	16	9	73	0	0	0	46	14	0	234
July	7.4	5.3	0.8	2.5	7	7	68	0	0	0	78	6	0	266
August	7.7	2.1	1.3	5.2	11	9	77	0	0	1	90	15	0	319
Sept.	12.0	0.7	1.0	1.9	8	13	65	0	0	0	65	10	0	211
Oct.	8.1	5.5	0.4	0.3	6	10	69	0	0	0	82	8	0	187
Nov.	1.0	14.8	0.4	2.7	4	6	71	0	0	0	91	0	0	526
Dec	8.8	0.2	0.5	2.3	7	2	55	0	1	0	68	0	0	447
Yr to date	**120.9**	**53.6**	**7.5**	**29.4**	**80**	**100**	**774**	**0**	**1**	**2**	**858**	**97**	**2**	**3161**
2023 Goals	**120.0**	**50.0**	**n/a**	**45-50**	**50-65**	**90**	**n/a**	**<10**	**<**	**4**	**n/a**	**n/a**	**n/a**	**n/a**
2022 Results	**120.9**	**53.6**	**7.5**	****40.3**	****92**	**100**	**774**	**0**	**1**	**2**	**858**	**97**	**2**	**3161**
2021 Results	*123	*50	8.6	**46	**55	91	834	2	0	4	944	n/a	n/a	2294
2020 Results	134.2	51.0	8.4	29.6	72	85	754	6	0	0	1012	89	5	2362
2019 Results	112.0	48.2	6.9	42.7	60	86	967	6	0	4	1063	75	33	2850
2018 Results	134.2	48.5	7.4	42.1	66	63	1256	6	0	4	1139	134	89	2525
2017 Results	126.4	52	6	25	66	97	1265	8	2	3	700	178	61	3218

* = Including TOW

**= Including LAH and TOW

Report to the District Board for the Regular Meeting of January 11, 2023

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WEST BAY SANITARY DISTRICT
AGENDA ITEM 3D

To: ***Board of Directors***

From: ***Bob Hulsmann, Operations Superintendent***

Subject: ***Town of Los Altos Hills - Operations and Maintenance Report for Work Performed by WBSD – December 2022***

Town of Los Altos Hills O & M Report									
	Basin PM Pipe Clean-ing	High Freq. PM Pipe Clean-ing	Un-Sche. Pipe Clean-ing	WBSD CCTV Insp.	Pump Sta. PM	Pump Sta. Unsch. Repairs	SSO	SSO	Service Calls
Month							Cat. 1	Cat. 2&3s	Call Outs
	Miles	Miles	Miles	Miles	Qty.	Qty.			
January	0.5	0.8	0.2	0.8	5	1	0	0	0
February	1.3	0.2	0.1	1.2	4	1	0	1	0
March	0.0	1.2	0.0	0.0	4	0	0	0	0
April	3.2	1.8	0.0	0.0	4	0	0	0	0
May	3.3	1.3	0.1	0.1	4	0	0	0	0
June	1.8	0.5	0.1	1.9	4	0	0	0	0
July	1.4	1.1	0.0	1.6	4	0	0	0	0
*August	1.8	1.1	0.4	1.0	4	0	0	0	0
Sept.	1.8	0.5	0.0	1.9	4	0	0	0	0
Oct.	1.7	0.8	0.0	0.8	4	0	0	0	0
Nov.	1.1	0.2	2.1	0.0	4	0	0	1	0

Dec	0.3	1.4	0.5	0.5	4	0	0	1	1
**** Yr to date**	**18.2**	**10.9**	**3.5**	**9.8**	**51**	**2**	**0**	**3**	**1**
FY21/22Goals	17.4	16.9	n/a	9.3	52	n/a	n/a	n/a	n/a

* = August- Start of Contract

WEST BAY
Sanitary District

WEST BAY SANITARY DISTRICT
AGENDA ITEM 3E

To: ***Board of Directors***

From: ***Bob Hulsmann, Operations Superintendent***

Subject: ***Town of Woodside Operations and Maintenance Report for Work Performed by WBSD – December 2022***

Yearly Summary Report

1/5/2023
10:01 AM

Dates Between 1/1/2022 and 12/31/2022

Month	Basin PM Pipe Cleaning (miles)	High Freq PM Pipe Cleaning (miles)	Unscheduled Pipe Cleaning (miles)	CCTV Inspection (miles)	Pump Stations Preventive Maintenance Qty	Pump Stations Unscheduled Repairs Qty	SSO Cat 1	SSO Cat 2 & 3	Service Calls Call Outs
January	0.0	0.0	0.0	0.0	8	0.0	0.0	0.0	0.0
February	0.00	0.0	0.0	0.0	8	0.0	0.0	0.0	0.0
March	0.00	0.2	0.0	0.0	8	0.0	0.0	0.0	1.0
April	0.00	0.0	0.0	1.1	10	0.0	0.0	0.0	0.0
May	0.00	0.0	0.0	0.0	8	0.0	0.0	0.0	0.0
June	0.00	0.3	0.0	0.0	8	0.0	0.0	0.0	0.0
July	0.00	0.0	0.0	0.0	8	0.0	0.0	0.0	0.0
August	0.00	0.0	0.0	0.0	8	0.0	0.0	0.0	0.0
September	0.19	0.3	0.0	0.0	8	0.0	0.0	0.0	0.0
October	0.00	0.0	0.0	0.0	8	0.0	0.0	0.0	0.0
November	0.00	0.0	0.0	0.0	8	0.0	0.0	0.0	0.0
December	4.43	0.0	0.0	0.0	8	0.0	1	0.0	0.0
Totals	4.62	0.8	0.0	1.1	98	0.0	1	0.0	1.0

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M E M O R A N D U M

October 22, 2021

TO: Board of Directors, West Bay Sanitary District

FROM: Tony Condotti, District Legal Counsel

RE: Resolution Authorizing District to Implement Teleconferenced Public Meetings Pursuant to Assembly Bill 361

RECOMMENDATION: Adopt resolution authorizing District to continue the use of teleconferenced meetings pursuant to Assembly Bill 361.

BACKGROUND: On March 4, 2020, Governor Newsom issued a proclamation of State of Emergency in response to the developing COVID-19 pandemic. Due to the continued spread of the virus, the Governor issued Executive Order N-29-20 on March 17, 2020, which included a provision authorizing suspensions to the Ralph M. Brown Act's ("Brown Act") teleconferencing rules in order to facilitate virtual meetings while public health orders were in place.

On June 11, 2021, the Governor issued Executive Order N-08-21, which provided that the Brown Act teleconferencing suspensions would expire after September 30, 2021. On September 16, 2021, the Governor signed Assembly Bill 361 ("AB 361"), an urgency measure taking effect immediately, which amended the Brown Act to allow local legislative bodies to continue using teleconferencing and virtual meeting technology provided certain conditions are met.

DISCUSSION: AB 361 allows for teleconferenced meetings during a declared State of Emergency, as defined under the California Emergency Services Act, if one of the following circumstances apply: (1) State of local officials have imposed or recommended measures to promote social distancing; (2) The legislative body is meeting to determine whether, as a result of the emergency, meeting in person would present imminent risks to the health or safety of attendees; or (3) The legislative body has determined that, as a result of the emergency, meeting in person presents imminent risks to the health or safety of attendees.[1]

The Governor's March 4, 2020 proclamation of State of Emergency is still in effect. Measures continue to exist that impose and recommend measures to promote social distancing. The California Department of Public Health recommends that individuals wear masks in indoor

[1] Cal. Gov't Code § 54953(e)(1)(A)-(C)

public settings.[2] Additionally, San Mateo County requires that face coverings continue to be worn in indoor settings for all individuals in the County.[3]

Moreover, in recent months, the highly transmissible delta variant has caused increases in positive cases and hospitalizations locally and throughout the State. According to the CDC, community transmission of COVID-19 in San Mateo County is moderate, however the nature of the pandemic is unpredictable and transmission rates have the potential to rise quickly. As such, holding meetings in person would present imminent risks to the health or safety of attendees due to the continued spread of COVID-19.

To continue teleconferenced meetings under AB 361, the Board of Directors will need to declare every thirty (30) days that it has reconsidered the circumstances of the State of Emergency and either (1) the State of Emergency continues to directly impact the ability of the members to meet safely in person; or (2) State or local health officials continue to impose or recommend measures to promote social distancing.[4]

FISCAL IMPACT: No significant fiscal impact.

[2] *See* CDPH, *Guidance for the Use of Face Coverings* (July 28, 2021), https://www.cdph.ca.gov/Programs/CID/DCDC/Pages/COVID-19/guidance-for-face-coverings.aspx.
[3] *See https://cmo.smcgov.org/press-release/oct-7-2021-bay-area-health-officers-issue-criteria-lifting-covid-19-indoor-masking*.
[4] Cal. Gov't Code § 54953(e)(3).

RESOLUTION NO. _____ (2023)

IN THE DISTRICT BOARD OF THE WEST BAY SANITARY DISTRICT
COUNTY OF SAN MATEO, STATE OF CALIFORNIA

*****

A Resolution of the District Board of the West Bay Sanitary District Authorizing Remote Teleconference Meeting of the Legislative Bodies of the West Bay Sanitary District Pursuant to Brown Act Provisions

The Board of Directors of the West Bay Sanitary District ("Agency") does resolve as follows:

WHEREAS, the West Bay Sanitary District is committed to preserving and nurturing public access and participation in meetings of the Board of Directors; and

WHEREAS, all meetings of West Bay Sanitary District's legislative bodies are open and public, as required by the Ralph M. Brown Act (Cal. Gov. Code 54950 – 54963), so that any member of the public may attend, participate, and watch the District's legislative bodies conduct their business; and

WHEREAS, the Brown Act, Government Code section 54953(e), makes provisions for remote teleconferencing participation in meetings by members of a legislative body, without compliance with the requirements of Government Code section 54953(b)(3), subject to the existence of certain conditions; and

WHEREAS, on March 4, 2020, Governor Newsom issued a Proclamation of State of Emergency in response to the COVID-19 pandemic; and,

WHEREAS, on March 17, 2020, Governor Newsom issued Executive Order N-29-20 that suspended the teleconferencing rules set forth in the California Open Meeting law, Government code Section 54950 et seq. (the "Brown Act"), provided certain requirements were met and followed; and

WHEREAS, on June 11, 2021, Governor Newsom issued Executive Order N-08-21 that clarified the suspension of the teleconferencing rules set forth in the Brown Act, and further provided that those provisions would remain suspended through September 30, 2021; and,

WHEREAS, on September 16, 2021, Governor Newsom signed AB 361 which provides that a legislative body subject to the Brown Act may continue to meet without fully complying with the teleconferencing rules in the Brown Act, provided that a State of Emergency is declared by the Governor pursuant to Government Code section 8625, and either state or local officials have imposed or recommended measures to promote social distancing, or the legislative body determines that meeting in person would present imminent risks to the health or safety of attendees, and further requires that certain findings be made by the legislative body every thirty (30) days; and,

WHEREAS, the State of Emergency proclaimed by the Governor on March 4, 2020 remains in effect; and,

WHEREAS, California Department of Public Health ("CDPH") and the federal Centers for Disease Control and Prevention ("CDC") caution that the Delta variant of COVID-19, currently the dominant strain of COVID-19 in the country, is more transmissible than prior variants of the virus, may cause more severe illness, and that even fully vaccinated individuals can spread the virus to others resulting in rapid and alarming rates of COVID-19 cases and hospitalizations (https://www.cdc.gov/coronavirus/2019-ncov/variants/delta-variant.html); and,

WHEREAS, other variants of COVID-19 exist, and it is unknown at this time whether other variants may result in a new surge in COVID-19 cases; and,

WHEREAS, the CDC has established a "Community Transmission" metric with 4 tiers designed to reflect a community's COVID-19 case rate and percent positivity; and,

WHEREAS, San Mateo County currently has a Community Transmission metric of "moderate" which indicates an elevated risk of transmission;

WHEREAS, due to the seriousness of the current pandemic situation, the CDPH has required that all unvaccinated persons wear facial coverings indoors, and the CDC and CDPH recommend that all persons, regardless of vaccination status, wear facial coverings indoors; and,

WHEREAS, the Board of Directors is empowered to take actions necessary to protect public, health, welfare and safety within the region; and,

WHEREAS, the District has an important governmental interest in protecting the health, safety and welfare of those who participate in meetings of the Board of Directors and other District committees; and,

WHEREAS, in the interest of public health and safety, as affected by the emergency caused by the spread of COVID-19, the Board of Directors deems it necessary to find that meeting in person for meetings of the Board of Directors and District committees and subcommittees would present imminent risks to the health or safety of attendees, and thus intends to invoke the provisions of AB 361 related to teleconferencing as provided in subdivision (e) of Government Code section 54953; and

WHEREAS, all teleconferenced meetings of the District Board of Directors and related committees or subcommittees shall comply with the requirements to provide the public with access to meetings as prescribed in paragraph (2) of subdivision (e) of Government Code section 54953;

WHEREAS, State of California and County of San Mateo health officials recommend various social distancing measures, including wearing mask indoors and limiting occupancies at meeting locations; and

WHEREAS, the Board of Directors does hereby find and determine that the above conditions create a heightened risk to the health and safety of attendees; and

NOW, THEREFORE, BE IT RESOLVED, that the Board of Directors of the West Bay Sanitary District does hereby resolve as follows:

Section 1. Recitals. The Recitals set forth above are true and correct and are incorporated into this Resolution by this reference.

Section 2. The Board of Directors finds that as a result of the ongoing proclaimed State of Emergency in California due to the COVID-19 pandemic, and COVID-19's continued spread, holding in person meetings of District legislative bodies would present imminent risks to the health or safety of attendees

Section 3. The General Manager and legislative bodies of West Bay Sanitary District are hereby authorized and directed to take all actions necessary to carry out the intent and purpose of this Resolution including, conducting open and public meetings in accordance with Government Code section 54953(e) and other applicable provisions of the Brown Act.

Section 4. This Resolution shall take effect immediately upon its adoption and shall be effective until the earlier of (i) thirty days from its adoption, or (ii) such time the Board of Directors adopts a subsequent resolution in accordance with Government Code section 54953(e)(3) to extend the time during which the legislative bodies of West Bay Sanitary District may continue to teleconference without compliance with paragraph (3) of subdivision (b) of section 54953.

PASSED AND ADOPTED by the District Board of the West Bay Sanitary District at a regular meeting thereof held on 11th day of January, 2023, by the following votes:

AYES:

NOES:

ABSENT:

ABSTAIN:

_____

President of the District Board of the
West Bay Sanitary District of San
Mateo County, State of California

Attest:

_____

Secretary of the District Board of the
West Bay Sanitary District of San Mateo
County, State of California

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To: ***Board of Directors***

From: ***Sergio Ramirez, General Manager***

Subject: ***General Manager's Report***

1) **Administrative:**
   a. The District fared well through record breaking storm event of December 31, 2022. The District Pump Stations did not experience high water alarms. The only issue occurred at the Menlo Park Pump Station.
   b. Freyer and Laureta Inc. is assisting with the 2023 Master Plan consultant.
   c. The annual State Water Resources Control Board collection system permit was paid in the amount of $18,512.00.

2) **Finance:**
   a. San Mateo County Assessor's Office delivered the first Sewer Service Charge payment collected through the tax toll in the amount of $15,269,981.82
   b. A deposit was collected from the 1125 O'Brien Project developer in Menlo Park to conduct a flow capacity study to the Willow Pump Station.

3) **CIP Projects:**
   a. **Construction Capital Improvement Program (CIP):**
      i. The Bayfront Park Sewer Improvements Project was awarded to Ranger Pipelines Inc. Construction should begin in the next 30 days.
      ii. Two pipeline segments in an easement at Alberni Street and Menalto Avenue will be replaced. The project was approved by the Board at the September 14th Regular Board Meeting.
   b. **Levee Improvement Project**:
      i. The District is expecting to receive permits from the United States Army Corps of Engineers' (USACE) soon so the project can go to bid by February or March 2023.

4) **Information Technology (IT):**
   a. Staff will begin migrating to Cloud based MicroIX for accounting and Microsoft Office 365 in early 2023.

5) **Operations and Maintenance:**
    a. **Collection System**:
        i. Crews assisted the Town of Woodside with a pump station issue during the recent storm events to minimize a Sanitary Sewer Overflow (SSO) at the Town Center Pump Station. Bypass equipment was deployed during the storms.

    b. **Pump Facilities:**
        i. The Pump Supervisor and Superintendent will present on the ISAC System, which uses telephone lines and dial-up modems to communicate alarms but will no longer be supported.

    c. **Training:**
        i. Staff received training on the updated Sewer System Management Plan (SSMP). The SSMP was approved by the Board of Directors on September 28, 2022.

6) **Water Quality:**
    a. **Sharon Heights Golf and Country Club (SHGCC):**
        i. The West Bay/SHGCC facility produced 5.4 million gallons for the month of November, however, only 154,690 gallons were received by the Club. The plant is at minimal levels of production.

    b. **Bayfront Recycled Water Facility (BRWF):**
        i. The State's SRF program has added the Bayfront Reclaimed Water Facility project to its Intended Use Plan. The initial approval is for $52 million. Staff may be requesting for additional funds.
        ii. The Board should consider approving the Project Management Agreement with Woodard and Curran to obtain a 30% design and assist in securing a Guaranteed Maximum Price (GMP) by a qualified design build team.
        iii. The City of Menlo Park approved the Recycled Water Purveyor MOU on December 6, 2022. This will establish the District as the reclaimed water provider for the Bayfront Recycled Water Facility within the City's municipal water service area.

    c. **Woodside Recycled Water Facility (BRWF):**
        i. The Woodside Recycled Water Facility feasibility is underway. Pass through invoices are being payed to Woodard and Curran but reimbursed by Menlo Country Club as part of the feasibility agreement.

7) **Fleet and Facilities:**
    a. **Vehicle Maintenance:**
        i. The District received its half inch hydro jetter and is being outfitted with traffic control lights and a radio.
8) **Personnel:**
        i. The recruitment for the Project Manager position was successful.
        ii. The Associate Engineering position will go out for recruitment once again.

9) **Upcoming Events:**
    a. **Next Regular Board Meetings:** Wednesdays, January 25th and February 8th.

Report to the District Board for the Regular Meeting of January 11, 2023

Additional information or topics may be introduced by the GM verbally during the Board meeting.

10) **Misc. Items**:

a. **West Bay:** The District experienced 3 sanitary sewer overflow (SSO) in 2022.

b. **Town of Los Altos Hills:** Crews continue to clean and video inspect the Town's system.

c. **Town of Woodside:** Crews cleaned the entire system for the Town at the end of the year.

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WEST BAY SANITARY DISTRICT

WEST BAY SANITARY DISTRICT
AGENDA ITEM 5

To: ***Board of Directors***

From: ***Sergio Ramirez, General Manager***

Subject: ***Consider Authorizing General Manager to Enter into an Agreement for the District's 2023 Master Plan with V.W. Housen & Associates***

Background

The District previously adopted a Wastewater Collection System Master Plan in 2011 and updated the plan in 2013 based on updated flow monitoring results. The 2011 and 2013 Master Plans will be replaced with this update which evaluates the current system that has been improved since 2011, prioritizes the capital improvement program, minimizes inflow and infiltration, ensures compliance with regulatory requirements, includes recycled water planning, and increases efficiencies in operations and maintenance. The 2023 Master Plan will recommend short term and long-term capital improvement projects that will improve system reliability, resiliency, functionality, and flexibility. The Master Plan will also guide the management and implementation of the sanitary sewer facility improvement projects within the District's collection system.

Analysis

The District advertised this project in October 2022 and received two proposals, one from HydroScience and the other from V.W. Housen & Associates (teamed with Woodard & Curran). These firms presented their proposals to the District's Master Plan Committee on December 7, 2022, and the firms were evaluated based on the following criteria:

Criteria	Weight Factor	Rating (1.0-5) (low to high)	Weighted Rating
1) Quality of Proposal and Qualifications and experience of the Proposer related to the services described in this RFP.	30%		

---

2) Proposer's understanding of the project and knowledge of subject matter and expertise and approach as presented during Proposal Presentation to committee.	45%		
3) Proposer's ability and available resources to perform the requested services.	15%		
4) Proposed project costs.	10%		

Each firm scored well in Criteria 1 and 3 however V.W. Housen & Associates scored higher in Criteria 2 and 4. The Committee reached consensus on the recommendation to move forward with V.W. Housen & Associates.

Fiscal Impact

The proposed fee for the Master Plan Update Scope of Work as outlined in the District's RFP is $312,770. V.W. Housen & Associates proposed an additional item to provide modeling training to District staff for an additional $12,962, for a total of $325,732. The work will span over two fiscal years and will be paid for from the capital budget.

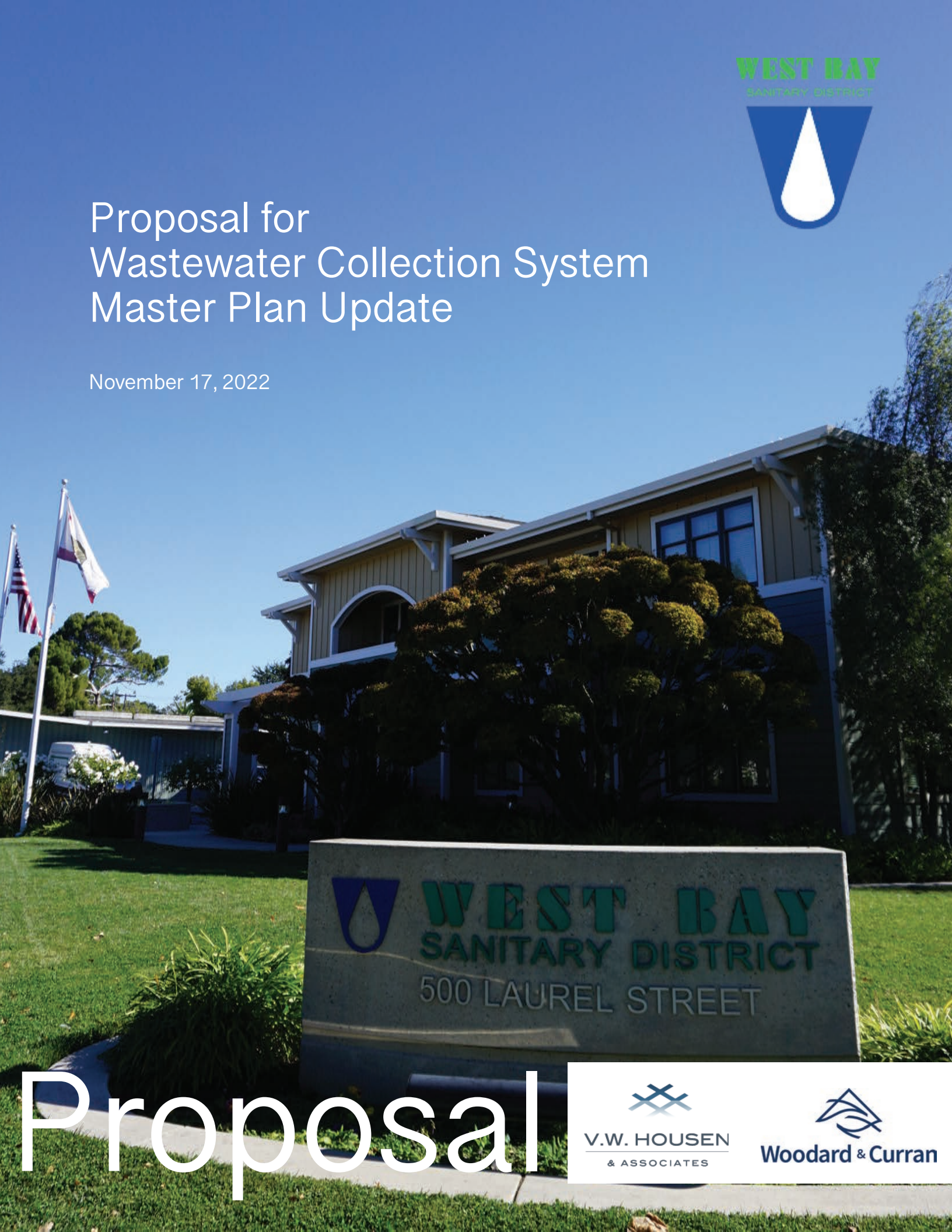
Recommendation

The General Manager recommends the District Board Authorize the General Manager to enter into the agreement for the 2023 Master Plan with V.W. Housen & Associates.

WEST BAY
SANITARY DISTRICT

Proposal for Wastewater Collection System Master Plan Update

November 17, 2022



Proposal

V.W. HOUSEN & ASSOCIATES

Woodard & Curran

V.W. HOUSEN
& ASSOCIATES

November 17, 2022

Sergio Ramirez
General Manager
West Bay Sanitary District
500 Laurel Street
Menlo Park, CA 94025

Subject: Proposal for Wastewater Collection System Master Plan Update

Dear Mr. Ramirez,

We at V. W. Housen & Associates and Woodard & Curran ("the VWHA team") are excited to provide this Proposal for the West Bay Sanitary District Wastewater Collection System Master Plan Update. This Proposal highlights our qualifications and knowledge of the District's systems, and demonstrates how closely our project experience matches the needs of the District.

I built VWHA from a strong foundation working for local water and wastewater agencies. Since 2012, we have provided consulting services to 50 Bay Area agencies, focused almost exclusively on wastewater collection system planning, design, and asset management. For this duration, VWHA has supported the District with hydraulic modeling, master planning, the LAMP, consolidation discussions, and as-needed engineering tasks. Since 2014, Woodard & Curran has supported the District's recycled water strategy, beginning with a recycled water market study, which led to planning, funding, preliminary design, and serving as the Owner's Representative during construction of the Sharon Heights Golf and Country Club recycled water facility.

I will serve as the Project Manager and will lead hydraulic modeling and capacity assessment tasks, as well as the Linear Asset Management Plan update and CIP update. Greg Ow, PE will provide constructability review and cost estimating for the recommended Master Plan projects. Dave Richardson and his team at Woodard & Curran will evaluate the District's pump stations and complete recycled water planning. Over the past 15 years, VWHA and Woodard & Curran have worked together on projects for the City of Berkeley, Central San, Ironhouse Sanitary District, Delta Diablo, the southern Marin wastewater collection agencies, Town of Los Altos Hills, and West Bay Sanitary District.

We are ready and available to work with the District to create a single, cohesive Master Plan that guides infrastructure decisions for the next ten years. We look forward to the opportunity to present our qualifications and approach to the selection team in December. Please feel free to contact me at (925) 518-3487 or vhousen@housenassociates.com if you have questions or would like to discuss our proposal further.

Sincerely,

V. W. Housen & Associates

Vivian Housen, P.E.
Principal

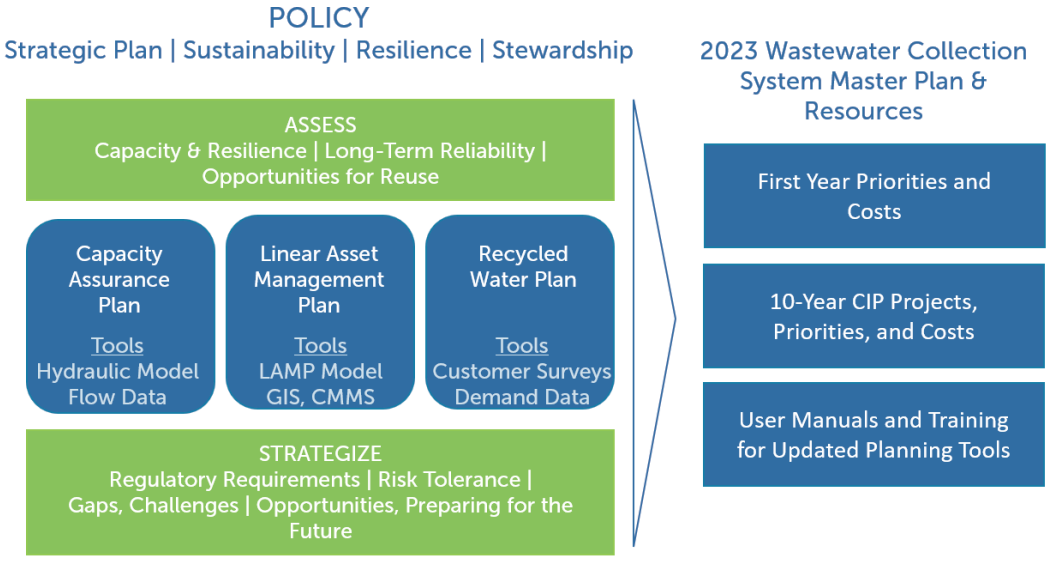
Executive Summary

Your plans are all connected. Decisions needed to address projects from the *Capacity Assurance Plan* will change if inflow and infiltration (I&I) are reduced. When *Recycled Water Planning* answers the need for year-round recycling, then downstream flows and capacity needs will also change. Elevating the priority of projects that reduce I&I may require the deferral of other rehabilitation projects with a higher priority in the *Linear Asset Management Plan*. All of these plans must support the *District's Strategic Plan*. By considering these connections, the VWHA team will evaluate your wastewater collection system in a way that highlights the highest priorities while creating the greatest efficiencies. Your customers will know that their rates are paying to resolve the most critical District needs, and that the resulting projects have considered customer service, reliability, resilience, sustainability, and cost.

The Master Plan update weaves together and updates the District's planning studies to form a single 10-year roadmap that supports the Strategic Plan.

Our approach completes these three plans in parallel, so findings from one can be integrated into the ongoing work of another. The VWHA team brings decades of experience developing master plans for Bay Area agencies with similar challenges to yours. We have a deep understanding of your wastewater infrastructure and recycled water operations and there will be no time wasted as we move forward with the Master Plan Update. We will work closely with you to gather current documents, data, and knowledge, so we can get to work on the needed analyses. Your staff will be involved at every step, and we will maintain momentum while addressing your key issues. In this way, the Master Plan CIP will reflect the best options for the District as you plan for the next decade of effective utility management.

Our approach includes *robust tools* that utilize both historical and recently acquired flow, demand, and field data to help our team to complete *detailed and thoughtful analyses.* Our work will lead to capacity, rehabilitation, replacement, and water reuse solutions that address the District's call for a Master Plan that provides *clear guidance* for the next decade, allowing sufficient *flexibility* to choose solutions that *maximize reliability* to *reduce risk*, maximize *options for water reuse*, ensure *regulatory compliance*, and *manage cost* for your customers.



The VWHA team uses a proven process to Assess, Strategize, Analyze, and Create logical, prioritized, near- and long-term CIPs that reduce risk at a reasonable cost

We propose a proven and familiar project team that has worked successfully for many years with District staff, to solve the very problems that are presented by your Master Plan update. If invited to make a proposal presentation, Project Manager Vivian Housen, Recycled Water Lead Dave Richardson, and Pump Station Assessment Lead Tony Valdivia are the three team members who will attend.

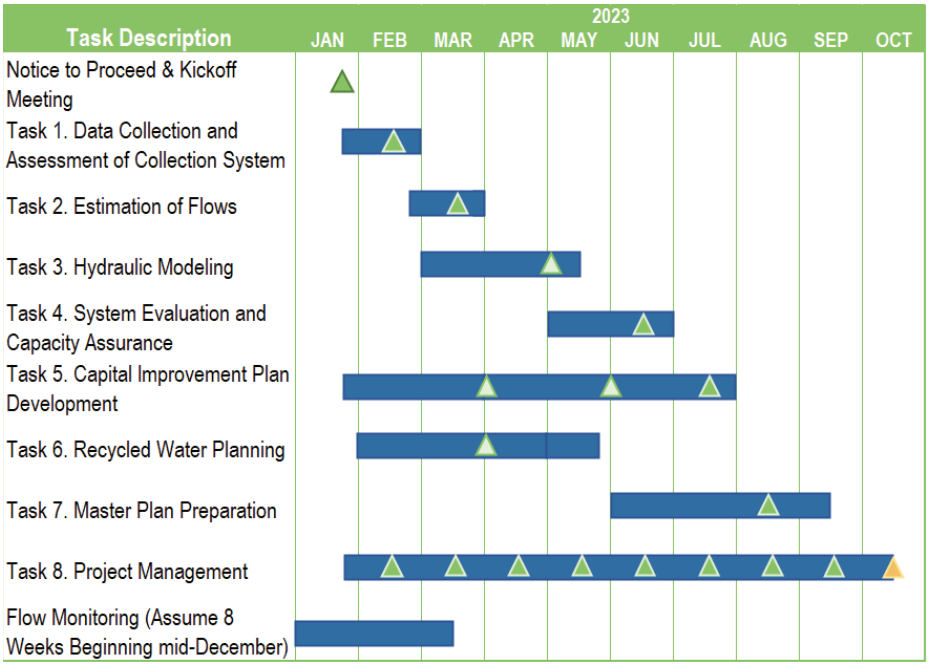
Vivian has worked with the District since 2009, *when she served as the District's Interim General Manager.*

Since this time, she has assisted the District with the original 2011 Master Plan, 2013 Master Plan Update, 2015 Linear Asset Management Plan (LAMP), 2016 Collection System of the Future project, 2016 Contract Services Agreements, 2018 Sustainability Plan, 2020 Hydraulic Model Update, and 2021 review of potential East Palo Alto Sanitary District flows.

Dave has worked with the District since 2014, **when the District initiated its first Recycled Water Marketing Plan** project to explore opportunites to recycle water within the service area. Dave helped to secure SRF and grant funding, and has supported the Sharon Heights Golf and Country Club (SHGCC) recycled water project through the development of an MOU, finance plan, conceptual design, and a system operation evaluation.

Tony served as the Owner's Representative **during the construction of this $22 million design-build project**, and coordinated successful testing and commissioning of the cutting-edge plant. Vivian, Dave, Tony, and our team are in tune with the District's needs and priorities. Together with your staff, we will create a Master Plan that the District will use often and with great pride, as you continue to serve your customers over the next ten years.

Our Workplan will complete the Master Plan in 8 months from the Notice to Proceed. With our strong foundation of knowledge of the District's system, data, and tools, we will begin work on the Master Plan update without delay, in order to meet the District's aggressive schedule. Our team will start immediately with the Recycled Water Plan and LAMP updates. These tasks will be well developed when new flow data arrives in March, after which we will complete the capacity assessment, CIP, and Master Plan Report. We have scheduled 12 formal meetings with staff and a presentation to the Board upon completion of the project.



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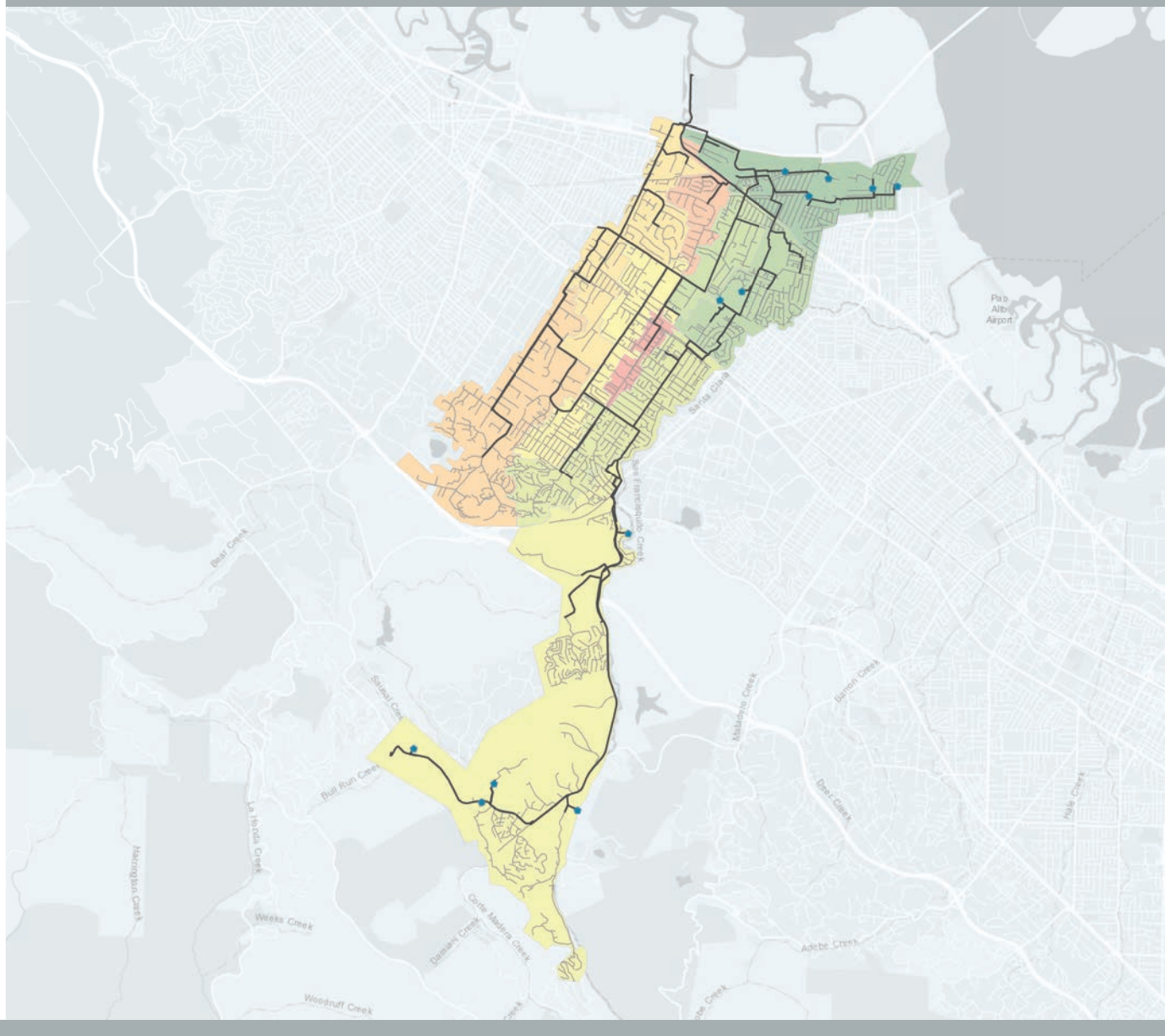

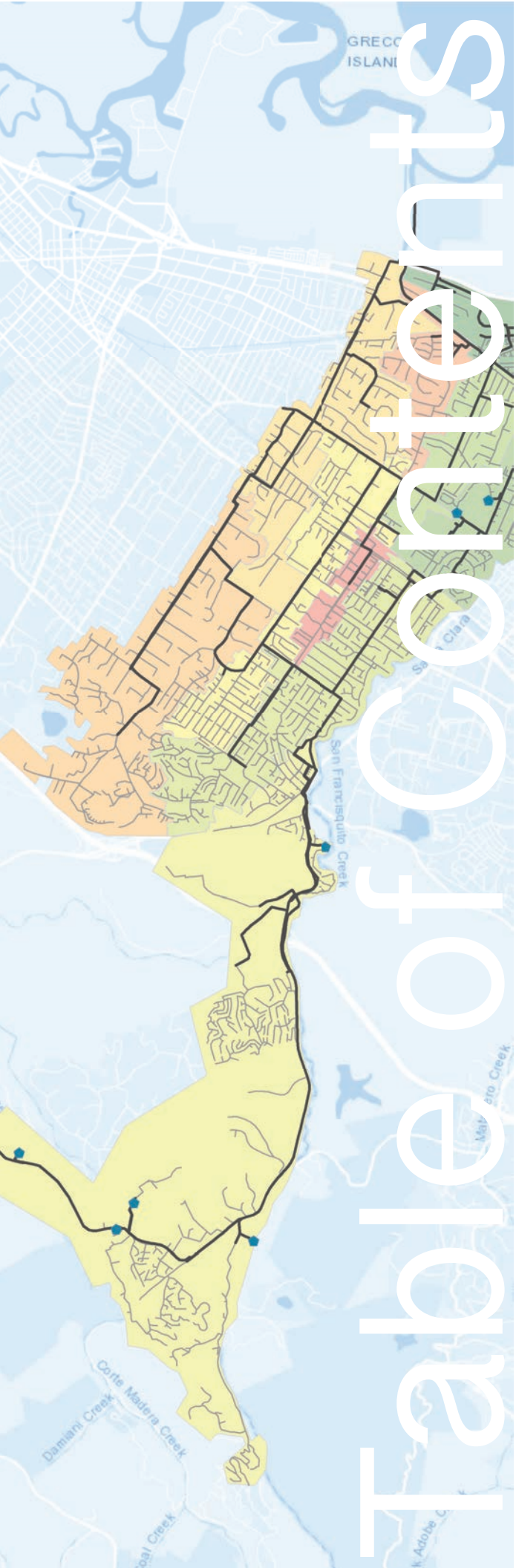

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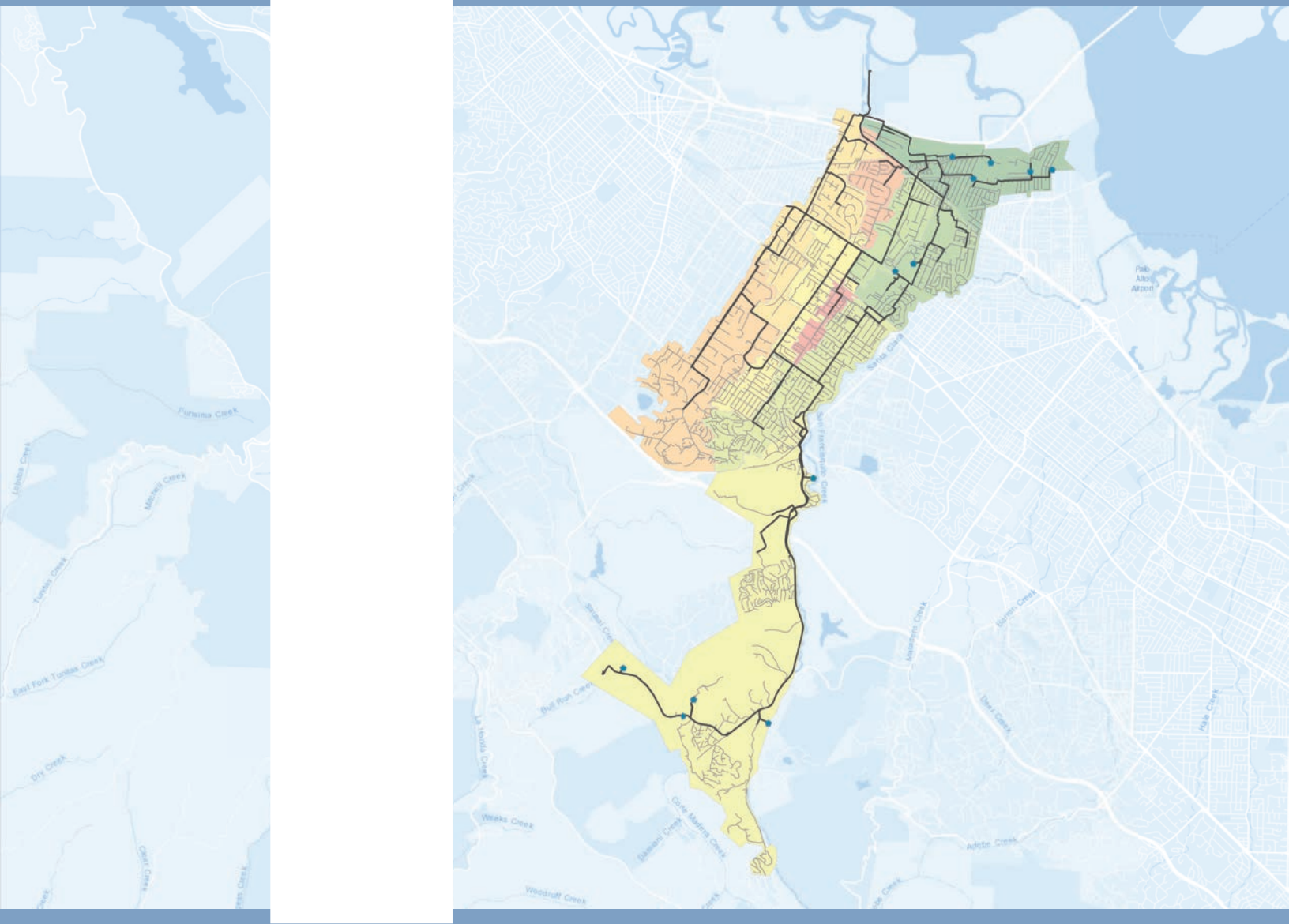
Identification of Proposer



Identification of Proposer

Lead Firm: V.W. Housen & Associates, Inc.

V. W. Housen & Associates, Inc. (VWHA) was established in 2012 to help public agencies to plan and implement strategic initiatives for improving infrastructure. We provide program management, agency management, infrastructure planning, design and construction management, lifecycle asset management, and O&M efficiencies support services. We specialize in helping our clients to anticipate and address change in a way that minimizes risk. VWHA has been recognized by the Regional and State Water Boards for our efforts in assisting water and wastewater agencies to substantially improve system performance. We bring decades of experience to our recommended solutions, creating programs that address the most critical needs within available budgets.

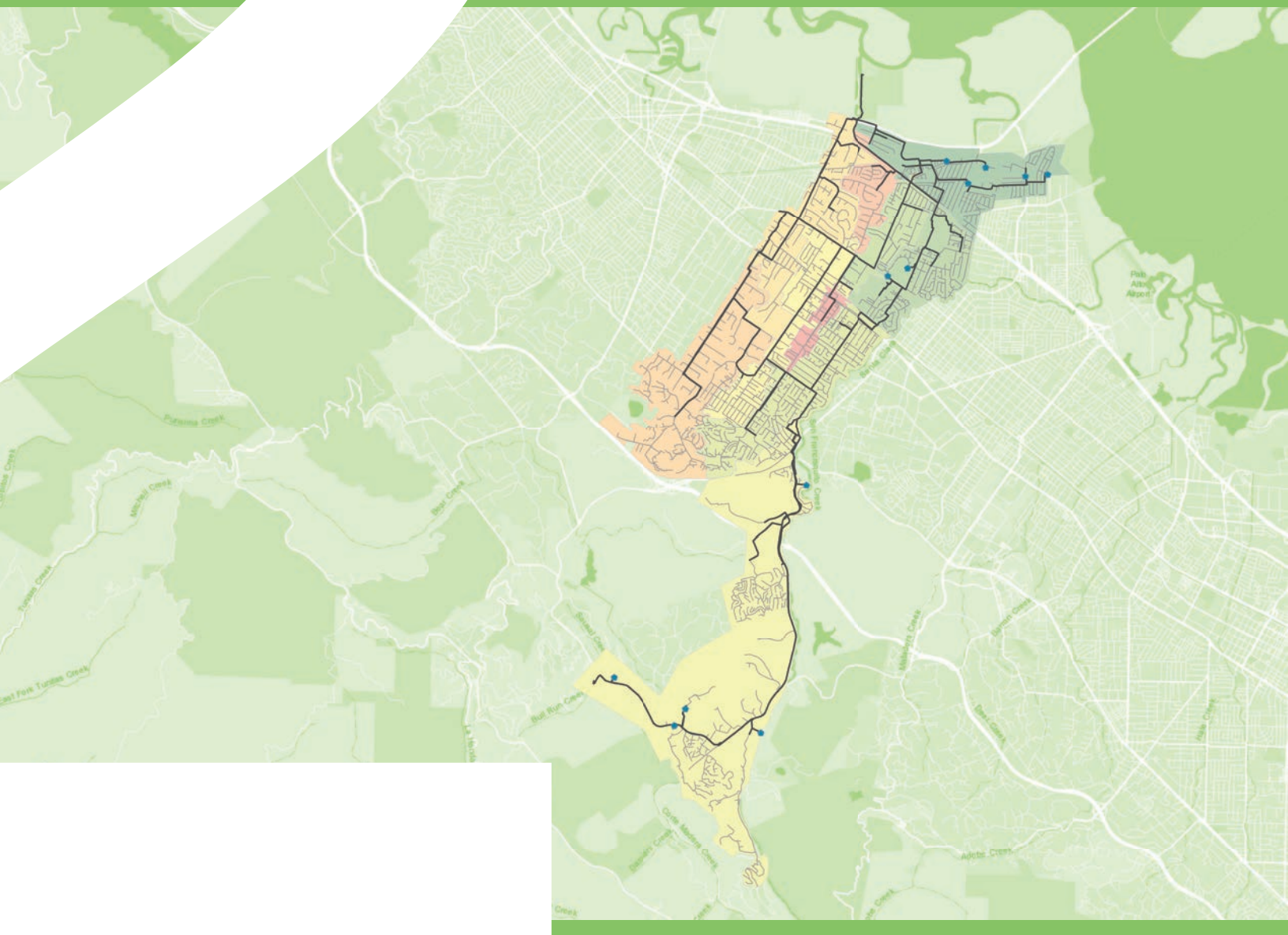
Lead Firm:	V. W. Housen & Associates, Inc. "S" Corporation
Primary Project Responsibilities:	Project Management, Hydraulic Modeling, Linear Asset Management, Capital Improvement Program
Location:	1777 N. California Blvd., Suite 330, Walnut Creek, CA 94596
Contact Information:	Vivian Housen, Principal VHousen@HousenAssociates.com, (925) 518-3487

Subconsultant: Woodard & Curran, Inc.

Woodard & Curran, Inc. (W-C) is an integrated science, engineering, design-build, and operations company specializing in water and environmental projects. Our depth of experience across these disciplines makes us uniquely suited to handle any project with a completely tailored approach. By partnering with our clients, adopting their priorities, and understanding the realities they face, we deliver one-of-a-kind answers to unique problems, with a truly collaborative working style. We believe that doing good work for our clients goes hand in hand with doing good work for the companies and communities we serve, and for the planet as a whole, and that all good work begins and ends with a happy, healthy team. These commitments — to each other, to our clients, and to the world around us — define Woodard & Curran.

Firm Name:	Woodard & Curran, Inc. Corporation
Role on the Project:	Recycled Water Planning, Pump Station Evaluations, QA/QC
Location:	2175 N. California Blvd., Suite 315, Walnut Creek, CA 94596
Contact Information:	David Richardson, Senior Principal DRichardson@WoodardCurran.com, (925) 627-4138

Staffing Resources



Staffing Resources

Our project team members, shown in the chart below, have successfully guided agencies through the development of complex wastewater collection system master plans. We bring hands-on experience working in communities with diverse topography, complex system hydraulics, and challenging flow characteristics. We have in-depth knowledge of the District's infrastructure, and also your wastewater and recycled water challenges, through our prior work with the District. Our team members are skilled at managing these project challenges, and will provide a holistic solution to West Bay's diverse system needs, transforming the recommendations into a strategic, well-planned, and cost effective capital improvement program.

V. W. Housen & Associates and Woodard & Curran have worked together on wastewater collection system projects for nearly two decades. Our history of successful collaboration allows our firms to coalesce as one team.

Our team is available, excited, and committed to working closely with the District Board, staff, and community to kick off the next decade of improvements through a comprehensive wastewater collection system master plan.

The three team members who will be principally responsible for working with the District include:

- *Vivian Housen, PE (VWHA)* | Project Manager, Hydraulic Modeling, Linear Asset Management, CIP
- *Dave Richardson, PE (W-C)* | Recycled Water Planning
- *Tony Valdivia, PE (W-C)* | Pump Station Assessments

Vivian Housen, PE | Project Manager, Hydraulic Modeling, Linear Asset Management, CIP

Vivian Housen, PE is a Principal at VWHA and has over 30 years of experience in hydraulic modeling, master planning, linear asset management, regulatory compliance, and capital program development. She has worked with agencies facing significant capacity issues and has been successful in creating workable solutions to resolve their complex wet weather flow challenges. Vivian is respected by local and state regulatory agencies and was invited by staff to present her approach toward linear asset management to the Region 2 Board of Directors. She is very familiar with the District's wastewater collection system through her work developing and updating the District's hydraulic model in 2011, 2013, and 2020, developing the Linear Asset Management Plan in 2015, and providing ongoing as-needed support assisting the District to assess flow impacts from new development.

Other representative projects include:

- Sewer Master Plan and Asset Management Plan, Veolia Water & City of Richmond, CA
- Wastewater Collection System Master Plan, City Engineering Support (Sewer), and CIP Support, City of Half Moon Bay, CA
- On-Call Engineering Support including Hydraulic Modeling and Gravity Sewer Master Plan Update, BKF and Castro Valley Sanitary District, CA

Dave Richardson, PE | Recycled Water Lead

Dave Richardson, PE is a Senior Principal at Woodard & Curran and has over 40 years of experience in planning, design, and funding of wastewater and recycled water projects. Dave understands how social, environmental, and economic considerations contribute to sustainable projects. He is skilled at guiding participatory decision-making through work on multi-stakeholder projects, including wastewater and recycled water master planning. Representative projects completed for West Bay Sanitary District include:

- Recycled water planning and development + Sharon Heights WWTP Design-Build
- District-wide recycled water study and feasibility studies for Sharon Heights, Bayfront, and Woodside
- Integrated Water Resource Study
- SRF Loan and Grant Financing for Bayfront and Avy-Atschul Recycled Water Projects

Tony Valdivia, PE | Pump Stations

Tony Valdivia, PE is a Principal at Woodard & Curran and has 22 years of experience in planning, design, and rehabilitation of treatment facilities, pumping stations, pipelines, recycled and reclaimed water system conveyance facilities, and stormwater detention facilities. Tony has significant experience in evaluating system operations, including analyses to quantify the reliability and efficiency of conveyance and storage systems and recommend improvements. Representative projects include:

- Owner's agent for SHGCC Recycled Water Project, West Bay Sanitary District, Menlo Park, CA
- Design Lead for Recycled Water Booster Pump Station No. 1, Napa Sanitation District, Napa, CA
- Design Lead and Lead Mechanical Designer for Geysers Connection Pump Station, Town of Windsor, CA

Three additional senior team members will support Vivian, Dave, and Tony throughout the project:

- *Greg Ow, PE (VWHA)* | Rehabilitation and Replacement, Cost Estimating, CIP
- *Carrie Del Boccio, PE (W-C)* | Recycled Water Planning
- *Chris van Lienden, PE (W-C)* | Hydraulics, Quality Assurance and Quality Control

In addition, VWHA and Woodard & Curran each have the capacity to provide additional personnel as needed to assure that the project tasks are completed to the District's satisfaction, on schedule, and within budget.

Greg Ow, PE (VWHA) | Rehabilitation and Replacement, Cost Estimating, CIP

Greg Ow, PE is a Senior Project Manager at VWHA and has over 40 years of civil engineering experience ranging from water distribution design through program and construction management of complex infrastructure projects. He brings practical knowledge to his proposed solutions from his professional experiences as both a wastewater and water treatment plant operator, and adds measurable value on project reviews, improving both efficiency and constructability. Representative projects include:

- Project Manager for design of Bonavita Heights Infrastructure, Santa Rosa, CA involving base mapping, utility location, sewer and manhole replacements, water line and valve replacements, and new water service connectors and meters.
- Project Manager for design services to reconstruct Wastewater Pump Station 12, Pacific Grove, CA

Carrie Del Boccio, PE (W-C) | Recycled Water Planning

Carrie Del Boccio, PE is Woodard & Curran's Municipal Recycled Water Practice Leader. She has 17 years of experience, and has helped to implement solutions to some of the most challenging recycled water issues in California. Carrie has experience in recycled water planning and treatment design, pipeline design, program management, and development of sewer system and urban water management plans. She works with clients to evaluate available supply quantities, determine facility needs, develop feasibility-level costs, evaluate permitting and institutional constraints, and establish financial projections. Representative projects include:

- Project Manager for Northwest Santa Clara County Recycled Water Strategic Plan, Palo Alto, CA
- Design Lead for Recycled Water Infrastructure Expansion - Phase 1A, Pleasanton, CA
- Project Engineer for Recycled Water Facility Plan, City of Hayward, CA

Chris van Lienden, PE (W-C) | Hydraulics, QA/QC

Chris van Lienden, PE, is a Project Manager at Woodard & Curran and has 14 years of experience on water, wastewater, and stormwater infrastructure projects, including system evaluation, modeling, and design. He has led numerous hydraulic model development projects for municipal agencies throughout California. Chris is skilled in InfoWorks CS and ICM, WaterGEMS, H2Omap Water and Sewer, InfoWater, InfoSewer, InfoSWMM, HEC-RAS, ArcGIS, and other analysis tools. Representative projects include:

- Project Manager for Sewer System Master Plan, Pleasanton, CA
- Project Engineer for Central Contra Costa Sanitary District Collection System Master Plan, Martinez, CA
- Project Engineer for Sanitary Sewer Master Plan Phase II, City of San Jose, CA

Vivian Housen, PE, ENV SP

Project Manager, Capacity Assessment, LAMP, CIP

Vivian Housen has over 30 years of experience in the planning, design, and management of wet infrastructure projects. She is a hands-on manager for programs involving wastewater facility improvements, hydraulic modeling, master planning, utility asset management, and regulatory compliance. Vivian also assists agencies with interim management needs and to improve O&M efficiencies. She is strategic and forward-thinking, and is recognized for her ability to build consensus among diverse organizations. She has demonstrated success delivering controversial programs significantly under budget.

RELATED EXPERIENCE

Project Manager for Risk Assessment and Capital Replacement Programs. Vivian has assisted water and wastewater agencies with systemwide asset management involving the establishment of Level of Service objectives, creation of computerized risk models that calculate Risk based on Likelihood and Consequence of Failure, and development of prioritized pipeline rehabilitation and replacement programs. Vivian's clients have included: West Bay Sanitary District | Town of Los Altos Hills | City of Half Moon Bay | Veolia Water & City of Richmond | Ross Valley Sanitary District | Delta Diablo | Ironhouse Sanitary District | and Mt. View Sanitary District.

Project Manager for Hydraulic Model Development, Updates, and Analyses. Vivian has developed and calibrated wastewater collection system hydraulic models using Infoworks CS, Infosewer, and InfoSWMM. Model development has included capturing real-time flow data, estimating flows, model development, and inflow & infiltration evaluations. Vivian has utilized these models to identify and prioritize project needs, and to assist in addressing regulatory mandates for spill reduction. Vivian's clients have included: West Bay Sanitary District | City of Half Moon Bay | City of Sausalito | City of Millbrae | Veolia Water & City of Richmond | Ross Valley Sanitary District | Ironhouse Sanitary District | and CV San.

Project Manager for Collection System of the Future Initiative. Vivian assisted West Bay Sanitary District, as the lead agency, to lead a series of workshops over 18 months to conduct information-sharing and benchmarking, brainstorm future challenges and obstacles, and develop strategies to prepare for and address challenges facing sewer collection system agencies. The project involved nine leading Bay Area agencies, including West Bay Sanitary District, Union Sanitary District, West Valley Sanitation District, CV San, Ross Valley Sanitary District, West County Wastewater, Novato Sanitary District, and the City of Livermore. The final product was presented at the 2016 CWEA Annual Conference, and is available for reference by other collection system agencies.

Professional Registration

- Professional Civil Engineer, California No. C46324
- Envision Sustainability Professional

Education

- MS, Structural Engineering, Stanford University
- BS, Civil Engineering, Regent's Scholar, University of California at Berkeley

Professional Affiliations

- American Water Works Association
- Bay Area Water Works Association
- Water Environment Federation
- California Water Environment Association
- California Association of Sanitation Agencies (Prior Associates Committee Chair and Executive Board Member)
- American Society of Civil Engineers

V.W. HOUSEN
& ASSOCIATES

Greg Ow, PE

Project Development, Cost Estimating, CIP

Gregory Ow has more than 40 years of civil engineering experience ranging from water distribution design through program/construction management of complex infrastructure projects. He brings practical knowledge from his professional experiences as both a wastewater and water treatment plant operator. Drawing from his civil engineering design experience, Mr. Ow has well-rounded experience in providing valuable input into planning & design, constructability reviews, and construction management services.

RELATED EXPERIENCE

Project Engineer for Risk Assessment Analysis Project, Veolia and City of Richmond, Richmond, CA. Greg is assisting the project team with constructability reviews for pipeline replacements, cost estimating, and project prioritization. This project provides an annual update of the City's computerized risk model that calculates Risk based on Likelihood and Consequence of Failure, and develops new project priorities, costs, and a running timeline for improvements.

Project Manager for Construction Management of Water and Wastewater Facilities, Various Clients. Greg has led construction management teams for numerous projects within the San Francisco Bay Area. Project scopes have involved new water, sewer, and stormwater pipelines, service laterals, paving and hardscape, pump stations, concrete tanks, and water and wastewater treatment facilities. Greg utilizes this background to assist VWHA with constructability reviews and cost estimates. Clients have included: City of Mill Valley | City of Lathrop | City of Millbrae | City of Ukiah | Tahoe-Truckee Sanitation Agency | North Marin Water District | EBMUD | Marin Municipal Water District | and City of Merced.

Project Manager and Project Engineer for Design of Water and Wastewater Facilities, Various Clients. Greg has served as PIC, Project Manager, and Project Engineer on water facility designs for Bay Area clients. These projects involved raw and potable water pipelines, sewer pipelines and appurtenances, and pump stations. Clients have included: City of Martinez | City of Petaluma | City of Pacific Grove | and City of Santa Rosa.

Project Manager for Water System Studies, Various Clients. Greg completed hydraulic modeling for the Water Systems Study and Design for the Naval Air Station in Alameda, CA, and conducted a physical assessment of system operability prior to preparing biddable plans and specifications for system replacement. Greg was also Project Manager and completed hydraulic modeling for the new potable water distribution system on Treasure Island in San Francisco, CA, prior to completing final design of 25 miles of new pipe varying in size from six to 18 inches.

Professional Registration

- Professional Civil Engineer, California No. 37002

Education

- MS, Environmental Management, University of San Francisco
- BS, Civil Engineering, University of California at Berkeley

Professional Affiliations

- American Water Works Association
- American Council of Engineering Companies
- California Water Environment Federation
- American Public Works Association
- California Water Environment Association
- American Society of Civil Engineers

V.W. HOUSEN & ASSOCIATES

David Richardson, PE
Project Lead - Recycled Water

Education
- Masters, Civil & Environmental Engineering, Stanford University
- Masters, Finance, Stanford University Graduate School of Business
- Bachelors, Civil Engineering, Stanford University

Registration
- Professional Engineer - CA (37097)

Professional Associations
- WateReuse Research Foundation (has served on the Board of Directors)
- California Association of Sanitation Agencies
- Water Environment Federation
- Association of California Water Agencies

Technical Expertise
- Water Recycling Planning + Design

Specialized Training
- Decision Analysis\Financial Analysis

Professional Profile

With 41 years of experience and as a National Practice Leader for Woodard & Curran's wastewater services group, Dave provides a broad range of engineering planning, design, and construction expertise to project teams, making sure Woodard & Curran's projects are technically sound and that client needs are met. His decades of engineering and financial and funding experience have given him a good understanding of how social, environmental, and economic considerations contribute to sustainable projects. He is skilled at guiding participatory decision-making through work on multi-stakeholder projects such as integrated water management planning and wastewater and recycled water master planning. Additionally, he has expertise in managing large and complex infrastructure projects and programs for public agencies where he has demonstrated his ability to leverage agency expertise, break down complex activities into achievable tasks, and balance competing demands to move a project forward.

Related Experience

West Bay Sanitary District, CA – Recycled Water Planning and Development + Sharon Height WWTP Design-Build (Including UV Disinfection). Principal-in-Charge responsible for overseeing the development of a recycled water system in Menlo Park to serve irrigation and industrial users such as Sharon Heights Golf Course and the Stanford Linear Accelerator Center. Work included a market survey to identify recycled water users and conduct interest and issue assessments, development of alternatives and facility engineering and planning, development of cooperative Memorandum of Understanding with involved agencies, development of a finance plan, and successful grant and loan funding applications. Work included conceptual treatment plant design, flow monitoring and system operation evaluation. The CEQA document was certified in November 2015; the project was completed in 2021 and is producing recycled water, offsetting potable water use.

West Bay Sanitary District, Menlo Park, CA – District-wide Recycled Water Market Study and Feasibility Studies for Sharon Heights, Bayfront and Woodside. Project Manager on Market Study for WBSD service area. The strong interest in recycled water led to 3 separate feasibility studies for West Bay-the Woodside Recycled Water Study has just begun and contemplates diverting wastewater from Woodside and the Fair Oaks Sewer Maintenance District in San Mateo County to Menlo Country Club to offset the use of potable water for irrigation of the golf course.

West Bay Sanitary District, Menlo Park, CA – Integrated Water Resource Study. As Recycled Water Lead, Dave worked with Vivian Housen to compile the WBSD planning documents into an integrated water resources plan. This effort led the City of Menlo Park to expand its water recycling planning efforts and increase its reliance on recycled water through its Urban Water Management plans.

West Bay Sanitary District, Menlo Park, CA – SRF Loan and Grant Financing for Bayfront and Avy-Altshul Recycled Water Projects. Principal-in-Charge on both Bayfront and Avy-Altshul, where wastewater will be diverted to supplement water supply to the Sharon Heights recycled water project. Both projects achieved maximum possible scores in the competitive financing process and are slated to be fully financed in 2023.

Anthony Valdivia, PE

Pump Stations

Education

- Bachelors, Civil and Environmental Engineering, University of California, Berkeley

Registration

- Professional Engineer - CA, 66847

Professional Associations

- American Society of Civil Engineers

Professional Profile

Tony has 22 years of experience and specializes in planning, design and rehabilitation of municipal infrastructure projects, including treatment facilities, pumping stations, pipelines, and stormwater detention facilities. His experience includes potable and reclaimed water system conveyance facilities from the early planning stages through construction and startup assistance. Tony is an expert in hydraulic modeling and surge analysis, and has significant experience in the evaluating system operations, including analyses to quantify the reliability and efficiency of conveyance and storage systems and recommend improvements.

Tony has developed keen management skills to keep complex design and construction projects on budget and on schedule. He is adept at identifying and addressing project challenges early, and coordinating with clients, subconsultants, construction managers and contractors to develop approaches and resolutions before they impact project success. Tony completed the accelerated design of a major pump station upgrade in just 4 months—from preliminary design through final bid documents, including 4 weeks of client and constructability review time—to meet a client's schedule needs.

Related Experience

Recycled Water Project, CA - West Bay Sanitary District. As Owners Agent for this $22-million design-build project, SRF-funded project, Tony was responsible for leading the preliminary design and development of bridging documents for construction of a 0.5mgd membrane bioreactor (MBR) treatment plant, diversion pump station and 2-mile raw wastewater pump station. Development of the RFP to procure a design-build contractor required careful management of the design to provide a facility that met the District's operational requirements, satisfied complex environmental and permitting mandates and fit within the limited grant and loan funding obtained by Woodard & Curran on behalf of the District. Throughout construction, Tony managed the DB team to monitor construction progress, budget, schedule and potential changes to keep the project on track, and assisted the contractor/engineer and District in obtaining required Title 22 permits. This work included organizing a remote bioassay test for validation of the facilities new Trojan UV unit during COVID lockdown as well as negotiations with DDW for interim operation of the plant (under higher UV dosing) while the bioassay reporting was completed. This allowed the District to operate the plant while validation testing was ongoing, mitigating the impacts of COVID delays.

Napa Sanitation District, CA - Booster Pump Station No.1 Design. Design Lead for a new recycled water distribution pump station to serve a 5-mile expansion of the District's recycled water system (the pipeline was also designed also by Woodard & Curran). The design included hydraulic modeling of the existing and expanded systems to define pump station design criteria, pump station siting evaluations and preliminary and final design. The facility has an initial design capacity of 1,400 gpm, but it is expandable to over 9,000 gpm in the future. The pumps and electrical equipment are housed in a CMU building designed to blend in with its surroundings, and the project also features surge control and new electrical and controls systems. When the District's plans for the initial location of the site changed after the 100% design was completed, Woodard & Curran efficiently redesigned the pump station to sit on an entirely new site one mile away, which impacted site access, pump sizing and building aesthetics (the new site is located at Napa State Hospital).

Town of Windsor, CA - Geysers Connection Pump Station. Design Lead and Lead Mechanical Designer for this 1.67 mgd, vertical turbine recycled water pump station to convey tertiary treated water from the Town's largest storage pond to the City of Santa Rosa Geysers pipeline. Conveying recycled water to the Geysers steamfield for production of green energy provides the Town with an invaluable disposal method and flexibility of operations. The project included preliminary siting analyses, preliminary design, final design and bid services.

Carrie Del Boccio, PE

Recycled Water

Education

- Masters, Environmental Engineering, University of California, Berkeley
- Bachelors, Civil and Environmental Engineering, UCLA

Registration

- Professional Engineer - CA

Professional Associations

- American Society of Civil Engineers, Member
- American Water Works Association (AWWA), Member
- California Water Environment Association, Member
- Chi Epsilon - Honor Society of Civil Engineers, Member
- Order of the Engineer, Member
- Water Environment Federation (WEF)
- Watereuse California, Committee Member

Professional Profile

Carrie has 17 years of experience and serves as Woodard & Curran's Municipal Recycled Water Practice Leader. As a Practice Leader, she works directly with clients to implement solutions to some of the most challenging recycled water issues. Carrie provides technical leadership to our municipal infrastructure projects and helps to drive innovation in the firm's municipal recycled water practice. In addition, Carrie has experience in recycled water planning and treatment design, pipeline design, program management, and development of sewer system and urban water management plans. Carrie has performed design services from conceptual through to design and implementation. She works with clients to evaluate available supply quantities, determine facility needs, develop feasibility-level costs, evaluate permitting and institutional constraints, and establish financial projections.

Related Experience

City of Palo Alto, CA – Northwest Santa Clara County Recycled Water Strategic Plan. Project Manager for strategic plan to produce a guideline for an alternative reliable water supply for the City of Palo Alto and adjacent cities that will augment supplies with recycled water, thus increase the reliance on locally available water supplies. Coordinating recycled water and groundwater preliminary planning studies to assess the feasibility of both non-potable and potable reuse options for the region; providing coordination efforts for Phase III of the recycled water system expansion through financial planning, preliminary design, and funding; and business analyses to guide the City and stakeholders' future investments in recycled water infrastructure Assessing the feasibility of non-potable reuse versus IPR/DPR. The project includes an assessment of IPR and DPR and preparation of a business plan for non-potable reuse and potable reuse.

City of Pleasanton, CA - Recycled Water Infrastructure Expansion – Phase 1A. Design Lead for 5,600 linear feet of 20-inch recycled water pipeline, 2,300 linear feet of 12-inch potable water pipeline, and retrofits to an existing 24-inch potable water pipeline to a recycled water main. Carrie also authored the Title 22 Engineer's Report for Distribution and Use of Recycled Water. Woodard & Curran provided engineering design and bid assistance for a recycled water distribution system that will serve the Hacienda Business Park and Sports Park in the City of Pleasanton. Phase 1A consisted of an expedited design of 50,000 linear feet of 6-inch to 24-inch recycled water pipeline, two flow control stations, and multiple site retrofits. Carrie was one of three design leads who split responsibility for portions of the system to meet the expedited schedule.

City of Hayward, CA - Recycled Water Facility Plan. Project Engineer participated in a $150,000 facilities planning study jointly funded by the State Water Resources Control Board (SWRCB) and the City of Hayward. The study's key objectives included refining the project previously identified in a Recycled Water Feasibility Study (reuse sites and demands, distribution alignment, sizing, construction alternatives, reuse site retrofit alternatives); developing the facilities, including a 6 mgd tertiary treatment plant, at the facility plan level, developing and implementing a funding strategy; and preparing for implementation. Also went on to develop a document demonstrating compliance with the requirements of a US Bureau of Reclamation Title XVI Feasibility Study.

Ironhouse Sanitary District, CA - Recycled Water Master Plan. Project Manager for the development of the master plan. The District built a new MBR treatment facility which provides high quality recycled water. Carrie developed a market assessment targeting landscape and agricultural irrigation customers and evaluated pipeline alignments.

Chris van Lienden, PE

Hydraulic Modeling + QA/QC

Education

- Masters, Civil & Environmental Engineering, University of California, Davis
- Bachelors, Chemical Engineering, University of California, Berkeley

Registration

- Professional Engineer, - CA, 75034

Professional Profile

Chris has 14 years of experience in water, wastewater, and stormwater infrastructure projects, including system evaluation, modeling, and design. He is currently the operations lead for Woodard & Curran's hydraulic modeling and master planning group in California and has led hydraulic model development for a variety of project sizes and types for municipal agencies throughout California. Chris has extensive experience in data analysis and report writing, his technical software skills include InfoWorks CS and ICM, WaterGEMS, H2Omap Water and Sewer, InfoWater, InfoSewer, InfoSWMM, HEC-RAS, ArcGIS, and other analysis tools. Over the past 10 years, Chris has completed model development and master plans for Central Contra Costa Sanitary District (Central San), City of San Mateo, Town of Hillsborough, City of Roseville, Delta Diablo Sanitary District, Fair Oaks Sewer Maintenance District (San Mateo County), Novato Sanitary District, and supported many others.

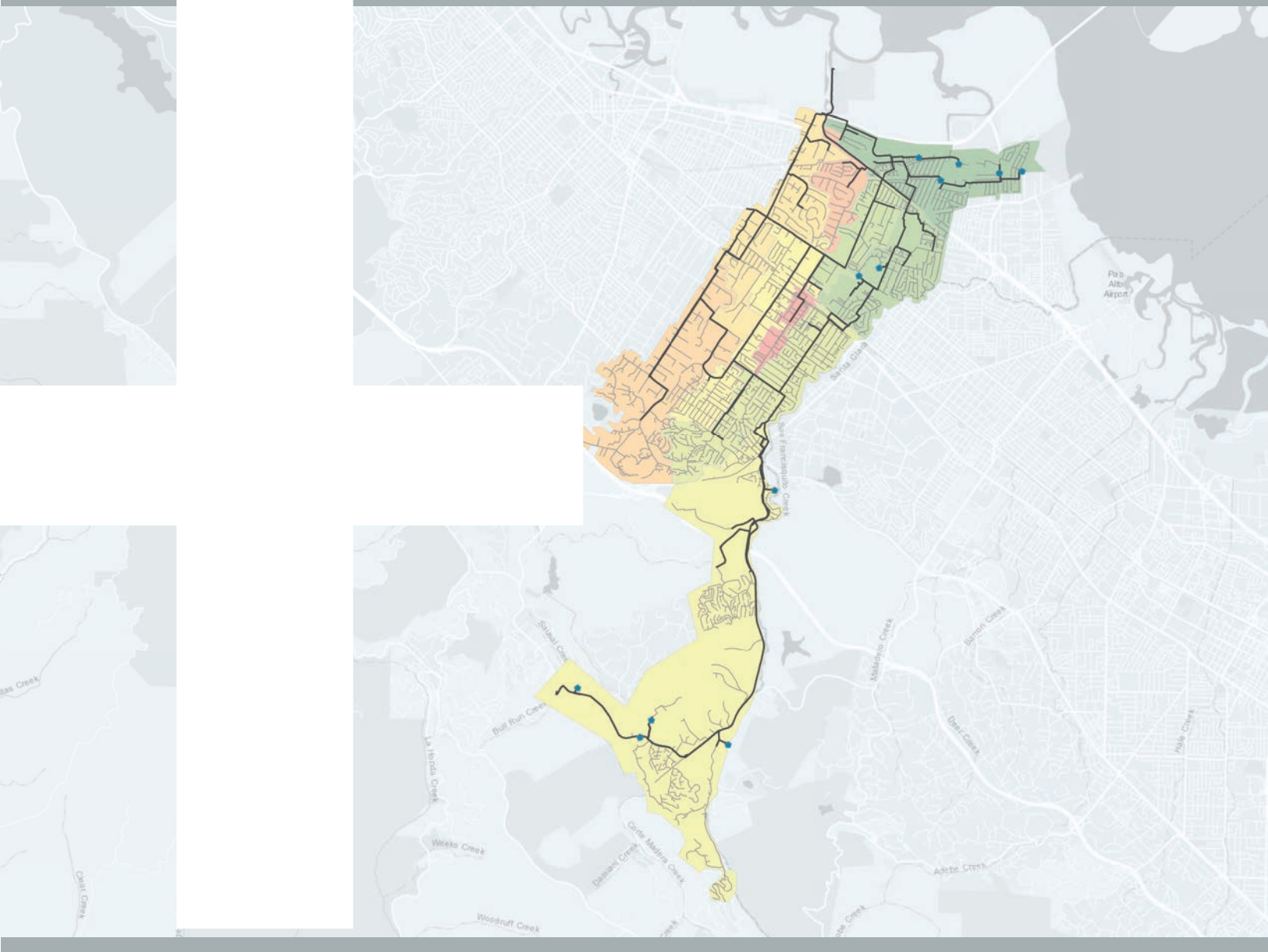
Related Experience

City of Pleasanton, CA – Sewer System Master Plan. Project Manager. Woodard & Curran is supporting the City in a major update of its sewer collection system hydraulic model and will be using the updated model to evaluate sewer system capacity. The City's previous Master Plan was last updated in 2007 and used modeling software, sewer data, and flow projection information that is now out of date. The new Master Plan uses Innovyze ICM software platform, and is based on current sewer data, extending the model network out to include all of the City's sewers. Sewer loading data is based on water consumption data geocoded to each parcel, with a future land use projected for each parcel based on the City's planning data (and coordinated with the City's concurrent water master plan development). The model will be calibrated using flow monitoring data collected in the 2022/2023 flow monitoring period.

Central Contra Costa Sanitary District, CA – Collection System Master Plan and Model Support Services. As Project Engineer, used the District's GIS to create a new, fully connected model network in InfoWorks, and extracted almost 300 mile of trunk sewer to be used as the basis of the District's new model. Chris and the Woodard & Curran team added pump stations and other structures, and underwent quality control and validation work to ensure that the modeled system is consistent with available record drawings and survey information. The project also includes updating all modeled loads using the District's billing data, and calibrating the model using 70 flow meters installed in the 2015/2016 wet season. Chris used the model to evaluate the capacity of the District's trunk system, identify any capacity deficiencies, and propose potential improvements. Chris has continued to support the District's modeling needs in a variety of ways, including staff training, development of best practices for updating the model to reflect changes in GIS, and other assorted model requests.

City of San Jose, CA – Sanitary Sewer Master Plan, Phase II. As Project Engineer, provided ongoing support for analyses associated with the City of San Jose's Phase II Master Plan. Chris led a team to evaluate all 159 of the City's modeled sewer siphons to identify siphons with the highest risk of sediment-induced overflows. Data from the City's siphon metering program was used to estimate steady state sediment depths, and the results were compared with previous research correlating sediment depth with self-cleansing velocity. An approach for estimating sediment depth in unmetered siphons was established using a combination of available flow meter data and hydraulic modeling. The results of the modeling were discussed with City maintenance staff to identify 30 siphons with the greatest need for improvements. Solutions to address overflow risks at these siphons, by either modifying or eliminating the siphon or recommending improvements, were identified.

Experience and Technical Competence



a. Experience

V. W. Housen & Associates and Woodard & Curran have convened a team of senior resources who are leaders and specialists in their fields. We offer an in-depth understanding of the District's hydraulic modeling software, risk assessment methods and software, recycled water planning and design challenges, and grant opportunities. We have a thorough understanding of the regulatory, public perception, and funding landscape that often drives decisions related to wastewater collection system and recycled water planning and implementation. We have a deep well of knowledge of the District's assets, systems, and needs, gathered through prior projects completed for the District.

In addition to our proposed team members, we have additional resources available locally, from VWHA's home office in Walnut Creek, CA, and Woodard & Curran's Bay Area offices.

Section 2, Staffing Resources, presents our team organization, which is also shown on the adjacent figure. Section 2 includes brief biographies of the individuals that will be working directly with the District and one-page resumes for these team members. The biographies and resumes, as well as additional information presented in this section, highlight prior experience and experience on District projects that have prepared our team members to fully and successfully meet the goals and objectives of the District's Wastewater Collection System Master Plan Update.

VWHA, established by Vivian Housen in 2012, has been in business for 10 years. Vivian has completed hydraulic modeling, master planning, asset management, and CIP development, and has over a decade of related experience from work at prior firms. Greg Ow, PE joined VWHA in 2019 and has 40 years of design, cost estimating, CIP development, and water system O&M experience.

Woodard & Curran was established in 1979 and has been in business for 43 years. Our proposed team members have completed projects involving hydraulic modeling, master planning, asset management, recycled water planning and design, grant funding, and CIP development as described in Section 2. The firm has 1,200 professionals in 27 office locations across the United States, including seven offices in California.

Vivian Housen, PE has completed over a dozen master planning projects over the past 10 years. These projects involved hydraulic modeling, capacity assessments, risk modeling, prioritization, cost estimating, and capital project development. Many plans significantly reduced inflow and infiltration in parallel with capacity upgrades. These master plans require regular updates and receive close review by regulatory agencies and third-party interests.

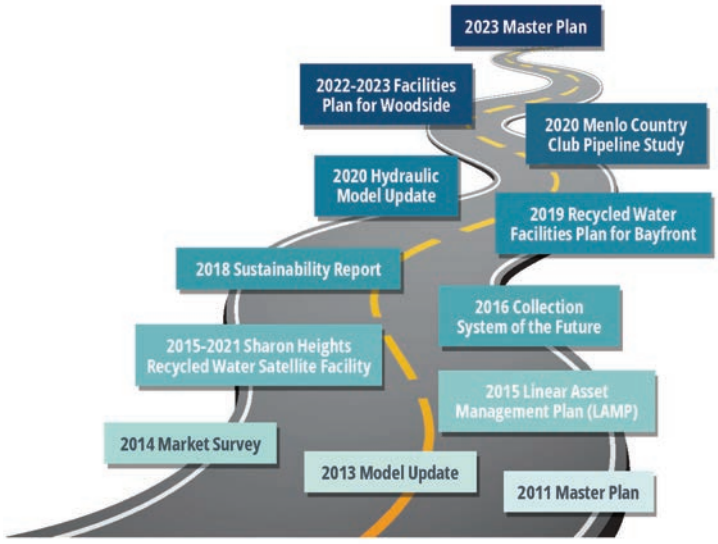
Vivian has a long history of projects that have been completed for the District, as chronicled below.

Vivian has completed over a dozen master planning projects in the Bay Area with similar challenges of balancing I&I reduction, asset management, and capacity improvements.

2008 - Vivian serves as Interim District Manager

2011 - Prior to forming VWHA, Vivian develops the District's first hydraulic model and Master Plan

2013 - Vivian and VWHA update the model and recalibrate the Marsh Road subcatchment, following the discovery of a break in a sewer near a creek on Haven Avenue. During peak wet periods, inflow from this seasonal creek entered the system, adding approximately one million gallons per day of wet weather flow. Prior to this discovery, the model had attributed the additional inflow to the entire basin. However, recalibration in 2013 allowed the District to ***significantly reduce the scope of what would have been the costly and disruptive James Avenue Diversion project***.



VWHA and W-C have worked closely with District staff and Board Members since 2008 in management, hydraulic modeling, asset management, master planning, and recycled water implementation.

2015 - Vivian and VWHA develop the Linear Asset Management Plan, which assessed Risk of Failure for the District's gravity pipelines, as determined by assigning Likelihood and Consequence of Failure to each pipe. The foundation for the LAMP is a numerical Risk Model that has been joined with the District's Lucity computerized maintenance and management system, and is used to this day to help prioritize ongoing rehabilitation and replacement needs.

2020 - Vivian converts the hydraulic model to Infoworks ICM, and updates the model to include data from the District's long-term flow monitoring program, updated water consumption data, V&A 2019 flow data, updated precipitation forecasts, and available general plan information.

2021 - Vivian utilizes this updated model to evaluate system upgrades that would be required if proposed East Palo Alto Sanitary developments were to connect to the District system.

Dave Richardson, PE and the Woodard & Curran team have completed many similar projects throughout the San Francisco Bay Area and California, including over 30 collection system planning projects and a similar number of recycled water projects within the past 10 years.

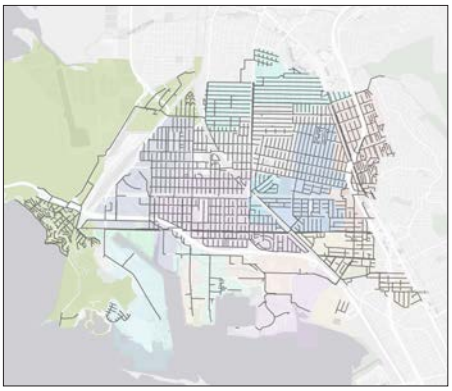
Dave and his team have completed dozens of water, sewer, and recycled water master planning projects in California that are similar to the District's Wastewater Collection System Master Plan Update.

Woodard & Curran also provides on-call collection system modeling support to several clients for development reviews, design verification, and other special studies. Likewise, we provide ongoing recycled water system modeling for clients with multiple customers such as the City of Roseville and Central San. Woodard & Curran's extensive experience and expertise will ensure that the District's project is completed efficiently and provides the tools and information that the District needs to continue to meet its planning needs. In addition to contributing our recycled water planning and lift station assessment expertise, Woodard & Curran will provide cross-firm QA/QC of hydraulic modeling, asset management, and CIP development.

Woodard & Curran is very familiar with the District's facilities, operations, goals and future plans. We have provided supportive services for CEQA, project management, planning, funding, and construction to the District. Through projects such as the ***Sharon Heights Golf and Country Club Recycled Water Project, additional recycled water feasibility studies for Bayfront and Woodside, and ongoing coordination with the City of Menlo Park, SLAC and Facebook***, we have learned that the District values its role in resource recovery, and in ongoing partnerships with local agencies, its customers and dischargers, and its neighbors. Through partnerships with neighboring agencies, the District will be providing recycled water service throughout the Menlo Park Water District Service Area.

Hydraulic Modeling, Master Planning, and Program Implementation, *City of Richmond, CA*

Vivian Housen, P.E. has assisted the City as Project Manager for a wide range of wastewater projects, including:

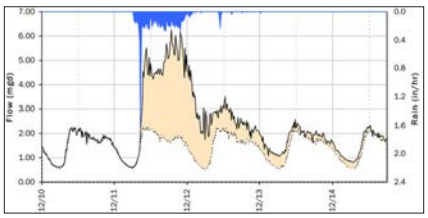


- Development of a fully dynamic hydraulic model and master plan that includes pump stations, isolates tidal inflow, and considers plant-induced hydraulics.
- Development of an asset management strategy and risk management plan that creates substantial reductions in SSOs
- Ongoing modeling to streamline capital improvement project recommendations and to define bypassing constraints during the construction of capital projects
- Completion of an inflow and infiltration reduction program to reduce the need for costly interceptor pipelines while concurrently repairing collection system pipelines that have exceeded their useful lives
- Provision of design and program management services for the City's collection system projects

All work was completed on schedule and under budget.

Client Reference: Chandrasekar Venkatraman, Director of Capital Program Management, Veolia Water | 601 Canal Blvd., Richmond, CA | 909.341.8246 | Chandrasekar.Venkatraman@veolia.com

Wastewater Collection System Master Plan, *West Bay Sanitary District, Menlo Park, CA*



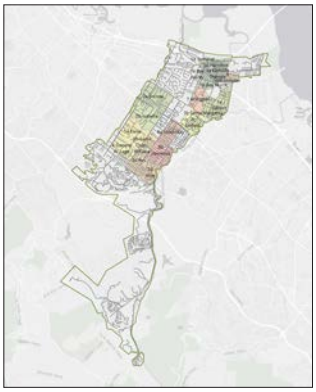
Vivian Housen, P.E. was Project Manager for the development of WBSD's first hydraulic model prior to forming VWHA, and used this model to define pipeline, pump station and storage needs. The CIP was used to complete a rate and connection fee study for the District.

After the initial model was developed, the repair of a single creek crossing appeared to have reduced wet weather flows by about 25 percent, as witnessed at the Menlo Pump Station. Recalibration of the model in 2013 confirmed that the pipe repair project reduced projected wet weather flows by approximately 1 million gallons per day. Using the recalibrated model, VWHA determined that one proposed wet weather relief sewer from the 2011 Master Plan , the James Avenue Diversion, could be significantly downsized.

Vivian completed a hydraulic model update in 2020 to include new water usage data, updated District flow data, updated general plan projections, and updated precipitation predictions from the National Oceanic and Atmospheric Administration. In 2021, Vivian utilized this updated model to evaluate necessary system upgrades that would be required prior to accepting potential future flows from specific developments in East Palo Alto. All hydraulic modeling efforts were completed on schedule and under budget.

Client Reference: Sergio Ramirez, District Manager, West Bay Sanitary District | 500 Laurel Street, Menlo Park, CA | 650.321.0384 | Sramirez@westbaysanitary.org

Linear Asset Management Plan (LAMP), *West Bay Sanitary District, Menlo Park, CA*

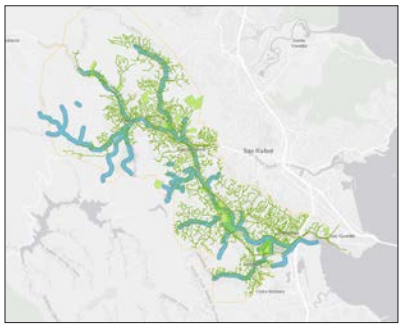


Vivian Housen, P.E. was Project Manager for the District's Linear Asset Management Plan (LAMP). The foundation for the LAMP was a customized, user-friendly numerical risk model that was used to confirm and prioritize pipeline repair needs by assessing Risk. Risk is calculated as a combination of Likelihood and Consequence of Failure.

The numerical model uses familiar Microsoft products, removing the "black box" and allowing improved customization as compared to other asset management software options. Vivian used results from the LAMP model to update the District's Master Plan CIP. Subsequently, WBSD connected the risk model to the Lucity computerized maintenance management system, allowing for real-time adjustment of priorities.

Client Reference: Sergio Ramirez, District Manager, West Bay Sanitary District | 500 Laurel Street, Menlo Park, CA | 650.321.0384 | Sramirez@westbaysanitary.org

Infrastructure Asset Management Plan (IAMP), *Ross Valley Sanitary District, San Rafael, CA*



Vivian Housen, PE was Project Manager for this multi-faceted and fast-track effort that evaluated and prioritized replacement needs for the District's pump stations, force mains, and gravity sewer pipelines. The plan, which required completion in five months to meet the terms of a Cease and Desist Order, included development of Level of Service objectives, evaluation of system data, updates to the District's hydraulic model including a review of different pump station scenarios and flow criteria, development of a numerical asset management tool that assigned a Risk Score to every gravity pipe based on Likelihood and Consequence of Failure, integration of results into GIS, and development of a prioritized capital replacement plan. The IAMP is now regarded by Regional Board staff as an exemplary approach to system management. Upon request by Regional Board staff, Vivian joined Ross Valley to make a presentation to their Board on the benefits of an asset management approach in resolving complex SSO issues. The work was completed on schedule and under budget. Vivian assisted RVSD with implementation of this program for six years following completion of the document.

Client Reference: Greg Norby, Former General Manager, Ross Valley Sanitary District (now SFPUC Assistant General Manager of Wastewater and Stormwater) | 525 Golden Gate Avenue, San Francisco, CA | (415) 308-7954 | gnorby@sfwater.org

Hydraulic Model Update, Asset Management, and CIP Development, *City of Half Moon Bay, CA*

Vivian Housen, PE is Project Manager for multiple efforts at the City of Half Moon Bay. Recent projects have included conversion of the hydraulic model (from InfoSWMM to Infoworks ICM), hydraulic model recalibration, and development of an updated capacity assurance plan; CCTV data review and annual updates to the risk model, project priorities, and CIP; oversight of flow monitoring and smoke testing field activities; I&I reduction analyses; and regulatory support.

Client Reference: John Doughty, Public Works Director, City of Half Moon Bay | 501 Main Street, Half Moon Bay, CA | 831.726.8252 | jdoughty@hmbcity.com

Recycled Water Infrastructure Expansion Phase 1A Design, *City of Pleasanton, CA (W-C)*

As part of the City of Pleasanton's need to quickly cut-back on imported water, provide a drought proof supply of irrigation water, and diversify its water supply portfolio, Woodard & Curran (led by Carrie Del Boccio) provided engineering design, bid and construction assistance for a recycled water distribution system that will serve Hacienda Business Park and the Pleasanton Sports Park. Woodard & Curran was responsible for the topographic surveys and utility research, corrosion evaluations, geotechnical investigations, permitting, engineering design, and bid and construction support services. The facilities included the following: 50,100 linear feet (LF) of 4-inch through 20-inch recycled water distribution pipelines; 2,500 LF of 12-inch potable water distribution pipelines, two supply flow metering and control valve stations and associated communication and SCADA system design for operation of the control valve, three connections into existing recycled water infrastructure, conversion of a 24-inch diameter potable water line into recycled water service, and 134 service lines to existing meter boxes for customer connections. Woodard & Curran met an aggressive project schedule, completing the design in three and a half months. This included an evaluation of alternatives for crossing the Arroyo Mocho, a primary flood control channel, using trenchless HDD approach or open cut and hanging from an existing City bridge structure. The trenchless approach proved less costly and would result in a shorter construction time for the installation. The trenchless design was for an HDD installation of 16-inch fusible PVC pipe for the 1,350-foot long crossing.

Client Reference: Steve Kirkpatrick, Director of Engineering, City of Pleasanton | 200 Old Bernal Avenue, Pleasanton, CA | 925.931.5676 | SKirkpatrick@cityofpleasantonca.gov

Wastewater Collection System Services, *Union Sanitary District, Union City, CA (W-C)*

Since 2005, Woodard & Curran (on a team led by Dave Richardson) has supported Union Sanitary District's wastewater treatment and collection system projects. Work has ranged from process and facility upgrades to collection system modeling and master plans.

Since the mid-1990s, USD has prepared master plans on a staggered schedule for each for its three major drainage basins (Alvarado, Newark, and Irvington) that comprise its approximate 800-mile collection system. Woodard & Curran has completed the last six of these plans. Woodard & Curran's services include updating the sewer model based on the latest GIS inventory data, as well as flow monitoring and re-assessment of land use planning for the three cities that comprise its service area.

The second key component of the master plan updates is a comprehensive sewer condition and risk assessment based on CCTV inspection data. The data are analyzed using a software application that provides ratings for each pipe based on condition scores and impact factors. The program computes the lifecycle cost of alternate renewal approaches (spot repair, lining, replacement, or continued maintenance) to address pipes with identified defects, and the estimated capital budget requirements for sewer rehabilitation. In the most recent master plans for the Newark and Irvington basins, Woodard & Curran updated the model to include all pipes in the system and updated the condition assessment process using InfoAsset Planner software.

Client Reference: Raymond Chau, Principal Engineer, Union Sanitary District | 5072 Benson Road, Union City, CA | 510.477.7606 | raymond_chau@unionsanitary.com

b. Project Specific Experience

Following are the three most relevant service contracts (i.e., most similar in scope) held by VWHA within the last five years. We have included one additional relevant project that was initiated before the requested five-year window. VWHA has had no occurrences of the situations listed in the RFP (failure to enter into a contract once selected; withdrawal of a proposal; termination or failure to complete a contract; debarment; involvement in litigation, arbitration, or mediation; conviction; concealment of a deficiency; falsification of information; submission of deceptive or fraudulent statements; or willful disregard for applicable rules, laws, or regulations).

1. Project Name: City of Richmond Wastewater Collection System Master Plan	
Role of Firm	Lead Firm (Prime)
Dollar Value of the Services	$357,041
Dollar Value of VWHA's Fee:	$166,091
Description of the Services:	• Update hydraulic model (originally developed in 2011) to include new asset data and parcel delineations. • Analyze and assign base wastewater flow factors • Manage flow monitoring program • Evaluate and characterize measured dry and wet weather flows • Recalibrate model to match field-measured flows, including characterizing peak storm inputs and both calibrating and validating model with measured storm data • Evaluate and assign design storm • Conduct analysis of potential I&I reduction utilizing pipeline condition information from the City's computerized maintenance management system • Develop holistic program involving a combination of strategic I&I reduction supported by capacity upgrades • Develop project recommendations, cost estimates, priorities, and timeline • Prepare Master Plan document. Respond to questions from SF Baykeeper and prepare requested updates.
Staffing:	Vivian Housen and supporting staff; flow monitoring subconsutlant (V&A), survey subconsultant
Duration of Providing Services:	January 2019 through October 2019
Relationship to Client:	Consultant to Veolia Water, Contract Operator for City of Richmond
Contact Name:	Chandrasekar Venkatraman ("CV")
Position:	Director of Capital Program Management
Entity Name:	Veolia Water | 601 Canal Blvd., Richmond, CA
Telephone Number:	909.341.8246
Fax Number:	n/a
Email Address:	chandrasekar.venkatraman@veolia.com

2. Project Name: City of Richmond Lift Station Master Plan	
Role of Firm	Lead Firm (Prime)
Dollar Value of the Services	$278,516
Dollar Value of VWHA's Fee:	$237,016
Description of the Services:	• Compile library of pump station drawings, equipment specifications, and operating parameters through document research and staff interviews • Complete desktop and field inspections and assessments for 14 wastewater collection system pump stations located throughout the service area • Complete mechanical, structural, electrical, and hydraulic evaluations • Develop recommendations to address safety, reliability, and capacity • Prepare cost estimates and priorities, and summarize findings in a Master Plan document
Staffing:	Vivian Housen and supporting staff; structural, electrical, and corrosion subconsultants
Duration of Providing Services:	September 2017 through October 2018
Relationship to Client:	Consultant to Veolia Water, Contract Operator for the City of Richmond
Contact Name:	Chandrasekar Venkatraman ("CV")
Position:	Director of Capital Program Management
Entity Name:	Veolia Water | 601 Canal Blvd., Richmond, CA
Telephone Number:	909.341.8246
Fax Number:	n/a
Email Address:	chandrasekar.venkatraman@veolia.com

3. Project Name: City of Richmond Risk Assessment Analysis	
Role of Firm	Lead Firm (Prime)
Dollar Value of the Services	$337,257 (Original model and four updates)
Dollar Value of VWHA's Fee:	$337,257
Description of the Services:	• Establish Level of Service parameters • Compile and catalogue available data for assets including physical attributes, cleaning records, inspection results, and sanitary sewer overflow details • Obtain and review data for critical components of the service area that will be impacted by sewer spills, including waterways, arterial roadways, commercial areas, public facilities, and emergency facilities • Create criteria scores, weights (importance), acceptable buffers, and build and calibrate a risk model using MS Access • Evaluate the Risk of Failure and develop recommend projects to repair or replace the most critical assets • Assign costs and priorities and develop an asset management capital program and report.
Staffing:	Vivian Housen and supporting staff
Duration of Providing Services:	October 2019 through Present
Relationship to Client:	Consultant to Veolia Water, Contract Operator for the City of Richmond
Contact Name:	Chandrasekar Venkatraman ("CV")
Position:	Director of Capital Program Management
Entity Name:	Veolia Water | 601 Canal Blvd., Richmond, CA
Telephone Number:	909.341.8246
Fax Number:	n/a
Email Address:	chandrasekar.venkatraman@veolia.com

4. Project Name: Ross Valley Sanitary District Infrastructure Asset Management Plan (IAMP)	
Role of Firm	Lead Firm (Prime)
Dollar Value of the Services	$308,820
Dollar Value of VWHA's Fee:	$154,760
Description of the Services:	• Establish Level of Service parameters • Compile and catalogue available data for pump station, forcemain, and pump station assets including location data (topography and soils information), physical attributes, cleaning records, inspection results, other maintenance needs, and sanitary sewer overflow details • Conduct pump station and limited forcemain evalutions to supplement pipeline condition data • Obtain and review data for critical components of the service area that will be impacted by sewer spills, including waterways, arterial roadways, commercial areas, public facilities, emergency facilities • Create criteria scores, weights (importance), acceptable buffers, and build and calibrate a risk model for the linear assets using MS Access • Evaluate Risk of Failure and develop recommended projects to repair or replace the most critical assets • Assign costs and priorities and develop an asset management capital program and report for each asset class • Identify operations and maintenance strategies, tools, and technology to implement in conjunction with the asset replacement program to rapidly reduce the number and volume of sanitary sewer overflows. • Assist the District with implementation, updates, and project prioritization and development
Staffing:	Vivian Housen and Doug Humphrey with pump station assesment and corrosion subconsultants
Duration of Providing Services:	May 2013 through March 2019
Relationship to Client:	Prime Consultant
Contact Name:	Greg Norby (former General Manager of RVSD)
Position:	Assistant General Manager of Wastewater and Stormwater
Entity Name:	San Francisco Public Utilities Commission (current employer) 525 Golden Gate Avenue, San Francisco, CA
Telephone Number:	415.308.7954
Fax Number:	n/a
Email Address:	gnorby@sfpuc.org

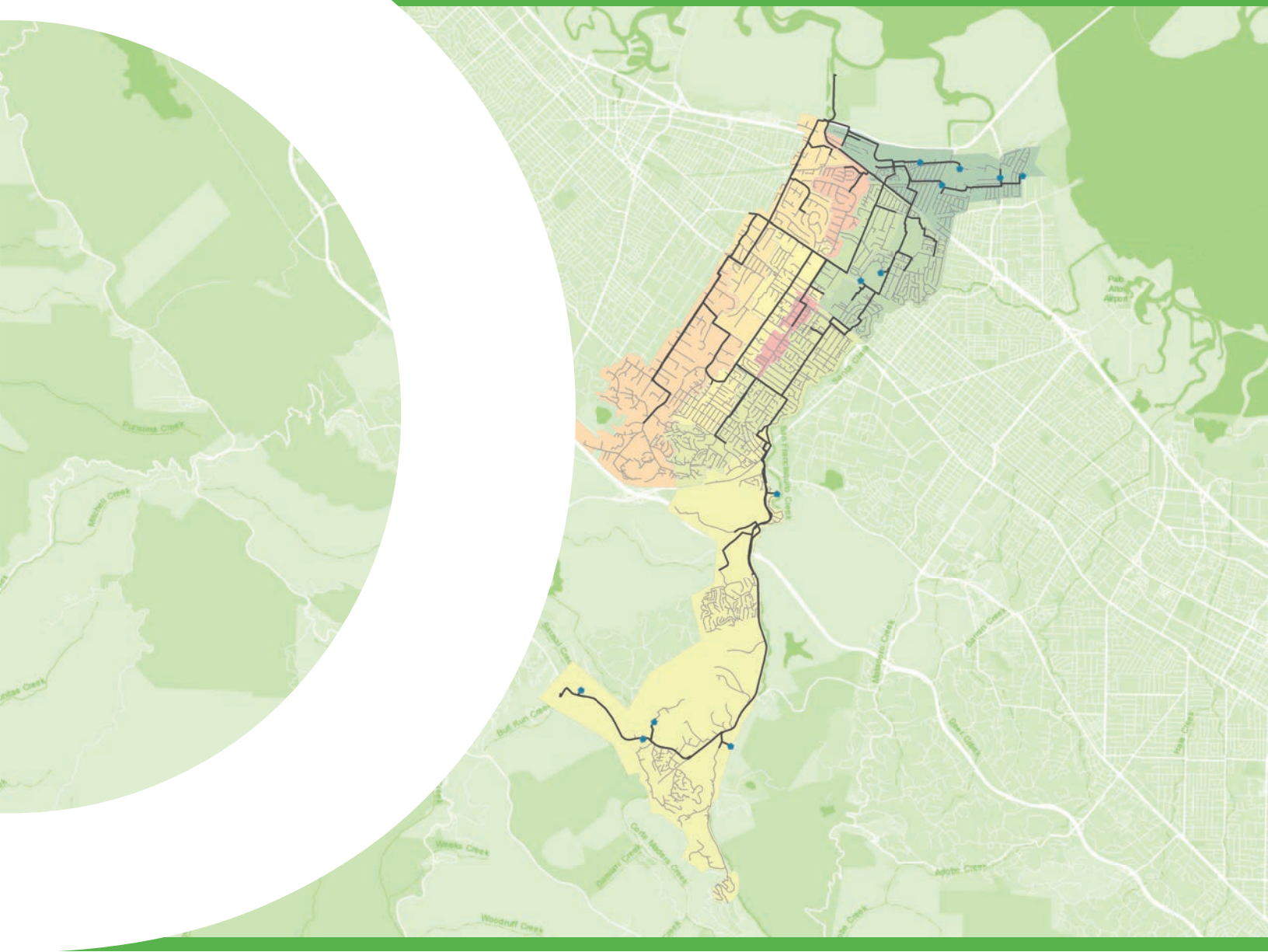
c. Technical Competence

V. W. Housen & Associates has sufficient and applicable in-house resources for use on the District's Wastewater Master Plan Update. All engineering staff have access to and utilize the following tools on our master planning projects as required:

- Laptops and desktop computers
- Small and large format printers
- Microsoft Office Suite (including Microsoft Word, Excel, Access)
- Adobe PDF, Photoshop, Indesign
- Bluebeam Revu
- ESRI GIS
- Infoworks ICM, InfoSewer, and InfoSWMM hydraulic modeling software
- Python programming application
- Autodesk AutoCAD
- InfoAsset Planner (W-C)

Both VWHA and Woodard & Curran have the ability to draw upon multi-disciplinary staff to address the services requested in this RFP. In particular, Woodard & Curran has seven office in California, each with available resources to support the Master Plan update.

Proposed Method to Accomplish the Work



Proposed Method to Accomplish the Work

Over the past decade, the West Bay Sanitary District's operating landscape has changed significantly. Today, the District serves new tech customers along the Bayfront Expressway and has expanded its services to include recycled water treatment and delivery. The next decade promises to bring similar change, as SRI International transforms its campus into a cutting edge residential and research hub, and the District constructs a new recycled water facility at its historical treatment plant site within Bedwell Bayfront Park. **Smart planning** that provides **expanded services** without impacting current ratepayers, **extends the useful life** of the District's existing system, and **maximizes reuse opportunities** in dry and wet weather are critical to the success of the program. The VWHA team has helped many agencies within the San Francisco Bay Area to achieve these same goals.

Project Understanding

The District completed its last formal Master Plan Update in 2013, and since this time, has worked diligently to eliminate sanitary sewer overflows. The 2013 Master Plan marked the beginning of an era of continuous improvement, which was further defined by the completion and implementation of the District's Linear Asset Management Plan (LAMP) and Recycled Water Feasibility Plan, and design and construction of the Sharon Heights Golf and Country Club (SHGCC) recycled water plant. During this time, the District also expanded its expertise to include sewer maintenance for the neighboring towns of Los Altos Hills and Woodside. All of these activities are memorialized in the District's Sustainability Plan.

The 2023 Wastewater Collection System Master Plan will provide a consolidated update to the District's Master Plan, LAMP, Recycled Water Plan, and Sustainability Plan.

The Master Plan update will memorialize the District's last decade of success, and will establish a new foundation to support the next decade of progress. All of the District's prior plans will be woven into one integrated document that answers several key questions.

Project Vision

The District seeks a Master Plan that provides clear guidance for the next decade, allowing sufficient flexibility to choose solutions that maximize reliability while minimizing cost for its customers.

The Master Plan will:

- Prioritize projects to reduce risk
- Reduce inflow and infiltration to reduce collection, pumping, and treatment costs
- Maximize options for water reuse within the service area
- Ensure regulatory compliance

Key Questions to be Answered by the Updated Master Plan

Capacity Assurance. What project portfolio will allow the District to manage capacity needs in the most cost-effective way possible? The new capacity assessment will confirm areas that will benefit most from inflow and infiltration (I&I) reduction, and will identify and prioritize necessary pipeline and pump station capacity upgrades.

Linear Asset Management. How can we maximize our use of existing data and reduce the risk of failure? The new LAMP will put years of system data to work defining projects that address the highest-risk assets first, while strategically reducing I&I.

Recycled Water. Are wet weather recycled water solutions available to maximize the use of the SHGCC plant? What strategies and infrastructure will the District need to serve new recycled water customers with the greatest success?

Our team will develop a Master Plan that answers these questions and guides the District in the implementation of solutions. We will create a Master Plan that becomes a well-used manual that

spends more time on the desk than the shelf. This plan will become the document that is regularly referenced as a go-to resource for the important decisions needed to effectively manage the wastewater collection system, as well as recycled water treatment and distribution facilities.

In addition to the master plan document, we will provide the District with updated planning tools, including a new hydraulic model and LAMP risk model. These tools will be well-documented, and each will be accompanied by a user manual and training to enable staff to use these tools with ease and confidence.

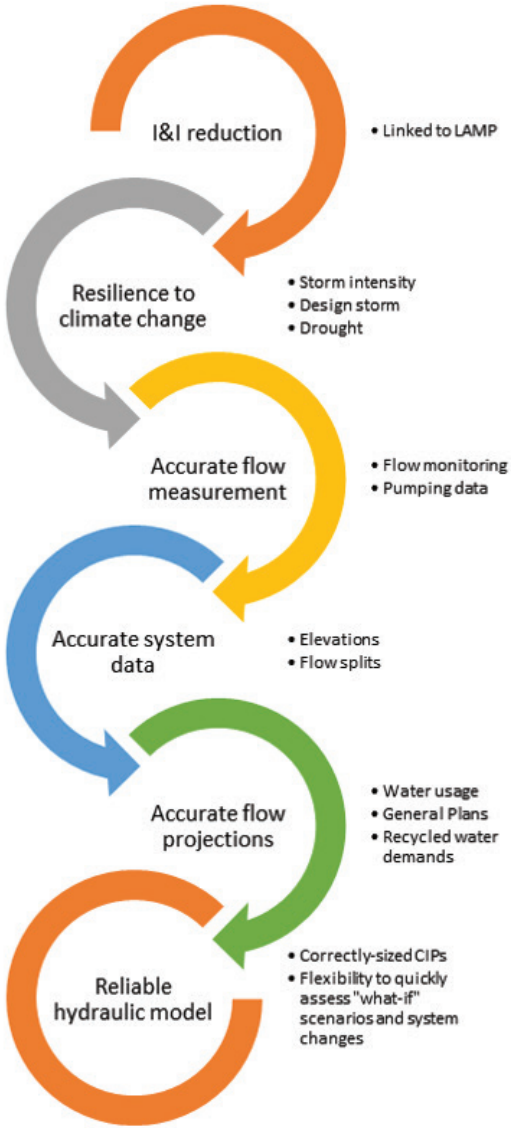
A Holistic Approach to Capacity Assurance Planning

The District's capacity evaluation must serve as a working guide for the next decade. During this time, the service area will continue to build out. At the same time, the water scarcity issue is growing, emphasizing the continued need for conservation and water recycling. In addition, climate change may present sporadic but severe rainfall and flooding that could overwhelm existing infrastructure.

To achieve success, the Master Plan Update will incorporate a whole-system approach to addressing capacity needs. The capacity assessment will provide important information to support additional Master Plan analyses:

- Identification or confirmation of areas with high levels of I&I
- An understanding of system impacts that could occur due to the changes in rainfall severity and drought that are associated with climate change
- Trends in rainfall intensity and flows over the past decade, to help predict future performance
- Improved system knowledge including a clear understanding of flow splits
- An accurate snapshot of current flows, water usage, buildout plans, and flow variations created through water recycling

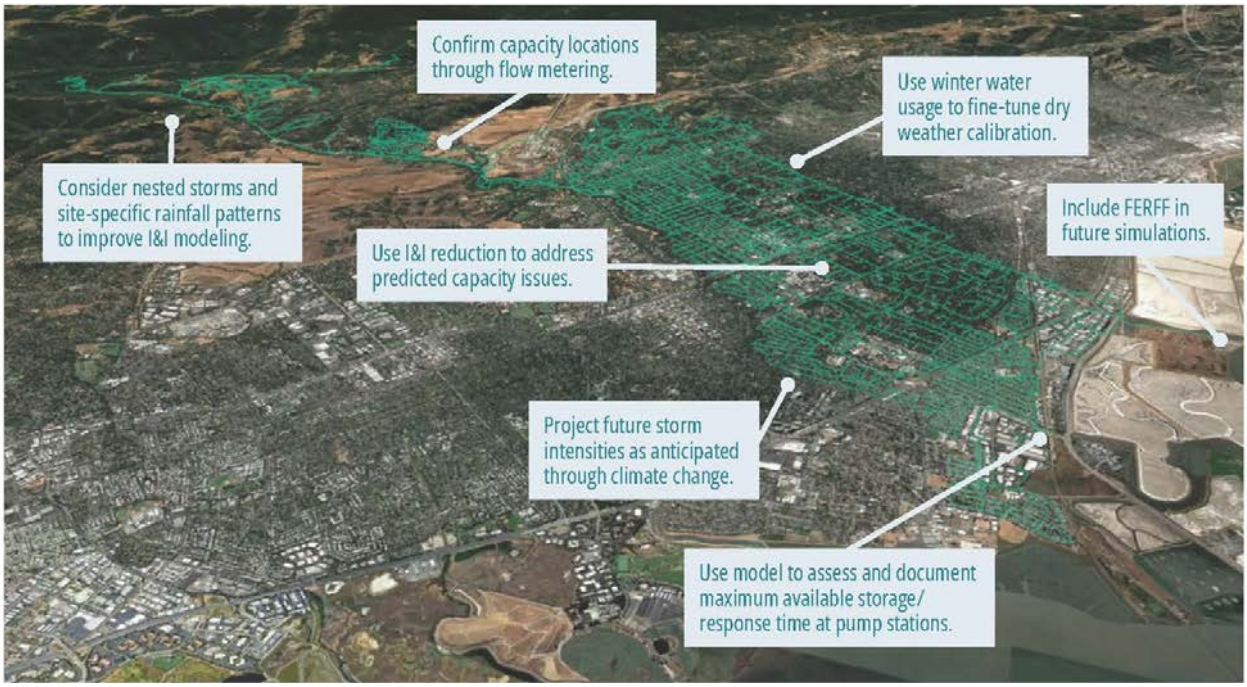
The resulting hydraulic model will be detailed and reliable, and the District will be assured that the resulting capacity upgrades address risk without excess. More importantly, the resulting hydraulic model will be flexible, allowing staff to run "what-if" scenarios and incorporate new system data as it is known.



The Master Plan Update will seek ways to reduce I&I, recycle wet and dry flow, and fine-tune the modeling parameters in order to reduce the need for unnecessary capacity improvements.

We have reviewed the District's existing hydraulic model, and have identified several ways that the model can be improved during the 2023 update. Opportunities for improvement include:

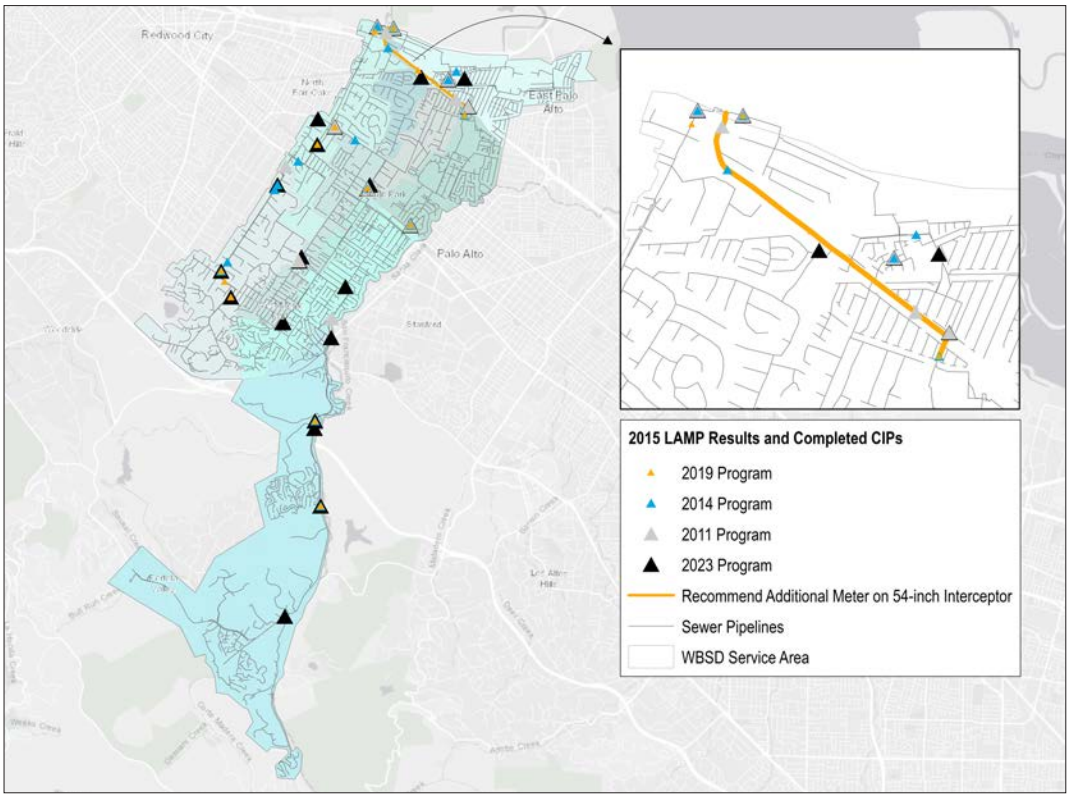
- Customized storm profiles to more accurately represent rainfall, providing confidence in capacity prediction
- Incorporation of drought impacts and projected recycled water diversions for a realistic representation of system conditions
- I&I sensitivity evaluation to help prioritize pipeline rehabilitation activities
- Adding the FERFF facilities to the hydraulic analysis to integrate wet weather storage and recycled water diversions into modeled flows
- Review of available storage at pump stations and within the system to inform emergency response activities



The updated hydraulic model will include enhancements that improve the accuracy and reliability of the capacity assessment, consider I&I reduction in lieu of system expansions, provide resilience to the effects of climate change, and evaluate time-to-overflow to aide in emergency response planning.

We have also reviewed the District's planned 2023 flow monitoring program and are excited about the improved information that will be provided by the additional meters. In particular, the nature of flow splits will be very important in adding accuracy to the hydraulic model.

Based on our review of the information provided as background to the Request for Proposals, we recommend either adding a meter or moving a strategically selected meter to the existing 54-inch interceptor along Highway 101 and Marsh Road. This interceptor has been metered in prior studies, and conveys a significant amount of flow to the Menlo Pump Station. This meter would help refine wet weather flow estimates, especially at the wet weather flow split at Hollyburne, as shown on the figure on the following page.



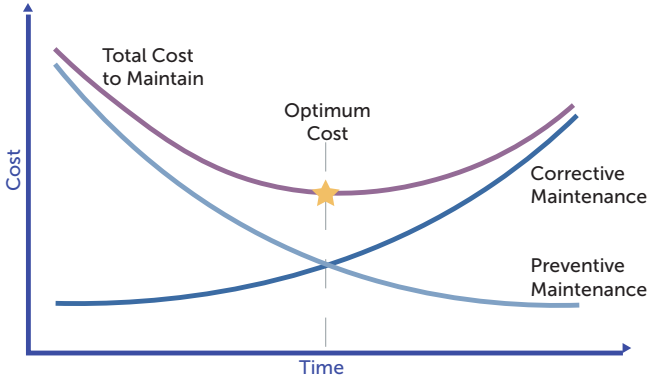
The 2022-2023 flow monitoring program will add valuable information by dividing large subcatchments, confiming flow splits, and measuring flows in areas with predicted SSOs. If the current plan does not include a meter on the 54-inch interceptor as shown, we recommend that the District add this meter to the upcoming program.

A New Generation of Linear Asset Management Planning

A fundamental principle of lifecycle management is that maintaining assets in good condition costs significantly less than reconstructing a poor condition asset. The overall goal of the LAMP is to prioritize repairs so they occur at the correct time in the asset's life, thereby extending the expected life of the District's system, while managing risks and minimizing the total lifecycle costs.

The District's updated LAMP will support the District's April 2022 Strategic Plan by accomplishing the following:

- Meeting desired levels of service and managing costs to protect future rates
- Enhancing public trust
- Providing environmental stewardship for multiple benefits and protecting resources
- Maintaining reliable and efficient services
- Making the highest and best use of all District assets
- Exploring opportunities for wastewater reuse



The optimum time for replacement is when the cost to replace is less than the cost to maintain the asset through repairs and preventive maintenance

Our team will meet these objectives by delivering a Master Plan that follows the Effective Utility Management framework developed by the EPA and six national collaborating organizations.

The LAMP achieves these goals by assigning asset rehabilitation and renewal projects, priorities, timelines, and costs in a way that manages Risk. Risk increases when the Likelihood and/or Consequence of Failure of the asset increases.

Likelihood of Failure factors define components that, if not addressed, increase the risk of pipe or pump station failure.

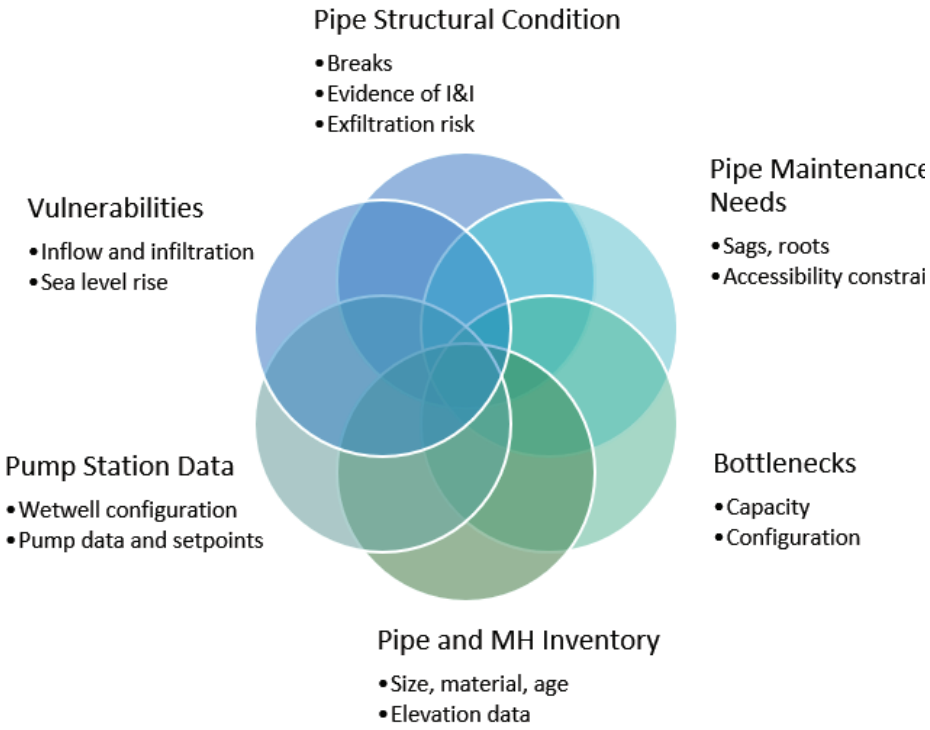
Consequence of Failure factors measure impacts to the public that would prevent the District from providing the desired Level of Service. Example features that would be impacted include **waterways, public facilities, critical transportation,** and/or **commercial corridors**.

Key Management Topics for the Updated LAMP (from EPA Effective Utility Management framework)

- *Regulatory compliance*
- *Community and customer needs*
- *Stable and sustainable financial future*
- *Infrastructure stability*
- *Operational optimization and resilience*
- *Support of water resource adequacy through recycled water deliveries*

When Likelihood and Consequence of failure are combined, the relative Risk score for that asset will be defined. After a Risk score is assigned to every asset, conceptual costs will be developed for recommended solutions. VWHA will then develop an implementation timeline for the next ten years that takes one of three actions:

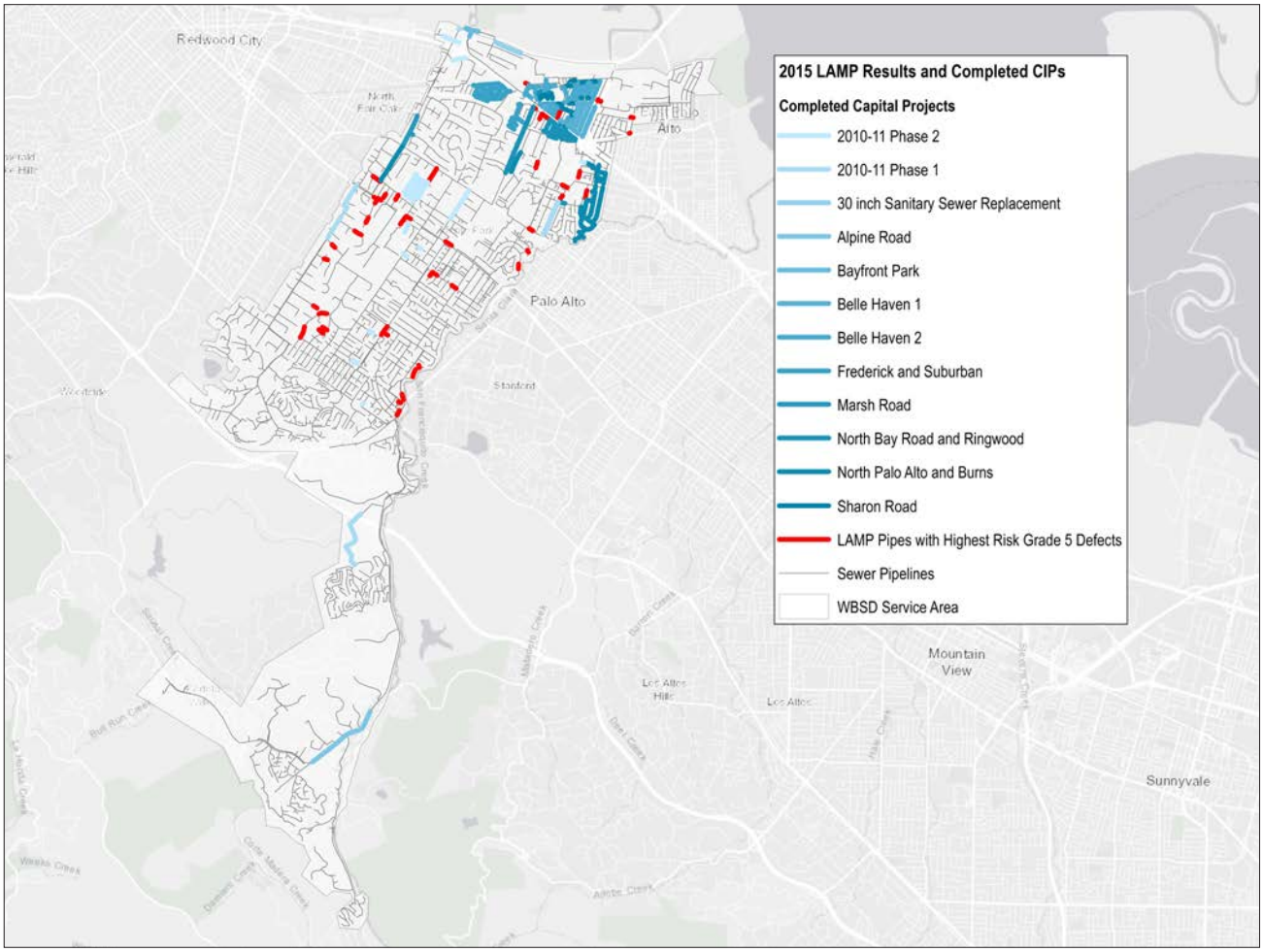
(1) Eliminates all issues and removes the risk event entirely
(2) Mitigates risk by reducing likelihood or consequence of failure
(3) Accepts the issue and retains risk as-is



The updated LAMP will incorporate a wide range of factors defining Likelihood of Failure. By increasing this level of detail, the LAMP risk model will fine-tune needs and priorities, assuring that the most critical issues are addressed first.

The 2015 LAMP established and prioritized rehabilitation areas, as well as rehabilitation needs within each area. Since then, the District has made significant progress, having renewed or upsized about 23 miles of pipelines within the highest risk areas. In addition, the District has competed multiple cycles of CCTV inspection. With this updated database, the District is right on track in terms of its lifecycle asset management cycle. VWHA will update the LAMP risk model with the District's current data, updated Likelihood and Consequence factors, and current desired risk outcomes. Similar to the 2015 LAMP, the new risk model will be designed to be easily integrated into the District's computerized maintenance management system, allowing real-time decisions to be made by staff as new information is brought into the database.

The updated LAMP portfolio will consider increased preventive maintenance, prolonged service life through repairs, and strategically-timed replacements. The goal of the program is to replace assets when the cost of replacement is equal to or less than the cost of continued preventive maintenance.

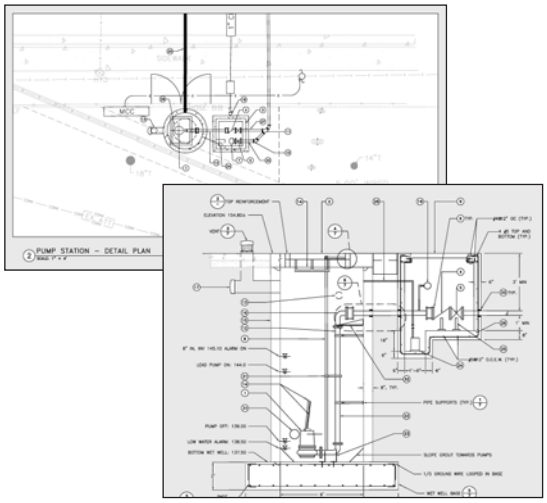


Since 2015, the District has completed over a dozen projects that have renewed or upsized about 23 miles of pipelines within the highest risk areas. There is still work to be done, and with new data, VWHA will develop the next decade of rehabilitation priorities.

Validation of Pump Station and Forcemain Needs

The District's wastewater pump stations are a critical link in the overall collection system, comprised of mechanical, electrical and structural assets that must function reliably to move wastewater through the collection system to the SVCW treatment plant. Fundamentally, the stations must have sufficient pumping capacity to convey flows, with enough firm (standby) capacity to continue to function if a key mechanical or electrical asset is out of service. For a pumping facility, this typically means assessing capacity with the largest pump out of service.

Verification of capacity will be completed once design flows for each station are determined, evaluating existing pumping curves against the system curve for each force main to determine the expected maximum and minimum pump and pump station flow. Minimum flow is typically not a factor in capacity analysis. However, this can become a long-term operational concern for constant speed pump stations if pump cycling becomes excessive (typically, greater than 10 starts per hour).



The District's lift station maintenance program assures that rehabilitation is needed only when the station has maximized its useful life.

As complex mechanical and electrical facilities, pumping stations will experience wear and tear over the course of their useful lives. Given the size of its pumping facilities, the District has taken the proactive step of stocking "shelf spare" pumping units, allowing operators to replace pumps as needed and moving what would otherwise be capital replacement funds into its operations budget. This, coupled with the District's dedicated pump station operations team, allows the District to maintain stations in good working order without the significant degradation in pumping capacity that can otherwise occur between major station retrofits.

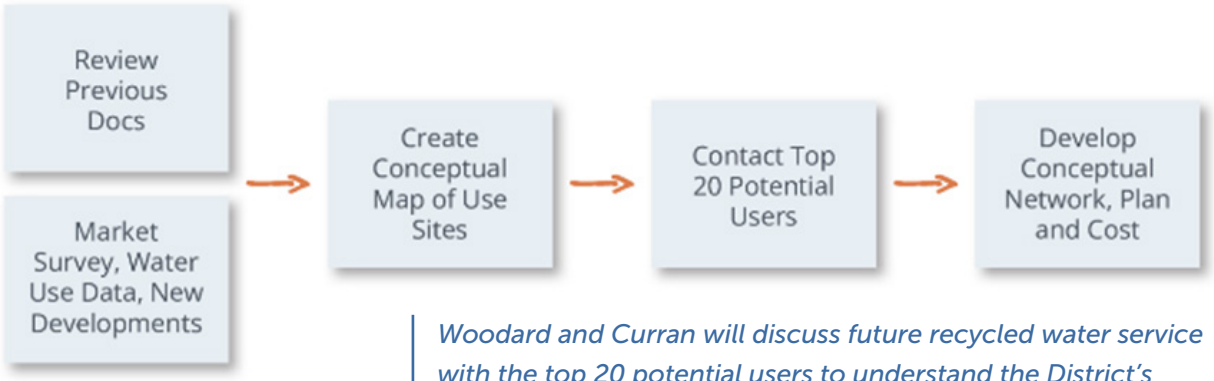
This said, the District does have two major pump station rehabilitations in the planning and design stages, and additional stations may require upgrades in the future. We will work closely with District operations staff to understand the specific needs of each of its pump stations. Together, we will determine where planned and potential pump station rehabilitations fall within the CIP timeline, and will develop planning-level costs to help the District reserve sufficient budget for these critical projects. Additionally, the CIP will include planned force main replacements, as the District currently has approximately 3,600 feet of force main dating back to the 1980's that will be due for replacement within the ten-year planning horizon.

A Realistic Recycled Water Program that Supports Both Summer and Winter Reuse

Our team will evaluate and address the following issues as part of the recycled water planning scope:

- Current and potential recycled water production at the recycled water facility at Sharon Heights Golf and Country Club (SHGCC)
- Current and future demand for recycled water throughout the District
- Extension of recycled water service to serve Flood Park/Ringwood/SRI, and the Government Center
- Potential future users and conceptual facilities/expansion and distribution system locations to support users
- Feasibility of expanding into Cal Water service areas
- Options to continued recycled water operations in off winter months

We will prepare a market survey, evaluate current water use data, and assess the potential to service



Woodard and Curran will discuss future recycled water service with the top 20 potential users to understand the District's recycled water market opportunities

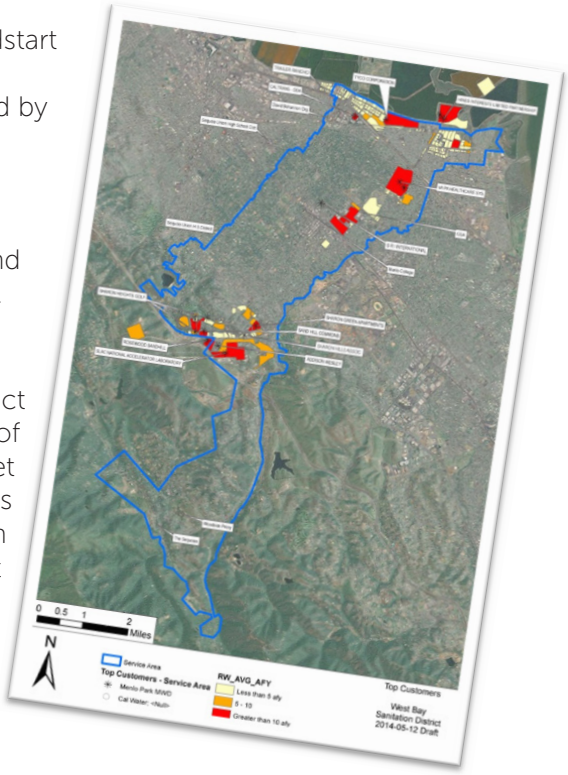
new developments. We approach this task with a headstart from the 2014 recycled water market survey that our team completed for the District prior to being acquired by Woodard & Curran in 2016.

After creating a conceptual map of use sites, our team will contact the top 20 potential users, and from these interviews, will develop a conceptual network, plan, and cost, as shown in the flowchart on the following page.

Maximize Recycled Water Use

To maximize future recycled water use within the District and the region, our team will build upon the work of previous planning efforts to create an updated market assessment with a full survey of all potential customers and their required level of service. In addition, our team will review water use records and new development plans to update future water demands.

We have worked with the District and neighboring cities to identify new developments that will potentially need onsite recycled water, including phased expansion to serve Flood Park/Ringwood/ SRI, and the Government Center.



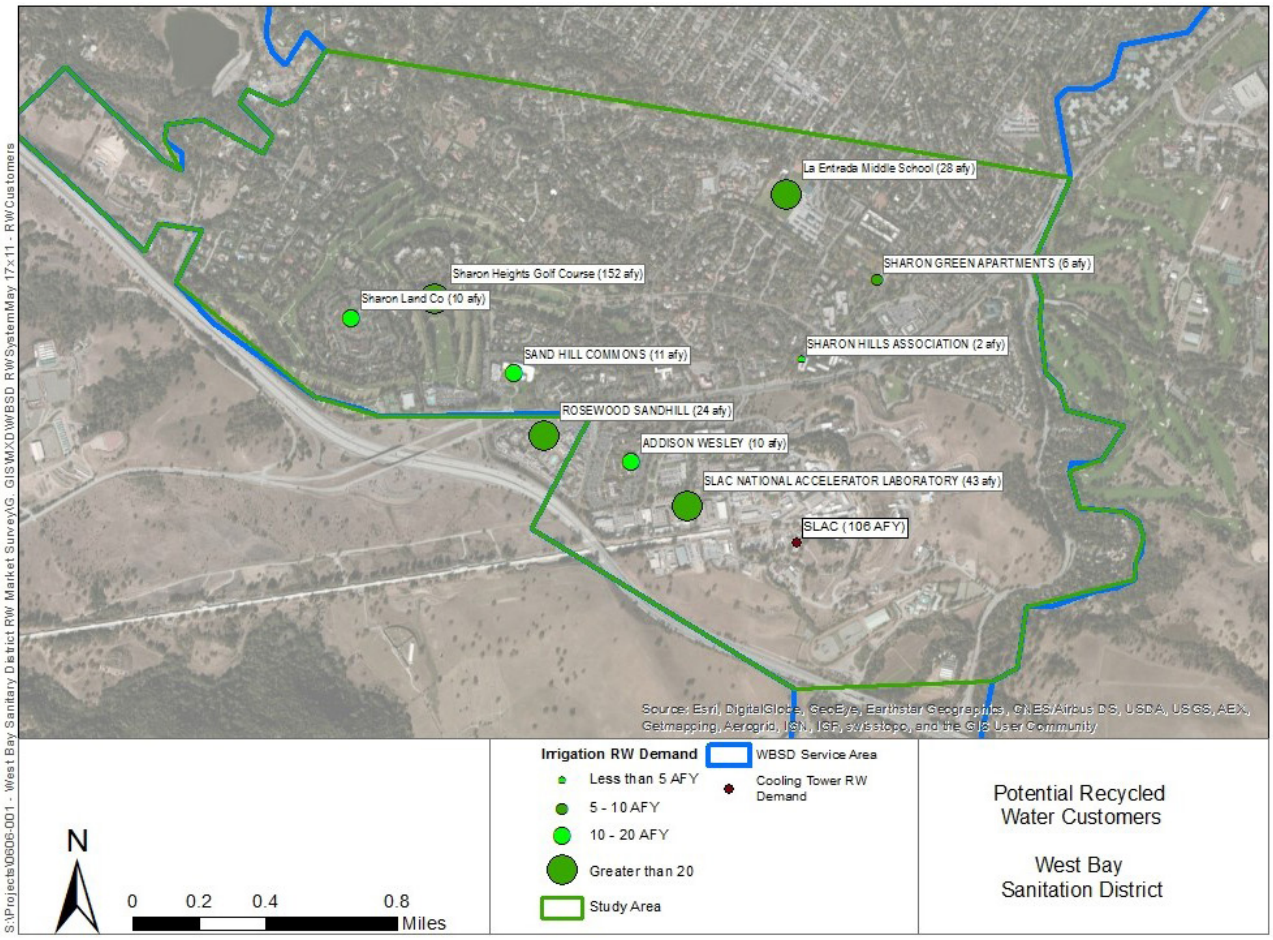
Top recycled water customers in the District's service area were identified as part of the market survey completed in 2014 by RMC (now Woodard & Curran)

Our team will further study the recycled water facility at SHGCC for potential future users, feasibility of expanding into Cal Water service area, and an analysis to avoid diverting recycled water to the sanitary sewer in off winter months.

The map on the following page demonstrates our knowledge and experience in the Sharon Heights service area. where we created the Recycled Water Delivery Area and assessed potential additional demand. We also have preserved Sharon Heights recycled water quality (low salinity) by developing a salinity diversion plan in cooperation with SLAC and West Bay.

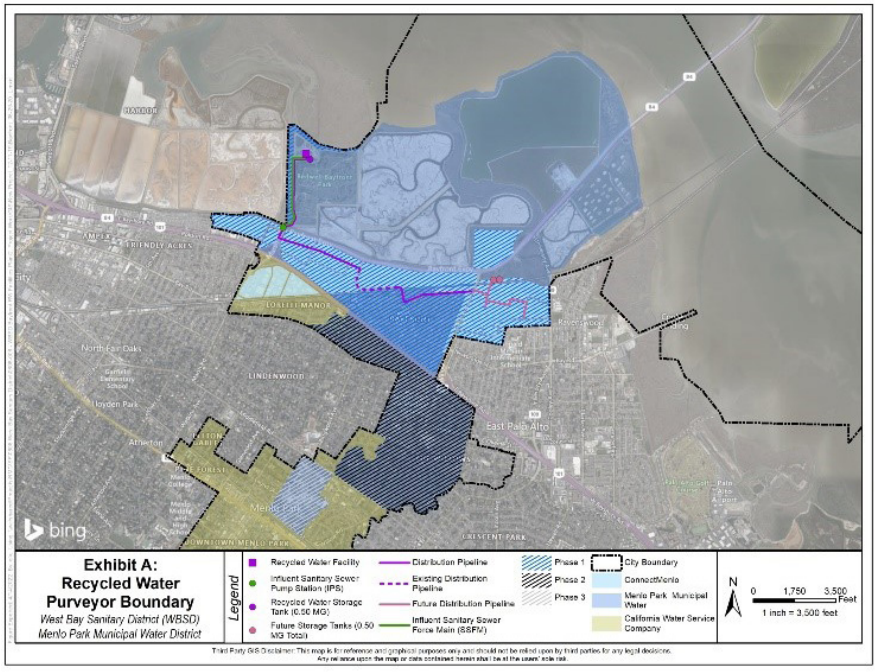
Based on review of the relevant information, our team will create a water demand map to show the large use sites across the City and the Cal Water service area (if feasible).

From the demand map, we will develop a conceptual map and determine the most important potential



Woodard & Curran established the Recycled Water Delivery Area and assessed potential additional demand for the Sharon Heights service area. The SHGCC recycled water project preserved Sharon Heights recycled water quality (low salinity) by developing a salinity diversion plan in cooperation with SLAC and West Bay.

users to create a reasonable network. We will reach out to the top 20 potential users to confirm their interests and preferences. A conceptual distribution network, phasing plan, and cost estimates will be developed. Our findings and recommendations will be documented in a technical memorandum.



Phased expansion identified by Woodard & Curran to extend recycled water service to the City and Cal Water service areas

Scope of Work

We present below a summarized project scope of work that highlights the key elements of each task. A detailed scope of work that would be suitable for use in a contract agreement is included in the Appendix. The workflow is illustrated on the project schedule at the end of this section. The schedule highlights the key tasks, deliverables, and meetings associated with the tasks described below. We look forward to working closely with you to further define the project scope of work to best meet the District's needs.

Task 1: Data Collection and Assessment of Collection System

The VWHA team will review and become thoroughly familiar with the District's existing documents, plans, and completed work, and will develop a data review matrix that summarizes information reviewed. VWHA will also provide a list of additional data required for the project.

Deliverables: Technical Memorandum summarizing data reviewed, how it will be used in the Master Plan, and bibliography.

Task 2: Estimation of Flows

Using data available for existing and future land use and existing water usage, VWHA will develop the methodology to be used to determine existing and future dry weather wastewater flows (Base Wastewater Flow) for input to the hydraulic model. VWHA will also develop design criteria to be used for the capacity assessment, and for design storm parameters as part of this task. This task includes one meeting with staff.

Deliverables: Technical Memorandum summarizing data utilized, agreed methodology, results from the dry weather flow analysis, and design criteria.

Task 3: Hydraulic Modeling

VWHA upgraded the District's model to InfoWorks ICM in 2020, and converted the model with each parcel contributing individual flow to the system. VWHA will update this model to reflect current conditions, adding the enhancements described earlier in this section . VWHA will also review historical and 2023 flow monitoring data, and will complete QA/QC on the 2023 V&A report findings. VWHA will utilize this information to refine and calibrate the hydraulic model to measured dry and wet weather flows. We have moved the requested precipitation and design storm assessment to Task 2.

Deliverables: Draft and Final Technical Memorandum summarizing model updates, flow monitoring analysis approach and results, and calibration results for dry and wet weather scenarios.

Task 4: System Performance Evaluation and Capacity Assurance Plan

VWHA will analyze and evaluate wastewater collection and pumping system performance during dry and wet weather as predicted by the hydraulic model. VWHA will identify wet weather capacity needs and potential dry weather flow challenges. VWHA will also validate performance of the model through a comparison to an independent flow event that occurs during the 2022-23 flow monitoring period.

VWHA will meet with staff to identify three scenarios that will be investigated further using the model. Example studies include review of potential changes in model outcomes resulting from: (1) Basin-specific I&I reduction, (2) recycled water usage, (3) increased rainfall intensities, or (4) conservation and/or growth. This task includes two meetings to review capacity needs and identify special studies, and to review the results from these special analyses.

Deliverables: Draft and Final Technical Memorandum summarizing existing and future system performance and capacity needs, and results from the supplemental studies discussed above.

Task 5: Capital Improvement Plan Development

This task includes 3 subtasks: (1) Updated LAMP and CIP, (2) Pump Station Assessment and CIP, and (3) Capacity Assurance CIP.

VWHA will review and update the existing Master Plan's capacity assurance plan, and expand this plan to integrate updated capacity assurance, LAMP, and pump station improvement projects.

VWHA will meet with staff to review and update

the desired Level of Service, as well as existing LAMP Likelihood and Consequence factors. VWHA will develop an updated LAMP risk model. Using this updated model, we will identify and prioritize rehabilitation and replacement needs for implementation over the next ten years. Similar to the 2015 model, the updated model will be designed so it can be tied directly to the District's CMMS if desired.

Concurrently, the VWHA team, through Woodard & Curran, will review existing pump station and force main record drawings to develop system hydraulics. Pump performance curves will be used in conjunction with this hydraulic analysis to determine the theoretical capacity of each pump station. This capacity will be compared to the design flows developed under Task 4. In addition, we will visit the District's pump stations and interview District operations staff to determine the potential for large scale rehabilitations that may fall outside the scope of the District's proactive pump replacement program. Where such projects are identified, we will develop planning level capital cost estimates and approximate timelines for pump station rehabilitation.

VWHA will develop, prioritize, and estimate the cost of capacity assurance projects (from Task 4), LAMP projects, and pump station improvements while considering the need for resilience, sustainability, capacity, and reliability. We will propose necessary project timing and phasing in a way that supports the principles of Effective Utility Management.

We will develop a separate CIP for each area - capacity, LAMP, and pump stations - and combine these CIPs into an updated, prioritized, master 10-year CIP. In addition, project descriptions will be developed to be consistent with the format of the District's budget documents.

This task includes multiple meetings as shown in the schedule, as required to discuss: (1) LAMP criteria, updates, and results; (2) Pump Station assessment needs and findings; and (3) CIP costs, priorities, and timelines

Deliverables: Draft and Final plans for the updated LAMP and Pump Station assessment tasks. Draft and Final Technical Memorandum summarizing the master CIP, with recommended projects and cost sheets for years one through ten for capacity needs, LAMP needs, and pump station needs.

Task 6: Recycled Water Planning

VWHA and Woodard & Curran will review current and potential recycled water production at the recycled water facility at Sharon Heights Golf and Country Club (SHGCC), and current and future plans for recycled water production throughout the District including Flood Park/Ringwood/SRI and Government Center demands. We will also study the Recycled Water Facility at SHGCC for potential future users, possible plant expansion, the feasibility of expanding into Cal Water service areas, and ways to avoid diverting recycled water to the sanitary sewer in off winter months.

Deliverables: Draft and Final Technical Memorandum to include potential users along a phased recycled water expansion and production for SHGCC and the Bayfront area to the Government Center. The TM will include cost productions for phased expansion, as coordinated with the District.

Task 7: Master Plan Preparation

VWHA will prepare a consolidated Master Plan that provides a clear rational for identifying, justifying, prioritizing, and costing the recommended improvements. The Master Plan will include an executive summary and will incorporate material developed and presented in the various project TMs.

Deliverables: Draft and Final Master Plan, including all reports, hydraulic models, and technical files.

Task 8: Project Management

The VWHA team will provide project management and administration. We will attend monthly in-person progress meetings with District staff, and provide quality assurance/quality control. Several additional, task-specific project meetings are also scheduled.

In addition, this task includes development of user manuals for the hydraulic model and LAMP model, and training in the use of the respective models.

Deliverables: Meeting agendas and minutes, monthly status reports and invoices, user manuals for hydraulic model and LAMP model.

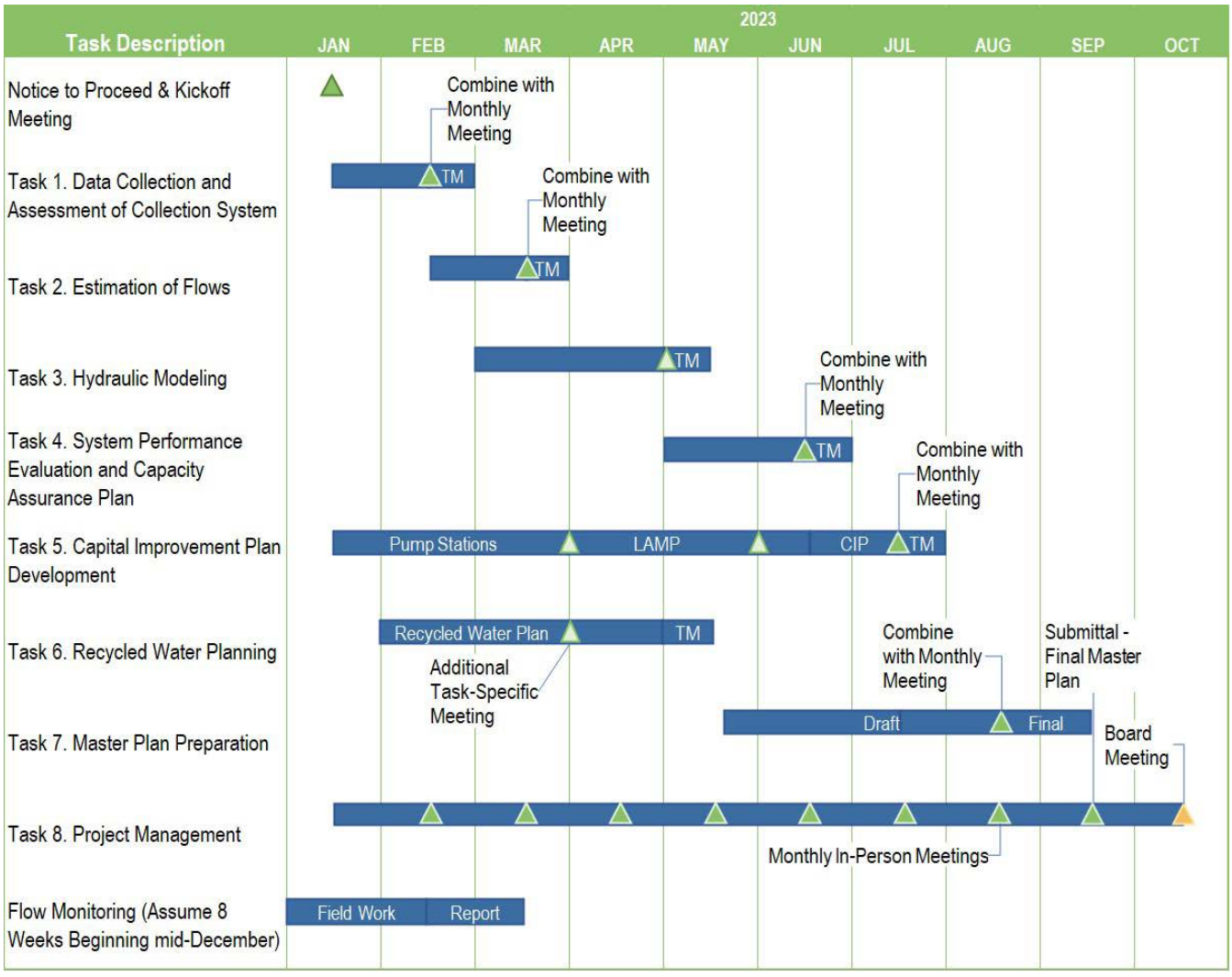
Project Schedule

VWHA's preliminary project schedule for the Wastewater Collection System Master Plan Update is shown below. The schedule shows all tasks to be completed within eight months. One month is included after delivery of the Master Plan for project closeout activities. For planning purposes, the Notice to Proceed date is shown as January 12, 2023.

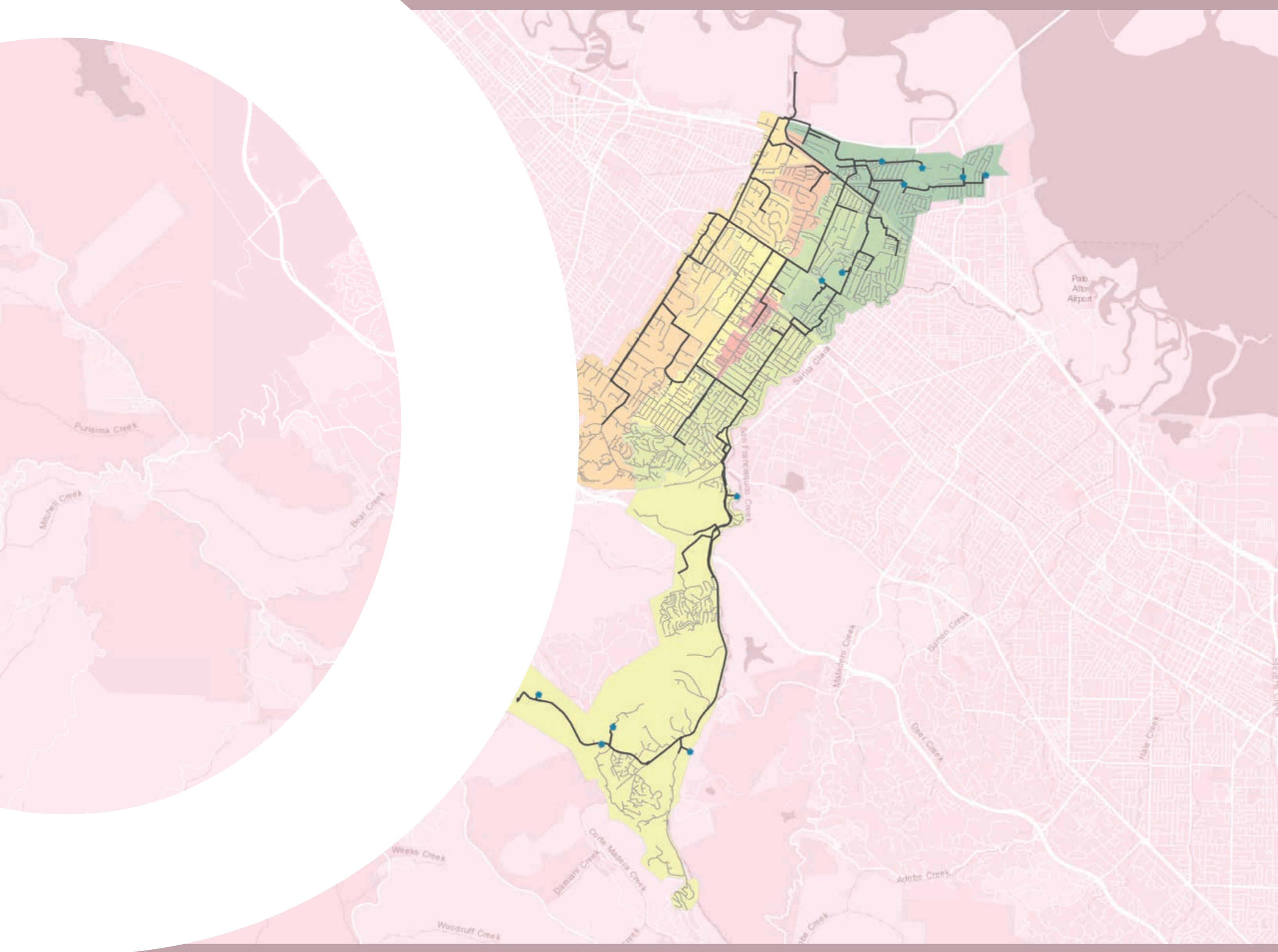
Data from one analysis may change results from another analysis. For example, although we are showing pump station assessments to occur early, the hydraulic modeling results may require a re-evaluation of pump station recommendations as needed to accommodate capacity upgrades. The schedule below shows pump station, LAMP, and capacity assessments in parallel. If interim analyses require the team to circle back in one planning area to account for results from a different assessment, we will evaluate the associated schedule impact, if any, and work with District staff to adjust the timeline as required.

The most critical driver of this study will be to obtain relevant and applicable rainfall data during the 2022-23 wet weather season. During this period, we hope for the District to receive multiple rainfall events to improve ground saturation, and at least one event exhibiting high volume and and hourly peak to assist with wet weather calibration. Our scope assumes receipt of raw wet weather flow data no later than March 15, 2023.

We are available to discuss this proposed schedule and to develop a program plan that works for the District.



Insurance



Palo Alto Airport
Purisima Creek
Mitchell Creek
Bear Creek
San Francisquito Creek
Matadero Creek
Barron Creek
Deer Creek
Hale Creek
Weeks Creek
Corte Madera Creek
Damiani Creek
Adobe Creek
Woodruff Creek

Insurance

VWHA and Woodard & Curran have reviewed the example contract agreement, including the insurance requirements, and request the following changes to the contract language. We remain flexible and welcome a discussion with District staff on these items.

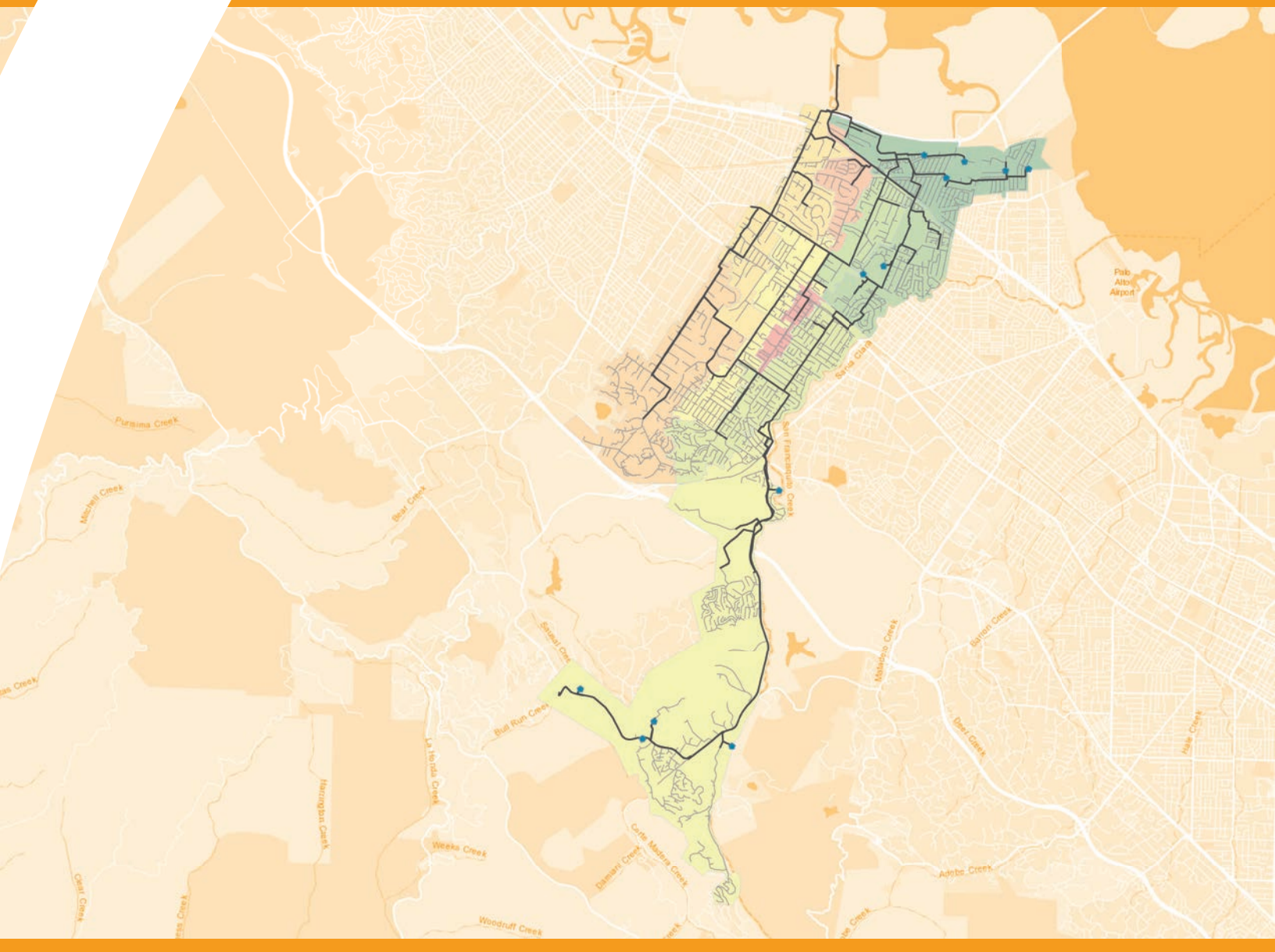
- Paragraph X.2: remove the phrase "undivided loyalty"

- Add to the insurance requirements the following, or similar, clause:

  "Neither party shall be responsible or liable to the other for special, indirect, or consequential damages. The total aggregate liability of the Consultant to Owner or anyone claiming through Owner for any and all claims whatsoever arising out of this Agreement shall not exceed the total applicable insurance proceeds paid to Consultant by its insurers up to the amount of the minimum specified insurance policy limits set forth in this Agreement."

7

Litigation



Litigation

V. W. Housen & Associates has never had a contract terminated for default, and has not been involved in any litigation, either by our firm or against our firm related to the provision of any services in the last five (5) years.

The following is a list of all matters that Woodard & Curran, Inc. has been involved in within the last five years; none of these matters will have any material impact on the Company's ability to perform services for West Bay Sanitary District.

- A.J Virgilio Construction, Inc. v. Town of Easton and Woodard & Curran, MA, 19-056. The contractor to the Town of Easton on a sanitary sewer construction project brought this lawsuit against W&C's client, the Town, alleging, inter alia, breach of contract, and W&C. ***Woodard & Curran was completely dismissed*** from this lawsuit on a successful dispositive motion, which is being challenged by the contractor.

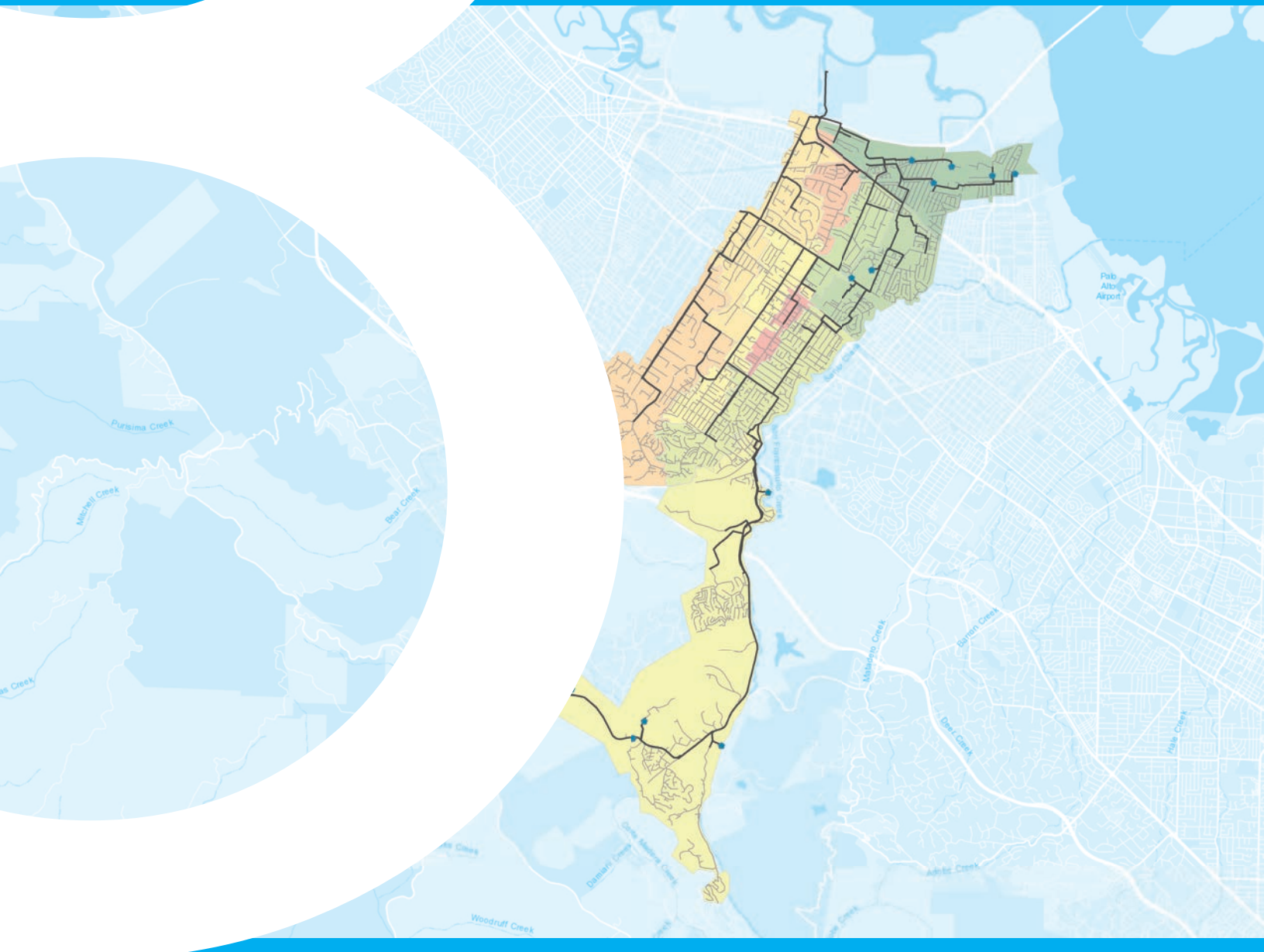
- Federated Mutual Ins. Co. v. Central Connecticut Cable Co., CT, HHD-CV196117230-S. Federated Mutual Insurance Company brought a first party subrogation action, as subrogee for Schmidt Electric Co., against Schmidt's subcontractor, Central Connecticut Cable, Co. (CCC), seeking recovery of insurance proceeds allegedly paid in connection with an incident that occurred at the City of Waterbury sewage treatment plant. Federated alleged that CCC improperly cut into an energized cable at the facility while performing the replacement of an electrical cable. CCC then brought a third-party complaint against a number of parties, including Woodard & Curran's client and its subcontractors. ***The matter is resolved***.

- Monterey County Water Resources Agency and California-American Water Services Co. v. Marina Coast Water District and RMC Water and Environment and related actions, CA 92015). RMC (a subsidiary of Woodard & Curran, Inc.) and a client were named as co-defendants in a lawsuit filed by two water agencies in relation to the termination of a project. ***The matter is resolved.***

- Town of Peterborough v. Woodard & Curran, NH, Civil No. 16-cv-198-LM. The Town of Peterborough, NH initiated this lawsuit asserting a claim for funding-related damages in connection with an engineering project at the Town's Wastewater Treatment facility. ***The matter is resolved.***

- Lexington Ins. Co. v. C.C. Construction, Inc., et al., MA, Civil No. 16-1992F. Lexington Insurance Company brought a subrogation lawsuit against C.C. Construction and W&C, seeking recovery of $50,000 it alleged it paid to its insured, the Pineapple Inn, for damage from a sewer back-up. ***The matter is resolved.***

Other Information



Other Information

The Request for Proposals requested that the proposing firm provide the following:

a. The information provided in Section 2, Staffing Resources and Section 4, Experience and Technical Competence demonstrate our team's record of staffing tasks efficiently and completing projects on time and within the allocated budget.

   We are proud of our ability to meet these objectives on the projects that we complete for our clients, and encourage you to contact our references to learn more about our technical capabilities, attention to detail, and commitment to client service.

b. VWHA participates in the following community events within the greater Bay Area:

   - Annual donation through Donors Choose to Title 1 schools in the greater Bay Area. Recent donations have included El Cerrito High School, Willie Brown Jr. Middle School in the Bayview District of San Francisco, and David Reese Elementary School in Sacramento
   - Annual delivery of full meal food packages delivered through the Monument Crisis Center
   - CA Coastal Cleanup Days (various locations)

   In addition, Woodard & Curran completed outreach to the recycled water customers as part of the 2014 recycled water market survey.

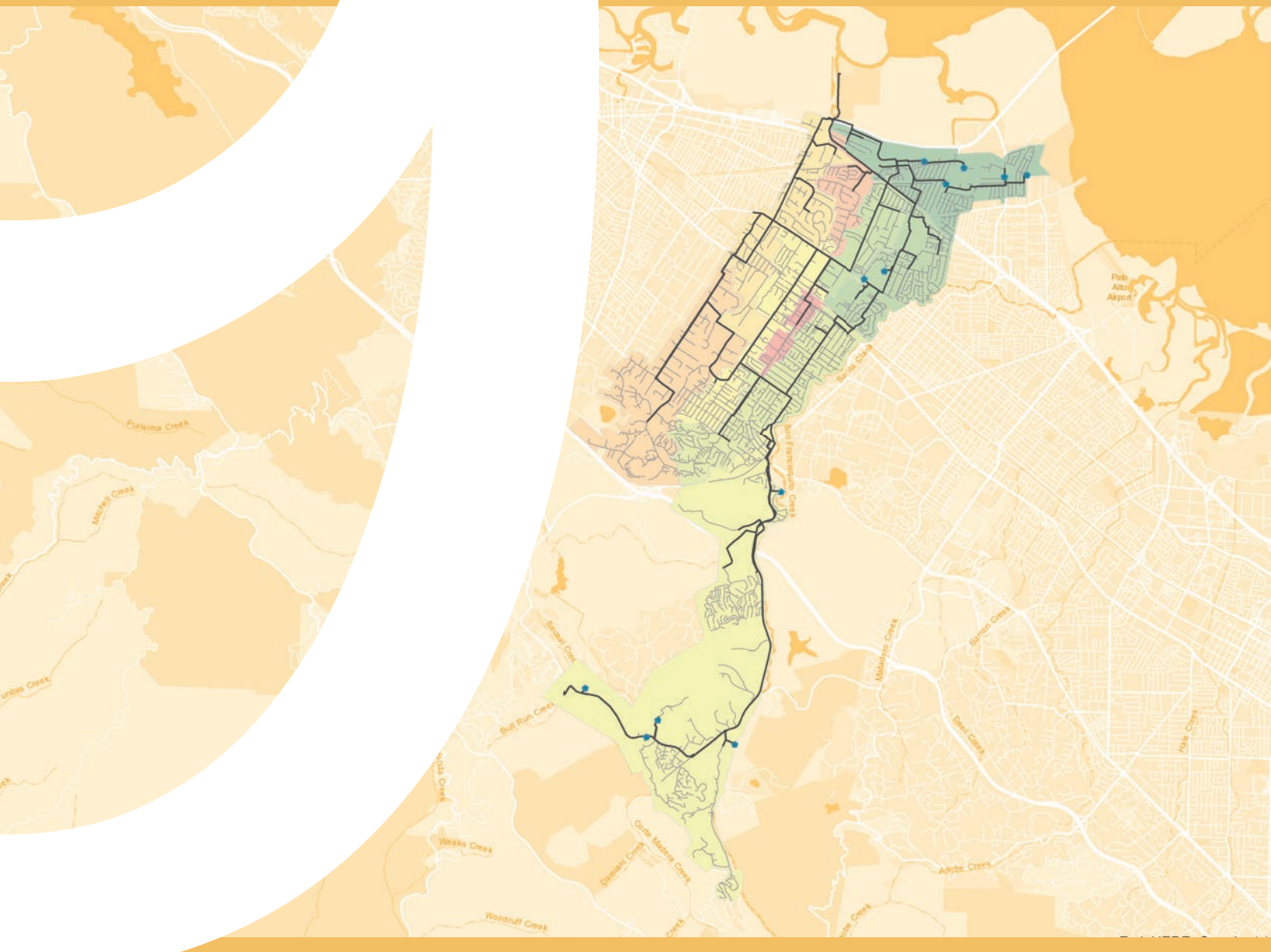
c. VWHA has worked with the District on the following projects:

   - 2008: Interim General Management Services (while employed with West Yost Associates)
   - 2009 to Present: On-Call Engineering Services
   - 2011: Wastewater Collection System Master Plan (while employed with West Yost Associates)
   - 2013: Hydraulic Model Update
   - 2013: Consolidation Discussions and Contracting Support
   - 2015: Linear Asset Management Plan
   - 2016: Collection System of the Future
   - 2018: Sustainability Report
   - 2020: Hydraulic Model Update
   - 2021: East Palo Alto Flow Study

   Woodard and Curran has worked with the District on the following projects:

   - 2014: District-wide Recycled Water Market Study and Feasibility Studies for Sharon Heights, Bayfront and Woodside
   - 2015: Integrated Water Resource Study
   - 2015 to 2021: Recycled Water Planning and Development + Sharon Height WWTP Design-Build (Including UV Disinfection)
   - 2020 to 2022: West Bay Sanitary District, Menlo Park, CA – SRF Loan and Grant Financing for Bayfront and Avy-Altshul Recycled Water Projects

Appendix


Pursima Creek
Mitchell Creek
Butt Run Creek
Weeks Creek
Woodruff Creek
Adobe Creek
Barron Creek
Palo Alto Airport

Appendix - Detailed Scope of Work

The following Scope of Work provides additional detail to supplement the summary scope of work that is included in Section 5, Proposed Method to Accomplish the Work.

Scope of Services

Task 1: Data Collection and Assessment of Collection System

VWHA and Woodard & Curran (collectively, "VWHA") will review the records of the District's wastewater system and infrastructure, including, but not limited to, pipeline mains, manholes and cleanouts, pump stations, basins and sub-basins. VWHA will become fully familiar with the District's wastewater system using the existing Master Plan, GIS data, and record drawings. We will review existing and historical data, including relevant studies and projects that have been performed since the development of the Existing Master Plan to determine completed and unfinished goals. Our review will consider regulatory compliance, water consumption, population growth, sewer overflow data, flow monitoring studies and capital improvement plan efforts. VWHA will develop a data review matrix that summarizes information reviewed.

Deliverables: Draft and final Technical Memoranda to summarize the evaluation of existing data and the determination of its usefulness for incorporation in the updating Master Plan. Bibliography of documents and information used in developing the Master Plan.

Task 2: Estimation of Flows

VWHA will provide the background and methodology to be used to determine existing and future dry weather wastewater flows (Base Wastewater Flow) for input to the District's collection system hydraulic model. We will use data available from cities and water agencies within the District's service area to characterize existing and future land use and document existing water usage within the model. VWHA will also develop design criteria to be used for the capacity assessment.

We have moved the following work from RFP Task 3 to this Task 2: VWHA will review local available historical rainfall and precipitation data and develop a hyetograph for an appropriate 10-year, 6-hour Design Storm as used in the existing District Master Plan. VWHA will compare the results from this design storm to other rainfall profiles, such as site-specific synthesized profiles, to confirm that this design storm continues to accurately represent current and future conditions, especially in light of anticipated changes due to climate change. This task includes one meeting with staff.

Deliverables: Draft and Final Technical Memoranda that summarize sources of system data, resources used to develop land use projections for communities served by the District, design criteria, design storm criteria, and calculation of the Base Wastewater Flow (BWF) component of the hydraulic model.

Task 3: Hydraulic Modeling

VWHA will become familiar with flow monitoring performed by others as part of the development of the existing Master Plans and will refresh our knowledge on the most recent modeling analysis available. We understand that the District will provide an updated Flow Monitoring Study performed by V&A Consulting. VWHA will utilize the updated Flow Monitoring Study when developing the new model, and will confirm the approach to be used in applying this data with staff. VWHA will synthesize the data provided, and will complete quality assurance/quality control of the final flow data.

Please note that we have moved the requested precipitation and design storm assessment to Task 2.

VWHA will update the District's existing model to reflect current conditions, and will expand the

model to include consideration of the following enhancements:

- Incorporation of drought impacts and projected recycled water diversions for a realistic representation of system conditions
- I&I sensitivity evaluation to help prioritize pipeline rehabilitation activities
- Adding the FERFF facilities to the hydraulic analysis to integrate wet weather storage and recycled water diversions into modeled flows
- Review of available storage at pump stations and within the system to inform emergency response activities

VWHA will utilize final flow data to refine and calibrate the hydraulic model to measure dry and wet weather flows. All modeling is proposed to be completed using InfoWorks ICM.

Deliverables: Draft and Final Technical Memoranda summarizing modeling approach, updates, and results; flow monitoring analysis and results; I&I analysis; and calibration results for dry and wet weather scenarios.

Task 4: System Performance Evaluation and Capacity Assurance Plan

VWHA will analyze and evaluate the District's wastewater collection and pumping system (e.g. mains, structures, pumps stations, force mains, etc.) design and performance. We will analyze and evaluate wastewater collection and pumping system performance during dry and wet weather as predicted by the hydraulic model. These evaluations will incorporate the model enhancements that are described in Task 3. VWHA will identify wet weather capacity needs and potential dry weather flow challenges. VWHA will also validate performance of the model by comparing model-generated flows to an independent flow event that occurs during the 2022-23 flow monitoring period.

VWHA will meet with staff to identify three scenarios that will be investigated further using the model. Example studies include review of potential changes in model outcomes resulting from: (1) Basin-specific I&I reduction, (2) recycled water usage, (3) increased rainfall intensities, or (4) conservation and/or growth. This task includes two meetings to review and discuss existing system capacity, operation of the wastewater collection system under dry and wet conditions, and anticipated bottlenecks and other issues. During these meetings, we will also work with staff to finalize the scope of the special studies, and to review the results from these special analyses.

Deliverables: Draft and Final Technical Memoranda summarizing existing and future system performance and capacity needs, and results from the special studies discussed above.

Task 5: Capital Improvement Plan Development

This task includes 3 subtasks: (1) Updated LAMP and CIP, (2) Pump Station Assessment and CIP, and (3) Capacity Assurance CIP. VWHA will review and update the existing Master Plan's capacity assurance plan, and will expand this plan to include updated LAMP and pump station improvement projects.

Linear Asset Management Plan. VWHA will meet with staff to review and update the desired Level of Service, as well as existing LAMP Likelihood and Consequence factors. VWHA will develop an updated LAMP risk model in its current software platform, MS Access. MS Access provides an open and user-friendly software that allows customization of LAMP parameters, eliminating the "black box." Using this updated model, VWHA will identify and prioritize rehabilitation and replacement needs for implementation over the next ten years. Recommendations will consider capacity results from Task 4, I&I reduction objectives, maintenance needs, known structural risks, and cost. Similar to the 2015 model, the updated model will be designed so it can be tied directly to the District's computerized maintenance management system if desired.

Pump Station Master Plan. Concurrently, the VWHA team, through Woodard & Curran, will review existing pump station and force main record drawings, as available, to develop system hydraulics. Pump performance curves will be used in conjunction with this hydraulic analysis to determine the theoretical capacity of each pump station. This capacity will be compared to the design flows

developed under Task 4 to determine if pump stations are under or over capacity relative to projected flows. If flow and pressure data are available from the District, we will use this data to determine if actual capacity may vary from theoretical results.

In addition, Woodard & Curran will visit each of the District's 11 pump stations and interview District operations staff to determine the potential for large scale rehabilitations that may fall outside the scope of the District's proactive pump replacement program. These projects may occur as stations reach an age where the rising cost of routine maintenance justifies the decision to renew major infrastructure. When such projects are identified, Woodard & Curran will develop planning-level capital cost estimates and approximate timelines for pump station rehabilitation. Unless requested by the District, this scope assumes replacement "in kind," and does not include the development of conceptual plans or designs.

Capital Improvement Plan. Capital improvement plans will be developed for each of the three analyses (capacity, LAMP, and pump station). These plans will be memorialized in individual Technical Memoranda and consolidated into a single, master CIP in the Master Plan document. For each of the CIPs, VWHA will develop, prioritize, and estimate the cost of projects while considering the need for resilience, sustainability, capacity, and reliability. Costs will be presented in terms of net present value to support the District's budgeting approach.

For each individual CIP, and again for the Master 10-year CIP, VWHA will propose project timing and phasing in a way that supports the principles of Effective Utility Management. Proposed timelines will consider the wet weather construction period constraints that must be acknowledged to avoid unnecessary sewer spills. In addition, VWHA will develop project descriptions that are consistent with the format of the District's budget documents.

This task includes multiple meetings with staff as shown in the project schedule, as required to discuss: (1) LAMP criteria, updates, and results; (2) Pump Station assessment needs and findings; and (3) CIP costs, priorities, and timelines

Deliverables: Draft and Final plans for the updated LAMP and Pump Station assessment tasks. Draft and Final Technical Memoranda summarizing the combined, Master Capital Improvement Plan, with recommended projects and cost sheets on year one through ten for capacity needs, LAMP needs, and pump station needs.

Task 6: Recycled Water Planning

VWHA, through Woodard & Curran, will review the current and potential recycled water production provided by the District at the recycled water facility at Sharon Heights Golf and Country Club (SHGCC), current and future plans for recycled water production throughout the District, including phased expansion to serve Flood Park/Ringwood/SRI, and the Government Center which includes City of Menlo Park and West Bay Sanitary District offices. Furthermore, we will document in the Master Plan additional analyses completed on potential future users and possibly plant expansion of the Recycled Water Facility at SHGCC. Our team will evaluate the feasibility of expanding into the Cal Water service areas, and will complete an analysis for proposed methods for avoiding the diversion of recycled water to the sanitary sewer in off-winter months.

Deliverables: Draft and Final Technical Memoranda to include potential users to support a phased recycled water expansion and production strategy for SHGCC and for the Bayfront area to the Government Center. The TM will include cost productions for phased expansion, as coordinated with the District.improvements.

Task 7: Master Plan Preparation

VWHA will prepare a consolidated Master Plan that provides a clear rational for identifying, justifying, prioritizing, and costing the recommended improvements. The Master Plan will include an executive summary and will incorporate material developed and presented in the various project TMs.

The Master Plan will clearly define how the various analyses incorporated information on:

- Future population growth

- Water consumption and conservation (drought restrictions)
- Recycled water production
- Relevant regulatory requirements
- Operations and maintenance related data and efficiencies

The Master Plan will be accompanied by all Technical Memoranda, the hydraulic model file, and other techical files that were developed for the project. The Master Plan will include the following Chapters:

- Table of Contents
- Acronyms
- Terms
- Executive Summary
- Chapter 1 – Introduction
- Chapter 2 – Existing Wastewater System
- Chapter 3 – System Flows
- Chapter 4 – Hydraulic Model Development
- Chapter 5 – Planning Criteria
- Chapter 6 – Capacity Analysis and Capacity Assurance Plan
- Chapter 7 – Pipeline Condition Assessment and Capital Improvement Projects (Linear Asset Management Plan)
- Chapter 8 – Pump Station Rehabilitation Program
- Chapter 9 – Capital Improvement Program
- Chapter 10 – Recycled Water Planning

Deliverables: Draft and Final Master Plan, including all reports, hydraulic models, and technical files.

Task 8: Project Management

VWHA will provide project management and administration. We will attend monthly in-person progress meetings with District staff, and provide quality assurance/quality control. Several additional, task-specific project meetings are also scheduled, as shown in the project schedule in Section 5.

In addition, VWHA will develop user manuals for the hydraulic model and LAMP model, and will provide training in the use of the respective models.

Deliverables: Meeting agendas and minutes, monthly status reports and invoices, user manuals for hydraulic model and LAMP model.

V.W. HOUSEN
& ASSOCIATES

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Walnut Creek, CA 94596
www.housenassociates.com

Proposal • November, 17 2022

WASTEWATER COLLECTION SYSTEM MASTER PLAN UPDATE

SECTION 1

EXECUTIVE SUMMARY

COPY

November 17, 2022

West Bay Sanitary District
500 Laurel Street
Menlo Park, CA 94025

RE: Proposal for the Wastewater Collection System Master Plan Update

To Whom it May Concern:

HydroScience Engineers (HydroScience) welcomes the opportunity to work with the West Bay Sanitary District (District) to prepare the Wastewater Collection System Master Plan Update. Our project approach and team has been carefully tailored to meet the project's specific needs. Provided here are some of the highlights and key features of our proposal.

Uniquely Experienced and Comprehensive Project Team.

The proposed Project Team (***page 7***) consists proven master planners who have recently collaborated to complete many local similar projects. **Angela Singer, PE,** our proposed Project Manager has been heavily involved in numerous water, sewer, and recycled water master planning projects during her 18-year HydroScience tenure for local South Bay and Peninsula clients including Palo Alto, Foster City, Mountain View, Sunnyvale, and Milpitas.

Our Project Engineer, **Alex Park, PE,** is an expert in the hydraulic modeling and planning for sewer and water systems and brings a wealth of experience and knowledge for planning projects around the Bay Area. In her 22 years of industry experience, she has used and mastered most modeling software offered from all major platforms including Innovyze and Bentley. Alex is also PACP/MACP certified through NASSCO.

Alex will be the technical resource for **Rachel Yenney,** who will work with Alex to create the sewer hydraulic model. Rachel, having recently built, calibrated, and analyzed both the City of Milpitas and City of Mountain View sewer models, is an integral part of our modeling team. Alex and Rachel have teamed on various sewer modeling projects including for the Cities of Livermore and Watsonville.

Jason Crowley, PE, will be the lead for the system inspection and assessment. Jason and Angela worked together on both the Foster City and Mountain View Water and Sewer Master Plans to assess facility condition. For Foster City, he conducted assessments for 20 lift stations and collaborated with Angela on developing a prioritization matrix to analyze each of the project components and identify their priority and triggers for lift station rehabilitation.

Principal-in-Charge, **Curtis Lam, PE,** will be the lead for recycled water planning. Curtis is a known expert in the field of recycled water planning having worked for South Bay Water Recycling and as former President of the WateReuse Association of California. He will also ensure that resources are available to meet the District's goals

HYDROSCIENCE ENGINEERS, INC.

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asinger@hydroscience.com

and expectations for the duration of the project. He will also serve as a technical resource. Both he and **Eric Petrel, PE,** will provide QA/QC for the project. Eric, an expert in sewer planning and design, will provide technical review for design criteria and standards, improvement needs and alternatives, and condition assessment. Curtis will provide QA/QC for overall submittal quality, scope adherence, and correctness.

Our Team also includes subconsultant **HMH** for manhole survey services, which has been provided as an optional service. HMH is a locally based surveying firm with significant experience performing work for both HydroScience and on the Peninsula.

Collectively this team has worked together on several recent master planning projects including the City of Mountain View's Water and Sewer Master Plans, the City of Milpitas Sewer Master Plan, and the City of Foster City/EMID's Water and Sewer Master Plans. With both the Mountain View and Milpitas Sewer Master Plans, HydroScience developed additional detail in the hydraulic model by identifying hundreds of flow splits to improve modeling accuracy.

Thoughtful Approach to Meeting District's Needs.

In our approach, we highlight what we feel are the keys to successfully implementing this project. Our priorities include:

- Careful project management and tracking, which is facilitated by clear communication, both internally and with the client, and decision tracking.
- Development of high-quality technical report submittals that have undergone internal technical QA/QC and designed to convey information in a clear and concise manner.
- Collaborating with District Staff to understand the District's perspective and concerns so that we can develop a sound basis for planning and modeling.
- A detailed yet methodical approach to hydraulic model development to assure that the time invested will generate worthwhile hydraulic model improvements.
- An appreciation for the changing ways we use water, given the current drought and pandemic driven changes that impact water use and wastewater generation rates.
- Preparing a capital improvement plan for the District based on a thoughtful assessment of what the District needs and considering how best to prioritize those needs based on well-informed criteria.

We have included an optional manhole survey task in the event there is more data needed to flesh out further details in the hydraulic model. Specifically, we want to assure that we are capturing the appropriate detail for flow splits and diversion structures. In our experience, usually due to budget constraints, manhole surveys may only include rims and outflow inverts in an effort to capture as many manholes as possible within the available budget. This task will allow us to obtain all invert data needed to accurately model any identified flow splits.

We appreciate the opportunity to submit this proposal and hope to have the chance to support the District with this important project.

HYDROSCIENCE ENGINEERS, INC.

Curtis Lam
Principal

SECTION 2

TABLE OF CONTENTS

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SECTION 3

IDENTIFICATION OF PROPOSER

HydroScience Engineers

HydroScience Engineers Inc. (HydroScience) provides planning, design, permitting, and construction management services for water, wastewater, stormwater, and recycled water projects. With offices in Berkeley, Sacramento, and San Jose, we understand and address the complex water-related needs of Northern California.

Founded in 1997 in Sacramento, HydroScience has steadily grown in both staff and revenues on a sustainable basis. We are a debt-free company that maintains its principal banking relationship with Wells Fargo Bank. We are a California corporation and certified Small Business Enterprise (SBE) managed by five principals.

Our staff of 40 professionals includes licensed civil, mechanical, environmental, and electrical and instrumentation engineers as well as hydraulic modelers, water treatment and distribution operators, funding and permitting specialists, drafters, construction managers, and marketing and administrative professionals. With this wide range of resources, HydroScience offers clients a breadth of capabilities typical of a large engineering firm while still delivering the distinct advantages of a smaller, more local firm: close proximity, responsiveness, direct project involvement from senior staff, low overhead, and project team stability.

HydroScience's proposed representative to contact concerning this proposal as well as during this project is our proposed Project Manager, Angela Singer. She will be the District's primary contact and our proposed Principal-in-Charge, Curtis Lam, will be the District's alternate contact. Both of their contact information is provided to the right.

PROPOSAL CONTACTS

PRIMARY CONTACT

- **Angela Singer, PE**
  Senior Project Manager
  Berkeley Office
  741 Allston Way
  Berkeley, CA 94710
  (510) 403-4680
  asinger@hydroscience.com

ALTERNATE CONTACT

- **Curtis Lam, PE**
  President and Principal
  Berkeley Office
  741 Allston Way
  Berkeley, CA 94710
  (510) 403-4636
  clam@hydroscience.com

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SECTION 4

STAFFING RESOURCES

HydroScience is proposing a robust team of seven people which include planning and modeling engineers led by our Project Manager, **Angela Singer, PE**. We have assigned technical leads for each of the tasks described in the District's RFP, including recycled water planning, condition assessment, and hydraulic modeling of sewer systems. All of our team is based out of our Berkeley office which is managed by Angela. Should the need arise, she can guarantee additional personnel is added from any of our locations on a moments notice.

Below is our proposed project team organization chart as well as each personnels qualifications to execute and lead the work their role demands. One-page resumes for all team members can be found on the following pages.

ANGELA SINGER
PROJECT MANAGER

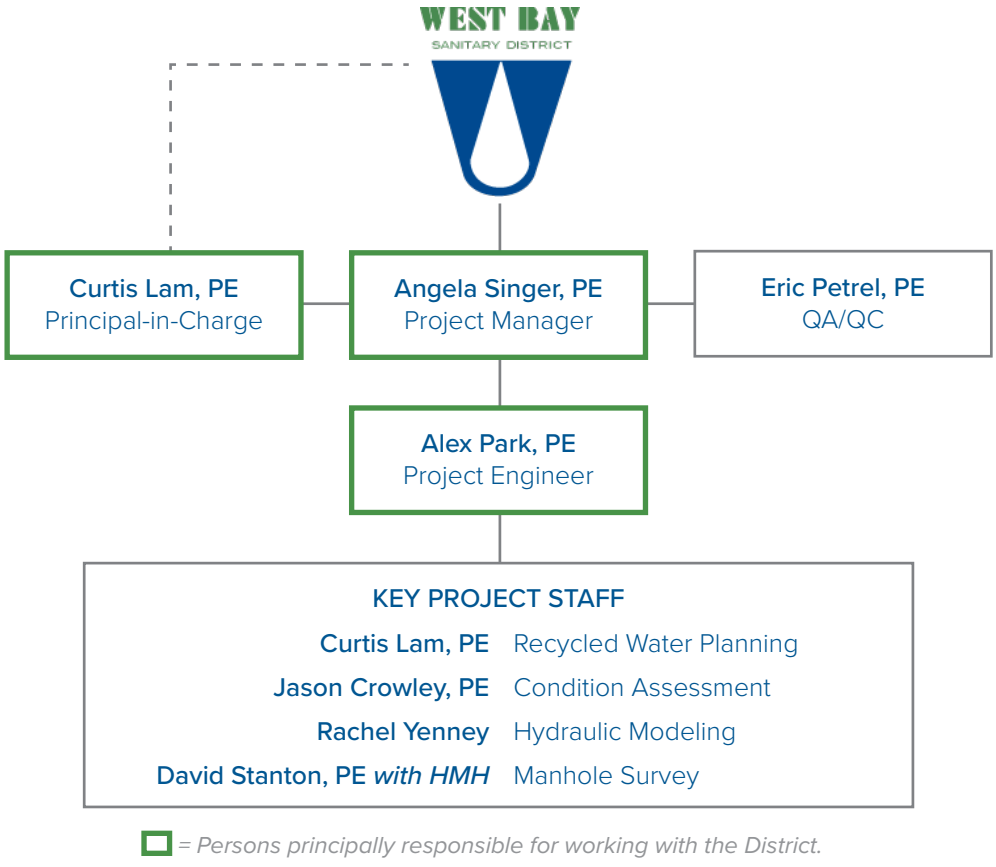
Angela has a strong background in master planning and has recent experience working with nearby cities and other municipalities.

Personnel Qualifications

As Project Manager, **Angela Singer, PE,** will be responsible for overall project delivery, scope, and project management. She will continuously monitor the budget, productivity, and schedule and make any needed adjustments. She will also provide technical guidance and leadership to the project team, and will serve as engineer-of-record for deliverables. Angela is a LEED Accredited Professional with 18 years of experience and has been a project manager, deputy project manager, and project engineer on some of HydroScience's most ambitious planning projects. Angela recently served as Deputy Project Manager for the City of Mountain View Water and Sewer Master Plans and for the City of Milpitas Sanitary Sewer Maser Plan. She also served as Project Manager for Livermore's Sewer Modeling and Capacity Analysis.

Serving as Principal-in-Charge and lead for Recycled Water Planning is **Curtis Lam, PE**. He will monitor project progress and conformance to the agreement, and will provide backup support to Angela as needed. As Principal and President of HydroScience, Curtis has successfully managed and overseen many projects of this scope and magnitude, including recycled water projects for EBMUD, Valley Water, South Bay Water Recycling, Sunnyvale, Mountain View, and DSRSD.

Project Team Organization Chart



= Persons principally responsible for working with the District.

Serving as QA/QC is **Eric Petrel, PE.** Eric will provide independent peer review and verify that HydroScience Quality Control standards are being followed during project execution. Eric has 38 years of experience in civil engineering and the planning, design, analysis, and rehabilitation of sewer collection systems. His project experience includes the City of Foster City's On-Call Development Review and Public Works Engineering and Inspection Services, as well as sanitary sewer assessment and rehabilitation projects for the cities of San Mateo, Foster City, Belmont, Albany, and Pittsburg.

Serving as Project Engineer is **Alex Park, PE.** Alex will be working closely with Angela on all project deliverables. Alex has 22 years of experience in wastewater and water system modeling, studies, design, and GIS. Alex has worked on facility plans, wastewater master plans, pipeline design, pump station design, treatment plant hydraulic profiles and sewer collection system modeling. She has experience or training with the following computer modeling packages: InfoWorks, InfoSewer, XPSWMM, SWMM, H2OMAP Water, H2OMAP Sewer, WaterCAD, SewerCAD, and Hydra.

Serving as Hydraulic Modeling Lead is **Rachel Yenney.** Rachel specializes in hydraulic modeling and master planning flow evaluation, and has worked for clients including the cities of Mountain View, Milpitas, Watsonville, and Sunnyvale, as well as Livermore-Amador Valley Water Management Agency, among others. A graduate of Stanford University's Master of Science program in Environmental Engineering, Rachel is currently providing planning and hydraulic modeling services for projects in the California Bay Area and Central Valley.

Serving as Condition Assessment Lead is **Jason Cowley, PE.** Jason has nine years of experience and has served as project manager, project engineer, inspector, and construction manager for a wide range of engineering projects for HydroScience. Jason has had key roles in the planning and design of new civil site design projects, collection system infrastructure projects, wastewater treatment system design, and the planning of new water supply and distribution system infrastructure. Jason led the condition assessment tasks for both the Mountain View and Foster City Master Plans. The Foster City Wastewater Collection System Master Plan included an extensive condition assessment of 20 lift stations.

Serving as Manhole Survey Lead is **David Stanton, PE** *with HMH*. David has 31 years of experience and he currently manages all HMH field survey operations and staff resources including Licensed Land Surveyors, technical office support staff and multiple field survey crews. He oversees field and office operations including survey control, topographic surveys and mapping, right-of-way surveys, ALTA surveys, and construction staking. David's background in construction site operations and inspection provides him with a perspective of the need for strong teamwork and emphasizes clear project task communication, ensuring accurate and timely delivery. His past experience includes many years of civil engineering design and project management for both public and private projects throughout the Bay Area, Monterey County, and Central California.

Angela Singer, PE, Grade D2/T2, LEED AP

Project Manager

HydroScience

Angela Singer has 18 years of experience serving as Project Manager, Project Engineer, and Associate Engineer on a variety of water, wastewater, and recycled water projects including feasibility studies, permitting, recycled water retrofits, and the modeling of water and sanitary sewer systems.

EDUCATION

M.S., Environmental Engineering and Science, Stanford University

B.S., Civil and Environmental Engineering, University of California, Los Angeles

REGISTRATION

Civil Engineer, California, Registration No. 70316

Grade D2 Water Distribution Operator, No. 53424, California

Grade T2 Water Treatment Plant Operator, No. 43730, California

LEED Accredited Professional, Green Building Certification Institute, No. 10162577

AFFILIATIONS

American Water Works Association

Bay Area Water Works Association

WateReuse Association

REFERENCED PROJECT EXPERIENCE

- **Sewer Master Plan**
  City of Milpitas, California
  Deputy Project Manager.
- **Water and Sewer Master Plans**
  City of Mountain View, California
  Deputy Project Manager.
- **Sub-Basin 7 Hydraulic Modeling and CIP Planning**
  City of Watsonville, California
  Project Manager.

ADDITIONAL PROJECT EXPERIENCE

Water and Wastewater Master Plans

City of Foster City/Estero Municipal Improvement District (EMID), California

Project Engineer. HydroScience was retained by the District to develop a comprehensive Water Distribution System Master Plan and a Wastewater Collection System Master Plan to identify strategies for planning, budgeting, maintaining, and improving EMID's water and wastewater systems based on current demands, future growth, and emergency situations. At the conclusion of each of the studies, HydroScience prepared a prioritized capital improvement project plan and cost estimates for a 20-year period.

Influent Structure Modeling and Analysis

City of Livermore, California

Project Manager. HydroScience provides sewer collection system hydraulic modeling services as part of an on-call agreement with the City of Livermore. The City is designing upgrades to the Water Reclamation Plant (WRP) including a new screening structure that would be installed as an influent structure to the WRP. This task order in the on-call agreement was to update the City's existing sewer collection system hydraulic model to reflect the effects of this influent screening structure on the collection system. The previous model did not include downstream boundary conditions but focused rather on the hydraulic capacity of the collection system conveyance only. HydroScience coordinated with the design team working on the influent structure to understand the design and appropriately set the hydraulic grade line boundary conditions. HydroScience updated the piping to match the design of the influent structure within the H2OMap Sewer model. After completing the updates, the effects of the influent screening structure were evaluated to identify any surcharging or backwater effects throughout the entire collection system cause by the construction of this screening structure based on the City's deficiency criteria

Water Quality Monitoring Plan (WQMP)

City of Palo Alto, California

Project Engineer. HydroScience updated the City's WQMP which included: system description, system operation, regulations, water quality monitoring for source water and distribution system, sampling stations, sampling protocol, ten-year monitoring schedules, bacteriological siting plan, sample site maps for grouped constituents, future regulations, and recommendations. HydroScience was able to prepare the WQMP within a tight schedule in order to comply with DDW's annual audit of the City's system. Based on HydroScience's evaluation, the City was able to improve efficiency of sample collection by designating fixed sample station sites versus rotating sites. Monitoring schedules were designed to enhance efficiency in sample collection and maximize opportunities for economies of scale.

2020 Urban Water Management Plan

City of Manteca, California

Project Manager. HydroScience worked with the City to develop a comprehensive Urban Water Management Plan (UWMP) that documents the anticipated water demands and water supply into the future. The Plan addresses water supply reliability under average dry year, single dry year, and five consecutive dry year conditions with projections in five-year increments through 2040. The Plan also incorporates new and more prescriptive requirements for UWMPs including a Water Shortage Contingency Plan with more prescriptive stages and requires separate adoption by City Council.

Curtis Lam, PE

Principal-in-Charge & Recycled Water Planning

HydroScience

Curtis Lam has 28 years of experience in the design of recycled water and potable water distribution system infrastructure, wastewater treatment and collection system design, and the master planning of water, wastewater, and recycled water infrastructure. A Principal with HydroScience, Curtis has served as Principal-in-Charge, Project Manager and Project Engineer on a wide range of water, wastewater, and recycled water projects.

EDUCATION

M.S., Civil and Environmental Engineering, University of California, Berkeley

B.S., Civil Engineering, University of California, Berkeley

REGISTRATION

Civil Engineer, California, Registration No. 59049

AFFILIATIONS

WateReuse Association, Representative to the Board of Trustees, 2017 - 2020

WateReuse Association, President, 2015 - 2016

WateReuse Association, Vice-President, 2013 - 2014

WateReuse Association, Program Chair, 2011 - 2013

WateReuse, Chair, 2013 California Annual Conference

California Water Environment Association

Water Environment Federation

REFERENCED PROJECT EXPERIENCE

- **Sewer Master Plan**
  City of Milpitas, California
  Project Manager.
- **Water and Sewer Master Plans**
  City of Mountain View, California
  Project Manager.

ADDITIONAL PROJECT EXPERIENCE

Water Master Plan

City of Foster City/EMID, California

Principal-in-Charge. HydroScience was retained by the District to develop a comprehensive Water Distribution System Master Plan to identify strategies for planning, budgeting, maintaining, and improving EMID's water distribution system based on current demands, future growth, and emergency situations. We are currently working with the City to develop the water demand analysis and hydraulic model for evaluating the ability of the water system to operate under future water demand conditions as well as fire flow conditions. At the conclusion of the study, HydroScience will prepare a prioritized capital improvement project plan and cost estimates for a 20-year period.

Influent Structure Modeling and Analysis

City of Livermore, California

Principal-in-Charge. HydroScience provides sewer collection system hydraulic modeling services as part of an on-call agreement with the City of Livermore. The City is designing upgrades to the Water Reclamation Plant (WRP) including a new screening structure that would be installed as an influent structure to the WRP. This task order in the on-call agreement was to update the City's existing sewer collection system hydraulic model to reflect the effects of this influent screening structure on the collection system. The previous model did not include downstream boundary conditions but focused rather on the hydraulic capacity of the collection system conveyance only. HydroScience coordinated with the design team working on the influent structure to understand the design and appropriately set the hydraulic grade line boundary conditions. HydroScience updated the piping to match the design of the influent structure within the H2OMap Sewer model. After completing the updates, the effects of the influent screening structure were evaluated to identify any surcharging or backwater effects throughout the entire collection system cause by the construction of this screening structure based on the City's deficiency criteria

Countywide Water Reuse Master Plan

Valley Water, Santa Clara County, California

Technical Lead. HydroScience worked with the District to create a collaborative strategy to integrate and expand recycled and purified water use in Santa Clara County as a local, reliable, environmentally adaptive, drought-proof water supply and guide strategic investment of public funds over the next 20 years. The District's objectives for the CWRMP are: to guide how to best develop 24,000 AFY of purified water supply by 2028, guide the strategic investment of up to $1B for potable reuse and recycled water expansion in the County, and identify how much supply may be available from four County wastewater facilities for reuse.

Westbrook Water and Recycled Water Master Plans

Mackay and Somps, City of Roseville, California

Principal-in-Charge. HydroScience prepared potable and recycled water master plans for the Westbrook development, a portion of the Sierra Vista Specific Plan, in Roseville CA. The project included building complete hydraulic models of the potable and recycled water distribution systems, analyzing available potable and recycled water supplies, determining potable and recycled water distribution system requirements, and planning for integration of the distribution systems into the City of Roseville's existing systems.

Eric Petrel, PE

QA/QC

HydroScience

EDUCATION

M.S., Civil Engineering (Environmental), San Jose State University

B.S., Engineering Science, University of California, Berkeley

REGISTRATION

Civil Engineer, California, Registration No. 46794

AFFILIATIONS

Bay Area Water Works Association

California Water Environment Association

Eric has 38 years of experience in civil engineering and the planning, design, analysis and rehabilitation of water and wastewater facilities. His background includes a variety of projects involving water, wastewater and recycled water transmission systems; treatment facilities; and site improvements and hydrology, with emphasis on the design and rehabilitation of conveyance systems.

SELECT PROJECT EXPERIENCE

Foster City On-Call Development Review and Public Works Engineering and Inspection Services

City of Foster City/EMID, California

Project Manager. Due to an unusually large number of private development and redevelopment projects undertaken in the City of Foster City, HydroScience was retained to provide development review services to assist the City in meeting the increased workload. HydroScience's reviews included water, sewer, and storm drainage systems, both onsite and off-site. On-site improvement reviews focused on compliance with City and state standards, runoff and hydraulic calculation reviews, and observations on the constructability and operability of the improvements. Some reviews included developers' Storm Water Pollution Prevention Plans (SWPPP) and Best Management Practices (BMP) for control of site runoff. Off-site reviews included proposed sewer, force main, water main and storm drain improvements and estimates of the impacts on the existing systems. Reviews were completed on a fast-track basis to avoid project delays

Cabrillo Park Sewer Improvements

Santa Cruz County Sanitation District, California

QA/QC. HydroScience was retained by the Santa Cruz County Sanitation District to provide pipeline condition assessment, trenchless rehabilitation and new installation alternatives analysis/feasibility study, and design and construction services for pipeline improvements associated with this project. The project encompasses approximately 17 manholes and 2,540 linear feet of pipeline broken into 16 sewer segments located both upstream and downstream of the overflow locations. Existing pipelines are 6- and 8-inches in diameter, and all are asbestos cement pipe (ACP) except for a DIP segment residing under Highway 1. Improvements target removal and replacement of an aerial pipeline crossing, rehabilitation utilizing CIPP lining, sliplining, and pipe bursting/reaming. HydroScience developed a TM to assess and outline design recommendations for both sewer and manhole improvements. From there, the project was split into two phases, with the first phase accelerated to accommodate the most critical sewer improvements, and the second following a more typical schedule to allow for further geotechnical investigation, easement research and documentation, evaluate options for realignment, and preliminary negotiations with Caltrans to present a unique approach for crossing Highway 1. Both phases are currently in design, with bidding of the first phase pending easement acquisition.

Wastewater Collection Consolidation

City of Rio Vista, California

Collection System. The City of Rio Vista is closing one of it two existing wastewater treatment plants and the wastewater from the entire city will now flow to the remaining plant. HydroScience prepared a preliminary study that analyzed the combined flows and loads that will now be experienced at the wastewater treatment plant. Upgrades to the wastewater treatment plant and modifications to operations processes were identified by HydroScience in consultation with the wastewater treatment plant operator, Veolia. Similarly, HydroScience also analyzed the upgrades and modifications required for the sanitary sewer collection system.

Infiltration/Inflow Study

East Bay Municipal Utility District, Alameda County, California

Project Engineer. Eric was a team member for the East Bay Infiltration/Inflow Study, a study designed to locate sources of stormwater entry into sanitary sewers. Work included conducting flow monitoring and smoke and dye tests in sanitary sewers. He developed computer models of municipal sewer systems and developed data management systems to assist in cyclic rehabilitation and maintenance programs.

Alex Park, PE

Project Engineer

HydroScience

Alex has 22 years of experience in wastewater and water system studies, wastewater design and GIS; working on facility plans, sewer master plans, pipeline design, pump station design, treatment plant hydraulic profiles and sewer collection system modeling. Alex has experience or training with the following computer modeling packages: InfoWorks, InfoSewer, XPSWMM, SWMM, H_2OMAP Water, H_2OMAP Sewer, WaterCAD, SewerCAD, and Hydra.

REFERENCED PROJECT EXPERIENCE

- **Sewer Master Plan**
  City of Milpitas, California
  Hydraulic Modeling & Condition Assessment Lead.
- **Water and Sewer Master Plans**
  City of Mountain View, California
  Sewer Hydraulic Modeling & CCTV Review.
- **Sub-Basin 7 Hydraulic Modeling and CIP Planning**
  City of Watsonville, California
  Technical Lead.

ADDITIONAL PROJECT EXPERIENCE

Wastewater Collection System Master Plan

City of Foster City/EMID, California

Inflow/Infiltration (I/I) Flow Monitoring. HydroScience was retained to develop a Wastewater Collection System Master Plan to identify near-term and medium-term Capital Improvement Projects over the next 20 years. Alex performed dry-weather flow monitoring analysis to identify unit flow rates for wastewater planning, and wet-weather flow monitoring analysis to estimate the amount of rainwater entering the collection system. Unit flows were then applied to the system as a whole to identify areas within the system that may be heavily impacted requiring rehabilitation or replacement. Results of the flow monitoring were utilized to establish potential projects to be implemented.

Influent Structure Modeling and Analysis

City of Livermore, California

Modeling Lead. HydroScience provides sewer collection system hydraulic modeling services as part of an on-call agreement with the City of Livermore. The City is designing upgrades to the Water Reclamation Plant (WRP) including a new screening structure that would be installed as an influent structure to the WRP. This task order in the on-call agreement was to update the City's existing sewer collection system hydraulic model to reflect the effects of this influent screening structure on the collection system. The previous model did not include downstream boundary conditions but focused rather on the hydraulic capacity of the collection system conveyance only. HydroScience coordinated with the design team working on the influent structure to understand the design and appropriately set the hydraulic grade line boundary conditions. HydroScience updated the piping to match the design of the influent structure within the H2OMap Sewer model. After completing the updates, the effects of the influent screening structure were evaluated to identify any surcharging or backwater effects throughout the entire collection system cause by the construction of this screening structure based on the City's deficiency criteria

Sanitary Sewer Hydraulic Modeling Services

County of San Mateo, California

Sewer Capacity Assessment. For this project, Alex compared an in-progress InfoWorks sanitary sewer hydraulic model generated by the City of San Mateo and their Program Manager (Jacobs/CH2M) to the hydraulic model generated as part of the Sewer System Flow Monitoring and Hydraulic Modeling model previously generated in 2010. The intent of this comparison was to identify what changes were made to the underlying flows and assumptions, and review the content of both models.

Sewer Collection System Hydraulic Modeling

Marine Corps Base Camp Pendleton, San Diego County, California

Project Engineer. Alex completed a comprehensive sewer master plan that included an evaluation of television and manhole inspection data and hydraulic modeling results. Hydraulic models of the nine separate tributary areas were developed. Alex developed and performed a two-day training for base employees on the use of the SewerCAD models and GIS techniques.

EDUCATION
M.S., Civil and Environmental Engineering, University of California, Berkeley

B.S., Civil and Environmental Engineering, University of California, Berkeley

REGISTRATION
Civil Engineer, California, Registration No. 64117

CERTIFICATIONS
PACP (Pipeline Assessment Certification Program)

MACP (Manhole Assessment Certification Program)

AFFILIATIONS
California Water Environment Association, Professional Development Committee, 2010–2014

California Water Environment Association, Student Activities Committee Chair, 2003–2005

California Water Environment Association, Student Activities Committee Member, 2001–2002

Jason Crowley, PE

Condition Assessment

HydroScience

Jason has nine years of experience and has served as project engineer, inspector, and construction manager for a wide range of engineering projects for HydroScience. Jason has had key roles in the planning and design of new civil site design projects, collection system infrastructure projects, and the planning of new water supply and distribution system infrastructure. Jason's aptitude and experience in construction services benefit any effort to which he is assigned and any team to which he leads or supports.

EDUCATION
B.S., Environmental Resources Engineering, Humboldt State University

REGISTRATION
Civil Engineer, California Registration No. 88975

REFERENCED PROJECT EXPERIENCE

- **Water and Sewer Master Plans**
  City of Mountain View, California
  Condition Assessment & Pump Station Evaluation.

ADDITIONAL PROJECT EXPERIENCE

Wastewater Collection System Master Plan

City of Foster City/EMID, California

Project Engineer. HydroScience was retained to develop a Wastewater Collection System Master Plan to identify near-term and medium-term Capital Improvement Projects over the next 20 years. Alex performed dry-weather flow monitoring analysis to identify unit flow rates for wastewater planning, and wet-weather flow monitoring analysis to estimate the amount of rainwater entering the collection system. Unit flows were then applied to the system as a whole to identify areas within the system that may be heavily impacted requiring rehabilitation or replacement.

Whisman Pump Station

City of Mountain View, California

Project Engineer. HydroScience provided a condition and risk assessment of the aging Whisman Pump Station, which identified various mechanical, structural and electrical improvements needed to enhance long-term reliability and potable water delivery throughout zones 1 and 2 of the City's distribution system. Budgetary construction costs were then determined to help the City plan for the upcoming CIP budget. The condition assessment included a site visit and a discussion with City operators, engineers, and facilities managers to identify expectations, goals, and objectives. HydroScience then developed a list of deficiencies requiring upgrade. Recommended improvements included the construction of two new 200-hp split-case centrifugal pumps for Zone 2 distribution, replacement of the existing Motor Control Center and Variable Frequency Drives, SCADA integration, seismic upgrades, mechanical improvements, and the development of an autonomous control system.

Sanitary Sewer Inspection and Citywide Sewer Rehabilitation

City of Pittsburg, California

Project Engineer. The City of Pittsburg owns and operates about 100 miles of sanitary sewer, most of which is reaching the end of its design life. HydroScience provided design services for the replacement and upgrades of approximately 8,500 LF of sewer lines, rehabilitation of aging manholes, and installation of new manholes to improve maintenance access. Design includes relocation of shallow, flat sewers to improve sewer flow velocities and to permit the abandonment of backyard sewer easements. Challenges include a BNSF railway crossing, using pilot tube guided auger boring to install a 24-inch steel casing under the railway. HydroScience also designed replacements for 2,700 LF of undersized 10-inch water main with a new 16-inch main to improve system performance. HydroScience provided permitting assistance for the new railway crossing as well as an Underground Classification from the CalOSHA Mining and Tunneling unit for installation of the steel casing, and prepared the engineer's cost estimate and bid period assistance.

Wastewater Collection Consolidation

City of Rio Vista, California

Project Engineer. The City of Rio Vista is closing one of it two existing wastewater treatment plants and the wastewater from the entire city will now flow to the remaining plant. HydroScience prepared a preliminary study that analyzed the combined flows and loads that will now be experienced at the wastewater treatment plant. Upgrades to the wastewater treatment plant and modifications to operations processes were identified by HydroScience in consultation with the wastewater treatment plant operator, Veolia. Similarly, HydroScience also analyzed the upgrades and modifications required for the sanitary sewer collection system.

Rachel Yenney, EIT

Hydraulic Modeling

HydroScience

EDUCATION
M.S. Environmental Engineering, Stanford University, California

B.S. Physics, Bloomsburg University of Pennsylvania

REGISTRATION
Engineer-in-Training, California, Registration No. 171359

A graduate of Stanford University's Master of Science program in Environmental Engineering, Rachel is currently providing engineering support services for planning and hydraulic modeling projects in the California Bay Area and Central Valley. Rachel specializes in hydraulic modeling, regulatory compliance, and flow evaluation, and has worked for clients including the City of Milpitas, the City of Watsonville, the City of Sunnyvale, Zone 7 Water Agency, and Livermore-Amador Valley Water Management Agency, among others.

REFERENCED PROJECT EXPERIENCE

- **Sewer Master Plan**
  City of Milpitas, California
  Support Engineer.
- **Water and Sewer Master Plans**
  City of Mountain View, California
  Sewer Master Plan & Modeling Support.
- **Sub-Basin 7 Hydraulic Modeling and CIP Planning**
  City of Watsonville, California
  Hydraulic Modeling.

ADDITIONAL PROJECT EXPERIENCE

Morgan Hill Sanitary Sewer Condition Assessment

National Plant Services, Morgan Hill, California

QA/QC Support. National Plant Services (NPS) was hired by the City of Morgan Hill to clean, inspect, and provide condition ratings for a portion of the City's wastewater collection system. NPS hired HydroScience as a subconsultant to perform further condition assessment of the sanitary sewer CCTV inspections performed by NPS and to develop a rehabilitation and replacement program for the City based on the results and ratings of the inspections performed by NPS. Based on the CCTV inspections and risk of failure assessment, HydroScience provided a recommended rehabilitation program including project descriptions, cost estimates, and a timeline for implementation.

Influent Structure Modeling and Analysis

City of Livermore, California

Hydraulic Modeling. HydroScience provides sewer collection system hydraulic modeling services as part of an on-call agreement with the City of Livermore. The City is designing upgrades to the Water Reclamation Plant (WRP) including a new screening structure that would be installed as an influent structure to the WRP. This task order in the on-call agreement was to update the City's existing sewer collection system hydraulic model to reflect the effects of this influent screening structure on the collection system. The previous model did not include downstream boundary conditions but focused rather on the hydraulic capacity of the collection system conveyance only. HydroScience coordinated with the design team working on the influent structure to understand the design and appropriately set the hydraulic grade line boundary conditions. HydroScience updated the piping to match the design of the influent structure within the H2OMap Sewer model. After completing the updates, the effects of the influent screening structure were evaluated to identify any surcharging or backwater effects throughout the entire collection system cause by the construction of this screening structure based on the City's deficiency criteria

On-Call Water Quality Support Services

City of Sunnyvale, California

Support Engineer. The City of Sunnyvale provides drinking water to a population of over 150,000 and receives its supply from the San Francisco Public Utilities Commission (SFPUC), the Santa Clara Valley Water District Valley Water, and six groundwater wells. Beginning in 2008, HydroScience has provided as-needed water quality support services to the City to help maintain regulatory compliance. This includes water quality compliance support for the revised Total Coliform Rule, Stage 2 Disinfection Byproducts, triennial Lead and Copper Rule monitoring, triggered source monitoring for Groundwater Rule, triennial Public Health Goals reporting, and Unregulated Contaminant Rule Monitoring (UCMR). Since that time, HydroScience has prepared the City's Annual Water Quality Report. HydroScience compiles the water quality data and prepares the text based on the most current requirements from DDW. HydroScience's Marketing Department designs the brochure and prepares the layout for printing. Rachel provided support for the 2019 Water Quality Report. Rachel's duties include updating the City's Sanitary Sewer Management Plan.

David currently manages all HMH field survey operations and staff resources including Licensed Land Surveyors, technical office support staff and multiple field survey crews. He oversees field and office operations including survey control, topographic surveys and mapping, right-of-way surveys, ALTA surveys, and construction staking. David's background in construction site operations and inspection provides him with a perspective of the need for strong teamwork and emphasizes clear project task communication, ensuring accurate and timely delivery. His past experience includes many years of civil engineering design and project management for both public and private projects throughout the Bay Area, Monterey County, and Central California.

EXPERIENCE 31 years
EDUCATION B.S. Civil Engineering - San Jose State University

David Stanton, PE

Vice President, Survey Manager

California RCE 56150

California & Nevada Civil Engineers and Land Surveyors Association

Trustee of Operating Engineers, Pension Annuity, Health & Welfare and Pensioned Health & Welfare Trust

American Council of Engineering Companies

American Public Works Association

Building Industry Association

United States Green Building Council

HMHCA.COM
408.487.2200
1570 oakland road
san jose ca 95131

LAND SURVEYING
land use entitlements
land planning
land development
public works
civil engineering
landscape architecture
stormwater compliance

RELEVANT PROJECT INVOLVEMENT

Foster City Levee Improvements Project, *Foster City, CA*
David was the Survey Manager responsible for overseeing and allocating survey staff and crew as well as responsible for quality assurance/quality control. The Levee Improvements Project will increase the height and width of the levee to improve protection against storm/tide surges, meet sea level rise projections through the year 2050, maintain FEMA accreditation, and make the levee more resistant to earthquakes. The project also includes redevelopment and widening of the Levee/Bay Trail, which will provide the community with an enhanced, more inviting recreation destination.

San Mateo Wastewater Treatment Plant, *San Mateo, CA*
David managed the survey team as quality assurance/quality control and as principal-in-charge. The project included construction of new wastewater treatment facilities required for the City of San Mateo to meet current and future regulations. The new facilities will be built on City-owned land adjacent to the existing wastewater treatment plant facilities.

San Jose Water Company, *San Jose, CA*
Allocating required survey staff and coordinating the topographic surveys for the domestic water pipeline replacement new installation of recycled water piplelines.

BART SVBX (Silicon Valley Berryessa Extension), *Milpitas and San Jose, CA*
David managed the survey team as quality assurance/quality control and principal-in-charge. The project included topographic field surveys and coordinated pothole and as-built utility surveys for the Bay Area Rapid Transit (BART) Silicon Valley Berryessa Extension (SVBX). The BART Berryessa Extension is a 10-mile, two-station extension, beginning in Fremont south of the BART Warm Springs Station and proceeding in the former Union Pacific Railroad right-of-way through Milpitas and then to the Berryessa area of San Jose. HMH played a significant role in the solutions pertaining to the challenges associated with numerous utilities passing through five undercrossing structures along the project corridor.

Alum Rock and El Camino Bus Rapid Transit (BRT) Projects,
San Jose, Santa Clara, and Mountain View, CA
David oversaw the preparation of plat maps and legal descriptions, topographic surveys, construction staking, and pothole surveying for utility relocation for the Santa Clara Alum Rock BRT project. The seven mile extension connects east San Jose to Downtown San Jose which adds convenience and enhances the transit environment.

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SECTION 5

FISCAL STABILITY

INSIGHTS

Update your information with D-U-N-S® Manager

Report as of: 11-15-2022

Hydroscience Engineers, Inc.

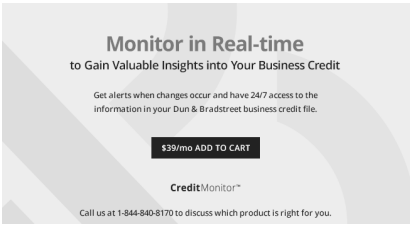
Alerts:

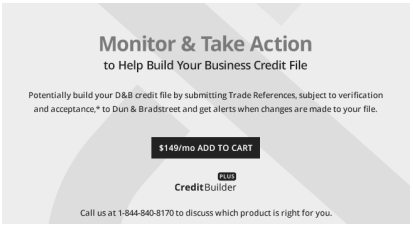
ACTIVE HEADQUARTERS

Address: 10569 Old Placerville Rd, Sacramento, CA, 95827, United States

SCORES AND RATINGS

PAYDEX® Score	Delinquency Predictor Percentile	Financial Stress Percentile	Supplier Evaluation Risk Rating
80	96	91	2
LOW RISK	LOW RISK	LOW-MODERATE RISK	LOW RISK





COMPANY PROFILE

D-U-N-S
83-011-1014

Business Form
Corporation

Date Incorporated
December 18, 1997

State of Incorporation
CA

Ownership
Not publicly traded

Mailing Address
United States

Telephone
(916) 364-1490

Website
www.hydroscience.com

Annual Sales
US$ 9,975,484

Employees
75 (35 here)

Age (Year Started)
25 (1997)

Named Principal
George Harris, President

Line of Business
Engineering services

-1-

DUNN AND BRADSTREET

Number: 83-011-1014

LEGAL EVENTS

Events	Open Count	Last Filed
Bankruptcies	0	-
Judgments	0	-
Liens	0	-
Suits	0	-
UCC	0	-

TRADE PAYMENTS

Highest Past Due

US$ 0

Highest Now Owing
US$ 2,500

Total Trade Experiences
20

Largest High Credit
US$ 80,000

Average High Credit
US$ 7,500

OWNERSHIP

This company is a **Global Ultimate, Domestic Ultimate, Parent/Headquarters**.

Hydroscience Engineers, Inc.
United States
D-U-N-S Number 83-011-1014

Total Members in Family Tree - 4

Subsidiaries	Branches
0	3

FINANCIAL OVERVIEW

Source:

INQUIRIES

12 Month Summary

Total number of Inquiries	Unique Customers
9	0

*Trade References will be added subject to Dun & Bradstreet verification and acceptance. Dun & Bradstreet cannot guarantee that trade references will be accepted or that accepted trade references will impact your business credit file. Please see https://www.dandb.com/glossary/trade-references/ for eligibility, process and other information regarding Trade References.

SECTION 6

EXPERIENCE & TECHNICAL COMPETENCE

Wastewater Master Planning Expertise

Our proposed project team includes the President of HydroScience, Curtis Lam, as Principal-in-Charge. Should the need arise he, as well as our proposed Project Manager, Angela Singer, can pull in-house resources from any office on short notice. In this section, we detail our experience and technical competence in completing similar projects in scope to the District's project. We have also provided client references for five recent projects as well as more detailed information for three of them as requested within the RFP. Below is a summary of our expertise in the various disciplines needed for this project.

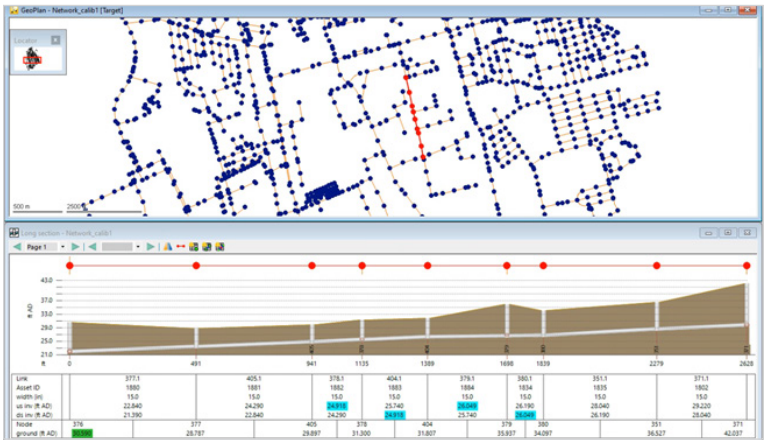
HydroScience has completed dozens of master planning projects throughout Northern California since its inception 25 years ago. The team members we have assigned to this proposal have played key roles on many previous master planning projects, and bring a wealth of experience that is directly applicable to your master planning effort. HydroScience prides itself on delivering practical, client-focused solutions. Many of our prior planning efforts resulted in subsequent implementation of recommended projects that we then designed. Once we complete a project, we take our experience and lessons learned and apply them to the next one. Our intention is to create a highly practical master plan that the District can rely on to guide future capital improvements. To the right is a list of some of our Master Planning and/or Hydraulic Modeling clients. Many of these are repeat clients over the years.

Gravity and Pressure Network Hydraulic Modeling

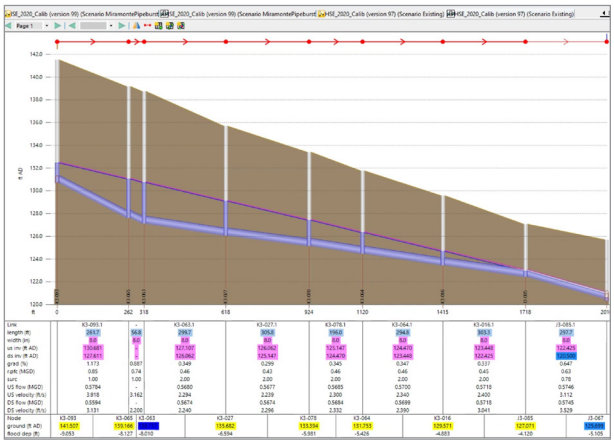
We have a hydraulic modeling team with the capability to conduct hydraulic analyses of both gravity and pressure network systems. We have prepared numerous wastewater collection system models for the purpose of planning and understanding the impacts of future developments and identifying capital improvement projects. ***HydroScience staff chosen for this project have experience using a variety of modeling software, including both Innovyze and Bentley software formats such as InfoWorks ICM, InfoSewer (formerly H2OMap Sewer), InfoWater, SWMM, XPSWMM, SewerGEMS, WaterCAD, and WaterGEMS and Hydra.***

MASTER PLANNING AND/OR HYDRAULIC MODELING CLIENTS

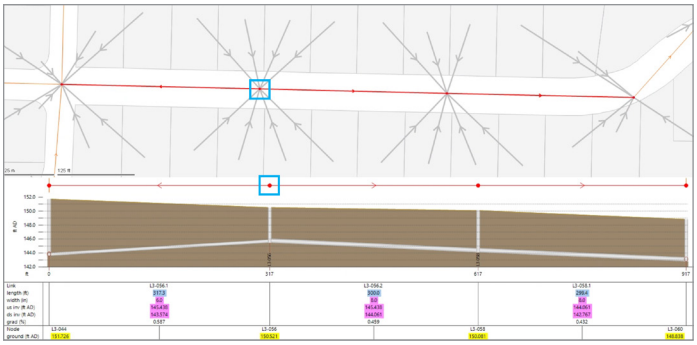
- California American Water
- City of Foster City/EMID
- City of Gridley
- City of Milpitas
- City of Mountain View
- City of San Jose
- City of San Mateo
- City of Santa Clara
- City of Sunnyvale
- City of Williams
- EBMUD
- Lake Alpine Water Company
- Placer County
- San Jose Water
- South Bay Water Recycling
- Vallejo Flood and Wastewater District
- Valley Water



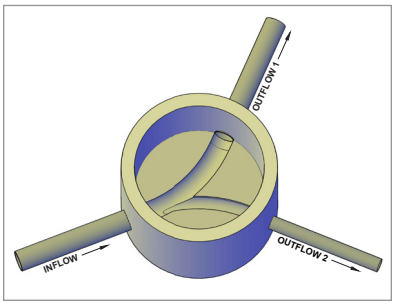
Above: InfoWorks ICM sewer model.



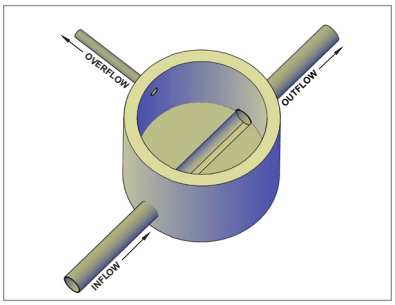
Above: Pipe surcharge diagram.



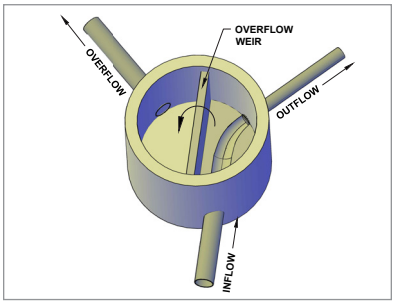
Above: High point flow split plan and profile.



Above: Even flow split.



Above: Overflow flow split.



Above: Flow diversion structure.

Sewer Modeling Expertise

We are knowledgeable about the District's modeling software and how details can affect model development. In our experience, we have found that often the evolution of hydraulic models is to incorporate more detail than the last iteration and one of the more critical details that is often in need of improvement is representation of flow splits in a collection system. This is in part due to the fact that hydraulic models, some better than others, have evolved and now have the capability to mathematically compute the operation of these structures. InfoWorks is stable and more accurate because it is a fully dynamic engine. It offers tools to evaluate the impacts of Rainfall Derived Infiltration and Inflow (RDI/I), and groundwater infiltration (GWI) and can also evaluate surface runoff (i.e. 2D analysis) for stormwater and combined system modeling. One of the more significant advantages of this software is that it has more options for customization of diversion structures, manhole construction (i.e. flow splits), real-time controls, pipe segment headlosses, 2D analysis, and more. There are several types of flows splits that we are typically looking for:

- **High point flow splits –** high points from which sewage flows in opposing directions.
- **Even flow splits –** manholes where incoming flow is split proportionally in two (or more) directions where outflow pipes have matching inverts.
- **Overflow flow splits –** where manhole flow splits with overflow. At an overflow split during normal flow conditions, the flow takes one path and during high flow conditions, if the manhole begins to surcharge and flow reaches a certain depth, there is an "overflow" pipeline that is activated and will carry flow.
- **Flow diversion structure –** alters an existing even flow split to mimic an overflow flow split. During normal dry weather operating conditions, all inflow is directed to one outflow pipe by the diversion structure. During higher flow conditions as the manhole begins to surcharge, the diversion structure is overtopped, and some flow is diverted to an overflow pipe.

For our most recent project with the City of Mountain View, we identified and modeled 165 flow splits in the system where HMH provided additional pipe invert and flow direction so that model flows could be more accurately represented.

GIS Capabilities and Expertise

HydroScience staff are well versed in the use of ArcGIS for mapping and as a tool for documenting assets within collection systems. Often utilities may not have the time to dedicate to maintaining a GIS database. We have worked with clients to bring their GIS databases up to date by conducting gap analyses of their systems to identify key information that is missing. Making sure that system shapefiles are current also facilitates the accurate development of the hydraulic model as most modeling programs either use ArcGIS as the operating platform or communicate with GIS format files to populate key infrastructure data in the model and utilize land use based files, such as parcel files, to allocate flows in the model.

Security Protocols

Security of our employees, workplace, and client information is a top priority. We follow strict guidelines for maintaining client confidentiality and have equipped our offices with state of the art alarm systems. Additionally, our in house staff includes an IT professional dedicated to network security. All networked computers are protected with updated virus removal software and a secure firewall.

Local Experience

HydroScience has a long history working with neighboring cities and districts. Our clientele includes Silicon Valley Clean Water, Midpeninsula Water District, County of San Mateo, cities of Belmont, San Mateo, Redwood City, Foster City/EMID, Palo Alto, Los Altos (Cal Water), Mountain View, Sunnyvale, and Stanford University. While we have not yet had the opportunity to work with the District, we welcome the chance to show our technical expertise and commitment to our clients.

Client References

We encourage you to contact the references shown within this section, as each of them can attest to our team's professionalism and the accuracy of our results.

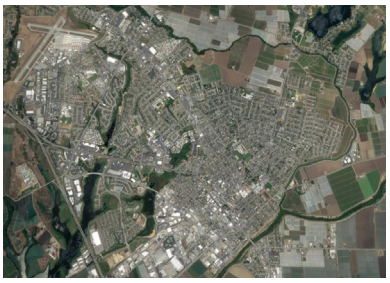
City of Mountain View • Water and Sewer Master Plans

Ariel Morales, *Sr. Civil Engineer*
(650) 903-6042
ariel.morales@mountainview.gov

Description: HydroScience is working with the City of Mountain View to develop comprehensive Water and Sewer Master Plans. The overarching objective of this project is to develop Capital Improvement Projects to address supply and capacity deficiencies in the water and sewer systems.

As part of the master planning effort, HydroScience is developing and calibrating that City's hydraulic models for both the water and sewer systems using InfoWater and InfoWorks ICM, both Innovyze software. The hydraulic modeling work involves using the existing hydraulic models, City GIS, system plat maps, and record drawings to update the model infrastructure and conduct a quality assurance and quality control review. An essential element of the hydraulic modeling work includes a comprehensive water demand assessment to evaluate historical water usage and sewer flows according to user type and land use to establish a baseline for existing demands/flows and project for future conditions. This data will be used to populate the hydraulic models and form the basis for calibration and system analysis. Both models will be calibrated against real time data collected in the field.

Project Size: The wastewater collection system consists of approximately 157 miles of gravity sewers ranging from 4-in to 48-in diameter. The hydraulic model includes all pipelines.



City of Watsonville • Sub-Basin 7 Hydraulic Modeling and CIP Planning

Danielle Green, *Principal Engineer*
(831) 768-3102
danielle.green@cityofwatsonville.org

Description: The City of Watsonville's sanitary sewer collection system is divided into 13 sub-basins. The City identified Sub-Basin 7 as prone to surcharging and overflowing during wet weather events. Some areas within the sub-basin are also prone to backups that require frequent maintenance by the jetting crew. HydroScience worked with the City to identify current areas of concern including areas with low flow and slope, historical surcharging during wet weather, planned future development, and recent collection system expansion. This project included expanding the model from skeletonized to all pipes, reviewing flow and level monitoring data to calibrate unit flows based on land use and approximate wet weather inflow and infiltration (WWI/I), projecting future flows and identifying improvement projects with cost estimates to resolve hydraulic deficiencies during design conditions.

Project Size: Sub-Basin 7 consists of nearly 11.2 miles of gravity sewer lines and 210 manholes.

City of Milpitas • Sewer Master Plan

Harris Siddiqui, *Principal Engineer*
(408) 586-3358
hsiddiqui@ci.milpitas.ca.gov

Description: HydroScience developed a comprehensive Sewer Master Plan for the City of Milpitas to help provide valuable information on the City's system performance and capital improvement needs, and identify priorities and strategies, help outline the City's zoning policy, and establish the City's development priorities. Additionally, the master plan evaluated the existing system infrastructure and incorporated impacts of short term and long term planned growth to develop a comprehensive road map of the City's Capital Improvement Program.

Project Size: The wastewater collection system consists of approximately 160 miles of gravity sewers, with pipe diameters ranging from 4- to 66-inches. All pipelines 8-inch and larger were included int he hydraulic model. HydroScience also identified and modeled 177 flow splits.

City of Foster City • Water and Sewer Master Plans

Laura Galli, *Engineering Manager*
(650) 286-3280
lgalli@fostercity.org

Description: HydroScience was retained by the District to develop a comprehensive Water Distribution System Master Plan and a Wastewater Collection System Master Plan to identify strategies for planning, budgeting, maintaining, and improving EMID's water and wastewater systems based on current demands, future growth, and emergency situations. At the conclusion of each of the studies, HydroScience prepared a prioritized capital improvement project plan and cost estimates for a 20-year period.

Project Size: The existing wastewater collection system infrastructure consists of nearly 63 miles of gravity sewer lines, three miles of sewer force main, 52 lift stations, and the one high capacity pump station that pumps all wastewater to the Wastewater Treatment Plant.

City of Livermore • Sewer Modeling and Capacity Analyses

Farnoush Levers, *Senior Civil Engineer*
(925) 960-4515
fslevers@cityoflivermore.net

Description: HydroScience provides sewer collection system hydraulic modeling services as part of an on-call agreement with the City of Livermore. The City is designing upgrades to the Water Reclamation Plant (WRP) including a new screening structure that would be installed as an influent structure to the WRP. This task order in the on-call agreement was to update the City's existing sewer collection system hydraulic model to reflect the effects of this influent screening structure on the collection system. The previous model, developed in H2OMap Sewer, did not include downstream boundary conditions but focused rather on the hydraulic capacity of the collection system conveyance only. HydroScience coordinated with the design team working on the influent structure to understand the design and appropriately set the hydraulic grade line (HGL) boundary conditions. HydroScience as updated the piping to match the design of the influent structure within the H2OMap Sewer model. After completing the updates, the effects of the influent screening structure were evaluated to identify any surcharging or backwater effects throughout the entire collection system cause by the construction of this screening structure based on the City's deficiency criteria.

Project Size: The City's collection system consists of approximately 299 miles of gravity mains, three miles of force mains and four lift stations.

Water and Sewer Master Plans

City of Mountain View, California

Role
Prime

Dollar Value of Services
$912,600

Dollar Value of Fee
$912,600

Staffing
Curtis Lam, *Project Manager*
Angela Singer, *Deputy Project Manager*
Jason Crowley, *Condition Assessment & Pump Station Evaluation*
Alex Park, *Sewer Hydraulic Modeling & CCTV Review*
Rachel Yenney, *Sewer Master Plan & Modeling Support*
HMH, *Manhole Survey*

Duration
2020 - 2022

Relationship to Client
Contracted Consultant

Contact
Ariel Morales,
Senior Civil Engineer
City of Mountain View
t. (650) 903-6042
f. none
ariel.morales@mountainview.gov

HydroScience developed the City's Water and Sewer Master Plans. The project objective was to develop Capital Improvement Projects to address supply and capacity deficiencies in the water and sewer systems, including conducting site visits and operator interviews to document all major facilities and to identify any noted physical wear and deficiencies.

As part of the master planning effort, HydroScience developed and calibrated the City's hydraulic models using InfoWater and InfoWorks ICM, both Innovyze software for the water distribution and sewer collection systems, respectively. The work involved used the prior hydraulic models, City GIS, system plat maps, and record drawings to update the model infrastructure and conducted a quality assurance and quality control review. An essential element of the work included a comprehensive water demand assessment to evaluate historical water usage and sewer flows according to user type and land use to establish a baseline for existing demands/flows and project for future conditions. This data was used to populate the hydraulic models and form the basis for calibration and system analysis. Both models were calibrated against real time data collected in the field.

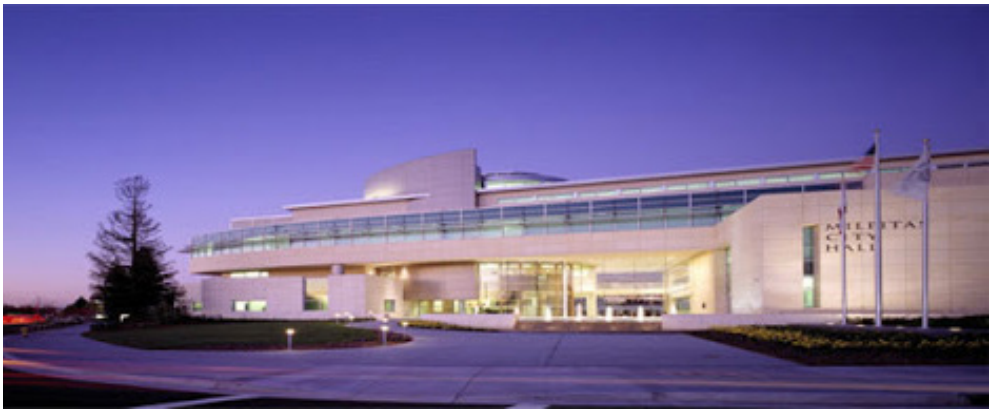
For the water system, HydroScience developed and implemented a Calibration Plan in conjunction with City staff to document the impacts to the water system from hydrant flows (simulated fire flow). Using the fire flow and pressure data collected, the water model was calibrated to reflect actual system demand, operation, and response. The calibrated hydraulic model was used to assess system capacity under existing and future scenarios including peak demand, fire flow conditions, and emergency scenarios. *One of the challenges in working with the water use data was to assess the impacts of the COVID-19 pandemic as well as recent and historic drought on water demands. We conducted a detailed analysis of five years worth of historic meter data to tease out both the occurrences and take them into consideration in developing unit factors.*

For the sewer system, HydroScience calibrated the hydraulic model to both existing dry weather data and wet weather data collected during the winter 2020-2021 wet season. HydroScience analyzed the dry weather data to establish and confirm unit sewer flow factors for various user and land use types. Wet weather data was analyzed for measured rainfall-dependent inflow and infiltration (RDI/I) to understand the in-situ response to wet weather events. Once calibrated under dry weather conditions, HydroScience analyzed wet season flow monitoring data to calibrate the system response to wet weather conditions. The calibrated model being used to model the impacts of RDI/I using simulated rainfall events to assess existing and future system capacity including impacts of future development.

The results of both the water and sewer system analyses were documented in the Master Plans and formed the basis for the phased Capital Improvement Programs to address the respective system deficiencies.

Milpitas Sewer Master Plan

City of Milpitas, California



HydroScience developed a comprehensive Sewer Master Plan for the City of Milpitas to provide valuable information on the City's system performance and capital improvement needs, identify priorities and strategies, outline the City's zoning policy, and establish the City's development priorities. Additionally, HydroScience evaluated the existing system infrastructure and incorporated impacts of short-term and long-term planned growth to develop a comprehensive road map of the City's Capital Improvement Program.

The work included a comprehensive data review and update of the City's GIS for water and sewer assets including a data gap analysis; field investigation of all sewer assets including CCTV of approximately 100,000 LF of pipe and condition assessment using NASSCO MACP/PACP protocols; an assessment of Consequence of Failure and Likelihood of Failure for sewer assets; land use based analysis of sewer flow contribution per parcel representing existing and buildout conditions based on General Plan; analysis of both dry and wet weather flow monitoring data at 17 points in the collection system along with development and calibration of hydraulic model using InfoWorks ICM; and preparation of a Financial Plan by subfund for managing cash flow.

For the hydraulic model, HydroScience conducted a thorough evaluation of the collection system identifying 177 flow splits (shown to the left) and delineating 20 subbasins captured during the flow monitoring program. HydroScience developed land use based sewer flow factors for 14 different land use types and diurnal curves for six different use classes for both weekday and weekend operation. The wet weather analysis included an analysis of storm events and representation as R-factors for each subbasin to identify the contribution of RDI/I under wet weather conditions.

The detail developed in the flow analysis translated to very tight calibration for both dry and wet weather scenarios. The sewer master plan includes existing and future sewer system capacity analyses, asset renewal and replacement studies, evaluation of system capacity and relief projects, and an asset rehabilitation plan. It is expected that this document will be used by the City to help guide development decisions, set sewer rates, identify connection fee requirements, develop a Capital Improvement Plan, and optimize their share of capacity at the San Jose-Santa Clara Regional Wastewater Facility.

Role
Prime

Dollar Value of Services
$891,000

Dollar Value of Fee
$891,000

Staffing
Curtis Lam, *Project Manager*
Angela Singer, *Deputy Project Manager*
Alex Park, *Hydraulic Modeling*
Rachel Yenney, *Support Engineer*

Duration
2019 - 2021

Relationship to Client
Contracted Consultant

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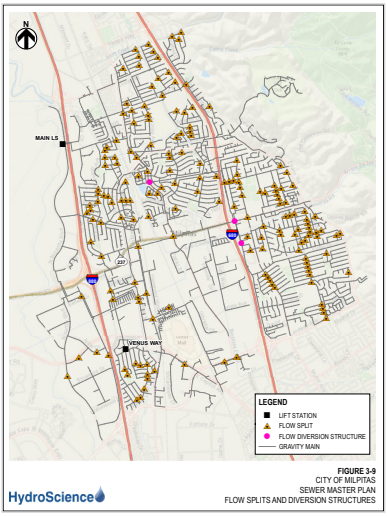

Sub-Basin 7 Hydraulic Modeling and CIP Planning

City of Watsonville, California

Role
Prime

Dollar Value of Services
$84,770

Dollar Value of Fee
$84,770

Staffing
Angela Singer, *Project Manager*
Alex Park, *Technical Lead*

Duration
2019 - 2021

Relationship to Client
Contracted Consultant

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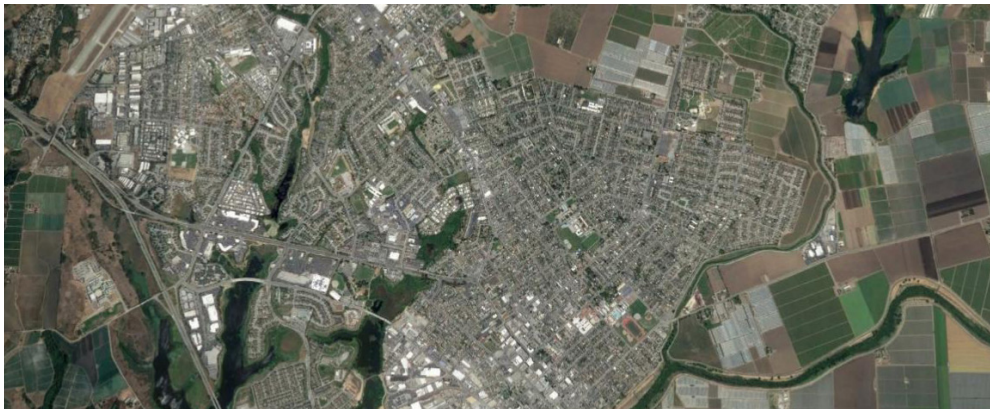


The City of Watsonville's sanitary sewer collection system is divided into 13 sub-basins. The City identified Sub-Basin 7 as prone to surcharging and overflowing during wet weather events. Some areas within the sub-basin are also prone to backups that require frequent maintenance by the jetting crew.

Sub-basin 7 Hydraulic Study. The City had never formally evaluated the complete wastewater collection system capacity using a hydraulic model. The City's arterial sewer mains were previously evaluated using InfoWorks ICM by Innovyze. This InfoWorks ICM model was updated and used to create a hydraulic model of the Sub-Basin 7 collection system and identify required capacity improvements.

HydroScience worked with the City to identify areas of concern including areas with low flow and slope, historical surcharging during wet weather, planned future development, and recent collection system expansion. This project included reviewing historical flow monitoring data and level monitoring data captured with SmartCover technology. The flow monitoring data was used to calibrate unit flows based on land use and approximate wet weather inflow and infiltration (WWI/I), projecting future flows, and identifying capital improvement projects with cost estimates to resolve hydraulic deficiencies during design conditions. The SmartCover data served as data confirmation for the model calibration.

Results were presented in a report documenting the approach, methods, and results of the hydraulic modeling and analysis which provided the basis for recommendations for capital improvements and costs. This project served as a launching point for two additional projects, including:

Freedom Blvd Water and Sewer Improvements – Phase 1 Preliminary Design Report. Expanding on the Subbasin 7 analysis, the City contracted with HydroScience to assess the sewer and water facilities in the area immediately upstream of Subbasin 7 relative to current design and separation standards, hydraulic capacity needs, existing pipeline conditions and alignment constraints. This first phase of work included hydraulic modeling, condition assessment, standards review, and site assessment to inform improvement needs and recommendations.

Lee/Beach Sub-basin Storm Sewer Study. The City operates and maintains the Watsonville Slough Sub-basin that discharges storm water into surrounding sloughs and creeks, which lead to flooding in wet weather. HydroScience assessed impacts of future development on the strained system, as well as inform options to alleviate flooding in this area. This study included building a hydraulic model using InfoWorks ICM; conducting a hydraulic analysis to identify capacity deficiencies; identifying projects to reroute City flows away from private properties; and preparing a report with recommendations and cost estimates.

SECTION 7

PROPOSED METHOD TO ACCOMPLISH THE WORK

Project Understanding

The West Bay Sanitary District (District) is seeking a consultant to update the District's Wastewater Collection System Master Plan and related hydraulic model (the Project). The Project objectives are to provide the District with a new Wastewater Collection System Master Plan that incorporates improvement projects that have been implemented since that last iteration of the Master Plan/Update; evaluate hydraulics to minimize risk of SSOs and minimize inflow and infiltration (I/I); develop a hydraulic model to evaluate system capacity under existing and anticipated future flows and also ensures compliance with regulatory requirements; and develop a comprehensive and prioritized Capital Improvement Program (CIP) that will be incorporated into the current CIP and that will increase efficiencies in operations and maintenance. In addition, the District wishes to evaluate recycled water expansion opportunities within the service area.

The wastewater collection system generally slopes from the south end of the District to the northwest through 200 miles of 4" to 54" diameter gravity sewer mains. The system includes 12 pump stations, with design firm capacities ranging from 110 gpm to 2,500 gpm. The terminus of the collection system is at the Menlo Park Pump Station (MPPS). The District also has large wet weather equalization basins adjacent to the MPPS which are part of the Flow Equalization Facility (FEF). Flows from the MPPS are discharged to the Silicon Valley Clean Water (SVCW) wastewater conveyance system and treated at the SVCW Wastewater Treatment Plant, which also receives flow from the cities of Belmont, San Carlos, and Redwood City. The District is the second largest contributor to SVCW after Redwood City.

The last Master Plan update was completed in 2011, which was partially updated in early 2013 to incorporate I/I reductions realized after pipeline improvements were made to the collection system. Reduction of I/I is of ongoing importance to the District, given the limited flow SVCW capacity. The District wishes to prepare a comprehensive model which would include all developments and improvements implemented to date and to utilize the model to further identify, isolate, and minimize I/I in the future.

Many of the improvement projects recommended in the 2011 Master Plan have been implemented which have included gravity pipeline rehabilitation and replacement, and a new pump station (Sausal Vista) and force main. As part of this proposed master planning effort, the District has hired V&A Consulting Engineers (V&A) to install 12 flow monitors in addition to the District's 17 existing system flow monitors. Additional flow data used to calibrate the hydraulic model will help to identify areas with higher I/I, which will allow the District to focus further improvement efforts in a cost effective manner.

Approach

Many sewer systems are affected by a number of factors including aging infrastructure, maintenance needs, changing flows, soil condition, regulations, and technology. Typically, improvement projects are developed based on growth, risk, deficiency, opportunity, enhancement, and/or funding.

Our approach is intended to provide the District with a comprehensive Sewer Master Plan that meets the District's stated objectives while maintaining the project budget and schedule. Below is a description of the methods we intend to implement.

Above: Deltek Ajera project accounting software provides real-time project status which allows us to continuously track schedule and budget, respond immediately if budget recovery is required, and generate accurate invoices.

Project Management, Budget, and Schedule

The key to staying within budget and on schedule begins with a detailed description of the scope, deliverables, and milestones as outlined in this proposal. HydroScience has carefully structured tasks with key deliverables. Key deliverables/milestones are identified on the project schedule shown on ***page 49***. To obtain timely review of deliverables, our approach includes conducting progress meetings/workshops to facilitate and coordinate feedback from District staff. In addition, we have dedicated local resources for the duration of the project to maintain consistency and effectiveness. To ensure scope, schedule, and budget remain on track, our Project Manager (PM) will:

- Ensure that all staff members understand their respective work assignments, including scope, schedule, budget, and required QA/QC practices.
- Give task leaders responsibility for leading selected subtasks and maintaining regular contact with our PM and internal staff.
- Setup and assign a fixed fee budget for each task on HydroScience's accounting system.
- Have task leaders monitor scope, schedule, and budget of discrete items, who will in turn coordinate with the PM who holds responsibility for overall scope, schedule, and budget compliance.
- Regularly monitor the project budget, schedule, estimated percentage of completion of specific tasks and effort-to-complete.
- Prepare monthly invoices with appropriate details, including schedule and budget status updates.
- Schedule review meetings with the District for deliverables as defined in the scope and schedule to facilitate District review process and feedback to the HydroScience team.
- In lieu of monthly in person meetings, the PM will present the option to conduct brief biweekly check-in meetings via video conference to keep the District apprised of progress and to facilitate knowledge transfer. We have found that this is a very cost-effective way to allow for greater team involvement, more frequent communication with the client, and the ability to screenshare during hydraulic model development.

The District will be regularly updated on project status and will be advised early of any issues and proposed corrective actions. The District will receive an update on schedule and budget immediately if there are any changes. Every meeting will be preceded by a clear agenda and followed by minutes, action items, and decision logs, as necessary. This process allows us to work as partners with the District and closely tailor our planning documents to District processes and functions.

Quality Assurance/Quality Control (QA/QC)

Quality assurance and quality control will emphasize doing it right the first time and verifying quality using internal resources that are independent from the project team. All deliverables will be internally checked before submission. Checks will include verification of project objectives being met; accuracy of all calculations; assurance that the message being conveyed is clear and concise; organization of documents are user friendly, grammatically correct, and without spelling errors; Figures, Tables, and Table of Contents are accurately labeled and correspond to the correct text, and the overall format and appearance of the document meets HydroScience's high standards for all planning documents. We will maintain a decision log documenting all major decisions and questions and answers along the way.

Collaboration with District Staff and Stakeholders

Collaboration with District staff will start with finalizing the scope, schedule, and fee for contract execution. A kickoff meeting will give the key project team members an opportunity to meet, establish project communications protocol, refine project objectives and an opportunity to fine-tune the project approach. Milestone workshops will provide an opportunity for the HydroScience team to present deliverables and respond to any questions the District might have. It's an opportunity for multiple reviewers and our team to work together to resolve any potential conflicts and progress with a similar basis of understanding for decisions made and the path moving forward.

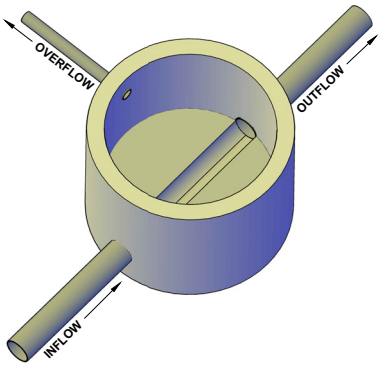
HydroScience acknowledges that the operations and maintenance staff is an invaluable resource for system knowledge obtained from working in the field on a daily basis. HydroScience will work with District operations and maintenance staff to collect information and discuss known deficiencies and hot spots. We will accompany District personnel on site visits to all major facilities such as lift stations, flow diversion structures, and key flow meter locations to understand their purpose and function. Pictures will be taken to document existing condition and included in the Master Plan, where applicable.

Based on land use conditions for existing and future conditions, HydroScience will identify underutilized areas within the District and planned developments. In addition, HydroScience will review metered water use data, which will be used in collaboration with dry weather flow monitoring data to develop unit flow factors and to identify large dischargers. It is assumed that the District will coordinate and obtain the land use condition data and water use data from each stakeholder prior to the start of the project to facilitate the project schedule.

Hydraulic Model Development and Calibration

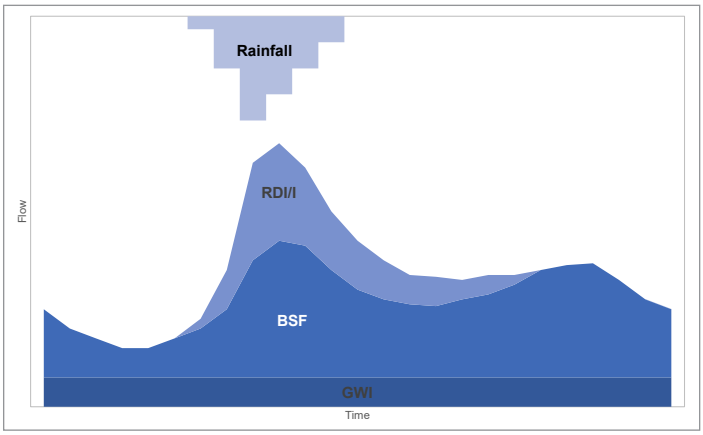
When developed properly, sewer hydraulic models have enhanced functionality that enables the tool to be used for a wide variety of purposes. The following describes the key elements HydroScience staff will focus on in the development of the model.

- **Geographical Information System (GIS)** – GIS is critical to working with the hydraulic model. We will incorporate the District's GIS files and confirm the complete transfer of information to the hydraulic model elements. If available, we will review LiDAR map files used to establish system elevations to assure the accuracy of the elevation extraction; incorrect elevations can generate inaccurate results. Missing GIS data will be completed using information from record drawings, the prior Master Plan, and maintenance records such as pump curves and repair history provided by the District.



Above: Diagram of an over flow split.

- **Flow Splits, Overflows, and Diversion Structures** – In our experience, sewer hydraulic models may not contain detailed invert elevations for flow splits, overflows, and flow diversion structures. These facilities can significantly impact how wastewater is modeled during peak flow conditions. We have included an optional task to survey up to 200 manholes to collect additional or more detailed information about a flow split or flow diversion structure. Identifying and detailing these structures early in the process will also facilitate flow monitoring and calibration.
- **Model Calibration** – Prior to using the model as an operational and planning tool, it must be calibrated within an acceptable level of accuracy appropriate for the intended purpose. Wet weather flow (WWF) is a combination of calibrated base sanitary flow (BSF), wet weather groundwater infiltration (GWI), and rainfall dependent inflow and infiltration (RDI/I). The RDI/I and wet weather GWI will be calibrated using appropriate storms identified from the wet weather flow monitoring and rainfall data. We understand that the District has contracted with V&A to conduct flow monitoring. HydroScience will work with the District to identify optimal flow monitoring locations within the District to collect both dry weather and wet weather data. This data will be used to calibrate the model under steady state conditions.
- **Capital Improvement Program (CIP)** – The model will be developed to assist in identifying existing and future capacity deficiencies and evaluate related CIP projects. We will incorporate specific design criteria based on industry and District standards and develop scenarios to confirm if design criteria are being met, identify and evaluate deficiencies, and prioritize based on vulnerability and risk.



Above: Typical Flow Components.

Wastewater Flow Analysis

The District's service area has a unique composition of users and water demand and it is important to develop wastewater flow factors that are derived from actual customer usage. Using the metered water usage data for the past five years as well as GIS land use plans, we will establish wastewater flow normalized by land use types as well as identify large dischargers. We'll evaluate the post-COVID/"new normal" conditions and work with the District to establish appropriate flow factors. By this method, we can define wastewater flow as unit factors of wastewater demand per parcel area (gpd/acre) or per dwelling unit (gpd/DU). Area based flow factors will be developed for various public (e.g. schools and parks), commercial, industrial, and multi-family residential parcels. Single-family residential flow factors will be per parcel. Once established, these unit factors can be applied to current and future land uses using GIS and for future population increase/densification, escalation factors can be applied to discreet land uses expected to grow over time. Future demand forecasting for each stakeholder will be based on a combination of land use plans, planned development, General Plan forecasts, and/or anticipated population growth. Flow monitoring data and the hydraulic model will be used to verify the unit flows and quantify groundwater infiltration and wet-weather flow response. Peak factors and diurnal curves for peak dry and peak wet-weather flows and I/I allowance will be developed and based on flow monitoring data.

Capital Improvement Plan (CIP)

The HydroScience team will develop a recommended CIP that describes a logical and carefully considered set of prioritized CIP projects for new facilities that are required to meet future sewer capacity needs while also considering potential flow reduction through minimizing I/I and expanding recycled water usage. This CIP will be based on existing system conditions and its long term operation to meet future needs, to develop a priority array of anticipated projects. Capacity projects will be identified based on a need to correct deficiencies during modeled condition scenarios, including analysis evaluating potential flow reductions based on I/I reduction programs. The HydroScience team will work collaboratively with the District to identify and verify projects to create a comprehensive CIP and triggers for each project. The projects will be evaluated using a pre-determined list of criteria developed with the District. The criteria may include factors such as availability of funding, ease of operation and maintenance, safety and security, enhance water quality, cost saving measures, etc. Each criterion will be weighed against the others to determine importance and then each project will be rated against the criteria using a matrix. The result will be a prioritized and ranked list of projects, allowing the District to address the most pressing and important needs early on in the CIP. The CIP will be integrated into the overall Master Plan and will include a time schedule for implementation over a 10-year planning horizon.

Opportunities for Efficiencies

The scope of work provided below addresses the scope as requested in the RFP. However, we have identified two opportunities where the District can exercise efficiencies without compromising on quality. In fact, we feel that these will streamline communication and produce a better overall product. These efficiencies are as follows:

- We propose to conduct biweekly meetings remotely in lieu of onsite progress meetings. In our experience, we find that 30 min meetings every other week is an effective way to keep the project moving and keeps everyone on the Team accountable including Consultant and Client. Remote meetings also allow for all members of the Team to attend since there is savings on travel time and expenses.

  With hydraulic modeling and GIS, remote meetings are also an efficient way to conduct screen sharing and keep the client abreast of obstacles, data needs, and project status. Biweekly meetings can be stretched or shortened as needed to function as workshops or brief check-ins.
- In lieu of preparing a technical memorandum (TM) for each task, we propose instead that the respective draft Master Plan chapters are prepared with each task. This will streamline the overall development of the master plan and District review of the document. With each task, the District will see the first draft of the Master Plan chapter and provide a review; those edits and comments will be incorporated into the complete draft of the Master Plan. Thus when the District reviews the draft Master Plan, it will actually be the second review of the chapters but as a comprehensive document. We feel that this method will produce a better quality document as it will be written as a whole document chapter-by-chapter rather than stitching together a series of TMs. This will also allow our Team to dedicate more time to improving the quality of the hydraulic model and ultimately the capital improvement plan.

These savings are reflected as an option in the fee, which has been provided in a sealed envelope.

Scope of Work

Task 1 Deliverables

- Draft & Final Data Review and Bibliography TM (PDF)
- Table of key findings, listings, and descriptions of available information (MS Excel)

Task 1 – Data Collection and Assessment of Collection System

HydroScience will review the relevant information as described in Exhibit "A" Proposed Scope of Services as defined in the RFP. In addition to reviewing the listed available documents, HydroScience will review historical water use data and production data for the last five calendar years, the prior hydraulic model, available manhole survey data, LiDAR data, GIS shapefiles of existing and future land use plans, and other data as appropriate. Water use data and production data will be used to establish and calibrate estimated return-to-sewer (RTS) ratios and ultimately land use based wastewater flow factors. The hydraulic model will be populated with the wastewater flow factors as BSF. Population projections and land use development will be considered when developing future flow projects and will consider the effect of drought, water conservation, and regulatory compliance.

All improvement projects completed and implemented will be documented and incorporated into the hydraulic model. Occurrence of sanitary sewer overflows and locations of hotspots will be identified based on District Operations and will be considered in the development of the flow monitoring program.

To further develop a comprehensive assessment of the collection system, HydroScience will visit each of the District's wastewater collection system facilities. To maximize time and efficiency, initial field investigations and interviews with operations staff shall be scheduled following the kickoff meeting. It is anticipated that field visits will take no more than two days to complete and will include lift stations and notable flow mitigation/diversion structures. An inspection form/questionnaire will be prepared prior to ensure information needed is properly documented. The intent of the field visit is to visually confirm the facilities and note existing conditions by photographing the facility; documenting function, identification of criticality/consequence of failure, and age of equipment based on name plate, maintenance records, and/or interview with District staff; and to note any leaks, corrosion, and coating condition. Interviews will be conducted during the field visits to gain a better understanding of the system and how the District defines failure. Performance of equipment and/or facility will be based on service records such as meter calibration testing and pump performance test records and interviews with District staff. We will utilize existing District pipeline assessments to identify potential condition-related projects, assuming pipe ratings are available.

A detailed bibliography of data collected and reviewed will be documented in a technical memorandum (TM). The TM will document the purpose for each resource and proposed use in the Master Plan development. The TM will also document the findings obtained during the site visit.

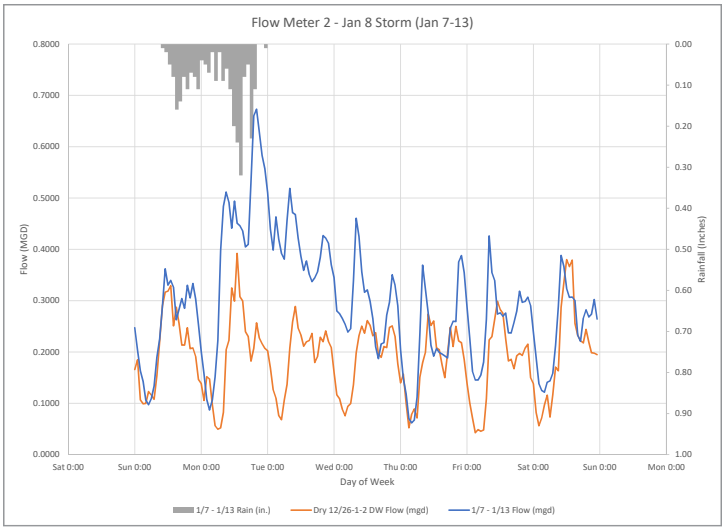
Task 2 Deliverable

- Draft & Final Dry Weather Flow TM (PDF)

Task 2 – Estimation of Flows

Establish land use basis. WBSD serves several communities and the flow estimation will require review of information from multiple stakeholders and consolidation of available information including land use and water use data. Land use categories will be consolidated by similar wastewater usage volume and pattern. It is assumed that the stakeholders will provide land use maps as GIS shapefiles and those maps will be populated with zoning, land use designations, and APNs.

Base Wastewater Flow. The base wastewater flow is also commonly referred to the base sanitary flow or BSF. Initial unit factors for wastewater flow per parcel area (gpd/acre) or per dwelling unit (gpd/DU) will be defined based on available information. Area based flow factors will be developed for various public (e.g. schools and parks), commercial, industrial, and multi-family residential parcels. Single-family residential flow factors will be per parcel. Using ArcGIS, available meter and flow data and locations, parcel data, and existing land use types, we will develop unit flows for various land uses. Using this approach enables varying land uses to be assigned different baseline flow factors and diurnal patterns. These wastewater flow factors represent the BSF. Once established, these unit flow factors can be applied to current and future land uses and connections using GIS and for future population increase/densification, escalation factors can be applied to discreet land uses expected to grow over time. Future demand forecasting will be based on a combination of land use plans, planned development and future connections of septic systems, General Plan forecasts, and/or anticipated population growth. Large discharger information available from the District as well as available water use data will be used to identify large dischargers. A GIS shapefile will be prepared of the known large dischargers with respective flows and will be populated in the hydraulic model as a separate user class. Large dischargers are identified as those parcels that discharge a disproportionately large flow relative to their parcel size (i.e. high gpd/acre).



Above: The basis for BSF and dry weather GWI will be summarized in a Dry Weather Flow TM.

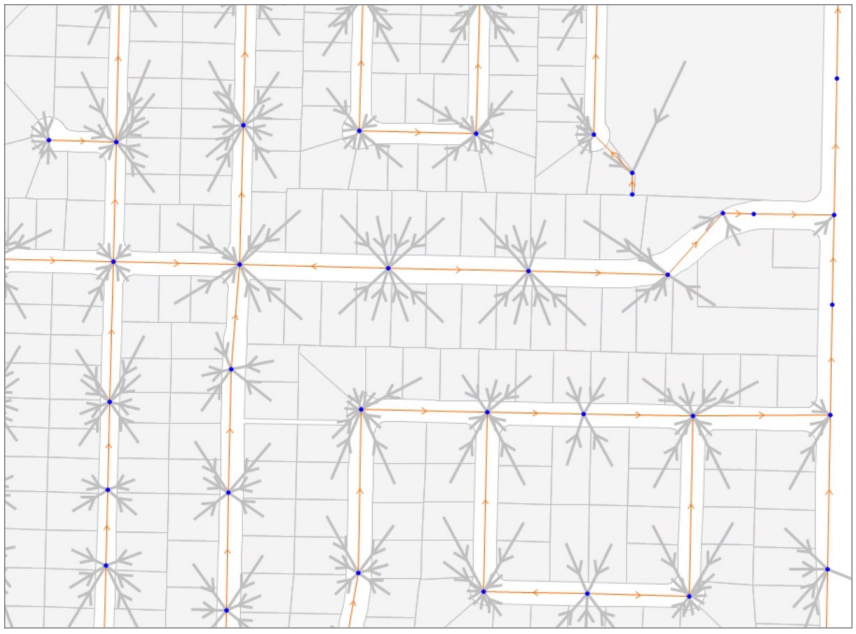
Calibration. Flow monitoring data and the hydraulic model will be used to verify the unit flows and quantify GWI. Diurnal curves for peak dry weather flows will be developed and based on flow monitoring data. The dry weather flow (DWF) is a combination of BSF and dry weather GWI. Flow monitoring data and the hydraulic model will be used to verify the unit flow rates and quantify GWI. Peak factors and diurnal curves for peak DWF and I/I allowance will be developed and based on flow calibrated against individual subbasin flows as well as total District flow measured at the MPPS. The intent is to establish a baseline for calibration purposes and for evaluating existing conditions.

Task 3 – Hydraulic Modeling

Flow Data Review. The flow monitoring data provided by V&A will serve as the basis for developing estimates for current wastewater generation and RDI/I rates. It will also be used to estimate the amount of GWI entering the system. The RDI/I and wet weather GWI will be calibrated using wet weather flow monitoring and rainfall data. Wet weather flow (WWF) is a combination of calibrated BSF, wet weather GWI, and RDI/I. The rainfall and flow data will be reviewed, and appropriate storms will be identified for model WWF calibration. These storms need to be large enough to be used to predict a design storm event flow response. The 10-year 6-hour design storm will be used to evaluate the wet weather capacity of the collection system in the system performance evaluation. Evaluation criteria will include depth to diameter ratio (d/D), freeboard, and maximum and minimum velocities during peak dry and peak wet weather flow conditions.

Task 3 Deliverables

- Draft & Final Hydraulic Model Development and Calibration TM (PDF)



Above: Sample load allocation where parcel-level flow factors consider both parcel size and land use.

Model Development. Using the last updated InfoWorks CS model, existing GIS database, and available as-built drawings, we will develop a hydraulic model incorporating new construction infrastructure elements that have taken place since the last model update. Additionally, the collection system will be reviewed to identify additional piping to include in the model that may affect the accuracy of the results. Particular attention will be paid to accurately representing physical structures such as flow diversions and wastewater flow components that affect hydraulic performance to provide a well-functioning model and increase confidence in the results of the analysis. Available software tools such as network validation and profile view will be utilized for efficient quality control. It is assumed that the District has current rim and invert elevations for any new facilities. Laterals will be excluded and the infrastructure for the model will be limited to District-maintained and owned pipelines and respective appurtenances.

An optional task to survey up to 200 manholes to improve model accuracy is included as **Task 9**.

Using the dry weather unit flows by parcel and land use, wastewater loads will be initially allocated to the nearest manhole, then reviewed for accuracy to delineate subbasins and sewer sheds.

The basis for model construction, subbasin and sewer shed updates, model calibration and validation, design flow, design storm, and hydraulic criteria will be included in a TM.

Task 4 Deliverables

- Draft & Final System Performance Evaluation and Capacity Assurance Plan TM (PDF)

Task 4 – System Performance Evaluation and Capacity Assurance Plan

System performance evaluation and capacity assurance will include review of the collection and pumping system capacity, design condition analysis, and determining capacity related improvements as described below.

Evaluate System Capacity. This task includes analysis of the hydraulic performance of the District's collection system and pumping stations to identify capacity-triggered improvements for the existing and future projected flows under design conditions. We will identify capacity deficiencies under existing and future design flows based on the deficiency criteria developed in consultation with the District. The updated hydraulic model runs will identify potential wet weather conveyance capacity deficiencies for each scenario.

Exiting and Future Design Condition Analysis. Following identification of capacity deficiencies, we will review potential measures to address deficiencies including increasing facility size, collection system storage, or relief sewers. We will model these revised pipe segments and sizing to confirm that the resulting system performance will meet design criteria. All improvements will be sized based on future estimated design flows and prioritized based on degree of deficiency and risk.

For areas identified as having high I/I, HydroScience will evaluate potential sources of I/I based on available information with the intent of estimating potential reductions in flow based on historical flow reductions after system rehabilitation or replacement.

Capacity-Related Improvements. When the capacity analysis is completed, we will meet with District Operations staff to discuss the condition of the existing collection system and current bottleneck issues. After working with the District to review and select preliminary solutions, we will develop and analyze the selected improvement alternatives for each deficiency using both non-economic and economic criteria. Construction methods, disruption to the public, time for implementation, and potential cost are some of the criteria that will be considered when evaluating alternatives.

The preferred alternatives will be modeled and established in the hydraulic model as the proposed projects. A model scenario will be developed to incorporate proposed projects.

Flow Scenarios to be modeled include:

- Existing Dry Weather
- Future Dry Weather
- Existing Wet Weather Design Flow
- Future Wet Weather Design Flow
- Proposed Projects Design Flowv

The two alternative scenarios may include different sewer design criteria, current available capacity, recycled water production, climate change and drought impacts, population growth, storm intensity, or other factors.

The results of all improvement modeling will be documented in a TM. The TM will include the basis for the collection system hydraulic performance, analysis of system improvements, and recommended improvement projects.

Task 5 – Capital Improvement Plan Development

Develop Cost Criteria. HydroScience will use information from recent District construction projects and similar local projects to generate unit cost criteria. Construction cost information from these projects will be incorporated in the development of the District's cost estimates. These criteria will be used to develop planning level cost estimates for the recommended projects.

Prepare Cost Estimates. Projects will be described in sufficient detail to support reliable planning level capital and operations and maintenance cost estimates (AACE Class 5, -30% to +50% order of magnitude), with underlying assumptions and project dependencies clearly described.

Develop Project Prioritization Criteria and Rankings. Projects will be evaluated using a list of non-economic criteria developed with the District. The criteria may include criticality of infrastructure, availability of funding, ease of O&M, safety and security, cost saving measures, benefit/opportunity of combining with other projects, seasonal regulatory requirements, and others. Weighted factors will be developed using a comparative rating method to establish priority among identified criteria. Each criterion will be weighed against the others to determine importance and then each project will be rated against the criteria using a matrix. These factors are applied to each criterion to rate each project. The result will be a prioritized and ranked list of projects, allowing the District to address the most pressing and important needs early in CIP execution.

Task 5 Deliverable

- Draft & Final Capital Improvement Plan TM (PDF)

Develop Capital Improvement Program (CIP). We will develop a recommended CIP that describes a logical and carefully considered set of prioritized CIP projects that also incorporates existing projects. This CIP will be based on the conditions of the existing system and future needs, to develop a priority array of anticipated projects. Capacity projects will be identified based on a need to correct deficiencies identified in modeled scenarios. The recommended projects will be reviewed alongside the existing Sewer CIP and prioritized together.

The CIP will be summarized in a TM and will include a time schedule for implementation over a 10-year planning horizon. We will work collaboratively with the District to identify and verify projects to create a comprehensive CIP and triggers for each project.

Task 6 Deliverables

- Draft and Final TM – Recycled Water Expansion Project (PDF)

Task 6 – Recycled Water Planning

The strategy for the production and use of recycled water will be a multi-pronged approach resulting in the phased implementation of recycled water use within the District. The first step of this approach will be to review recycled water production at the Sharon Heights Golf and Country Club (SHGCC) satellite facility to identify current use and potential production capacity. HydroScience will also review prior recycled water studies and market assessments to confirm plans for recycled water production and potential uses and identify other alternatives or opportunities for expansion.

The intent for this analysis is to confirm and identify a subset of customers who would be potentially cost-effective to connect to a new recycled water distribution system. These customers are expected to include the Flood Park/Ringwood/SRI, and the Government Center which includes City of Menlo Park and West Bay Sanitary District offices and selected other potentially large water users identified as part of reviewing meter data for the Sewer Master Plan.

HydroScience will explore opportunities to expand the SHGCC satellite facility and identify potential future users in the area. Opportunities to expand recycled water use into the California Water Service Company (Cal Water) service areas will be considered to maximize the use of recycled water. The use of recycled water in the Cal Water service area will require execution of a wholesaler retailer agreement and potentially CPUC approval, depending on the form of agreement executed between the District and Cal Water. The study will also look at potential opportunities to have Cal Water rate base the expansion of recycled water infrastructure in their service area.

HydroScience will also work with the District on a strategy to mitigate the disposal of treated recycled water to the sanitary sewer system during low demand periods, i.e., the winter season. The objective will be to develop a year-round approach to maximizing recycled water production and use.

The recommended customers will be supplied by an expanded recycled water distribution system. Any recommended or new facilities such as a recycled water storage tank, pump station and distribution system would be conceptually sized for cost estimating purposes.

A TM will document the results of this analysis and will identify a phased expansion for the recycled water system. The TM will include an estimate of cost for expanded production and distribution of recycled water.

Task 7 – Master Plan Preparation

The Master Plan report will be a consolidation of all prior TMs and documentation prepared as part of earlier tasks and will reflect the chapters as detailed in the RFP. The report will be streamlined to read as a single well-written report and care will be taken to assure that the document does not present like a series of TMs. The objective of the report will be to present a clear and concise plan to implement capital improvement projects to address identified deficiencies. The plan will include consideration for recycled water planning, drought restrictions, regulatory compliance, operational challenges, and projection population growth and development.

The Master Plan Report will contain the following sections:

- Executive Summary
- Chapter 1 – Introduction
- Chapter 2 – Existing Wastewater System
- Chapter 3 – System Flows
- Chapter 4 – Hydraulic Model Development
- Chapter 5 – Planning Criteria
- Chapter 6 – Capacity Analysis
- Chapter 7 – Pipeline Condition Assessment
- Chapter 8 – Pump Station Rehabilitation Program
- Chapter 9 – Capital Improvement Program
- Chapter 10 – Recycled Water Planning

Prepare Draft Report. An electronic MS Word version of the draft report will be submitted to the District to facilitate review, comments, and editing. District staff comments from the TMs will be incorporated and a comment response matrix provided. We recommend the District track changes to the document in the electronic MS Word file to distinguish comments made between different District staff. It is assumed that the District will provide one consolidated set of comments/edits to resolve any conflicting comments/edits. We will conduct a review workshop with District staff. This will allow all participants to discuss and resolve any discrepancies in a timely manner.

Prepare Final Report. The Final Sewer Master Plan will be complete and incorporate any remaining comments from the Draft Master Plan, including edits from the District, as appropriate. A decision log/comment response matrix will be provided which will identify the District's comments, the staff generating comment, how the comment was addressed, and who addressed the comment.

Task 7 Deliverables

- Draft Report (MS Word and PDF)
- Final Sewer MP (MS Word, PDF, and GIS files)
- Hydraulic model and technical files (native format)

Task 8 Deliverables

- Monthly invoices and status reports (PDF)
- Meeting/Workshop agendas and minutes (PDF)
- Meeting presentation materials (PDF)

Task 8 – Project Management

The key to staying within budget and on schedule begins with a detailed description of the scope, deliverables, and milestones outlined in the proposal as well as an established communication plan and protocol. To obtain timely review of deliverables, our approach includes progress meetings and workshops to facilitate and coordinate feedback from District staff.

Project Administration. The PM will prepare monthly invoices which will include a description of work accomplished, project status, and an update of the project schedule. Invoices will be summarized by task number and will show the total task budget, amount billed each month, and task budget balance.

All major deliverables will undergo internal QA/QC review prior to submission including technical memoranda, studies, estimates, calculations, and draft and final Master Plan. Checks will address general correctness and accuracy, completeness, compliance with regulations, fulfillment of objectives, and comparison with industry standards.

Monthly Progress Meetings. The PM will schedule and facilitate monthly in-person progress meetings to review project progress; discuss issues to be resolved; share early study results; and reconfirm projective objectives, study direction, and deliverables as the project evolves. We will prepare and issue agendas, minutes, and action items for meetings. The budget assumes up to ten (10) monthly workshops/ progress meetings in conjunction with major deliverables to present and discuss results and obtain District comments/feedback. Meeting objectives/topics may include:

- Project Kickoff
- Land Use Planning Information and Parcel Loads
- Design Flow and Hydraulic Criteria
- System Hydraulic Performance
- System Improvement Alternatives
- Sewer System Capital Improvement Program
- Recycled Water Planning
- Draft Sewer Master Plan Report

Kickoff Meeting. A kickoff workshop will be initiated within one week of receiving the notice to proceed. At the kickoff workshop, we will introduce the project team, review scope of work, discuss the initial project goals and priorities, existing operation and maintenance of the system(s) and known deficiencies, identify data needs and collect information/data, establish communication protocol, and confirm schedule. During this workshop we will discuss system design and operating criteria and procedures and conditions as well as institutional knowledge of the system performance and other issues identified by the District.

Task 9 – Manhole Survey (Optional)

We have teamed with HMH to provide land surveying services. Services will include dipping manholes to obtain rim and invert elevations for pipes and manholes as well as pipeline diameters. The scope includes dipping up to 200 manholes at an average rate of 20 manholes per day including minor traffic control. Survey services will be provided on a per day basis dictated by the number of manholes in need of survey. Surveying services do not include drafting services of preparing a topographic survey. Elevation data collected by the land surveyor will be input into the hydraulic model.

This task also includes separate allowances for the preparation of traffic control plans to facilitate the manhole surveys within the District service area, as well as the execution of the approved traffic control plans during the survey. This allowance will be utilized on streets where the respective City determines a traffic control plan needs to be approved and executed to facilitate the manhole survey. Traffic control plans will be stamped by a registered engineer in the State of California. It is assumed that the encroachment permit package preparation will be included in this allowance, as needed, though the District would be expected to pay/waive any encroachment permit fees.

HydroScience shall provide recommendations as to the extent of manholes needing to be surveyed, as necessary, after a thorough review of the collection system and data included in the hydraulic model and District GIS (**Task 3**).

List of Assumptions

- This scope of work does not include a gap analysis of District GIS shapefiles. It is assumed that the GIS is complete and appropriate for use in developing/updating the hydraulic model or the District will provide direction as to the accuracy and assumptions that should be made.
- This scope of work does not include an update of the District's GIS files. However, any updates incorporated into the hydraulic model can be exported to GIS shapefiles for the District's use.
- This scope of work does not include CCTV investigation or review of existing CCTV for the purposes of assessing pipeline condition. It is assumed that HydroScience will use existing NASSCO pipeline ratings from prior CCTV to assess and prioritize condition based improvements.
- It is assumed that the District will manage and direct V&A flow monitoring activities.
- It is assumed that the District will coordinate with stakeholders and obtain land use basis for existing and future flow factor development.
- It is assumed that the District will provide one consolidated set of review comments and edits for each submittal.

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SECTION 8

INSURANCE

HydroScience maintains insurance coverage that meets or exceeds the terms outlined in the agreement of the District's RFP. Our insurance policy shall be made available upon request.

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SECTION 9

LITIGATION

HydroScience is not a party to any current or pending litigation, and has not been for more than the past five years.

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SECTION 10

OTHER INFORMATION

Schedule and Budget Control

Our system for maintaining schedule and budget is based on the fundamental belief that there is no substitute for solid project management. Our proposed project manager, Angela Singer, will be responsible for all schedule and budget control measures implemented as part of this project. We have prepared and included a project schedule that presents the expected progress of the project tasks in a Gantt chart using MS Project which is shown on ***page 49***.

In our experience, adherence to the schedule is the best way to keep the project within budget. Unanticipated schedule barriers or conflicts are typically the source of added costs. We will work with the District to identify any barriers early on so that they can be accounted for in the schedule and budget. The schedule will be monitored on a weekly basis and updated as needed. We will notify the District immediately if the possibility of a change in the budget or schedule becomes apparent, and will recommend corrective actions to address unanticipated delays and to keep the project schedule on track.

Some of the tools we use to track project costs include developing resource loaded project schedules, periodic status meetings with the client, and using multiple forms of communication (in person, phone, email, video conferencing, etc.). Over the years, we have found that the best way to assure a quality, cost-effective, and timely product is to track day-to-day issues and make continual adjustments and corrections in the flow of project work.

Our Deltek Ajera project management software allows us to track staff activity and project progress to assure efficacy in project implementation.

Engineering Community Involvement

HydroScience staff are encouraged to get involved in local and regional organizations to stay abreast of industry-wide issues that pertain to our clients. HydroScience supports attendance to regular meetings, events, and conferences. Provided is a list of the most frequented organizations:

- Northern California Pipe Users Group (PUG)
- California Water Environment Association (CWEA)
- American Society of Civil Engineers (ASCE)
- WateReuse Association
- American Water Works Association
- Bay Area Water Works Association
- Sacramento Area Water Works Association
- Central Valley Clean Water Association
- Water Environment Federation

PREVIOUS INVOLVEMENT WITH THE DISTRICT

While we have not yet had the chance to work with the District, we welcome the opportunity to Team with the District to put together a carefully developed model and master plan update and provide the District with a meaningful plan for project implementation.

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SECTION 11

APPENDICES

Provided on the following page is the proposed project schedule. It is understood that the District wishes to complete the project within eight months of NTP. It is noted that adherence to this schedule is contingent upon receiving all data listed in the RFP upon NTP and receiving a complete report from V&A at the conclusion of the indicated flow monitoring period as shown on the schedule. It is also assumed that the District will provide land use based information from stakeholders prior to initiating Task 2.

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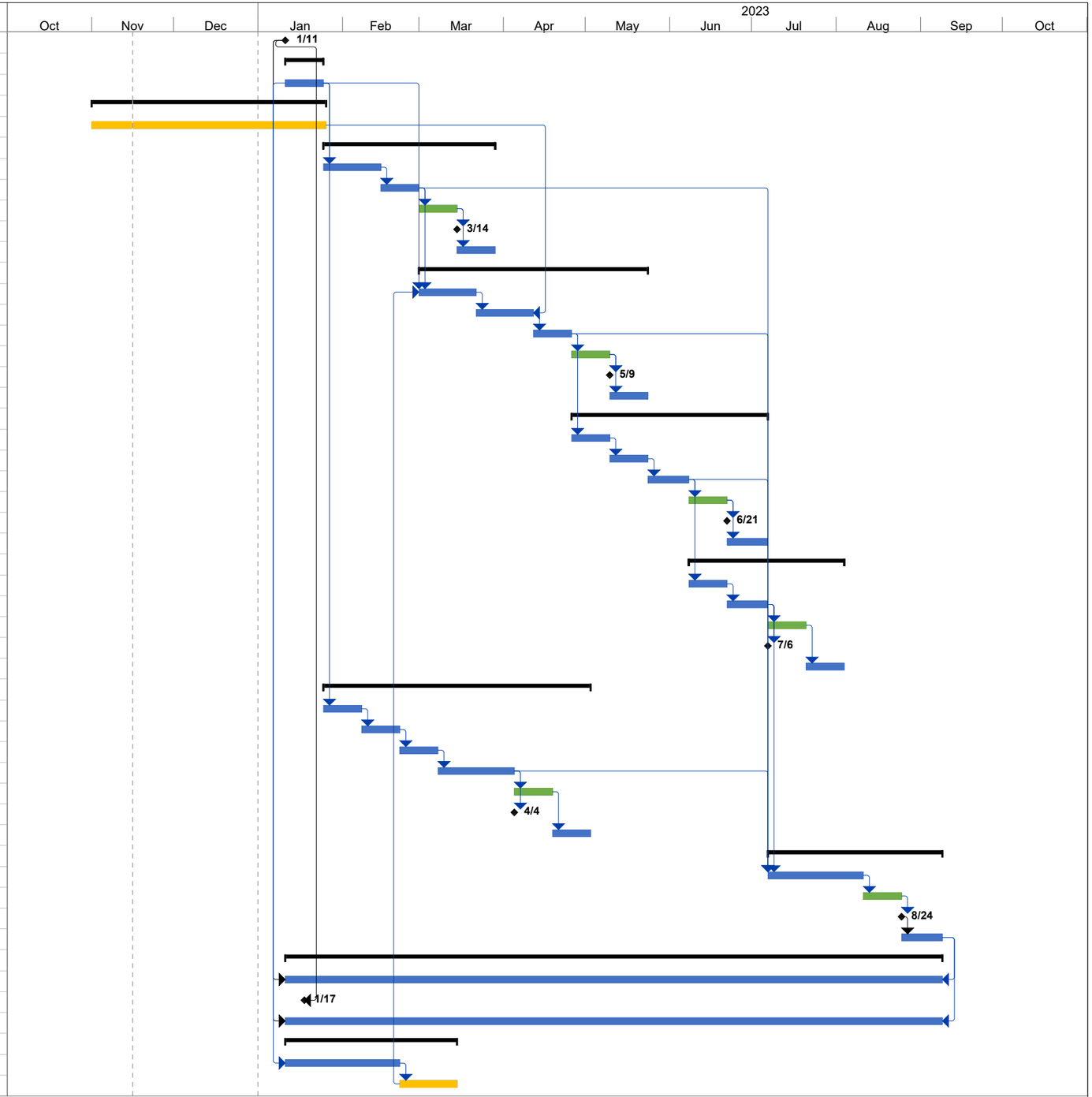
Task Name	Duration	Start	Finish
Notice to Proceed	**0 days**	**1/11/23**	**1/11/23**
Task 1—Data Collection and Assessment of Collection System	**10 days**	**1/11/23**	**1/24/23**
Site Visit, Review Documents, Maps, and Files	10 days	1/11/23	1/24/23
Flow Monitoring and Reporting by Others	**60 days**	**11/1/22**	**1/25/23**
Flow Monitoring and Reporting by Others	60 days	11/1/22	1/25/23
Task 2—Estimation of Flows	**45 days**	**1/25/23**	**3/28/23**
Develop Design Flow and Hydraulic Criteria	15 days	1/25/23	2/14/23
Draft Dry Weather Flow TM	10 days	2/15/23	2/28/23
City Review	10 days	3/1/23	3/14/23
Workshop	0 days	3/14/23	3/14/23
Final Dry Weather Flow TM	10 days	3/15/23	3/28/23
Task 3—Hydraulic Modeling	**60 days**	**3/1/23**	**5/23/23**
Hydraulic Model Development	15 days	3/1/23	3/21/23
Model Validation and Calibration	15 days	3/22/23	4/11/23
Draft Hydraulic Model Development and Calibration TM	10 days	4/12/23	4/25/23
City Review	10 days	4/26/23	5/9/23
Workshop	0 days	5/9/23	5/9/23
Final Hydraulic Model Development and Calibration TM	10 days	5/10/23	5/23/23
Task 4—System Performance Evaluation and Capacity Assurance Plan	**50 days**	**4/26/23**	**7/6/23**
Conduct Model Simulations and Identify Capacity Deficiencies	10 days	4/26/23	5/9/23
Modeling of Proposed Projects	10 days	5/10/23	5/23/23
Draft System Performance Evaluation and Capacity Assurance Plan TM	10 days	5/24/23	6/7/23
City Review	10 days	6/8/23	6/21/23
Workshop	0 days	6/21/23	6/21/23
Final System Performance Evaluation and Capacity Assurance Plan TM	10 days	6/22/23	7/6/23
Task 5—Capital Improvement Plan Development	**40 days**	**6/8/23**	**8/3/23**
Develop Capital Improvement Program	10 days	6/8/23	6/21/23
Draft Capital Improvement Plan TM	10 days	6/22/23	7/6/23
City Review	10 days	7/7/23	7/20/23
Workshop	0 days	7/6/23	7/6/23
Draft Capital Improvement Plan TM	10 days	7/21/23	8/3/23
Task 6 – Recycled Water Planning	**70 days**	**1/25/23**	**5/2/23**
Review Existing Recycled Water Plans	10 days	1/25/23	2/7/23
Identify Expansion Opportunities	10 days	2/8/23	2/21/23
Identify RW Facility Requirements	10 days	2/22/23	3/7/23
Draft Recycled Water Expansion Project TM	20 days	3/8/23	4/4/23
City Review	10 days	4/5/23	4/18/23
Workshop	0 days	4/4/23	4/4/23
Final Recycled Water Expansion Project TM	10 days	4/19/23	5/2/23
Task 7—Master Plan Preparation	**45 days**	**7/7/23**	**9/8/23**
Prepare Draft Report	25 days	7/7/23	8/10/23
City Review	10 days	8/11/23	8/24/23
Workshop	0 days	8/24/23	8/24/23
Prepare Final Report	10 days	8/25/23	9/8/23
Task 8—Project Management	**170 days**	**1/11/23**	**9/8/23**
Project Administration	170 days	1/11/23	9/8/23
Kickoff Meeting	0 days	1/17/23	1/17/23
Progress Meetings and Weekly Phone Calls	170 days	1/11/23	9/8/23
Task 9—Manhole Survey (Optional)	**45 days**	**1/11/23**	**3/14/23**
Prepare, Review, Approve Traffic Control Plans	30 days	1/11/23	2/21/23
Manhole Survey	15 days	2/22/23	3/14/23



HydroScience

HydroScience Task | Project Milestone | Task Summary | District Task | Task by Others

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HydroScience is a civil engineering firm that plans, designs, and manages the construction of water, wastewater, and recycled water projects. With offices in Berkeley, Sacramento, and San Jose, we understand and address the complex water and wastewater needs of Northern California.

HydroScience
741 Allston Way
Berkeley, CA 94710
(510) 540-7100

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COST PROPOSAL

Provided on the following page is the proposed costs by task. Additional scope is included as Task 9. Our rates for 2023 are included below.

HYDROSCIENCE ENGINEERS, INC.

2023 Standard Schedule of Billing Rates
Valid for the duration of this contract

LABOR CLASSIFICATION	HOURLY RATE
Principal	$285
Engineer IX	$275
Engineer VIII	$265
Engineer VII	$250
Engineer VI	$240
Engineer V	$230
Engineer IV	$220
Engineer III	$205
Engineer II	$195
Engineer I	$180
Engineering Aide	$110
Construction Professional VI	$190
Construction Professional V	$180
Construction Professional IV	$170
Construction Professional III	$160
Construction Professional II	$150
Construction Professional I	$140
Cross Connection Control Specialist	$135
CAD Manager	$155
CAD Designer I	$135
Marketing Professional	$120
Administrative II	$110
Administrative	$95

Notes: All hourly rates are in accordance with HydroScience's 2023 Standard Billing Rate Schedule. Other direct costs are billed at cost plus 10% markup.

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West Bay Sanitary District
Cost Proposal for the Wastewater Collection System Master Plan Update
HydroScience Engineers

November 17, 2022

Task	Description	**Curtis Lam** Principal-in-Charge	**Eric Petrel** QA/QC	**Angela Singer** Project Manager	**Alex Park** Project Engineer	**Jason Cowley** Condition Assessment	**Rachel Yenney** Hydraulic Modeling	**Staff Engineer**	**Total Hours**	**HydroScience Fee**	**HMH** Manhole Survey	**Other Direct Costs**	**Expense Total with Markup**	**Task Totals**
		Prin	E-IX	E-VII	E-V	E-IV	E-II	E-II						
		$285	$275	$250	$230	$220	$195	$195						
1	**Data Collection and Assessment of Collection System**	4	2	20	80	16	128	16	266	$56,690	$0	$0	$0	$56,690
2	**Estimation of Flows**	2	2	26	68	0	144	0	242	$51,340	$0	$0	$0	$51,340
3	**Hydraulic Modeling**	2	0	12	104	0	160	0	278	$58,690	$0	$0	$0	$58,690
4	**System Performance Evaluation and Capacity Assurance Plan**	2	2	24	72	0	120	0	220	$47,080	$0	$0	$0	$47,080
5	**Capital Improvement Plan Development**	4	6	40	32	48	96	0	226	$49,430	$0	$0	$0	$49,430
6	**Recycled Water Planning**	24	0	32	0	0	0	120	176	$38,240	$0	$0	$0	$38,240
7	**Master Plan Preparation**	6	2	24	40	10	120	16	218	$46,180	$0	$0	$0	$46,180
8	**Project Management**	32	0	80	40	0	40	0	192	$46,120	$0	$2,500	$2,750	$48,870
	Savings Opportunities (Optional)	24	0	56	56	0	56	0	192	($44,640)	$0	($2,000)	($2,200)	($46,840)
	Remote Biweekly Meetings (avg 30 min)	16		16	16		16		64	($15,360)		($2,000)	($2,200)	($17,560)
	Chapter Development in lieu of TMs	8		40	40		40		128	($29,280)			$0	($29,280)
TOTAL BASE SERVICES + SAVINGS (TOTAL NTE)		52	14	202	380	74	752	152	1626	$349,130	$0	$500	$550	$349,680
9	**Manhole Survey (Optional)**	4	2	8	0	0	16	80	110	$22,410	$32,000	$500	$35,750	$58,160
TOTAL BASE + SAVINGS + OPTIONAL SERVICES (TOTAL NTE)		56	16	210	380	74	768	232	1736	$371,540	$32,000	$1,000	$36,300	$407,840

Notes:
All hourly rates are in accordance with HydroScience's 2023 Standard Billing Rate Schedule.
Other direct costs are billed at cost plus 10% markup.

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WEST BAY SANITARY DISTRICT
AGENDA ITEM 6

To: ***Board of Directors***

From: ***Sergio Ramirez, General Manager***

Subject: ***January 11th, 2023 Update Report on District Response to Corona Virus***

Background

In early March of 2020, the outbreak of Corona Virus in the USA caused Federal, State and Local governments to enact several laws, regulations and guidelines to mitigate the impact of the spread and severity of the virus including Shelter in Place. The District has been busy employing measures to meet those regulations and guidelines as well as taking action to ensure the safe working conditions of staff and minimize exposure of and interaction with the public.

Analysis

The District has thus far taken action in regards to: Shelter in Place, Social Distancing, Personal Protective Equipment, and the Injury and Illness Prevention Program (IIPP).

Shelter in Place: The District as a wastewater agency has been designated as an "Essential Service" and supplied employees with letters drafted by legal counsel that can be shown to legal authorities, if required, to justify their travel to, during and from work. In addition, the District has developed a Modified Work Schedule that requires individuals to stay at home or telecommute in order to reduce interaction and thus the potential of any spread of the virus among District staff. The District has also implemented the use of Zoom for meetings to reduce the need for consultants, partners, the public and Board member to attend in person. A camera and large screen have been installed to accommodate this mode of virtual meetings.

Social Distancing: District staff has employed several measures related to Social Distancing including; limiting meeting size to 10, marking seating spots at tables with 6

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foot separation, signage encouraging 6 foot distancing, separation of reporting stations to include the FERRF, Plexi-glass shields at the counter and between workspaces that cannot achieve 6 foot distancing, and closing of the District Office to the public unless by appointment.

Personal Protective Equipment (PPE): The District has been engaged in supplying employees and Board members with several forms of Personal Protective Equipment and emphasizing the frequent and regular use of this equipment. These items include: The distribution of hand sanitizer to employees and Board members, wipes for counters, chairs and tables, installation of hand sanitizer at counter, tables and offices, N95 masks to all employees, increased counts coveralls, face shields, goggles etc.

This has caused the District to reassess its inventory and at what levels of existing stock should trigger new orders so that the District can maintain adequate levels of important supplies to carry us not only through traditionally thought of natural disasters but pandemics such as this. To that end staff has developed an improved inventory check list that includes contact information for ordering, expected lag times in ordering, minimum levels of stock, Trigger-levels for ordering, dates of stock added to inventory and so on. This should help us be better be prepared for future events where PPE can be in short supply or difficult to obtain and District operations can continue uninterrupted.

Injury and Illness Prevention Program: The District has made a significant effort in the way of training employees in how to deal with the COVID 19 response. We have developed SOP's for both field staff and office staff in dealing with customers while maintaining social distancing, utilizing PPE, and remote permitting etc. We have complied with local health officials requirement to complete and post at all entrances the Social Distancing Protocols and used that and our SOP's as a basis for developing a comprehensive COVID 19 Preparedness and Response program.

The District has taken great efforts to inform the public of changes in business procedures during this time including website postings, posting notices and information on all entrance doors, mailings of letters and flyers to residents, and ads in Facebook and YouTube. The use of Wipes has emerged as a huge problem for the District and our outreach has included addressing this problem in the flyers, ads, and correspondence to persuade our constituents to refrain from flushing wipes.

May 13 update: The District has found that it takes at least 3 weeks from the date of order to delivery of consumable PPE items such as; N95 face masks (we have received 2,000 masks since the first March order), 500 face shields, and 150 goggles to protect the field staff from droplets and mist while cleaning the sewer lines.

The District will now be faced with transitioning back to normal operations. The District Office is open on Friday by appointment only. Construction activities are increasing and inspections are being scheduled much more frequently. Social Distancing and PPE will continue to be key elements of District life for the foreseeable future.

May 27 update: The District has opened the office to the public on Tuesdays and Thursdays. Stickers on the floors and notices on the doors and shields at the counters have been placed to remain compliant with the Health Dept. Wipes and signs have been placed in the bathrooms. All the departments except Administration have returned to normal work hours (which are mostly 9/80 schedule but crews are still separated with the Satellite Office/Corp Yard. As a result of these changes have updated the COVID 19 response plan and affixed to entry doors as required.

June 10 update: Staff is resuming normal Pre-COVID 19 work schedules beginning June 8, with the exception of some of the Admin staff. Office hours will open up to Monday through Thursday 9am to 3pm.

June 24 update: As of Friday, June 12 the Administration Office was open by appointment. Office hours continue to be open Monday through Thursday 9am to 3pm. Staff is continuing to make a concerted effort to be available to the public and contractors for business.

July 8 update: The current YouTube advertisement advising customers not to flush wipes or towels has been viewed by 220,653 people and 24% or 50,759 have viewed the video to completion.

August 12 update: When an employee has been in contact with a known or possible COVID 19 positive patient or been in contact with someone who has been in contact with a confirmed COVID 19 positive patient they will asked to stay home for a 14-day self-quarantine period and will be asked to be tested for COVID 19. If the employee is well enough during the self-quarantine period, they will work from home during this time. As soon as the employee is COVID 19 negative, they will be asked to return to work.

September 9 update: The District's COVID-19 Preparedness and Response Program has been updated through DuAll Safety to include usage of current San Mateo County Health Department signage, updated social distancing protocol (verbiage and links for continuing SIP order), CDC updates on Coronavirus symptoms, addition of cloth face mask and San Mateo County Health guidelines. Training to be scheduled for September with DuAll Safety (by ZOOM) for all current updates. Staff has purchased two disinfecting fog machines to disinfect surfaces in the Admin and Maintenance Buildings, and Operations Building at FERFF. Disinfection of surface are being done weekly.

September 23 update: Two employees are currently out sick and in quarantine due to a possible exposure to COVID-19 per District's protocol memorialized in our August 12, 2020 update (above) *"When an employee has been in contact with a known or possible COVID 19 positive patient or been in contact with someone who has been in contact with a confirmed COVID 19 positive patient they will asked to stay home for a 14-day self-quarantine period and will be asked to be tested for COVID 19."* Once the

employees test negative for COVID-19, or quarantine for 14 days, they will be allowed back to work.

October 14 update: No updates at this time.

October 28 update: Updated training on the Response Program will be conducted in October. Two office employees were experiencing COVID-19 symptoms and were asked to work from home until test results were available. Both employees tested negative and have returned to work.

November 18 update: Updated training on the Response Program will be conducted on November 16.

December 9 update: The District is following all County of San Mateo increased COVID-19 restrictions and has cancelled our Holiday Luncheon out of an abundance of caution.

January 13, 2021 update: The front office is now limiting customers inside the lobby to no more than one. Others are asked to socially distance outside while they wait. Staff is working on the new COVID-19 Prevention Emergency Temporary Standards regarding prevention and reporting outbreaks.

January 27, 2021 update: The new COVID-19 Prevention Plan is complete and staff will receive training shortly.

February 10, 2021 update: Updated training on the Response Program was provided on February 2.

February 24, 2021 update: District Manager issued COVID-19 Vaccine letter to staff so they may schedule their vaccine on or after February 22, 2021 as part of the Phase 1B.

March 10, 2021 update: To date 7 employees have received at least one vaccine shot and approximately 3 others have received appointments.

March 24, 2021 update: Approximately 10 employees have been vaccinated.

April 14, 2021 update: The front office is back open to the public with limited hours of 9am-3pm Monday thru Friday with one customer being allowed in the lobby at a time. All four front office staff have received their second vaccine. Approximately, 33% of all staff have received one or more vaccine shots.

April 28, 2021 update: Approximately 50% of West Staff has been vaccinated. Effective May 3rd the Administrative staff will begin to work in the office full time, rather than from home, as they were for one to two days per week.

May 12, 2021 update: West Bay staff is back to working in the office full time and we are continuing have the front office opened to the public Monday through Friday. Over 50% of all staff are now vaccinated.

May 26, 2021 update: According to voluntary data, approximately 70% of West Bay staff have been vaccinated. Staff continues to follow Health Department guidelines.

June 9, 2021 update: Staff is following the County and State updates closely as restrictions ease up.

June 23, 2021 update: The District has made no changes to our existing COVID-19 policy but it is currently under review for updates and we are following Cal/OSHA and County of San Mateo requirements.

July 14, 2021 update: Staff is working with legal counsel and Du-All Safety to update the COVID 19 Response Plan. Training will take place in July on the updated plan.

July 28, 2021 update: There is no update since the July 14, 2021 Board meeting.

August 18, 2021 update: There is no further update since the July 14, 2021 Board Meeting.

September 8, 2021 update: The District is considering mandatory vaccination for staff.

September 22, 2021 update: District Manager and Legal Counsel will meet with Teamsters Local 350 to discuss mandatory vaccination.

October 13, 2021 update: There is no further update since the September 22, 2021 Board meeting.

October 27, 2021 update: There is no further update since the October 13, 2021 Board meeting.

November 10, 2021 update: An email was sent to staff letting them know that West Bay will mandate COVID-19 vaccinations.

December 8, 2021 update: On November 8, 2021 the District Manager and Safety Officer (Water Quality Manager) held training regarding the COVID-19 vaccine mandate. Staff has been submitting proof of vaccination to Human Resources since the training was held.

January 12, 2022 update: All employees and Board Members have provided proof of vaccination by the December 30 deadline.

January 26, 2022 update: State indoor mask mandate in effect until February 15. Front office staff is working from home two days per week to limit exposure.

February 9, 2022 update: Staff is working with DuALL Safety to update the response plan and will incorporate the latest CDC guidelines and requirements.

February 23, 2022 update: Staff is working with District Counsel to incorporate all of the recent guidelines with the various government bodies, if possible.

March 9, 2022 update: The office staff has returned to an in-full office work schedule after the latest COVID-19 surge. The District has prepared an update to COVID-19 Response Plan and will hold training in March.

March 23, 2022 update: Staff was trained on updated COVID-19 Response Plan on March 10. Masks are no longer required at this time unless staff is helping the public.

June 8, 2022 update: With the recent surge in COVID-19 cases, the District has two employees out with COVID-19 and three others working from home as a precaution.

June 22, 2022 update: One more staff member has contracted COVID-19. Everyone else is back on duty.

July 13, 2022 update: All staff members are back on full duty. The District's General Counsel has updated the COVID-19 Response Plan. Staff will be implementing and training on the revision in July.

August 10, 2022 update: Staff received training on the COVID-19 Response Plan revisions on August 1st. The revisions include a 48 hours testing requirement prior to returning to work from traveling outside of the state or country.

December 14, 2022 update: The District's General Counsel is reviewing the COVID-19 Response Plan and will provide necessary updates.

January 11, 2023 update: The current policy is under review and should be updated by the middle of January 2023.

Fiscal Impact

While there has been considerable expense to implementing some of the COVID 19 mitigation measures such as; converting the FERRF office space (approx. $2,000), purchasing PPE for stock ($8,000 to $10,000), Public Outreach ($10,500), Zoom Meeting Equipment (approx. $6,000) these expenses were absorbed in the Operating budget. The FY2020-21 Budget was impacted by the effects of the national COVID 19 response. To date approximately $5300.00 has been spent in PPE, $2000.00 in disinfecting equipment, and $1927.00 in producing and updating the COVID 19 Response Plan. Cost are continuing to be tracked in FY2022-23.

Recommendation

The General Manager recommends the Board accept this report and provide comments to the General Manager in regards to the report. Additional information may be available at the Board meeting as conditions and responses are rapidly changing throughout the COVID-19 pandemic.

WEST BAY SANITARY DISTRICT
AGENDA ITEM 7

To: ***Board of Directors***

From: ***Sergio Ramirez, General Manager***

Subject: ***Discussion and Direction on the West Bay and Sharon Heights Recycled Water Facility***

A discussion will be held on the Sharon Heights Recycled Water Facility and other events related to the recycled water plant. The Board will have opportunity to provide direction to staff and legal counsel.

Recycled Water Facility Production Data:

2020	Treated	Delivered
August	8.8MG	8.2MG
September	8.2MG	5.1MG
October	7.4MG	4.5MG
November	5MG	1.4MG
December	4.7MG	.55MG
2021	**Treated**	**Delivered**
January	4.8MG	.23MG
February	4.4MG	.13MG
March	5.9MG	1.8MG
April	8.5MG	7.6MG
May	9.3.MG	8.2MG
June	9.8MG	8.7MG
July	9.5MG	9.1MG
August	9.4MG	9.0MG
September	9.1MG	6.9MG*
October	7.6MG	2.6MG**
November	5.2MG	0
December	4.7MG	0

2022	Treated	Delivered
January	4.4MG	97,000 gallons
February	4.4MG	1.5MG
March	6.6MG	3.5MG
April	7.6MG	3.8MG
May	9.2MG	7.4MG
June	9.8MG	8.7MG
July	9.6MG	8.1MG
August	9.2MG	8.1MG
September	8.6MG	6.7MG
October	7.9MG	4.6MG
November	5.9MG	310,000 gallons
December	5.4MG	154,690 gallons

* Sharon Heights substantially tapered off their water usage for September which is the reason for the large discrepancy between treated and delivered.
** Treatment was reduced in the second half of the month. Rain in late October and an irrigation equipment malfunctions caused water delivery to decrease.

The following is a disclosure statement required for any document, written report or brochure prepared in whole or in part pursuant to the Finance Agreement with the State Water Resources Control Board for the West Bay Sanitary District Recycled Water Project - Sharon Heights: Funding for this project has been provided in full or in part through an agreement with the State Water Resources Control Board. California's Clean Water State Revolving Fund is capitalized through a variety of funding sources, including grants from the United States Environmental Protection Agency and state bond proceeds. The contents of this document do not necessarily reflect the views and policies of the foregoing, nor does mention of trade names or commercial products constitute endorsement or recommendation for use.

WEST BAY SANITARY DISTRICT
AGENDA ITEM 8

To: ***Board of Directors***

From: ***Sergio Ramirez, General Manager***

Subject: ***Discussion and Direction on the Bayfront Recycled Water Project and Status Update***

A discussion will be held on the District's Bayfront Recycled Water Projects and other events related to the recycled water projects including financing, environmental review, design/build issues and grant applications.

The Board will have opportunity to provide direction to staff and general counsel.

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WEST BAY SANITARY DISTRICT
AGENDA ITEM 9

To: ***Board of Directors***

From: ***Sergio Ramirez, General Manager***

Subject: ***Report and Discussion on South Bayside Waste Management Authority (SBWMA)***

The District's representative to South Bayside Waste Management Authority (SBWMA), President Fran Dehn, will report on any pertinent items regarding SBWMA business.

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WEST BAY SANITARY DISTRICT
AGENDA ITEM 10

To: ***Board of Directors***

From: ***Sergio Ramirez, General Manager***

Subject: ***Report and Discussion on Silicon Valley Clean Water (SVCW) Plant***

The District's representative to Silicon Valley Clean Water (SVCW), Commissioner George Otte, will report on pertinent items regarding SVCW Operations, CIP and Finance.

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WEST BAY SANITARY DISTRICT
AGENDA ITEM 12

To: ***Board of Directors***

From: ***Sergio Ramirez, General Manager***

Subject: ***Consider to Approve End-of-Year Goals and Objectives Performance Compensation for the General Manager***

Background

The Employment Agreement between West Bay Sanitary District and the General Manager allows for an end-of-year performance compensation in an amount up to 15% of Employee's base salary based on the Board of Director's assessment of the General Manager's overall performance in meeting the goals and objectives during the prior calendar year. The end-of-year compensation is payable on or after January 1, 2023.

Analysis

During the regular meeting of December 14, 2022 the Board met to review the General Manager's Goals. On January 11, 2023, the Board may approve the end-of-year performance compensation up to 15% of the General Manager's base salary.

Fiscal Impact

Funds would be allocated from the General Fund – Salaries and Wages.

Recommendation

The General Manager recommends the District Board adopt the resolution establishing the end-of-year compensation by the District Board at the approved percentage.

RESOLUTION NO. _____ (2023)

IN THE DISTRICT BOARD OF THE WEST BAY SANITARY DISTRICT

COUNTY OF SAN MATEO, STATE OF CALIFORNIA

*****

A Resolution Establishing End Of Year (2022) Compensation for General Manager

WHEREAS:

1. The Employment Agreement between West Bay Sanitary District and the General Manager allows for an end-of-year performance compensation in an amount up to 15% of Employee's base salary based on the Board of Director's assessment of General Manager's performance in meeting goals and objectives during the year; and

2. During the regular meeting of December 14, 2022 and January 11, 2023, the Board assessed the overall performance of the General Manager and evaluated his set Goals and Objectives.

NOW, THEREFORE, BE IT RESOLVED that:

The District Board of the West Bay Sanitary District has determined:
The General Manager will be compensated _____% of current base salary, or $_____ as the End-of-Year Performance compensation for Calendar Year 2022.

*****

Passed and adopted by the District Board of the West Bay Sanitary District at a regular meeting thereof held on the 11th day of January, 2023 by the following vote:

Ayes:

Noes:

Abstain:

Absent:

_____
President of the District Board of the West Bay Sanitary District of San Mateo County, State of California

Attest:

_____
Secretary of the District Board of the West Bay Sanitary District of San Mateo County, State of California