CUPERTINO SANITARY DISTRICT
SANITARY BOARD MEETING
WEDNESDAY, MAY 5, 2021

A_G_E_N_D_A

In accordance with Executive Order N-33-20, meeting to be held at 7:00 p.m. via teleconference [call 1 (866) 899 - 4679 Conference Access Code: 251566821] and anyone interested may also call in. The District Office at 20863 Stevens Creek Blvd, Suite 100, Cupertino is closed.

1. ROLL CALL

2. PUBLIC COMMENTS

THIS PORTION OF THE MEETING IS RESERVED FOR PERSONS DESIRING TO ADDRESS THE BOARD ON ANY MATTER NOT ON THE AGENDA. SPEAKERS ARE LIMITED TO THREE (3) MINUTES.

ALL STATEMENTS REQUIRING A RESPONSE WILL BE REFERRED TO STAFF FOR FURTHER ACTION. IN MOST CASES, STATE LAW WILL PROHIBIT THE BOARD FROM MAKING ANY DECISIONS WITH RESPECT TO A MATTER NOT LISTED ON THE AGENDA.

3. CLOSED SESSION

A. CONFERENCE WITH LEGAL COUNSEL – EXISTING LITIGATION
in accordance with government code section Paragraph (1) of Subdivision (d) of Section 54956.9, existing litigation. Name of Case: County Sanitation District 2-3, West Valley Sanitation District, Cupertino Sanitary District, Burbank Sanitary District and the City of Milpitas v. The City of San Jose, The City of Santa Clara and Does 1 through 50 inclusive.

4. MINUTES

A. APPROVAL OF THE MINUTES OF APRIL 21, 2021

B. APPROVED MINUTES OF APRIL 7, 2021

5. CORRESPONDENCE

A. LAFCO – ADOPTION OF PROPOSED BUDGET FOR FY2022 & NOTICE OF PUBLIC HEARING

CUPERTINO SANITARY DISTRICT
SANITARY BOARD MEETING
WEDNESDAY, MAY 5, 2021

6. MEETINGS

A. TELECONFERENCE MEETING OF THE SAN JOSE/SANTA CLARA TREATMENT PLANT TECHNICAL ADVISORY COMMITTEE (TAC) TO BE HELD ON MAY 17, 2021

B. TELECONFERENCE MEETING OF THE SAN JOSE/SANTA CLARA TREATMENT PLANT ADVISORY COMMITTEE (TPAC) TO BE HELD ON MAY 20, 2021

7. REPORTS

NONE

8. UNFINISHED BUSINESS

A. SSMP CERTIFICATION

B. V&A AGREEMENT FOR SMOKE TESTING

C. AKEL ENGINEERING AGREEMENT FOR HYDRAULIC MODELING

D. COVID-19 UPDATES

9. NEW BUSINESS

A. FORM 470 FILING

B. ESRI ARCGIS SOFTWARE RENEWAL

10. STAFF REPORT

A. PLANNING FOR FUTURE DEVELOPMENT PROJECTS

11. CALENDAR ITEMS

A. NEXT REGULAR DISTRICT BOARD MEETING IS SCHEDULED TO BE HELD ON WEDNESDAY, MAY 19, 2021

B. PUBLIC HEARING ON CONSIDERATION OF RATE INCREASE IS SCHEDULED TO BE HELD ON WEDNESDAY, MAY 19, 2021

12. ADJOURNMENT

CUPERTINO SANITARY DISTRICT
MEETING/EVENT SCHEDULE

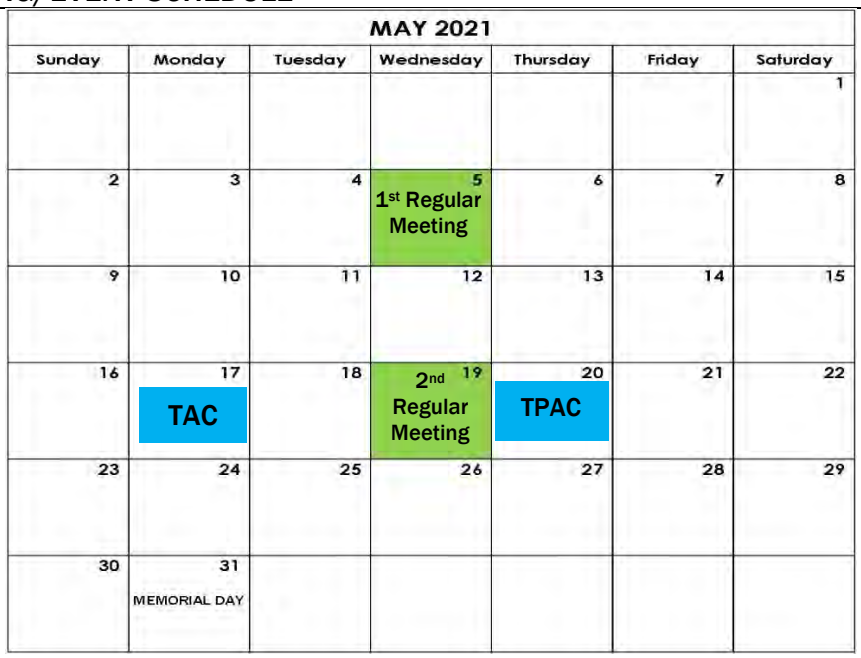
MAY 2021

05/05: 1st Regular Meeting

05/17: TAC

05/19: 2nd Regular Meeting

05/20: TPAC



JUNE 2021

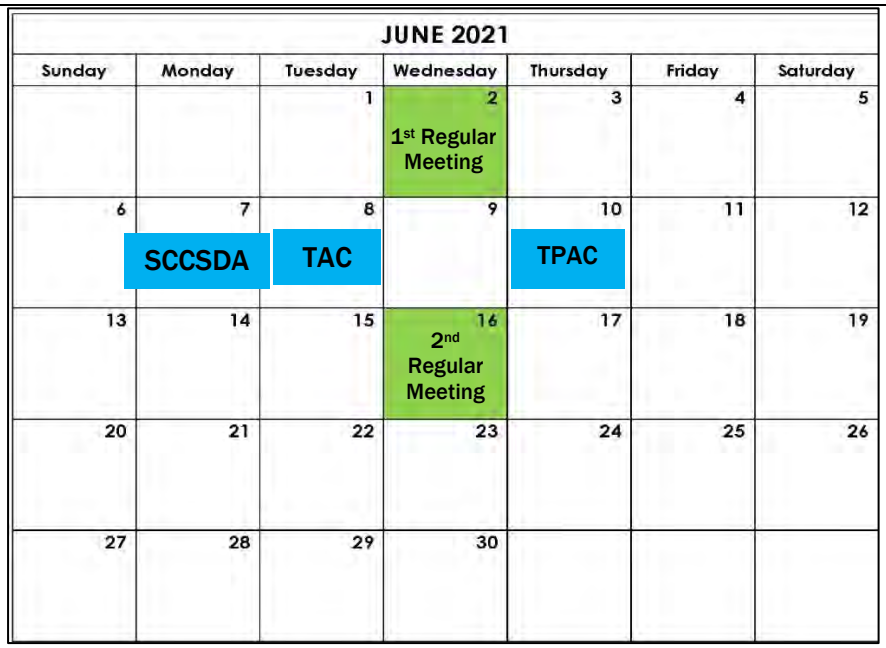
06/02: 1st Regular Meeting

06/07: SCCSDA

06/08: TAC

06/10: TPAC

06/16: 2nd Regular Meeting



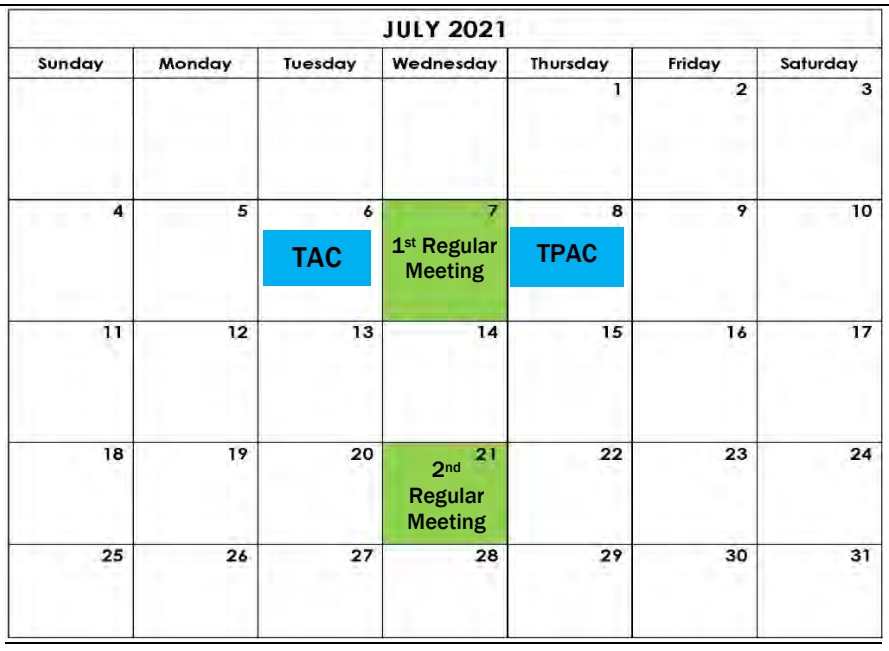
JULY 2021

07/06: TAC

07/07: 1st Regular Meeting

07/08: TPAC

07/21: 2nd Regular Meeting



CUPERTINO SANITARY DISTRICT BOARD MEETING
WEDNESDAY, APRIL 21, 2021

The Sanitary Board of the Cupertino Sanitary District convened this date at 7:00 p.m. This meeting was conducted in accordance with the Executive Order N-33-20 via teleconferencing. The District office at 20863 Stevens Creek Blvd, Suite 100, Cupertino was closed.

1. ROLL CALL:

President Saadati called the meeting to order, and the following proceedings were had to wit: Roll call was taken, with the following members in attendance:

Directors present: Angela S. Chen, Taghi S. Saadati, John M. Gatto, William A. Bosworth, and Patrick S. Kwok.

Staff present: District Manager Benjamin Porter, Deputy District Manager Robert Woodhouse, and Counsel Marc Hynes.

District Consultant: Richard Tanaka

Public: None

2. PUBLIC COMMENTS:

There were none.

3. CLOSED SESSION:

President Saadati adjourned the regular meeting session and opened the closed session at 7:01 p.m. Manager Porter and Deputy Manager Woodhouse were excused from the closed session.

A. Conference with legal counsel – Existing Litigation in accordance with government code section Paragraph (1) of Subdivision (d) of Section 54956.9, existing litigation. Name of Case: County Sanitation District 2-3, West Valley Sanitation District, Cupertino Sanitary District, Burbank Sanitary District, and the City of Milpitas v. The City of San Jose, The City of Santa Clara, and Does 1 through 50 inclusive.

   Closed session was adjourned at 7:19 p.m. and the regular meeting was called to order. District Manager Porter and Deputy District Manager Woodhouse rejoined the regular meeting. There was no reportable action.

4. MINUTES & BILLS:

A. On a motion by Director Gatto, seconded by Director Bosworth, by a vote of 5-0-0 the minutes of Wednesday, April 7, 2021 were approved as written.

B. By consensus, the Minutes of Wednesday, March 17, 2021 is to be Noted & Filed.

C. The Board reviewed March payable warrants and financial statements. Board requested a summary sheet of Mark Thomas invoicing on future bills and commented that it would be beneficial to have the invoicing summary sheet in the same order as the monthly budget expenditures table. The

financial statements reflect that the dewatering project and the Legacy Lagoons project were not invoiced by the City of San Jose this year.. On a motion by Director Kwok, seconded by Director Gatto, by a vote of 5-0-0, the financial statement and payment of bills were approved as written.

D. Board members will submit their April timesheets to Manager Porter.

5. CORRESPONDENCE:

A. The Board reviewed the CASA annual summer conference survey. It is to be Noted & Filed.

6. MEETINGS:

There are none.

7. REPORTS:

A. Director Gatto reported on the teleconference meeting of the San Jose/Santa Clara Treatment Plant Advisory Committee (TPAC) held on April 8, 2021.

8. UNFINISHED BUSINESS:

A. Manager Porter and Deputy Manager Woodhouse presented on the draft Sewer System Management Plan.

B. Manager Porter presented on the Budget Workshop. Add budget line items in this year's budget for SSMP Certification ($200,000) and the I/I Reduction Program ($100,000) with zero net change to the budget by reallocating funds from the Repair budget which is underspent.

Add budget line items in next year's budget for SSMP Implementation ($100,000) and the I/I Reduction Program ($500,000).

On a motion by Director Gatto, seconded by Director Chen, by a vote of 5-0-0, the Board approved the revisions.

C. Manager Porter reported on the COVID-19 updates. Mark Thomas is surveying staff about returning to the office.

9. NEW BUSINESS:

A. The Board reviewed D&B Legacy Installer's Agreement Closeout Memo and Resolution No. 1328. On a motion by Director Gatto, seconded by Director Chen, by a vote of 5-0-0, the Board approved Resolution No. 1328, Accepting Improvements at 10310 North Foothill Blvd.

B. The Board reviewed Proposal for Hydraulic Modeling Consulting Services Memo. On a motion by Director Gatto, seconded by Director Chen, by a vote of 5-0-0, the Board approved Akel Engineering to go ahead with review of District's XPSWMM model.

C. The Board reviewed Oak Crest and Forum 2 Pump Station Repairs Memo. The Board inquired whether there are materials that can be used that will not corrode as much in the future. On a motion by Director Gatto, seconded by Director Bosworth, by a vote of 5-0-0, the Board approved construction and awarded the bid to C2R Engineering at a total cost of $28,550.00. Board also approved electrical work to be done by St. Francis Electrical for $5,000. The total project budget including contingency (10%) is $36,905.

10. STAFF REPORTS:

A. Manager Porter reported on Future Development Projects. District staff is continuing discussions with Vallco on their development plans and proposed encasement of the District pipe that was exposed by their construction activities.

B. Manager Porter reported on the Monthly Maintenance Report.

11. CALENDAR ITEMS:

The next regular District Board meeting is scheduled to be held on Wednesday, May 5, 2021.

12. ADJOURNMENT:

On a motion properly made and seconded, at 8:50 p.m. the meeting was adjourned.

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Secretary of the Sanitary Board President of the Sanitary Board

CUPERTINO SANITARY DISTRICT BOARD MEETING
WEDNESDAY, APRIL 07, 2021

The Sanitary Board of the Cupertino Sanitary District convened this date at 7:00 p.m. This meeting was conducted in accordance with the Executive Order N-33-20 via teleconferencing. The District office at 20863 Stevens Creek Blvd, Suite 100, Cupertino was closed.

1. ROLL CALL:

President Saadati called the meeting to order and the following proceedings were had to wit: Roll call was taken, with the following members in attendance:

Directors present: Angela S. Chen, Taghi S. Saadati, John M. Gatto, William A. Bosworth, and Patrick S. Kwok.

Staff present: District Manager Benjamin Porter, Deputy District Manager Robert Woodhouse, and Counsel Marc Hynes.

District Advisor: Richard Tanaka

Public: None

2. PUBLIC COMMENTS:

There were none.

3. CLOSED SESSION:

President Saadati adjourned the regular meeting session and opened the closed session at 7:02 p.m. Manager Porter and Deputy Manager Woodhouse were excused from the closed session.

A. Conference with legal counsel – Existing Litigation in accordance with government code section Paragraph (1) of Subdivision (d) of Section 54956.9, existing litigation. Name of Case: County Sanitation District 2-3, West Valley Sanitation District, Cupertino Sanitary District, Burbank Sanitary District, and the City of Milpitas v. The City of San Jose, The City of Santa Clara, and Does 1 through 50 inclusive.

   Closed session was adjourned at 7:24 p.m. and the regular meeting was called to order. District Manager Porter and Deputy District Manager Woodhouse rejoined the regular meeting. There was no reportable action.

4. MINUTES:

A. On a motion by Director Gatto, seconded by Director Bosworth, by a vote of 5-0-0 the minutes of Wednesday, March 17, 2021 were approved.

B. By consensus, the Minutes of Wednesday, March 3, 2021 are to be Noted & Filed.

5. CORRESPONDENCE:

There was none.

6. MEETINGS:

A. Director Gatto plans to attend the teleconference meeting of The San Jose/Santa Clara Treatment Plant Advisory Committee (TPAC) scheduled to be held on April 8, 2021.

7. REPORTS:

A. Manager Porter reported on the teleconference meeting of The San Jose/Santa Clara Treatment Plant Technical Advisory Committee (TAC) held on April 5, 2021. Costs for the digester project have escalated significantly (50 %).

8. UNFINISHED BUSINESS:

A. Manager Porter reported on COVID-19 updates. Some of the inspectors have been vaccinated, others are holding off for now. Other staff have begun to get vaccinated as well.

B. Deputy Manager Woodhouse reported on the Sewer System Management Plan update and presented slides that described the risk-based prioritization has been used to develop the updated version of the CuSD SSMP that will need to be certified in May 2021.

9. NEW BUSINESS:

A. The Board reviewed the CCTV Software Annual Subscription – Request for Partial Reimbursement Board Memo. On a motion by Director Kwok, seconded by Director Chen, by a vote of 5-0-0 the Board approved reimbursement in the amount of $1,612.50 to Mark Thomas.

B. The Board reviewed the Metering Station Exhaust Fan Replacement Board Memo. On a motion by Director Gatto, seconded by Director Kwok, by a vote of 5-0-0 the Board approved Staff's recommendation to proceed with replacement of the exhaust fan at the Flume Metering station with a budgeted repair cost of $21,400.

10. STAFF REPORTS:

A. Manager Porter reported on the Planning for Future Development Projects and presented slides that described the multi-pronged approach that staff is taking to accommodate planned development in the District.

11. CALENDAR ITEMS:

A. The next regular District Board meeting is scheduled to be held on Wednesday, April 21, 2021.

12. ADJOURNMENT:

On a motion properly made and seconded, at 8:50 p.m. the meeting was adjourned.

_____ _____

Secretary of the Sanitary Board President of the Sanitary Board

SANTA CLARA LAFCO

Local Agency Formation Commission of Santa Clara County
777 North First Street
Suite 410
San Jose, CA 95112
SantaClaraLAFCO.org

April 28, 2021

TO: County Executive, Santa Clara County
City Managers, Cities in Santa Clara County
District Managers, Special Districts in Santa Clara County

FROM: Neelima Palacherla, Executive Officer

SUBJECT: ADOPTION OF PROPOSED BUDGET FOR FISCAL YEAR 2022 & NOTICE OF JUNE 2, 2021 LAFCO PUBLIC HEARING

At its public hearing on April 7, 2021, the Local Agency Formation Commission of Santa Clara County (LAFCO) adopted a Proposed Budget for Fiscal Year 2022, as recommended in the attached staff report. The attached report reviews the status of LAFCO's current year work plan and budget; and sets forth the proposed work plan and budget for Fiscal Year 2022.

LAFCO is scheduled to consider adoption of its Final Budget at a public hearing on Wednesday, June 2, 2021 at 1:15 PM. The County Auditor will apportion LAFCO costs and invoice the cities, independent special districts and the County based on the Final Budget adopted by LAFCO.

Due to the COVID-19 pandemic and the shelter-in-place orders, and consistent with the Governor's Executive Order N-29-20, the June 2, 2021 LAFCO meeting will be held as a virtual meeting. More information regarding public access to the meeting will be available with the publication of the meeting agenda on the LAFCO website at SantaClaraLAFCO.org. The staff reports and related meeting material will also be available on the LAFCO website by May 28, 2021. All interested persons may attend the meeting as provided for on the agenda. Written public comments may be submitted by email to **LAFCO@ceo.sccgov.org** prior to the date of the hearing.

Attachment:

Staff Report on the Proposed Work Plan and Budget for FY 2022 (April 7, 2021)

cc: Board of Supervisors, Santa Clara County
City Council Members, Cities in Santa Clara County
Board of Directors, Special Districts in Santa Clara County
Santa Clara County Cities Association
Santa Clara County Special Districts Association

ITEM # 7

SANTA CLARA LAFCO

Local Agency Formation Commission of Santa Clara County
777 North First Street
Suite 410
San Jose, CA 95112
SantaClaraLAFCO.org

LAFCO MEETING: **April 7, 2021**

TO: **LAFCO**

FROM: **Neelima Palacherla, Executive Officer**
Dunia Noel, Asst. Executive Officer

SUBJECT: **PROPOSED WORK PLAN AND BUDGET FOR FY 2022**

FINANCE COMMITTEE / STAFF RECOMMENDATIONS

1. Adopt the Proposed Work Plan for Fiscal Year 2021-2022.
2. Adopt the Proposed Budget for Fiscal Year 2021-2022.
3. Find that the Proposed Budget for Fiscal Year 2022 is expected to be adequate to allow the Commission to fulfill its statutory responsibilities.
4. Authorize staff to transmit the Proposed Budget adopted by the Commission including the estimated agency costs as well as the LAFCO public hearing notice for the adoption of the Fiscal Year 2022 Final Budget to the cities, the special districts, the County, the Cities Association of Santa Clara County and the Santa Clara County Special Districts Association.

ANNUAL BUDGET PROCESS REQUIREMENTS

The Cortese Knox Hertzberg Local Government Reorganization Act of 2000 (CKH Act) which became effective on January 1, 2001, requires LAFCO, as an independent agency, to annually adopt a proposed budget by May 1 and a final budget by June 15 at noticed public hearings. Both the proposed and the final budgets are required to be transmitted to the cities, the special districts and the County. Government Code §56381(a) establishes that at a minimum, the budget must be equal to that of the previous year unless the Commission finds that reduced staffing or program costs will nevertheless allow it to fulfill its statutory responsibilities. Any unspent funds at the end of the year may be rolled over into the next fiscal year budget. After adoption of the final budget by LAFCO, the County Auditor is required to apportion the net operating expenses of the Commission to the agencies represented on LAFCO.

FISCAL YEAR 2021-2022 BUDGET DEVELOPMENT TIMELINE

Dates	Staff Tasks / LAFCO Action
March 17 - April 7	Notice of this public hearing was advertised in a local newspaper, posted on the LAFCO website and distributed to local agencies. The agenda and a link to the posted agenda packet are also distributed to local agencies, interested persons and organizations. The proposed Workplan and Budget are posted on the LAFCO website and available for public review and comment.
April 7	LAFCO public hearing on adoption of Proposed Workplan and Budget
April 8	Proposed Work Plan and Budget, preliminary apportionments and LAFCO public hearing notice for Final Budget Hearing transmitted to agencies
June 2	LAFCO public hearing and adoption of Final Budget
June 2 - July 1	Final Budget transmitted to agencies; Auditor requests payment from agencies

LAFCO FINANCE COMMITTEE

At its February 3, 2021 LAFCO meeting, the Commission appointed Commissioner Jimenez, Commissioner Kremen and Alternate Commissioner Melton to serve on the Finance Committee.

At its special meeting held on March 4, 2021, the Finance Committee discussed the progress on the current year work plan and the status of the current year budget; and recommended the proposed FY 2022 work plan and budget for consideration and adoption by the full commission.

CURRENT YEAR IN REVIEW

PROGRESS REPORT ON FY 2020-2021 WORK PLAN

LAFCO's current fiscal year workplan was adopted at a noticed public hearing held on April 8, 2020. **Attachment A** depicts the current status (through the third quarter of the year) of the 2020-2021 Work Program.

During this time, LAFCO has initiated many important new projects identified in its workplan highlighted by the Countywide Fire Service Review, the dissolution of an inactive district, and the implementation of recommendations from LAFCO's Comprehensive Organizational Assessment. These projects are currently underway.

A major focus of LAFCO's work during the past nine months has centered on providing assistance and expertise to local and regional agencies on a variety of matters in support of local or shared goals such as island annexations, Urban Service

Area amendment and out of agency contract for service applications, environmental review activities, regional plans/housing needs allocations, city general plan updates and other topics that affect local agency boundaries and services. Many of these issues need months or years of discussion and coordination and involve time intensive research, back and forth dialogue, exploration of options, multiple meetings and preparation of documentation and comment letters.

In accordance with the Commission's directive, a work plan focus area as opportunities arise and time permits has been to conduct targeted outreach to various local entities (special districts, County, cities and other community organizations/individuals) on LAFCO's role in promoting sustainable growth and good governance.

Another significant and growing area of the workplan is responding to public inquiries. The volume and complexity of such inquiries has continued to increase this past year, even under Shelter in Place restrictions. To examine this trend, LAFCO staff tracked public inquiries that the LAFCO Office received during the month of February (February 1 - 28, 2021). On top of prior scheduled meetings and administrative issues/requests, staff received and responded to a total of 43 public inquiries (an average of 2+ inquiries each day) during the month. This trend has continued. These inquiries come from various parties including property owners, developers, consultants, attorneys, or agency staff, and cover a broad range of issues/topics and could pertain to any location within Santa Clara County or neighboring counties. Depending on the type of inquiry, a response can be provided in a single email/phone call, require moderate or extensive research, require one or more meetings, or a combination of these. While this represents a considerable part of staff workload on the whole, only the more complex issues or controversial issues, or those that involve a significant amount of staff time are reported on a regular basis to the Commission in the EO Reports.

Other notable administrative activities and projects that have been completed or are underway include among others, the annual financial audit, the annual report, new commissioners onboarding, required staff training, bylaws revision, and arrangement for LAFCO meetings broadcast.

Notwithstanding the preceding progress on various work plan items, some important, high priority projects such as the comprehensive review and update of LAFCO policies and scanning of LAFCO records have fallen behind and will not be completed by the end of the fiscal year. The delays are partly due to the increased demand for LAFCO services and staff's efforts to prioritize and meet the needs of the local agencies and the public; personnel issues including a vacant analyst position since the end of January 2021; and remote work protocols due to the COVID-19 pandemic. The projects in the current workplan that will not be completed by the end of the fiscal year have been added to the proposed FY 2022 workplan.

The LAFCO Annual Report for FY 2020 which summarizes the work accomplished during the previous fiscal year (July 2019 – June 2020) provides context and serves as a benchmark to evaluate the scope of staff workload for the current fiscal year.

LAFCO has not experienced a decrease in the current year workload as a result of the COVID-19 pandemic, rather the workload reflects a higher demand from local agencies for LAFCO's expertise and assistance. Staff's goal is to continue to be responsive and provide service with professional and personal integrity.

The LAFCO Annual Report for FY 2021 will be published at the end of the current fiscal year and will document all the applications reviewed and processed by LAFCO in Fiscal Year 2021; and will summarize the various accomplishments, activities/projects that LAFCO has engaged in or completed during the period.

STATUS OF FY 2020-2021 ADOPTED BUDGET

Attachment D includes the FY 2021 final budget adopted by the Commission at a noticed public hearing on June 2, 2020, the status of LAFCO's expenditures and revenues as of February 19, 2021 and expenditure and revenue projections for end of FY 2021. The adopted LAFCO budget for FY 2021 is $983,785 and reflects a 14% reduction compared to the previous fiscal year's (FY 2020) budgeted operating expenses. It is estimated that the total year-end projected expenditures for FY 2021 would be approximately 10% lower than the adopted budget primarily due to salary savings from a vacant staff position and unspent business travel and office expense accounts due to the COVID-19 pandemic. Revenue for FY 2021 is also projected to be lower than that projected in the adopted budget. LAFCO has received the respective FY 2021 cost shares from the County, the cities and the independent special districts. The actual fund balance rolled over at the end of FY 2020 was considerably higher at $352,123, compared to the amount estimated ($187,927) in the FY 2021 budget. The excess fund balance and the unspent FY 2021 expenditure amounts will carry over into FY 2022 and be used to reduce net operating expenses that would in turn translate to reduced FY 2022 costs for contributing agencies.

PROPOSED WORK PLAN FOR FISCAL YEAR 2022

Attachment C includes the proposed work plan for FY 2022, as recommended by the Finance Committee, for consideration and adoption by the full commission.

The proposed workplan includes ongoing as well as new projects and outlines detailed projects/activities organized under six broad areas: (1.) LAFCO application processing; (2.) island annexations; (3.) outreach, government/community relations and customer service; (4.) service reviews, special studies and sphere of influence updates; (5.) commission support; and (6.) administrative projects. The work plan assigns priority levels (high, moderate, low); and designates whether the work is to be conducted by staff or outside consultants.

The Finance Committee directed that staff consider and discuss how the reduced staffing levels (due to a vacant position) might affect work plan priorities and the accomplishment of the work plan. Staff has reassessed the proposed priorities to better reflect actual staffing levels and has updated the workplan accordingly.

The proposed work plan includes a broad spectrum of responsibilities that LAFCO, as an independent local agency and as a regulatory body of the state, is expected to

fulfil in its role of promoting sustainable growth and good governance in Santa Clara County. It incorporates the Commission's legislative functions and mandates and also the Commission's proactive local initiatives and priorities such as its directives for ongoing public outreach and communications, comprehensive organizational assessment and its proactive service review and implementation program.

Reduced Staffing and Impact on Work Plan

As indicated previously, over the past year, LAFCO has experienced an ever increasing demand for its expertise and services but is currently functioning with reduced professional staffing (3.0 FTE) due to a vacant LAFCO Analyst position since January 2021. The current 3.0 FTEs are experienced staff members and provide superior service levels – each having served in their positions for 20 years. Due to the current vacancy, staff members have had to work overtime and particularly the LAFCO Clerk has had to perform higher functions and fill the vacancy gap in order to meet deadlines. At this time, it is unclear how quickly the vacant position could be filled as the recruitment for the position is dependent on the outcome of the classification study currently in progress. It is anticipated that actual professional staffing capabilities will be below 4.0 FTE for at least six months, and possibly longer considering the onboarding and training period for the new staff person.

According to the Comprehensive Organizational Assessment report prepared by LAFCO's consultant, even the 4.0 FTE staffing level is lower than other LAFCOs with comparable operations. However, in August 2020, the Commission voted to maintain the current 4.0 FTE staffing level given uncertain economic conditions related to the COVID-19 pandemic but kept open the option to consider the potential addition of 1.0 FTE in the future.

To address this reduced staffing situation, staff must actively manage the workload in order to focus on accomplishing essential activities such as processing applications, completing projects currently underway such as the Countywide Fire Service Review, maintaining core administrative functions, recruiting and training new staff, supporting the commission and responding to local agency and public requests for assistance. Non-essential activities and other proactive initiatives will need to be deferred until staffing levels/expertise are restored. This is consistent with past practice where LAFCO's statutorily mandated activities take priority over administrative projects that are not statutorily required, and over proactive commission-initiated projects which are discretionary but support LAFCO's mission and statutory requirements.

PROPOSED BUDGET FOR FISCAL YEAR 2021

Attachment D includes the proposed Budget for FY 2021-2022 as recommended by the Finance Committee, for consideration and adoption by the full commission. The Finance Committee conducted a thorough review of the work plan and budget and recognized the public benefit of LAFCO's work and the high demand for LAFCO's services from local agencies and the public. The Committee maintained its commitment to ensure adequate resources that allow the Commission to fulfill its

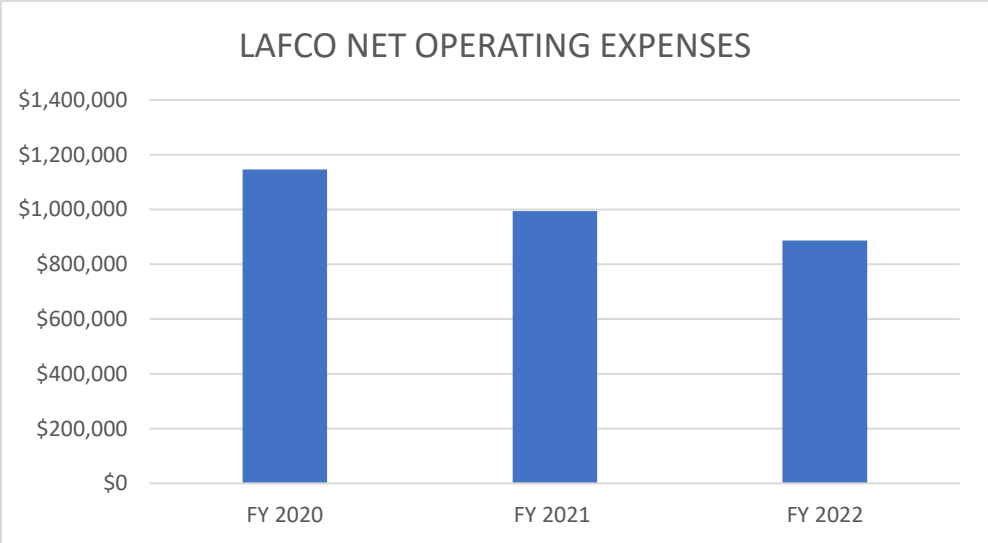
statutory responsibilities and accomplish its work plan while also limiting costs for LAFCO's funding agencies given the financial challenges faced by local agencies due to the COVID-19 pandemic. Specifically, the Committee directed staff to:

- Review certain expenditure line items in order to reduce the amounts and make them more consistent with actual expenditure trends from previous years and/or to reflect COVID-19 related reduced operational expenses
- Reduce the current reserve amount from $250,000 to $200,000
- Negotiate a rent reduction given that the LAFCO office is closed and staff is working remotely due to the COVID-19 pandemic
- Confirm the costs in the County's cost allocation plan amount to ensure that the charges are appropriate

Staff has addressed these issues within the detailed discussion of the individual budget line items and has incorporated revisions into the proposed budget accordingly. As a result of these intentional measures, the proposed budget maintains the overall expenditure for FY 2022 ($1,210,990) at a substantially similar level to the current year budget ($1,207,712).

In addition to cutting costs to limit net operating expenses, projected current year cost savings (from salary savings, unspent travel, and other reduced operational costs because of COVID-19 remote work) and a larger than estimated fund balance from FY 2020 are expected to result in a $288,660 fund balance at the end of the current year – and will be used to further reduce net operating expenses in FY 2022.

As a result of these measures, LAFCO's proposed net operating expense for FY 2022 is 10% lower than the current year budgeted amount which was 14% lower than the previous year. **This means that for a second year LAFCO has reduced local agencies' apportionments.** However, such measures may not be available in future years and there may be a potential need to increase apportionments in order to meet state mandates and LAFCO work plan objectives.



DESCRIPTION OF FY 2021-2022 BUDGET LINE ITEMS

LAFCO and the County of Santa Clara entered into a Memorandum of Understanding (MOU) (effective since July 2001), under the terms of which, the County provides staffing, facilities, and services to LAFCO. The associated costs are reflected in the proposed LAFCO budget. LAFCO is a stand-alone, separate fund within the County's accounting and budget system and the LAFCO budget information is formatted using the County's account descriptions/codes.

The following is a detailed itemization of the proposed budget.

EXPENDITURES

Expenditures are divided into two main sections: Staff Salary and Benefits (Object 1) which comprise 70% of the total expenditures, and Services and Supplies (Object 2).

OBJECT 1. SALARIES AND BENEFITS $844,239

This line item supports the salary and benefits for the 4.0 FTE positions including the Executive Officer position, the two Analyst positions and the Clerk position. One Analyst position is currently vacant. Recruitment for the position is on hold until the County's classification study for LAFCO staff positions is completed. LAFCO contracts with the County of Santa Clara for staffing and services and in accordance with the MOU between the County and LAFCO, all four positions are staffed through the County Executive's Office. The proposed amount is based on the best available projections from the County at this time for salary and benefits for the 4 positions. Changes to the projections for the four positions that occur within the next couple of months will be reflected in the Final LAFCO budget.

OBJECT 2. SERVICES AND SUPPLIES

5255100 Intra-County Professional $10,000

This includes the costs for services from various County agencies such as the County Surveyor's Office, the County Assessors' Office, and the Registrar of Voters. The County Surveyor assists with map review and approval for boundary change proposals. In addition, the Surveyor's Office also assists with research to resolve boundary discrepancies. The County Assessor's Office prepares reports for LAFCO and the Registrar of Voters provides data necessary for processing LAFCO applications. This item also allows LAFCO to seek GIS mapping services including maintenance and technical assistance from the County Planning Office, as necessary. This budgeted amount has been reduced significantly from $45,000 to be more consistent with actual expenditure trends from previous years.

5255800 Legal Counsel $75,896

This item covers the cost for general legal services.

In February 2009, the Commission retained the firm of Best Best & Krieger for legal services on a monthly retainer. The contract was amended in 2010 to reduce the number of total hours required to 240 hours per year. The contract sets the hourly rate and allows for an annual automatic adjustment to the rates based on the Consumer Price Index (CPI). In 2017, the contract was once again amended to

increase the monthly retainer cost and limit the CEQA work within the retainer to 24 hours annually. Any additional CEQA work above 24 hours would be charged outside the retainer at the same hourly rate.

The monthly retainer for FY 2022 increases to $6,083, based on a 1.7% increase in the Consumer Price Index for the prior calendar year (2020). This item covers the annual retainer fees and includes additional monies to cover approximately 10 hours of work outside the retainer at the current hourly rate of $290.

5255500 Consultant Services $150,000

This item is budgeted for hiring consultants to assist LAFCO with special projects such as for conducting service reviews and special studies, facilitating a strategic planning workshop, scanning LAFCO's hardcopy records into the existing electronic document management system, meeting broadcast services for LAFCO meetings and for conducting the annual financial audit, among others. The Commission must take action to authorize such special projects prior to expending funds. This item also includes costs associated with ongoing existing contracts such as costs for maintenance and hosting of the LAFCO website by an outside provider.

5285700 Meal Claims $750

This item includes cost of food to support Commission events, workshops, meetings.

5220200 Insurance $8,500

This item is for the purpose of purchasing general liability insurance and workers' compensation coverage for LAFCO. In 2010, LAFCO switched from the County's coverage to the Special District Risk Management Authority (SDRMA), for the provision of general liability insurance. Additionally, LAFCO also obtains workers' compensation coverage for its commissioners from SDRMA. Workers' compensation for LAFCO staff is currently covered by the County and is part of the payroll charge. SDRMA has recently provided estimated FY 2022 contribution amounts for use in the budgeting process: Property/ liability ($7,300) and Workers compensation ($1,100). SDRMA is in the process of negotiating rates on behalf of its program membership and expects to confirm rates in mid-May. The Final budget will reflect any major revisions to these estimates.

5270100 Rent & Lease $47,784

This item includes monthly rent for the LAFCO office space during the FY 2022. The current lease term expires on March 31, 2022. As directed by the Finance Committee, staff has contacted the landlord about rent accommodation in light of the COVID-19 pandemic. The landlord suggested a "blend and extend" approach as part of renegotiating a 3-year option to extend the lease based on current market rent. It allows the landlord to lock in the tenant for the option term and the tenant gets some rent relief in lowered rent because of market instability. Staff will work with legal counsel and bring this back to the Committee and the full Commission for consideration upon receiving more information from the landlord.

5250100 Office Expenses $5,000

This item includes funds for purchase of books, subscriptions/publications necessary to keep current on laws and trends; small equipment and supplies for office operations, including printer/photocopier lease. This amount has been reduced in half to be more consistent with actual expenditure trends from previous years and reflects potential lower operating expenses due to COVID-19 related remote work and office closure.

5255650 Data Processing Services $22,048

This item includes estimated costs associated with County Technology Solutions & Services Department (TSS) providing IT services to the LAFCO program. According to TSS, the projected costs cover Telecom services for 5 phones- VOIP/Landline ($2,520), Wireless Carrier Service ($709), MS Adobe special order, Acrobat Pro and MS Visio monthly subscription ($3,449), and other services ($15,370) comprising Enterprise Content Management services and solutions, Kronos support, Architecture and Innovation Services, Claranet services, Data Analytics and Visualizations, digital print and sccLearn. Revised cost estimates received from the County will be reflected in the Final LAFCO budget.

5225500 Commissioner's Fees $10,000

This item covers the $100 per diem amount for LAFCO commissioners and alternate commissioners to attend LAFCO meetings and committee meetings.

5260100 Publications and Legal Notices $1,000

This item is for costs associated with publication of hearing notices for LAFCO applications and other projects/ studies, as required by state law. It has been reduced from $2,500 to be more consistent with actual expenditure trends from previous years.

5245100 Membership Dues $12,500

This item includes CALAFCO – the California Association of LAFCOs membership dues. As approved at the CALAFCO Annual Membership Business meeting on October 31, 2019, the FY 2022 membership dues for Santa Clara LAFCO is $10,760.

Additionally, this item includes estimated membership dues for CSDA – the California Special Districts Association. In June 2018, CSDA informed staff that Santa Clara LAFCO as a customer of SDRMA, must be a member of CSDA pursuant to SDRMA bylaws.

5250750 Printing and Reproduction $1,500

This covers printing expenses for reports such as service reviews or other studies and documents.

5285800 Business Travel $10,000

This item includes funding for staff and commissioners to attend conferences and workshops. It would cover costs of air travel, accommodation, conference registration and other expenses at the conferences. CALAFCO annually holds a Staff Workshop (March 2022) and an Annual Conference (October 2021) that is attended

by commissioners as well as staff. The CALAFCO Legislative Committee meetings are currently being held by teleconference and will not require travel. The reduced amount reflects this and is more consistent with actual expenditure trends from previous years.

5285300 Private Automobile Mileage $1,000

This item provides for mileage reimbursement when staff travels by private car to conduct site visits and attend meetings / training sessions. This amount has been reduced in half to be more consistent with actual expenditure trends from previous years.

5285200 Transportation and Travel (for use of County car) $600

This item would cover costs associated with the use of a County vehicle for travel to conferences, workshops, site visits and meetings.

5281600 Overhead ($49,173)

This overhead charge is established by the County Controller's Office, for service rendered by various County departments that do not directly bill LAFCO. The overhead includes LAFCO's share of the County's FY 2022 Cost Allocation Plan which is based on actual overhead costs from FY 2020 – the most recent year for which actual costs are available.

The overhead amount includes the following charges from:

County Executive's Office:	$12,569
Controller-Treasurer:	$11,000
Employee Services Agency:	$6,976
OBA:	$426
BHS-MH - Employee:	$281
TSS Intragovernmental Service:	$672
Technology Services & Solutions:	$3,212
Procurement:	$62
Facilities and Fleet:	$121

Further, a "roll forward" is applied which is calculated by comparing FY 2020 Cost Plan estimates with FY 2020 actuals. The FY 2020 cost estimates were lower than the actuals by $13,854; this amount is added to the FY 2022 Cost Plan. This is a state requirement.

5275200 Computer Hardware $3,000

This item is designated for any required hardware upgrades / purchases.

5250800 Computer Software $5,000

This amount is designated for computer software purchases, and annual licenses for GIS software and records management (LaserFische) hardware/software annual maintenance agreement.

5250250 Postage $1,000

This amount covers postage costs for mailing notices, agendas, agenda packets and general correspondence. This amount has been reduced by half to be more consistent with actual expenditure trends from previous years.

5252100 Training Programs $2,000

This item covers the costs associated with attendance at staff development courses and seminars. CALAFCO conducts University Courses throughout the year on topics of relevance to LAFCO.

REVENUES

4103400 Application Fees $30,000

It is anticipated that LAFCO will receive approximately $30,000 in fees from processing applications. The actual amount earned from fees depends entirely on the level of application activity.

4301100 Interest $6,000

It is estimated that LAFCO will receive an amount of approximately $6,000 from interest earned on LAFCO funds.

3400150 Fund Balance from Previous Fiscal Year (FY 2021) $288,660

It is projected that there will be a savings or fund balance of approximately $288,660 at the end of the current year, which will be carried over to reduce the proposed Fiscal Year 2022 costs for LAFCO's funding agencies (cities, independent special districts and the County).

Projected Year-End [FY 2021] Fund Balance = (Projected Year-End [FY 21] Revenue + Actual Fund Balance from Previous Fiscal Year [FY 20] + Funds Received from Local Agencies in FY 21) - (Projected Year-End [FY 21] Expenses)

= ($20,000+ $352,123 + $983,784) - $1,077,248

= $288,660

The fund balance excludes the reserves.

RESERVES

3400800 Reserves Available $200,000

This item includes reserves for two purposes: litigation reserve – for use if LAFCO is involved with any litigation; and contingency reserve – to be used for unexpected expenses. If used during the year, this account will be replenished in the following year. Since 2012, the reserves have been retained in a separate Reserves account, thus eliminating the need for LAFCO to budget each year for this purpose.

The Reserves amount has been held at $250,000 since FY 2020 to timely implement potential recommendations from the Comprehensive Organizational Assessment, and as a tentative measure in recognition that LAFCO operates in an increasingly complex and controversial environment. The implementation of the Comprehensive Organizational Assessment Study is currently on hold pending the completion of the Classification Study by the County, which is expected soon.

The Finance Committee has recommended that the Reserves be reduced by $50,000 to $200,000, and that amount be used to further reduce costs to local agencies given the COVID -19 related economic hardships. This places the proposed Reserve amount at approximately 17% of the total FY 2022 expenditures. LAFCO has not adopted a Reserves policy, however as an independent agency, LAFCO should maintain sufficient reserves for flexibility and stability in the event of unanticipated needs.

5701000 Reserves ($50,000)

The Finance Committee has recommended that the Reserves be reduced by $50,000 to $200,000, which is approximately 17% of the total FY 2022 expenditures.

FY 2022 NET OPERATING EXPENSES

FY 2022 Net Operating Expenses = (Proposed FY 2022 Expenditures) - (Proposed FY 2022 Fee & Interest Revenues + Projected Fund Balance from FY 2021)

= ($1,210,990) – ($36,000 + $288,660)

= $886,330

The projected operating expense for FY 2022 is based on projected expenditures and revenues as well as on estimated fund balance for the current year. Further revisions may be needed as we get a better indication of current year expenses/revenues towards the end of this fiscal year. Additionally, a more accurate projection of costs/revenues for the upcoming fiscal year could become available, particularly for employee salary and benefits. This could result in changes to the proposed net operating expenses for FY 2022 which could in turn impact the costs for each of LAFCO's funding agencies.

COST APPORTIONMENT TO CITIES, INDEPENDENT SPECIAL DISTRICTS AND COUNTY

In January 2013, independent special districts were seated on LAFCO. Government Code §56381(b)(1)(A) provides that when independent special districts are represented on LAFCO, the county, cities and independent special districts must each provide a one-third share of LAFCO's operational budget.

The City of San Jose has permanent membership on LAFCO pursuant to Government Code Section 56327. As required by Government Code §56381.6(b), the City of San Jose's share of LAFCO costs must be in the same proportion as its member bears to the total membership on the commission, excluding the public member. The remaining cities' share must be apportioned in proportion to each city's total

revenues, as reported in the most recent edition of the Cities Annual Report published by the Controller, as a percentage of the combined city revenues within a county.

Government Code Section 56381 provides that the independent special districts' share shall be apportioned in proportion to each district's total revenues as a percentage of the combined total district revenues within a county. The Santa Clara County Special Districts Association (SDA), at its August 13, 2012 meeting, adopted an alternative formula for distributing the independent special districts' share to individual districts. The SDA's agreement requires each district's cost to be based on a fixed percentage of the total independent special districts' share.

Therefore, in Santa Clara County, the County pays a third of LAFCO's operational costs, the independent special districts pay a third, the City of San Jose pays one sixth and the remaining cities pay one sixth. Government Code §56381(c) requires the County Auditor to request payment from the cities, independent special districts and the County no later than July 1 of each year for the amount each agency owes based on the net operating expenses of the Commission and the actual administrative costs incurred by the Auditor in apportioning costs and requesting payment.

The following is a draft apportionment to the agencies based on the proposed net operating expenses for FY 2022.

Apportionment of the costs among the 14 cities and among the 17 independent special districts will be calculated by the County Controller's Office after LAFCO adopts the final budget in June. In order to provide each of the cities and districts

with a general indication of their costs in advance, **Attachment E** includes draft estimated apportionments prepared by the County Controller's Office, based on the proposed FY 2022 net operating expenses and 2018/2019 Cities annual Report.

ATTACHMENTS

Attachment A:	Status of FY 2021 Work Plan
Attachment B:	LAFCO Financials 2008-2020
Attachment C:	Proposed Work Plan for Fiscal Year 2022
Attachment D:	Proposed LAFCO Budget for Fiscal Year 2022
Attachment E:	Estimated FY 2022 Costs to Agencies Based on the Proposed Budget

ITEM # 7
Attachment A

FY 2021 WORK PLAN STATUS REPORT (July 1, 2020 – February 28, 2021)

	PROJECTS	STATUS
LAFCO APPLICATIONS	Process applicant-initiated LAFCO proposals	Ongoing, as needed (2 special district annexation proposals in process + one pending OASC application) Inactive District dissolution: Reclamation District 1663 – initiated by LAFCO-February 2021
	Comment on potential LAFCO applications, relevant plans, projects & development proposals, city General Plan updates and/ or related environmental documents	Completed and submitted comment letters on unincorporated RHNA allocations, Plan Bay Area 2050, Gilroy General Plan, San Jose General Plan: Coyote Valley, County Farmland Mapping designations. Ongoing, as needed
	Comprehensive review and update of LAFCO policies and procedures for context, clarity and consistency with State law	In progress, working with consultant
ISLAND ANNEXATIONS	Conduct outreach to cities with islands, follow up on responses including review/research of city limits/ USA boundaries, provide assistance with potential annexations and potential USA amendments	Ongoing, as needed Meetings on island annexations, San Jose, LAH, LG
	Review and finalize city-conducted island annexations	Processed applications received. Ongoing, as needed
PUBLIC OUTREACH & COMMUNICATION	Conduct outreach to increase awareness of LAFCO's role	Completed LAFCO presentations to SDA, County Planning Commission, GCRCD, Leadership Sunnyvale, staff of 2 special districts CA APA Award of Excellence for Communications Initiative
	Engage and establish relationships with local (cities, districts, county), regional (ABAG/MTC), state (SGC, OPR, DoC, SWRCB) agencies, organizations such as SDA, SCCAPO, CALAFCO, other stakeholder groups	Ongoing. Attend regular, scheduled meetings of SCCAPO, SDA, County Planning Dept.; unincorporated RHNA collaboration, GIS Working Group, Sustainability County Working Group
	Respond to public enquiries re. LAFCO policies, procedures and application filing requirements	Ongoing, higher volume than usual, complex enquiries reported in EO reports to the Commission

	PROJECTS	STATUS
SERVICE REVIEWS & SPHERE OF INFLUENCE UPDATES	Conduct third round of service reviews and special studies	Adopted third round service review work plan. Countywide Fire Service Review in progress
	Continue to monitor implementation of recommendations from previous service reviews, as necessary	Completed RRRPD Special Study draft. Cupertino is considering the study. Ongoing follow up with District/City
	Map Mutual Water companies	Ongoing, as new information becomes available
	Engage in SALC grant partnership opportunities	On hold until opportunities present
	Compile and post JPA filings on the LAFCO website	Ongoing as JPAs provide agreements, website posting upon completion of relevant service reviews
ADMINISTRATIVE PROJECTS	Prepare annual work plan and budget	In progress
	Prepare Annual Report	Completed August 2020
	Prepare Annual Financial Audit	Completed December 2020
	Review and update administrative policies and procedures	Completed COI Code and Bylaws amendment in October 2020. Ongoing, as needed.
	Conduct a Strategic Planning Workshop	On hold, previous workshop in 2018 (Communications Plan)
	Maintain and enhance the LAFCO Website	Ongoing enhancements/trouble shoot of new website
	Maintain LAFCO database	Software upgrade and server migration in progress
	Broadcasting LAFCO meetings	Completed MOU execution, February 2021
	Maintain LAFCO's hard copy and digital records	Ongoing
	Organize scan of LAFCO records to Electronic Document Management System	On hold
	Staff and Commissioner training and development (orientation, CALAFCO events, workshops, conferences, relevant courses)	Completed onboarding / orientation of 4 commissioners. Departure of LAFCO Analyst. Position vacant since 1/29 Ongoing staff training CEQA, SHP, JVSV, other webinars
	Staff performance evaluation	Completed April -October 2020
	Comprehensive Organizational Assessment Study	Completed study - August 2020. Implementation in progress
	Track LAFCO related legislation	EO serves as voting member on CALAFCO Legislative Committee. Commission took positions on SB 414 and potential GC 56133(e) amendments
	Other administrative functions mandated of a public agency	Ongoing, as required

ITEM # 7
Attachment B

FY 2008 - FY 2020 LAFCO FINANCIALS

February 2021

ITEM NO.	TITLE	ACTUALS FY 2008	ACTUALS FY 2009	ACTUALS FY 2010	ACTUALS FY 2011	ACTUALS FY 2012	ACTUALS FY 2013	ACTUALS FY 2014	ACTUALS FY 2015	ACTUALS FY 2016	ACTUALS FY 2017	ACTUALS FY 2018	ACTUALS FY 2019	ACTUALS FY 2020
EXPENDITURES														
	Salary and Benefits	$356,009	$400,259	$406,650	$413,966	$393,194	$411,929	$450,751	$466,755	$484,216	$514,381	$628,534	$713,900	$744,439
Object 2:	Services and Supplies													
5255100	Intra-County Professional	$66,085	$57,347	$13,572	$4,532	$6,118	$5,260	$5,663	$4,379	$18,523	$1,292	$703	$3,593	$346
5255800	Legal Counsel	$0	$9,158	$67,074	$52,440	$48,741	$56,791	$53,550	$52,854	$57,498	$71,131	$59,400	$72,276	$69,975
5255500	Consultant Services	$19,372	$75,000	$76,101	$58,060	$102,349	$59,563	$35,602	$37,250	$39,625	$0	$45,000	$52,650	$106,709
5285700	Meal Claims	$0	$368	$277	$288	$379	$91	$228	$209	$367	$50	$901	$257	$166
5220100	Insurance	$491	$559	$550	$4,582	$4,384	$4,378	$4,231	$4,338	$4,135	$4,679	$4,893	$5,296	$5,893
5250100	Office Expenses	$1,056	$354	$716	$639	$1,212	$536	$850	$783	$6,266	$48,632	$15,412	$4,702	$2,544
5270100	Rent and Lease											$41,120	$39,360	$44,478
5255650	Data Processing Services	$8,361	$3,692	$3,505	$1,633	$3,384	$1,663	$3,311	$9,024	$1,519	$6,869	$877	$11,894	$15,500
5225500	Commissioners' Fee	$5,700	$5,400	$3,500	$3,400	$4,000	$4,900	$5,800	$4,900	$6,700	$5,300	$5,400	$5,000	$4,600
5260100	Publications and Legal Notices	$1,151	$563	$1,526	$363	$916	$222	$378	$2,484	$487	$191	$145	$192	$44
5245100	Membership Dues	$5,500	$7,000	$7,000	$7,000	$7,000	$14,473	$0	$7,428	$7,577	$8,107	$8,674	$9,615	$11,822
5250750	Printing and Reproduction	$5	$0	$0	$0	$0	$0	$9	$177	$703	$0	$0	$0	$799
5285800	Business Travel	$7,238	$8,415	$4,133	$8,309	$3,095	$4,777	$5,800	$4,042	$5,811	$3,877	$13,091	$4,260	$6,908
5285300	Private Automobile Mileage	$1,016	$704	$832	$1,185	$615	$424	$409	$396	$1,009	$1,264	$590	$689	$696
5285200	Transportation&Travel (County Car Us	$894	$948	$629	$0	$384	$250	$371	$293	$559	$605	$0	$328	$256
5281600	Overhead	$42,492	$62,391	$49,077	$46,626	$60,647	$43,133	$42,192	$34,756	$49,452	$0	$28,437	$69,944	$4,505
5275200	Computer Hardware	$0	$451	$0	$83	$2,934	$1,791	$2,492	$0	$106	$0	$0	$773	$0
5250800	Computer Software	$0	$0	$626	$314	$579	$3,124	$933	$1,833	$2,079	$754	$4,505	$3,012	$1,200
5250250	Postage	$1,160	$416	$219	$568	$309	$589	$246	$597	$411	$209	$183	$117	$73
5252100	Staff Training Programs	$0	$665	$491	$250	$300	$0	$0	$1,431	$0	$0	$0	$350	$525
5701000	Reserves	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
TOTAL EXPENDITURES		**$516,530**	**$633,691**	**$636,478**	**$604,238**	**$640,540**	**$613,895**	**$612,816**	**$633,929**	**$687,043**	**$667,342**	**$857,865**	**$998,208**	**$1,021,478**
REVENUES														
4103400	Application Fees	$46,559	$41,680	$35,576	$48,697	$37,426	$45,458	$63,561	$27,386	$146,168	$20,436	$29,864	$33,049	$7,587
4301100	Interest: Deposits and Investments	$24,456	$16,230	$6,688	$4,721	$4,248	$3,416	$2,674	$2,844	$6,073	$10,830	$12,620	$12,141	$18,176
3400150	Fund Balance from Previous FY	$271,033	$368,800	$334,567	$275,605	$209,987	$208,219	$160,052	$226,111	$187,310	$293,489	$331,177	$314,693	$352,123
TOTAL REVENUE		**$342,048**	**$426,711**	**$376,831**	**$329,023**	**$251,661**	**$257,092**	**$226,287**	**$256,341**	**$339,551**	**$324,755**	**$373,661**	**$359,883**	**$377,886**
NET LAFCO OPERATING EXPENSES		**$174,482**	**$206,980**	**$259,648**	**$275,215**	**$388,879**	**$356,802**	**$386,529**	**$377,588**	**$347,492**	**$342,587**	**$484,204**	**$638,325**	**$643,592**
3400800	**RESERVES AVAILABLE**				**$100,000**	**$100,000**	**$150,000**	**$150,000**	**$150,000**	**$150,000**	**$150,000**	**$150,000**	**$150,000**	**$250,000**
COSTS TO AGENCIES														
5440200	County	$271,641	$270,896	$267,657	$292,601	$298,597	$281,780	$156,002	$187,521	$220,668	$225,778	$266,298	$277,942	$381,904
4600100	Cities (San Jose 50% +other cities 50%)	$271,641	$270,896	$267,657	$292,601	$298,597	$282,625	$156,002	$187,521	$220,668	$225,778	$266,298	$277,942	$381,904
4600100	Special Distrcits							$296,892	$187,521	$220,668	$225,778	$266,298	$277,942	$381,904

ITEM # 7
Attachment C

PROPOSED WORK PLAN FOR FISCAL YEAR 2022

PRIORITY* H - High Priority (essential activities: state mandate, Commission directive, requirements)
M - Medium Priority (important, provided resources allow or time permits)
L - Low Priority (desirable provided resources allow or time permits, not urgent)

	PROJECT DESCRIPTION	ACTIVITIES / TIMELINE	RESOURCES	PRIORITY*
LAFCO APPLICATIONS	Process applicant initiated LAFCO proposals	Encourage pre-application meetings prior to application submittal Conduct pre-agenda meetings with County Depts to obtain Assessor & Surveyor reports, as needed Process applications per CKH Act requirements: issue Notice of Application, Certificate of Filing / Sufficiency, Public Hearing Notice, staff report, conduct protest proceedings, as needed	Staff	H
	Comment on potential LAFCO applications, relevant projects & development proposals, city General Plan updates and/ or related environmental documents	Ongoing, as needed	Staff	H
	Review and update LAFCO policies for context, clarity and consistency with State law	In progress	Staff / Consultant	H
	Dissolution of inactive special districts	Work with State Controller's Office to identify County Library Services Area as inactive	Staff	M
	Prepare flowcharts for LAFCO processes and update application packets for current requirements and ease of public use	Upon completion of policies update	Staff	L
ISLAND ANNEXATIONS	Conduct outreach to cities with islands, follow up on responses including review/research of city limits/ USA boundaries, provide assistance with annexations or necessary USA amendments	Prepare and distribute island maps to cities	Staff	L
	Facilitate interagency discussions to support remaining island annexations	Ongoing discussion with San Jose, Los Altos Hills	Staff	H
	Review and finalize city-conducted island annexations	Ongoing, as needed	Staff	H

PROPOSED WORK PLAN FOR FISCAL YEAR 2022

	PROJECT DESCRIPTION	ACTIVITIES / TIMELINE	RESOURCES	PRIORITY*
OUTREACH, GOVERNMENT / COMMUNITY RELATIONS & CUSTOMER SERVICE	Conduct outreach to increase awareness of LAFCO's role	Presentations to cities, other agencies on LAFCO, as relevant	Staff	L
		Distribute LAFCO communications material to elected officials and staff of cities, special districts and the County		M
		Seek exhibit opportunities at public spaces / events		L
		Maintain website as the primary information resource on LAFCO		H
		Increase social media presence (Twitter)		L
	Engage and establish relationships with local (cities, districts, county), regional (ABAG/MTC), state (SGC, OPR, DoC, SWRCB) agencies, organizations such as SDA, SCCAPO, CALAFCO, other stakeholder groups	Attend regular meetings of SDA (quarterly), SCCAPO (monthly), County Planning Dept.(quarterly)	Staff	M
		Small water systems issues / legislation		M
		Collaborate with agencies and entities with goals common to LAFCO		M
	Track LAFCO related legislation	EO is voting member of the CALAFCO Legislative Committee and attends regular meetings	Staff	M
		Commission takes positions and submit letters on proposed legislation		M
	Respond to public enquiries re. LAFCO policies, procedures and application filing requirements	Timely response to public inquiries	Staff	H
		Update the PRA form for the website		L
		Document research on complex inquiries		L
		Report to Commission on complex inquiries		H

PROPOSED WORK PLAN FOR FISCAL YEAR 2022

	PROJECT DESCRIPTION	ACTIVITIES / TIMELINE	RESOURCES	PRIORITY*
SERVICE REVIEWS, SPECIAL STUDIES & SPHERE OF INFLUENCE UPDATES	Countywide Fire Service Review	Participate in consultant selection, negotiate contract Manage consultant's work and contract Coordinate TAC meetings Prepare and distribute stakeholder/public outreach material Coordinate stakeholder / public engagement process Prepare current maps of service provider agencies Attend stakeholder interviews with consultant Work with consultant on any data collection issues Review and comment on administrative draft reports Distribute Public hearing notices and coordinate community workshops and public hearings Prepare staff reports with implementation recommendations Follow up with agencies and report back to the commission	Staff / Consultant	H
	Continue to monitor implementation of recommendations from previous service reviews and conduct special studies, as necessary	RRRPD study – city took action to delay decision on consolidation	Staff	L
	Map Mutual Water companies	Initial maps complete, further through service review	Staff	L
	Engage in or support grant / partnership opportunities on issues related to enhancing viability of agriculture, and climate smart growth	As needed, and as opportunities arise	Staff	L
	Compile and post JPA filings on the LAFCO website	Notice provided, gather JPA information through service review process	Staff	L

PROPOSED WORK PLAN FOR FISCAL YEAR 2022

	PROJECT DESCRIPTION	ACTIVITIES / TIMELINE	RESOURCES	PRIORITY*
COMMISSION SUPPORT	Provide ongoing support to the 12 commissioners for regularly-scheduled Commission meetings, special meetings and Committee meetings (Finance Committee, Ad Hoc Committee on Organizational Assessment and the Fire Service Review TAC)	Prepare and distribute public hearing notices and agenda packets, provide staff support during the meetings, record minutes, broadcast meetings Hold pre-agenda review meeting with Chair Hold pre-meeting calls with individual commissioners to address agenda item questions Process commissioner per diems for attendance at LAFCO meetings	Staff	H
	Keep the Commission informed	EO report off-agenda emails, as needed	Staff	H
	Onboarding new Commissioners	Facilitate filing / completion of Form 700, commissioner pledge, ethics training. Update LAFCO letterhead, directory, and website Set up vendor accounts, provide parking permits Conduct new Commissioner orientation Recognize outgoing commissioners for service on LAFCO	Staff	H
	Commissioners Selection Process	Inform appointing bodies of any upcoming vacancies and provide information on appointment criteria Convene ISDSC committee meeting, as necessary Coordinate public member selection process, as necessary	Staff	H
	Conduct a Strategic Planning Workshop	2018 Workshop re. LAFCO Communications and Outreach Plan	Staff / Consultant	L
	Commissioner participation in CALAFCO	Support commissioner participation in CALAFCO activities / or election to the CALAFCO Board	Staff	L

PROPOSED WORK PLAN FOR FISCAL YEAR 2022

	PROJECT DESCRIPTION	ACTIVITIES / TIMELINE	RESOURCES	PRIORITY*
ADMINISTRATIVE PROJECTS	Prepare LAFCO annual work plan	March –June	Staff	H
	Prepare LAFCO annual budget	March –June	Staff	H
	Prepare LAFCO Annual Report	August 2021	Staff	H
	Prepare LAFCO Annual Financial Audit	October 2021 (Contract with Chavan Associates ends after FY 2021 Audit)	Consultant / Staff	H
	Office / facility management	Coordinate with Building Manager on facilities issues Coordinate with County re. computers/network, phone, printers, office security, procurement , installation & maintenance Order and manage office supplies Make travel arrangements and process expense reimbursements. Process mileage reimbursements Negotiate office space lease (current lease ends May 5, 2022J	Staff	H
	Records management	Organize scan of LAFCO records to Electronic Document Management System (LaserFische) Maintain LAFCO's hard copy records Maintain and enhance the LAFCO Website Maintain LAFCO database	Staff/ Consultant Staff	H H H H
	Contracts and payments & receivables	Track consultant contracts and approve invoices Approve vendor invoices / process annual payments for various services/ memberships Coordinate with County Controller's Office and track annual collection of payments from member agencies	Staff	H

PROPOSED WORK PLAN FOR FISCAL YEAR 2022

	PROJECT DESCRIPTION	ACTIVITIES / TIMELINE	RESOURCES	PRIORITY*
ADMINISTRATIVE PROJECTS	Review and update LAFCO bylaws / administrative policies and procedures	Ongoing, as needed	Staff	H
	Staff training and development	CALAFCO workshops, conferences, relevant courses	Staff	M
	Coordinate with County on administrative issues	Attend monthly meetings with the Deputy County Executive	Staff	H
	Staff performance evaluation	April - October 2021	Staff/Commission	H
	Comprehensive Organizational Assessment Study – implementation	As needed	Staff/Commission	H
	Recruitment and training of LAFCO staff	One LAFCO Analyst position currently vacant – recruitment pending County Classification study results	Staff	H
	Other administrative functions mandated of a public agency (Form 806, maintaining liability/workers comp insurance, etc.)	Ongoing	Staff	H

ITEM # 7
Attachment D

PROPOSED LAFCO BUDGET
FISCAL YEAR 2021- 2022

ITEM #	TITLE	APPROVED BUDGET FY 2021	ACTUALS Year to Date 2/19/2021	PROJECTIONS Fiscal Year End 2021	PROPOSED BUDGET FY 2022
EXPENDITURES					
Object 1:	Salary and Benefits	$806,845	$491,543	$747,214	$844,239
Object 2:	Services and Supplies				
5255100	Intra-County Professional	$45,000	$0	$5,000	$10,000
5255800	Legal Counsel	$74,622	$41,867	$74,000	$75,896
5255500	Consultant Services	$110,000	$14,654	$110,000	$150,000
5285700	Meal Claims	$750	$0	$100	$750
5220100	Insurance	$10,452	$10,452	$10,452	$8,500
5250100	Office Expenses	$10,000	$549	$5,000	$5,000
5270100	Rent & Lease	$46,254	$22,914	$46,254	$47,784
5255650	Data Processing Services	$20,267	$11,755	$20,267	$22,048
5225500	Commissioners' Fee	$10,000	$2,800	$7,000	$10,000
5260100	Publications and Legal Notices	$2,500	$0	$200	$1,000
5245100	Membership Dues	$12,000	$12,144	$12,144	$12,500
5250750	Printing and Reproduction	$1,500	$0	$1,000	$1,500
5285800	Business Travel	$12,000	$0	$0	$10,000
5285300	Private Automobile Mileage	$2,000	$7	$100	$1,000
5285200	Transportation&Travel (County Car Usage)	$605	$0	$100	$600
5281600	Overhead	$30,917	$15,459	$30,917	$49,173
5275200	Computer Hardware	$3,000	$0	$1,000	$3,000
5250800	Computer Software	$5,000	$3,508	$5,000	$5,000
5250250	Postage	$2,000	$109	$500	$1,000
5252100	Staff/Commissioner Training Programs	$2,000	$0	$1,000	$2,000
5701000	Reserves	$0	$0	$0	-$50,000
TOTAL EXPENDITURES		**$1,207,712**	**$627,761**	**$1,077,248**	**$1,210,990**
REVENUES					
4103400	Application Fees	$30,000	$1,367	$20,000	$30,000
4301100	Interest: Deposits and Investments	$6,000	$6,168	$10,000	$6,000
TOTAL REVENUE		**$36,000**	**$7,535**	**$30,000**	**$36,000**
3400150	**FUND BALANCE FROM PREVIOUS FY**	**$187,927**	**$352,123**	**$352,123**	**$288,660**
NET LAFCO OPERATING EXPENSES		**$983,785**	**$268,103**	**$695,125**	**$886,330**
3400800	**RESERVES Available**	**$250,000**	**$250,000**	**$250,000**	**$200,000**
COSTS TO AGENCIES					
5440200	County	$327,928	$327,928	$327,928	$295,443
4600100	Cities (San Jose 50% + Other Cities 50%)	$327,928	$327,928	$327,928	$295,443
4600100	Special Districts	$327,928	$327,928	$327,928	$295,443

ITEM # 7
Attachment E

LAFCO COST APPORTIONMENT: COUNTY, CITIES, SPECIAL DISTRICTS
Estimated Costs to Agencies Based on the Preliminary FY 2022 LAFCO Budget

	Preliminary Net Operating Expenses for FY 2022			**$886,330**
JURISDICTION	**REVENUE PER 2018/2019 REPORT**	**PERCENTAGE OF TOTAL REVENUE**	**ALLOCATION PERCENTAGES**	**ALLOCATED COSTS**
County	**N/A**	**N/A**	**33.3333333%**	**$295,443.33**
Cities Total Share			**33.3333333%**	**$295,443.33**
San Jose	N/A	N/A	50.0000000%	$147,721.67
Other cities share			50.0000000%	$147,721.66
Campbell	$64,536,222	1.7980522%		$2,656.11
Cupertino	$108,060,680	3.0106928%		$4,447.45
Gilroy	$125,345,516	3.4922679%		$5,158.84
Los Altos	$57,463,937	1.6010103%		$2,365.04
Los Altos Hills	$16,800,340	0.4680765%		$691.45
Los Gatos	$51,214,203	1.4268856%		$2,107.82
Milpitas	$216,026,300	6.0187372%		$8,890.98
Monte Sereno	$3,758,600	0.1047188%		$154.69
Morgan Hill	$110,550,245	3.0800549%		$4,549.91
Mountain View	$407,506,157	11.3535827%		$16,771.70
Palo Alto	$701,560,301	19.5462638%		$28,874.07
Santa Clara	$1,078,173,133	30.0391235%		$44,374.28
Saratoga	$34,095,585	0.9499416%		$1,403.27
Sunnyvale	$614,138,449	17.1105921%		$25,276.05
Total Cities (excluding San Jose)	**$3,589,229,668**	**100.0000000%**		**$147,721.66**
Total Cities (including San Jose)				**$295,443.33**
Special Districts Total Share		**(Fixed %)**	**33.3333333%**	**$295,443.34**
Aldercroft Heights County Water District		0.06233%		$184.15
Burbank Sanitary District		0.15593%		$460.68
Cupertino Sanitary District		2.64110%		$7,802.95
El Camino Healthcare District		4.90738%		$14,498.53
Guadalupe Coyote Resource Conservation District		0.04860%		$143.59
Lake Canyon Community Services District		0.02206%		$65.17
Lion's Gate Community Services District		0.22053%		$651.54
Loma Prieta Resource Conservation District		0.02020%		$59.68
Midpeninsula Regional Open Space District		5.76378%		$17,028.70
Purissima Hills Water District		1.35427%		$4,001.10
Rancho Rinconada Recreation and Park District		0.15988%		$472.35
San Martin County Water District		0.04431%		$130.91
Santa Clara Valley Open Space Authority		1.27051%		$3,753.64
Santa Clara Valley Water District		81.44126%		$240,612.80
Saratoga Cemetery District		0.32078%		$947.72
Saratoga Fire Protection District		1.52956%		$4,518.98
South Santa Clara Valley Memorial District		0.03752%		$110.85
Total Special Districts		100.00000%		**$295,443.34**
Total Allocated Costs				**$886,330.00**

RESOLUTION NO. 1329

RESOLUTION OF THE BOARD OF DIRECTORS OF THE CUPERTINO SANITARY DISTRICT CERTIFYING THE SEWER SYSTEM MANAGEMENT PLAN IS COMPLETE AND IN COMPLIANCE WITH THE STATEWIDE GENERAL WASTE DISCHARGE REQUIREMENTS WDR 2006-0003

WHEREAS, the Cupertino Sanitary District ("the District") is required by the Statewide General Waste Discharge Requirements 2006-0003 to prepare and implement a Sewer System Management Plan (SSMP); and

WHEREAS, the Board of Directors has reviewed the SSMP and has found it complete,

NOW, THEREFORE, BE IT RESOLVED, the Board of Directors of the Cupertino Sanitary District finds the SSMP for the Cupertino Sanitary District is complete and in compliance with the Waste Discharge Requirements 2006-0003.

_____

President, Cupertino Sanitary District

I hereby certify that the foregoing is a true and correct copy of a Resolution duly and regularly passed and adopted by the Board of Directors of the Cupertino Sanitary District at a meeting held on the 5th day of May 2021, by the following vote:

AYES:

NOES:

ABSTAIN:

ABSENT:

_____

Secretary, Cupertino Sanitary District

SEWER SYSTEM MANAGEMENT PLAN (SSMP)

CUPERTINO SANITARY DISTRICT

PREPARED BY:

MARK THOMAS

20863 STEVENS CREEK BOULEVARD, SUITE 100

Cupertino, California 95014

(408) 255-2137

Certified:

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EXECUTIVE SUMMARY

This Sewer System Management Plan (SSMP) has been prepared in compliance with the State Water Resources Control Board (SWRCB) Order 2006-0003: Statewide General Waste Discharge Requirements for Sanitary Sewer Systems (GWDR), as revised by Order No. WQ 2008-0002.EXEC on February 20, 2008. The GWDR prohibits sanitary sewer overflows (SSOs), requires reporting of SSOs using the statewide electronic reporting system, and requires the preparation of an SSMP.

The SWRCB has been working the past few years to develop a new State Waste Discharge Requirements (WDR) document and an administrative draft has been provided to stakeholders for review and comment. The current version of the draft document calls for changes to the format and content for Sewer System Management Plans. The new WDR will go through a review process through the summer and fall of 2021 and revisions to the draft language will be used to produce a new final WDR near the end of 2021.

Since the last SSMP for Cupertino Sanitary District was certified in May of 2016 the District is required to prepare and certify a revised SSMP every 5 years. As a result, this SSMP will be produced and certified in May of 2021 based upon the requirements of the Statewide GWDR as revised by Order No. WQ 2008-0002.EXEC on February 20, 2008. In anticipation of the new requirements that are being proposed by the SWRCB and the District staff involvement with the California Association of Sanitation Agencies (CASA) Collections Systems Workgroup (CWG), the District decided in 2020 to begin work on long lead-time activities that will improve the resilience of the sewer system.

Early in 2020, the District began work on a risk based prioritization project using the District's Arc-GIS Computerized Utility Mapping System, the XPSWMM hydraulic model, and the Lucity Computerized Maintenance Management System (CMMS). The risk-based decision project allows the District to score all of its sewer and pump station assets in accordance with likelihood and consequence of failure. The resultant scoring will enable the District to focus their capital dollars and O&M activities to the highest risk assets which will reduce risks of sewer spills and achieve a more resilient sewer system.

The determination of repair priority for long term CIP projects takes into consideration all the various factors affecting the likelihood and consequence of failure of sewer pipelines and pump stations. The District developed a risk-based prioritization model (Risk Model) to provide a more objective approach to CIP project prioritization and help aid in developing its 5-Year and 10-Year CIP rehabilitation project plans. It should be noted that the development of a CIP project and its prioritization does not solely rely upon the results of the Risk Model, but it also takes into consideration other significant factors such as project timing, budget allocation, resource availability, coordination with municipal projects, etc.

The Risk Model developed is based on guidelines recommended by the National Association of Clean Water Agencies (NACWA) in their publication "Implementing Asset Management: A Practical Guide". In summary, the Risk Model quantifies risk as a product of the Consequence of Failure (COF) and Likelihood of Failure (LOF). The COF parameters reflect failure impacts to

the community and environment, while LOF parameters reflect system conditions that affect failure or degree of failure.

DOCUMENT VERSION CONTROL

This Sewer System Management Plan (SSMP) is a living document that will change over time. This version control sheet is intended to keep track of the copies of the SSMP that have been assigned to District Staff. Please contact Robert Woodhouse prior to making copies for use by others, initiating changes, or for information regarding the current version of this document.

SSMP Copy Number: _____

This copy assigned to: _____ Telephone No.: _____

SSMP Section	Original Version Certified Date	Previous Version Date	Current Version Date
Introduction			
1. Goals	May 2016	May 2018	May 2021
2. Organization	May 2016	May 2020	May 2021
3. Legal Authority	May 2016	May 2018	May 2021
4. O&M Program	May 2016	May 2018	May 2021
5. Design and Performance Provisions	May 2016	May 2018	May 2021
6. Overflow Emergency Response Plan	May 2016	May 2020	May 2021
7. FOG Control Plan	May 2016	May 2018	May 2021
8. System Evaluation and Capacity Assurance Plan	May 2016	May 2018	May 2021
9. Monitoring, Measurement, and Program Modifications	May 2016	May 2018	May 2021
10. SSMP Program Audit	May 2016	May 2020	May 2021
11. Communications Plan	May 2016	May 2018	May 2021

INTRODUCTION

This Sewer System Management Plan (SSMP) has been prepared in compliance with the State Water Resources Control Board (SWRCB) Order 2006-0003: Statewide General Waste Discharge Requirements for Sanitary Sewer Systems (GWDR), as revised by Order No. WQ 2008-0002.EXEC on February 20, 2008. The GWDR prohibits sanitary sewer overflows (SSOs), requires reporting of SSOs using the statewide electronic reporting system, and requires the preparation of an SSMP.

This document has been prepared with the awareness that the District is one of a number of stakeholder agencies within a local watershed area of Santa Clara County each accountable by permit to the State Water Resources Control Board under the Clean Water Act. These stakeholders include:

- San Jose/Santa Clara Regional Wastewater Facility, Department of Environmental Services
- Santa Clara Valley Water District
- Cities of Cupertino, Saratoga, Sunnyvale, Santa Clara, Los Altos and San Jose
- Santa Clara County Roads and Airports and Public Works Departments

Other stakeholders include the Santa Clara County Environmental Services Department and several privately organized environmental groups.

This SSMP includes the elements required by both the SWRCB and RWQCB and is organized following the SWRCB outline. Both SWRCB and RWQCB requirements are addressed in each element. Each requirement is shown as stated in the SSO-WDR and the RWQCB SSMP Development Guide.

BACKGROUND INFORMATION

Cupertino Sanitary District (CuSD) is a separate governmental entity established as a special district of the State of California. Being an independent special district, the District has a Board of Directors elected from the constituency within its Service Area Boundary. The District was formed on December 28, 1953 as County Sanitation District 07 and was reorganized on April 30, 1956 as the Cupertino Sanitary District. The District provides sewer services for the residents of areas within the Cities of Cupertino, Los Altos and Saratoga and unincorporated areas within the spheres of influence. The District contracts with the San Jose-Santa Clara Regional Wastewater Facility for wastewater treatment and disposal.

The District lies within the watershed basins of Stevens Creek, a habitat of steelhead trout, and Calabasas Creek both of which lead to San Francisco Bay. Tributaries to Calabasas Creek are seasonal creeks which include Rodeo Creek and Regnart Creek.

The District provides sewage collection, treatment and disposal services for an area comprising approximately 13.1 Square Miles with a population of over 59,000 residents and 22,000 homes and businesses. The District owns and manages more than one million lineal feet of sewer mains, 500,000 lineal feet of sewer laterals and seventeen pump stations. The wastewater collected from

all areas is conveyed to the San Jose/Santa Clara Regional Wastewater Facility through mains and interceptor lines shared with both the Cities of San Jose and Santa Clara in accordance with the joint use agreement.

REQUIRED ELEMENTS OF AN SSMP

The required elements of an SSMP include:

- Collection System Management Goals
- Organization of Personnel, including Chain of Command and Communication
- Fats, Oils and Grease Control Plan
- Legal Authority for permitting flows in the system, inflow/infiltration control as well as enforcement of proper design, installation, testing standards and inspection requirements for new and rehabilitated sewers
- Measures and activities to maintain the wastewater collection system
- Design and Construction Standards
- Overflow Emergency Response Plan
- Capacity Management
- Monitoring, Measurement and Program Modifications
- Periodic SSMP audits and implementation of program improvements
- Communication Programs

DEFINITIONS, ACRONYMS, AND ABBREVIATIONS

Best Management Practices (BMP) – Refers to the procedures employed in commercial kitchens to minimize the quantity of grease that is discharged to the sanitary sewer system. Examples include scraping food scraps into the garbage can and dry wiping dishes and utensils prior to washing.

Cupertino Sanitary District (CuSD) – Refers to special sanitary district established under the Sanitary District Act of 1923.

California Office of Emergency Services (Cal OES) – Refers to the agency responsible for overseeing and coordinating emergency preparedness, response, recovery and homeland security activities within the state. The agency was created in 2008, superseding both the Office of Emergency Services (OES) and Office of Homeland Security (OHS).

Calendar Year (CY) – January 1st to December 31st.

California Department of Fish and Wildlife (CDFW) – Refers to the State agency responsible for overseeing fish and wildlife protection and services in the State of California.

California Integrated Water Quality System (CIWQS) – Refers to the State Water Resources Control Board online electronic reporting system that is used to report SSOs, certify completion of the SSMP, and provide information on the sanitary sewer system.

California Association of Sanitation Agencies (CASA) – Refers to an association of local agencies engaged in advancing the wastewater disposal system/technology and the recycling of wastewater into usable water, generation of renewable energy, and other valuable resources.

California Water Environmental Association (CWEA) – Refers to an association of local agencies engaged in protecting waters of United States.

Capital Improvement Program (CIP) – Refers to the document that identifies planned capital improvements to the District's sanitary sewer system.

Certification of SSO Reports – The SWRCB requires the Legally Responsible Official (LRO, defined below) to log in to CIWQS within a given time period to electronically sign submitted reports thereby stating that to the best of his/her knowledge and belief, the information submitted is true, accurate, and complete.

Closed Circuit Television (CCTV) – Refers to the process and equipment that is used to internally inspect the condition of gravity sewers.

County Health – Refers to the Santa Clara County Public Health Department.

Environmental Protection Agency (U.S. EPA) – Refers to the United States Environmental Protection Agency.

Fats, Oils, and Grease (FOG) – Refers to fats, oils, and grease typically associated with food preparation and cooking activities that can cause blockages in the sanitary sewer system.

First Responder – Refers to the District employee who provides the District's initial response to a sewer system alarm, emergency, or other event.

Field Report – Refers to the Sanitary Sewer Overflow Report, a document used to provide the basis for entering an overflow report into CIWQS.

Fiscal Year (FY) – Refers to July 1st to June 30th of each year.

Gallons per Acre per Day (gpad) – Refers to measurement of volume per acre.

Gallons per Day (gpd) – Refers to measurement of volume per day.

Gallons per Minute (gpm) – Refers to measurement of volume per minute.

General Waste Discharge Requirements (GWDR) – Refers to the State Water Resources Control Board Order No. 2006-0003, Statewide General Waste Discharge Requirements for Sanitary Sewer Systems, dated May 2, 2006, as revised on February 20, 2008.

Geographic Information System (GIS) – Refers to the District's system that it uses to capture, store, analyze, and manage geospatial data associated with the District's sanitary sewer system assets.

Global Positioning System (GPS) – Refers to the handheld unit used to determine the longitude and latitude of sanitary sewer overflows for use in meeting the CIWQS Online SSO Reporting

System reporting requirements. Google maps can be used in lieu of a GPS unit to obtain this information.

***Grease Removal/Pretreatment Devices (GRD*) –** Piece of equipment connected to the sewer line close to the source of FOG (fats, oils and grease) being discharged. It is made up of a baffle system inside intended to slow the discharge long enough for the FOG to separate from the gray water (retention time). The FOG floats to the top of the reservoir inside the device, gray water flows through the sewer system and food particles drop to the bottom of the reservoir.

House Connection Sewer (Upper Lateral) – Refers to that portion of the horizontal sewer piping from the building or structure to the property line of the public right of way or easement.

Infiltration/Inflow (I/I) – Refers to water that enters the sanitary sewer system from storm water and groundwater that increases the quantity of flow. Infiltration enters through defects in the sanitary sewer system after flowing through the soil. Inflow enters the sanitary sewer system without flowing through the soil. Typical points of inflow are holes in manhole lids and direct connections to the sanitary sewer (e.g. storm drains, area drains, and roof leaders).

Legally Responsible Official (LRO) – Refers to the individual who has the authority to certify reports and other actions that are submitted through the Online SSO Reporting System.

Manhole (MH) – Refers to an engineered structure that is intended to provide access to a sanitary sewer for maintenance and inspection.

Millions of Gallons per Day (MGD) – Refers to measurement of volume in million gallons per day.

Monitoring, Measurement, and Program Modification (MMPM) – Refers to methods used in field for sewer overflows.

National Pollutant Discharge Elimination System (NPDES) – Refers to State of California permit for point and non-point source discharges.

Non-Federal Waters - Not Applicable (NA) – Refers to abbreviation used (NA) when something does not apply.

Notification of a SSO – Refers to the time at which the District becomes aware of a SSO event through observation or notification from the public or other source.

Office of Emergency Services (OES) – See California Emergency Management Agency.

Online SSO Reporting System – Refers to the California Integrated Water Quality System (CIWQS).

Operations and Maintenance (O&M) – Refers generally to annual operations and maintenance activities of the sanitary sewer system.

Overflow Emergency Response Plan (OERP) – Refers to established plan of the District in response to an emergency.

Preventive Maintenance (PM) – Refers to the maintenance activities intended to prevent failures of the sanitary sewer system facilities (e.g. cleaning, CCTV, inspections).

Private Lateral Sewage Discharges (PLSD)– Sewage discharges that are caused by blockages or other problems within a privately owned sewer service lateral.

Property Damage Overflow – Property damage overflow refers to a sewer overflow or backup that damages private property.

Public Sewer – As stated in the District Operations Code, this refers to any mainline sewer constructed in any street, highway, alley, place or right of way dedicated for public use.

Regional Water Board – Refers to the San Francisco Bay Regional Water Quality Control Board – Region 2.

Regional Water Quality Control Board (RWQCB) – Refers to the San Francisco Bay Regional Water Quality Control Board – Region 2 and Regional Water Board.

Sanitary Sewer Overflow (SSO) – Any overflow, spill, release, discharge or diversion of untreated or partially treated wastewater from a sanitary sewer system. SSOs include:

- Overflows or release of untreated or partially treated wastewater that reach waters of the United States;
- Overflows or release of untreated or partially treated wastewater that do not reach waters of the United States; and
- Wastewater backups into buildings and on private property that are caused by blockages or flow conditions within the publicly owned portion of a sanitary sewer system.

Sanitary Sewer System – Refers to the portion of the sanitary sewer facilities that are owned and operated by Cupertino Sanitary District. The sanitary sewer system consists of collection sewers and trunk sewers.

Sensitive Area – Refers to areas where a SSO could result in a fish kill or pose an imminent or substantial danger to human health (e.g. parks, aquatic habitats, etc.).

Sewer Service Lateral – For the purposes of this SSMP, the sewer service lateral includes both the upper lateral (house connection sewer) and the lower lateral (sewer lateral).

Sewer Lateral (Lower Lateral) – Refers to the portion of the pipe from upper lateral (house connection sewer) to the sewer main, including the connection to the sewer main. The property owner is responsible for repairing any failure or damage in the upper sewer lateral. District is responsible for repairs, including the connection to the sewer main; unless it is determined that another party caused the failure or damage of the sewer lateral (Lower Lateral).

Sewer System Management Plan (SSMP) – Refers to State mandated program for sewer management.

Santa Clara County Public Health Department (County Health) – Refers to Santa Clara County Health Department.

Standard Operating Procedures (SOP) – Refers to written procedures that pertain to specific activities employed in the operation and maintenance of the sanitary sewer system.

State Water Resource Control Board (SWRCB) – Refers to the California Environmental Protection Agency (Cal/EPA) State Water Resources Control Board and staff responsible for protecting the State's water resources.

Surface Waters – See Waters of the State

System Evaluation and Capacity Assurance Plan (SECAP) – Refers to methods employed to assure adequate available capacity.

Trunk Sewer or Main Interceptor System – The terms trunk sewer, gravity trunk line, and main interceptor sewer are used interchangeably to refer to the main branches of the sanitary sewer system, which carry flows from the collector sewers to the treatment plant.

Volume Captured – The amount of spilled sewage that is returned to the sanitary sewer system. When recording the volume that is captured, the volume of water used for flushing and/or cleaning should not be included.

Water Body – A water body is any stream, creek, river, pond, impoundment, lagoon, wetland, or bay.

Waters of the State – Waters of the State (or waters of the United States) means any water, surface or underground, including saline waters, within the boundaries of California. In case of a sewage spill, storm drains are considered to be waters of the State unless the sewage is completely contained and returned to the sanitary sewer system and that portion of the storm drain is cleaned.

Work Order (WO) – Refers to the document (paper or electronic) that is used to assign work and to record the results of the completed work.

ELEMENT 1 – GOALS

SWRCB REQUIREMENTS:

The goal of the Sewer System Management Plan (SSMP) is to provide a plan and schedule to properly manage, operate, and maintain all parts of the sanitary sewer system. This will help reduce and prevent SSOs, as well as mitigate any SSOs that do occur.

RWQCB REQUIREMENTS:

Each wastewater collection system agency shall, at a minimum, develop goals for the Sewer System Management Plan as follows:

- *To properly manage, operate, and maintain all parts of the wastewater collection system*
- *To provide adequate capacity to convey peak flows*
- *To minimize the frequency of SSOs*
- *To mitigate the impact of SSOs*

The purpose of the SSMP is to provide guidance to the District in the operation, management and maintenance of its sewer collection system in order to comply with the SWRCB Order No. 2006-003 DWQ and RWQCB requirements outlined in the Sewer System Management Plan Development Guide. The District is charged with the responsibility of collection of sewage waste within its service boundaries and conveyance to the San Jose/Santa Clara Water Pollution Control Plant. The District's goal is to carry out maintenance and operation of the sewer collection system with no adverse impact to the public health or environment.

The provisions of the SSMP were developed and updated to ensure that the District is able to meet its goals by:

- Implementing a collection system maintenance program to minimize the frequency of sanitary sewer overflows.
- Responding to sanitary sewer overflows quickly and mitigating the impact of the SSO.
- Mitigating the impact of sewer overflows that do occur as well as follow up investigations to identify the cause of the overflow event and using that information to either adjust the maintenance schedule or schedule a repair/replacement.
- Properly managing, operating and maintaining all elements of the wastewater collection system to better allocate resources and manpower.
- Cost effectively minimizing infiltration/inflow (I/I) and analyzing the existing capacity and developing a plan to provide adequate capacity for future development and to convey peak dry weather flows.
- Developing and maintaining design construction standards and specifications for the installation and repair of the collection system and its associated infrastructure.
- Maintaining comprehensive and up-to-date maps of wastewater collection system.

- Coordinating with the City of San Jose and Santa Clara County to maintain storm water maps.
- Providing training on a regular basis for staff in collection system maintenance and operations.
- Encouraging and supporting participation in the quarterly meetings with the neighboring collection system agencies and the partners to the wastewater treatment plant.
- Maintaining Fats, Oils, and Grease (FOG) program to limit fats, oils, and grease, and other debris that may cause blockages in the sewage collection system.
- Developing a closed-circuit televising (CCTV) program for the collection system.

The District has implemented policies and procedures for the systematic inspection and continued maintenance of its infrastructure and engages contracted, competent, trained personnel to carry out the scheduled tasks. The District personnel and contractors are utilizing the procedural training available through organizations such as California Association of Sanitation Agencies (CASA) and California Water Environment Association (CWEA).

ELEMENT 2 – ORGANIZATION

SWRCB REQUIREMENTS:

The Sewer System Management Plan (SSMP) must identify:

- *The name of the responsible or authorized representative as described in Section J of this order.*
- *The names and telephone numbers for management, administrative, and maintenance positions responsible for implementing specific measures in the SSMP program. The SSMP must identify lines of authority through an organization chart or similar document with a narrative explanation; and*
- *The chain of communication for reporting SSOs, from receipt of a complaint or other information, including the person responsible for reporting SSOs to the Health and Regional Water Board and other agencies if applicable (such as County Health Officer, County Environmental Health Agency, Regional Water Board, and/or Cal EMA).*

RWQCB REQUIREMENTS:

Each wastewater collection system agency shall, at a minimum, provide the following information regarding organization:

- *Identify agency staff responsible for implementing, managing, and updating the SSMP*
- *Identify chain of communication for responding to SSOs*
- *Identify chain of communication for reporting SSOs*

The District Organization Chart is attached and indicates the chain of responsibility for the management, operation and maintenance of the District's collection system. District contracts its management, engineering and operation with Mark Thomas and Company Inc.

The RWQCB requires certification by an LRO. District policy is to have one LRO review and determine that the SSMP is "ready for certification.". The second LRO then certifies the SSMP. Persons responsible are:

Benjamin Porter, District Manager-Engineer (408) 497-3933

Robert Woodhouse, Deputy District Manager (408) 315-1896

Frank Quach, Operations Manager/Project Manager (510) 299-0917

CHAIN OF COMMUNICATION FOR REPORTING SSO'S:

- Cupertino Sanitary District (408) 253-7071; after business hours/holidays (408) 299-2507 receives call of SSO from the public or other agency.
- First Responder dispatched to spill site requests. Response Crew to meet at scene.
- SSO report form completed by First Responder with GPS Coordinates to define location.

- Category 1 spill: one of the above staff will be at the site.
- SSO form forwarded to Benjamin Porter/Robert Woodhouse.
- Frank Quach or designated staff inputs SSO data into statewide SSO database via CIWQS website.
- Benjamin Porter or Robert Woodhouse will review input data and get ready to certify.
- Benjamin Porter or Robert Woodhouse will review the "ready to certify" report and certify the report.

AUTHORIZED REPRESENTATIVE

The District's Authorized Representatives in all sanitary sewer system matters are Benjamin Porter (District Manager-Engineer), Robert Woodhouse (Deputy District Manager) and Frank Quach (Operations Manager). Porter, Woodhouse, and Quach are authorized to submit verbal, electronic, and written spill reports to the RWQCB, SWRCB, County Health, and Cal OES. Benjamin Porter and Robert Woodhouse are the District's designated Legally Responsible Officials (LROs) and are authorized to certify electronic spill reports submitted to the SWRCB.

RESPONSIBILITY FOR SSMP IMPLEMENTATION

Robert Woodhouse is responsible for developing, implementing, and maintaining all elements of the District's SSMP.

DISTRICT ORGANIZATION

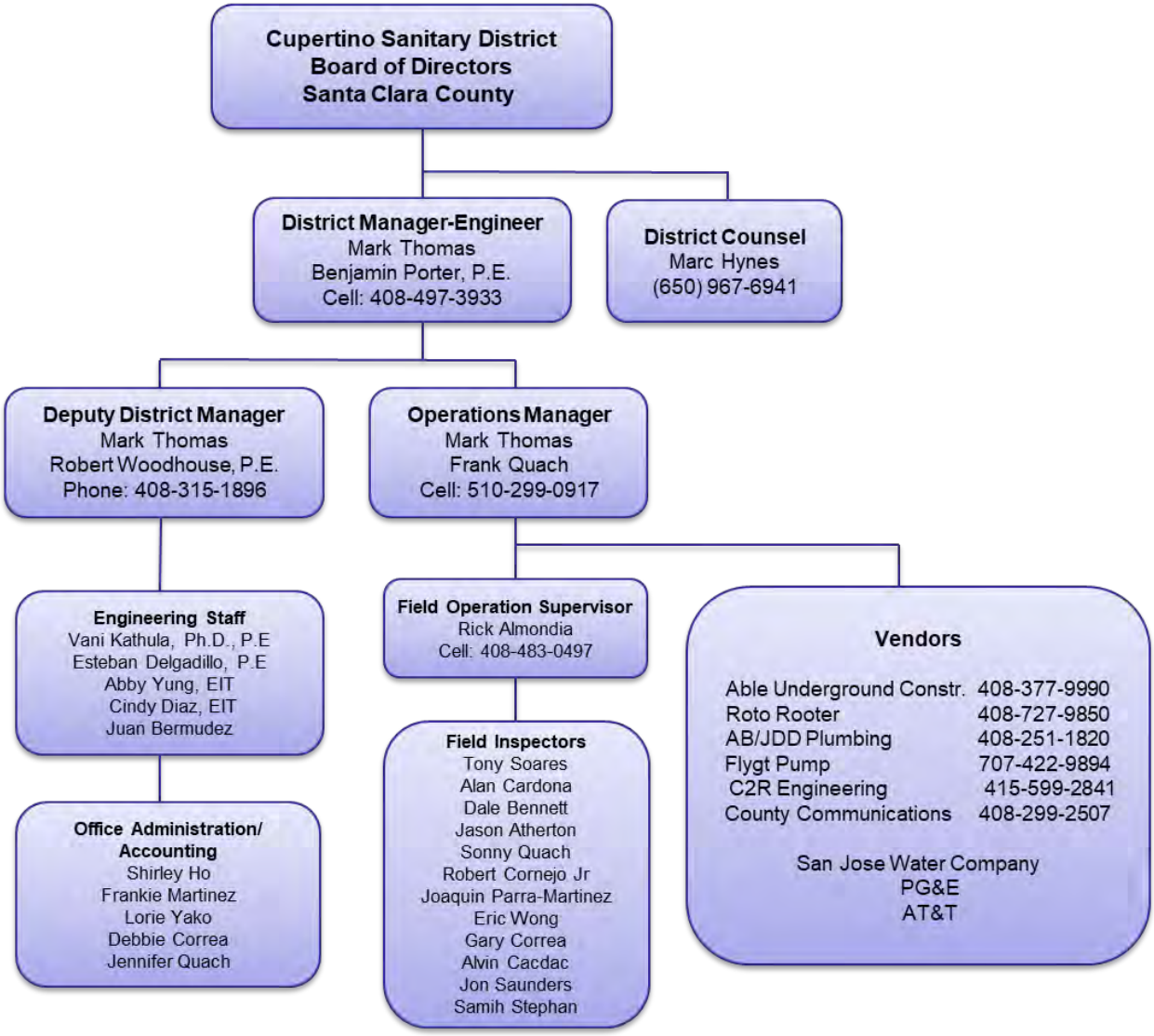


Figure 1: CuSD Organization Chart

ELEMENT 3 – LEGAL AUTHORITY

SWRCB REQUIREMENTS:

Each enrollee must demonstrate, through sanitary sewer system use ordinances, service agreements, or other legally binding procedures, that it possesses the necessary legal authority to:

- *Prevent illicit discharges into its sanitary sewer system (examples may include I/I, storm water, chemical dumping, unauthorized debris and cut roots, etc.);*
- *Require that sewers and connections be properly designed and constructed;*
- *Ensure access for maintenance, inspection, or repairs for portions of the lateral owned or maintained by the Public Agency;*
- *Limit the discharge of fats, oils, and grease and other debris that may cause blockages; and*
- *Enforce any violation of its sewer ordinances.*

RWQCB REQUIREMENTS:

Each wastewater collection system agency shall, at a minimum, describe its legal authority through sewer use ordinances, service agreements, or other legally binding procedures to:

- *Control infiltration/inflow (I/I) from satellite wastewater collection systems and laterals.*
- *Require proper design and construction of new and rehabilitated sewers and connections.*
- *Require proper installation, testing, and inspection of new and rehabilitated sewers.*

The powers of and the execution of Legal Authority provided by and through the governing body of the Cupertino Sanitary District (District) and directed by the District Manager-Engineer, for sewer use, services, construction, permits and procedures are applicable to all industrial, business or residential entities and are cited in the District Operations Code, adopted March 12, 2016 and as amended.

The following procedures are established as a means of enforcement of the terms and conditions of this Code or any other ordinances, rules and regulations, and not as a penalty. The Government Code of the State of California, Health and Safety Code of the State of California, Code of Federal Regulations, City Health Department, County Health Department, Environmental Protection Agency, Civil Code of the State of California, County of Santa Clara, NPDES, Plumbing and Electrical Codes are referenced within the District's Operations Code.

The primary responsibility for enforcement of the provisions of this Code is vested in the District Manager-Engineer or District agents as designated, field inspectors or other representatives of the District and the San Jose/Santa Clara Regional Wastewater Facility authorized to act on behalf of the District Manager-Engineer, having the power to inspect and issue notices for violations.

The specific purpose of the Cupertino Sanitary District Operations Code as it relates to this Sewer System Management Plan is to:

1. Prevent illicit discharges into its wastewater collection system and limit the discharge of fats, oils, and grease (FOG) and other debris that may cause blockages:
    A. FOG Inspection & Record Keeping
    B. Grease Control Devices
    C. Illegal Discharges, Protection from Accidental Discharge and Federal Pretreatment Regulations
    D. Wastewater Discharge Permits and Fees
    E. Enforcement
2. Require that construction design for new and rehabilitated sewers and connections are properly designed and constructed.
3. Require proper installation, inspection and testing of new and rehabilitated sewers and connections.
4. Maintenance and use of sewers

ELEMENT 4 – OPERATIONS AND MAINTENANCE

SWRCB REQUIREMENTS:

The Sewer System Management Plan (SSMP) must include those elements listed below that are appropriate and applicable to the enrollee's system:

- *Maintain an up-to-date map of the sanitary sewer system, showing all gravity line segments and manholes, pumping facilities, pressure pipes, and applicable stormwater conveyance facilities;*
- *Describe routine preventive operation and maintenance activities by staff and contractors, including a system for scheduling regular maintenance and cleaning of sanitary sewer system with more frequent cleaning and maintenance targeted at known problem areas. The Preventive Maintenance (PM) program should have a system to document scheduled and conducted activities, such as work orders;*
- *Develop a rehabilitation and replacement plan to identify and prioritize system deficiencies and implement short-term and long-term rehabilitation actions to address each deficiency. The program should include regular visual and TV inspections of manholes and sewer pipes, and a system of ranking the condition of the sewer pipes and scheduling rehabilitation. Rehabilitation and replacement should focus on sewer pipes that are at risk of collapse or prone to more frequent blockages due to pipe defects. Finally, the rehabilitation and replacement plan should include a capital improvement plan that addresses proper management and protection of the infrastructure assets. The plan shall include a time schedule for implementing the short- and long-term plans plus a schedule for developing the funds needed for the capital improvement plan;*
- *Provide training on a regular basis for staff in sanitary sewer system operations and maintenance, and require contractors to be appropriately trained; and*
- *Provide equipment and replacement part inventories, including identification of critical replacement parts.*

RWQCB REQUIREMENTS:

<u>Collection System Map</u> – Each wastewater collection system agency shall maintain up-to-date maps of its wastewater collection system facilities.

<u>Resources and Budget</u> – Each wastewater collection system agency shall allocate adequate resources for the operation, maintenance, and repair of its collection system.

<u>Prioritized Preventive Maintenance</u> – Each wastewater collection system agency shall prioritize its preventive maintenance activities.

<u>Scheduled Inspections and Condition Assessment</u> – Each wastewater collection system agency shall identify and prioritize structural deficiencies and implement a program of prioritized short-term and long-term actions to address them.

<u>Contingency Equipment and Replacement Inventories</u> – Each wastewater collection system agency shall provide contingency equipment to handle emergencies, and spare/replacement parts intended to minimize equipment/facility downtime.

<u>Training</u> – Each wastewater collection system agency shall provide training on a regular basis for its staff in collection system operations, maintenance, and monitoring.

<u>Outreach to Plumbers and Building Contractors</u> – Implement an outreach program to educate commercial entities involved in sewer construction or maintenance about the proper practices for preventing blockages in private laterals. This requirement can be met by participating in a region-wide outreach program.

OPERATIONS AND MAINTENANCE ACTIVITIES

The District's Operation and Maintenance Program is essential to fulfill the District's mission to serve the customers within its service area while reducing the occurrence of SSOs and mitigating their impact. The District's sewage flows are collected by approximately 290 miles of sewer mains and service laterals and then transmitted through joint use mains, interceptors and trunk lines by contractual agreement with the Cities of Santa Clara and San Jose to their Regional Water Pollution Control Plant for treatment and disposal.

Costs of wastewater treatment and disposal are based upon the terms of a Master Agreement between the Cities of San Jose and Santa Clara, owners of the Water Pollution Control Plant, and Cupertino Sanitary District, dated March 1, 1983. The Master Agreement provides for treatment capacity rights and a proportionate shared ownership interest in the treatment plant and appurtenant lands. The Master Agreement was first amended December 17, 1985 to reapportion tributary capacities due to increased total capacity of the treatment plant. A second amendment to the agreement was entered into December 4, 1995 responding to State imposed limits of treated flows into the bay, establishing a water reclamation program to reuse the excess treated flows and establishing basis of determining the proportionate share of the tributary agencies for the obligation bonds raised by the cities for the construction and expansion of the treatment facility to satisfy state and federal permit requirements.

The District's management is provided by contractual agreement with Mark Thomas & Company Inc., a private consultant responsible for day-to-day administration and oversight of the District's facilities and operations. Repairs and maintenance activities are provided as scheduled or needed with outside contractors and overseen by Mark Thomas and Company field inspection personnel.

Outside Contractors providing routine maintenance and emergency response services are required by the District's Operations Code to be registered annually with the District providing evidence of current insurance coverage in force at the limits set forth by the District. In addition, current workman's compensation insurance coverage must be verified prior to authorization for a contractor to perform District work in the public right of way. The contractors must also demonstrate professionalism and competency to carry out the assigned tasks of maintenance and repairs of the District's facilities. A contractor's safety record is considered as well as observed safe practices and quality workmanship performance.

Maintenance activities are overseen by District staff and findings of existing condition of sewer mains are logged and evaluated on a priority of needed service or repair. Maintenance services range from increased frequency of cleaning to video inspection to determine extent of needed spot repairs or eventual replacement of a significant section of sewer main if the defects are impacting the level of service. Mains found to be significantly in disrepair or undersized are placed on a prioritized list on the District's Capital Improvement Program to be rehabilitated by pipe lining, or replacement by pipe-bursting or open-cut construction to increase capacity, eliminate sources of I & I and/or improve the

reliability of the system. The major elements of the District's Operation and Maintenance Program are:

1. Collection System Mapping and Computerized Sewer Management System
2. Description of Existing Facilities
3. Annual Routine Maintenance
4. Rehabilitation and Replacement Plan
5. Capital Improvement Program
6. Staff Training and Certification
7. Maintenance Equipment

COLLECTION SYSTEM MAPPING AND COMPUTERIZED MANAGEMENT SYSTEM

The District's primary collection system mapping is a computerized geographical information system using the Arc-GIS Computerized Utility Mapping System which includes the following information:

- All Sewer Mains and laterals within the District
- The District's Boundary
- Manhole Designations
- County Assessor Maps
- Records of Permitted Accessory Dwelling Units (ADUs)
- As-Built Information
- District's CCTV Progress Map
- Pump Stations and Pump Zones
- District Pipe Condition Assessment Map
- SSO Historical Map
- Maintenance Record and Zoning
- Pump Stations details and Zoning
- Waterways

Storm Sewer Maps - The City of Cupertino also utilizes Arc-GIS for the storm sewer base map for the City of Cupertino. The storm sewer base map from the City of Saratoga has not been made available to the District at this time.

Detailed Maps – The District is utilizing Automated Computer Assisted Drafting (AutoCaD) to design and Trimble Geo 7X handheld Global Position System (GPS) to calculate position and mapping out the data collected from the field. This information is integrated with the District Lucity and Arc-GIS System, and can import and store District GIS data, assets and attributes.

Computerized Maintenance Management System (CMMS) – The District is utilizing **Lucity Software** to plan, and schedule sewer inspection activities, to record completed work, track customer complaints, and sewer overflow activities and for managing and prioritizing District's maintenance operations. This maintenance information is transferred to the Arc-GIS system. The District also uses GraniteNet for CCTV inspection data and transfers the CCTV data, videos and photos logs into Lucity software and keeps an up-to-date database that is readily accessible.

Computerized CCTV Program – The District is utilizing GraniteNet Software to perform pipeline condition assessment for all sewer mains within the District for gravity mains, which follows the Certification Program (PACP) developed by National Association of Sewer Service Companies (NASSCO).

Computerized Modelling Program – The District is utilizing SWMM-XP Software for the hydraulic modeling of all sewer mains within the District for gravity mains.

Computerized SCADA System for Pump Stations – The District is utilizing a Xylem Multitrode SCADA and Pump View to monitor and track all pump stations (see Figure 2). This SCADA system provides 24/7 immediate text notification to management, supervisors, key staff and on-call staff in the event of a system malfunction high flow issue or power outage.

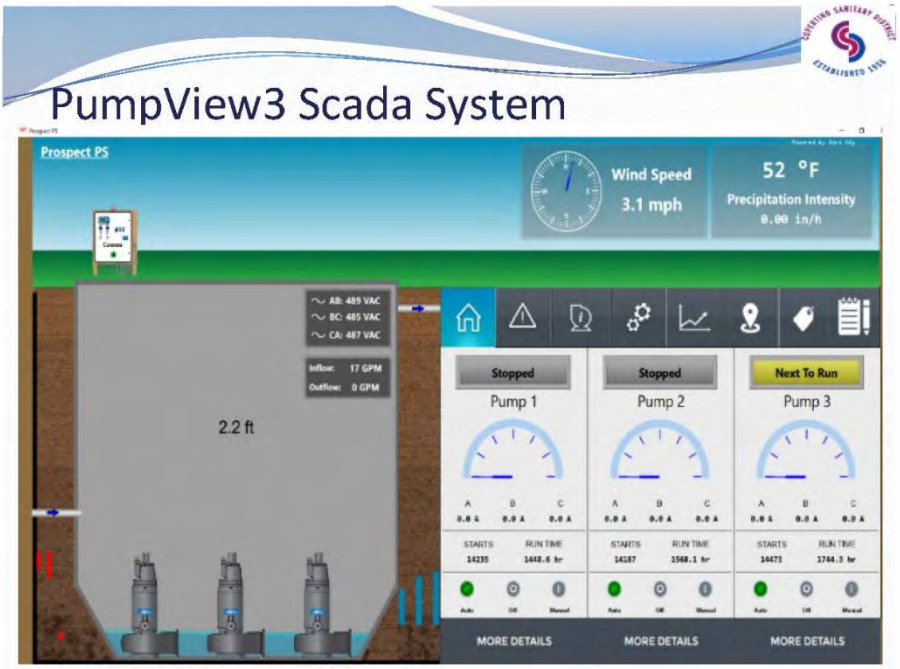


Figure 2: Sample View of SCADA User Interface

CCTV Camera - The District is utilizing a Computerized OZ III Built-In Sonde Camera from (Q CUES) with a self-leveling head that pans, tilts, and rotates for easy identification of defects along junctions and around manholes. The unit can accurately pinpoint the location of any defect, root intrusions, or FOG build up precisely from above, through dirt, and pavement.

Smart Cover Manholes – District is utilizing a Smart Cover Systems which provides a 24/7 early warning flow monitoring system throughout the District's service area (See Figure 3). Installation locations are chosen based on historic problematic issues or close proximities to Creek. The smart

cover software provides 24/7 immediate text notifications to communicate with management, key staff, and On-Call staff (See Figure 4). The primary fuction of the Smart Cover System is the prevention of SSOs. Through an advanced of alarming and notification capabilities of this Smart Cover System, District's inspectors able to monitor and response quick to resolve blockages within the short period of time prior to an SSO occurring. The other benefit of the Smart Cover System is data collection to provide the District engineering staff with hydraulic level information pertaining to the District's collection system at locations where the smart covers are installed.

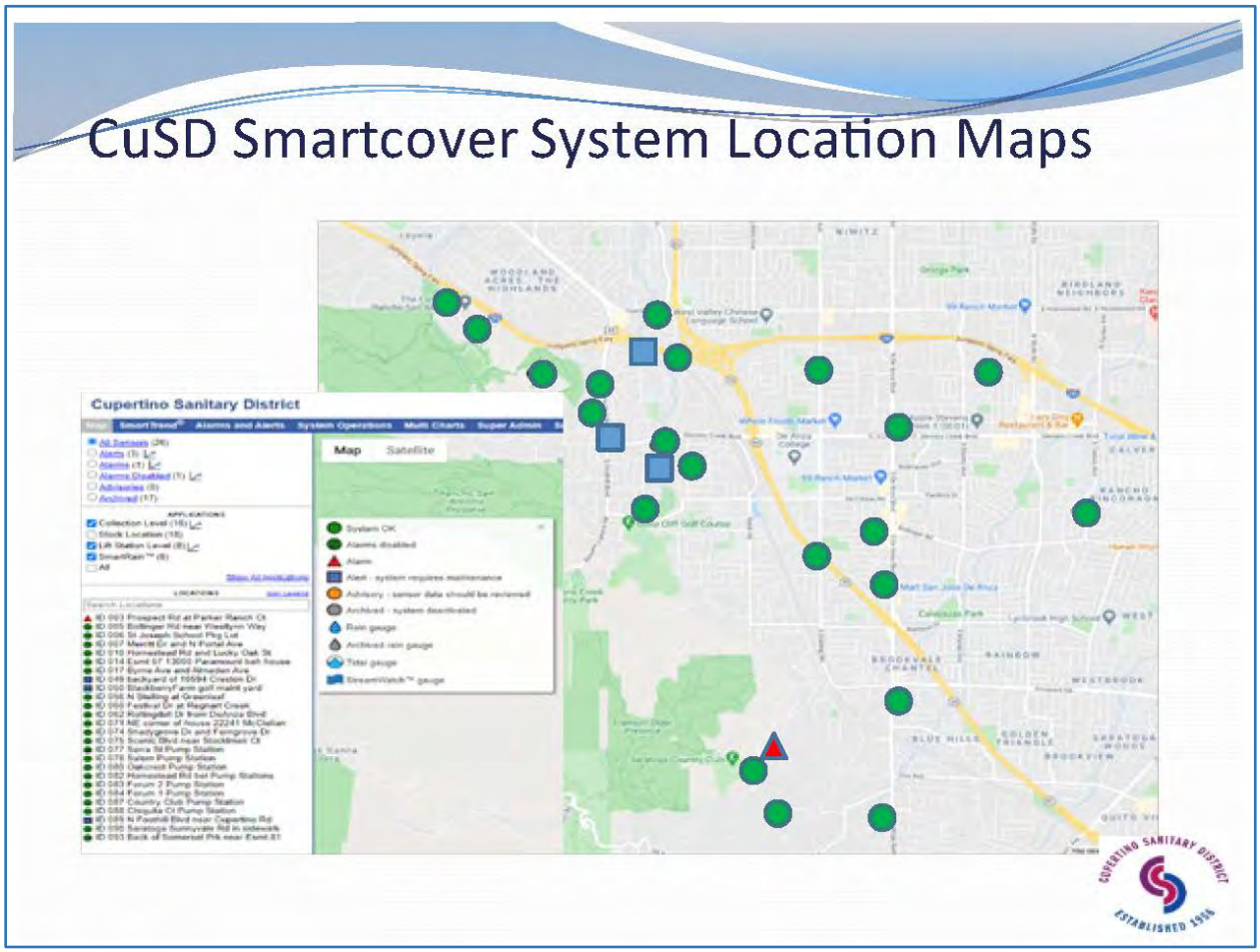


Figure 3: Smartcover Locations

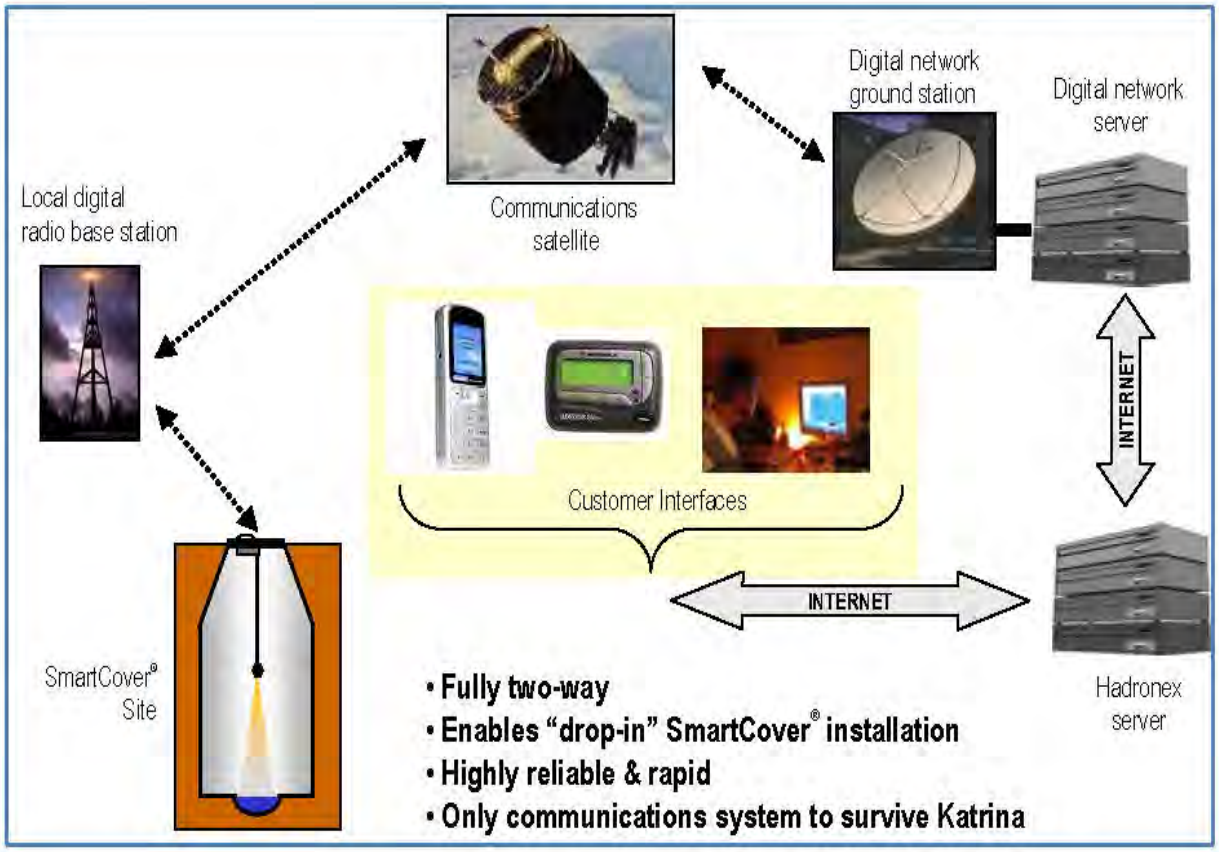


Figure 4: Smartcover Communications

Cupertino Sanitation District Location and Service Area Map - The District provides wastewater collection services to its residential, commercial establishments, and institutional customers. Figure 5 shows the map of the District's boundary showing its service area, the sewer mains, lower laterals, and pump stations. Figure 6 shows the map of the District's sewer basin boundaries by basin number. Figure 7 shows the map of the District's pump stations and pump station zones.

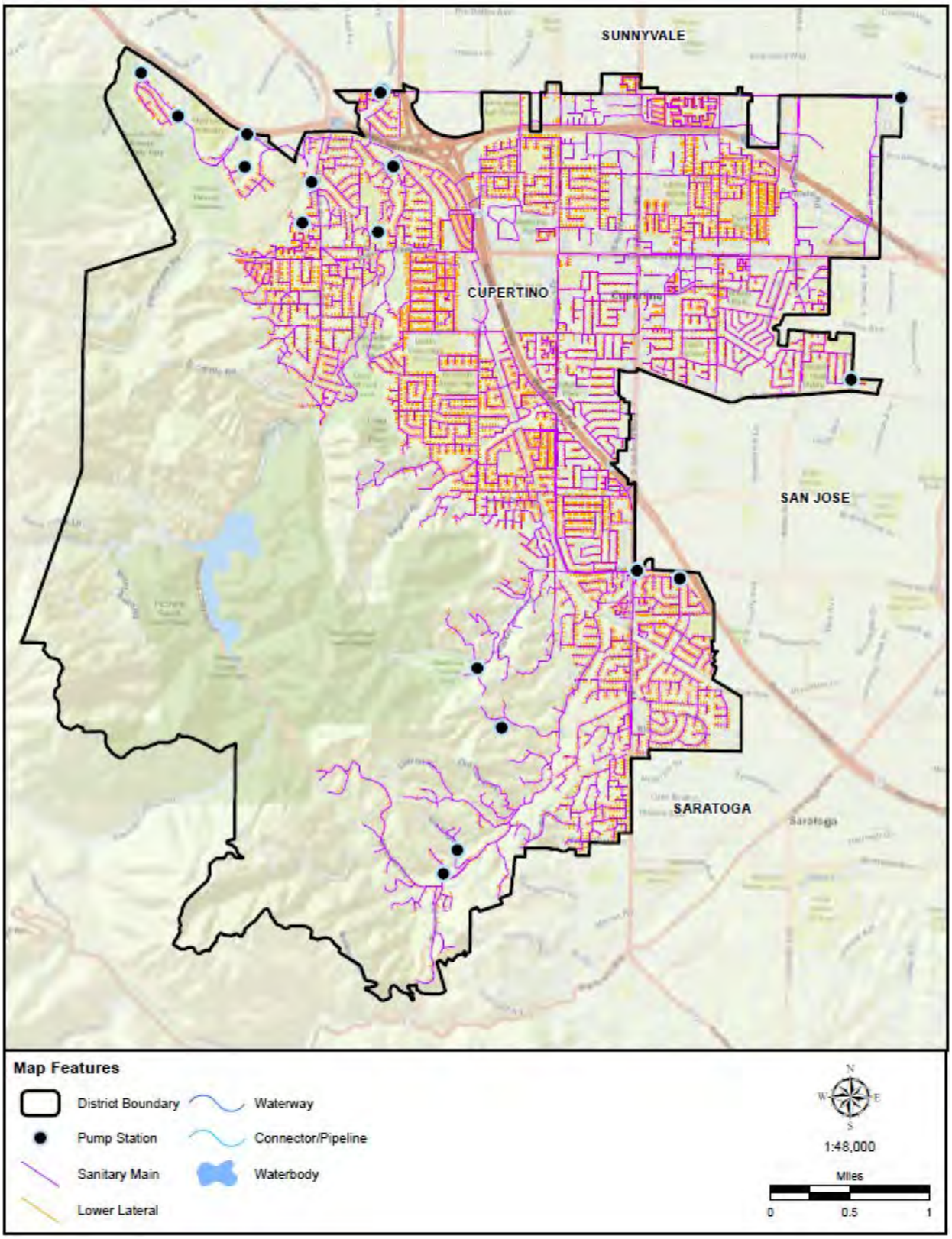


Figure 5: CuSD Sewer Service Area Map

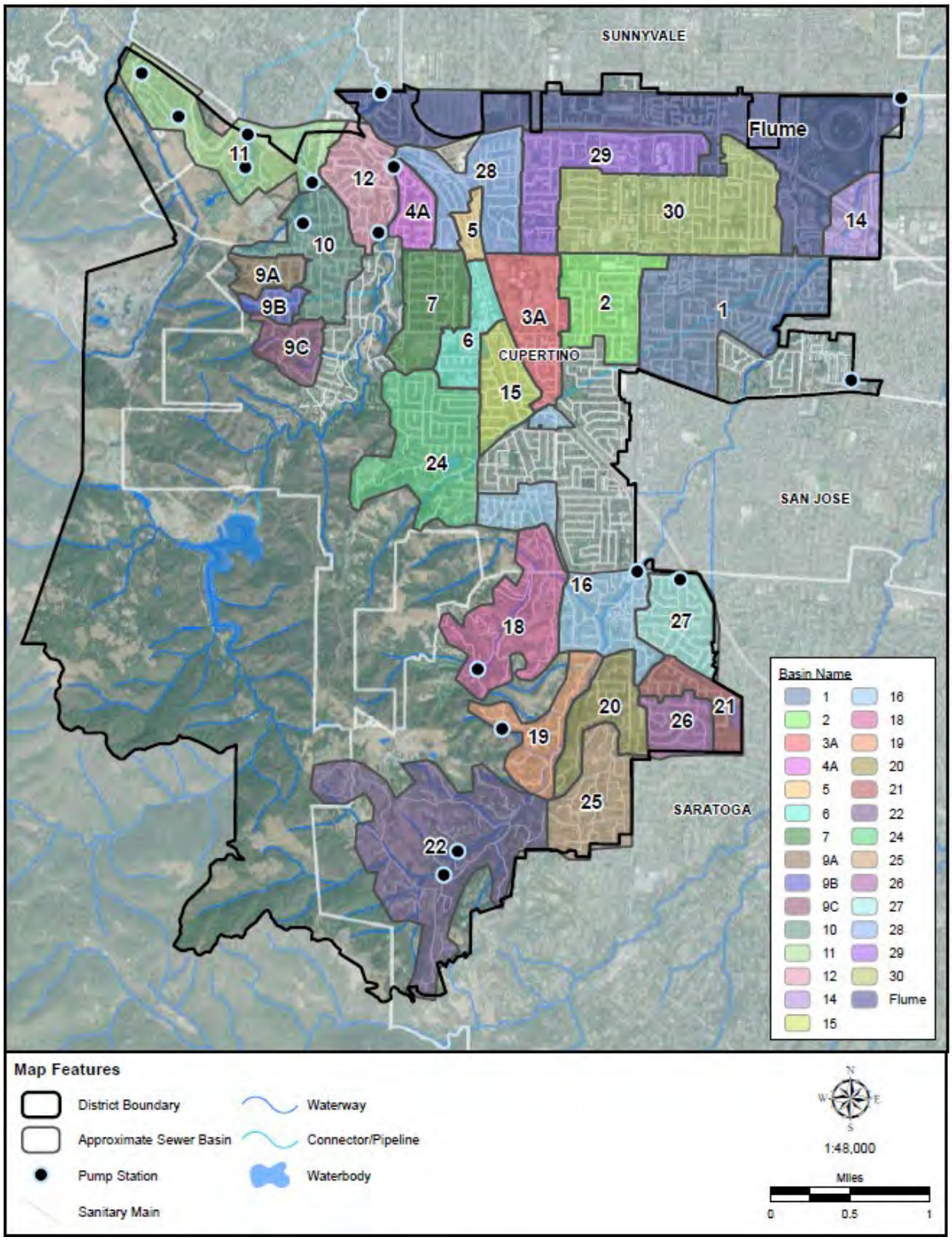


Figure 6: CuSD Sewer Area Sewer Basins

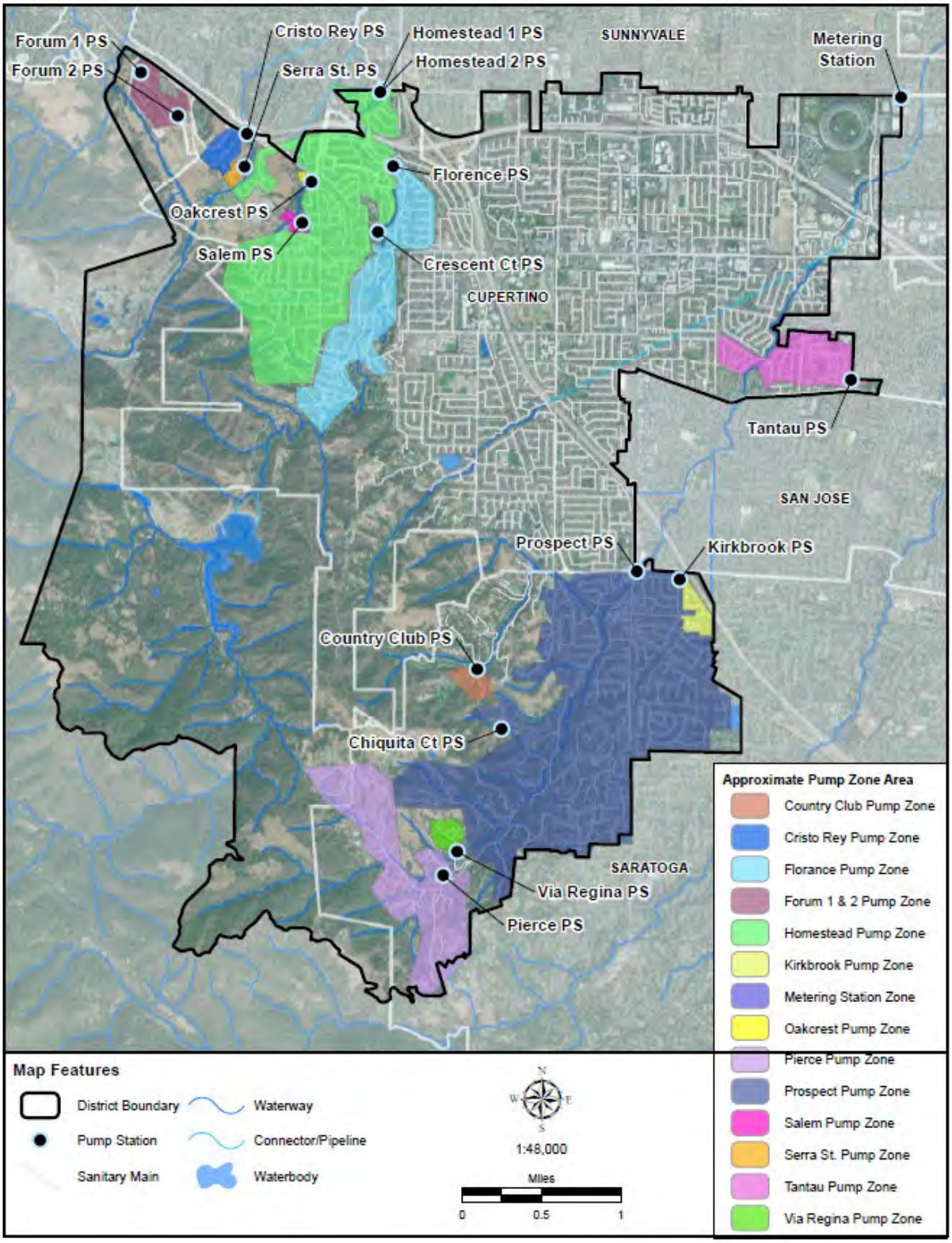


Figure 7: CuSD Pump Station Zones and Location of Pump Stations

DESCRIPTION OF EXISTING FACILITIES

The District maintains approximately 191.5 miles of sewer mains, 1.18 miles of force mains, and 79.57 miles of lower laterals and seventeen pump stations. The pipe diameter for gravity mains ranges from 2 inches to 27 inches in diameter. The collected wastewater from all areas is conveyed to the San Jose/Santa Clara Regional Wastewater Facility through mains and interceptor lines shared with the both the Cities of San Jose and Santa Clara per a joint use agreement.

Table 1 through Table 8 provide information about the District's sewer collection system assets.

- Table 1 shows the breakdown of the sewer gravity mains by pipe diameter. The distribution of size, amount of length in feet and miles is shown in Table 1.
- Table 2 provides the distribution of active force mains by length and percentage.
- Table 3 provides the distribution of the lower laterals by length and percentage.
- Table 4 provides the breakdown of manholes by their installation date and their respective count based on the installation age interval.
- Table 5 provides the District's sewer collection system based on the basins boundaries and basin IDs. The length of sewer mains and the number of sewer mains per basin number is also provided in Table 5.
- Table 6 provides the distribution of the manholes, and other structures.
- Table 7 provides a details of District's 17 pump stations, installation year and their average daily flow.
- Table 8 provides the details of Districts sewer force mains by size, length and material.

-

Table 1: Size and Distribution of Gravity Main Pipes

Pipe Diameter (inches)	Length (Feet)	Length (Miles)	Percentage of System (By Length)
2	2,612	0.49	0.3%
3	1,376	0.26	0.1%
6	307,316	58.20	30.3%
8	571,390	108.22	56.4%
10	52,088	9.87	5.1%
12	42,859	8.12	4.2%
14	1,262	0.24	0.1%
15	24,368	4.62	2.4%
18	4,182	0.79	0.4%
21	971	0.18	0.1%
24	365	0.07	0.0%
27	4,554	0.86	0.4%
Totals	1,013,343	191.92	100.0%

Table 2: Size and Distribution of Force Main Pipes

Pipe Diameter (inches)	Length (Feet)	Length (Miles)	Percentage of System (By Length)
2	539	0.10	8.6%
3	144	0.03	2.3%
4	612	0.12	9.8%
6	4,946	0.94	79.3%
Totals	6,241	1.18	100.0%

Table 3: Size and Distribution of Active Lower Laterals

Pipe Diameter (inches)	Length (Feet)	Length (Miles)	Percentage of System (By Length)	Number of Upper Laterals
1	38	0.01	0.0%	3
1.5	454	0.09	0.1%	15
2	93	0.02	0.0%	3
3	37	0.01	0.0%	1
4	414,103	78.43	98.6%	15,702
6	3,411	0.65	0.8%	240
8	1,220	0.23	0.3%	48
Unknown	797	0.15	0.2%	290
Totals	420,153	79.57	100.0%	16,302

Table 4: Count and Age Distribution of Manholes

Age Range	Total Count	Percentage of System (By Count)
Before - 1900	4	0.1%
1900 - 1919	0	0.0%
1920 - 1939	3	0.1%
1940 - 1959	597	15.4%
1960 - 1979	2,348	60.7%
1980 - 1999	639	16.5%
2000 - Present	42	1.1%
Unknown	238	6.1%
Totals	3,871	100.0%

Table 5: Distribution of Gravity Mains by Basin Number

Basin ID	Length	Count
1	81,745	377
2	33,701	121
5	6,360	27
6	11,942	40
7	26,508	107
10	35,096	185
11	20,236	105
12	23,178	109
14	4,247	17
15	20,524	89
16	53,150	247
18	31,948	140
19	13,212	58
20	21,027	90
21	10,898	44
22	47,331	188
24	50,529	221
25	20,999	97
26	14,217	53
27	25,015	102
28	30,039	110
29	34,463	134
30	75,210	298
3A	19,313	102
4A	13,284	61
9A	12,426	60
9B	7,302	35
9C	13,025	64
Flume	86,497	415

Unknown	9,443	63
Outside Sewer Basins	160,478	680
Total	1,013,343	4,439

Table 6: Distribution of Active Manholes and Other Structures

Structures	Total Count
Manhole	3,871
Flushing Inlet	273
Overflow	35
Syphon	14
Drop manhole	2

The District also operates 17 pump stations as described in Table 7.

Table 7: Pump Station Summary

Pump Station	Average Daily Flow (GPM)	# of Pumps	Date Constructed	Structure Age	Generator	SCADA
Homestead 1	610	3	1984	37	Yes	Yes
Homestead 2	300	2	2004	17	Yes	Yes
Forum #1	190	2	1991	30	Yes	Yes
Forum #2	170	2	1991	30	Yes	Yes
Cristo Rey	320	2	1991	30	Yes	Yes
Oakcrest	45	2	1980	41	No	Yes
Salem	32	3	1981	40	No	Yes
Florence	340	2	1971/2019	50/2	No	Yes
Country Club	140	2	1986	35	No	Yes
Chiquita Ct	30	2	1997	24	No	Yes
Pierce	210	2	1992	29	Yes	Yes
Prospect	650	3	1981/1987 /2019	40/2	Yes	Yes
Kirkbrook	160	2	1984	37	No	Yes
Tantau	160	2	1982	39	Yes	Yes
Serra St	30	2	2001	20	No	Yes
Via Regina	150	2	2008	13	Yes	Yes
Crescent Ct	70	2	2008	13	Yes	Yes

Table 8: Sewer Force Mains by Material, Length

Pump Station	Force Main Size (in)	Force Main Material	Force Main Length (ft)
Homestead 1	8	CIP	547
Homestead 2	8	CIP	622
Forum #1	6	PVC	1971
Forum #2	6	PVC	2137
Cristo Rey	6	PVC	893
Oakcrest	4	DIP	187
Salem	4	CIP	155
Florence	8	CIP	459
Country Club	4	PVC	440
Chiquita Ct.	2	PVC	400
Pierce	6	CIP	1235
Prospect	10	CIP	2742
Kirkbrook	4	PVC	30
Tantau	4	PVC	8
Serra St.	2	PVC	537
Via Regina	8	HPDE	1140
Cresent Ct	4	PVC	523

ANNUAL ROUTINE MAINTENANCE

Annual Routine Maintenance Schedule

The goal of the District's Routine Maintenance Schedule is to clean all sewer mains every three years. System-wide cleaning is scheduled by zones utilizing Arc-GIS and Lucity as the management tool. All completed sewer cleaning is recorded in the District Arc-GIS database. In addition to this, District has also developed system to track the collection system by basin.

The District's collection system is divided into sewer basins that were established as part of an Inflow & Infiltration Study completed in 2016. The basins were created to better understand how different regions of the District reacted to rainfall events. Basin boundaries are created in a GIS program and are stored as GIS layers. Figure 6 shows the District's sewer basin map. Staff uses this information from the overall collection basin map, previous cleaning results, pump station zone information, terrain of the city, inspection crew knowledge, and the history of logged calls, to develop a cleaning frequency for each sewer basins.

Cleaning crews focus on individual sewer basins each year as part of a 1-year routine cleaning cycle. Cleaning for the pipes that are less than 24 inches are contracted out by the District and are cleaned once every 15 months. The cleaning frequencies are dynamic, and the schedule is updated and maintained by the District staff in the Lucity software. In Lucity, the cleaning crew document the details of the pipes cleaned, time spent, and type of cleaning performed.

Scheduled maintenance of the pump stations is also performed to increase pump station reliability, operate as designed and at peak efficiency, particularly during heavy wet weather flows. All pump stations are visited weekly to assess the condition of the pumps, valves, control cabinet, latches & hinges etc. (check for leaks and proper function) and wet wells. Periodic services from professional contractors who perform vactoring of the wet wells to remove grease blankets is performed to extend the performance life of the pumps performance. The District contracts with specialty contractors for pump repairs, generator service and electrical work to assist in the maintenance and inspection of the District's sewer pump stations..

The District ordinance allows for servicing of lower laterals for properties that are accessible. District standard property line clean outs and laterals that have historical blockage data. The laterals are serviced annually and inspected immediately to determine eligibility for repair or replacement.

The District targets cleaning of its laterals on a 6-month or 12-month preventive maintenance schedule for laterals with serviceable cleanouts (approximately 2,600 out of 16,300 laterals). The schedule is determined based on the history (structural defects, SSO, heavy roots, etc.) of the individual lateral. Cleaning results are collected and entered into the District's asset management software, Lucity, for use in determining level of repairs necessary for the laterals.

Based on the CCTV data the laterals are cleaned based on the prioritization shown in Table 9.

Table 9: Lateral Prioritization for Maintenance

Prioritization	Remark
1	Laterals that have property line cleanouts but are not serviceable due to structural condition
2	Laterals that are on a 6-month maintenance schedule due to structural condition

Annual Routine Maintenance Prioritization List

The annual maintenance program prioritization list is based on the following factors of the sanitary sewer collection system:

A. **Structural Condition** - The District is implementing a pipeline assessment program using CCTV inspections to analyze the areas that require a higher maintenance frequency. Pipeline sections are eligible for repair or replacement based on the NASSCO PACP classifications. Frequency of maintenance is returned to the normal cycle once the pipeline has been repaired or replaced and update in the system.

B. **Root Control** - Established neighborhoods and pipe segments located within easements with a history of root intrusion are maintained with power rodding and high-pressure rodding cleaning. Pipeline assessment and history analysis will determine the frequency of the maintenance for these lines. The District is also conduct root treatment operations for pipe segments with medium and heavy roots. The District is scheduled hydro-jet to clean all root foam treated line approximately six to ten weeks after the treatment. The areas targeted for root foaming were identified based on data received from the past maintenance work recorded, and CCTV inspections finding.

C. **Grease Conditions** - Sewers with a history of repeated calls for grease stoppages are maintained at a frequency that is intended to prevent repeat stoppages or SSOs. The District not only performs maintenance of these lines, but conduct an annual inspection and we work closely with the County of Santa Clara Environmental Health Department and Environmental Programs Specialist of the City of Cupertino in the implementation of the Fats, Oils, and Grease (FOG) reduction program by educating food establishments on Best Management Practices.

REHABILITATION AND REPLACEMENT PROGRAM

The District is implementing a condition assessment and CCTV inspection program to be completed in a five-year time frame. All CCTV within 200 feet of the creek area has been completed. With the CCTV inspection program, all PACP rated 5 are being repaired or rehabilitated immediately. PACP 4 and below, along with I/I data will help the District prioritize long-term rehabilitation and sanitary sewer main replacement projects. These projects are programmed into the Capital Improvement Program (CIP). The condition assessment and prioritization program is described below:

Sewer Main Condition Assessment and Prioritization - The District has implemented a sewer main condition assessment program which consists of CCTV inspection of the District mainlines within the District boundary. The inspection is used to forecast the overall condition of the sanitary sewer system and to identify the level of effort and budget required to maintain and improve the sanitary sewer system. The goal of this program is to CCTV all sewer mains within 5 years. Sewer mains are prioritized for replacement or rehabilitation based on the NASSCO PACP rating as a result of the CCTV inspection.

CCTV provides information about the condition of the pipes so they can be properly maintained, repaired, and/or replaced. CCTV inspections were completed using the nationally recognized method; which are Pipeline Assessment and Certification Program (PACP). PACP Version 7.0 was used in the assessment of the pipes. Pipeline Assessment and Certification Program (PACP)

The National Association of Sewer Service Companies (NASSCO), along with the assistance of the Water Research Centre (WRC), has developed a national certification program to establish a viable solution to standardize the identification, categorization, evaluation, and prioritization of sanitary sewer or storm sewer infrastructure through CCTV investigations.

The PACP defect descriptions are organized into the following general categories:

- Structural Defect Coding: This group includes the type of defects where the pipe is considered to be damaged ranging from a minor case defect to a more severe case, depicted as pipe failure. The Structural Defect Coding group includes defects described as: cracks, fractures, broken pipe, holes, deformities, collapsed pipes, joint defects, surface damage defects, weld failures, point repair codes, brickwork defects, and lining failures.
- Operation and (O&M) Coding: This group includes the various codes that involve the spectrum of defects that may impede the operation and maintenance of the sewer piping system. The Operation and Maintenance Coding group includes defects comprised of roots, infiltration, deposits and encrustations, obstacles/obstructions, and vermin.
- Construction Features Coding: This group includes the various codes associated with the typical construction of the sewer piping system. The Construction Features Coding group includes taps, intruding seal material, pipe alignment codes, and access points.
- Miscellaneous Features Coding: This group includes observation codes such as water levels (detection of sags), pipe material changes, and dye testing notes.

Condition ratings are allocated through visual inspection of the pipe using PACP defect types. Assigning a rating to each inspected pipe gives a measure of the level of physical deterioration with respect to the "as new" condition. In this investigation quick scores were utilized to understand the condition of a pipe. There is a separate quick score for Structural and O&M defects were used to rate the overall condition of the pipe.

The NASSCO quick rating system is a four-character number that displays the occurrences of defects for the two highest grades.

- The first character represents the highest severity grade defect that is observed along the pipe.
- The second character represents the total number of occurrences for the highest severity grade.
- The third character represents the next highest severity grade observer through the pipe.
- The last character is the total number of occurrences of the second highest severity grade.

If the number of occurrences surpasses nine, the rating then uses letters as follows: A= 10 to 14, B= 15 to 19, and C = 20 to 24, etc. For example, the quick score 462B determined that there is six (6) grade 4 defects and fifteen (15) grade 2 defects. The quick score for each segment inspected will be found in the summary table for each basin.

PACP also provides a standardized system for the consistent assessment of sanitary sewer conditions. The two key concepts are the severity of the condition and the criticality of the defects was considered as part of the PACP grading system. The PACP rating process identifies the major deterioration factors and assigns a rating that is related to the likelihood of failure or collapse. Deterioration factors are classified into categories of structural, operation and maintenance defects. PACP utilizes condition rating (grading) system.

Each defect can be scored with a defect grade ranging from 1 to 5, where a grade 5 has the greatest potential for pipe failure, as described in Figure 8. The 1 to 5 grades based on the defect types are allocated directly by the CCTV inspector during the CCTV inspection process. The PACP Rating on a scale of 1 to 5 as shown in the Figure 8, summarizes the condition of a sewer length, generally from manhole to manhole. Example photos shown in Figure 8 are from Water Research Center (Wrc) Rehabilitation Manual.

The assigned grades for each pipe segments are managed in the District's CMMS system, Lucity, GraniteNet and in GIS so that inspection information and gradings are readily available to both engineering and maintenance staff. This condition information is used for making informed decisions on the amount and type of maintenance that may be required and for identifying when to rehabilitate sewers mains and the type of rehabilitation to be performed so that the performance and condition of the collection systems are maintained.

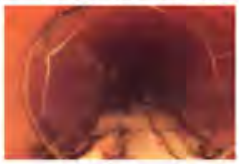
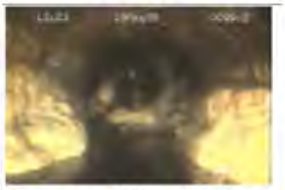
PACP Rating	PACP Defect Importance	Likelihood of Failure	Structural Defect Rating Example	O&M Defect Rating Example
1 - Excellent	Minor Defects	Failure unlikely in the foreseeable future		
2 - Good	Defects that have not begun to deteriorate	Pipe unlikely to fail for at least 20 years	 Longitudinal Cracking	 Fine Roots
3 - Fair	Moderate defects that will continue to deteriorate	Pipe may fail in 10 to 20 years	 Multiple Fractures	 Deposits = 15% (rating based
4 - Poor	Severe Defects	Pipe will probably fail in 5 to 10 years	 Broken Pipe	 nfiltration – Runner (rating
5 - Immediate Attention	Defects requires immediate action	Pipe has failed or will likely fail within the next 5 years	 Collapsed Pipe	 Root Ball (> 50% of capacity)

Figure 8: NASSCO's PACP Rating and associated Pipe Defect Examples.

Pump Station Condition Assessment and Prioritization

The District's 17 Lift Stations are routinely inspected each week for evidence of any need to change frequency of scheduled maintenance activities. Hours of operation of pumps are checked to discover whether one pump is cycling more frequently than the other, thus indicating possible obstruction or perhaps electrical/mechanical problems.

- The District has built redundancy systems into stations where there is high risk of overflow should there be a power outage or pump failures. The redundant systems range from mobile (and some permanent) standby generators to continue operation of a station in the event of a power outage to a fully independent back-up pump station.

- Homestead-2 provides the capability of taking Homestead-1 completely off-line while servicing or replacing pumps or alternately operating to extend service life of the pumps. The District has recently completed the SCADA conversion for all 17 pump stations. The purpose of the conversion is to enable District personnel to monitor and control the pump station performance remotely.

A condition assessment was prepared for each of the seventeen (17) pump stations based on review of existing information, vendor reports, and field visits. For the Pump Station Condition Assessment, the District developed a grading system to measure the structural condition of each component for all seventeen pump stations. The technique used to develop the grading system is based on a sensitivity analysis since the component degradation values are not known with certainty. The District is using the grading system shown in Table 10

Table 10: Condition Assessment Prioritization Criteria for Pump Stations

Prioritization	Description
Grade 5	At failure or failure imminent – Repair/Replace within 2 years
Grade 4	Failure likely in near future – Repair/replace within 5-10 years
Grade 3	Failure unlikely in near future – Reassess condition in 3 years
Grade 2	Minimal failure risk – Reassess condition in 5 years
Grade 1	Acceptable structural/operational condition – Reassess condition in 10 years

The four major factors considered when adjusting the grading of each component were proximity to an environmentally sensitive area (such as a creek or reserve), service area size, flow sizes, and whether a maintenance program exists or not. Components rated as Grade 5 generally require immediate repair due to the severity of degradation and high consequence of failure. Components rated as Grade 4 are those showing signs of degradation and have factors that make repairs necessary for reduction of failure risk and consequence of failure. It is recommended that components with Grade 5 and Grade 4 be repaired or replaced within 5 years of discovery with priority to those located within 200 feet of an environmentally sensitive area.

Lower Lateral Condition Assessment and Prioritization

The District has also implemented a lower lateral condition assessment program which consists of CCTV inspection of the District-maintained lower laterals that have a service history or has been inspected for a property line cleanout installation within the District boundary. Lower laterals will be prioritized for replacement or rehabilitation based on the NASSCO LACP rating as a result of the CCTV inspection.

The District targets cleaning of its laterals on a 6-month or 12-month preventive maintenance schedule for laterals with serviceable cleanouts (approximately 2,600 out of 16,300 laterals). The schedule is determined based on the history (structural defects, SSO, heavy roots, etc.) of

the individual lateral. Cleaning results are recorded and entered into the District's asset management software, Lucity, for use in determining level of repairs necessary for the laterals.

Based on the CCTV data the laterals are prioritized based upon the criteria shown in Table 11.

Table 11: Lateral Prioritization

Prioritization	Remark
1	Laterals that have property line cleanouts but are not serviceable due to structural condition
2	Laterals that are on a 6-month maintenance schedule due to structural condition

Manhole Condition Assessment and Prioritization

The District has also implemented a manhole condition assessment program which consists of visual inspection of the District manhole during preventive maintenance of the sewer mains. Manholes will be prioritized for replacement or rehabilitation based on the NASSCO MACP rating as a result of the visual inspection.

Sewer Force Main Condition Assessment Program

The District owns about 1.18 mile of Force Mains. Inspection of the Force Mains occurs as part of pump station rehabilitation program. The District is currently evaluating the options to implement a separate condition assessment program to identify the future rehabilitation projects based on the force main inspection data.

CMMS Software: Arc-GIS and Lucity

The District utilizes both Arc-GIS and Lucity Software as a key indicator to manage all maps, sewer assets data and inspections records. Lucity software enable the District to collect field data directly and stored in the database which syn with Arc-GIS. The District is able to perform data analysis and to develop a working plan, schedule for inspecting, assessing, maintenance frequency, prioritizing sanitary sewer repairs, and to purpose Capital Improvement Program (CIP) according to high prioritized repairs and areas with higher risks or history of SSO. It also allows emergency response to meet immediate needs, as well as to foresee the continue funding of the on-going condition assessment, inspections, property's sewer assets evaluation and to analyze rehabilitation programs such as annual overlay project with the City of Cupertino and CUSD emergency repairs etc.

CAPITAL IMPROVEMENT PROGRAM

The District has established an annual Sewer Main Rehabilitation and Replacement Project as part of the annual CIP for the rehabilitation and replacement for short-term sewer projects. The District has also established an additional Sewer Replacement reserve fund for long-term sewer projects, which will be implemented based on their risk priority rating. The District generally maintains a capital improvement program budget of $1.5 million annually. The District is currently

completing all condition assessment and hydraulic modelling with a goal to develop a 10-year CIP program. Construction projects in the proposed CIP meet one of three goals:

a) Enhance sewer capacity to meet economic development.

b) Rehabilitate existing sewers, with higher priority given to those with extensive, severe deterioration.

c) The District Inflow and Infiltration (I&I) Reduction Program. This program is intended to rehabilitate portions of the sewer system where the groundwater, storm water, and other sources of water enter the sewers.

Capital Improvement Program for Sewer Mains - The determination of repair priority for long term CIP projects takes into consideration all the various factors affecting the sewer pipeline's risk of failure. The District has developed a risk-based prioritization model (Risk Model) to provide a more objective approach to CIP project prioritization and help aid in developing its 5-Year and 10-Year CIP rehabilitation project plans. It should be noted that the development of a CIP project and its prioritization does not solely rely upon the results of the Risk Model, but it also takes into consideration other significant factors such as project timing, budget allocation, resource availability, coordination with municipal projects, etc.

Development of Risk Based Prioritization for Sewer Mains: The risk based prioritization model developed for mains is based on guidelines recommended by the National Association of Clean Water Agencies (NACWA) in their publication "Implementing Asset Management: A Practical Guide". In summary, the Risk Model quantifies risk as a product of the Consequence of Failure (COF) and Likelihood of Failure (LOF). The COF parameters reflect failure impacts to the community and environment, while LOF parameters reflect system conditions that affect failure or degree of failure.

The NACWA's Risk Matrix framework that was used to prioritize CuSD mains is shown in Figure 9. The details list of criterions and their parameters that were used in the LOF Matrix are shown in the Appendix A1, Figure 18. The details list of criterions and their parameters that were used in the COF Matrix are shown in the Appendix A2, Figure 19. The risk-based prioritization risk model for CuSD mains was developed using GIS and was completed in March 2021. The current model is a "dynamic" model that will automatically extract current likelihood of failure and risk parameter information from the Lucity database and automatically updates Risk Maps in GIS when prompted to run.

Maps showing the District collection system's LOF, COF, and Overall Risk Scores are provided in Figure 10, Figure 11 and Figure 12. Risk scores are calculated and assigned for each pipe segment. Risk scores are grouped into four zones of risk; Low, Medium, High, and Very High, and are shown in Figure 9. The results from the latest risk model for mains illustrate the overall risk profile of the District's collection system.

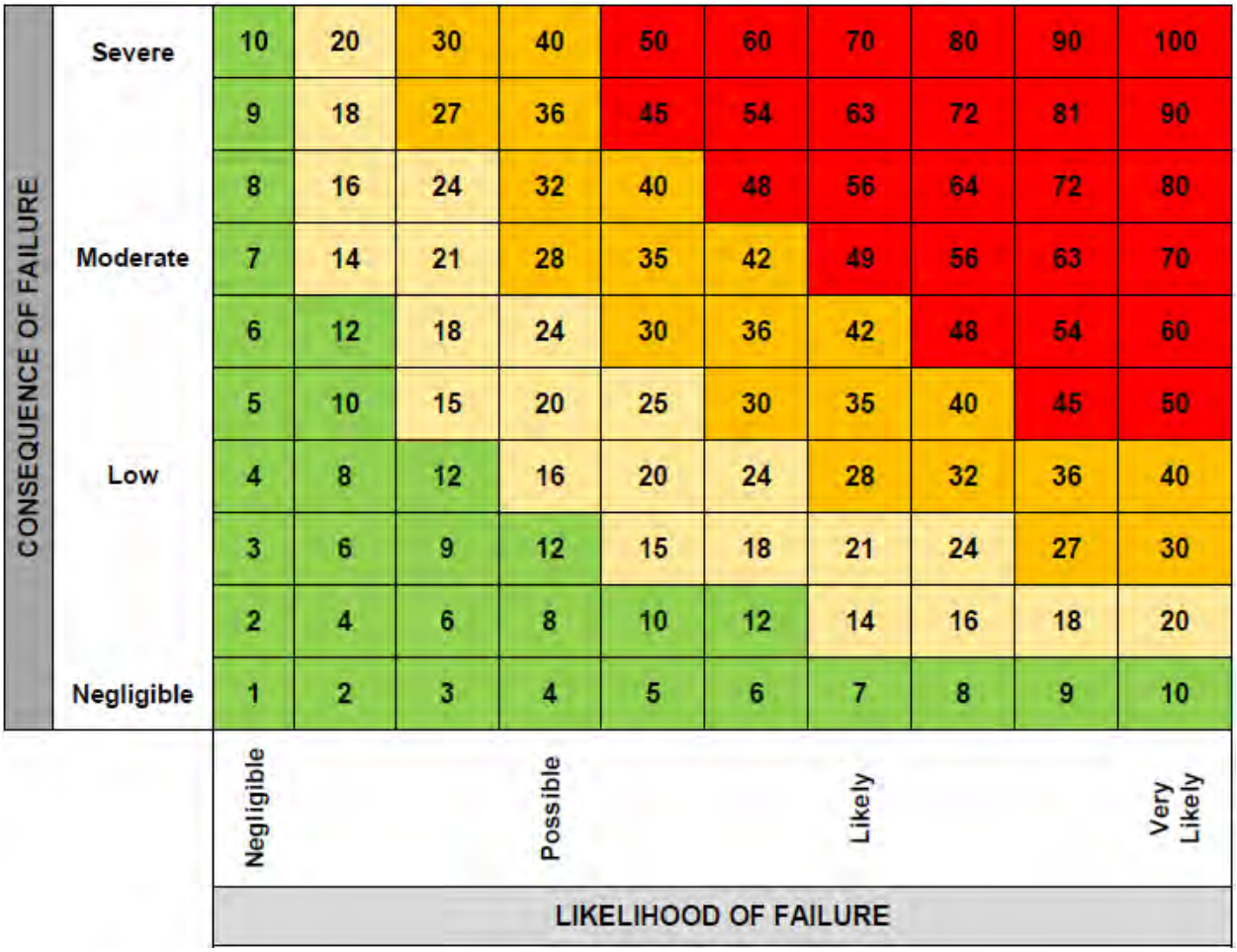


Figure 9. NACWA's Risk Matrix Framework used for CuSD Risk Analysis of Matrix

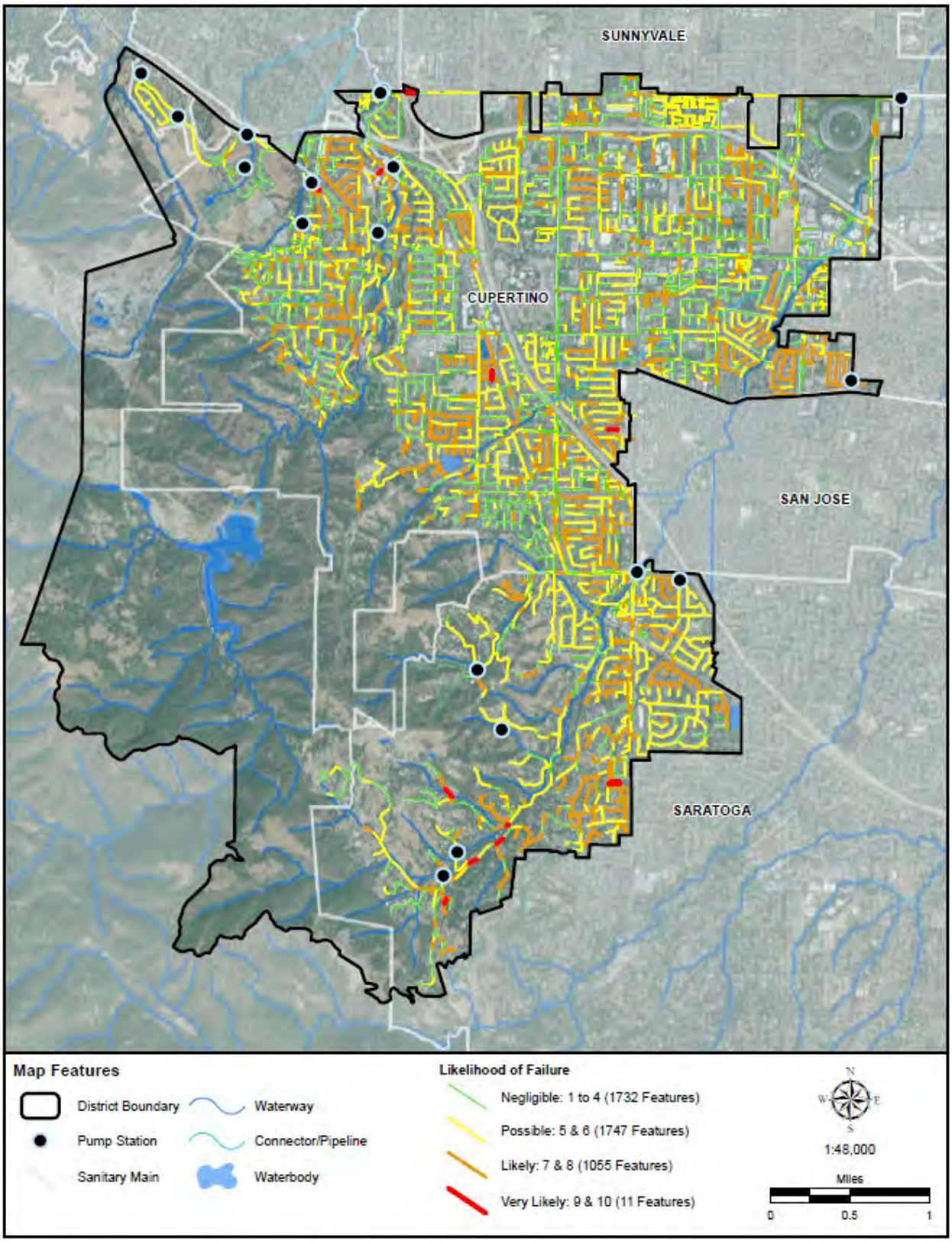


Figure 10: Likelihood of Failure Areas for Sewer Mains

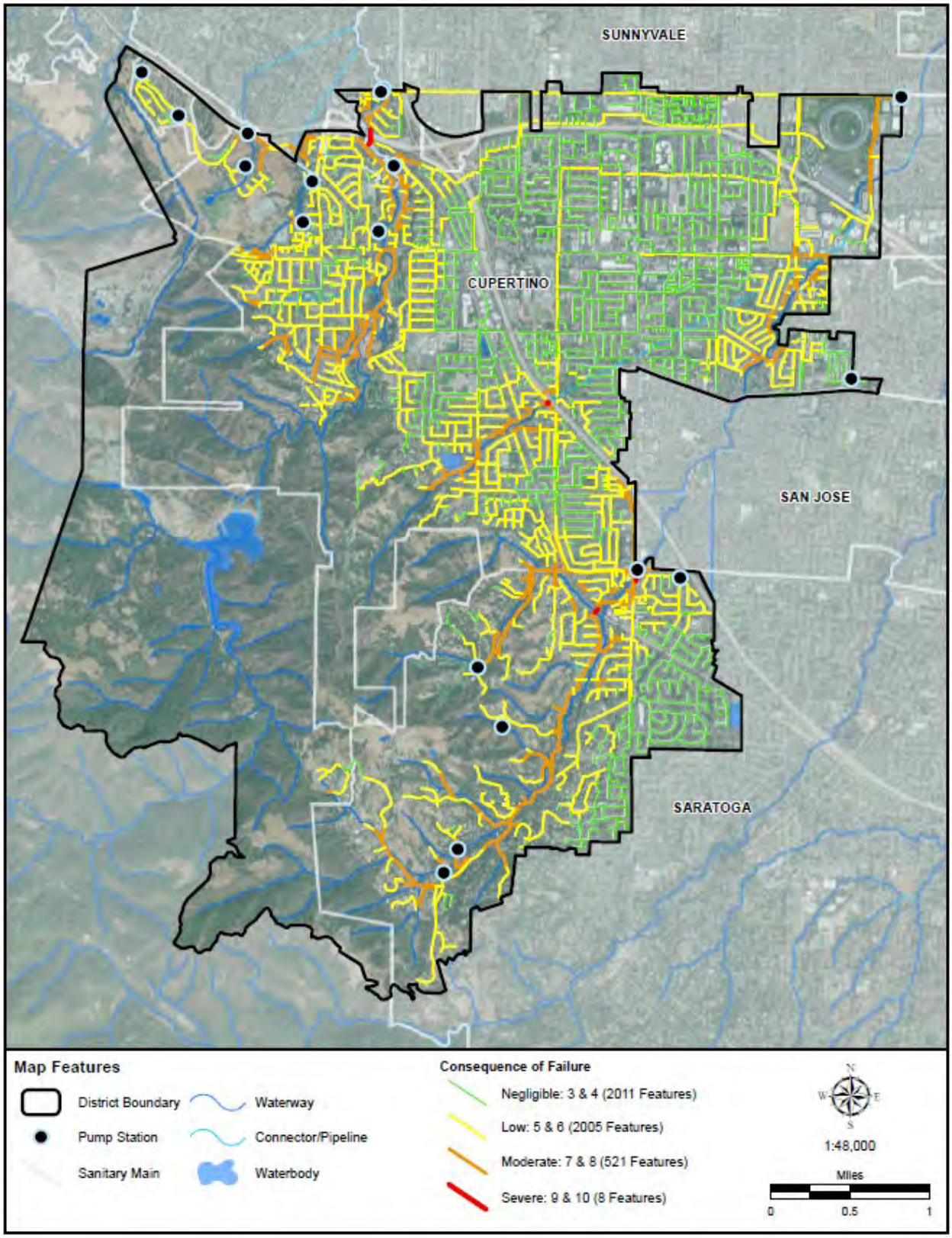


Figure 11: Consequence of Failure Areas for Sewer Mains

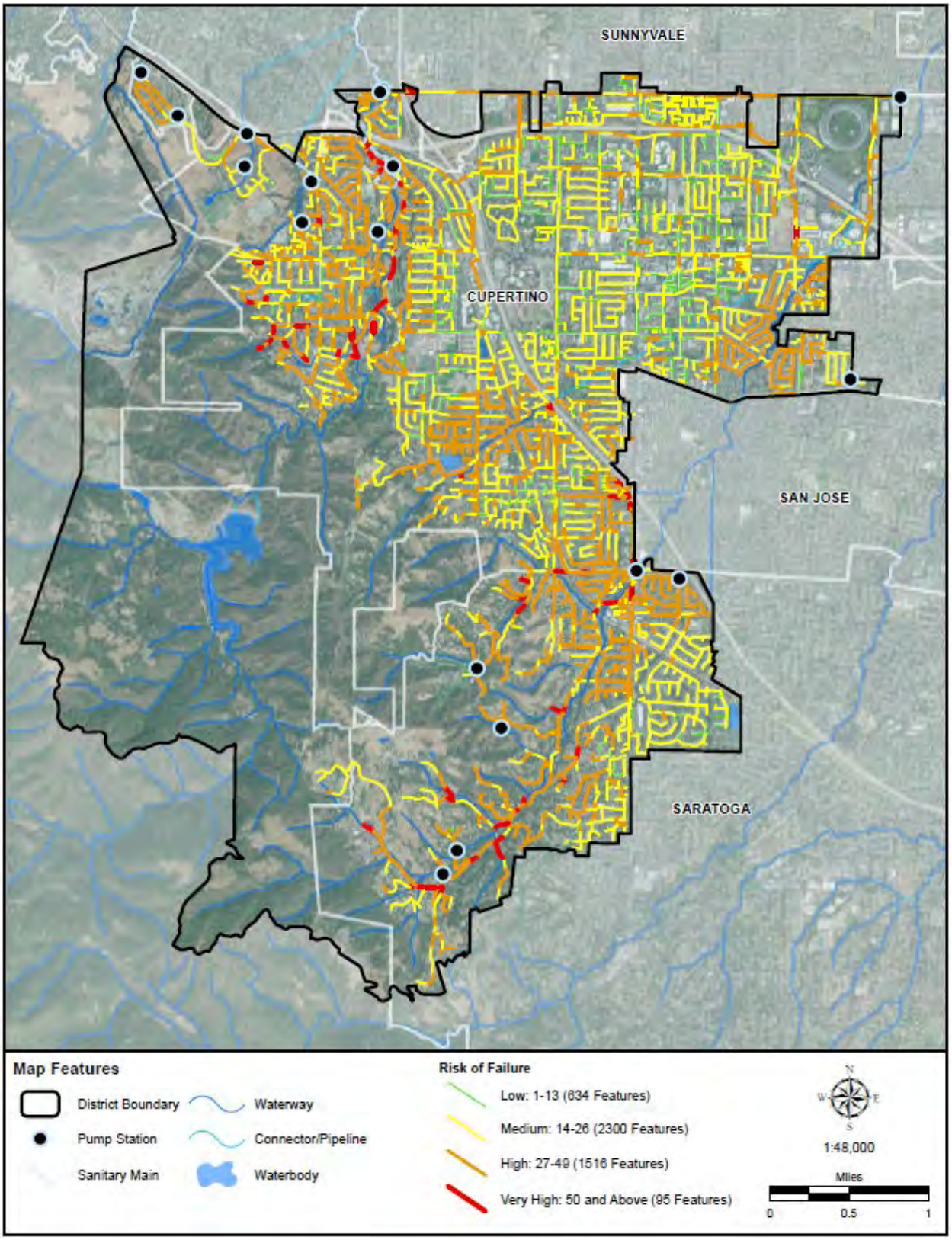


Figure 12: Risk of Failure for Sewer Mains

Capital Improvement Program for Pump Stations: Rehabilitation or replacement of the pump stations is scheduled based on the risk-based prioritization matrix. Figure 13 provides a GIS map of the location of all 17 pump stations and their respective LOF scores, COF scores and the pump scores.

Develop Likelihood of Failure for Each Pump Station. The pumping facilities and critical components that have the potential for likelihood of failure have been identified using likelihood of failure (LOF) matrix shown in the Appendix B1, Figure 20. The LOF category criteria including overall pump condition, the number of times the pump components have exceeded the useful service life, pump station capacity, SSO not related to major event and the number of days which pump stations have a recorded history of high level of alarms have been used in the LOF screening process for grading the pump stations on a scale of 1 to 5, where 1 represents very low likelihood of failure, and 5 represents very high likelihood of failure.

Develop Consequence of Failure for Each Pump Station. To quantitatively compare the pump stations to each other, consequence of failure (COF) for each pump station was computed. COF matrix shown in Appendix B2, Figure 21. The rankings were developed using numerical scoring system. Criteria that were evaluated for consequence of failure include: safety and security, social – customer and reputation, service, and financial impacts, and environmental regulatory. For each criterion, a range of parameters were identified and measured on a scale of 1 to 5, where 1 represents very low impact and 5 represents very high impact rating. A value is assigned based on the experience of District staff, SSO data and GIS data. Each criterion assigned a weighing factor to each criterion. The weighting helps characterization are important than others in defining risk.

Develop Ranking for Each Pump Station. LOF and COF criterion was evaluated based on pump station field staff observations and experience. The criterion score for each pump station was calculated by multiplying the criterion value times the criterion weight. The total score for COF for each pump station is calculated as the sum of all the weighted criterion scores for the consequence of failure. Similarly, the total score for LOF for each pump station is calculated as the sum of all the weighted criterion scores for the likelihood of failure. The ranking of the pump station is calculated by multiplying the LOF score with COF score. The ranking of the pump station is then based on the risk scores, with the highest score representing the pump station with the highest priority. The calculated LOF score, COF score and the Risk score for each of the pump station are shown in Appendix B3, Figure 22. The GIS map showing the location of all 17 pump stations and their respective LOF scores, COF scores and the pump Risk scores are shown in Figure 22.

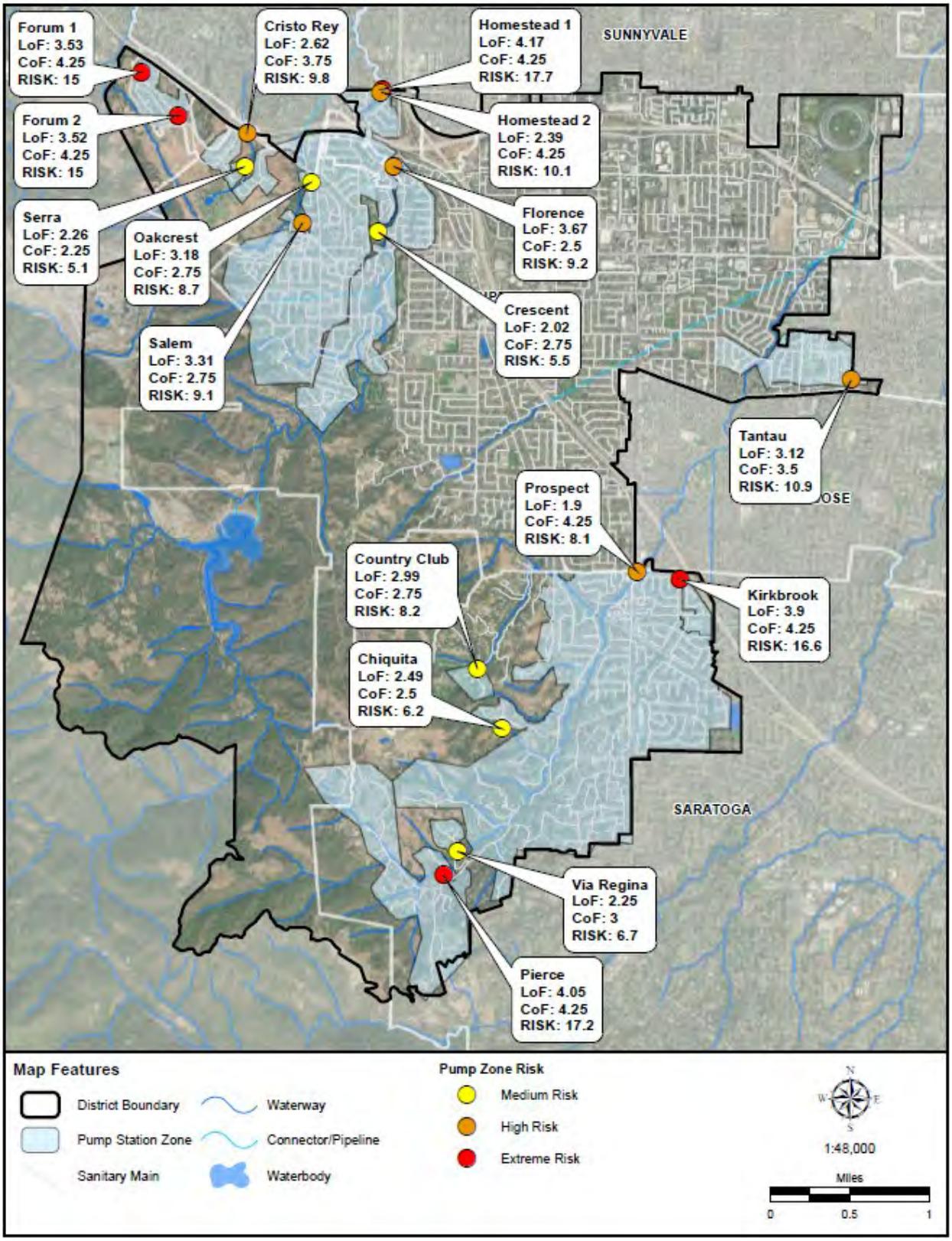


Figure 13: Pump Station LOF Scores, COF Scores and Risk Scores

STAFF TRAINING AND CERTIFICATION

The District uses a combination of in-house classes, on-the job training, conferences and seminars, and other training opportunities to train its sanitary sewer staff. Staff regularly participates in technical seminars, conferences, and meetings with the following:

- California Water Environment Association (CWEA)
- Bay Area Clean Water Agencies (BACWA)
- California Association of Sanitation Agencies (CASA)

All personnel are provided copies of the Standard Operating Procedures and trained on every piece of equipment assigned for the task including but not limited to:

- SSO and Backup Response
- Sewer Cleaning Equipment O&M
- Pump Station O&M
- CCTV Operation and Maintenance
- Lock Out/Tag Out
- Traffic Control
- USA Location Markings
- Trench Excavation and Backfilling

On-the job training is also received through mentoring by senior staff. Regular safety trainings are held to develop and maintain qualified staff.

The CWEA Technical Certification Program provides certification in a variety of wastewater disciplines to promote and enhance the education and effectiveness of the wastewater professional. The District encourages its maintenance staff to obtain CWEA certification to demonstrate their level of competency in the area of collection system maintenance. By providing adequate staff training and establishment of certain grade level requirements as a condition of career advancement, the District reinforces the importance it places on certification.

Table 14 provides a summary of the training and certification of all District staff.

Table 12: Training Summary

Staff Member	Title	Professional Engineer California	CWEA Certification	CCTV	Confined Space	Trench/ Excavation	Traffic Control	CPR/ First Aid/AED	Water Sample Collection
Benjamin Porter, PE	District Manager/Engineer	Yes							
Frank Quach, PE	Operations Manager		Yes	PACP, LACP, MACP	Yes	Yes	Yes, MUTCD	Yes	Yes
Robert Woodhouse, PE	Deputy District Manager	Yes							
Vani Kathula, PE	Senior Sanitary Engineer	Yes		PACP, LACP	Yes				
Esteban Delgadillo, PE	Design Engineer	Yes					Yes, MUTCD		
Tony J. Soares	Sewer Inspector		Yes	PACP, LACP, MACP	Yes		Yes, MUTCD	Yes	Yes
Jason Atherton	Sewer Inspector		Yes	PACP, LACP, MACP	Yes		Yes, MUTCD	Yes	Yes
Sonny Quach	Sewer Inspector		Yes	PACP, LACP, MACP	Yes	Yes	Yes, MUTCD	Yes	Yes
Joaquin Parra-Martinez	Sewer Inspector		Yes	PACP, LACP, MACP	Yes		Yes, MUTCD	Yes	Yes
Rick Almondia	Sewer Inspector		No	PACP, LACP, MACP	Yes	Yes	Yes, MUTCD	Yes	Yes
Gary Correa	Sewer Inspector		No	PACP, LACP, MACP	Yes	Yes	Yes, MUTCD	Yes	Yes
Dale Bennett	Sewer Inspector		Yes	PACP, LACP, MACP	Yes	Yes	Yes, MUTCD	Yes	Yes
Alan Cardona	Sewer Inspector		Yes	PACP, LACP	Yes	Yes	Yes	Yes	Yes

				MACP			MUTCD		
Jon Saunders	Sewer Inspector		No	PACP, LACP MACP	Yes	Yes	Yes MUTCD	Yes	Yes
Robert Cornejo Jr.	Sewer Inspector		No	PACP, LACP MACP	Yes	Yes	Yes MUTCD	Yes	Yes
Alvin Cacdac	Sewer Inspector		No	PACP, LACP MACP	Yes	Yes	Yes MUTCD	Yes	Yes
Eric Wong	Sewer Inspector		Yes	PACP, LACP MACP	Yes	Yes	Yes MUTCD	Yes	Yes
Shirley Ho	Senior Design Technician			PACP, LACP, MACP					

OUTREACH TO PLUMBERS AND BUILDING CONTRACTORS

The District maintains an outreach program to educate sewer construction and maintenance companies about the proper practices for preventing blockages in private laterals. The District provide plumbers and contractors with materials which describes District sewer construction standards, proper operations maintenance activities and effective measures for removing blockages in sewer systems and laterals. The materials and specifications are provided during District permitting and on the District's website.

MAINTENANCE EQUIPMENT

The District owns portable pumps, portable generators, generator trucks, trash pumps, Solar Arrow Board Trailer, and a CCTV truck/push-on. Replacement of equipment and spare parts for emergencies are addressed as needed. The District contracts out all sewer mainline, lateral, and pump stations routine maintenance. Equipment owned by the District is used for smaller jobs such as unblocking sewer lateral blockages or pump replacements.

Equipment owned by the District are portable submersible pumps and larger trasher pumps on pull along trailers for sewer bypasses and hand rods for unblocking obstructions in sewer laterals. Larger pumps stations are equipped with permanently enclosed generators, and smaller stations are equipped with smaller tow along portable generators. Sewer Mainline inspections are performed by a Mark Thomas owned CCTV truck. Smaller inspections are done with push-cameras on reels. Replacement of equipment and spare parts for emergencies are addressed as needed.

ELEMENT 5 – DESIGN AND PERFORMANCE STANDARDS

SWRCB REQUIREMENTS:

- *Design and construction standards and specifications for the installation of new sanitary sewer systems, pump stations and other appurtenances; and for the rehabilitation and repair of existing sanitary sewer systems; and*
- *Procedures and standards for inspecting and testing the installation of new sewers, pumps, and other appurtenances and for rehabilitation and repair projects.*

RWQCB REQUIREMENTS:

Each wastewater collection system agency shall identify procedures and standards for inspecting and testing the installation of new sewers, pump stations, and other appurtenances; and for rehabilitation and repair projects.

DESIGN GUIDELINES

The District utilizes the Design Guidelines for Sanitary Sewer for establishing minimum standards for construction of public sanitary sewers. The District's Standard Details are intended to aid consulting engineers, developers, and others doing work in the City on public sanitary sewer projects. The District Standard Details are as follows:

- 1 - Standard Trench
- 2- Standard Manhole
- 3- Sanitary Sewer Manhole Channels
- 4- Sanitary Sewer Manhole Frame & Cover
- 5- Standard Flushing Inlet
- 6- Lower Sanitary Sewer Lateral
- 7- Standard Property Line Clean Out
- 8- Standard Backflow Preventer Device
- 9- Pump Connection to Lateral
- 10 - Sewer Lateral Connection to Sewer Mains
- 11- Sand Oil Separator
- 12- Grease Interceptor

The District's Standard Specifications and Plans were updated and uploaded onto our website. The most current set is dated May 4, 2020.

SANITARY SEWER DESIGN PROCEDURES

The Design Procedures have been followed by District staff for in-house and consultant designed projects. Additional design procedures include:

- Preliminary Engineering includes feasibility and alternatives analysis, planning, scheduling, budgeting, requesting for services or information from utility companies, material testing, in-house surveying by Mark Thomas, hydraulic analysis, preliminary design, and environmental clearance applications such as exemption, negative declaration, and/or Environmental Impact Report.
- Initial Design and Plan Check Distribution for review to utility companies, impacted agencies and involved departments and divisions including material testing lab, survey, and City Public Works Departments.
- Final Design includes property acquisition, preparation of Installer's Agreements, request for insurance specification, request for encroachment permits, construction quantities and cost estimates, preparation of final plans and specifications, final review and approval, and bid and award.

The procedures ensure the communication, coordination, and collaboration with the involved parties in the design review process.

The complete District Standard Details are available at the District's office at 20863 Stevens Creek Boulevard, Suite 100, Cupertino, CA 95014 and on the District's website in Adobe PDF format at http://cupertinosanitarydistrict.org

OTHER DESIGN STANDARDS USED

When alternative techniques for pipeline rehabilitation are used on an existing system, the design must conform to ASTM and appropriate industry standards. Some of the potential techniques that may be considered for District rehabilitation are:

- Horizontal Directional Drilling
- Pipe Bursting
- Slip-lining
- Cured in place pipe (CIPP) lining

The engineering analysis during the design phase must include factors such as:

- Pipe size, length, and depth
- Existing pipe condition
- Capacity requirement
- Access conditions
- Right of way requirements
- Soil condition and cover

- Groundwater conditions
- Project locations
- Traffic conditions
- Environmental impacts

INSPECTION GUIDELINES

The District has prepared sewer inspection guidelines for the following:

- Lateral Maintenance Inspection
- Trunk Main Maintenance Inspection
- Final Inspection for Property Line Cleanout and CCTV
- Inspection Checklist for Sewer Lateral Capping
- Pre and Post Construction Checklist and Punch List
- Contract Change Orders
- Reporting and Documentation
- Miscellaneous and Testing

CONSTRUCTION MANAGEMENT

The District's construction management includes continuous onsite inspection. Inspections are performed during the progress of the work and at the completion of construction. All acceptance testing for gravity sewers is performed in the presence of the District sewer inspectors. The project will not be accepted until all results of the testing of sewers meet the requirements of the project plans and specification and/or the established standards. If the acceptance testing fails, the District will require the contractor to submit a repair plan and conduct the repair per the approved repair plan. Acceptance testing is performed again until the testing results meet the District's requirement.

A full-time District sewer inspector is assigned to CIP projects. The inspector will follow the project until its acceptance. Inspectors are under the supervision of District Manager-Engineer and should report any discrepancy directly to the supervisor. All communications between the contractor and District Manager-Engineer should be through the project inspector.

The inspector will work with contractor and project engineer to redline the field changes to the design plan in his/her working plans. At the acceptance of the project, the inspector will provide the complete redline working plans which contractor had used for the field changed to the project engineer for the marking of the "record-drawings" by updating all changes from the original plan drawing.

ELEMENT 6 – OVERFLOW AND EMERGENCY RESPONSE PLAN

SWRCB REQUIREMENTS:

Each enrollee shall develop and implement an overflow emergency response plan that identifies measures to protect public health and the environment. At a minimum, this plan must include the following:

- *Proper notification procedures so that the primary responders and regulatory agencies are informed of all SSOs in a timely manner;*
- *A program to ensure an appropriate response to all overflows;*
- *Procedures to ensure prompt notification to appropriate regulatory agencies and other potentially affected entities (e.g. health agencies, Regional Water Boards, water suppliers, etc.) of all SSOs that potentially affect public health or reach the waters of the State in accordance with the MRP. All SSOs shall be reported in accordance with this MRP, the California Water Code, other State Law, and other applicable Regional Water Board WDRs or NPDES permit requirements. The Sewer System Management Plan (SSMP) should identify the officials who will receive immediate notification;*
- *Procedures to ensure that appropriate staff and contractor personnel are aware of and follow the Emergency Response Plan and are appropriately trained;*
- *Procedures to address emergency operations, such as traffic and crowd control and other necessary response activities; and*
- *A program to ensure that all reasonable steps are taken to contain and prevent the discharge of untreated and partially treated wastewater to waters of the United States and to minimize or correct any adverse impact on the environment resulting from the SSOs, including such accelerated or additional monitoring as may be necessary to determine the nature and impact of the discharge.*

RWQCB REQUIREMENTS

Each wastewater collection system agency shall develop an overflow emergency response plan with the following elements:

- *Notification – Provide SSO notification procedures.*
- *Response – Develop and implement a plan to respond to SSOs.*
- *Reporting – Develop procedures to report and notify SSOs per SSO Monitoring and Reporting Program.*
- *Impact Mitigation – Develop steps to contain wastewater, to prevent overflows from reaching surface waters, and to minimize or correct any adverse impact from SSOs.*

SEWER OVERFLOW RESPONSE PLAN

I. SSO Detection

A. Public Observation

B. District Personnel Observation

C. Receipt of a Pump Station Alarm

D. City or Other Agencies' Observation

II. SSO Response and Procedure

A. Safety

B. Initial Response

C. Containment

D. Restore Flow

E. SSO Volume Estimation

F. Estimating of Recovery Volume of Spilled Sewage

G. Cleanup

H. Public Notification

III. Weekly SSO Meetings (Failure Analysis Investigation)

IV. SSO Documentation and Reporting

A. SSO Categories

B. Internal SSO Reporting Procedures

C. External SSO Reporting Procedures

a. Inputting SSO information into State Water Board CIWQS site

D. Internal SSO Documentation

E. External SSO Record Keeping Requirements

F. Other Reporting/SSO Record Keeping Requirements

V. Equipment

A. Closed Circuit Television (CCTV) Inspection Unit

B. Camera

C. GPS (Global Positioning System) Unit

D. Portable Generators, Portable Pumps, Piping and Hoses

VI. SSO Response Training

A. Initial and Annual Refresher Training

INTRODUCTION

The purpose of this Overflow Emergency Response Plan is to provide Standard Operating Procedures (SOPs) for an orderly and effective response to Sanitary Sewer Overflows (SSOs). This plan provides courses of actions for SSO detection, response, containment, volume estimation, recovery, clean up, analysis, documentation, and reporting that may occur within the District's service area. The SSO response plan is described in this section and the response steps to be taken are shown in the SSO Response Plan Flow Chart shown on Figure 14 on the next page.

I. SSO Detection

A. Public Observation

Public observation is the most common way that the District is notified of blockages and spills. Contact information for reporting sewer spills and backups are in the phone book and on the District's website: http://cupertinosanitarydistrict.org/. The public is instructed to call the District office at (408) 253-7071 during business hours between 8:00 am and 5:00 pm. County Communication at (408) 299-2507 dispatches sewage related calls to the first responder after hours, weekends, and holidays.

When a report of a sewer spill or backup is made, District staff receives the call, takes the information from the caller, and fills out the first section of a Service Request.

The person who receives the call will verbally communicate, plus send out an e-mail of the service request to the Sewer Inspector for follow up.

B. District Personnel Observation

District personnel conduct periodic inspections of its sewer system facilities as part of their routine activities. Any problems noted with the sewer system facilities are reported to appropriate District personnel who in turn responds to emergency situations. Work orders are issued to correct non-emergency conditions.

If District personnel determines that sewer overflow is caused by blockage within the private lateral owned by the property owner, they shall follow PLSD Response and Procedure found in Section VII below.

II. SSO Response and Procedures

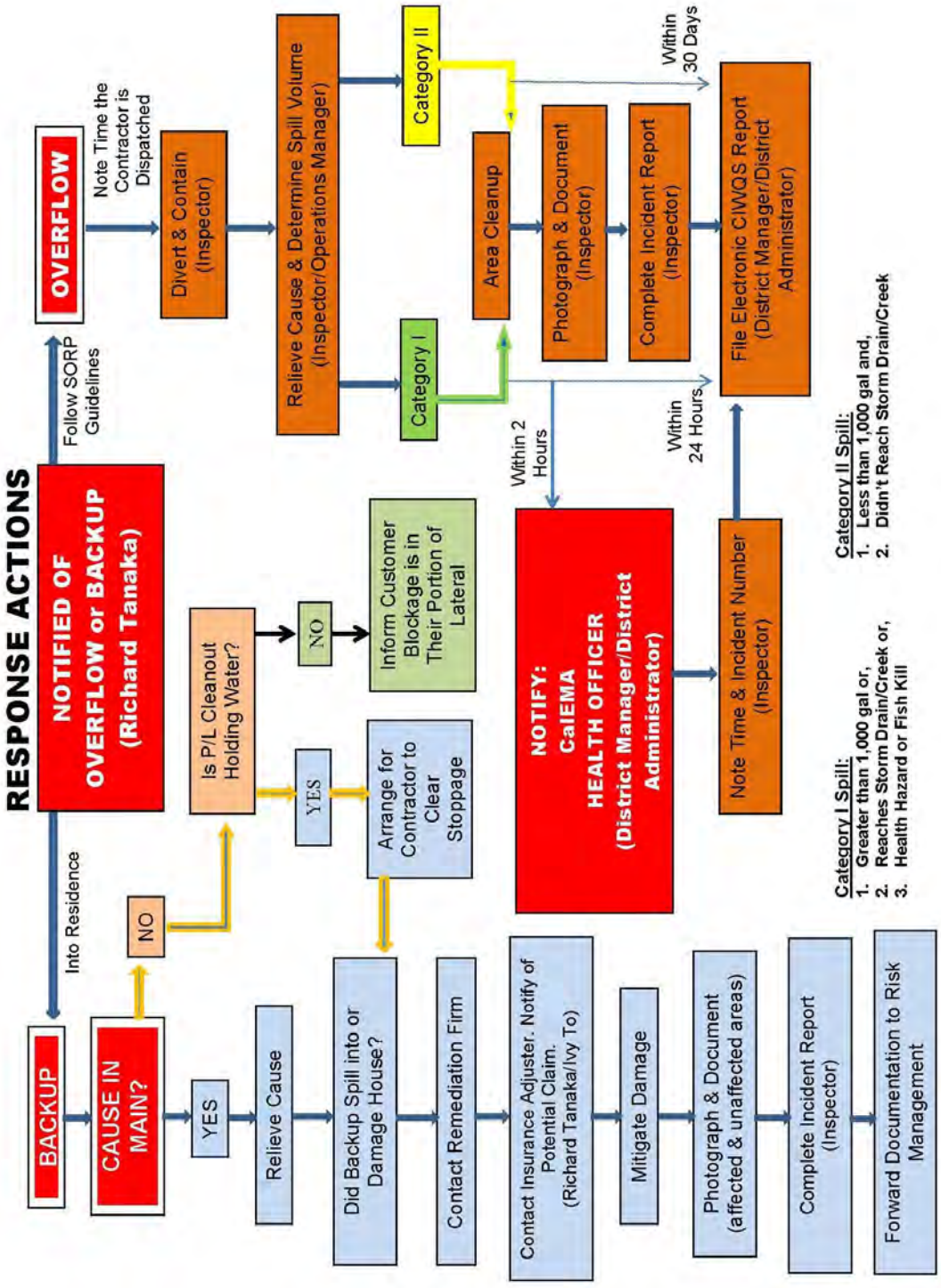


Figure 14: SSO Response Flow Diagram

A. Safety

The first responder is responsible for following safety procedures at all times. Special safety precautions must be observed when performing sewer work to protect and restore public health, environment, and property from sewage spill events. There may be times when District personnel responding to a sewer system event are not familiar with potential safety hazards for that particular sewer task. In such cases, it would be appropriate to take the time to identify hazards, discuss safety issues, consider the order of work, and check safety equipment before starting the job.

B. Initial Response

All sanitary sewer system calls require a response to the reported location of the event in an attempt to minimize or eliminate an overflow. The first responder must arrive at the site of the reported problem immediately and visually check for potential sewer stoppages or overflows.

Response Time – It is the goal of the District to respond to a SSO within 30 minutes of the first call during regular business hours (Monday thru Friday between 8:00 am and 5:00 pm), and within 60 minutes after hours and during weekends and holidays.

First Responder's (First Person at SSO site) Role is to:

- Identify and clearly assess the affected area and extent of spill and note arrival time at spill site.
- Establish perimeters and control zones with traffic cones, barricades, vehicles, or terrain.
- Document conditions upon arrival with photographs.
- Promptly notify the Authorized Representative in the event of a Category 1 SSO or when the spill appears to be large, in a sensitive area, or there is doubt regarding the extent, impact, or how to proceed, and request additional resources (e.g. people, equipment, etc.)
- Contain and control the sewage discharged to the maximum extent possible.
- Make every effort to prevent the discharge of sewage into waterways.
- Restore the flow as soon as practicable and contact the caller for additional information. Depending on the situation, utilize the combination sewer cleaning truck and/or spill response vehicle.
- Return the spilled sewage to the sewer system.
- Restore the area to its original condition (or as close as possible).

Note: Containment is a higher priority than restoring flow, but this depends on the circumstances.

- If the problem is in a private sewer lateral and the flow has entered public right of way, then the first responder should:

- Request the resident to cease activities that are causing continuation of the sewer spill (e.g. flushing toilets, washing laundry, etc.)
- Request the resident to call a plumber to correct the problem with their lateral and stand by until the plumber arrives.
- Contain any spilled sewage that has entered the public right of way and return it to the sanitary sewer system.

C. Containment

Decide whether to proceed with clearing the blockage to restore the flow or to initiate containment measures. The guidance for this decision is:

- Small Spills (less than 50 gallons) – proceed with clearing the blockage.
- Moderate spill where containment is anticipated to be simple (greater than 50 gallons to 999 gallons) – proceed with containment measures.
- Large spills where containment is anticipated to be difficult (greater than 1000 gallons) – proceed with clearing the blockage however, call for additional assistance after 15 minutes if unable to clear the blockage and implement containment measures.

The first responder should also attempt to contain as much of the spilled sewage using the following steps:

- Determine the immediate destination of the overflowing sewage.
- Plug storm drains using air plugs, sandbags, and/or plastic mats to contain the spill, whenever appropriate. If spilled sewage has made contact with the storm drainage system, attempt to contain the spilled sewage by plugging downstream storm drain facilities with sandbags.
- Contain/direct the spilled sewage using dike/dam or sandbags.
- Pump around the blockage/pipe failure.

D. Restore Flow

Attempt to remove the blockage from the system and observe the flows to ensure that the blockage does not recur downstream.

If blockage cannot be cleared within a reasonable time (15 minutes), or the sewer facility requires construction repairs to restore flow, then initiate containment and/or bypass pumping. If assistance is required, immediately contact the Authorized Representative, other employees, contractors, and equipment suppliers.

E. SSO Volume Estimation

A variety of approaches exist for estimating the volume of a sanitary sewer spill. It should be noted that the person preparing the estimate should use the method most appropriate to the sewer overflow in question and use the best information available. Below are three commonly used methods:

1. Measured Volume – The volume of most spills that have been contained can be estimated using this method. The shape, dimensions, and the depth of the contained wastewater are needed. The shape and dimensions are used to calculate the area of the spills and the depth is used to calculate the volume.

   Step 1 Sketch the shape of the contained sewage.

   Step 2 Measure or pace off the dimensions.

   Step 3 Measure the depth at several locations and select an average.

   Step 4 Convert the dimensions, including depth, to feet.

   Step 5 Calculate the area in square feet using the following formulas:

   Rectangle: Area = length (feet) x width (feet)

   Circle: Area = diameter (feet) x diameter (feet) x 0.785

   Triangle: Area = base (feet) x height (feet) x 0.5

   Step 6 Multiply the area (square feet) times the depth (in feet) to obtain the volume in cubic feet.

   Step 7 Multiply the volume in cubic feet by 7.48 to convert to gallons.

2. Duration and Flow Rate – Calculating the volume of spills, where it is difficult or impossible to measure the area and depth, requires a different approach. In this method, separate estimates are made of the duration of the spill and the flow rate. The methods of estimating duration and flow rate are:

   Duration: The duration is the elapsed time from the time the spill started to the time that the flow was restored. Duration time for a SSO does not include the time required to perform cleaning efforts.

   Flow Rate: The flow rate is the average flow that left the sewage system during the time of the spill. The San Diego Manhole Flow Rate Chart is used to estimate the manhole overflow rate. Photographs showing the actual measurement should be taken in documenting the basis for the flow rate estimate. Figure 15 and Figure 16 provide an example District's Manhole SSO flow rate estimation.

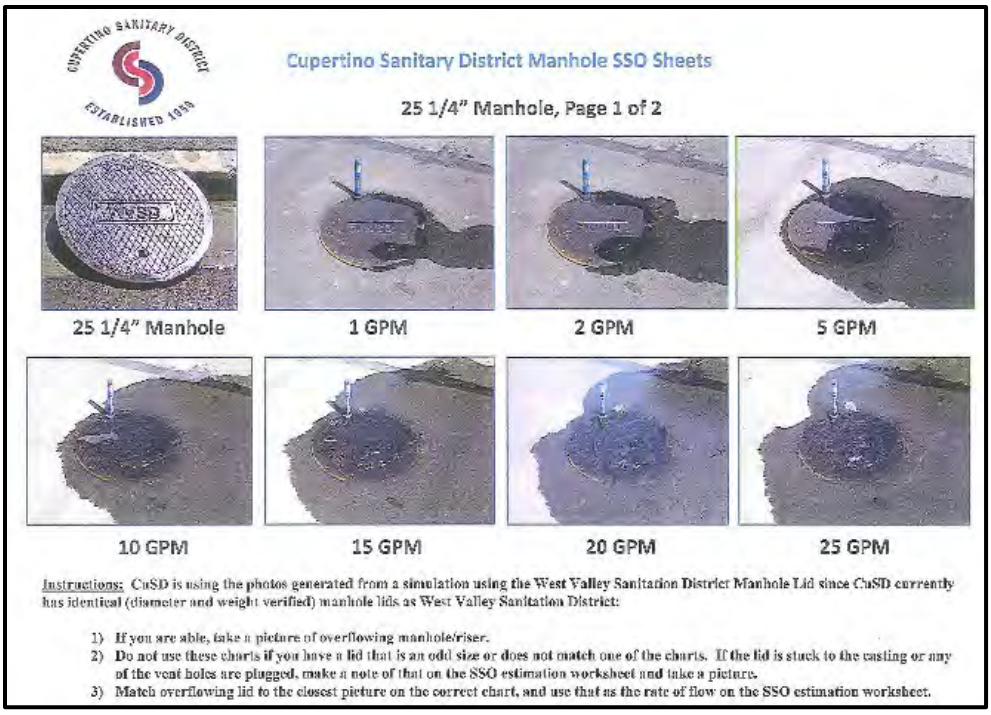


Figure 15: SSO Flow Estimates, Image 1 of 2

Figure 16. SSO Flow Rate Estimates, Image 2 of 2

SSO Start Time: The start time is sometimes difficult to establish. Below are suggestions for determining spill start times:

- Nearby Witnesses: Witnesses can be used to establish start time. Contact and interview the reporting party, nearby residents, business owners or any witnesses that may have observed the incident. Inquire as to their observations. Spills that occur in public right of way are usually observed and reported promptly. Spills that occur out of the public view can go on longer. Sometimes, observations like odors or sounds (e.g. water running in a normally dry creek bed) can be used to estimate the start time.
- Site Conditions: Conditions at the spill site change over time. Initially there will be limited deposits of toilet paper and other sewage solids. After a few days to a week, the sewage solids form a light-colored residue. After a few weeks to a month, the sewage solids turn dark. The quantity of toilet paper and other materials of sewage origin increase over time. These observations can be used to estimate the start time in the absence of information. Taking photographs to document the observations can be helpful if questions arise later in the process.
- Accounting for Flow Variations: It is important to remember that spills may not be continuous. Blockages are not usually complete (some flow continues). In this case the spill would occur during the peak flow periods (typically 10:00 to 12:00 and 13:00 to 16:00 each day). Spills that occur due to peak flows in excess of capacity will occur only during and for a short period after heavy rainfall.
- Spill Volume/Flow Rate: Start time can be calculated using estimated flow rate and estimated spill volume. District personnel will use the San Diego Manhole Flow Rate Chart to estimate the flow rate and to estimate the spill volume using approved methodology (please see method 2 calculation above). The start time then is calculated by using both the estimated flow rate and the estimated spill volume.

SSO Stop Time: The stop time is usually much easier to establish. The stop time is determined when field crews confirm that the SSO has stopped. This typically is the time when the blockage has been removed.

Spill Volume Calculation Using Flow Rate: Once duration and flow rate have been estimated the volume of the spill is the product of the duration in hours or days and the flow rate in gallons per hour or gallons per day.

Example:	Spill Start Time:	14:00
	Spill End Time:	17:00
	Spill Duration:	3 Hours
	Flow Rate:	3.3 gallons per minute

Volume: 3.3 gallons per minute x 60 minutes per hour x 3 hours = 594 gallons

F. Estimating Recovery Volume of Spilled Sewage

The following methods can be used, depending on the circumstances, for estimating recovered sewage volume:

1. Two Truck Sewage Recovery Method: The sewage recovery and cleanup effort often requires fresh de-chlorinated water to clean the affected area or storm pipe lines. The collected liquid in the tank would not represent the actual spill sewage volume if water is introduced for cleanup. By using this method, District inspectors will require the contractor to use two Vactor trucks, one with an empty tank at a downstream storm drain manhole or inlet and one filled with fresh de-chlorinated water at an upstream storm drain manhole or inlet where fresh de-chlorinated water is introduced. The total recovered volume will include cleanup water and sewage which can be used to calculate the sewage spill volume. The total amount of the collected water less the cleanup water introduced would provide the actual sewage spill/recovered.
2. Pipe Volume Calculation: Using this method, before vacuuming the sewage from the storm pipe line into a tank, the contractor will block the storm pipe line downstream, video the storm main and measure the level of liquid standing in the pipe. By knowing the pipe size, level of liquid in the pipe, and the length of pipe filled, the spill sewage volume can be calculated. See Figure 17 below.

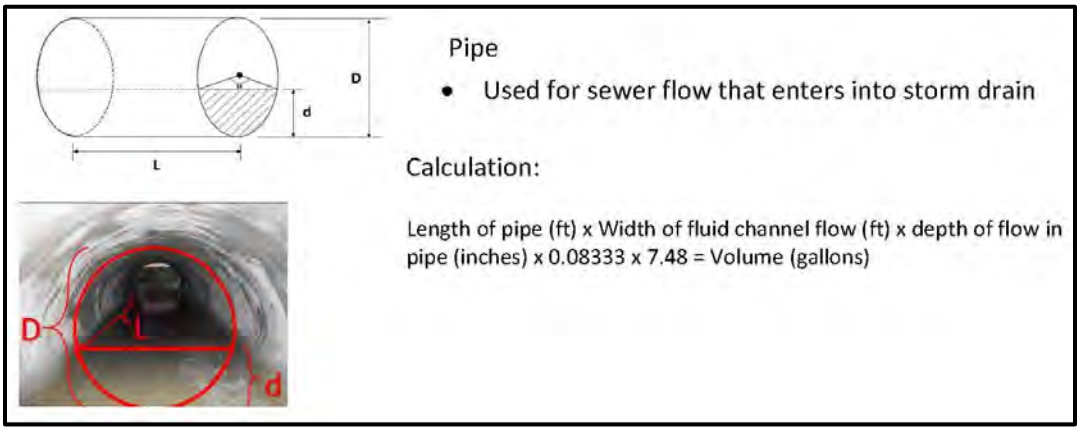


Figure 17: Volume Calculation

- Water Quality Monitoring

In accordance with subsection D.7(v) of the SSS WDRs, water quality monitoring program to assess impacts from SSO's to surface waters in which 50,000 gallons or greater are spilled into surface water shall include the following:

1. Protocols for water quality monitoring shall include, at minimum, visual inspection, determination of volume of total spills and estimated volume

entering the surface water, and/or spill travel time in the surface water where monitoring may not be possible due to safety concerns, access restrictions, etc.

2. Within 48 hours, water quality sampling for, at a minimum, the following constituents:
    a. Ammonia
    b. Appropriate bacterial indicators per the applicable Basin Plan water quality objectives, which may include total and fecal coliform, enterococcus and E-coli.
3. Water quality analysis shall be performed by an accredited or certified laboratory and instruments/devices used to implement the SSO Water Quality Monitoring Program shall be properly maintained and calibrated, as necessary, to ensure their continued accuracy.

- Water Quality Sampling and Testing

Water quality sampling and testing is required when 50,000 gallons or greater are spilled to surface water to determine the extent and impact of the SSO. Water quality samples will be taken whenever adverse impacts to surface waters (i.e. fish kill) is visually observed, the sampling can be safely obtained from the impacted water body, and the act of sampling does not prevent the District from completing the necessary SSO response actions.

- Conduct water quality sampling within 48 hours after initial SSO notification for Category 1 SSOs in which 50,000 gallons or greater are spilled to surface waters. Water quality results are required to be uploaded into CIWQS in which 50,000 gallons or greater are spilled to surface waters.
- The following steps should be taken to collect water quality samples:
    a) Samples should be collected from upstream of the spill, from the spill area, and downstream of the spill (e.g. creeks).
    b) Samples should be collected near the point of entry of the spilled sewage and every 100 feet along the shore of stationary water bodies.
    c) Label the samples with date, time, location, and sampler's initials
    d) Keep the bacteriological samples under ice (cold packs) until transferred to the laboratory's process refrigerator (use a cooler).
- The City of San Jose Environmental Services Department laboratory will analyze the sample to determine the nature and extent of impact from the discharge. Additional sample will be taken to determine if posting of warning signs should be discontinued. The basic analyses should include pH, temperature, total coliform, fecal coliform, biochemical oxygen demand (BOD), dissolved oxygen, and ammonia nitrogen.

In addition to above, effective August 28, 2013, the District will take water quality sampling and testing whenever it is estimated that an SSO of fifty (50) gallons or more enters surface waters. The District will collect and test samples from three (3) locations: the point of discharge, upstream of the point of discharge, and downstream of the point of discharge. Constituents tested for shall include ammonia, fecal coliform, E-coli, total coliform, dissolved oxygen, and BOD.

G. Clean Up

The recovery and clean up phase begins when the flow has been restored and the spilled sewage has been contained to the extent possible. Clean up and disinfection procedures should be implemented to reduce the potential for human health issues and adverse environmental impacts that are associated with a SSO event. The procedures described are for dry weather conditions. The contractor under the direction of the District Inspector shall follow the following guidelines:

- Hard Surface Areas
    - Collect all signs of sewage solids and sewage related material either by hand or with the use of rakes and brooms.
    - Wash down the affected area with clean de-chlorinated water until the water runs clear. They should take all reasonable steps to contain and vacuum up the wastewater which should be returned to the sanitary sewer system.
    - Disinfect all areas that were contaminated from the overflow using the disinfectant solution of household bleach diluted 10:1 with water. Apply minimal amounts of disinfectant solution using a hand sprayer.
    - Document the volume and application method of disinfectant that was employed.
    - Allow the area to dry and repeat as necessary.
- Landscaped and Unimproved Natural Vegetation
    - Collect all signs of sewage solids and sewage related material either by hand or with the use of rakes and brooms.
    - Wash down the affected area with clean de-chlorinated water until the water runs clear. The flushing volume should be approximately three times the estimated volume of the sewer spill.
    - Either contain or vacuum up the wash water so that none is released.
    - Allow the area to dry and repeat as necessary.
- Natural Waterways
    - The California Department of Fish and Wildlife (CDFW) should be notified in the event a SSO impacts any creeks or natural waterways. CDFW will

provide the professional guidance needed to effectively clean up spills that occur in these sensitive environments. Contact CDFW at:

1(707) 944-5500 Monday-Friday, 8:00 AM – 5:00 PM

1(888) 334-2258 After Hours

If there is no immediate response, follow up with Cal EMA and request CDFW call back.

- Clean up should proceed quickly in order to minimize negative impact. Take photos after clean-up.

- Wet Weather Modifications
  - Omit flushing and sampling during storm events wherein flushing and sampling may be impractical and unsafe as well as provide meaningless results.
- Follow-Up Activities
  - If sewage has reached the storm drain system, the combination sewer cleaning truck should be used to vacuum/pump out the catch basin and any other portion of the storm drain that may contain sewage. District Inspectors may require the contractor to use two Vactor trucks, one with an empty tank at a downstream storm drain manhole or inlet and one filled with fresh de-chlorinated water at an upstream storm drain manhole or inlet where fresh de-chlorinated water is introduced.
  - In the event that an overflow occurs at night, the location should be re-inspected first thing the following day. The inspector should look for any signs of sewage solids and sewage-related material that may warrant additional cleanup activities.

H. Public Notification

The District's Website: The District maintains a website https://www.cupertinosanitarydistrict.org/. to inform the public about its activities. Typical information available on the website includes general information about the District's regulations, ordinances and codes, permit forms, District's collection system, link to CA media coverage related to COVID-19, The website also serves to update the public on the District's construction projects or as a tool to convey any late breaking news.

Door Hangers: Door hangers and letters are distributes to sanitary sewer customers in areas that will be impacted by the District's construction projects. Homeowners are normally provided with an opportunity to coordinate replacement of their private service lateral when the District is replacing the corresponding public section of the lateral.

Direct Mail: The District regularly uses letter to notify it residents of important construction projects, meetings and other community considerations.

Post "Raw Sewage Spill" signs and place barricade/cones with caution tape to keep vehicles and pedestrians away from contact with spilled sewage. Do not remove the signs until directed by the Santa Clara County Health Department.

Creeks and streams that have been contaminated as a result of a SSO will have signs posted at visible access locations until the risk of contamination has subsided to acceptable levels.

Warning signs, once posted, will be inspected every day to ensure that they are still in place.

Major spills may warrant broader public notice. The District Manager-Engineer will authorize contact with local media when significant areas may have been contaminated by sewage.

III. Weekly SSO Meetings (Failure Analysis Investigation)

In a weekly SSO meeting, all SSOs should be thoroughly investigated and documented for use in managing the sewer system and meeting established reporting requirements.

The objective of the failure analysis investigation is to determine the "primary cause" of the SSO and to identify corrective actions needed that will reduce or eliminate future potential for the SSO to recur. Every SSO event is an opportunity to evaluate the response and reporting procedures. Each overflow event is unique, with its own elements and challenges including volume, cause, location, terrain, and other parameters.

All relevant participants meet weekly to review the procedures used and to discuss what worked and where improvements could be made in responding to and mitigating future SSO events. The results of the debriefing should be recorded and tracked to ensure the action items are completed.

The investigation should include:

- Reviewing and completing the Sanitary Sewer Overflow Report.
- Reviewing past maintenance records.
- Reviewing available photographs.
- Viewing a CCTV inspection video to determine the condition of the line segment immediately following the SSO and reviewing the inspection reports and logs.
- Reviewing input from District personnel who responded to the spill.

IV. SSO Documentation & Reporting

Reporting and documentation requirements vary based on the type of SSO.

A. SSO Categories

The SWRCB has established guidelines for classifying and reporting SSOs. There are three categories of SSOs as defined by the SWRCB:

- Category 1 – Discharges of untreated or partially treated wastewater of any volume resulting from an enrollee's sanitary sewer system failure or flow condition that:
    - Reach surface water and/or reach a drainage channel tributary to a surface water; or
    - Reach a Municipal Separate Storm Sewer System (MS4) and are not fully captured and returned to the sanitary sewer system or not otherwise captured and disposed of properly. Any volume of wastewater not recovered from the MS4 is considered to have reached surface water unless the storm drain system discharges to a dedicated storm water or ground water infiltration basin (e.g., infiltration pit, percolation pond).
- Category 2 – Discharges of any untreated or partially treated wastewater of 1,000 gallons or greater resulting from an enrollee's sanitary sewer system failure or flow condition that do not reach surface water, a drainage channel, or a MS4 unless the entire SSO discharged to a storm drain system is fully recovered and disposed of properly.
- Category 3 – All other discharges of any untreated or partially treated wastewater resulting from an enrollee's sanitary sewer system failure or flow condition.

Private Lateral Sewage Discharge (PLSD) – Discharges of any untreated or partially treated wastewater resulting from blockages or other problems within a privately owned sewer lateral connected to the enrollee's sanitary sewer system or from other private sewer assets. PLSD's that the enrollee becomes aware of may be voluntarily reported to the California Integrated Water Quality System (CIWQS) Online Database.

B. Internal SSO Reporting Procedures

Internal Reporting Category 1 or 2 SSOs

1. The first responder will, immediately following the SSO event, notify the Authorized Representative.
2. The first responder will fill out the SSO Report Form and make the report available to the Authorized Representative. The Authorized Representative will meet with the District inspector at the site of the SSO event to assess the situation and to document the conditions with photos immediately after the SSO event.

3. In the event of a Category 1 or 2 SSO or an overflow in a sensitive area, the Authorized Representative will notify the District Manager-Engineer accordingly.

Internal Reporting Category 3 SSOs

1. The first responder will notify the Authorized Representative immediately after confirming the SSO event.
2. The first responder will fill out the SSO Report Form and make the report available to the Authorized Representative.

C. External SSO Reporting Procedures

The California Integrated Water Quality System (CIWQS) electronic reporting system will be used for reporting SSO information to the SWRCB when required. If there are no SSOs during the calendar month, the Legally Responsible Officer will certify a no-spill report. The LRO will add a "to do task item" on his/her calendar as a reminder to submit timely No Spill Certification.

In the event that CIWQS is unavailable, the Authorized Representative will forward all required information to the Region 2 Water Quality Control Board (RWQCB) office in accordance with the time schedules identified above. In such event, the District will submit the appropriate reports using CIWQS as soon as practical.

External Reporting Category 1 or 2 SSOs

1. Within two hours of becoming aware of any Category 1 SSO greater than or equal to 1,000 gallons discharged to surface water or spilled in a location where it probably will be discharged to surface water, notify the California Office of Emergency Services (Cal OES, (800) 852-7550) and obtain a notification control number. The District will also notify the Santa Clara County Department of Environmental Health of the Category 1 SSO event within this time period.

   The District shall provide updates to Cal OES regarding substantial changes to estimated volume of untreated or partially treated sewage discharged and any known change to impact.
2. Within 3 business days of being notified of the Category 1 or 2 spill event, the LRO or Authorized Representative will submit the draft SSO report using CIWQS.
3. Within 15 calendar days of the SSO end date, the LRO will certify the final report using CIWQS after it is reviewed for accuracy by the First Responder and Authorized Representative. The LRO will update the certified report as new or changed information becomes available. The updates can be submitted at any time and must be certified.

External Reporting Category 3 SSOs

Within 30 calendar days of the end of the month in which the SSO occurred, the Authorized Representative will certify the electronic report in CIWQS. The report will include the information to meet the GWDR requirements.

External Reporting Private Lateral Sewage Discharges

The LRO may report private lateral SSO using CIWQS and specify that the sewage discharge occurred and was caused by a private lateral and identify the responsible party, if known.

D. Internal SSO Documentation

Category 1 and 2 SSOs

The following steps are taken to document both Categories 1 and 2 SSOs for internal documentation:

- The first responder will complete the Sanitary Sewer Overflow Report Form and provide copies to the Authorized Representative.
- The Authorized Representative will prepare a file for each individual SSO. The file should include the following information:
    - Initial service call information
    - Sanitary Sewer Overflow Report form
    - Copies of the CIWQS report forms
    - Volume estimates
    - Weekly SSO meetings

E. External SSO Record Keeping Requirements

The GWDR requires that individual SSO records be maintained by the District for a minimum of 5 years from the date of the SSO. This period may be extended when requested by the Regional Water Board Executive Officer. All records shall be made available for review upon State or Regional Water Board staff's request. Records shall be retained for all SSOs, including but not limited to the following when applicable:

- Copy of Certified CIWQS report(s);
- All original recordings for continuous monitoring instrumentation;
- Service call records and complaint logs of calls received by the District;
- SSO calls;
- SSO records;
- Steps that have been and will be taken to prevent the SSO from recurring and a schedule to implement those steps;

- Work orders, work completed, and any other maintenance records from the previous five years which are associated with responses and investigations of system problems related to SSOs;
- A list and description of complaints from customers or others from the previous five years; and
- Documentation of performance and implementation measures for the previous five years.

If the SSO water samples are taken for water quality results, the records of monitoring information shall include the following:

- The date, exact place, and time of sampling or measurements;
- The individual(s) who performed the sampling or measurement;
- The date(s) analyses were performed;
- The individual(s) who performed the analyses;
- The analytical technique or method used; and
- The result of such analyses.

F. Other Reporting/SSO Record Keeping Requirements

- SSO Technical Report shall be submitted within 45 calendar days after the end date of any Category 1 SSO in which 50,000 gallons or greater are spilled to surface waters.
- "No Spill" certification shall be completed within 30 calendar days of the end of the month.
- Collection System Questionnaire shall be updated and certified every 12 months.

V. Equipment

The District maintains or can access specialized equipment that is required to support this Overflow Emergency Response Plan (OERP) including:

A. Closed Circuit Television (CCTV) Inspection Unit

CCTV Inspection Unit is required to determine the primary cause for all SSOs from gravity sewers.

B. Camera

A digital, disposable, or cell phone camera is required to record the conditions upon arrival, during clean up, and upon departure.

C. Portable Generators, Portable Pumps, Piping, and Hoses

Portable generators, pumps, piping, and hoses are needed to pump around failed sewers mains.

VI. SSO Response Training

A. Initial and Annual Refresher Training

All District personnel who may have a role in responding to, reporting, and/or mitigating a sewer system overflow will receive training before they are placed in a position where they may have to respond. Current employees will receive annual refresher training or as needed on this plan and the procedures to be followed.

B. SSO Response Drills

Periodic training drills will be held to ensure that employees are up to date on the procedures, the equipment is in working condition, and the required materials are readily available. The training drill should cover scenarios typically observed during sewer related emergencies (e.g. mainline blockage, mainline failure, and lateral blockage). The results and the observations during the drills should be recorded and action items should be tracked to ensure completion.

C. SSO Training Record Keeping

Records will be kept of all training that is provided in support of this plan. The records for all scheduled training courses and for each overflow emergency response training event will include date, time, content, name of trainer(s), and name of attendees.

D. Contractors Working on District Sewer Facilities

All contractors working on District sewer facilities will be contractually required to develop a project-specific Overflow Response Plan. All contractor personnel will be required to receive training in the contractor's Overflow Response Plan and to follow it in the event they cause or observe a SSO.

VII. PLSD Response and Procedure

A. Overview

If a sanitary sewer overflow occurs due to a blockage or defect within the privately owned sewer lateral connected to the enrollee's sanitary sewer sytem, it is categorized as a Private Lateral Sewer Discharge. Upon arriving on site, the District representative shall contact the property owner and notify them that the spill must be cleaned up. Our cleaning services can be offered but the homeowner is responsible for the invoice. The homeowner has the right to refuse our services and hire their own plumbing service. If the homeowner is not present, District shall clean up spill and bill the homeowner for the cleaning. District representative to remain on site throughout cleanup of the spill. The enrollee is encouraged to provide notification to CalOES per section C (External SSO Reporting Procedures) above when a PLSD greater than or equal to 1,000 gallons has or may result in a discharge to surface water. For any PLSD greater than or equal to 1,000 gallons

regardless of the spill destination, the enrollee is encouraged to file a spill report as required by Health and Safety Code section 5410 et. Eq and Water Code section 13271, or notify the responsible party that notification and reporting should be completed as specified above and required by the State law.

ELEMENT 7 – FATS, OILS, AND GREASE (FOG) CONTROL PROGRAM

SWRCB REQUIREMENTS:

Each enrollee shall evaluate its service area to determine whether a FOG control program is needed. If an enrollee determines that a FOG program is not needed, the enrollee must provide justification for why it is not needed. If FOG is found to be a problem, the enrollee must prepare and implement a FOG source control program to reduce the amount of these substances discharged to the sanitary sewer system. This plan shall include the following as appropriate:

- *An implementation plan and schedule for a public education outreach program that promotes proper disposal of FOG;*
- *A plan and schedule for the disposal of FOG generated within the sanitary sewer system service area. This may include a list of acceptable disposal facilities and/or additional facilities needed to adequately dispose of FOG generated within a sanitary sewer system service area;*
- *The legal authority to prohibit discharges to the system and identify measures to prevent SSOs and blockages caused by FOG;*
- *Requirements to install grease removal devices (such as traps or interceptors), design standards for the removal devices, maintenance requirements, BMP requirements, record keeping and reporting requirements;*
- *Authority to inspect grease producing facilities, enforcement authorities, and whether the enrollee has sufficient staff to inspect and enforce the FOG ordinance;*
- *An identification of sanitary sewer system sections subject to FOG blockages and establishment of a cleaning maintenance schedule for each section; and*
- *Development and implementation of source control measures for all sources of FOG discharged to the sanitary sewer system for each section identified in (f) above.*

RWQCB REQUIREMENTS:

Each wastewater collection system agency shall evaluate its service area to determine whether a FOG control program is needed. If so, a FOG control program shall be developed as part of the Sewer System Management Plan (SSMP). If an agency determines that a FOG program is not needed, the agency must provide justification for why it is not needed.

Cupertino Sanitary District has taken over the FOG program from the Watershed Protection Division of the City of San Jose Environmental Services Department as of 2017. Prior to 2017, the District contracted the City's Environmental Services Department to manage and oversee the FOG program.

GREASE PRETREATMENT DEVICE PLAN CHECKS

District staff determines the sizing requirements for all grease removal/pretreatment devices (GRD). The District has requested city Building Departments to include the District in plan review of facilities with food service equipment. The plans are reviewed and a permit form with requirements are sent to the restaurant representative, and the requirement for a GRD is determined. The District will not approve any tenant improvement plans without the review comments and requirements. The District developed procedures for plan check as part of the FOG & Trash Enclosure Policy and Guidelines document which was adopted in Ordinance 120.

The plan review process involves evaluating the fixtures that are required to connect to the GRD, sizing the GRD based on the fixtures, requiring the applicant to update their plans to reflect the required GRD, as well as any applicable review and inspection fees. This information is sent to the applicant via the City Building Departments on a permit form with District letterhead. This permit form also states the minimum acceptable cleaning frequency for the type of GRD that is required, the on-site maintenance of a schedule and instructions for cleaning, and cleaning records and receipts.

The size and type of pretreatment device required is determined based upon the facility's potential for discharging grease in the wastewater. The sizing is based on the size of the restaurant, the cooking and cleaning equipment installed, and the number of meals served, these are some of the factors considered in order to determine the standard required GRD size. Requirements range from a small grease trap beneath the pot sink to a large in-ground grease interceptor.

Approved grease trap sizes are 40, 50, 70, and 100 pounds. Grease interceptors must be a minimum of 1000 gallons. The District does not permit the use of Power-Operated Grease Removal Devices, Chemicals, Enzymes or Bacteria. Best Management Practices (BMPs) are distributed to restaurant representatives during the plan check, including kitchen practices to minimize the discharge of grease into the sewer system, maintenance tips for grease traps and interceptors, and record keeping requirements. BMP documents are also reviewed by the restaurant representatives with District Staff during on-site inspections. District inspectors verify the installation and connection of the pretreatment device.

STANDARD RESTAURANT INSPECTIONS

District staff inspect all restaurants and other food facilities on a routine basis. Their initial inspection includes determining if the restaurant generates grease, if there is a GRD in place, and reviewing the cleaning records/manifests for the GRD, as well as practices used to clean floor mats, vent hoods, and outside areas. Enforcement actions are taken against any restaurant that does not clean their GRD at the minimum set frequency (monthly for grease traps and quarterly for grease interceptors) or keep 3 years of cleaning records. Facilities generating grease are reinspected periodically (every one to three years), depending on the number of areas of concern observed during the inspection. BMPs are distributed to restaurant operators during the inspections, as appropriate, including kitchen practices to minimize the discharge of grease into the sewer system, maintenance tips for grease traps and interceptors, and record keeping requirements. If a facility is not in compliance with the above requirements, District staff send

Notice of Violation correspondence to the restaurant representatives. In the event that there is no action taken on these Notice of Violations, the violation is escalated to a fine.

INVESTIGATION OF FOG IN SEWER MAINS

The District's Fats, Oil, and Grease Program has been in operation since July 2017. During the fiscal year 2018-2019 and 2019-2020, approximately 410 plus inspection each fiscal year, including re-inspections were performed. During this period, District inspectors work closely with contractor cleaning crews and staffs to identified "hot spot" and track those areas, for more frequent sewer cleaning service and surveillance. Facilities in "hot spots" are also evaluated to determine if possible plumbing connection or hydraulic loading of their grease removal devices might be contributing to the problems of that area. Facilities that have inadequate grease removal devices have been required to install adequately sized GRD to come into compliance with the District's FOG Ordinance.

District CCTV teams conduct video inspection of known problems areas in mainlines to help determine which pipe segments and restaurants nearby are the largest contributors and dischargers. The information collected is then given to FOG program personnel for further follow up for enforcement actions when warranted. Cupertino Sanitary District Inspectors respond to reports from staff or other sources that a grease blockage or unusual build-up of grease has taken place in the sanitary sewer mainlines. Referral for Watershed Protection investigations are commonly based on the following reasons:

- Excessive grease build-up
- Odor complaints
- Request for service
- Blockages due to grease
- Excessive grease evident during preventive maintenance
- Reduced flow
- Video inspection identifies excessive grease
- Litigation

The area upstream of the grease build-up is evaluated for potential sources, and inspections of those sources are performed. The presence and size of GRD are looked at, and GRD cleaning and maintenance records are reviewed. Enforcement action is taken against establishments determined to be causing grease blockages in the sanitary sewer, and additional requirements for cleaning or installation of GRD can be imposed.

PARTICIPATION IN REGIONAL EFFORTS

The District staff participates in a regional committee which includes the BACWA Collection Systems Committee.

OUTREACH

A number of outreach pieces are available to distribute information about FOG issues both in future Annual Reports and on an as needed basis. Grease Management Best Management Practices fact sheets: Grease Trap Maintenance, Grease Interceptor Maintenance, Maintenance Documentation, Power-Operated Grease Removal Devices, Chemicals, Enzymes and Bacteria, Vapor/Ventilation Hood Cleaning, and a poster – Managing Fats, Oils, & Grease, ("It's Easier Than You Think") are available to inspectors and plan check staff to distribute to restaurant owners and operators. Outreach has been created in languages other than English to better reach the diverse customers in District's service area and make our regulation more useful and better understanding. Outreach to all cities in Cupertino, and Saratoga has been conducted to ensure that the business owner clearly understand District's requirement for the need of compliance of all FSE with Cupertino Sanitary District FOG Ordinance in Cupertino service areas.

LEGAL AUTHORITY

1. **The California Government Code**

   http://www.leginfo.ca.gov/calaw.html

2. **Cupertino Sanitary District's Operation Code**

   http://cupertinosanitary.org/

Cupertino Sanitary District's Operation Code adopted March 12, 2016 and as amended, hereinafter "Code", which establishes ESD's legal authority to regulate domestic, commercial and industrial discharges to the sanitary sewer system. The sections included here describe District's ability to regulate the discharge of substances can that cause or contribute to blockages of the sanitary sewer system. A full copy of the District Code is available at the District Office and on its website.

ELEMENT 8 – SYSTEM EVALUATION AND CAPACITY ASSURANCE PLAN

SWRCB REQUIREMENTS:

The enrollee shall prepare and implement a capital improvement plan (CIP) that will provide hydraulic capacity of key sanitary sewer system elements for dry weather peak flow conditions, as well as the appropriate design storm or wet weather event. At a minimum, the plan must include:

- ***Evaluation**: Actions needed to evaluate those portions of the sanitary sewer system that are experiencing or contributing to a SSO discharge caused by hydraulic deficiency. The evaluation must provide estimates of peak flows (including flows from SSOs that escape from the system) associated with conditions similar to those causing overflow events, estimates of the capacity of key system components, hydraulic deficiencies (including components of the system with limiting capacity) and the major sources that contribute to the peak flows associated with overflow events;*
- ***Design Criteria**: Where design criteria do not exist or are deficient, undertake the evaluation identified in (a) above to establish appropriate design criteria; and*
- ***Capacity Enhancement Measures**: The steps needed to establish a short- and long-term CIP to address identified hydraulic deficiencies, including prioritization, alternatives analysis, and schedules. The CIP may include increases in pipe sizes, I/I reduction programs, increases and redundancy in pumping capacity, and storage facilities. The CIP shall include an implementation schedule and shall identify sources of funding.*
- ***Schedule**: The enrollee shall develop a schedule of completion dates for all portions of the capital improvement program developed in (a)-(c) above. This schedule shall be reviewed and updated consistent with the Sewer System Management Plan (SSMP) review and update requirement as described in Section D.14.*

RWQCB REQUIREMENTS:

***Capacity Assessment**: Each wastewater collection system agency shall establish a process to assess the current and future capacity requirements for the collection system facilities.*

***System Evaluation and Capacity Assurance Plan**: Each wastewater collection system agency shall prepare and implement a capital improvement plan to provide hydraulic capacity of key sewer system elements under peak flow conditions.*

Also, with the implementation of "Smart Cover" technology, there is the opportunity to obtain "real-time" flow characteristics during dry weather and wet weather peak periods and evaluate comparative readings to determine infiltration - inflow impacts to system capacities.

In 2010, the District implemented a 5-Year CIP which has since been completed. One of the main functions of the CIP is to administer and conduct planning efforts that include capacity and condition assessments along with recommendation and prioritization of sewer repair and

rehabilitative construction projects. In addition, the Risk Assessment Plan has been a useful tool to identify those locations where inclusion in the CIP of improvements to the system will eliminate or greatly minimize incidents of SSOs that might flow directly to a creek.

As part of the 2018 Master Plan development, The District conducted an investigation on all of its Pump Station Facilities. The investigation involved a detailed condition assessment of all pump station facilities operating within the district. The assessment involved in person site visits with the goal of determining existing conditions. Field notes where closely compared to pump station as-built plans and other existing condition records. Filed visits were limited to above surface inspections. Previous inspection records were used to provide an in-depth condition assessment of structural, electrical, mechanical and civil components. Critical data regarding the condition of each pump station was gathered and scoring system was developed. To compensate for the lack of recent underground inspection, age was used to analyze existing condition. The useful life of each major component withing each pump station was compared to its current age. Base on this we were able to determine the components that have server its useful life. Based on this we made a list of recommendations for each component. Each pump station was assessed by the major components within the facility such as: valves, force mains, electrical components and pumps. Importance was placed on facilities with a history of issues.

Another aspect of an agency's system evaluation must include an understanding and awareness of exposure to the potential of sewage overflows entering waterways that lead to receiving waters of fishable creeks and, ultimately for this District, the San Francisco Bay. To address or reduce these potential risks, the District will provide capacity throughout the District in areas that are currently under capacity. These locations will be prioritized based on their likelihood and consequence of failure during hypothetical rainstorms. Segments of pipe that have larger flows and more defects will be chosen before an area of the system with less flow and less defects. The District's sewer system will be analyzed based on theoretical 2-Year and 10-Year storms.

The District's personnel have knowledge of the locations of drainage channels and storm water collection facilities that are near sewer manholes or lift stations. Locations, which are recognized as most vulnerable, are noted on maps of the storm water collection infrastructure and the pertinent sewer system maps. District staff has recently added all storm water facilities in the vicinity of the District's sewer infrastructure on the District's GIS mapping. Having this information digitally available allows field staff to quickly access the final destination of a potential sewer spill.

Strategies will be developed to prevent or contain effluents that enter those facilities from reaching a fishable creek or protected habitat in the event of a spill. Effective strategies include use of containment devices, installation of by-pass systems, high-water sensing devices and organized mobilization of responders trained to contain the overflow, control the cause and clean-up contaminants.

Prioritization of funding for the implementation of permanent prevention devices will be given to those circumstances where violation of the environment and loss of agency monetary assets due to imposed fines are most at risk. Projects thus identified must be given highest priority in the District's annual CIP allocations.

CAPACITY ASSURANCE PLAN

The District has implemented the use of sanitary sewer hydraulic modeling software named XPSWMM to aide in analyzing and prioritizing areas in the District with capacity deficiencies. The model was built using District as-built records, Arc-GIS, metered dry and wet weather flows, and theoretical rainfall events. Currently, the standard storm used is a 10-Year 24-Hour storm. Model calibration was performed at various metered areas throughout the District and were compared to a metered event from 2016.

The model of the District's system allows staff to locate areas of deficiencies during theoretical future wet weather events. This model is also used to evaluate the impact of new developments connecting to the system. Results from the model allows the District to enforce the developers to perform capacity relief and upsizing projects near and downstream of the proposed developments.

The installation of "Smart Cover" sensing devices, intended to alert District staff when high water levels indicate the likelihood of a sewer overflow, has afforded the added benefit of monitoring flow levels at strategic locations in the collection system. By knowing the measured distance of the sensor from the invert elevation of the sewer main, the depth of flow can be derived and the flow capacity determined at any given time. The District currently have twenty seven (27) units installed at the most strategic locations in the collection system to provide early warning of an imminent spill. The units will provide data to enable District personnel to study flow characteristics at these locations in both dry and wet weather conditions and will allow the District to confirm adequate sewer system capacity as well as identify any specific high Infiltration and Inflow areas. The flow measurements derived in this manner may be further validated by comparison with flow meter data measured at the District's pump stations.

To characterize I & I sources, the District will issue service orders to appropriate companies to perform general I & I reconnaissance work, smoke testing, and sewer and manhole condition assessment for unwanted inflow and infiltration. The sources of inflow may be down spouts, driveway, or yard drains from illegal private property connections. The occasion for groundwater infiltration or sewage ex-filtration in the District's sewer mains and service laterals, due to offsets, separated joints or other structural failure, may be discovered by video inspections, air testing or hydrostatic testing techniques.

As a means of assuring adequate capacity in keeping with the District's Master Plan, staff conduct periodic reviews of historic and real time flow monitoring data, engineering/inspection reports, and sewer maintenance records to identify areas of high groundwater infiltration, and rainfall inflow and infiltration. Through flow monitoring data, the District engineer will also identify abnormal sewer flow behavior that might be related to capacity or condition problem. In such case, the District engineer and sewer maintenance staff shall work closely together to find the cause, and develop solutions to correct the condition.

PREVIOUS I/I REDUCTION STUDIES

A 2016 flow monitoring study characterized each of the sewer basins in the Cupertino service area in terms of the amount of I/I that was being contributed due to defects in the sewer pipes and manholes (infiltration sources) or the number of locations where stormwater was entering the system during wet weather events (inflow sources). Shown on Figure 6 is a map of the

CuSD Sewer System that shows the sewer basins that were defined by the 2016 flow monitoring study. The 2016 study indicated that the measured inflow exceeded the infiltration flow so another two studies were completed in 2017 and 2018 to identify the sources of inflow.

In 2017 the District divided Basin 22, ranked highest for I/I, into smaller mini-basins and completed flow monitoring. In 2018 V&A used a field investigation technique called smoke testing in three of the high inflow basins in the system. The 2018 Smoke Testing and Field Investigation study identified specific inflow sources and defects in the three basins (basins 4A, 9, and 22) that were allowing stormwater to enter the sanitary sewer system.

CAPACITY ENHANCEMENT MEASURES

The District Systemwide Inflow and Infiltration (I&I) Reduction Program will be implemented in 2021 to reduce extraneous flows in the sewer system. The key steps of the I/I Program are described below.

- Complete the inflow correction measures in sewer basins 4A, 9, and 22. Most of the defects that are contributing inflow reside on the private property side of the sewer lateral (the upper lateral) and some are in the public right of way controlled by the City of Cupertino District staff will take an active role in educating homeowners on how to repair the defects, lining up resources to help them complete the work, and managing the work until it is completed.
- Inflow defects located in the lower laterals and manholes will be corrected by the Cupertino Sanitary District. Additional defects in the public right of way will need to be repaired by the City of Cupertino. The inflow correction measures in basins 4A, 9, and 22 will be completed prior to the end of 2021.
- The District GIS will be updated to include a GIS On-Line feature that will assist with the tracking of notifications that are sent to homeowners and the City of Cupertino and will also track the progress of Inflow Correction repairs. These repairs include repairs to private property, repairs that are completed in the public right-of-way, and repairs to defects that occur in the District's sewer system which are typically located in the lower laterals and in manholes.
- Additional smoke testing and field investigations will be completed in the summer of 2021 in sewer basins (126,000 feet of pipe) to identify the sources of inflow and defects in each of the remaining "high inflow" sewer basins. Perform lateral testing at locations where inflow defects are identified with the smoke testing program. The smoke testing will identify specific defects in public and private property that need to be repaired to eliminate inflow.
- Conduct systemwide flow monitoring during the wet-weather season (winter 2021 to spring 2022) to determine the flows for the base-line – Pre-Inflow Correction – and will be used to measure the progress of the overall Systemwide I/I Reduction program.
- Start the inflow correction measures in sewer basins 18, 19, 20, 25, and 27. Letters will be sent to the homeowners where the defective upper laterals are located. District staff will take an active role in educating homeowners on how to repair the defects,

lining up resources to help them complete the work, and managing the work until it is completed.

- Additional defects in the public right of way will need to be repaired by the City of Cupertino. A letter will be sent to the City of Cupertino that identifies stormwater connection defects that are under the jurisdiction of the City for correction. Inflow defects located in the lower laterals and manholes will be corrected by the Cupertino Sanitary District.
- Conduct flow monitoring during the wet-weather season (winter 2022 to spring 2023) to determine the flows in sewer basins 18, 19, 20, 25, and 27 to see how much the peak flows have been reduced as a result of the inflow correction work.
- Conduct night-time I/I reconnaissance (taking spot measurements and I/I investigation during low-flow hours right after a storm) for 4 nights in focused areas in basins 4A, 9, 11, 20, 21, 22, and 25. These basins were ranked high for inflow and infiltration and the selection will be based on data analysis and the simultaneous flow monitoring.

Based upon the results of the flow monitoring studies, determine what additional source work detection work will be required to locate remaining sources of inflow in the sewer system. If the inflow measures fail to meet the required reduction in I/I, then continue with the more inflow reduction to reduce the peak flows in the system. The Inflow Reduction program then proceed with additional Smoke Testing, Field Investigations, Inflow Reduction Projects, and Flow monitoring for the new highest ranked inflow basins.

ELEMENT 9 – MONITORING, MEASUREMENT, AND PROGRAM MODIFICATIONS

SWRCB REQUIREMENTS:

The enrollee shall:

- *Maintain relevant information that can be used to establish and prioritize appropriate Sewer System Management Plan (SSMP) activities;*
- *Monitor the implementation and, where appropriate, measure the effectiveness of each element of the SSMP;*
- *Assess the success of the preventative maintenance program;*
- *Update program elements, as appropriate, based on monitoring or performance evaluations; and*
- *Identify and illustrate SSO trends, including: frequency, location, and volume.*

RWQCB REQUIREMENTS:

Each wastewater collection system agency shall monitor the effectiveness of each SSMP element and update and modify SSMP elements to keep them current, accurate, and available for audit as appropriate.

The performance criteria that are monitored include:

- Total number of SSOs;
- Number of SSOs for each cause (roots, grease, debris, pipe failure, capacity, and others);
- Portion of sewage contained compared to total volume spilled;
- Volume of spilled sewage discharged to surface water; and
- Miles of sanitary sewer lines cleaned.

The SSMP shall be reviewed monthly by the Authorized Representative to insure all the provisions are implemented. The effectiveness shall be discussed during regularly scheduled field inspectors and safety training meetings. These meetings include field inspectors, administrative and engineering staff. The following Table 15 will be utilized to assess the effectiveness of the SSMP and to measure progress in reducing SSO's.

Table 13: SSO Log

Cause of SSO	Number		Percent of Total	
Blockage:	Laterals	Mains	Laterals	Mains
Roots				
Grease				
Debris				
Debris from Laterals				
Vandalism				
Animal Carcass				
Construction Debris				
Multiple Causes				
Infrastructure Failure				
Inflow & Infiltration				
Electrical Power Failure				
Flow Capacity Deficiency				
Natural Disaster				
Bypass				
Cause Unknown				
Total				

SSMP UPDATES

The SSMP and its elements shall be updated in accordance with current regulatory guidelines and as a result of monitoring recommendations by District staff. Performance evaluations are on-going because daily operations of the District include all the elements of the SSMP program. The District shall revise and update its CIP program each year to include upgrades to its infrastructure in compliance with SSMP requirements. Allocation of funds for such upgrades shall be identified in the CIP program and annual budget submitted to the District's Board of Directors for approval.

The District will determine the need to update its SSMP more frequently based on the results of the bi-annual audit as required by the SSS-WDR and the performance of its sanitary sewer system. The process to complete the update will be identified in the event that the District determines that an update is warranted. The update will be completed within one year following identification of the need for an update.

The authority for approval of changes such as employee names, contact information, or minor procedural changes is delegated to the District Manager-Engineer.

IDENTIFY AND ILLUSTRATE SSO TRENDS, INCLUDING: FREQUENCY, LOCATION, AND VOLUME

SSO reports shall be entered into the District's database to analyze SSO trends. The database can create reports as to location, volume, cause, and frequency of SSO events. These annual reports shall be reviewed by the District staff to determine appropriate maintenance/repair/upgrades to the sewer system, if necessary.

ELEMENT 10 – SSMP AUDITS

SWRCB REQUIREMENTS:

As part of the Sewer System Management Plan (SSMP), the enrollee shall conduct periodic internal audits, appropriate to the size of the system and the number of SSOs. At a minimum, these audits must occur every two years and a report must be prepared and kept on file. This audit shall focus on evaluating the effectiveness of the SSMP and the enrollee's compliance with the SSMP requirements identified in this subsection (D.13), including identification of any deficiencies in the SSMP and steps to correct them.

RWQCB REQUIREMENTS:

Each wastewater collection system agency shall conduct an annual audit of their SSMP which includes any deficiencies and steps to correct them (if applicable), appropriate to the size of the system and the number of overflows, and submit a report of such audit.

The District shall perform internal audits evaluating its SSMP and its compliance with the SSO-WDR every two years. A report shall be prepared and kept on file at the District office. The report shall include an evaluation of the effectiveness of the SSMP along with recommendations and suggested improvements to the Board of Directors.

The audit shall consist of the following elements:

- Progress made on development of SSMP elements, and whether or not the District is on schedule in developing all elements of the SSMP;
- SSMP implementation efforts over the timeframe in question;
- The effectiveness of implementing SSMP elements;
- A description of the additions and improvements made to the sanitary sewer collection system in the past reporting year(s); and
- A description of the additions and improvements planned for the upcoming reporting year(s) with an estimated schedule for implementation.

SSMP AUDIT CHECKLIST

		YES	NO
ELEMENT 1 – GOALS			
A.	Are the goals stated in the SSMP still appropriate and accurate?	☐	☐
ELEMENT 2 – ORGANIZATION			

		YES	NO
A.	Is the District Services Key Staff Telephone List current?	☐	☐
B.	Is the Sanitary Sewer Overflow Responder Telephone List current?	☐	☐
C.	Is Figure 1 of the SSMP, entitled "District Organization Chart," current?	☐	☐
D.	Are the position descriptions an accurate portrayal of staff responsibilities?	☐	☐
E.	Is Table 2 of the SSMP, titled "Chain of Communication for Reporting and Responding to SSOs," accurate and up-to-date?	☐	☐
ELEMENT 3 – LEGAL AUTHORITY			
Does the SSMP contain excerpts from the current Cupertino Sanitary District Operations Code documenting the District's legal authority to:			
A.	Prevent illicit discharges?	☐	☐
B.	Require proper design and construction of sewers and connections?	☐	☐
C.	Ensure access for maintenance, inspection, or repairs for portions of the lateral owned or maintained by the District?	☐	☐
D.	Limit discharges of fats, oil and grease?	☐	☐
E.	Enforce any violation of its sewer ordinances?	☐	☐
ELEMENT 4 – OPERATIONS AND MAINTENANCE			
Collection System Maps			

		YES	NO
A.	Does the SSMP reference the current process and procedures for maintaining the District's wastewater collection system maps?	☐	☐
B.	Are the District's wastewater collection system maps complete, current, and sufficiently detailed?	☐	☐
	Resources and Budget		
C.	Does the District allocate sufficient funds for the effective operation, maintenance and repair of the wastewater collection system and is the current budget structure documented in the SSMP?	☐	☐
	Prioritized Preventive Maintenance		
D.	Does the SSMP describe current preventive maintenance activities and the system for prioritizing the cleaning of sewer lines?	☐	☐
E.	Based upon information in the Annual SSO Report, are the District's preventive maintenance activities sufficient and effective in minimizing SSOs and blockages?	☐	☐
	Scheduled Inspections and Condition Assessments		
F.	Is there an ongoing condition assessment program sufficient to develop a capital improvement plan addressing the proper management and protection of infrastructure assets? Are the current components of this program documented in the SSMP?	☐	☐
	Contingency Equipment and Replacement Inventory		
G.	Does the SSMP list the major equipment currently used in the operation and maintenance of the collection system and document the procedures of inventory management?	☐	☐
H.	Are contingency equipment and replacement parts sufficient to respond to emergencies and properly conduct regular maintenance?	☐	☐
	Training		
I.	Is the training calendar current?	☐	☐

		YES	NO
J.	Does the SSMP document current training expectations and programs within the District's Wastewater Division?	☐	☐
	Outreach to Plumbers and Building Contractors		
K.	Does the SSMP document current outreach efforts to plumbers and building contractors?	☐	☐

ELEMENT 5 – DESIGN AND PERFORMANCE STANDARDS			
A.	Does the SSMP contain current design and construction standards for the installation of new sanitary sewer systems, pump stations and other appurtenances and for the rehabilitation and repair of existing sanitary sewer systems?	☐	☐
B.	Does the SSMP document current procedures and standards for inspecting and testing the installation of new sewers, pumps, and other appurtenances and the rehabilitation and repair of existing sewer lines?	☐	☐
ELEMENT 6 – OVERFLOW AND EMERGENCY RESPONSE PLAN			
A.	Does the District's Sanitary Sewer Overflow and Backup Response Plan establish procedures for the emergency response, notification, and reporting of sanitary sewer overflows (SSOs)?	☐	☐
B.	Are District staff and contractor personnel appropriately trained on the procedures of the Sanitary Sewer Overflow and Backup Response Plan?	☐	☐
C.	Considering performance indicator data in the Annual SSO Report, is the Sanitary Sewer Overflow and Backup Response Plan effective in handling SSOs in order to safeguard public health and the environment?	☐	☐
ELEMENT 7 – FATS, OILS, AND GREASE (FOG) CONTROL PROGRAM			

A.	Does the Fats, Oils, and Grease (FOG) Control Program include efforts to educate the public on the proper handling and disposal of FOG?	☐	☐
B.	Does the District's FOG Control Program identify sections of the collection system subject to FOG blockages, establish a cleaning schedule and address source control measures to minimize these blockages?	☐	☐
C.	Are requirements for grease removal devices, best management practices (BMP), record keeping and reporting established in the District's FOG Control Program?	☐	☐
D.	Does the District have sufficient legal authority to implement and enforce the FOG Control Program?	☐	☐
E.	Is the current FOG program effective in minimizing blockages of sewer lines resulting from discharges of FOG to the system?	☐	☐
ELEMENT 8 – SYSTEM EVALUATION AND CAPACITY ASSURANCE PLAN			
A.	Does the Cupertino Sanitary District Sanitary Sewer Master Plan evaluate hydraulic deficiencies in the system, establish sufficient design criteria and recommend both short and long term capacity enhancement and improvement projects?	☐	☐
B.	Does the District's Capital Improvement Plan (CIP) establish a schedule of approximate completion dates for both short and long-term improvements and is the schedule reviewed and updated to reflect current budgetary capabilities and activity accomplishments?	☐	☐

ELEMENT 9 – MONITORING, MEASUREMENT, AND PROGRAM MODIFICATIONS			
A.	Does the SSMP accurately portray the methods of tracking and reporting selected performance indicators?	☐	☐
B.	Is the District able to sufficiently evaluate the effectiveness of SSMP elements based on relevant information?	☐	☐
ELEMENT 10 – SSMP AUDITS			

A.	Will the SSMP Audit be submitted with the SSO Annual Report to the Regional Water Board by March 15th of the year following the end of the calendar year being audited?	☐	☐
ELEMENT 11 – COMMUNICATION PROGRAM			
	Does the District effectively communicate with the public and other agencies about the development and implementation of the SSMP and continue to address any feedback?		
A.	*The District provides an Annual Report to the public which details the District's maps, FOG related issues, sanitary sewer overflows, preventing sewer blockages, handling grease waste and pharmaceuticals. Any feedback that the District receives on the material in the report is followed up by Staff. The District's SSMP will be posted to the website by May 31, 2016.*	☐	☐

ELEMENT 11 – COMMUNICATION PROGRAM

SWRCB REQUIREMENTS:

Each enrollee shall communicate on a regular basis with the public on the development, implementation, and performance of its Sewer System Management Plan (SSMP). The communication system shall provide the public the opportunity to provide input to the enrollee as the program is developed and implemented.

The enrollee shall also create a plan of communication with systems that are tributary and/or satellite to the enrollee's sanitary sewer system.

COMMUNICATIONS WITH AND OUTREACH TO RESIDENTIAL, COMMERCIAL, AND INDUSTRIAL CUSTOMERS AND THE GENERAL PUBLIC

Cupertino Sanitary District's communications program involves mailing, emailing, and posting on the District's website SSMP components and other related information for input by the public as well as dissemination of important SSMP requirements. The District also conducts extensive public outreach and education to residents and businesses related to sanitary sewer overflows, preventing grease blockages and Best Management Practices for the handling of grease waste. Links to such information are located on the District's website where the public and District customers are encouraged to view. Additional links such as the Association of Bay Area Governments' (ABAG) "Sewer Smart," the Santa Clara Valley Water District's "Best Management Practices" for storm water discharges, and the District's Standard Design Details are available for residential and commercial customers.

The District annually mails informational flyers to all residential and business property owners and tenants describing the negative impacts of discharging fats, oil, and grease (FOG) into the sanitary sewer system. In areas where sewer overflows are attributed to FOG, the District inspectors canvass the vicinity with notifications to residents and businesses to reinforce the message to avoid pouring these items down sewer drains.

The District disseminates information, in meetings and/or by mailings to land developers, consultant engineers, and plumbing contractors regarding the need and methods to reduce SSOs. The District has communicated with the Cities of San Jose and Cupertino and solicited input regarding the SSMP requirements with an emphasis on design and construction practices and devices that prevent sewer overflows or backflows into residential or commercial uses.

COMMUNICATION WITH OTHER LOCAL SANITARY SEWER AGENCIES

The District is a tributary agency to the City of San Jose's and City Santa Clara Regional Wastewater Facility. Other tributary agencies include the City of Milpitas, West Valley Sanitation District, County Sanitation District No. 2-3, and Burbank Sanitary District. Collectively, these agencies along with the District have been included in a communication program initiated by the City of San Jose to establish a collaborative approach during the development and implementation of, and future improvements, to the SSMP. Regularly scheduled meetings have been established on a quarterly basis to discuss common issues and provide support during the SSMP development

process as well as working to establish a collaborative response to SSOs that occur between the service boundaries of two or more agency's jurisdictions.

Wastewater collection agencies share the same watershed basins with storm water collection agencies or cities and Santa Clara Valley Water District. Since all are subject to State WDR and/or NPDES permitting, it is imperative that open communication be maintained which acknowledges a partnership of stakeholders with the common interest of keeping the South Bay, creeks and their tributaries free of pollutants. Specifically, this District shares the Watershed Basins, geographically defined by Stevens Creek, Regnart Creek and Calabazas Creek, with the Cities of San Jose, Santa Clara, Cupertino, Sunnyvale, Saratoga, Los Altos, Santa Clara County and the Santa Clara Valley Water District.

The District has developed a Risk Assessment Plan which identifies areas most vulnerable to impacting receiving waters within the watershed in the event of an SSO. Steps have been taken to install sensing devices to alert District personnel when flow levels rise prior to reaching the surface. These measures provide additional time to respond and eliminate blockages before they become a major spill event. The sensing devices also will alert when there is an intrusion into a manhole in a remote or vulnerable location where unlawful grease dumping or vandalism can occur.

The District will be communicating with the above agencies to note the identified areas at risk in the event of SSOs and working to develop strategies for joint response, when practical, to contain and prevent SSOs from reaching fishable creeks or receiving waters to the Bay.

COMMUNICATION WITH OTHER LOCAL WATERSHED STAKEHOLDERS

California Water/Wastewater Agency Response Network (CalWARN) was established with a mission to support and promote statewide emergency preparedness and mutual assistance for member public and private water and wastewater utilities, has been active for approximately 12 years. The organization is divided into six regions within the state. Cupertino Sanitary District is within Coastal OES Region II. Of the tributary agencies to San Jose-Santa Clara WPCP only the Cities of Milpitas and Santa Clara are currently members of CalWARN. Within Santa Clara County the City of Sunnyvale, California Water Service Company, San Jose Water Company, San Jose Municipal Water System and Santa Clara Valley Water District are also members. Membership in this organization of all the tributary agencies and others having common watershed interests, would be a first step toward accomplishing the stated objectives above described and is encouraged. Additional information for CalWARN can be found at its website www.calwarn.org.

APPENDIX A

LIKELIHOOD OF FAILURE MATRIX AND CONSEQUENCE OF FAILURE MATRIX FOR MAINS

APPENDIX A1: LIKELIHOOD OF FAILURE MATRIX FOR SEWER MAINS

Likelihood Category	Weights	Source Criterion	Likelihood of Failure Score									
			Negligible - 1	Unlikely - 2	3	Possible 4	5	6	Likely = 7	8	9	Very Likely = 10
Physical Condition	60%	NASSCO's PACP Coding	PACP Defect Grade = 0	PACP Defect Grade = 1	PACP Defect Grade = 2; No of PACP 2 Defects equal to 1	PACP Defect Grade = 2; No of PACP 2 Defects more than 1	PACP Defect Grade = 3, No of PACP 3 Defects equal to 1	PACP Defect Grade = 3; No of PACP 3 Defects more than 1	PACP Defect Grade = 4, No of PACP 4 Defects equal to 1	PACP Defect Grade = 4; No of PACP 4 Defects more than 1	PACP Defect Grade Structural = 5; Defects codes B, SRV family, DV, H, DH, DI; Max PACP Structural = 4;	PACP Defect Structural Grade = 5; Defect codes BSV, BVV, CH family, D, FH family, HSV, HVV, SMW family, SRC family, X family; Max PACP Structural Grade = 5; Defect codes B, SRV family, DV,H, DH, DI
		Pipe Age (pipes with no CCTV data)	8 years and less	9 to 17 years	18 to 26 years	27 to 35 years	36 to 43 years	44 to 52 years	53 to 61 years	62 to 70 years	71 to 79 years	80 years and greater
		Pipe Material (pipes with no CCTV data)										Unlined ACP; Unlined Terracotta; Unlined, Pre-1950s VCP
Capacity	40%	Capacity Model Results		Model indicates flow is below springline during 10-year storm or pipe not in model (small diameter).	Model indicates flow in pipe above springline during 10-year storm.	Pipes likely to surcharge during a 10-Year Storm only under future build-out conditions when loads become higher due to intensified land use or population increase.	Pipes likely to have surcharge, but more than 5' of freeboard available during 10-year storm.	Pipes likely to have surcharge, but more than 5' of freeboard available during peak dry flow.	Model indicates surcharge of over 1' and less than 5' of freeboard in 10-year storm. Relief or replacement sewer required.	Model indicates surcharge with 1 to 5 feet of freeboard in peak dry weather. Sewer relief or replacement required.	Model indicates SSO under a 10-year storm.	Model indicates SSO under peak dry weather.

Figure 18: Likelihood of Failure for Mains

APPENDIX A2: CONSEQUENCE OF FAILURE MATRIX FOR MAINS

Category	Goal	Objective	Weight	Indicator	Consequence Score								
					2	3	Low = 4	5	6	Moderate = 7	8	9	Severe = 10
Environmental Responsibility – Potential for Large SSO	Protect public from pathogens and toxins	Minimize the potential for large spills	30%	Size of sewer	Less than 6-inch	6-inch, one to three pipe segments upstream	6-inch, more than three pipe segments upstream	8-inch, more than three pipe segments upstream			12" to 14"	15" to 21"	24" and greater
					6-inch, no pipes upstream	8-inch, one to three pipe segments upstream							
					8-inch, no pipes upstream								
Impacts to Community	Minimize nuisance impacts and impacts to customers	Minimize impacts to commuters and areas serving key customers or large number of people or providing critical services.	10%	Impacts to commuters based on type			Residential Roadway; and, No Commuter	Impact to Primary Roadway		Impact to Major Roadway			Freeway; Highway; Expressway;
				Impacts to land use areas.			Open Space; Park; and, Agricultural	Residential - Low to Medium Density	Recreational; Utility; Transportation; and, Residential– High Density	Commercial	Commercial-Heavy; Industrial; Manufacturing; and, Professional	Public, Institutional, and, Church	Water Supply; Hospital, Library; and, School
Environmental Responsibility – Distance to Surface Water	Meet environmental regulations; Protect the public from pathogens and toxins	Minimize spill volume to surface waters	60%	Spill travel distance to surface water		Greater than 1,500 feet		701 to 1,500 feet		301 to 700 feet	101 to 300 feet	26 to 100 feet	25 feet and less

Figure 19: Consequence of Failure Matrix for Mains

APPENDIX B

LIKELIHOOD OF FAILURE MATRIX, CONSEQUENCE OF FAILURE MATRIX FOR PUMP STATION, AND CALCULATED LOF SCORES, COF SCORES AND RISK SCORES FOR PUMP STATIONS

APPENDIX B1: LIKELIHOOD OF FAILURE MATRIX FOR PUMP STATIONS

Likelihood Category	Weight	Likelihood Score				
		1	2	3	4	5
		Very Low	Low	Moderate	High	Very High
Pump Station Overall Condition Summary (Average Grade)	30%	Acceptable structural/operational condition – Reassess condition in 10 years; No immediate concerns or recommendations	Unlikely to fail for least 20 years; Some components may need replacement within next 5 to 10 years; assess condition in 5 years	May fail in 10 to 20 years; Some components may need repair or replacement within next 2 to 5 years; assess condition in 3 years	Will probably fail in 5 to 10 years; Some components may need to be repair or replacement within next 5 to 10 years	Have failed or will likely to fail within 5 years; Some components may need replacement within next 1 to 2 years
Pump Station Components that Exceeded Their Useful Life (2021)	40%	Components can be assumed to be In Good Condition; less than 20% along its Useful Life with no reports Of operational issues	Components can be assumed to be In Good Condition; between 20% to 50% along its Useful Life with no reports Of operational issues	Components can be assumed to be In Good Condition; more than 50% along its Useful Life with no reports Of operational issues	Components have nearly reached its Typical Useful Life.	Components have reached or exceeded Its Typical Useful Life with no reports of operational issues
Pump Station Size Based on Capacity	20%		Relative Size of wet well pump station as compared to the total number of wet well pump stations at CuSD: Small	Relative Size of wet well pump station as compared to the total number of wet well pump stations at CuSD: Medium	Relative Size of wet well pump station as compared to the total number of wet well pump stations at CuSD: Large	Relative Size of wet well pump station as compared to the total number of wet well pump stations at CuSD: Very Large
SSOs Not Related to Major Storm Events, Operator Error, Third Party Actions	5%		Number of pump station-related SSOs not caused by Major Storm Events, Operator Error, or Third Party Actions during the past 5-year period: > 0 SSOs	Number of pump station-related SSOs not caused by Major Storm Events, Operator Error, or Third Party Actions during the past 5-year period: > 1 SSO	Number of pump station-related SSOs not caused by Major Storm Events, Operator Error, or Third Party Actions during the past 5-year period: > 2 or 3 SSOs	Number of pump station-related SSOs not caused by Major Storm Events, Operator Error, or Third Party Actions during the past 5-year period: > 4 SSOs
Number of Days with High Level Alarms	5%		Number of days that pump station had at least one recorded high level alarm within the last 1 year: 0 Days	Number of days that pump station had at least one recorded high level alarm within the last 1 year: 1 Day	Number of days that pump station had at least one recorded high level alarm within the last 1 year: 2 to 4 Days	Number of days that pump station had at least one recorded high level alarm within the last 1 year >5 Days

Figure 20: Likelihood of Failure Matrix for Pump Stations

APPENDIX B2: CONSEQUENCE OF FAILURE MATRIX FOR PUMP STATIONS

Consequence Category	Weight	Consequence Score				
		1	2	3	4	5
		Very Low	Low	Moderate	High	Very High
Safety and Security	25%	No risk of injury and minor security threat	Low risk of minor injury or security threat	Low risk of moderate injury or security jeopardized	High expectation of major injury, not life threatening or security compromised	High expectation of major injury, not life threatening or security compromised
Social - Customers & Reputation	25%	In-house work item; makes facilities less efficient	Contained within the facilities, workarounds making work flow difficult	Minor service impacts and/or diminish reputation	High expectation of major injury, not life threatening or security compromised	Major impact on stakeholders and/or serious threat to long-term reputation
Service & Financial Impacts	25%	No impact to operations; direct (or indirect) costs do not trigger media coverage	No disruption of services; direct (or indirect) costs do not trigger media coverage	Partial disruption of services; direct (or indirect) costs do not trigger media coverage	Partial disruption of services; direct(or indirect) costs trigger local media coverage	Complete disruption of services; direct (or indirect) costs trigger state or regional media coverage
Environmental Regulatory	25%	Non-compliance unlikely or minor damage to the environment	Non-compliance possible if not addressed or minimal damage to the environment	Non-compliance possible or some damage to the environment	Fine, Compliance order or other regulatory action possible or localized damage to the environment	Fine. Compliance order or other regulatory action likely or significant damage to the environment

Figure 21: Consequence of Failure Matrix for Pump Stations

APPENDIX B3: CALCULATED LOF SCORES, COF SCORES AND RISK SCORES FOR PUMP STATIONS

				Likelihood of Failure (POF)						Consequence of Failure (COF)				
Weights				0.3	0.4	0.2	0.05	0.05	1	0.25	0.25	0.25	0.25	1
Pump Station Name	LOF Score	COF Score	Risk	Pump Station Overall Condition Summary (Average Grade)	Pump Station Components that Exceeded Their Useful Life (2021)	Pump Station Size Based on Capacity	SSOs Not Related to Major Storm Events, Operator Error, Third Party Actions	Number of Days with High Level Alarms	Total Likelihood of Failure (LOF) Score	Safety and Security	Social - Customers & Reputation	Service & Financial Impacts	Environmental Regulatory	Total Consequence of Failure (COF) Score
Homestead 2	2.39	4.25	10.1	1.00	0.72	Very Large	0 SSO	0 Days	2.39	Low	Very High	Very High	Very High	4.25
Homestead 1	4.17	4.25	17.7	3.00	2.23	Very Large	1 SSO	1 Day	4.17	Low	Very High	Very High	Very High	4.25
Florence	3.67	2.50	9.2	3.00	2.23	Medium	0 SSO	0 Days	3.67	Low	Moderate	Moderate	Low	2.50
Prospect	1.90	4.25	8.1	1.00	0.04	Very Large	0 SSO	0 Days	1.90	Low	Very High	Very High	Very High	4.25
Crescent	2.02	2.75	5.5	2.00	0.63	Small	0 SSO	0 Days	2.02	Low	Low	Low	Very High	2.75
Via Regina	2.25	3.00	6.7	2.00	0.67	Medium	0 SSO	0 Days	2.25	Low	Moderate	Moderate	High	3.00
Serra	2.26	2.25	5.1	2.00	0.89	Small	0 SSO	1 Day	2.26	Low	Low	Low	Moderate	2.25
Chiquita	2.49	2.50	6.2	2.50	1.07	Small	0 SSO	0 Days	2.49	Low	Low	Low	High	2.50
Tantau	3.12	3.50	10.9	1.50	1.74	Large	0 SSO	1 Day	3.12	Low	High	High	High	3.50
Pierce	4.05	4.25	17.2	3.50	2.28	Large	0 SSO	0 Days	4.05	Low	Very High	Very High	Very High	4.25
Kirkbrook	3.90	4.25	16.6	3.00	2.28	Large	0 SSO	0 Days	3.90	Low	Very High	Very High	Very High	4.25
Country Club	2.99	2.75	8.2	3.00	1.56	Small	0 SSO	0 Days	2.99	Low	Low	Low	Very High	2.75
Oakcrest	3.18	2.75	8.7	3.00	1.83	Small	0 SSO	0 Days	3.18	Low	Moderate	Moderate	Moderate	2.75
Salem	3.31	2.75	9.1	3.00	2.02	Small	0 SSO	0 Days	3.31	Low	Moderate	Moderate	Moderate	2.75
Forum 2	3.52	4.25	15.0	4.00	1.26	Large	1 SSO	0 Days	3.52	Low	Very High	Very High	Very High	4.25
Forum 1	3.53	4.25	15.0	4.20	1.26	Large	0 SSO	0 Days	3.53	Low	Very High	Very High	Very High	4.25
Cristo Rey	2.62	3.75	9.8	3.00	0.49	Large	0 SSO	0 Days	2.62	Low	High	High	Very High	3.75

Figure 22: Likelihood of Failure Scores, Consequence of Failure Scores and Risk Scores for each Pump Stations

Cupertino Sanitary District

Memo

Item 8B

To: **Board of Directors**

From: **Benjamin T. Porter, District Manager-Engineer**

Date: **May 5, 2021**

Re: **V&A Agreement for Smoke Testing**

Summary:

On October 7, 2020, the Board approved Staff to enter into an agreement with V&A for smoke testing and field investigations in sewer basins 18, 19, 20, 25, and 27 (126,000 feet of pipe) to identify the sources of inflow and defects in the remaining "high inflow" sewer basins. The cost for that work was estimated to be $123,000. The scope of work now includes smoke testing of laterals where smoke does not reach the house due to the lateral's length. The fee estimate increased from $123,000 to $ 190,000 as a result of this increased scope of work.

The work is scheduled to be completed in the Spring of 2021 in sewer basins 18, 19, 20, 25, and 27. The V&A smoke testing study will identify specific defects in public and private property that need to be repaired to eliminate inflow. The attached agreement in the amount of $190,000 provides the scope of work to complete the smoke testing and lateral investigations in the five sewer basins with high Inflow & Infiltration (I/I).

Recommendation:

Staff recommends the Board to authorize District Manger to enter into an agreement with V& A Consulting to perform smoke testing for a not-to-exceed amount of $190,000.

Attachment:

1. V&A Agreement

AGREEMENT FOR MANAGEMENT AND ENGINEERING SERVICES

THIS AGREEMENT, dated _____, by and between CUPERTINO SANITARY DISTRICT OF SANTA CLARA COUNTY ("District"), and V&A Consulting Engineers, a California corporation ("Consultant"), is made with reference to the following facts:

NOW, THEREFORE, it is agreed as follows:

1. **Scope of Services.** Subject to the direction and approval of District, Consultant shall perform smoke testing services as described in Exhibit "A" attached hereto and incorporated herein by reference. All services shall be performed to the reasonable satisfaction of the District.

2. **Principal-In-Charge.** Consultant shall designate one of its principals who shall act on behalf of Consultant and be primarily responsible for supervising performance of Consultant's services hereunder (the "Principal-In-Charge"). The person designated as Principal-In-Charge shall be subject to approval of the District. At any time, Consultant may change the person designated as Principal-In-Charge and the District may request Consultant to replace the person currently serving as the Principal-In-Charge.

3. **Compensation and Expenses.** As compensation for all services to be performed by Consultant under this Agreement, Consultant shall be paid the amounts set forth in Exhibit "B" attached hereto and incorporated herein by reference. In addition to such compensation, Consultant shall be entitled to charge District for expenses as described in Exhibit "B", provided such expenses are included as part of the District's annual budget, or are otherwise approved by the District Board, and are billed to District at Consultant's cost.

4. **Method of Payment.** Consultant shall submit billings to District describing in detail the work performed for which payment is requested, the date the services were performed, the number of hours spent and by whom, and a description of any expenditures charged to District during the period covered by the statement. Billings shall be submitted monthly, or at such other time as agreed upon between District and Consultant. District shall pay Consultant no later than 30 days after approval of the invoice by the District Board. If the District Board objects to all or any portion of the billing, the District shall notify Consultant of the nature of such objection and the amount in dispute. District shall pay when due the portion of the billing, if any, that is not in dispute. The parties will make every effort to settle the disputed billing through good faith negotiations and mediation.

5. **Maintenance and Inspection of Records.** Consultant shall maintain any and all ledgers, books of account, invoices, vouchers, canceled checks, time cards, purchase orders, and other records or documents relating to charges for services or expenditures charged to District, for a minimum of three (3) years from the date of final payment to Consultant under this Agreement and shall make the same available to District or its authorized representatives for inspection and audit, at any time during regular business hours, upon written request by District. The right of inspection shall include the right to make extracts and copies.

6. **Assignment and Subcontracts.** Consultant acknowledges that Consultant's special skill and expertise is a material consideration for District entering into this Agreement. Consultant shall not assign, subcontract or delegate to any other party the performance of any services to be rendered by Consultant under this Agreement without prior approval of the District Board. If the District Board consents to any subcontracting of work, Consultant shall be responsible to District for all acts or omissions of the subcontractor.

7. **Correction of Work.** Consultant shall promptly correct any defective, inaccurate or incomplete tasks, deliverables, goods, services, or other work, without additional cost to District. The performance or acceptance of services furnished by Consultant shall not relieve Consultant from the obligation to correct subsequently discovered defective, inaccurate, or incomplete performance of Consultant's services hereunder.

8. **Ownership of Documents.** All plans, drawings, specifications, reports, documents and other writings prepared by and for Consultant in the course of performing its services under this Agreement, including all such materials delivered to Consultant by any other parties, except Consultant's working notes and internal documents, shall become the property of District upon payment to Consultant for such work, and District shall have the sole right to use such materials in its discretion without further compensation to Consultant or to any other party. Consultant shall, at Consultant's cost, provide such plans, drawings, specifications, reports, documents and other writings to District upon written request.

9. **Independent Contractor.** Except as otherwise expressly provided in this Agreement, Consultant is, and at all times shall remain, an independent contractor, and not an agent, officer or employee of District.

10. **Licenses.** Consultant represents and warrants to District that it has all licenses, permits, qualifications, insurance and approvals of whatsoever nature that are legally required of Consultant to practice its profession. Consultant shall, at its sole cost and expense, keep and maintain such licenses, permits, qualifications, insurance and approvals in full force and effect at all times during the term of this Agreement.

11. **Compliance with Standards of Care and Laws.** Consultant shall adhere to the standard of care in its profession and shall exercise due professional care to comply with all applicable federal, state and local laws, codes, ordinances and regulations in connection with the performance of its services under this Agreement.

12. **Mutual Indemnity.**

(a) Consultant shall indemnify, defend, and hold harmless the District and its officers, directors, and officials, from and against any and all claims, demands, causes of action, losses, damages, injuries, expenses and liabilities, direct or indirect, including reasonable attorney's fees, to the extent arising out of the negligent performance by Consultant of its services under this Agreement or its failure to comply with any of its obligations contained in this Agreement, and District shall not be liable for any negligent acts or omissions or willful misconduct of Consultant.

(b) To the extent permitted by law, District shall indemnify, defend, and hold harmless Consultant and its officers, directors, shareholders, and employees, from and against any and all claims, demands, causes of action, losses, damages, injuries, expenses and liabilities, direct or indirect, including reasonable attorney's fees, arising from Consultant being designated and acting as District's manager, engineer, and District Clerk, and not resulting from any negligent act or omission or willful misconduct committed by Consultant, Consultant's Responsible Principal, or any of Consultant's other principals, officers, directors, employees or agents.

13. **Insurance.** Consultant, at its own expense, shall procure and maintain, for the duration of this Agreement, insurance policies which satisfy the following requirements:

(a) Type of policies and coverage:

(1) General Liability Coverage. Consultant shall maintain commercial general liability insurance in an amount not less than $2,000,000 per claim for bodily injury, personal injury and property damage. If the form of insurance with a general aggregate limit is used, either the general aggregate limit shall apply separately to the work to be performed under this Agreement or the general aggregate limit shall be at least twice the required occurrence limit.

(2) Automobile Liability Coverage. Consultant shall maintain automobile liability insurance in an amount not less than $2,000,000 combined single limit for each occurrence, for bodily injury and property damage, providing coverage at least as broad as Insurance Services Office form CA 0001 (Ed. 12/90) Code 1 (any auto).

(3) Workers' Compensation and Employer's Liability Coverage. Consultant shall maintain workers' compensation insurance as required by the State of California and employer's liability insurance in an amount not less than $1,000,000 per occurrence, for any and all persons employed by Consultant in connection with the performance of services under this Agreement. In the alternative, Consultant may rely on a self-insurance program to provide this coverage so long as the program of self-insurance complies fully with the provisions of the California Labor Code. The insurer, if insurance is provided, or Consultant, if a program of self-insurance is provided, shall waive all rights of subrogation against District for loss arising from work performed by Consultant for District.

(4) Professional Liability Coverage. Consultant shall maintain professional errors and omissions liability insurance in an amount not less than $1,000,000 per claim, covering negligent acts, errors or omissions which may be committed by Consultant in the performance of its services under this Agreement.

(b) Endorsements: Each general liability and automobile liability insurance policy shall contain, or be endorsed to contain, the following provisions:

(1) The District, its directors, officers, officials, employees, agents and volunteers in their official capacities as representatives of the District, are to be covered as insureds as respects: liability arising out of activities performed by or on

behalf of Consultant; products and completed operations of Consultant; premises owned, occupied or used by Consultant; or vehicles owned, leased, hired or borrowed by Consultant. The coverage shall contain no special limitations on the scope of protection afforded to District, its directors, officers, officials, employees, agents or volunteers.

(2) For any claims related to the services performed by Consultant hereunder, Consultant's insurance coverage shall be primary insurance as respects the District, its directors, officers, officials, employees, agents and volunteers. Any insurance or self-insurance maintained by District, its directors, officers, officials, employees, agents or volunteers shall be excess of Consultant's insurance and shall not contribute with it.

(3) Any failure to comply with reporting or other provisions of the policies including breaches of warranties shall not affect coverage provided to District, its directors, officers, officials, employees, agents or volunteers.

(4) Consultant's insurance shall apply separately to each insured against whom claim is made or suit is brought, except with respect to the limits of the insurer's liability.

(5) Consultant's insurance coverage shall not be suspended, voided, canceled or reduced in coverage or in limits except after thirty (30) days' prior written notice by certified mail, return receipt requested, has been given to District.

(c) Deductibles and Self-Insured Retentions. Any deductibles or self-insured retentions must be declared to and approved by the District Board.

(d) Acceptability of Insurers. Insurance is to be placed with insurers having a current A.M. Best rating of no less than A:VII, unless otherwise approved by the District Board.

(e) Verification and continuation of coverage. Consultant shall provide certificates of insurance with original endorsements to District as evidence of the insurance coverage required by this Agreement. At the request of District, Consultant shall provide complete, certified copies of all required insurance policies, including endorsements affecting the coverage required by this Agreement. In the event of any reduction, suspension or cancellation of any insurance coverage required to be provided by Consultant hereunder, Consultant shall furnish replacement insurance in accordance with the requirements of this Section prior to the effective date of such reduction, suspension or cancellation so as to avoid any lapse in coverage.

14. **Notices.** Any notices required or permitted to be given under this Agreement shall be in writing and shall be either personally delivered or sent by certified mail, return receipt requested, addressed to the other party as follows:

To District: Cupertino Sanitary District
20863 Stevens Creek Blvd.
Suite 100
Cupertino, CA 95014
Attn: Benjamin Porter
District Manager-Engineer

To Consultant: V&A Consulting Engineers
1000 Broadway, Suite 320
Oakland, CA 94607
Attn: Glenn Willson
Western Regional Manager
V&A Principal-In Charge

15. **Litigation Expenses and Attorneys' Fees**. To the extent permitted by law, if either party to this Agreement commences any legal action against the other party to enforce or interpret this Agreement, the prevailing party shall be entitled to recover all costs and expenses that may be incurred in connection therewith, including court costs, expert witness fees, discovery expenses, and attorneys' fees. Prior to the commencement of any litigation, the parties shall make a good faith effort to resolve the dispute through mediation.

16. **Termination of Agreement.** This Agreement may be terminated by either party, effective upon written notice, should the other party commit any material default in the performance of its obligations hereunder. This Agreement may also be terminated by either party, for any reason, upon ninety (90) day's prior written notice to the other party. In the event this Agreement is terminated by District through no fault of Consultant, Consultant shall be compensated for all services performed to the effective date of termination.

17. **Miscellaneous Provisions.**

(a) Severability. Should any portion of this Agreement be declared void or unenforceable in a final decision by a court of competent jurisdiction, such decision shall not affect the validity of the remainder of this Agreement, which shall continue in full force and effect, provided that the remainder of this Agreement can be reasonably interpreted to implement the intention of the parties.

(b) Entire Agreement. This Agreement constitutes the entire agreement between the parties and supersedes and cancels all prior agreements or understandings, whether written or verbal.

(c) Amendments. This Agreement may be modified or amended only by a written document duly executed by both District and Consultant.

(d) Waiver. The waiver of any breach or default under this Agreement shall not constitute a continuing waiver of a subsequent breach of the same provision or any other provision of this Agreement.

(e) Execution. Each party warrants that the individuals signing this Agreement on its behalf have the legal power and authority to do so and to bind the party to this Agreement.

(f) Successors and Assigns. Subject to the restriction against assignment and subcontracting, this Agreement shall be inure to the benefit of and shall be binding upon the successors and assigns of the parties hereto.

IN WITNESS WHEREOF, the parties have executed this Agreement the day and year first above written.

CUPERTINO SANITARY DISTRICT
OF SANTA CLARA COUNTY

By: _____
Angela S. Chen, President

Attest: _____
William A. Bosworth, Secretary

APPROVED AS TO FORM:

_____
Marc Hynes, District Counsel

PRINCIPAL-IN-CHARGE:
V&A Consulting Engineers

By: _____
Glenn Willson, Western Regional Manager

EXHIBIT A

Description of Services

1 Project Preparation and Accounting: V&A will gather, and review documents and information provided by CuSD including maps of the study area, the CuSD sewer system atlas book and available GIS, and list of streets and addresses within the study area. V&A will use this information to plan the testing locations and associated smoke testing fieldwork. CuSD will distribute the 1-week notifications to the affected residents and businesses. V&A will distribute the 24-48-hour smoke testing notifications.

2 Smoke Testing: V&A will perform smoke testing of the sanitary sewer lines as directed by CuSD and Mark Thomas. V&A will attempt to minimize impacts or inconveniences to the community, but at the same time maintain a high level of reporting accuracy. Work hours will be between 8:00 AM and 5:00 PM on low traffic volume streets and between 9:00 AM and 3:30 PM on arterial streets. If applicable, V&A will not perform smoke testing in the proximity of schools during morning drop-off and afternoon pick-up hours. Smoke testing will not be performed on weekends or holidays. The basins of interest are Basins 18, 19, 20, 25, and 27. This would also include smoke testing of laterals where smoke does not reach the house due to the lateral's length. Three (3) V&A staff will perform the fieldwork and anticipate 28 days to complete the smoke testing. V&A will be responsible for notification of appropriate fire department daily prior to start of work and at the end of the day at conclusion of work. V&A will be responsible for execution and equipment for this project.

3 Smoke Testing Letter Report Preparation: V&A will provide documentation of system deficiencies and illicit connections that could be sources of inflow or infiltration found during smoke testing. V&A will summarize findings in a final report, including the identification of parcels, photographic documentation, and GPS coordinates.

Scope of Work Assumptions

1. V&A assumes that no encroachment permit is currently required. If it is determined permits are required, the associated cost will be in addition to the stated costs for the flow monitoring.

2. V&A assumes only simple traffic control set-ups (truck mounted light board and cones) will be required for this project. If complex traffic control set-ups requiring a traffic control contractor are deemed necessary, the costs of the traffic control contractor will be in addition to the stated costs for the smoke testing, as noted in the table above.

3. District Provided Liaison Services – The DISTRICT will provide a liaison that could answer questions that may arise from homeowners during the smoke testing. This

liaison would accompany the crew during the field days and allow the crew performing smoke testing to concentrate on the field work.

EXHIBIT B

Compensation

V&A proposes to complete this work on a lump sum basis, shown as follows:

Summary of Cost per Task

Task	Amount
Approximately 126,000 linear feet of Smoke Testing – Standard Crew	$190,000

Compensation Assumptions:

1. The scope of work was developed from our discussion and represents our mutual understanding. If unforeseen circumstances should arise, which indicate that more work is required, we would provide a written estimate of the additional cost. We will not proceed with work beyond the not to exceed figure without a written authorization from your office.
2. We are prepared to begin work on your project upon receiving written approval, a Notice-to-Proceed, or purchase order from your office.
3. It is expected that this work will be performed during the late Spring and/or Summer months of 2021 after the winter rainfalls have stopped and the groundwater levels have receded in the project area.

Cupertino Sanitary District

Memo

Item 8C

To: **Board of Directors**

From: **Benjamin T. Porter, District Manager-Engineer**

Date: **May 5, 2021**

Re: **Akel Engineering Agreement for Hydraulic Modeling**

The Cupertino Sanitary District utilizes the XPSWMM Hydraulic Modeling software to simulate existing and future flows throughout its sanitary sewer system. The software allows the District to model different buildout scenarios and how those scenarios react to rainfall events of different intensities. The model was constructed using the District's GIS for the network (pipes and manholes) and the measured flows from the 2016 Inflow & Infiltration (I/I) Study. The attached agreement provides the scope of work and fee estimate for the Cupertino Sanitary District XPSWMM Model Review by Akel Engineering. This project has a preliminary fee of **$32,288**, including a contingency fee of $8,520 for currently unplanned tasks. The scope includes:

- **Task 1 – Project Management and Meetings:** This task consists of a kickoff meeting and up to four model review workshops

- **Task 2 – XPWSMM Model Review:** This task consists of a review of the XPSWMM model. Subtasks are provided for the various review elements including land use, model development, model calibration, and dry/wet weather flows

- **Task 3** – **Recommendations.** This task includes recommending enhancements to the existing hydraulic model.

- **Task 4 – Prepare Technical Memorandum:** This tasks consists of preparing a draft, final draft, and final technical memorandum documenting the results of the review.

- **Task 5 – Contingency:** This task consists of a contingency accounting for unforeseen circumstances or additional analysis and review requested by CuSD staff but not currently included in this scope of work. This task may only be used with explicit authorization from CuSD staff.

Recommendation:

Staff recommends the Board authorize the District Manger to execute the agreement with Akel Engineering with a not-to-exceed amount of $32,288.

Attachment:

1. Akel Engineering Agreement with Scope and Fee

AGREEMENT FOR MANAGEMENT AND ENGINEERING SERVICES

THIS AGREEMENT, dated _____, by and between CUPERTINO SANITARY DISTRICT OF SANTA CLARA COUNTY ("District"), and Akel Engineering Group, Inc., a California corporation ("Consultant"), is made with reference to the following facts:

NOW, THEREFORE, it is agreed as follows:

1. **Scope of Services.** Subject to the direction and approval of District, Consultant shall perform XPSWMM hydraulic model review services as described in Exhibit "A" attached hereto and incorporated herein by reference. All services shall be performed to the reasonable satisfaction of the District.

2. **Principal-In-Charge.** Consultant shall designate one of its principals who shall act on behalf of Consultant and be primarily responsible for supervising performance of Consultant's services hereunder (the "Principal-In-Charge"). The person designated as Principal-In-Charge shall be subject to approval of the District. At any time, Consultant may change the person designated as Principal-In-Charge and the District may request Consultant to replace the person currently serving as the Principal-In-Charge.

3. **Compensation and Expenses.** As compensation for all services to be performed by Consultant under this Agreement, Consultant shall be paid the amounts set forth in Exhibit "B" attached hereto and incorporated herein by reference. In addition to such compensation, Consultant shall be entitled to charge District for expenses as described in Exhibit "B", provided such expenses are included as part of the District's annual budget, or are otherwise approved by the District Board, and are billed to District at Consultant's cost.

4. **Method of Payment.** Consultant shall submit billings to District describing in detail the work performed for which payment is requested, the date the services were performed, the number of hours spent and by whom, and a description of any expenditures charged to District during the period covered by the statement. Billings shall be submitted monthly, or at such other time as agreed upon between District and Consultant. District shall pay Consultant no later than 30 days after approval of the invoice by the District Board. If the District Board objects to all or any portion of the billing, the District shall notify Consultant of the nature of such objection and the amount in dispute. District shall pay when due the portion of the billing, if any, that is not in dispute. The parties will make every effort to settle the disputed billing through good faith negotiations and mediation.

5. **Maintenance and Inspection of Records.** Consultant shall maintain any and all ledgers, books of account, invoices, vouchers, canceled checks, time cards, purchase orders, and other records or documents relating to charges for services or expenditures charged to District, for a minimum of three (3) years from the date of final payment to Consultant under this Agreement and shall make the same available to District or its authorized representatives for inspection and audit, at any time during regular business hours, upon written request by District. The right of inspection shall include the right to make extracts and copies.

6. **Assignment and Subcontracts.** Consultant acknowledges that Consultant's special skill and expertise is a material consideration for District entering into this Agreement. Consultant shall not assign, subcontract or delegate to any other party the performance of any services to be rendered by Consultant under this Agreement without prior approval of the District Board. If the District Board consents to any subcontracting of work, Consultant shall be responsible to District for all acts or omissions of the subcontractor.

7. **Correction of Work.** Consultant shall promptly correct any defective, inaccurate or incomplete tasks, deliverables, goods, services, or other work, without additional cost to District. The performance or acceptance of services furnished by Consultant shall not relieve Consultant from the obligation to correct subsequently discovered defective, inaccurate, or incomplete performance of Consultant's services hereunder.

8. **Ownership of Documents.** All plans, drawings, specifications, reports, documents and other writings prepared by and for Consultant in the course of performing its services under this Agreement, including all such materials delivered to Consultant by any other parties, except Consultant's working notes and internal documents, shall become the property of District upon payment to Consultant for such work, and District shall have the sole right to use such materials in its discretion without further compensation to Consultant or to any other party. Consultant shall, at Consultant's cost, provide such plans, drawings, specifications, reports, documents and other writings to District upon written request.

9. **Independent Contractor.** Except as otherwise expressly provided in this Agreement, Consultant is, and at all times shall remain, an independent contractor, and not an agent, officer or employee of District.

10. **Licenses.** Consultant represents and warrants to District that it has all licenses, permits, qualifications, insurance and approvals of whatsoever nature that are legally required of Consultant to practice its profession. Consultant shall, at its sole cost and expense, keep and maintain such licenses, permits, qualifications, insurance and approvals in full force and effect at all times during the term of this Agreement.

11. **Compliance with Standards of Care and Laws.** Consultant shall adhere to the standard of care in its profession and shall exercise due professional care to comply with all applicable federal, state and local laws, codes, ordinances and regulations in connection with the performance of its services under this Agreement.

12. **Mutual Indemnity.**

(a) Consultant shall indemnify, defend, and hold harmless the District and its officers, directors, and officials, from and against any and all claims, demands, causes of action, losses, damages, injuries, expenses and liabilities, direct or indirect, including reasonable attorney's fees, to the extent arising out of the negligent performance by Consultant of its services under this Agreement or its failure to comply with any of its obligations contained in this Agreement, and District shall not be liable for any negligent acts or omissions or willful misconduct of Consultant.

(b) To the extent permitted by law, District shall indemnify, defend, and hold harmless Consultant and its officers, directors, shareholders, and employees, from and against any and all claims, demands, causes of action, losses, damages, injuries, expenses and liabilities, direct or indirect, including reasonable attorney's fees, arising from Consultant being designated and acting as District's manager, engineer, and District Clerk, and not resulting from any negligent act or omission or willful misconduct committed by Consultant, Consultant's Responsible Principal, or any of Consultant's other principals, officers, directors, employees or agents.

13. **Insurance.** Consultant, at its own expense, shall procure and maintain, for the duration of this Agreement, insurance policies which satisfy the following requirements:

(a) Type of policies and coverage:

(1) General Liability Coverage. Consultant shall maintain commercial general liability insurance in an amount not less than $2,000,000 per claim for bodily injury, personal injury and property damage. If the form of insurance with a general aggregate limit is used, either the general aggregate limit shall apply separately to the work to be performed under this Agreement or the general aggregate limit shall be at least twice the required occurrence limit.

(2) Automobile Liability Coverage. Consultant shall maintain automobile liability insurance in an amount not less than $2,000,000 combined single limit for each occurrence, for bodily injury and property damage, providing coverage at least as broad as Insurance Services Office form CA 0001 (Ed. 12/90) Code 1 (any auto).

(3) Workers' Compensation and Employer's Liability Coverage. Consultant shall maintain workers' compensation insurance as required by the State of California and employer's liability insurance in an amount not less than $1,000,000 per occurrence, for any and all persons employed by Consultant in connection with the performance of services under this Agreement. In the alternative, Consultant may rely on a self-insurance program to provide this coverage so long as the program of self-insurance complies fully with the provisions of the California Labor Code. The insurer, if insurance is provided, or Consultant, if a program of self-insurance is provided, shall waive all rights of subrogation against District for loss arising from work performed by Consultant for District.

(4) Professional Liability Coverage. Consultant shall maintain professional errors and omissions liability insurance in an amount not less than $1,000,000 per claim, covering negligent acts, errors or omissions which may be committed by Consultant in the performance of its services under this Agreement.

(b) Endorsements: Each general liability and automobile liability insurance policy shall contain, or be endorsed to contain, the following provisions:

(1) The District, its directors, officers, officials, employees, agents and volunteers in their official capacities as representatives of the District, are to be covered as insureds as respects: liability arising out of activities performed by or on

behalf of Consultant; products and completed operations of Consultant; premises owned, occupied or used by Consultant; or vehicles owned, leased, hired or borrowed by Consultant. The coverage shall contain no special limitations on the scope of protection afforded to District, its directors, officers, officials, employees, agents or volunteers.

(2) For any claims related to the services performed by Consultant hereunder, Consultant's insurance coverage shall be primary insurance as respects the District, its directors, officers, officials, employees, agents and volunteers. Any insurance or self-insurance maintained by District, its directors, officers, officials, employees, agents or volunteers shall be excess of Consultant's insurance and shall not contribute with it.

(3) Any failure to comply with reporting or other provisions of the policies including breaches of warranties shall not affect coverage provided to District, its directors, officers, officials, employees, agents or volunteers.

(4) Consultant's insurance shall apply separately to each insured against whom claim is made or suit is brought, except with respect to the limits of the insurer's liability.

(5) Consultant's insurance coverage shall not be suspended, voided, canceled or reduced in coverage or in limits except after thirty (30) days' prior written notice by certified mail, return receipt requested, has been given to District.

(c) Deductibles and Self-Insured Retentions. Any deductibles or self-insured retentions must be declared to and approved by the District Board.

(d) Acceptability of Insurers. Insurance is to be placed with insurers having a current A.M. Best rating of no less than A:VII, unless otherwise approved by the District Board.

(e) Verification and continuation of coverage. Consultant shall provide certificates of insurance with original endorsements to District as evidence of the insurance coverage required by this Agreement. At the request of District, Consultant shall provide complete, certified copies of all required insurance policies, including endorsements affecting the coverage required by this Agreement. In the event of any reduction, suspension or cancellation of any insurance coverage required to be provided by Consultant hereunder, Consultant shall furnish replacement insurance in accordance with the requirements of this Section prior to the effective date of such reduction, suspension or cancellation so as to avoid any lapse in coverage.

14. **Notices.** Any notices required or permitted to be given under this Agreement shall be in writing and shall be either personally delivered or sent by certified mail, return receipt requested, addressed to the other party as follows:

To District: Cupertino Sanitary District
20863 Stevens Creek Blvd.
Suite 100
Cupertino, CA 95014
Attn: Benjamin Porter
District Manager-Engineer

To Consultant: ~~V&A Consulting Engineers.~~ TA
Akel Engineering Group, Inc.
7433 N. First Street, Suite 103
Fresno, CA. 93720
Attn: Tony Akel
~~Akel Engineering Group~~ TA
Principal-In Charge

15. **Litigation Expenses and Attorneys' Fees.** To the extent permitted by law, if either party to this Agreement commences any legal action against the other party to enforce or interpret this Agreement, the prevailing party shall be entitled to recover all costs and expenses that may be incurred in connection therewith, including court costs, expert witness fees, discovery expenses, and attorneys' fees. Prior to the commencement of any litigation, the parties shall make a good faith effort to resolve the dispute through mediation.

16. **Termination of Agreement.** This Agreement may be terminated by either party, effective upon written notice, should the other party commit any material default in the performance of its obligations hereunder. This Agreement may also be terminated by either party, for any reason, upon ninety (90) day's prior written notice to the other party. In the event this Agreement is terminated by District through no fault of Consultant, Consultant shall be compensated for all services performed to the effective date of termination.

17. **Miscellaneous Provisions.**

(a) Severability. Should any portion of this Agreement be declared void or unenforceable in a final decision by a court of competent jurisdiction, such decision shall not affect the validity of the remainder of this Agreement, which shall continue in full force and effect, provided that the remainder of this Agreement can be reasonably interpreted to implement the intention of the parties.

(b) Entire Agreement. This Agreement constitutes the entire agreement between the parties and supersedes and cancels all prior agreements or understandings, whether written or verbal.

(c) Amendments. This Agreement may be modified or amended only by a written document duly executed by both District and Consultant.

(d) Waiver. The waiver of any breach or default under this Agreement shall not constitute a continuing waiver of a subsequent breach of the same provision or any other provision of this Agreement.

(e) Execution. Each party warrants that the individuals signing this Agreement on its behalf have the legal power and authority to do so and to bind the party to this Agreement.

(f) Successors and Assigns. Subject to the restriction against assignment and subcontracting, this Agreement shall be inure to the benefit of and shall be binding upon the successors and assigns of the parties hereto.

IN WITNESS WHEREOF, the parties have executed this Agreement the day and year first above written.

CUPERTINO SANITARY DISTRICT
OF SANTA CLARA COUNTY

By: _____
Angela S. Chen, President

Attest: _____
William A. Bosworth, Secretary

APPROVED AS TO FORM:

_____
Marc Hynes, District Counsel

PRINCIPAL-IN-CHARGE:
Akel Engineering Group, Inc.

By: _____
TONY AKEL

EXHIBIT A

Description of Services

Cupertino Sanitary District
XPSWMM Model Review

PRELIMINARY
April 14, 2021

BACKGROUND

The Cupertino Sanitary District (CuSD) uses XPSWMM hydraulic modeling software by Innovyze to simulate dry and wet weather flow conditions in its sanitary sewer system. The CuSD hydraulic model was prepared by Mark Thomas and Co. Engineers (Mark Thomas).

In support of an upcoming development within the CuSD service area Akel Engineering was asked to review the XPSWMM model for accuracy and consistency with general modeling practices. This review will include the following items:

- Review the land use assumptions and data sources used in the development of the hydraulic model.
- Review the model development process, including the incorporation of existing collection system GIS data, verification of GIS data, CuSand the preparation of other modeling components.
- Review the dry and wet weather model calibration process including data sources, flow monitoring results, and calibration methodology.
- Review the development and allocation of dry weather flows, including data sources, flow unit factors, peaking factors, and the load allocation process.
- Review the development of wet weather flows including data sources, inflow and infiltration (I/I) estimation, and peaking factors.
- Prepare a technical memorandum documenting the results of the model review.

SCOPE OF WORK

Task 1 – Project Management and Meetings

Task 1.1 – Kickoff Meeting. The Kickoff meeting is a critical milestone that confirms the objectives of the project. It is intended to include the project stakeholders, which includes staff from both CuSD and Mark Thomas.

Task 1.2 – Model Review Workshops

This project will include up to four model review workshops with the model developer (Mark Thomas staff). The purpose of these workshops will be to discuss the methodology and approach used for developing the current hydralic model. A preliminary plan for these workshops is as follows.

- ***Workshop 1 – Review Data Sources:*** *The purpose of this workshop will be to review the various data sources used in the development and validation of the hydraulic model. These sources will generally include collection system GIS, flow*

monitoring data, dry weather flow information, wet weather flow information, land use planning data, and more.

- ***Workshop 2 – Review Model Development and Calibration:*** *The purpose of this workshop will be to review the model development and calibration process.*
- ***Workshop 3 – Review Model Results and Findings:*** *The purpose of this workshop is to review the model results. This includes a review of potential capacity restrictions, existing system deficiencies, and other relevant modeling results.*
- ***Workshop 4 – If Needed:*** *One additional workshop is included, to be scheduled on an as-needed basis.*

Task 2 – XPSWMM Model Review

Task 2.1 – Land Use Planning. This task consists of reviewing the land use planning assumptions used in the development of the CuSD hydraulic model. This includes but is not limited to a review of the data sources, land use classification methodology, and determination of vacant lands.

Task 2.2 – Model Development. This task consists of reviewing the model development process. This includes but is not limited to a review of the data sources used to develop the collection system modeling elements, subcatchment discretization, model skeletonization, and data validation process used in preparing the hydraulic model.

Task 2.3 – Model Calibration. This task consists of reviewing the dry and wet weather model calibration process. This includes but is not limited to a review of the flow monitoring program, average dry weather diurnal pattern development, and wet weather calibration parameters.

Task 2.4 – Dry Weather Flow Review. This task consists of reviewing the process used to determine and allocate the existing and future system dry weather flows. This includes but is not limited to a review of the data sources, unit flow factors, peaking factors, and flow validation process.

Task 2.5 – Wet Weather Flow Review. This task consists of reviewing the process used to determine and allocate the existing and future system wet weather flows. This includes but is not limited to a review of the data sources, I/I estimation, subcatchment discretization, peaking factors, and flow validation.

Task 3 – Recommendations

Task 3.1 – Recommendations. The recommendations will be based on information learned during the review workshops, and include enhancements (if needed) to the existing model and analysis..

Task 4 – Prepare Technical Memorandum

Task 4.1 – Prepare Draft Technical Memorandum. This task consists of preparing a draft technical memorandum that summarizes the methodology and results of the Model Review. The memorandum will also document any recommendations or improvements identified during the review process.

Task 4.2 – Prepare Final Draft and Final Technical Memorandum. This task consists of updating the draft technical memorandum following receipt of comments from CuSD and Mark Thomas staff. A final memorandum will be compiled following the submittal and review of the Final Draft.

Task 5 - Contingency

Task 5.1 - Contingency. This task is intended as a contingency, and may only be expended with explicit authorization from CuSD staff. This may account for unforeseen circumstances, or additional analysis and review requested CuSD staff, but not currently included in this scope of work.

EXHIBIT B

Compensation

Cupertino Sanitary District

XPSWMM Model Review
Level of Effort

PRELIMINARY

Task No.	Task Description	Hours							Costs		
		Principal Engineer	Senior Engineer	Associate Engineer	Assistant Engineer	GIS Technician	Secretarial	Total	Labor Costs	Subtasks Total	Tasks Total
		$200	$181	$162	$122	$110	$82				
Task 1	**Project Management and Meetings**										**$5,658**
1.1	Kickoff Meeting	**4**	**6**					**10**	$1,886	$1,886	
1.2	Model Review Workshops (Up to Four)	**8**	**12**					**20**	$3,772	$3,772	
Task 2	**XPSWMM Model Review**										**$10,282**
2.1	Land Use Planning	**1**	**2**	**2**	**4**	**2**		**11**	$1,594	$1,594	
2.2	Model Development	**2**	**4**	**4**	**2**	**2**		**14**	$2,236	$2,236	
2.3	Model Calibration	**4**	**8**	**4**				**16**	$2,896	$2,896	
2.4	Dry Weather Flow	**1**	**2**	**6**				**9**	$1,534	$1,534	
2.5	Wet Weather Flow	**1**	**2**	**6**	**4**			**13**	$2,022	$2,022	
Task 3	**Recommendations**										**$2,502**
3.1	Recommendations	**2**	**8**	**2**		**3**		**15**	$2,502	$2,502	
Task 4	**Prepare Technical Memorandum**										**$5,326**
4.1	Prepare Draft Technical Memoradum	**4**	**8**	**4**		**6**		**22**	$3,556	$3,556	
4.2	Prepare Final Draft and Final Technical Memorandum	**1**	**4**	**2**		**4**	**1**	**12**	$1,770	$1,770	
Task 5	**Contingency**										**$8,520**
5.1	Contigency	**10**	**24**	**8**		**8**		**50**	$8,520	$8,520	
Total											
	Total	**38**	**80**	**38**	**10**	**25**	**1**	**192**	**$32,288**	**$32,288**	**$32,288**

AKEL ENGINEERING GROUP, INC.

4/14/2021

Item 9A

County of Santa Clara

Registrar of Voters

1555 Berger Drive, Building 2
San Jose, California 95112
Mailing Address: P.O. Box 611360 San Jose, CA 95161-1360
(408) 299-VOTE (8683) (866) 430-VOTE (8683) FA X (408) 998-7314
www.sccvote.org

Date: April 13, 2021

To: School and Special Districts

From: Election Division Coordinator, Candidate Services Division

Subject: Required Annual Financial Disclosure Statements

Fair Political Commission Practices (FPPC) Regulations require officeholders who receive monetary compensation of $200 or more a month from the School/Special District and do not have an active candidate/officeholder committee to file the Form 470 annually.

To help identify the filing obligation of your board members, we ask that each district representative complete the form below and indicate the exact monetary compensation each board members receive per month. Please return the completed form to our office no later than 04/26/2021 by either:

1. E-mail: email-rov-nom@rov.sccgov.org; or
2. Fax: 408-998-7356; or
3. Mail: Registrar of Voters, 1555 Berger Drive, Building 2, San Jose, CA 95112.

Enclosed is the Form 470 for you to make copies and distribute to your board members as needed. Board members who are required to file the Form 470 with our office have until 7/31/2021 to do so, early distribution of the form and filing with our office is recommended.

Officeholders who receive less than $200 a month or who have active candidate/officeholder committees do not need to file the Form 470.

If you have any questions, please contact our office at 408-299-8639.

Thank you for your assistance.

Name of District _____

Amount of compensation paid to each board member monthly _____

Print Name of District Representative _____

Signature of District Representative _____

Officeholder and Candidate Campaign Statement — Short Form - AND - Form 470 Supplement

CALIFORNIA FORM 470

Who Uses Form 470:

candidates who:

- do not have a controlled committee;
- do not anticipate receiving contributions totaling $2,000 or more during the calendar year; and
- do not anticipate spending $2,000 or more during the calendar year.

controlled committee or who have raised or spent $2,000 le the Recipient Committee Statement – Form 460.

Exceptions:

The following individuals seeking or holding le campaign disclosure statements (Form 470 or Form 460):

- that do not raise or spend $2,000 or more in a calendar year;
- per month and judicial candidates who have not made or received contributions or made expenditures during non-election years; and
- judges who do not receive contributions and who make personal expenditures of less than $1,000 or more in non-election years.

Period Covered:

The period covered is always the calendar year (January 1 through December 31).

$2,000 Threshold:

To determine if $2,000 has been raised or spent, or will be raised or spent, the candidate's personal

are excluded.

A campaign bank account must be established if the candidate receives contributions from other persons.

When to File:

Ensure campaign deadlines are met. Go to www schedules.

year, no additional campaign statements need

contributions received remain less than $2,000 and total expenditures made remain less than $2,000.

, or

an election, covering the year of the election. If,

reach $2,000 or more, see the attached Form 470 Supplement for important reporting requirements.

Where to File:

State Elections:

and members of CalPERS and CalSTRS, judges

one copy with:

Secretary of State
Political Reform Division
1500 11th Street, Room 495
Sacramento, CA 95814
Phone (916) 653-6224
Fax (916) 653-5045
www.sos.ca.gov

Additional Copies:

A
the candidate's county of domicile' .

a copy of the Form 470 with the relevant CalPERS s county of domicile.

Local Elections:

- largest number of registered voters in the district and one copy with the candidate's county of domicile.
- .
- clerk.

Note: A local agency may impose additional requirements.

Amendments:

of the amendment. Be sure to enter the calendar year covered by the statement you are amending and the date of election, if applicable.

This form was prepared by the Fair Political Practices Commission (FPPC). For detailed information on campaign reporting requirements and the Information Practices Act of 1977, see the FPPC Campaign Disclosure Manual.

Officeholder and Candidate Campaign Statement – Short Form

Date of election if applicable: (Month, Day, Year)	☐ **Amendment** (Explain Below)	Date Stamp	**CALIFORNIA FORM 470** For Official Use Only

1. Statement Covers Calendar Year 20 _____ .

2. Officeholder or Candidate Information

NAME OF OFFICEHOLDER OR CANDIDATE

STREET ADDRESS

CITY | STATE | ZIP CODE

AREA CODE/DAYTIME PHONE NUMBER | OPTIONAL: FAX / E-MAIL ADDRESS

3. Office Sought or Held

OFFICE SOUGHT OR HELD

JURISDICTION (LOCATION) | DISTRICT NUMBER (IF APPLICABLE)

4. Committee Information

List all committees of which you have knowledge that are primarily formed to receive contributions or to make expenditures on behalf of your candidacy.

COMMITTEE NAME AND I.D. NUMBER	COMMITTEE ADDRESS	NAME OF TREASURER

5. Verification

I declare under penalty of perjury that to the best of my knowledge I anticipate that I will receive less than $2,000 and that I will spend less than $2,000 during the calendar year and that I have used all reasonable diligence in preparing this statement. I certify under penalty of perjury under the laws of the State of California that the foregoing is true and correct.

Executed on _____ (DATE)

By _____ (SIGNATURE OF OFFICEHOLDER OR CANDIDATE)

Officeholder and Candidate Campaign Statement Form 470 Supplement

SEE INSTRUCTIONS ON REVERSE

☐ **Amendment** (Explain Below)

Date Stamp

CALIFORNIA FORM 470 SUPPLEMENT

For Official Use Only

This form is written notification that the officeholder/candidate listed below has received contributions totaling $2,000 or more or has made expenditures of $2,000 or more during the calendar year.

1. Officeholder or Candidate Information

NAME OF OFFICEHOLDER OR CANDIDATE

STREET ADDRESS

CITY | STATE | ZIP CODE

AREA CODE/DAYTIME PHONE NUMBER | OPTIONAL: FAX / E-MAIL ADDRESS

2. Office Sought

OFFICE SOUGHT | DISTRICT NUMBER (IF APPLICABLE)

DATE OF ELECTION (MONTH, DAY, YEAR)

3. Date Contributions Totaling $2,000 or More Were Received or Date Expenditures of $2,000 or More Were Made

(MONTH, DAY, YEAR)

Instructions for Completing Form 470 Supplement

CALIFORNIA FORM 470 SUPPLEMENT

Form 470 Supplement:

470 for an election year and later receives contributions (including monetary and non-monetary contributions, loans, and the candidate's personal funds) totaling $2,000 or more or makes expenditures totaling $2,000 or more during the same calendar year
must send a written notice within 48 hours. Use the attached Form 470 Supplement or follow the instructions below for preparing the notice.

When to File:

The notice must be sent within 48 hours of receiving contributions totaling $2,000 or more or making expenditures of $2,000 or more.

Method of Delivery:

The notice must be sent by guaranteed overnight delivery service, personal delivery, fax, or email. Regular mail may not be used.

Where to File:

- Secretary of State'
-

her campaign statements; and

-

s full name, residential or business address and daytime telephone number.

-
- the district number, if any; and
- the date of the election.

Date Contributions/Expenditures Were Made or Received:

Enter the date monetary or non-monetary contributions totaling $2,000 or more (including the candidate's personal funds) were received or the date expenditures of $2,000 or more were made.

Amendments:

of the amendment.

Note:
the $2,000 threshold in receipts or expenditures,

other forms are required. See FPPC Campaign Disclosure Manual 1 for state candidates or Manual 2 for local candidates.

Cupertino Sanitary District

Memo

Item 9B

To: **Board of Directors**

From: **Benjamin Porter, District Manager-Engineer**

Date: **May 5, 2021**

Re: **ESRI ArcGIS Software Renewal**

Project Summary:

On April 16, 2014, the Board authorized Staff to enter into an agreement with ESRI for the use of ArcGIS software to manage the District's assets using a smart geographical database that has geospatial attributes and can store historical data. The license agreement was a three-year term and it was last renewed in April 2018. For the past three years Staff have been evolving and managing the District's assets and documentation with ArcGIS Software to manage the changes with developments in the District and to harness the power of existing data. These activities include incorporating district maps, as-built details, maintenance records, repair records, inspection records, underground pipe system, pump stations, capital assets of the District. The software has also been used to provide engineering solutions to Capital Improvement Projects and for the and the Sewer System Management Plan (SSMP) updates with risk assessment and analytical tools. The software is a very powerful tool that has and will continue to benefit the District as we maintain and utilize the District's electronic database.

Renewal Plan:

The annual cost of the software package was previously $25,000 per year and it has been kept constant in the proposal for the next three years. The software agreement is necessary to allow the District to continue using ArcGIS to manage District's assets and documentation.

Recommendation:

Staff recommends the Board to authorize District Manger to renew the ESRI agreement to continue the use of ArcGIS software. This license agreement is a commitment for three-year term at $25,000 per year.

Attachment:

1. ArcGIS Agreement for Small Enterprise License Agreement 2021-2024.

February 17, 2021

Benjamin Porter
Cupertino Sanitary District
20863 Steven Creek Blvd Ste 100
Cupertino, CA 95014-2110

Dear Ben,

We are looking forward to continue supporting Cupertino Sanitary District's GIS needs. I am providing proposed pricing and key business terms below.

The Esri Enterprise Agreement (EA) will remain in effect for three years and grant Cupertino Sanitary District uncapped access to the Esri products listed below.

The agreement will be effective on **5/13/2021** and requires a firm three-year commitment.

Although you have already deployed a considerable amount of Esri technology, our experience with similar customers indicates that there is significant potential to apply GIS in many additional areas within your organization. For these reasons, we believe that you will greatly benefit from an enterprise agreement. An EA offers numerous benefits including:

- A lower cost per unit for licensed software
- Substantially reduced administrative and procurement expenses
- Maintenance on all Esri software identified in this proposal and deployed within the organization
- Complete flexibility to deploy software products when and where needed

Proposed payment terms for the EA, developed to reflect your anticipated deployment schedule, are as follows:

	Year 1	Year 2	Year 3	Total
Annual EA Fee	$25,000	$25,000	$25,000	**$75,000**

Esri products and services to which Cupertino Sanitary District will have uncapped, single use deployment rights during the term of this agreement include:

- **ArcGIS Desktop:** Advanced, Standard, Basic (Single Use)
- **ArcGIS Desktop Extensions:** 3D Analyst, Spatial Analyst, Geostatistical Analyst, Publisher, Network Analyst, Schematics, Workflow Manager and Data Reviewer (Single Use)
- **ArcGIS Enterprise:** Advanced and Standard (Enterprise & Workgroup)
- **ArcGIS Enterprise Extensions:** 3D Analyst, Spatial Analyst, Geostatistical Analyst, Network Analyst, Schematics, Workflow Manager
- **ArcGIS GIS Server:** Advanced, Standard
- **ArcGIS Enterprise Additional Capability Servers:** ArcGIS Image Server (Optional Servers: ArcGIS GeoEvent Server)
- **ArcGIS Monitor**
- **ArcGIS Engine**
- **ArcGIS Engine Extensions:** 3D Analyst, Spatial Analyst, Engine Geodatabase Update, Network Analyst, Schematics
- **ArcGIS Runtime (Standard)**
- **ArcGIS Runtime Analysis Extension**

The EA also includes:

- **ArcGIS Online Named Users:** (50) Viewer named users and (50) Creator named users, with 10,000 annual credits
- **Apps for ArcGIS Online:** (5) Insights, (10) Tracker for ArcGIS, and (1) Business Analyst Web App
- **ArcGIS Enterprise Named Users:** (50) Creator named users
- **Apps for ArcGIS Enterprise:** (5) Insights and (10) Tracker for ArcGIS
- **ArcGIS Enterprise User Types Extensions:** (50) Utility Network
- **ArcGIS Developer Subscription:** (1) Professional Subscription
- **Esri CityEngine:** (2) Single Use Licenses

The EA also includes the following additional components:

- **Esri International User Conference:** (2) annual complimentary registrations
- **Authorized callers:** (3) callers

The following key business terms and conditions will apply to this EA:

- All your employees, in-house contractors, and employees of affiliates in which you have more than a 50% ownership interest will be eligible to use the products and services listed above for the sole benefit of Licensee. Current affiliates will need to be identified in the final agreement. Employees and contractors at companies that you or its affiliates acquire, merge with, or gain an ownership interest in during the term of this agreement will not be eligible to participate in the EA without the mutual agreement of the parties.
- Software products and services included in this proposal may only be deployed and used at your locations in the United States.
- Esri technology that may be embedded in any third-party products you acquire is not included under this agreement.
- You will establish a single point of contact for orders and deliveries and will be responsible for redistribution to eligible users.
- Esri products not included in this agreement may be purchased at pricing that you are normally eligible to receive for software and maintenance.
- You will be automatically invoiced upon the effective date and at the start of each payment term thereafter. Payments are due within 30 days of invoice date.
- You will provide Tier 1 technical support and will designate the quantity of individuals listed above who may directly contact Esri for Tier 2 technical support.
- You will provide an annual report of installed Esri products to Esri.
- You agree to abide by all United States export restrictions.
- Esri products that are eligible for use in this agreement will be automatically available for downloading.
- You will name Esri your company-wide GIS standard, will act as an Esri reference site, and will permit Esri to publicize your use of Esri products.
- The fee and benefits offered in this EA proposal are contingent upon your acceptance of Esri's standard licensing terms and conditions and the terms of the EA.
- The details of this agreement will be confidential and may not be disclosed by the contracting parties.

This proposal is valid for 90 days. In order to complete the agreement within this timeframe, I ask that you contact me within the next seven days to work through any questions or concerns you may have.

Esri and Cupertino Sanitary District have a long and rich history working together. I appreciate the opportunity to present you with this proposal, and I believe it will greatly benefit your organization. Thank you very much for your consideration.

Best regards,

Dianna Noriega
Enterprise Agreement Account Manager | Esri Global Water Practice

Quotation # Q-421174

Date: February 17, 2021

Environmental Systems Research Institute, Inc.
380 New York St
Redlands, CA 92373-8100
Phone: (909) 793-2853 Fax: (909) 307-3049
DUNS Number: 06-313-4175 CAGE Code: 0AMS3

Customer # 492253 Contract # ENTERPRISE AGREEMENT

Cupertino Sanitary District
20863 Stevens Creek Blvd Ste 100
Cupertino, CA 95014-2110

ATTENTION: Benjamin Proter
PHONE: (408) 477-7318
EMAIL: bporter@markthomas.com

To expedite your order, please attach a copy of this quotation to your purchase order.
Quote is valid from: 2/17/2021 To: 5/13/2021

Material	Qty	Term	Unit Price	Total
168089	1	Year 1	$25,000.00	$25,000.00
Meter Counts 10,001 to 50,000 Small Utility Term Enterprise License Agreement				
168089	1	Year 2	$25,000.00	$25,000.00
Meter Counts 10,001 to 50,000 Small Utility Term Enterprise License Agreement				
168089	1	Year 3	$25,000.00	$25,000.00
Meter Counts 10,001 to 50,000 Small Utility Term Enterprise License Agreement				

Subtotal:	$75,000.00
Sales Tax:	$0.00
Estimated Shipping and Handling (2 Day Delivery):	$0.00
Contract Price Adjust:	$0.00
Total:	$75,000.00

Esri may charge a fee to cover expenses related to any customer requirement to use a proprietary vendor management, procurement, or invoice program.

For questions contact:	**Email:**	**Phone:**
Dianna Noriega	dnoriega@esri.com	(909) 793-2853 x3874

The items on this quotation are subject to and governed by the terms of this quotation, the most current product specific scope of use document found at https://assets.esri.com/content/dam/esrisites/media/legal/product-specific-terms-of-use/e300.pdf, and your applicable signed agreement with Esri. If no such agreement covers any item quoted, then Esri's standard terms and conditions found at https://go.esri.com/MAPS apply to your purchase of that item. Federal government entities and government prime contractors authorized under FAR 51.1 may purchase under the terms of Esri's GSA Federal Supply Schedule. Supplemental terms and conditions found at https://www.esri.com/en-us/legal/terms/state-supplemental apply to some state and local government purchases. All terms of this quotation will be incorporated into and become part of any additional agreement regarding Esri's offerings. Acceptance of this quotation is limited to the terms of this quotation. Esri objects to and expressly rejects any different or additional terms contained in any purchase order, offer, or confirmation sent to or to be sent by buyer. Unless prohibited by law, the quotation information is confidential and may not be copied or released other than for the express purpose of system selection and purchase/license. The information may not be given to outside parties or used for any other purpose without consent from Esri. Delivery is FOB Origin.

NORIEGAD **This offer is limited to the terms and conditions incorporated and attached herein.**

Quotation # Q-421174

Date: February 17, 2021

Environmental Systems Research Institute, Inc.
380 New York St
Redlands, CA 92373-8100
Phone: (909) 793-2853 Fax: (909) 307-3049
DUNS Number: 06-313-4175 CAGE Code: 0AMS3

Customer # 492253 Contract # ENTERPRISE AGREEMENT

Cupertino Sanitary District
20863 Stevens Creek Blvd Ste 100
Cupertino, CA 95014-2110

ATTENTION: Benjamin Proter
PHONE: (408) 477-7318
EMAIL: bporter@markthomas.com

To expedite your order, please attach a copy of this quotation to your purchase order.
Quote is valid from: 2/17/2021 To: 5/13/2021

If you have made ANY alterations to the line items included in this quote and have chosen to sign the quote to indicate your acceptance, you must fax Esri the signed quote in its entirety in order for the quote to be accepted. You will be contacted by your Customer Service Representative if additional information is required to complete your request.

If your organization is a US Federal, state, or local government agency; an educational facility; or a company that will not pay an invoice without having issued a formal purchase order, a signed quotation will not be accepted unless it is accompanied by your purchase order.

In order to expedite processing, please reference the quotation number and any/all applicable Esri contract number(s) (e.g. MPA, ELA, SmartBuy, GSA, BPA) on your ordering document.

BY SIGNING BELOW, YOU CONFIRM THAT YOU ARE AUTHORIZED TO OBLIGATE FUNDS FOR YOUR ORGANIZATION, AND YOU ARE AUTHORIZING ESRI TO ISSUE AN INVOICE FOR THE ITEMS INCLUDED IN THE ABOVE QUOTE IN THE AMOUNT OF $_____, PLUS SALES TAXES IF APPLICABLE. DO NOT USE THIS FORM IF YOUR ORGANIZATION WILL NOT HONOR AND PAY ESRI'S INVOICE WITHOUT ADDITIONAL AUTHORIZING PAPERWORK.

Please check one of the following:

___ I agree to pay any applicable sales tax.

___ I am tax exempt, please contact me if exempt information is not currently on file with Esri.

_____ _____
Signature of Authorized Representative **Date**

_____
Name (Please Print)

_____
Title

Any estimated sales and/or use tax reflected on this quote has been calculated as of the date of this quotation and is merely provided as a convenience for your organization's budgetary purposes. Esri reserves the right to adjust and collect sales and/or use tax at the actual date of invoicing. If your organization is tax exempt or pays state tax directly, then prior to invoicing, your organization must provide Esri with a copy of a current tax exemption certificate issued by your state's taxing authority for the given jurisdiction.

Esri may charge a fee to cover expenses related to any customer requirement to use a proprietary vendor management, procurement, or invoice program.

For questions contact:	**Email:**	**Phone:**
Dianna Noriega	dnoriega@esri.com	(909) 793-2853 x3874

The items on this quotation are subject to and governed by the terms of this quotation, the most current product specific scope of use document found at https://assets.esri.com/content/dam/esrisites/media/legal/product-specific-terms-of-use/e300.pdf, and your applicable signed agreement with Esri. If no such agreement covers any item quoted, then Esri's standard terms and conditions found at https://go.esri.com/MAPS apply to your purchase of that item. Federal government entities and government prime contractors authorized under FAR 51.1 may purchase under the terms of Esri's GSA Federal Supply Schedule. Supplemental terms and conditions found at https://www.esri.com/en-us/legal/terms/state-supplemental apply to some state and local government purchases. All terms of this quotation will be incorporated into and become part of any additional agreement regarding Esri's offerings. Acceptance of this quotation is limited to the terms of this quotation. Esri objects to and expressly rejects any different or additional terms contained in any purchase order, offer, or confirmation sent to or to be sent by buyer. Unless prohibited by law, the quotation information is confidential and may not be copied or released other than for the express purpose of system selection and purchase/license. The information may not be given to outside parties or used for any other purpose without consent from Esri. Delivery is FOB Origin.

NORIEGAD **This offer is limited to the terms and conditions incorporated and attached herein.**

Esri Use Only:
Cust. Name _____
Cust. # _____
PO # _____
Esri Agreement # _____

SMALL ENTERPRISE AGREEMENT
SMALL UTILITY
(E215-2)

This Agreement is by and between the organization identified in the Quotation (**"Customer"**) and **Environmental Systems Research Institute, Inc.** (**"Esri"**).

This Agreement sets forth the terms for Customer's use of Products and incorporates by reference (i) the Quotation and (ii) the Master Agreement. Should there be any conflict between the terms and conditions of the documents that comprise this Agreement, the order of precedence for the documents shall be as follows: (i) the Quotation, (ii) this Agreement, and (iii) the Master Agreement. This Agreement shall be governed by and construed in accordance with the laws of the state in which Customer is located without reference to conflict of laws principles, and the United States of America federal law shall govern in matters of intellectual property. The modifications and additional rights granted in this Agreement apply only to the Products listed in Table A.

Table A
List of Products

Uncapped Quantities

Desktop Software and Extensions (Single Use)
ArcGIS Desktop Advanced
ArcGIS Desktop Standard
ArcGIS Desktop Basic
ArcGIS Desktop Extensions: ArcGIS 3D Analyst, ArcGIS Spatial Analyst, ArcGIS Geostatistical Analyst, ArcGIS Publisher, ArcGIS Network Analyst, ArcGIS Schematics, ArcGIS Workflow Manager, ArcGIS Data Reviewer

Enterprise Software and Extensions
ArcGIS Enterprise and Workgroup (Advanced and Standard)
ArcGIS Monitor
ArcGIS Enterprise Extensions: ArcGIS 3D Analyst, ArcGIS Spatial Analyst, ArcGIS Geostatistical Analyst, ArcGIS Network Analyst, ArcGIS Schematics, ArcGIS Workflow Manager

Enterprise Additional Capability Servers
ArcGIS Image Server

Developer Tools
ArcGIS Engine
ArcGIS Engine Extensions: ArcGIS 3D Analyst, ArcGIS Spatial Analyst, ArcGIS Engine Geodatabase Update, ArcGIS Network Analyst, ArcGIS Schematics
ArcGIS Runtime (Standard)
ArcGIS Runtime Analysis Extension

Limited Quantities
One (1) Professional subscription to ArcGIS Developer
Two (2) ArcGIS CityEngine Single Use Licenses
50 ArcGIS Online Viewers
50 ArcGIS Online Creators
10,000 ArcGIS Online Service Credits
50 ArcGIS Enterprise Creators
5 ArcGIS Insights in ArcGIS Enterprise
5 ArcGIS Insights in ArcGIS Online
10 ArcGIS Tracker for ArcGIS Enterprise
10 ArcGIS Tracker for ArcGIS Online
50 ArcGIS Utility Network User Type Extensions (Enterprise)
1 ArcGIS Business Analyst Web App

OTHER BENEFITS

Number of Esri User Conference registrations provided annually	**2**
Number of Tier 1 Help Desk individuals authorized to call Esri	**3**
Maximum number of sets of backup media, if requested*	**2**
Five percent (5%) discount on all individual commercially available instructor-led training classes at Esri facilities purchased outside this Agreement	

*Additional sets of backup media may be purchased for a fee

Customer may accept this Agreement by signing and returning the whole Agreement with (i) the Quotation attached, (ii) a purchase order, or (iii) another document that matches the Quotation and references this Agreement ("**Ordering Document**"). **ADDITIONAL OR CONFLICTING TERMS IN CUSTOMER'S PURCHASE ORDER OR OTHER DOCUMENT WILL NOT APPLY, AND THE TERMS OF THIS AGREEMENT WILL GOVERN.** This Agreement is effective as of the date of Esri's receipt of an Ordering Document, unless otherwise agreed to by the parties ("**Effective Date**").

Term of Agreement: Three (3) years

This Agreement supersedes any previous agreements, proposals, presentations, understandings, and arrangements between the parties relating to the licensing of the Products. Except as provided in Article 4—Product Updates, no modifications can be made to this Agreement.

Accepted and Agreed:

_____
(Customer)

By: _____
Authorized Signature

Printed Name: _____

Title: _____

Date: _____

CUSTOMER CONTACT INFORMATION

Contact: _____

Address: _____

City, State, Postal Code: _____

Country: _____

Quotation Number (if applicable): _____

Telephone: _____

Fax: _____

E-mail: _____

1.0—Additional Definitions

In addition to the definitions provided in the Master Agreement, the following definitions apply to this Agreement:

"Case" means a failure of the Software or Online Services to operate according to the Documentation where such failure substantially impacts operational or functional performance.

"Deploy", "Deployed" and "Deployment" mean to redistribute and install the Products and related Authorization Codes within Customer's organization(s).

"Fee" means the fee set forth in the Quotation.

"Maintenance" means Tier 2 Support, Product updates, and Product patches provided to Customer during the Term of Agreement.

"Master Agreement" means the applicable master agreement for Esri Products incorporated by this reference that is (i) found at https://www.esri.com/en-us/legal/terms/full-master-agreement and available in the installation process requiring acceptance by electronic acknowledgment or (ii) a signed Esri master agreement or license agreement that supersedes such electronically acknowledged master agreement.

"Product(s)" means the products identified in Table A—List of Products and any updates to the list Esri provides in writing.

"Quotation" means the offer letter and quotation provided separately to Customer.

"Technical Support" means the technical assistance for attempting resolution of a reported Case through error correction, patches, hot fixes, workarounds, replacement deliveries, or any other type of Product corrections or modifications.

"Tier 1 Help Desk" means Customer's point of contact(s) to provide all Tier 1 Support within Customer's organization(s).

"Tier 1 Support" means the Technical Support provided by the Tier 1 Help Desk.

"Tier 2 Support" means the Esri Technical Support provided to the Tier 1 Help Desk when a Case cannot be resolved through Tier 1 Support.

2.0—Additional Grant of License

2.1 Grant of License. Subject to the terms and conditions of this Agreement, Esri grants to Customer a personal, nonexclusive, nontransferable license solely to use, copy, and Deploy quantities of the Products listed in Table A—List of Products for the Term of Agreement (i) for the applicable Fee and (ii) in accordance with the Master Agreement.

2.2 Consultant Access. Esri grants Customer the right to permit Customer's consultants or contractors to use the Products exclusively for Customer's benefit. Customer will be solely responsible for compliance by consultants and contractors with this Agreement and will ensure that the consultant or contractor discontinues use of Products upon completion of work for Customer. Access to or use of Products by consultants or contractors not exclusively for Customer's benefit is prohibited. Customer may not permit its consultants or contractors to install Software or Data on consultant, contractor, or third-party computers or remove Software or Data from Customer locations, except for the purpose of hosting the Software or Data on Contractor servers for the benefit of Customer.

3.0—Term, Termination, and Expiration

3.1 Term. This Agreement and all licenses hereunder will commence on the Effective Date and continue for the duration identified in the Term of Agreement, unless this Agreement is terminated earlier as provided herein. Customer is only authorized to use Products during the Term of Agreement. For an Agreement with a limited term, Esri does not grant Customer an indefinite or a perpetual license to Products.

3.2 No Use upon Agreement Expiration or Termination. All Product licenses, all Maintenance, and Esri User Conference registrations terminate upon expiration or termination of this Agreement.

3.3 Termination for a Material Breach. Either party may terminate this Agreement for a material breach by the other party. The breaching party will have thirty (30) days from the date of written notice to cure any material breach.

3.4 Termination for Lack of Funds. For an Agreement with government or government-

owned entities, either party may terminate this Agreement before any subsequent year if Customer is unable to secure funding through the legislative or governing body's approval process.

3.5 Follow-on Term. If the parties enter into another agreement substantially similar to this Agreement for an additional term, the effective date of the follow-on agreement will be the day after the expiration date of this Agreement.

4.0—Product Updates

4.1 Future Updates. Esri reserves the right to update the list of Products in Table A—List of Products by providing written notice to Customer. Customer may continue to use all Products that have been Deployed, but support and upgrades for deleted items may not be available. As new Products are incorporated into the standard program, they will be offered to Customer via written notice for incorporation into the Products schedule at no additional charge. Customer's use of new or updated Products requires Customer to adhere to applicable additional or revised terms and conditions in the Master Agreement.

4.2 Product Life Cycle. During the Term of Agreement, some Products may be retired or may no longer be available to Deploy in the identified quantities. Maintenance will be subject to the individual Product Life Cycle Support Status and Product Life Cycle Support Policy, which can be found at https://support.esri.com/en/other-resources/product-life-cycle. Updates for Products in the mature and retired phases may not be available. Customer may continue to use Products already Deployed, but Customer will not be able to Deploy retired Products.

5.0—Maintenance

The Fee includes standard maintenance benefits during the Term of Agreement as specified in the most current applicable Esri Maintenance and Support Program document (found at https://www.esri.com/en-us/legal/terms/maintenance). At Esri's sole discretion, Esri may make patches, hot fixes, or updates available for download. No Software other than the defined Products will receive Maintenance. Customer may acquire maintenance for other Software outside this Agreement.

a. Tier 1 Support

1. Customer will provide Tier 1 Support through the Tier 1 Help Desk to all Customer's authorized users.

2. The Tier 1 Help Desk will be fully trained in the Products.

3. At a minimum, Tier 1 Support will include those activities that assist the user in resolving how-to and operational questions as well as questions on installation and troubleshooting procedures.

4. The Tier 1 Help Desk will be the initial point of contact for all questions and reporting of a Case. The Tier 1 Help Desk will obtain a full description of each reported Case and the system configuration from the user. This may include obtaining any customizations, code samples, or data involved in the Case.

5. If the Tier 1 Help Desk cannot resolve the Case, an authorized Tier 1 Help Desk individual may contact Tier 2 Support. The Tier 1 Help Desk will provide support in such a way as to minimize repeat calls and make solutions to problems available to Customer’s organization.

6. Tier 1 Help Desk individuals are the only individuals authorized to contact Tier 2 Support. Customer may change the Tier 1 Help Desk individuals by written notice to Esri.

b. Tier 2 Support

1. Tier 2 Support will log the calls received from Tier 1 Help Desk.

2. Tier 2 Support will review all information collected by and received from the Tier 1 Help Desk including preliminary documented troubleshooting provided by the Tier 1 Help Desk when Tier 2 Support is required.

3. Tier 2 Support may request that Tier 1 Help Desk individuals provide verification of information, additional information, or answers to additional questions to

supplement any preliminary information gathering or troubleshooting performed by Tier 1 Help Desk.

4. Tier 2 Support will attempt to resolve the Case submitted by Tier 1 Help Desk.

5. When the Case is resolved, Tier 2 Support will communicate the information to Tier 1 Help Desk, and Tier 1 Help Desk will disseminate the resolution to the user(s).

6.0—Endorsement and Publicity

This Agreement will not be construed or interpreted as an exclusive dealings agreement or Customer's endorsement of Products. Either party may publicize the existence of this Agreement.

7.0—Administrative Requirements

7.1 **OEM Licenses.** Under Esri's OEM or Solution OEM programs, OEM partners are authorized to embed or bundle portions of Esri products and services with their application or service. OEM partners' business model, licensing terms and conditions, and pricing are independent of this Agreement. Customer will not seek any discount from the OEM partner or Esri based on the availability of Products under this Agreement. Customer will not decouple Esri products or services from the OEM partners' application or service.

7.2 **Annual Report of Deployments.** At each anniversary date and ninety (90) calendar days prior to the expiration of this Agreement, Customer will provide Esri with a written report detailing all Deployments. Upon request, Customer will provide records sufficient to verify the accuracy of the annual report.

8.0—Ordering, Administrative Procedures, Delivery, and Deployment

8.1 Orders, Delivery, and Deployment

a. Upon the Effective Date, Esri will invoice Customer and provide Authorization Codes to activate the nondestructive copy protection program that enables Customer to download, operate, or allow access to the Products. If this is a multi-year Agreement, Esri may invoice the Fee up to thirty (30) calendar days before the annual anniversary date for each year.

b. Undisputed invoices will be due and payable within thirty (30) calendar days from the date of invoice. Esri reserves the right to suspend Customer's access to and use of Products if Customer fails to pay any undisputed amount owed on or before its due date. Esri may charge Customer interest at a monthly rate equal to the lesser of one percent (1.0%) per month or the maximum rate permitted by applicable law on any overdue fees plus all expenses of collection for any overdue balance that remains unpaid ten (10) days after Esri has notified Customer of the past-due balance.

c. Esri's federal ID number is 95-2775-732.

d. If requested, Esri will ship backup media to the ship-to address identified on the Ordering Document, FOB Destination, with shipping charges prepaid. Customer acknowledges that should sales or use taxes become due as a result of any shipments of tangible media, Esri has a right to invoice and Customer will pay any such sales or use tax associated with the receipt of tangible media.

8.2 **Order Requirements.** Esri does not require Customer to issue a purchase order. Customer may submit a purchase order in accordance with its own process requirements, provided that if Customer issues a purchase order, Customer will submit its initial purchase order on the Effective Date. If this is a multi-year Agreement, Customer will submit subsequent purchase orders to Esri at least thirty (30) calendar days before the annual anniversary date for each year.

a. All orders pertaining to this Agreement will be processed through Customer's centralized point of contact.

b. The following information will be included in each Ordering Document:

(1) Customer name; Esri customer number, if known; and bill-to and ship-to addresses
(2) Order number
(3) Applicable annual payment due

9.0—MERGERS, ACQUISITIONS, OR DIVESTITURES

If Customer is a commercial entity, Customer will notify Esri in writing in the event of (i) a consolidation, merger, or reorganization of Customer with or into another corporation or entity; (ii) Customer's acquisition of another entity; or (iii) a transfer or sale of all or part of Customer's organization (subsections i, ii, and iii, collectively referred to as "**Ownership Change**"). There will be no decrease in Fee as a result of any Ownership Change.

9.1 If an Ownership Change increases the cumulative program count beyond the maximum level for this Agreement, Esri reserves the right to increase the Fee or terminate this Agreement and the parties will negotiate a new agreement.

9.2 If an Ownership Change results in transfer or sale of a portion of Customer's organization, that portion of Customer's organization will transfer the Products to Customer or uninstall, remove, and destroy all copies of the Products.

9.3 This Agreement may not be assigned to a successor entity as a result of an Ownership Change unless approved by Esri in writing in advance. If the assignment to the new entity is not approved, Customer will require any successor entity to uninstall, remove, and destroy the Products. This Agreement will terminate upon such Ownership Change.