Santa Clara Valley Water District

NON-AGENDA

February 23, 2018

Board Policy: EL-7 Communication and Support to the Board
The BAOs shall inform and support the Board in its work.

Page #	
	CEO BULLETIN / NEWSLETTERS
4	**CEO Bulletin:** 02/16/18 – 02/22/18
5	**Water Tracker Report:** 02/01/18
	BOARD MEMBER REQUESTS & INFORMATIONAL ITEMS
8	**BMR/IBMR Weekly Reports:** 02/22/18
10	Memo from Nina Hawk, COO/WUE, to the Board, dated 02/06/18, regarding the Annual Drinking Water Regulatory Update.
19	Memo from Katherine Oven, DOO/Water Utility Capital, to Nina Hawk, COO/WUE, dated 02/07/18, regarding the Purified Water Program follow up to the January 23, 2018 Recycled Water Committee P3 Workshop.
23	Letter from Norma Camacho, CEO, Bob Shaver, ACWD, and G.F. Duerig, Zone 7 Water Agency, to Karla Nemeth, California Department of Water Resources, dated 02/07/18, regarding the South Bay Aqueduct Condition Assessment.
25	Memo from Nina Hawk, COO/WUE, to the Board, dated 02/13/18, regarding the January 2018 Water Use Report.
26	Memo from Ngoc Nguyen, DOO/Watershed Design & Construction, to Norma Camacho, CEO, dated 02/20/18, regarding the Report of Properties Acquired under EL 6.7.1.
35	Memo from Michele King, COB to the Board, dated 02/21/18, regarding a magazine article on pipeline protection by District staff Emmanuel Aryee.
43	Memo from Nina Hawk, COO/WUE, to the Board, dated 02/23/18, regarding the 2018 Protection and Augmentation of Water Supplies Report.
44	Memo from Darin Taylor, CFO, to the Board, dated 02/23/18, regarding the Summary of Monthly Report of Investments for January 2018.
	INCOMING BOARD CORRESPONDENCE
61	**Board Correspondence Weekly Report:** 02/23/18
62	Letter from Richard McMurtry to Norma Camacho, CEO (cc: BOD), received 02/21/18, regarding questions about water delivery (C-18-0035).
63	Letter from Jim Barnes, Barnestorming Advertising, to Norma Camacho, CEO (cc: Kremen), received 2/16/18, regarding the RFP and award process for the District's advertising campaigns (C-18-0036).

OUTGOING BOARD CORRESPONDENCE

66 Memo from Michele King, COB, to the Board, dated 02/21/18, regarding thank you letters from Chair Santos to the Water Retailers who attended the Joint Special Board Meeting on 01/17/18.

Board correspondence has been removed from the online posting of the Non-Agenda to protect personal contact information. Lengthy reports/attachments may also be removed due to file size limitations. Copies of board correspondence and/or reports/attachments are available by submitting a public records request to publicrecords@valleywater.org.

CEO BULLETIN/ NEWSLETTERS

CEO BULLETIN

Santa Clara Valley Water District

To: **Board of Directors**
From: **Norma J. Camacho, CEO**

Chief Executive Officer Bulletin
Week of February 16 – 22, 2018

Board Executive Limitation Policy EL-7:
The Board Appointed Officers shall inform and support the Board in its work. Further, a BAO shall 1) inform the Board of relevant trends, anticipated adverse media coverage, or material external and internal changes, particularly changes in the assumptions upon which any Board policy has previously been established and 2) report in a timely manner an actual or anticipated noncompliance with any policy of the Board.

Page	IN THIS ISSUE
1	**District receives Government Finance Officers Association Award**

District receives Government Finance Officers Association Award

The district has received the Distinguished Budget Presentation Award for its Fiscal Year (FY) 2017-18 budget from the Government Finance Officers Association (GFOA), the highest form of recognition in governmental budgeting.

GFOA established the Distinguished Budget Presentation Award in 1984 to encourage state and local governments to prepare budget documents of the very highest quality that reflect both the guidelines established by the National Advisory Council on State and Local Budgeting and the GFOA's best practices on budgeting.

In order to receive this award, the district published a budget document that meets program criteria as a policy document, financial plan, operations guide, and communications device.

For further information, please contact Darin Taylor at (408) 630-3068.

Outlook as of February 1, 2018

We began calendar year 2018 with groundwater storage well within Stage 1 (Normal) of the District's Water Shortage Contingency Plan. This year's precipitation is below 60% of average to-date at the San Jose Index Station and below average for the Santa Cruz Mountains, South County, and the Diablo Range. The snow water equivalent for the Northern Sierra is less than 30% of normal for this date.

Despite below normal local rainfall and well below normal statewide snow pack, end of year groundwater storage for 2018 is projected to be well within Stage 1 (Normal).

Weather

Rainfall in San Jose

- Month of January = 2.95 inches
- Rainfall year total = 4.45 inches or 57% of average to date (rainfall year is July to June 30)
- February 1 Northern Sierra snowpack was 27% of normal for this date

Local Reservoirs

- Total February 1 storage = 44,482 acre-feet
  - » 50% of 20-year average for that date
  - » 26% of total capacity
  - » 39% of restricted capacity (169,009 acre-feet total storage capacity limited by seismic restrictions to 113,667 acre-feet)
- Approximately 480 acre-feet of imported water was delivered into local reservoirs during January 2018
- Total estimated releases to streams (local and imported water) during January was 5,000 acre-feet

Groundwater

- Groundwater (GW) Storage: Total storage at the end of 2018 is predicted to fall within Stage 1 (Normal) of the District's Water Shortage Contingency Plan.

	Santa Clara Subbasin		Llagas Subbasin
	Santa Clara Plain	Coyote Valley	
January 2018 managed recharge estimate (AF)	6,400	900	1,500
January 2018 managed recharge, % of 5-year average	219%	111%	146%
December 2017 pumping estimate (AF)	7,000	700	3,900
January to December 2017 pumping estimate (AF)	70,000	12,400	41,800
January to December 2017 pumping, % of 5-year average	86%	113%	96%
GW index well level compared to last January	Increase	Decrease	Decrease

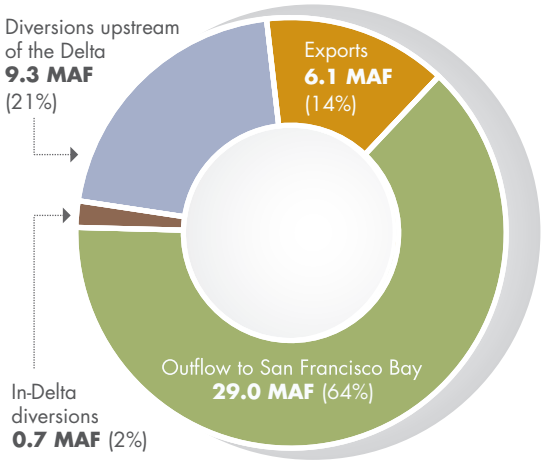
AF = acre-feet

continued on back ►

Imported Water

- As of January 29, 2018, the Statewide Average snowpack water content is 30% of the historic average for this date
- 2018 State Water Project (SWP) and Central Valley Project (CVP) allocations:
  - » 2018 SWP allocation: 20% = 20,000 acre-feet announced on January 29, 2018
  - » 2018 South-of-Delta CVP allocations: A 2018 CVP allocation has not yet been announced
- Reservoir storage information, as of January 31, 2018:
  - » Shasta Reservoir at 74% of capacity (109% of average for this date)
  - » Oroville Reservoir at 40% of capacity (61% of average for this date)
  - » San Luis Reservoir at 85% of capacity (108% of average for this date)
- District's Semitropic groundwater bank reserves are 254,385 acre-feet as of December 31, 2017
- Estimated SFPUC deliveries to Santa Clara County:
  - » Projected month of January = 2,991 acre-feet
  - » 2018 Total to Date = 2,991 acre-feet
  - » Five-year annual average is 48,700 acre-feet

Delta Watershed Diversions and Outflow
Typical Annual Balance
Average Years (45.1 MAF)



Note: *Percentages may not add up to 100% due to rounding to the nearest percent.*

Treated Water

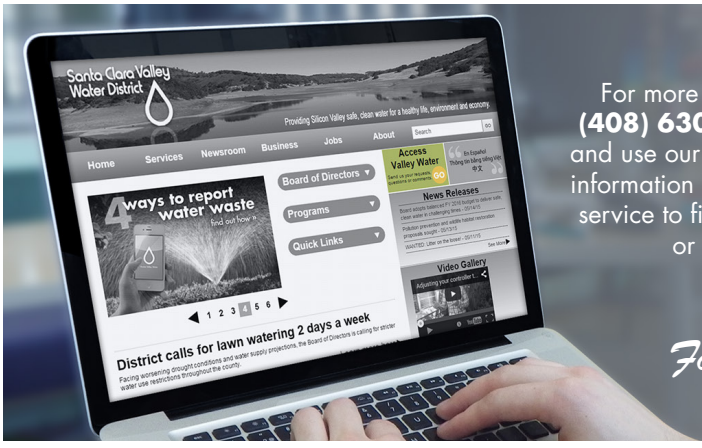
- Below average demands of 5,864 acre-feet delivered in January
- This total is 97% of the five-year average for the month of January
- Year-to-date deliveries = 5,864 acre-feet or 97% of the five-year average

Conserved Water

- Saved 72,000 acre-feet in FY17 from long-term program (baseline year is 1992)
- Long-term program goal is to save nearly 75,000 acre-feet in FY18
- The Board has called for a 20% reduction and a limit of three days per week for irrigation of ornamental landscape with potable water
- Achieved a 21% reduction in water use in calendar year 2017, compared to 2013

Recycled Water

- Estimated January 2018 production = 900 acre-feet
- Estimated Year-to-Date through January = 900 acre-feet or 84% of the five-year average
- Silicon Valley Advanced Water Purification Center produced an estimated 1.3 billion gallons (4,100 acre-feet) of purified water in 2017. Since the beginning of 2018, about 200 acre-feet of purified water has been blended with existing tertiary recycled water for South Bay Water Recycling Program's customers



CONTACT US

For more information, contact **Customer Relations** at **(408) 630-2880**, or visit our website at valleywater.org and use our **Access Valley Water** customer request and information system. With three easy steps, you can use this service to find out the latest information on district projects or to submit questions, complaints or compliments directly to a district staff person.

Follow us on: /scvwd /valleywater /valleywater

To get eNews, drop an email to: info@valleywater.org

© 2018 Santa Clara Valley Water District • 02/2018

BOARD MEMBER REQUESTS & INFORMATIONAL ITEMS

Request	Completed Date	Meeting Date	Director	GM / AGM	Description	20 Days Due Date	Expected Completion Date	Disposition
R-16-0021	Pending	04/12/16	Keegan	Stanton	Staff to take a preliminary look at the use of PLAs on Non-federal District projects.	03/22/17		03/02/17 Continued. 07/28/16 CEO Bulletin.

Request	Completed Date	Request Date	Director	GM / AGM	Description	20 Days Due Date	Expected Completion Date	Disposition
I-18-0002	Pending	02/09/18	Kremen	Comelo	Provide Director Kremen with information on which OS version the District is running on all machines,especially SCADA and which machines are not running the latest versions of OSs.	03/01/18		

Santa Clara Valley Water District

MEMORANDUM

FC 14 (01-02-07)

TO: Board of Directors **FROM:** Nina Hawk

SUBJECT: Annual Drinking Water Regulatory Update **DATE:** February 6, 2018

As per district policy, it is the responsibility of the Water Quality Unit to track and participate in the development of federal and state drinking water related regulations. Additionally, the Water Quality Unit is to provide to the Water Utility Enterprise an update of recent regulatory activity each year.

For the Board's information, attached is the summary of drinking water regulatory activity for January thru December 2017, which was distributed to the Water Utility Enterprise on February 5th, 2018.

Nina Hawk
Chief Operating Officer, Water Utility Enterprise

Attachment: January 31st, 2018 Drinking Water Regulatory Update

Santa Clara Valley Water District

MEMORANDUM
FC 14 (01-02-07)

TO: Water Utility Enterprise **FROM:** Water Quality Unit

SUBJECT: Drinking Water Regulatory Update **DATE:** January 31, 2018

The purpose of this document is to provide a summary of regulatory activity pertaining to drinking water quality, treatment and distribution for calendar year 2017. The update is divided into two sections: federal and state.

At the federal level, the U.S. Environmental Protection Agency (EPA) is responsible for developing and promulgating drinking water regulations. EPA establishes enforceable regulatory standards for constituents which are present in some public water systems and are known to be of health concern. Each regulatory standard, often in the form of a maximum contaminant level (MCL), reflects a balance between the contaminant level that protects human health and that which water systems can achieve using the best available technologies. Additionally, EPA establishes schedules for compliance, identifies analytical methods, and prescribes acceptable treatment techniques for removal or inactivation of regulated contaminants.

The Safe Drinking Water Act (SDWA) allows individual states to seek primacy (responsibility for promulgating and enforcing their own drinking water standards) by meeting specific requirements. Among the requirements for primacy is the establishment of regulatory standards that are at least as stringent as EPA's national standards. For California, the Division of Drinking Water (DDW) at the State Water Resources Control Board (SWRCB) is the primacy agency.

Information about EPA's regulatory process is available at:
http://water.epa.gov/lawsregs/rulesregs/regulatingcontaminants/basicinformation.cfm

FEDERAL REGULATIONS

Contaminant Candidate List

In November 2016, the EPA announced the final Fourth Contaminant Candidate List (CCL4), which consists of 97 chemicals or chemical groups and 12 microbial contaminants.

Now that the CCL4 is finalized, after compiling and evaluating additional data the EPA must determine whether to regulate at least five of the contaminants in a separate process called regulatory determination. The regulatory determination process, which was initiated in 2017 and will be ongoing, is based on the following criteria:

- The contaminant may have an adverse effect on the health of persons;
- The contaminant is known to occur or there is substantial likelihood the contaminant will occur in public water systems with a frequency and at levels of public health concern;
- Regulation of the contaminant presents a meaningful opportunity for health risk reductions for persons served by public water systems.

Background

The SDWA requires the EPA to publish a Contaminant Candidate List (CCL) every five years. The CCL is a list of unregulated contaminants that are known or expected to occur in public water

systems at a frequency and at levels of public health concern and where there is a meaningful opportunity for health risk reduction. The purpose of the CCL is to identify priority contaminants for regulatory decision-making and information and research needs.

More information is available at the EPA site: http://www.epa.gov/ccl

Fluoride

In November 2016, a petition was filed under the federal Toxic Substances Control Act (TSCA) requesting that EPA prohibit the addition of fluoridation chemicals to US water supplies to protect the public and susceptible subpopulations from the neurotoxic risks of fluoride. The petition was submitted by the following organizations: Fluoride Action Network, Food & Water Watch, Organic Consumers Association, the American Academy of Environmental Medicine, the International Academy of Oral Medicine and Toxicology, and several individuals.

On February 27, EPA denied the petition on grounds that the petitioner's argument lacked a scientifically-defensible basis to conclude that any persons have suffered neurotoxic harm because of exposure to fluoride in drinking water. However, opponents of fluoridated drinking water filed suit in April, after the EPA denied their petition to consider banning fluoridation chemicals from public drinking water. On December 21, a federal judge in California denied EPA's motion to dismiss the lawsuit, and opponents of fluoridation can now proceed with a lawsuit against the EPA under the TSCA.

Perchlorate

On September 15, the EPA published two notices regarding development of a Maximum Contaminant Level Goal (MCLG) for perchlorate. First, EPA announced the availability, for public comment, of a draft document titled "Proposed Approaches to Inform the Derivation of a Maximum Contaminant Level Goal for Perchlorate in Drinking Water." The second Federal Register requests public comment on proposed members of an expert peer review panel that will be tasked with reviewing EPA's "Proposed Approaches to Inform the Derivation of a Maximum Contaminant Level Goal for Perchlorate in Drinking Water." Public comments for both the proposed expert panel members and the document were due by October 30. In these documents, EPA is presenting for public and expert panel review a biologically based dose-response model to be used in the development of an MCLG. On November 28, the EPA announced the final list of peer reviewers for the EPA's proposed approaches for developing an MCLG for perchlorate. The peer review panel plans to hold a public meeting January 29-30, 2018.

Background

In 2011, the EPA decided to move forward with development of a drinking water standard for perchlorate. Since that time, EPA has been reviewing the best available scientific data on a range of issues related to perchlorate in drinking water including its health effects, occurrence, treatment technologies, analytical methods and the costs and benefits of potential standards. Unless the final federal MCL is more stringent than California's existing 6 micrograms per liter (µg/L) standard, there would be little or no impact to California water systems.

For information about perchlorate in drinking water:
http://water.epa.gov/drink/contaminants/unregulated/perchlorate.cfm

Six-Year Review

On January 11, the EPA announced the results of the third six-year review and requested comments by March 13. The EPA determined that eight of the existing 76 National Primary Drinking Water Regulations (NPDWRs) reviewed are candidates for regulatory revision. The eight contaminants are chlorite, *Cryptosporidium*, *Giardia lamblia*, haloacetic acids (HAA5), heterotrophic bacteria, *Legionella*, total trihalomethanes (TTHM) and viruses.

Background

Under the SDWA, as amended in 1996, EPA must review existing NPDWRs every six years and determine which, if any, need revision.

More information about the six-year review is available at: https://www.epa.gov/dwsixyearreview

Unregulated Contaminant Monitoring Rule

The fourth Unregulated Contaminant Monitoring Rule (UCMR4) was published in the Federal Register on December 2016. Monitoring for the 30 chemical contaminants in the UCMR4 will take place between 2018 and 2020. The UCMR4 contaminants include ten cyanotoxins, two metals including manganese, three disinfection byproduct groups, and several organic compounds. The ten cyanotoxins include Total Microcystins and Cylindrospermopsin for which EPA established 10-day health advisories in May 2015.

As a wholesaler, the district is not required to carry out monitoring for the UCMR4.

Background

The Unregulated Contaminant Monitoring Rule (UCMR) is a means for the EPA to collect data about contaminants that are suspected to be present in drinking water and do not have health-based standards set under the SDWA. The data acquired from the monitoring of unregulated contaminants is the primary source of occurrence and exposure information that the EPA uses to determine whether to regulate those contaminants.

More information about monitoring for unregulated contaminants is available at: *https://www.epa.gov/dwucmr*

STATE REGULATIONS

Drinking Water Fees

On April 10, the SWRCB adopted a revised fee schedule for annual operating fees paid by public water systems to support the state's Drinking Water Program. The initial goal of this law was to recover sufficient funding to support the Drinking Water Program's increased budget for Fiscal Year 2016-17 and to create a more stable and consistent source of funding for the Program for subsequent fiscal years.

By law, fee regulations must be authorized through the regular rulemaking process, which occurred on April 10. Thereafter, regulations, amendments, or subsequent adjustments to the annual fees shall be adopted as emergency regulations that are not subject to review by the Office of

Administrative Law. On September 19, the SWRCB adopted emergency regulations amending the drinking water fee regulation language in several areas identified as needing clarification and/or amendments to eliminate potential ambiguity in the text.

The revised adopted emergency regulations impose an annual fee of $6,000 on wholesaler systems plus an additional volumetric surcharge of $1.36 per each million-gallon produced annually on average, as reported to the SWRCB by the wholesaler in the Electronic Annual Report, over the four years immediately preceding the year in which the invoice is submitted. Based on annual production for years, 2014, 2015, 2016, and 2017 the district's anticipated annual fee would be around $50,000, compared to the district's most recent annual fee of $52,000.

Background

The Drinking Water Program's main responsibilities are issuing permits to drinking water systems, inspecting water systems, reviewing and approving proposed treatment facilities, monitoring water quality, setting and enforcing drinking water standards and requirements, and administering drinking water infrastructure grants and loans. Under the current fee schedule, wholesaler systems such as the district pay annually on a fee-for-service basis.

Lead Testing in Schools

In 2017, the DDW issued amended permits to all community water systems that serve a school. Under the amended permits, community water systems are required to test any school in their service area for lead, if the school requests testing. While this initial approach for testing for lead in drinking water in schools in California was voluntary, Assembly Bill 746, which was signed into law on October 13, made lead testing mandatory by requiring community water systems to test for lead in drinking water at schools built on or before July 1, 2010. Testing needs to be completed by July 1, 2019. The lead Action Level of 15 µg/L is included in the bill language as a trigger for follow-up action.

As a drinking water wholesaler, the district is exempt from this permit amendment.

Lead Service Lines

Senate Bill 1398 (SB 1398), signed into law on September 27, 2016, went into effect on January 1, 2017. SB 1398 establishes a program to develop an inventory and schedule for removal of lead service lines. By July 1, 2018 public water systems are required to prepare an inventory of known lead service lines and to identify areas of the distribution system that may have lead service lines. After developing the inventory, public water systems are to develop a timeline for DDW's approval for the removal and replacement of known lead service lines.

As a drinking water wholesaler, the district is not responsible for service lines, and thus is not affected by this requirement.

Senate Bill 623

On February 17, Senate Bill 623 (SB 623) "Water Quality: Safe and Affordable Drinking Water Fund" was introduced to the California Legislature. SB 623 would provide a Safe and Affordable Drinking Water Fund in the State Treasury and generate $2 billion dollars over the course of 15 years to

alleviate the financial burden placed on many communities trying to secure safe drinking water. The fund would ensure direct assistance towards water emergencies and long-term operations and maintenance costs in disadvantaged communities. In addition to establishing a fund to provide safe drinking water to disadvantaged communities, the bill also discourages the proliferation of new, unsustainable public water systems and state small water systems, and encourages consolidation and service extension when feasible. On August 21, the bill was amended in the Assembly to include a water fee on each customer of a public water system. On September 1, SB 623 was referred to the Assembly Rules Committee as a two-year bill. Hearings will be scheduled in 2018.

Background

Under existing California law every human being has the right to safe, clean, affordable, and accessible water adequate for human consumption, cooking, and sanitary purposes. Although most of the state's residents receive drinking water that meets federal and state drinking water standards, many drinking water systems in the state consistently fail to provide affordable, safe drinking water to their customers. Lack of safe drinking water is a problem that disproportionately affects residents of California's disadvantaged communities.

1,2,3-Trichloropropane

On July 18, the SWRCB adopted regulations for 1,2,3-TCP, including a new MCL of 5 nanograms per liter (ng/L) and a detection limit for purposes of reporting (DLR) of 5 ng/L. 1,2,3-TCP is a known human carcinogen and as such, the state has set an MCL that will result in a theoretical reduction in the cancer risk. The MCL became effective on December 14. The SWRCB also designated granular activated carbon as the best available technology for treating 1,2,3-TCP and established guidelines for monitoring and compliance, including the potential of grandfathering existing data during the required initial monitoring period.

All public water systems in California are required to comply with the state's new MCL and conduct four quarters of organic monitoring starting January 2018. A white paper with a more detailed summary of the new regulation and of the compliance requirements for the District is currently being developed.

Background

1,2,3-TCP was used as a cleaning and maintenance solvent, paint and varnish remover, and cleaning and degreasing agent; it was also a byproduct from the production of pesticides. Previous monitoring under the California UCMR (2001-2003) and the Federal UCMR3 (2012-2015) have determined that 1,2,3-TCP has primarily impacted groundwater.

Hexavalent Chromium

On May 31, the Superior Court of Sacramento County issued a judgment invalidating the hexavalent chromium MCL for drinking water. The court ordered the SWRCB to take the necessary actions to delete the hexavalent chromium MCL from the California Code of Regulations and to file with the court by August 15 proof that it has done so. On August 1, the SWRCB approved the removal of the

drinking water standard for hexavalent chromium. Thus, as of September 11, the MCL for hexavalent chromium is no longer in effect.

The court's primary reason for finding the MCL invalid is that the regulatory agency did not adequately document why the MCL was economically feasible. As a result, the SWRCB will not be enforcing any compliance plans that public water systems entered into for hexavalent chromium, as the MCL will no longer be in effect. However, the total-chromium MCL of 50 µg/L will remain in place. The SWRCB plans to adopt a new MCL for hexavalent chromium expeditiously.

Background

In July 2011, the Office of Environmental Health Hazard Assessment (OEHHA) established a public health goal (PHG) for hexavalent chromium of 0.02 µg/L. The availability of the hexavalent chromium PHG enabled CDPH to proceed with setting a primary drinking water standard. On July 1, 2014, the MCL for hexavalent chromium of 10 µg/L became effective. On September 4, 2015, Senate Bill 385 (SB385) provided public water systems with sources that produce water with hexavalent chromium concentration above the State's adopted MCL additional time to come into compliance without being deemed in violation of the MCL.

Perchlorate

On July 5, DDW presented to the SWRCB its findings and recommendations related the perchlorate MCL review. DDW's recommendations were to first establish a lower DLR to gather additional occurrence data, and then revise the MCL, if the new data support development of a new standard. The SWRCB approved DDW's proposal to investigate, develop, and propose revisions to the perchlorate DLR. Thus, as a first step, DDW staff is currently exploring the feasibility of lowering the perchlorate DLR from 4 µg/L to a value closer to, equal to, or less than the PHG of 1 µg/L.

Background

The primary drinking water standard for perchlorate is the MCL of 6 µg/L. The MCL became effective October 2007. In 2015, OEHHA revised the PHG for perchlorate from 6 µg/L to 1 µg/L. The revised PHG has prompted the SWRCB to review the perchlorate MCL.

For information about perchlorate in drinking water:
https://www.waterboards.ca.gov/drinking_water/certlic/drinkingwater/Perchlorate.shtml

Potable Reuse

On December 31, 2016, the SWRCB issued its report to the Legislature on the feasibility of developing uniform water recycling criteria for direct potable reuse (DPR). SWRCB recommended fourteen areas of research and program development that must be addressed prior to adopting uniform water recycling criteria for DPR, recognizing that additional resources would be needed to address these recommendations in a timely manner, and that development of the criteria can occur in tandem. However, the report did not specify a timeline for regulatory development.

Assembly Bill-574 (AB-574) - Potable Reuse was introduced on February 14. The bill was approved by the Governor on October 6. AB 574 defines the four different types of potable reuse projects as "groundwater augmentation", "reservoir augmentation," "raw water augmentation," and "treated water

augmentation." The bill requires the SWRCB to develop uniform water recycling criteria for potable reuse through raw water augmentation by December 31, 2021.

Surface Water Augmentation

Senate Bill 918 was chaptered in 2010, requiring the SWRCB to adopt uniform water recycling criteria for surface water augmentation (i.e. the introduction of recycled water to a reservoir that supplies surface water treatment plants) by December 31, 2016. On July 21, draft regulations were released for a 45-day comment period. The draft regulations included advanced treatment criteria, monitoring requirements for treated recycled water and the augmented surface water reservoir, and guidelines for reporting and operation. A minor update was released on November 30 for public comment. The surface water augmentation regulations are expected to be finalized in early 2018.

Total Coliform Rule

Since April 2016, and until California completes the regulatory adoption process for the Revised Total Coliform Rule (rTCR), all public water systems in California are required to comply with both the state's existing TCR and the federal rTCR. On February 3, DDW issued a draft rTCR regulation for review. It is anticipated that DDW will complete the regulatory adoption process for the rTCR sometime in 2018.

GLOSSARY

AL	Action Level - The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.
DDW	The Division of Drinking Water within the State Water Resources Control Board has been tasked with enforcing the drinking water regulations with which public water systems in California must comply. As the primacy agency for regulatory compliance, it must enact regulations that are at least stringent as federal drinking water regulations. Formerly known as California Department of Public Health or CDPH.
DLR	Detection Limit for Purposes of Reporting - The designated minimum level at or above which any analytical finding of a contaminant in drinking water resulting from monitoring shall be reported to the State Board.
DPR	Direct Potable Reuse - The delivery of purified water to a drinking water plant or a drinking water distribution system without an environmental buffer. Additional treatment, monitoring, and/or an engineered buffer(s) would be used in place of an environmental buffer to provide equivalent protection of public health and response time if the purified water does not meet specifications.
EPA	United States Environmental Protection Agency; tasked with implementing the Safe Drinking Water Act by setting standards that, when combined with protecting groundwater and surface water, ensure safe drinking water. California public

	water systems are required to meet all federal drinking water regulations, regardless of whether DDW has adopted parallel regulations.
Health Advisory	A Health Advisory describes the concentrations of drinking water contaminants at which adverse health effects are not anticipated to occur over specific exposure durations (e.g., one day, ten days, several years, a lifetime) with a margin of safety. It is not a legally enforceable federal standard.
MCL	Maximum Contaminant Level – A value defined under the Safe Drinking Water Act as the maximum permissible level (concentration) of a contaminant in water delivered to any user of a public water system. Maximum contaminant levels are the legally enforced standards in the United States.
MCLG	Maximum Contaminant Level Goal - A federal nonenforceable, health-based goal established by the US Environmental Protection Agency for each contaminant regulated by a national primary drinking water regulation. The maximum contaminant level goal is set at the level at which no known or anticipated adverse effects on human health occur and for which an adequate margin of safety exists.
OEHHA	Office of Environmental Health Hazard Assessment
PHG	Public Health Goal – a nonenforceable goal set by the California EPA's Office of Environmental Health Hazard Assessment. It is the concentration of a contaminant in drinking water that does not pose any significant risk to health over a lifetime of exposure; it is derived from a human health risk assessment. State code requires the DDW to establish a contaminant's MCL at a level as close to its public health goal as is technically and economically feasible. Similar to the federal MCLG.
RAA	Running Annual Average - The arithmetic average of quarterly results for the last four quarters.
Regulatory Determination	A formal decision on whether EPA should initiate a rulemaking process to develop a national primary drinking water regulation (NPDWR), i.e. an enforceable standard or MCL, for a specific contaminant.
SDWA	Federal Safe Drinking Water Act
SMCL	Secondary Maximum Contaminant Level – A secondary standard that is a non-enforceable guideline regulating contaminants that may cause cosmetic effects (such as skin or tooth discoloration) or aesthetic effects (such as taste, odor, or color) in drinking water. EPA recommends secondary standards to water systems but does not require systems to comply. However, states may choose to adopt them as enforceable standards.
SWRCB	State Water Resources Control Board

Santa Clara Valley Water District

MEMORANDUM

FC 14 (01-02-07)

TO: Nina Hawk, COO

FROM: Katherine Oven, DOO

SUBJECT: Purified Water Program – Follow-Up to January 23, 2018 Recycled Water Committee P3 Workshop

DATE: February 7, 2018

The purpose of this memorandum is to provide the Board information submitted by a P3 firm that attended and gave a brief presentation at the Recycled Water Committee's (Committee) P3 Workshop held on January 23, 2018.

Mr. Will Chow, InstarAGF, gave a brief presentation to the Committee at its January 23, 2018 P3 Workshop. In the follow-up question-and-answer session, one of the Committee members had expressed interest in a precedent term sheet. In late January, Mr. Chow emailed staff a brief presentation, provided in Attachment 1, that addresses the Committee member's request.

Per Mr. Chow's email to staff, slide 4 of the attached presentation contains an overview of the precedent term sheet. A link to the publicly available document is also provided in the bottom right corner of the slide.

For more information, please contact me at (408) 630-3126.

Katherine Oven, P.E.
Deputy Operating Officer
Water Utility Capital Division

Attachment 1: Precedent Term Sheet Example PowerPoint

Cc: C. Sun, B. Redmond

Precedent Term Sheet Example

Saint John Water and the Expedited Purified Water Program

A tale of two similar projects

Saint John Water

- Contracting Authority – Municipality (unrated)
- Jurisdiction – North America
- Public Authorities – Federal, Provincial, Municipal
- Delivery Model – DBFOM
- Scope
  - Water treatment plant (20 MGD)
  - Pipeline (~16 miles)
  - Pump station and air gaps
  - Discharge ponds
  - Well field site
  - Intake facility works
  - Dam Rehabilitations

Expedited Purified Water Program

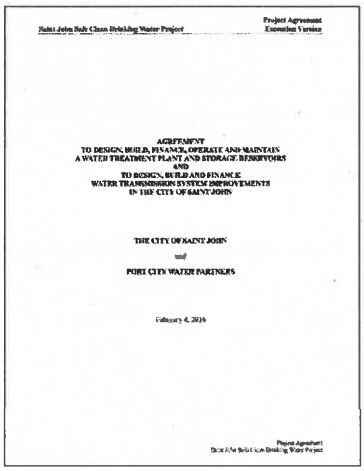
- Contracting Authority – Municipality
- Jurisdiction – North America
- Public Authorities – Federal (?), State, Municipal
- Delivery Model – DBF(O)M
- Scope
  - Water treatment plant (16-32 MGD)
  - Pipeline (~15 miles)
  - Pump stations and air gaps
  - Recharge ponds
  - Injection wells
  - Recharge facilities
  - Other items?

Features of Precedent Term Sheet

Millions of dollars invested and countless hours from 7 top P3 legal advisors

Key risk transfer items

- Amount and quality of water
  - Full risk transfer
- Progressive design-build (no delays)
  - City only provides output spec
  - At least 30% design by award
- Permitting
  - Full transfer except City issued permits
- Geotechnical
  - Baselining mechanism
- Site conditions
  - Known or inferable
- Contamination
  - Identified or caused
- Schedule and cost overrun
  - Full risk transfer
- Changes
  - Out of scope items only



AGREEMENT
TO DESIGN, BUILD, FINANCE, OPERATE AND MAINTAIN
A WATER TREATMENT PLANT AND STORAGE RESERVOIRS
AND
TO DESIGN, BUILD AND FINANCE
WATER TRANSMISSION SYSTEM IMPROVEMENTS
IN THE CITY OF SAINT JOHN

THE CITY OF SAINT JOHN
and
PURE CITY WATER PARTNERS

Link to publicly available document: Term Sheet

Financeable and Market Accepted
Fully negotiated by all 3 teams submitting response to Saint John Water Term Sheet, financing committed by domestic and international banking markets

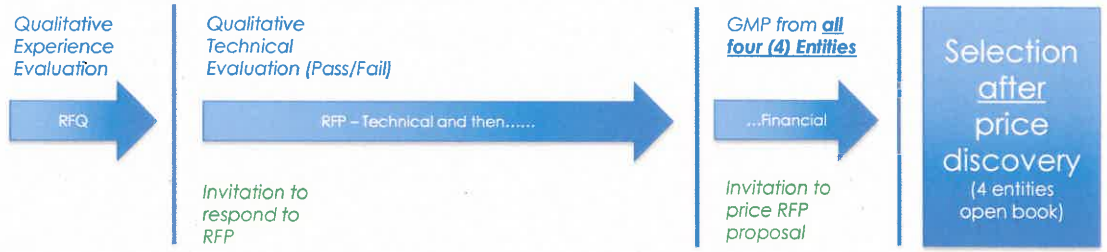
Progressive P3 vs. Hard Bid P3

Maintaining competitive tension until price discovery

Progressive P3

< No changes to RFP document, only change to RFP process – selection after price discovery >

Hard Bid P3



INSTARAGF acciona Agua

PRIVATE AND CONFIDENTIAL

INSTARAGF acciona Agua

Will Chow, CPA, CA, CFA
Vice President
Will.Chow@InstarAGF.com
416.815.6224

Brian Nicholas
Director, Business Development
Brian.Nicholas@Acciona.com
604.653.6780

February 7, 2018

Ms. Karla Nemeth
Director
California Department of Water Resources
P.O. Box 942836, Room 1115
Sacramento, CA 94236-0001

Dear Ms. Nemeth:

Subject: South Bay Aqueduct Condition Assessment

In this letter, we call for a high priority condition assessment of all sections of the South Bay Aqueduct.

We are pleased to learn that DWR, in collaboration with the State Water Contractors (SWC), is embarking on an effort to assess the condition and reliability of the entire State Water Project (SWP). While recognizing the importance of a system-wide SWP condition assessment, which may take several years, the South Bay Aqueduct (SBA) Contractors, namely, Zone 7 Water Agency, the Alameda County Water District, and the Santa Clara Valley Water District (SBA Contractors) request a more urgent condition assessment of the South Bay Aqueduct, including assessment of sediment accumulation and need for dredging Lake Del Valle, Bethany Reservoir, and Clifton Court Forebay, given the lack of redundancy and the minimal storage along this branch.

The South Bay Aqueduct was commissioned over 50 years ago and has become a vital facility to convey imported SWP water to over 2.5 million residents and businesses within the SBA Contractors' service areas. Over the past 50 years of operation, DWR and the SBA Contractors have made numerous improvements, expansions and repairs to portions of the aqueduct. Some of these have been permanent while others are works in progress. DWR's recent work on the SBA *vulnerability study* has led to strategic actions by DWR such as stockpiling repair materials and intensifying monitoring of known sections of the SBA prone to failure. We appreciate the efforts of DWR staff on these tasks and look forward to receiving the completed vulnerability study.

Even with a better understanding of some of the vulnerable areas of the system, much more needs to be done to improve the reliability of the system overall. As you are aware, the SBA incurred four service interruptions in 2017 due to leaks, in addition to a 10-month outage for seismic retrofit repairs on the Santa Clara Pipeline. SBA reliability is becoming more important as aging infrastructure in our local water systems also requires more extensive repairs and maintenance. For example, Santa Clara Valley Water District's largest reservoir, Anderson

Reservoir, will be drawn down for three years for seismic repairs beginning in approximately 2020, during which time there will be an increased reliance on water delivered through the SBA.

We want to thank DWR staff for efforts to date and acknowledge that the Delta Field Division and the Maintenance Engineering Branch in Sacramento are developing a plan to review the pipeline portion of the SBA. However, we are concerned about the slow pace at which such plans are typically developed and implemented. Instead, we call for a high priority condition assessment of the pipeline and all sections of the SBA. To that end, we wish to collaborate with DWR to perform an all-inclusive condition assessment of all operational components, including previously identified sections, required to deliver water through the SBA. We are particularly interested in a condition assessment of the useful life of each item and development of a long-term renewal or replacement plan to minimize future disruptions in service.

We would like to schedule a meeting with you involving senior SBA contractor staff to discuss this assessment.

Sincerely,

G. F. Duerig, General Manager
Zone 7 Water Agency

Robert Shaver, General Manager
Alameda County Water District

Norma J. Camacho, Chief Executive Officer
Santa Clara Valley Water District

cc: Joel Ledesma, California Department of Water Resources
Eric Chapman, State Water Contractors

Santa Clara Valley Water District

MEMORANDUM

FC 14 (01-02-07)

TO: Board of Directors

FROM: Nina Hawk

SUBJEC January 2018 Water Use Report

DATE: February 13, 2018

The January 2018 Water Use Report update contains the most recent 2017 water use and water reduction data and historical summaries from 2014 to 2016. Data collected to date indicates that water use reductions for 2017 were 21 percent when compared to 2013. This is above the 20 percent target continued by the Board on June 13, 2017. The January 2018 Water Use Report is available at https://www.valleywater.org/your-water/water-supply-planning/monthly-water-tracker.

Future updates will be provided to the Board quarterly.

If you have any questions, please call me at (408) 630-2736.

Nina Hawk
Chief Operating Officer
Water Utility Enterprise

Santa Clara Valley Water District

MEMORANDUM

FC 14 (01-02-07)

TO: Norma Camacho

FROM: Ngoc Nguyen

SUBJECT: Report of Properties Acquired Under Executive Limitation 6.7.1

DATE: February 20, 2018

In accordance with the Executive Limitation (EL) 6.7.1 the attached spreadsheet includes:

1. A report of properties to be acquired under EL 6.7.1.

2. A report on the number of parcels that have been signed off by the CEO and acquired during the quarter of October 1 through December 31, 2017 including respective statutory offers of just compensation and final negotiated values (EL 6.7.1.3).

If you have any questions, please contact Sue Turner at extension 2266.

N. Nguyen

Ngoc Nguyen
Interim Deputy Operating Officer
Watersheds Design and Construction

Cc: S. Turner, B. Magleby, E. Serrano
st:rc

C:\Users\Ngocnguy\Appdata\Local\Microsoft\Windows\Inetcache\Content.Outlook\CJXKWKAP\11282mm_St_02-16-18_Reportofpropertiesaquired.Docx

REPORT OF PROPERTIES TO BE ACQUIRED UNDER
EXECUTIVE LIMITATION 6.7.1

DISTRICT FILE	PROJECT NAME	ASSESSORS' PARCEL NUMBER (APN)	INTEREST
1016-85	HALE CREEK	189-28-011	EASEMENT IN
1016-86	HALE CREEK	189-28-012	EASEMENT IN
1016-87	HALE CREEK	189-28-013	EASEMENT IN
1016-88	HALE CREEK	189-26-054	EASEMENT IN
1016-89	HALE CREEK	189-26-049	TCE IN
1016-90	HALE CREEK	189-28-045	EASEMENT IN AND TCE IN
1016-91	HALE CREEK	189-28-047	EASEMENT IN
1028-179	SAN FRANCISQUITO CREEK	003-07-053	NO P&D
1029-175	STEVENS CREEK	161-02-005, 16102012 & 16102015	NO P&D
2010-225	CALABAZAS CREEK	104-28-069	FEE IN
2026-53	SUNNYVALE EAST OUTFALL	110-15-019	EASEMENT IN
2026-55	SUNNYVALE EAST OUTFALL	110-39-002	TCE IN
2026-56	SUNNYVALE EAST OUTFALL	110-32-030	TCE IN
2027-15	SUNNYVALE WEST OUTFALL	110-27-023, 110-27-032	TCE IN
2027-16	SUNNYVALE WEST OUTFALL	110-07-022, 165-44-007, 165-44-008	TCE IN
2027-20	SUNNYVALE WEST OUTFALL	110-25-017	NO P&D
2027-21	SUNNYVALE WEST OUTFALL	110-25-037	EASEMENT IN
2044-1	SOUTH BAY SALT PONDS	015-32-042, 015-32-043	NO P&D
2044-2	SOUTH BAY SALT PONDS	015-31-008, 015-31-023, 015-31-050, 015-31-051	NO P&D
2044-3	SOUTH BAY SALT PONDS	015-29-004	EASEMENT IN
3015-212	GUADALUPE RIVER	Parcels along Regent Street & Hamline Street	EASEMENT IN
3015-374	GUADALUPE RIVER	434-20-023	EASEMENT IN
3015-506	GUADALUPE RIVER	259-07-114	EASEMENT IN
3015-508	GUADALUPE RIVER	259-16-119	EASEMENT IN
3015-509	GUADALUPE RIVER	259-16-125	EASEMENT IN
3015-513	GUADALUPE RIVER	259-07-001	EASEMENT IN
3015-515	GUADALUPE RIVER	259-22-002	EASEMENT IN
3015-517	GUADALUPE RIVER	230-38-000	EASEMENT IN

NOTE:
TCE = Temporary Construction Easement

REPORT OF PROPERTIES TO BE ACQUIRED UNDER
EXECUTIVE LIMITATION 6.7.1

DISTRICT FILE	PROJECT NAME	ASSESSORS' PARCEL NUMBER (APN)	INTEREST
3015-595	GUADALUPE RIVER	434-27-125	FEE IN
3015-600	GUADALUPE RIVER	264-48-000	EASEMENT IN
3015-601	GUADALUPE RIVER	264-48-006	EASEMENT IN
3015-602	GUADALUPE RIVER	264-48-126	EASEMENT IN
3015-603	GUADALUPE RIVER	264-48-094	EASEMENT IN
3015-604	GUADALUPE RIVER	264-48-010, 264-48-084, 264-48-103	EASEMENT IN
3015-605	GUADALUPE RIVER	264-48-000	EASEMENT IN
3015-606	GUADALUPE RIVER	264-48-000 (Willow Street)	EASEMENT IN
3015-623	GUADALUPE RIVER	434-27-000 (Willow Glen Way & Northern Road)	FEE IN
3015-624	GUADALUPE RIVER	434-28-003	EASEMENT IN
3015-625	GUADALUPE RIVER	434-30-025	FEE IN
3015-634	GUADALUPE RIVER	434-29-022	EASEMENT IN
3015-635	GUADALUPE RIVER	434-29-020	EASEMENT IN
3015-636	GUADALUPE RIVER	434-29-019	EASEMENT IN
3015-637	GUADALUPE RIVER	434-29-015, 434-29-018	EASEMENT IN
3015-638	GUADALUPE RIVER	434-29-016, 434-29-017	EASEMENT IN
3015-639	GUADALUPE RIVER	434-29-014	EASEMENT IN
3015-641	GUADALUPE RIVER	434-29-000 (Pine Avenue)	EASEMENT IN
3015-642	GUADALUPE RIVER	439-25-033	EASEMENT IN
3015-643	GUADALUPE RIVER	455-21-012	EASEMENT IN
3015-645	GUADALUPE RIVER	439-25-032	EASEMENT IN
3015-646	GUADALUPE RIVER	439-25-031	EASEMENT IN
3015-647	GUADALUPE RIVER	43925030	EASEMENT IN
3015-648	GUADALUPE RIVER	439-25-029	EASEMENT IN
3015-649	GUADALUPE RIVER	439-25-028	EASEMENT IN
3015-650	GUADALUPE RIVER	439-25-027	EASEMENT IN
3015-651	GUADALUPE RIVER	439-25-026	EASEMENT IN
3015-652	GUADALUPE RIVER	439-25-025	EASEMENT IN

NOTE:
TCE = Temporary Construction Easement

REPORT OF PROPERTIES TO BE ACQUIRED UNDER
EXECUTIVE LIMITATION 6.7.1

DISTRICT FILE	PROJECT NAME	ASSESSORS' PARCEL NUMBER (APN)	INTEREST
3015-653	GUADALUPE RIVER	439-25-024	EASEMENT IN
3015-654	GUADALUPE RIVER	439-25-023	EASEMENT IN
3015-655	GUADALUPE RIVER	439-25-022	EASEMENT IN
3015-656	GUADALUPE RIVER	439-25-021	EASEMENT IN
3015-657	GUADALUPE RIVER	439-25-020	EASEMENT IN
3015-658	GUADALUPE RIVER	439-25-019	EASEMENT IN
3015-659	GUADALUPE RIVER	439-25-018	EASEMENT IN
3015-660	GUADALUPE RIVER	439-25-017	EASEMENT IN
3015-661	GUADALUPE RIVER	439-25-016	EASEMENT IN
3015-662	GUADALUPE RIVER	439-25-015	EASEMENT IN
3015-663	GUADALUPE RIVER	439-25-014	EASEMENT IN
3015-664	GUADALUPE RIVER	439-25-013	EASEMENT IN
3015-665	GUADALUPE RIVER	439-25-012	EASEMENT IN
3015-666	GUADALUPE RIVER	439-25-011	EASEMENT IN
3015-667	GUADALUPE RIVER	455-39-021	NO P&D
3015-672	GUADALUPE RIVER	455-27-008, 455-27-009	EASEMENT IN
3015-674	GUADALUPE RIVER	264-48-104	EASEMENT IN
3015-675	GUADALUPE RIVER	264-48-108	EASEMENT IN
3015-677	GUADALUPE RIVER	439-25-001	FEE IN
3015-678	GUADALUPE RIVER	439-25-009	EASEMENT IN
3015-679	GUADALUPE RIVER	439-25-008	EASEMENT IN
3015-680	GUADALUPE RIVER	434-20-023	EASEMENT IN
4017-61	BERRYESSA CREEK	022-31-017	EASEMENT IN
4017-65	BERRYESSA CREEK	022-31-017	EASEMENT IN
4017-66	BERRYESSA CREEK	028-12-006	EASEMENT IN
4017-70	BERRYESSA CREEK	22-31-000 (North Main Street Abandoned)	FEE IN
4017-97	BERRYESSA CREEK	086-32-021, 863-2-028	EASEMENT IN
4017-105	BERRYESSA CREEK	086-32-080	NO P&D

NOTE:
TCE = Temporary Construction Easement

REPORT OF PROPERTIES TO BE ACQUIRED UNDER
EXECUTIVE LIMITATION 6.7.1

DISTRICT FILE	PROJECT NAME	ASSESSORS' PARCEL NUMBER (APN)	INTEREST
4017-106	BERRYESSA CREEK	092-08-101	NO P&D
4018-22	CALERA CREEK	022-31-020	EASEMENT IN
4018-26	CALERA CREEK	022-02-014	EASEMENT IN
4018-29	CALERA CREEK	022-31-020	EASEMENT IN
4018-30	CALERA CREEK	022-31-000 (Hanson Court)	EASEMENT IN
4018-31	CALERA CREEK	026-18-003	EASEMENT IN
4018-32	CALERA CREEK	026-18-003	EASEMENT IN
4021-277	COYOTE CREEK	237-05-057 & 237-05-058	NO P&D
4021-283	COYOTE CREEK	97-04-037	TCE IN
4021-284	COYOTE CREEK	22-30-048	EASEMENT IN
4026-483	LOWER SILVER CREEK	670-29-002, 670-29-017	NO P&D
4032-67	UPPER PENITENCIA CREEK	Land exchanges for the Bart's Extension Project	NO P&D
4032-68	UPPER PENITENCIA CREEK	254-17-099	EASEMENT IN
4032-69	UPPER PENITENCIA CREEK	254-14-119	EASEMENT IN
4032-71	UPPER PENITENCIA CREEK	254-87-020	EASEMENT IN
4033-54	LOWER PENITENCIA CREEK	22-30-041	EASEMENT IN
4033-57	LOWER PENITENCIA CREEK	086-33-104	NO P&D
4033-58	LOWER PENITENCIA CREEK	022-37-002	EASEMENT IN
4033-59	LOWER PENITENCIA EAST CREEK	22-37-002	NO P&D
4049-11	PENITENCIA EAST CHANNEL	086-37-018	NO P&D
4049-12	PENITENCIA EAST CHANNEL	086-37-018	NO P&D
9109-66	GILROY WATER RECLAMATION FACILITY	841-73-008	TCE IN
9109-79	GILROY WATER RECLAMATION FACILITY	841-29-033, 841-30-004, 841-30-011	EASEMENT IN
9186-34	ANDERSON DAM/RESERVOIR	728-34-011	EASEMENT IN
9225-65	CENTRAL PIPELINE	254-17-069, 254-17-070	EASEMENT IN
9225-66	CENTRAL PIPELINE	254-17-074	EASEMENT IN
9225-67	CENTRAL PIPELINE	Land exchanges for the Bart's Extension Project	NO P&D
9245-32	COYOTE CANAL	729-54-001, 729-54-006	EASEMENT IN

NOTE:
TCE = Temporary Construction Easement

REPORT OF PROPERTIES TO BE ACQUIRED UNDER
EXECUTIVE LIMITATION 6.7.1

DISTRICT FILE	PROJECT NAME	ASSESSORS' PARCEL NUMBER (APN)	INTEREST
9245-33	COYOTE CANAL	729-55 (Bailey Ave)	NO P&D
9256-14	MAIN AVENUE PERCOLATION SYSTEM	728-33-005	FEE IN
9256-16	MAIN AVENUE PERCOLATION SYSTEM	728-33-005, 728-33-008	EASEMENT IN
9433-4	MILPITAS PIPELINE	86-42-023	EASEMENT IN
9433-18	MILPITAS PIPELINE	92-08-083	EASEMENT IN
9433-19	MILPITAS PIPELINE	92-08-083	EASEMENT IN
9433-20	MILPITAS PIPELINE	92-08-002	EASEMENT IN
9433-21	MILPITAS PIPELINE	92-08-002	EASEMENT IN
9433-22	MILPITAS PIPELINE	92-08-096	EASEMENT IN
9484-33	SNELL PIPELINE	692-26-049	EASEMENT IN
9484-34	SNELL PIPELINE	692-26-000 (Old Snell)	EASEMENT IN

NOTE:
TCE = Temporary Construction Easement

QUARTERLY REPORT OF PROPERTIES ACQUIRED UNDER CEO AUTHORITY
OCTOBER 1, 2017 TO DECEMBER 31, 2017

DISTRICT FILE	PROJECT NAME	AGENT	GRANTOR/GRANTEE	INTEREST	REC DATE	DOC#	BOARD/CEO	INITIAL OFFER	OWNER'S APPRAISED VALUE	FINAL SETTLEMENT	SEE EXPLANATION
5010-236	UPPER LLAGAS CREEK	MAGLEBY	PUMPKIN PARK, LLC	FEE IN	11/20/2017	23808199	CEO	$510,000	$1,802,500	$1,612,680	*
5027-36	UPPER LLAGAS CREEK	MAGLEBY	CHEN	FEE IN	12/12/2017	23824527	CEO	$433,500	$691,000	$594,000	*
5027-150	UPPER LLAGAS CREEK	MAGLEBY	MANANA INVESTORS LLC	FEE IN	10/3/2017	23767910	CEO	$74,000	$1,740,000	$480,200	*
5027-226	UPPER LLAGAS CREEK	SPRINGER	HERRERA	FEE IN	10/25/2017	23784197	CEO	$126,300		$126,300	
5027-228	UPPER LLAGAS CREEK	GRIMALDO	DAVIS	FEE IN	10/3/2017	23768006	CEO	$650,600		$683,200	*

NOTE: *See Explanation

QUARTERLY REPORT
OCTOBER 1, 2017-DECEMBER 31, 2017
EXPLANATION FOR ACCEPTED OFFER ABOVE DISTRICT'S INITIAL OFFER

DISTRICT FILE	GRANTOR/GRANTEE	INITIAL OFFER	OWNER'S APPRAISED VALUE	FINAL SETTLEMENT	*EXPLANATION FOR ACCEPTED OFFER ABOVE DISTRICT'S INITIAL OFFER
5010-236	PUMPKIN PARK, LLC	$510,000	$1,802,500	$1,612,680	The purchase price to acquire the subject parcel in fee is $1,612,680. An independent appraisal was performed by Hansen and Co., Inc. for the subject property and $510,000 was evaluated by the District's Real Estate Services Unit as "just ompensation" (Date of Valuation: May 22, 2015). The owners rejected the District offer and submitted a counter offer letter, dated June 13, 2016 in the amount of $1,800,180. Enclosed in :Information Only" section. The owner elected to hire a second licensed appaiser which is their legal right. The property owner was represented by an attorney, Mr Bart Hechtman who stated the owner's appraised value represented the real property interest being acquired by the District, but elected not to share the appraisal with the District. The District's legal counsel made a counter off of $1,550,180 per letter dated April 4, 2017 (See "Information Only" section) that was based on $240,00/acre, severance damages of $424,500 and site improvements valued at $6,560. Owner's claim for $250,000 to cover the cost of pumping station for sanitary sewer system was rejected by the District. Owner rejected the District's offer and submitted a counter-offer in the amount of $1,612,680, which include the $1,550,180 previously offered by the District, but included $50,000 for severance damages to cover the partial costs of a sanitary sewer pump station and an additional $12,500 to reimburse Grantor the cost of acquiring said appraisal. The Engineering Unit Manager approved this offer which the owner accepted.
5027-36	CHEN	$433,500	$691,000	$594,500	The purchase price to acquire the subject parcel in fee is $594,500. An independent appraisal was performed by Smith & Assosciates, Inc. for the subject property and $433,500 (Date of Valuation: April 14, 2015) was evaluated by the District's Real Estate Services Unit as 'just compensation". (See the Information Only" section). An offer was made to the owner which was rejected. Despite numerous attempts to reach settlement, negotiations reached an impasse. On August 25, 2015, the District's Board of Directors adopted Resolution 15-50 declaring that the public interest and necessity require District's acquisition of this subject parcel. A Complaint-Action in Eminent Domain was filed with the Superior Cour of the State of CA-County of Santa Clara, Case #116CV286563 (included in the Information Only" section). The owner's attorney obtained an independent appraisal valuing the interest to be acquired at $691,000. A copy of the independent appraisal is included in the "Information Only" section. SCVWD counsel and Owner's attorney reached a negotiated settlement in the amount of $594,500. District's Real Estate Services Unit and the Enginnering Unit Manager approved this negotiated settlement.
5027-150	MANANA INVESTORS, LLC	$74,000	$1,740,000	$480,200	The purchase price to acquire the subject parcel in fee is $480,200. An independent appraisal was performed by Smith & Assosciates, Inc. for the subject property and $74,000 was evaluated by the District's Real Estate Services Unit as 'just compensation". Date of evaluation was March 24, 2016. The property owner, Mr. Oliver rlected to hire a second licensed appraiser, Mr. Frank E. Schmidt of the Schmidt-Prescott Group, Inc., which is his legal right. The District reimbursed Mr. Oliver for his appraisal cost in accordance with Code of Civil Procedure Section 1263.025. Mr. Schmidt's appraisal (Date of Evaluation: 10/21/2016) indicated an opinion of value of $1,740,000. Both appraisals are enclosed in the Information Only section of this folder. Both appraisals were evaluated by District's Real Estate Services Unit and $480,200.00 was evaluated as "just compensation". See enclosed letter, dated June 5, 2017, included in the Information Only section of this folder for the breakdown of this counter offer. Enclosed is also Mr. Oliver's acceptance letter, dated June 9, 2017. In addition, Paragraph 10 "Contamination" of the standard Dsitrict's Right of Way Agreement was deleted at the request of the property owner who refused to sign the Agreement if the language remained. Since Phase I HSLA was performed and results were satisfactory, District staff accepted the request. The Engineering Unit Manager approved this counter offer of $480,200 which the owner accepted.

QUARTERLY REPORT
OCTOBER 1, 2017-DECEMBER 31, 2017
EXPLANATION FOR ACCEPTED OFFER ABOVE DISTRICT'S INITIAL OFFER

DISTRICT FILE	GRANTOR/GRANTEE	INITIAL OFFER	OWNER'S APPRAISED VALUE	FINAL SETTLEMENT	*EXPLANATION FOR ACCEPTED OFFER ABOVE DISTRICT'S INITIAL OFFER
5027-226	HERRERA	$126,300		$126,300	The purchase price to acquire the subject parcel in fee is $126,300. The acquisition includes compensation of approximately $72,000 for the acquisition of an existing garage structure. The enclosed owner signed Right of Way Agreement originals which includes paragraph 11 (items Included in Sale) to limit District risk from owner later asserting District compensation did not include the lost of the garage improvements. An independent appraisal was performed by Smith & Assocites, Inc. for the subject property and $126,300 was evaluated by the District's Real Estate Services Unit as 'just compensation". The Engineering Unit Manager approved this offer which the owner accepted.
5027-228	DAVIS	$650,600		$683,200	The purchase price to acquire the subject parcel in fee is $683,200. An independent appraisal was performed by Smith & Associates, Inc. for the subject property and $650, 600 was evaluated by the Dsitrict's Real Estate Services unit as "just compensation". Date Evaluation was May 31, 2016. Owner rejected the offer based on $20 per square foot (s/f) providing the comparable sale of the adjacent property at $23/sf. The District appraisal and the counter offer were evaluated by District's Real Estate Services Unit and $683,200 was evaluated as "just compensation" based on $21/sf. The Engineering Unit Manager approved this counter offer which the owner accepted.

NOTE: *Explanation

Santa Clara Valley Water District

MEMORANDUM

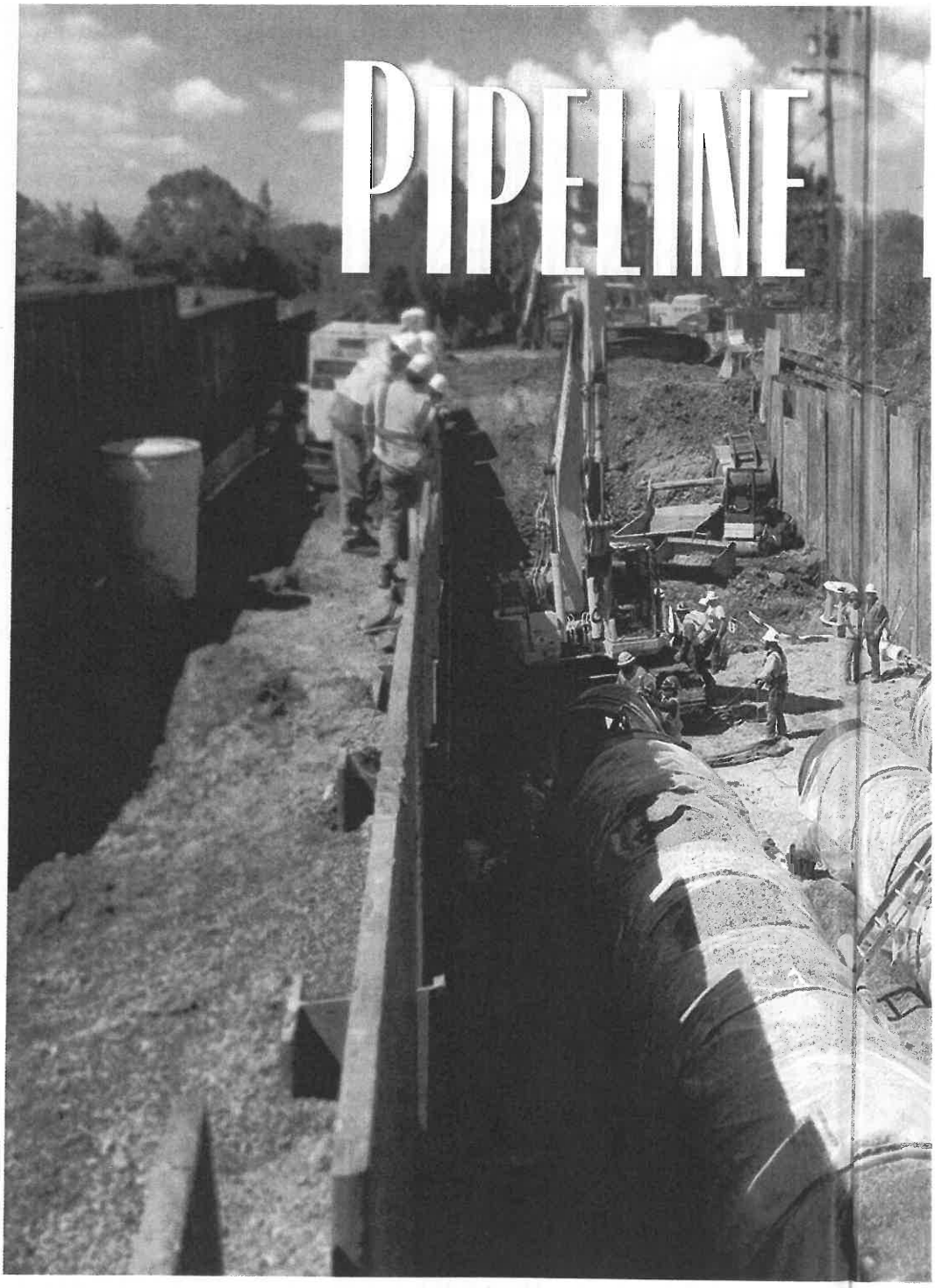
FC 14 (01-02-07)

TO: Board of Directors **FROM:** Michele L. King, Clerk

SUBJECT: Magazine article regarding pipeline protection **DATE:** February 21, 2018

The following article published in *Civil Engineering* titled "Pipeline Protection" was based on a paper co-written by District staff, Emmanuel Aryee, Capital Engineering Manager.

PIPELINE



To improve the seismic reliability of three critical pipelines, California's Santa Clara Valley Water District installed what is believed to be the first large-diameter earthquake-resistant ductile iron pipe in the United States. By hardening the pipelines where they cross an active landslide, the project increases system resilience and improves public safety in the event of an earthquake.

• • • •

BY DARREN BAUNE, P.E., AND EMMANUEL ARYEE, P.E., M.ASCE

LOOKING TO IMPROVE the seismic reliability of its 40 mgd Penitencia Water Treatment Plant (WTP), the Santa Clara Valley Water District, in San Jose, California, recently upgraded three critical pipelines that serve the facility. The pipelines required hardening along a short stretch near the WTP where they cross an active landslide. To this end, the project entailed what is believed to be the first installation of large-diameter earthquake-resistant ductile iron pipe (ERDIP) in the United States. Located quite close to a densely populated residential neighborhood and an elementary school, the $21.5-million project improved public safety by reducing the risk of flooding and property damage following a seismic event. At the same time, the project also minimized the extent to which the critical pipelines would be out of service and require repairs after an earthquake.

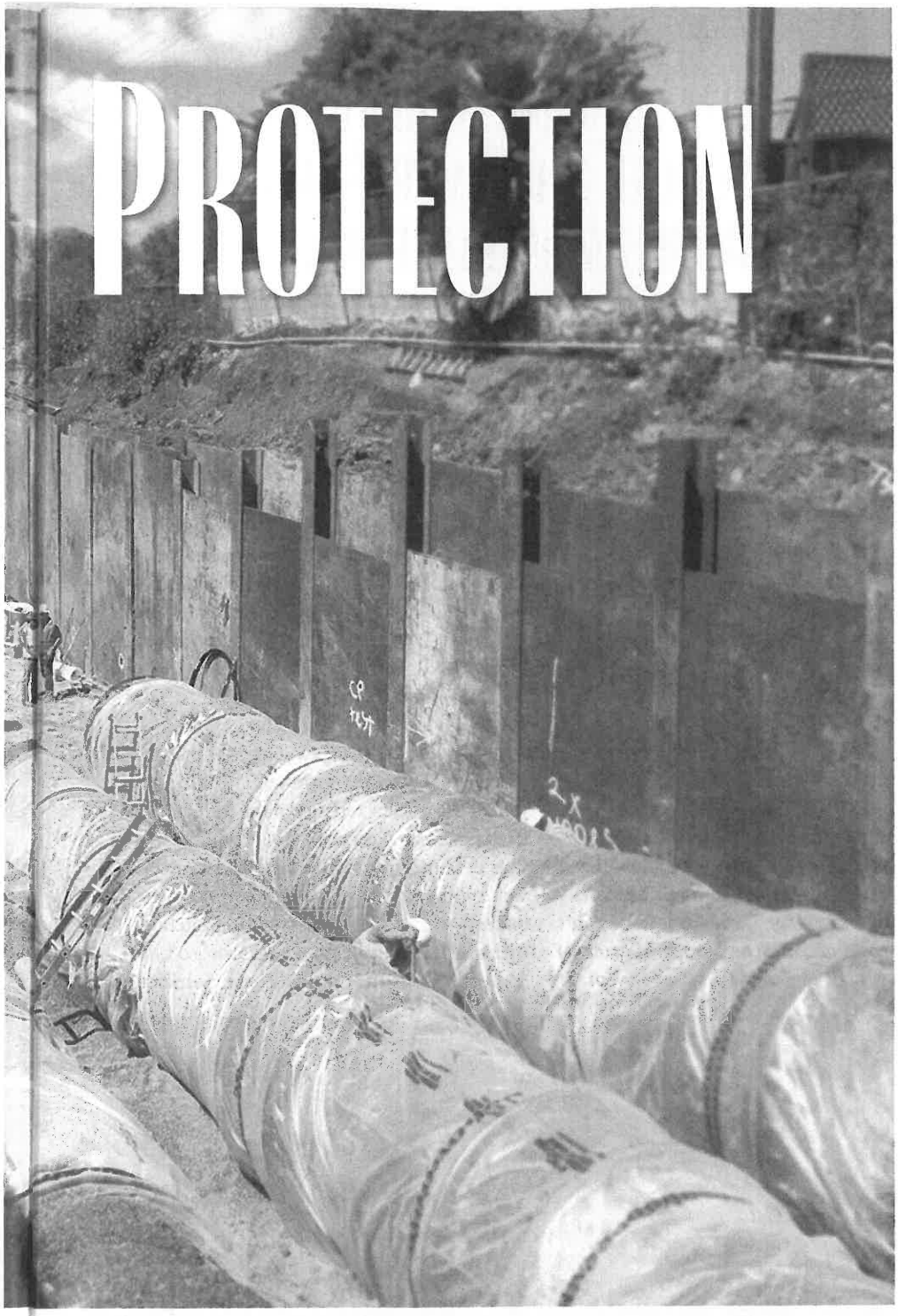
The Penitencia WTP is located a mere 1.2 mi from the Hayward Fault, which connects to the Calaveras Fault that extends through the East Foothills of Santa Clara County. Even closer to home, the Penitencia WTP is located on the Penitencia Creek Landslide, a 240-acre active landslide. Three pipelines cross from a stable geologic zone onto the landslide near the Penitencia WTP: the 60 in. diameter Penitencia Delivery Main (PDM), the 66 in. diameter Penitencia Force Main (PFM), and the 72 in. diameter South Bay Aqueduct (SBA). Owned by the Santa Clara Valley Water District, the PDM delivers treated water from the WTP to the district's customers and the PFM supplies raw water to the Penitencia WTP. Owned by the California Department of Water Resources, the SBA conveys raw water to the treatment facility.

Before the completion of the project, the existing pipe-

CAROLLO ENGINEERS INC.

0885-7024/18-0002-0064/$30.00 PER ARTICLE

PROTECTION



The new sections of the three pipelines had to be installed within an existing 50 ft wide easement, limiting site access and requiring trench shoring along the entire easement.

lines were vulnerable to the landslide displacement where they cross the toe of the landslide. Besides the ongoing creep displacement, the pipelines were at risk of seismic displacement from an earthquake event on the nearby Hayward and Calaveras faults as well as other seismic sources. The existing pipelines consisted of unrestrained, prestressed concrete cylinder pipe (PCCP) that was susceptible to pullout and brittle failure from the potential landslide displacement. In fact, the PDM failed in 1983, flooding nearby homes, causing erosion downslope of the failure point, and severely disrupting operations at, and water deliveries from, the Penitencia WTP. The pipeline failure was found to have been caused by large compressive forces resulting from the landslide movement. To avoid the recurrence of a similar event, the Santa Clara Valley Water District undertook the Penitencia Delivery Main and Penitencia Force Main Seismic Retrofit Project.

There have been many innovative projects to harden pipelines at perpendicular fault crossings over the years; perpendicular crossings stress pipelines in tension during fault displacement. This project is unique because the landslide displacement is anticipated to occur approximately parallel to the axis of the pipelines and load the pipelines in compression. The retrofit project also featured additional measures to improve the seismic resilience of the pipelines, including installation of a state-of-the-art system that monitors pipe deflection and instrumentation to monitor earthquake events, as well as features intended to expedite the return of service after seismic events.

BEGUN IN 2013, the planning phase for the project included a seismic hazard evaluation to estimate the displacement at the landslide toe. Led by Carollo Engineers Inc., which has its headquarters in Walnut Creek, California, the project team determined that the landslide could move as much as 7.7 ft during an earthquake, combined with an estimated 1.7 ft of creep-related movement over 50 years, for a total displacement of 9.4 ft during the project design life. The displacement estimates were based on a 1,000-year earthquake at the nearby Hayward and Calaveras faults and other faults at greater distances. This evaluation established the criteria for the pipeline design.

The planning phase also included an evaluation of several alternatives to improve the ability of the pipelines to withstand the landslide creep and seismic displacement. This evaluation resulted in a recommendation to use ERDIP manufactured by the Kubota Corp. The ERDIP dissipates the large landslide displacement by absorbing the movement through axial compression and

PROJECT DESIGN BEGAN IN 2014 AND INCLUDED THE DEVELOPMENT OF A SOPHISTICATED 3-D COMPUTER MODEL OF THE LANDSLIDE AND PIPELINE INTERACTIONS.

rotation at the pipe joints. The standard 72 in. diameter ERDIP pipe joint provides approximately 4 in. of axial expansion and compression capacity and 6.5 degrees of rotation. Ultimately, the project replaced approximately 850 ft of the existing PCCP near the landslide toe to mitigate the seismic and creep displacement estimated in the hazard evaluation. All told, approximately 670 ft of ERDIP and 180 ft of welded steel pipe (WSP) were used to replace each pipeline.

Project design began in 2014 and included the development of a sophisticated 3-D computer model of the landslide and pipeline interactions to optimize the placement of ERDIP joints to accommodate the landslide displacement. The project team created a model of the soil–pipe interaction and pipe joint behavior using Abaqus software from Dassault Systemes. Degenkolb Engineers led the modeling of the soil–pipe interaction, which was used to design the pipeline system for the large deformation at the landslide toe.

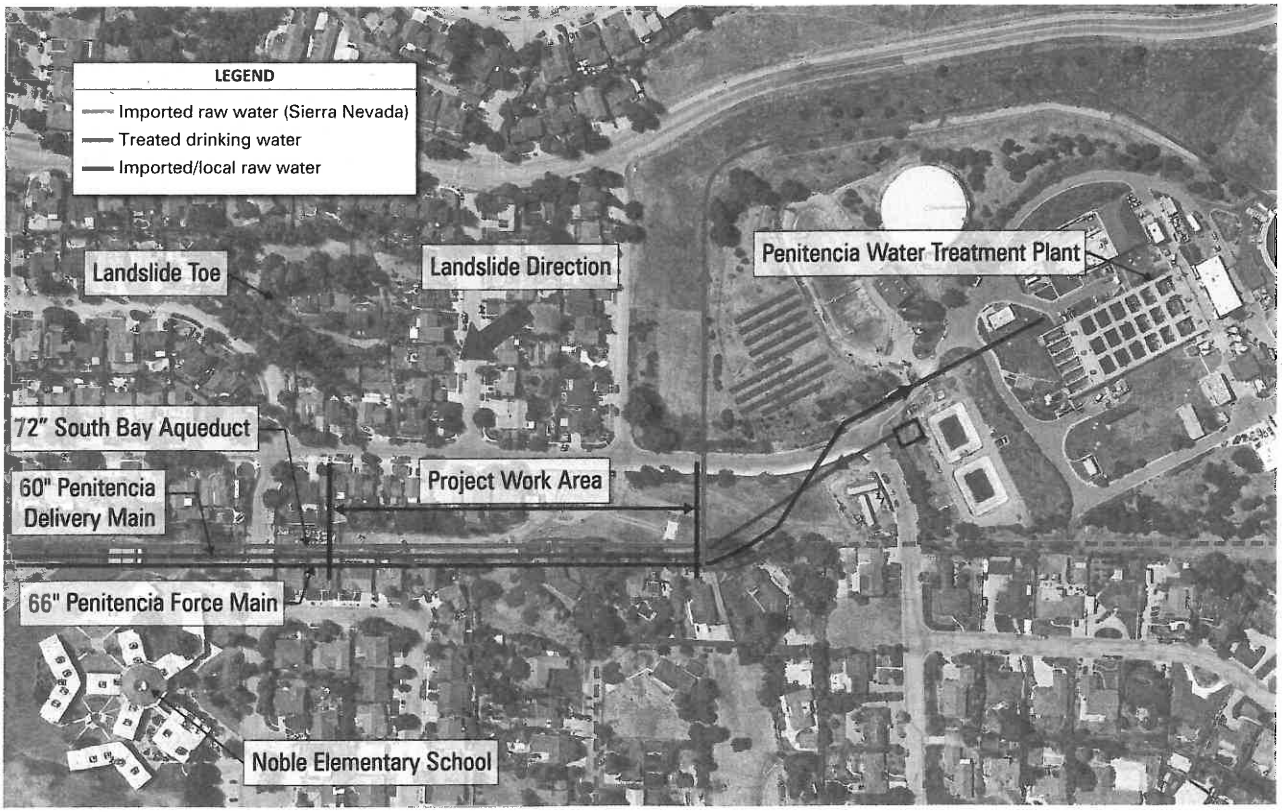
The Abaqus model helped the project team investigate the following:

- the large deformations associated with the interactions of the soil and pipe
- the soil–pipe and pipe–soil–pipe interactions
- biaxial interactions of the ERDIP joints
- interactions among the SBA, PDM, and PFM pipelines

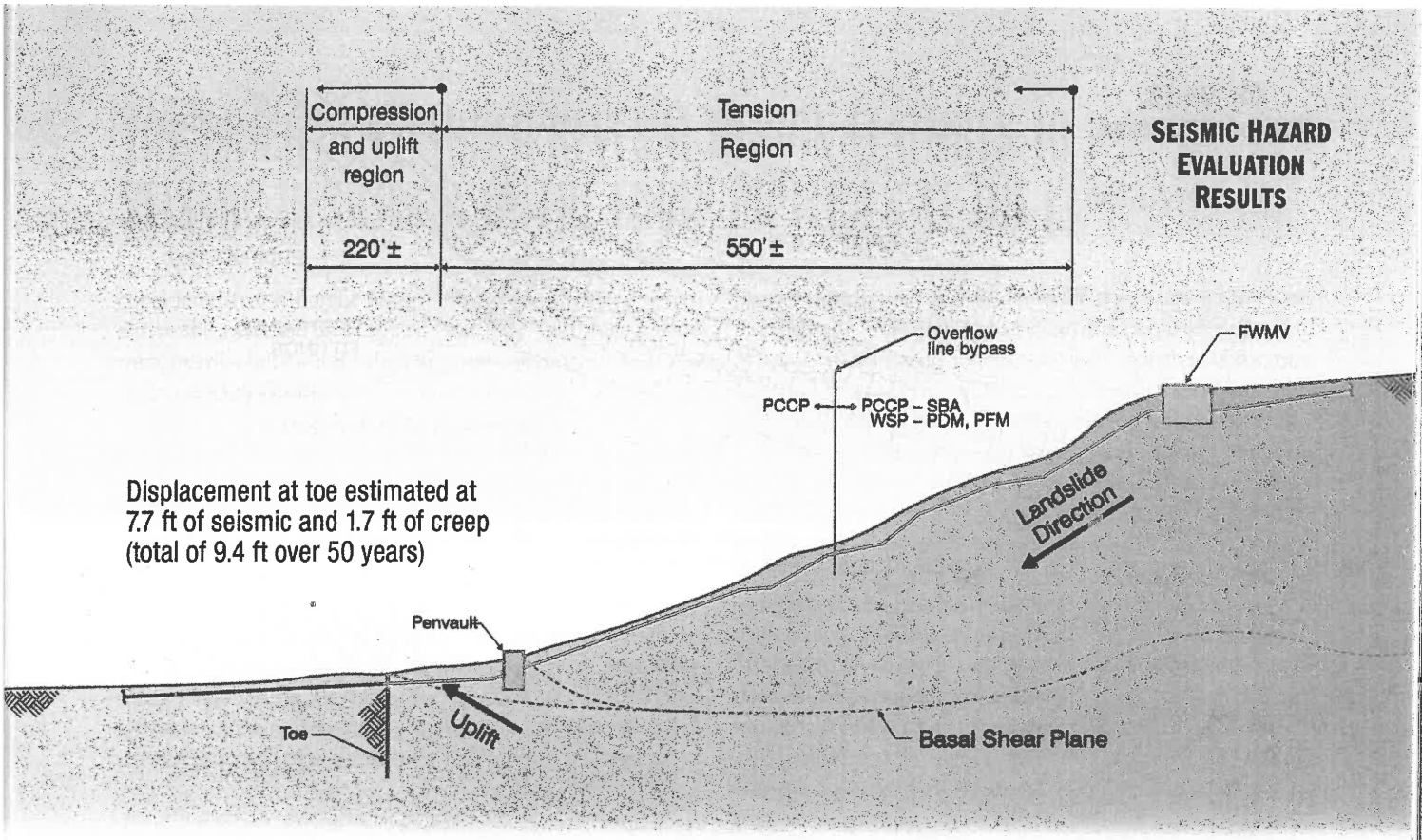
The Abaqus model considered the nonlinear behavior of the ERDIP joints and collars using recommended modeling properties from the ERDIP manufacturer and properties established during the full-scale testing, which Kubota conducted on a 60 in. diameter pipeline to confirm the published axial deflection and rotation capacity of the pipe joint. This Abaqus model considered the behavior of each joint in six degrees of freedom, including axial, bending, shear, and torsion actions. The model directly or indirectly simulated complex joint behavior, including sliding and locking behavior, biaxial interaction, and axial-bending interaction, especially for collar joints. The soil behavior was modeled using nonlinear—that is, yielding—soil springs connecting the pipe elements to the ground. The strength and stiffness characteristics of the soil springs were established on the basis of soil parameters obtained from soil testing and in accordance with the 2001 *Guidelines for the Design of Buried Steel Pipe* from the American Lifelines Alliance.

Because the landslide toe and the three pipelines intersect in a densely populated area that includes an elementary school, the project improved public safety by reducing the risk of flooding and property damage following a seismic event.

Lettis Consultants International Inc.,



CAROLLO ENGINEERS INC. AND GOOGLE



headquartered in Walnut Creek, served as the engineering geologist on the project team during design and construction. Lettis Consultants recommended modeling the following three scenarios to describe the style of deformation and capture the range of possible deformations at the landslide toe:

1. A 30-degree dipping shear plane accommodating the total displacement
2. A 2-degree dipping shear plane accommodating the total displacement
3. A 50-percent displacement on both the 2-degree and 30-degree dipping toes

Scenarios 1 and 2 assume a knife-edge failure mechanism at the toe, representing worst-case scenarios. Defined as the average of the first two scenarios, scenario 3 reflects distributed deformation at the toe. Although judged to be more likely, scenario 3 generally causes smaller demands compared with scenarios 1 and 2.

Cal Engineering and Geology Inc., also of Walnut Creek, served as the geotechnical engineer during design and construction. Based on numerous analytical studies and soil properties provided by Cal Engineering and Geology, two main design options emerged as the most viable solutions.

Option 1A, known as the joint-only design, consisted of regular ERDIP joints spaced at various distances, depending on the level of rotation demand. This alternative used very short spacing in the high-deformation zone and pipe joints spaced at greater distances elsewhere. The project team considered several alternatives with different joint spacing for this alternative.

Option 2B, known as the joint-and-collar design, was generally similar to option 1A but called for the use of collar joints in areas of very high demand. The primary advantage of this option was that the collars provided improved performance in the form of increased axial and rotational deformation capacities.

The analysis included additional options, the results for all of which are summarized in Table 1. The modeling

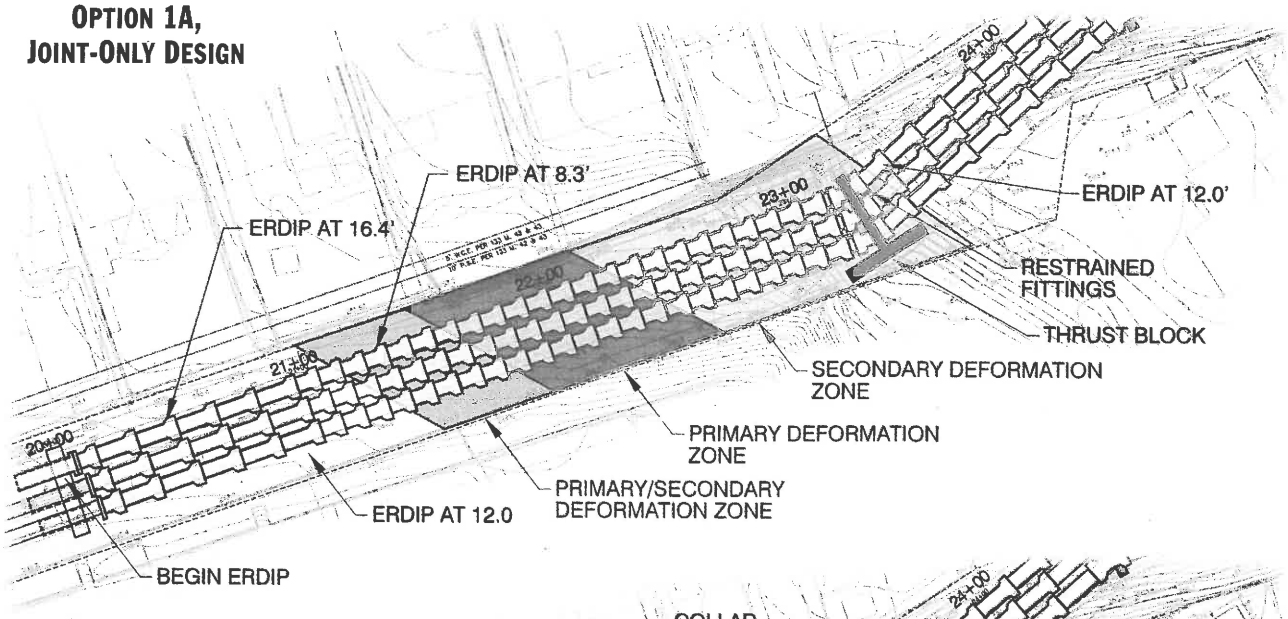
TABLE 1. MODELING RESULTS

DESIGN OPTION	100% LW	75% LW	55% LW	Native	Soft soil
Option 1A: joints @ 8.3 ft	NA	NA	NA	107%	95%
Option 1B: joints @ 6.5 ft	NA	NA	NA	88%	77%
Option 2A: five-collar	90%	93%	99%	103%	93%
Option 2B: nine-collar	78%	79%	81%	84%	87%

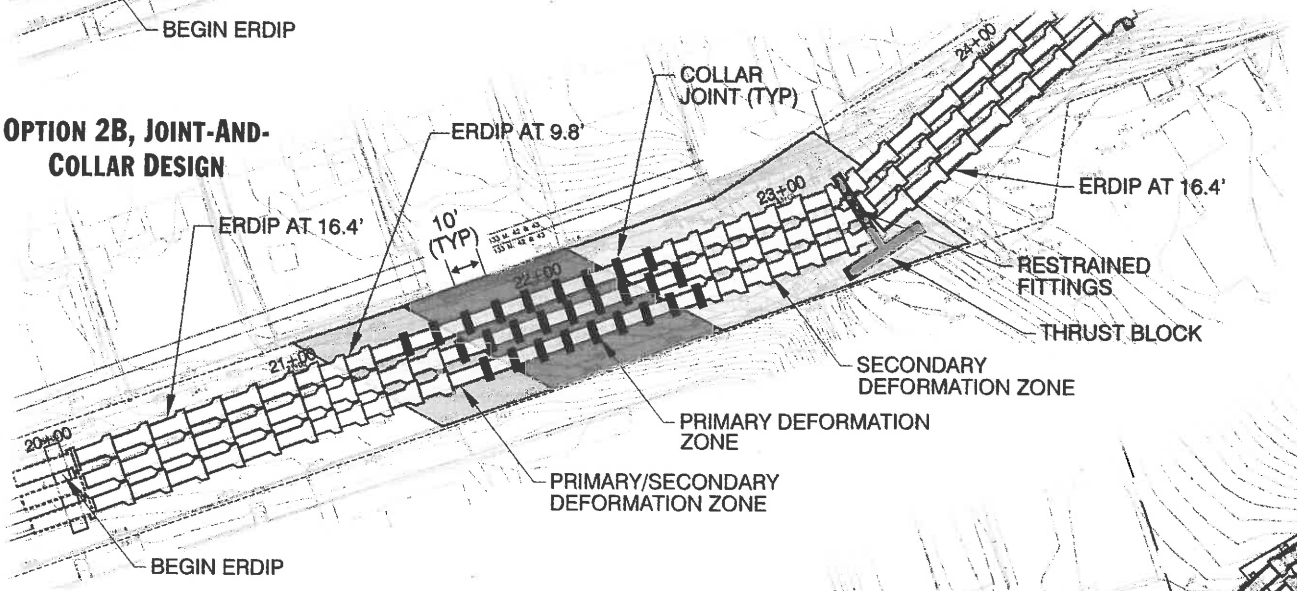
NOTES:
1. LW = Lightweight material.
2. The table summarizes the demand-to-capacity ratio for each alternative. Values larger than 100 percent indicate overstress. Smaller values indicate favorable performance.
3. Green indicates acceptable, orange indicates marginal, and red indicates unacceptable demand-to-capacity ratio.

CAROLLO ENGINEERS INC.

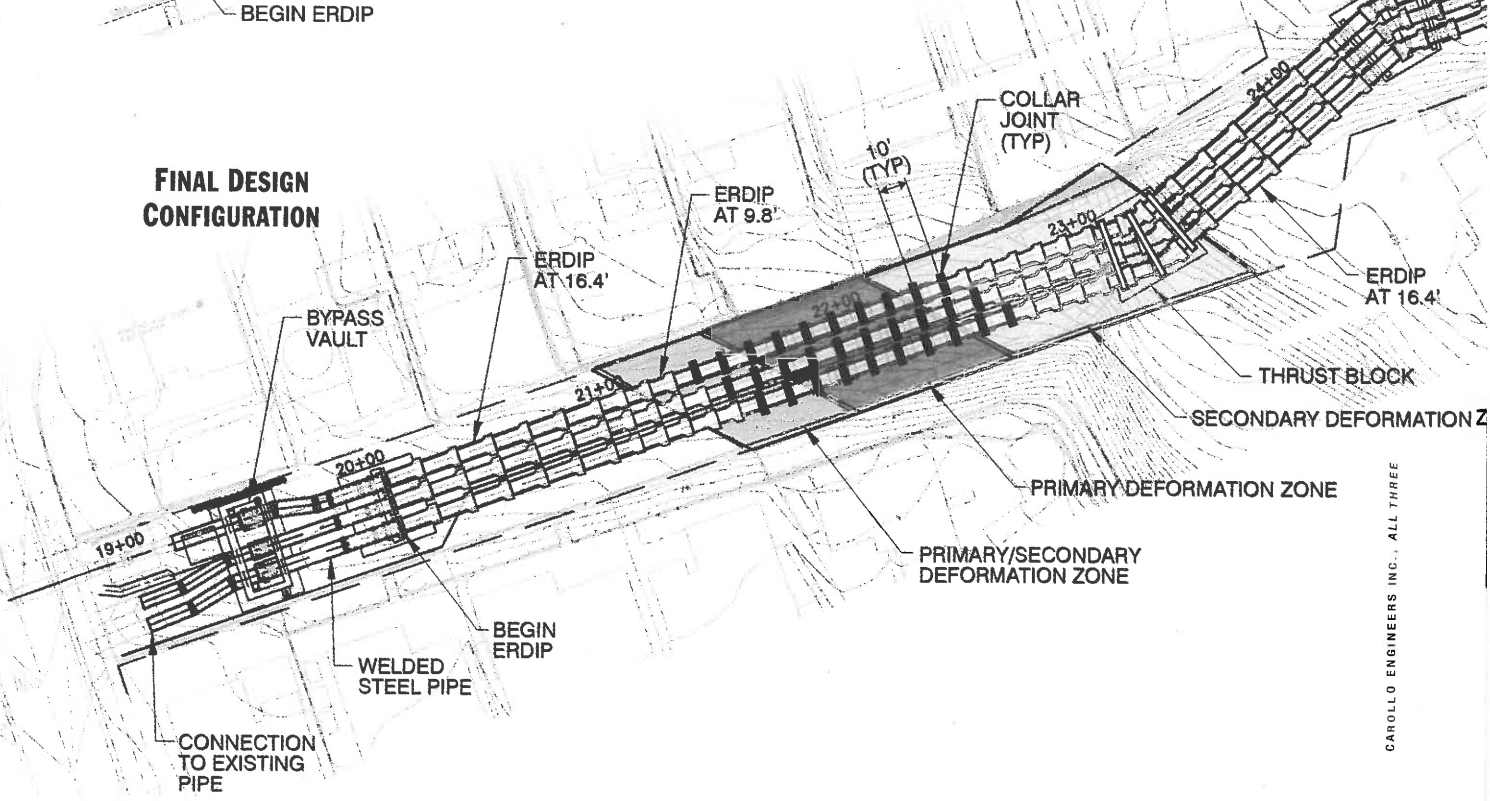
OPTION 1A, JOINT-ONLY DESIGN



OPTION 2B, JOINT-AND-COLLAR DESIGN



FINAL DESIGN CONFIGURATION

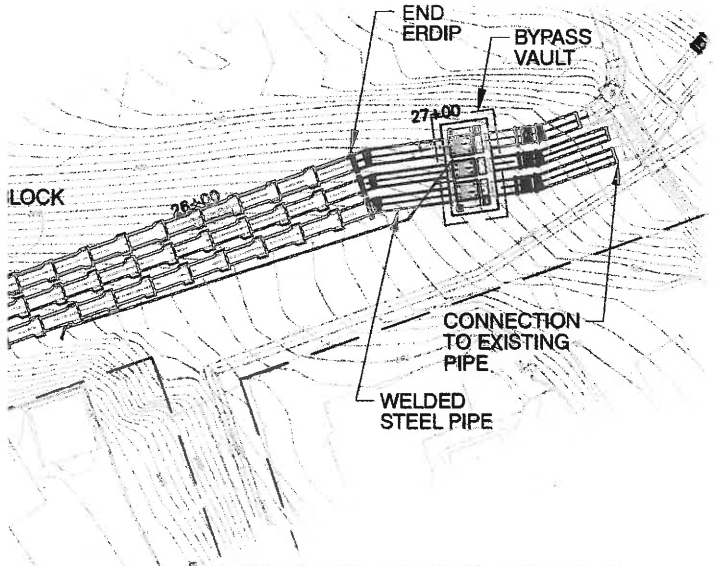


CAROLLO ENGINEERS INC., *ALL THREE*

THE PROJECT INCLUDED SEVERAL DESIGN FEATURES TO IMPROVE THE SEISMIC RESILIENCE OF THE ERDIP PIPELINES AT THE LANDSLIDE TOE.

considered five different materials for backfilling trenches: native soil material, an idealized "soft soil," and three hybrid mixtures of a lightweight shale aggregate and native soil (100 percent lightweight shale, 75 percent lightweight shale, and 55 percent lightweight shale). Ultimately, the project team recommended a version of option 2B, the joint-and-collar design with native backfill, but with 10 collars rather than the originally proposed 9 to provide additional displacement capacity in the secondary deformation zone. This option provided the best performance and was less sensitive to backfill soil properties than the other options.

The computer modeling found that installing ERDIP in shortened, nonstandard lengths was necessary, as was using collar joints spaced 10 ft apart on center in the primary deformation zone to prevent overrotation and reduce pipe joint stress. Compared with the standard pipe joint, the collar joints provided additional axial and rotational capacity at each joint. For example, each 72 in. diameter collar joint provides 9 in. of axial expansion and contraction and 13 degrees of rotation. The project team identified the locations of each pipe-and-collar joint based on the Abaqus modeling software output.



ALTHOUGH THE EXISTING PIPELINES HAD ISOLATION VALVES ON EACH SIDE OF THE LANDSLIDE TOE, SEVERAL OF THE VALVES COULD NOT BE ACTIVATED REMOTELY, AND THEY DID NOT HAVE BACKUP POWER.

Before this project, several pilot-scale efforts involving small-diameter ERDIP had been conducted in the United States. However, as stated above, the pipeline diameters of 60, 66, and 72 in. used on the Penitencia Delivery Main and Penitencia Force Main Seismic Retrofit Project are believed to represent the first large-diameter installation of ERDIP in this country. For this reason, the design included provisions for the ERDIP manufacturer to provide on-site field observations during installation to ensure that the pipelines were installed according to its recommendations.

Manufactured in Japan, the ERDIP pipelines and fittings have a lead time of about six months. Therefore, fabricating new fittings to adjust for field irregularities or problems with the material delivered to the site would have proved difficult. The team overcame this potential hurdle by including WSP on both sides of the ERDIP to make the tie-ins to the existing PCCP. The WSP was fabricated locally so that the contractor—Ranger Pipelines Inc., of San Francisco—could obtain replacements quickly in the event that any irregularities had to be addressed in the field.

THE PROJECT INCLUDED several design features to improve the seismic resilience of the ERDIP pipelines at the landslide toe. These features will enable the Santa Clara Valley Water District to shut down the pipelines during a failure, provide temporary bypass connections to return the facilities to service, monitor pipeline displacement, and monitor seismic events.

Connection points to each pipeline will allow the district or the Department of Water Resources to bypass water around the landslide in the event of a pipeline failure. The connection points are located in below-grade vaults on each side of the landslide toe. The bypass would require connecting to each pipeline with a manifold and installing temporary pipelines at grade.

The project included the retrofit of several existing valves to enable the district or the Department of Water Resources to shut down the PDM, PFM, and SBA pipelines at the landslide toe. Isolation of the pipelines is critical in the event of a pipeline failure. Although the existing pipelines had isolation valves on each side of the landslide toe, several of the valves could not be activated remotely, and they did not have backup power. The project retrofitted the existing isolation valves to add backup power and remote activation for each pipeline.

A pipeline displacement monitoring system designed by Geocomp Corp. was installed. The *(Continued on Page 75)*

(Continued from Page 69) system uses horizontal and vertical surface array accelerometers installed within horizontal and vertical conduits adjacent to the pipelines to provide real-time tracking of the pipeline deflection. The project also included an earthquake detector to measure the magnitude of seismic events. The detector sends alarms to the district's supervisory control and data acquisition (SCADA) system if a seismic event exceeds a set point. District operations staff will then be able to assess damage and close the isolation valves, if necessary. The project also included pressure-monitoring devices in each pipeline near the landslide toe. The purpose of these is to measure a sudden drop in pipeline pressure, which would indicate a pipeline break.

THE SUCCESS OF THIS PROJECT WAS PARTICULARLY IMPRESSIVE CONSIDERING THE CHALLENGING CONDITIONS AND CLOSE PROXIMITIES OF RESIDENTS AND THE SCHOOL.

IN APRIL 2016, THE DISTRICT issued the notice to proceed to the contractor to begin construction. That October, the Penitencia WTP was shut down to enable demolition of the existing pipelines. At this time, heavy construction began on the project and was scheduled to be completed by summer 2017. Construction included several challenges that were primarily related to the tight construction schedule, limited site access, proximity to residential neighborhoods, and requirements of the California Environmental Quality Act.

Construction of the project required shutting down the Penitencia WTP because the pipelines deliver raw water to, and treated water from, the treatment facility. The construction schedule was constrained because the district needed to return the Penitencia WTP to service in July 2017 to meet summertime water demands.

Weather significantly hindered project construction, as California received its second-highest rainfall total since the National Centers for Environmental Information within the U.S. National Oceanic and Atmospheric Administration began keeping such records in 1895. In particular, the rain created construction challenges associated with working in the large open trenches and excavations. Even on days when it did not rain, the muddy conditions in the work area hindered construction vehicle access and created a slippery environment that made pipeline installation challenging. The contractor made up some time by assembling the collar joints at the staging area and delivering them to the site for installation during drier months.

Near the landslide toe, the pipelines were installed within an existing 50 ft wide easement. This limited site access complicated the construction sequencing because installation of the pipelines required trench shoring along the entire easement. Because of the proximity to the residential neighborhood, the district implemented a public outreach program to maintain relations with nearby residents before and during construction of the project. The project also included restrictions on work hours, vibration monitoring, and structural surveys of adjacent houses before and after construction.

In accordance with the requirements of the California Environmental Quality Act, the project team identified potential nesting habitat of the red-tailed hawk during project design. The red-tailed hawk is a protected species under the law, which requires establishing a 250 ft "no-work" buffer around a nest if it is active beginning on February 1. With this requirement in mind, the contractor began construction at the top of the landslide near the upper bypass vault so that it could complete the work within the red-tailed hawk nesting area by February 1, 2017.

All three pipelines were restored to full operations in July 2017, and the Penitencia WTP was also returned to service then. The success of this project was particularly impressive considering the challenging conditions and close proximities of residents and the school. The full-scale testing and sophisticated finite element modeling provided a reasonable method to substantiate the design performance. The ERDIP and collar fittings proved to be a favorable design solution for this project, which improves public safety while also helping ensure the seismic reliance of critical water infrastructure. **CE**

Baune

Aryee

Darren Baune, P.E., is a project manager with Carollo Engineers in Walnut Creek, California. Emmanuel Aryee, P.E., M.ASCE, is an engineering unit manager for the Santa Clara Valley Water District. *This feature is based on a paper (https://doi.org/10.1061/9780784479957.176) delivered at Pipelines 2016, a conference sponsored by ASCE and its Utility Engineering & Surveying Institute. This year's conference will be held in Toronto in July. For more information, visit pipelinesconference.org.*

PROJECT CREDITS **Owners:** Santa Clara Valley Water District and California Department of Water Resources **Prime design consultant:** Carollo Engineers Inc., Walnut Creek, California **Structural modeling:** Degenkolb Engineers **Geotechnical engineer:** Cal Engineering and Geology Inc., Walnut Creek **Engineering geologist:** Lettis Consultants International Inc., Walnut Creek **Environmental planning:** LSA Associates Inc. **Technical adviser for seismic design of pipelines:** Ballantyne Consulting LLC, Tacoma, Washington **Earthquake-resistant ductile iron pipe manufacturer:** Kubota Corp., Osaka, Japan **General contractor:** Ranger Pipelines Inc., San Francisco **Pipeline displacement monitoring system:** Geocomp Corp., Buffalo Grove, Illinois, office

Santa Clara Valley Water District

MEMORANDUM

FC 14 (01-02-07)

TO: Board of Directors

FROM: Nina Hawk

SUBJECT: 2018 Protection and Augmentation of Water Supplies Report

DATE: February 23, 2018

The Report on Protection and Augmentation of Water Supplies (PAWS), 2018 was filed with the Clerk of the Board on February 23, 2018 as required by the District Act. It contains the recommended groundwater production and other water charges for fiscal year 2018-19. A copy for your review in preparation for the public hearing, which opens on April 10, 2018 can be downloaded at the following URL:

http://www.valleywater.org/2018-19GroundwaterChargeProcess

Also posted at the above URL, or linked from that page, are the notices to well owners and surface water users, which describe the rate-setting process, give the rationale for the determination of proposed rates, and provide the dates and times of upcoming public hearings. These notices were mailed to all well owners and surface water users of record on February 23. Note that there are four notices, a groundwater and a surface water notice for North County Zone W-2 and a groundwater and a surface water notice for South County Zone W-5. A total of 1,133 North County and 3,561 South County customers receive these notices. These mailers will also be shared with subscribers to the district's 12,000+ eNewsletter in March.

Hardcopies of the PAWS report and the well owner notices are available upon request. If you have any questions, please call me at 408 630-2736 or Darin Taylor at 408 630-3068.

Nina Hawk
Chief Operating Officer
Water Utility Enterprise

Santa Clara Valley Water District

MEMORANDUM

FC 14 (01-02-07)

TO: Board of Directors

FROM: Darin Taylor, Chief Financial Officer,

SUBJECT: Summary of Monthly Report of Investments, January 2018

DATE: February 23, 2018

In accordance with the District Board Investment policy, staff provides a detailed investment report to the Board of Directors on a quarterly basis. In addition to the quarterly investment report, Government Code section 53607 requires the Treasurer of the local agency who has been delegated with the authority to invest funds to provide a monthly report of the investment transactions to the legislative body. This report is provided to the Board in compliance with Government Code section 53607 and Executive Limitation-4 Financial Management.

Attached is the report of investments for the month January 2018. All investments were in compliance with the Investment Policy and performed better than the District's benchmark yield. The attached report includes a summary of the portfolio holdings, details of each security in the portfolio and an investment activity summary with comparisons to the previous 12 months. The following are highlights of the investment activities for the month:

- The book value of the District's portfolio as of January 31, 2018, was $518 million.
- The District's portfolio is invested with a primary goal of safety. To accomplish this goal, we only invest in securities that are permitted by California Government Code and the Board Investment Policy. These securities have high credit ratings and maturities of no more than 5 years. As of January 31, 2018, approximately 77% of the portfolio was held in US Government Treasury/Agency/Municipal Bonds, 20% was held in liquid funds (Local Area Investment Fund/money market mutual fund) and 3% in supranational/corporate medium-term notes.
- The portfolio had a yield-to-maturity of 1.28% as of January 31, 2018. This exceeded the District's benchmark, the 24-month floating average of the 2-year Treasury note, which was 1.16%.
- The District's portfolio is reviewed every month for compliance with the Investment Policy. All investments were in compliance for the reporting period.
- California Government Code requires that a public entity structure its portfolio so that it, at minimum, can meet expenditures for the next six months. The investment portfolio has been structured to ensure that sufficient monies will be available to cover anticipated expenditures in the coming six months.

If you have any questions regarding the Investment Report, please contact Darin Taylor, Chief Financial Officer, at 408-630-3068.

Darin Taylor
Chief Financial Officer

Attachment: Monthly Report of Investments for November 2017

Santa Clara Valley Water District

Santa Clara Valley Water Dist.
Portfolio Management
Portfolio Summary
January 31, 2018

SANTA CLARA VALLEY WATER
5750 Almaden Expressway
San Jose, San Jose, Ca 951
(408)265-2607

Investments	Par Value	Market Value	Book Value	% of Portfolio	YTM 365 Equiv.	Term	Days to Maturity
Treasury Securities - Coupon	3,000,000.00	2,951,484.00	2,990,605.26	0.58	1.638	950	850
Federal Agency Issues - Coupon	387,244,000.00	383,878,303.96	387,517,096.23	74.84	1.378	1,080	582
Negotiable CD's - Interest Bearing	950,000.00	945,903.88	950,000.00	0.18	1.743	614	546
LAIF	63,937,454.92	63,937,454.92	63,937,454.92	12.35	1.200	1	1
Medium Term Notes	8,575,000.00	8,580,869.35	8,643,733.07	1.67	1.655	1,030	560
Money Market Account	36,622,519.35	36,622,519.35	36,622,519.35	7.07	0.001	1	1
Supranational	9,000,000.00	8,923,668.00	9,004,469.15	1.74	1.745	1,019	682
Municipal Bonds	8,088,360.47	7,974,935.55	8,105,391.80	1.57	1.896	1,336	1,037
Investments	**517,417,334.74**	**513,815,139.01**	**517,771,269.78**	**100.00%**	**1.280**	**871**	**479**

Total Earnings	January 31 Month Ending	Fiscal Year To Date
Current Year	537,212.01	3,339,456.75
Average Daily Balance	**494,759,668.47**	**485,187,501.37**
Effective Rate of Return	**1.28%**	**1.17%**

Current market pricing is updated at the end of each month from data provided by Interactive Data, a securities pricing service.

Charlene Sun
Treasury/Debt Officer

Date 2/21/18

Darin Taylor, Chief Financial Officer

2/21/18

Reporting period 01/01/2018-01/31/2018

Run Date: 02/13/2018 - 10:24

Portfolio SCVW
AC
PM (PRF_PM1) 7.3.0
Report Ver. 7.3.3b

Santa Clara Valley Water Dist.
Portfolio Management
Activity Summary
January 2017 through January 2018

Month End	Year	Number of Securities	Total Invested	Yield to Maturity 360 Equivalent	Yield to Maturity 365 Equivalent	Managed Pool Rate	Number of Investments Purchased	Number of Investments Redeemed	Average Term	Average Days to Maturity
January	2017	122	496,232,718.91	0.932	0.945	0.680	14	2	854	480
February	2017	123	505,846,187.10	0.945	0.958	0.680	2	1	847	461
March	2017	121	480,718,617.99	0.980	0.994	0.680	0	2	879	459
April	2017	118	482,257,920.67	0.972	0.986	0.780	0	3	851	432
May	2017	115	464,711,162.88	1.018	1.032	0.780	6	9	874	465
June	2017	123	514,058,282.58	0.998	1.012	0.780	8	1	817	425
July	2017	120	503,099,025.40	1.026	1.040	0.920	3	5	818	419
August	2017	120	487,325,075.78	1.040	1.054	0.920	2	2	836	424
September	2017	121	474,868,284.49	1.058	1.073	0.920	8	7	862	448
October	2017	122	472,103,398.10	1.101	1.116	1.070	4	4	871	458
November	2017	122	470,173,284.42	1.116	1.132	1.070	5	4	869	449
December	2017	133	495,595,536.47	1.180	1.197	1.070	13	2	866	465
January	2018	136	517,771,269.78	1.262	1.280	1.200	8	5	871	479
	Average	**123**	**489,596,981.89**	**1.048%**	**1.063%**	**0.888**	**6**	**4**	**855**	**451**

Santa Clara Valley Water Dist.
Portfolio Management
Activity By Type
January 1, 2018 through January 31, 2018

CUSIP	Investment #	Issuer	Stated Rate	Transaction Date	Purchases or Deposits	Redemptions or Withdrawals	Balance
Treasury Securities - Coupon							
912828UJ7	5038	US Treasury Bill	0.875	01/31/2018	0.00	3,000,000.00	
		Subtotal			**0.00**	**3,000,000.00**	**2,990,605.26**
Federal Agency Issues - Coupon							
3133EJAD1	5184	Federal Farm Credit Bank	2.150	01/23/2018	4,997,370.00	0.00	
3133EJAD1	5185	Federal Farm Credit Bank	2.150	01/23/2018	4,999,500.00	0.00	
3130AD4X7	5183	Federal Home Loan Bank-CN	2.000	01/19/2018	4,974,850.00	0.00	
3137EADN6	4820	Federal Home Loan Mortgage Cor	0.750	01/12/2018	0.00	3,000,000.00	
3137EADN6	5031	Federal Home Loan Mortgage Cor	0.750	01/12/2018	0.00	3,000,000.00	
3135G0A78	5180	FNMA Discount Note	1.625	01/18/2018	4,957,500.00	0.00	
3135G0T29	5181	Fed Natl Mortgage Assoc	1.500	01/18/2018	4,943,600.00	0.00	
3135G0T29	5182	Fed Natl Mortgage Assoc	1.500	01/19/2018	4,942,050.00	0.00	
		Subtotal			**29,814,870.00**	**6,000,000.00**	**387,517,096.23**
Negotiable CD's - Interest Bearing							
05368TAT8	5186	Avidbank Palo Alto Calif	1.850	01/30/2018	240,000.00	0.00	
32115RAP0	5071	First Natl Bk SO CA	0.850	01/12/2018	0.00	245,000.00	
		Subtotal			**240,000.00**	**245,000.00**	**950,000.00**
LAIF (Monthly Summary)							
SYS88-0237LAIF	88-0237LAIF	Local Agency Investment Fund	1.200		15,177,079.76	15,000,000.00	
		Subtotal			**15,177,079.76**	**15,000,000.00**	**63,937,454.92**
Medium Term Notes							
		Subtotal					**8,643,733.07**
Money Market Account (Monthly Summary)							
23380W523	4102	Daily Income US Gov MMF	0.001		87,625,957.00	86,460,647.78	
		Subtotal			**87,625,957.00**	**86,460,647.78**	**36,622,519.35**
Apple Deposit Account (Monthly Summary)							
		Subtotal					**0.00**

Santa Clara Valley Water Dist.
Portfolio Management
Activity By Type
January 1, 2018 through January 31, 2018

CUSIP	Investment #	Issuer	Stated Rate	Transaction Date	Purchases or Deposits	Redemptions or Withdrawals	Balance
Supranational							
4581X0CL0	5029	Inter-American Dev't Bank	1.249	01/16/2018	0.00	3,000,000.00	
4581X0CD8	5187	INTERAMERI DEV	2.125	01/30/2018	2,983,500.00	0.00	
		Subtotal			**2,983,500.00**	**3,000,000.00**	**9,004,469.15**
Municipal Bonds							
		Subtotal					**8,105,391.80**
		Total			**135,841,406.76**	**113,705,647.78**	**517,771,269.78**

Santa Clara Valley Water Dist.
Portfolio Management
Portfolio Details - Investments
January 31, 2018

CUSIP	Investment #	Issuer	Average Balance	Purchase Date	Par Value	Market Value	Book Value	Stated Rate	YTM 365	Term	Days to Maturity	Maturity Date
Treasury Securities - Coupon												
912828XE5	5155	US Treasury Bill		10/24/2017	3,000,000.00	2,951,484.00	2,990,605.26	1.500	1.638	950	850	05/31/2020
		Subtotal and Average	**5,893,865.01**		**3,000,000.00**	**2,951,484.00**	**2,990,605.26**		**1.638**	**950**	**850**	
Federal Agency Issues - Coupon												
3133EETE0	4835	Federal Farm Credit Bank		04/23/2015	3,000,000.00	2,999,346.00	3,000,638.08	1.125	0.935	1,054	39	03/12/2018
3133EFQD2	4965	Federal Farm Credit Bank		11/23/2015	5,000,000.00	4,993,655.00	4,999,587.47	1.080	1.107	912	111	05/23/2018
3133EFSG3	4985	Federal Farm Credit Bank		12/22/2015	5,000,000.00	4,999,140.00	4,999,817.71	1.100	1.131	813	41	03/14/2018
3133EFPJ0	4991	Federal Farm Credit Bank		01/20/2016	5,000,000.00	4,979,400.00	5,007,659.27	1.290	1.095	1,034	291	11/19/2018
3133EF5X1	5017	Federal Farm Credit Bank		05/04/2016	3,000,000.00	2,959,440.00	3,006,296.16	1.100	0.930	1,094	456	05/03/2019
3133EGFX8	5025	Federal Farm Credit Bank		06/20/2016	5,000,000.00	4,976,475.00	5,000,000.00	1.010	1.010	1,553	962	09/20/2020
3133EGFQ3	5030	Federal Farm Credit Bank		06/27/2016	3,000,000.00	2,984,154.00	2,999,909.35	0.875	0.880	809	225	09/14/2018
3133EFSJ7	5044	Federal Farm Credit Bank		07/07/2016	1,000,000.00	994,397.00	1,005,039.41	1.300	0.714	890	316	12/14/2018
3133EDVK5	5055	Federal Farm Credit Bank		09/21/2016	3,344,000.00	3,334,312.43	3,373,435.40	1.750	0.960	908	410	03/18/2019
3133EG2D6	5084	Federal Farm Credit Bank		01/24/2017	3,000,000.00	2,970,009.00	3,005,644.36	1.550	1.434	976	603	09/27/2019
3133EG5D3	5086	Federal Farm Credit Bank		01/27/2017	3,000,000.00	2,944,545.00	3,000,000.00	2.030	2.030	1,826	1,456	01/27/2022
3133EGW92	5089	Federal Farm Credit Bank		01/27/2017	3,000,000.00	2,959,545.00	2,999,512.00	1.500	1.509	1,056	686	12/19/2019
3133EHJA2	5095	Federal Farm Credit Bank		05/08/2017	3,000,000.00	2,951,691.00	3,000,136.17	1.550	1.548	1,096	827	05/08/2020
3133EHHN6	5098	Federal Farm Credit Bank		05/10/2017	3,000,000.00	2,972,646.00	2,996,959.55	1.350	1.432	722	455	05/02/2019
3133EHGS6	5101	Federal Farm Credit Bank		05/10/2017	3,000,000.00	2,905,920.00	2,992,315.97	2.030	2.094	1,811	1,544	04/25/2022
3133EHPD9	5118	Federal Farm Credit Bank		06/29/2017	3,000,000.00	2,959,140.00	3,000,000.00	1.670	1.670	1,089	872	06/22/2020
3133ECPD0	5141	Federal Farm Credit Bank		09/14/2017	2,085,000.00	2,047,697.27	2,082,290.69	1.420	1.478	972	832	05/13/2020
3133EHJA2	5142	Federal Farm Credit Bank		09/14/2017	1,850,000.00	1,820,209.45	1,852,450.96	1.550	1.490	967	827	05/08/2020
3133EHZH9	5143	Federal Farm Credit Bank		09/20/2017	2,000,000.00	1,949,108.00	2,000,000.00	1.840	1.840	1,461	1,327	09/20/2021
3133EHM34	5154	Federal Farm Credit Bank		11/01/2017	3,000,000.00	2,930,292.00	3,000,000.00	2.230	2.230	1,826	1,734	11/01/2022
3133EGBL8	5170	Federal Farm Credit Bank		12/26/2017	3,000,000.00	2,934,249.00	2,961,970.27	1.370	2.000	875	838	05/19/2020
3133EHT78	5172	Federal Farm Credit Bank		12/26/2017	3,000,000.00	2,970,912.00	2,992,047.53	1.830	2.030	876	839	05/20/2020
3133EGBL8	5175	Federal Farm Credit Bank		12/29/2017	3,000,000.00	2,934,249.00	2,958,959.27	1.370	2.050	872	838	05/19/2020
3133EGCN3	5176	Federal Farm Credit Bank		12/29/2017	5,000,000.00	4,916,640.00	4,972,323.48	1.490	2.000	794	760	03/02/2020
3133EGBL8	5177	Federal Farm Credit Bank		12/29/2017	4,000,000.00	3,912,332.00	3,946,549.91	1.370	2.036	872	838	05/19/2020
3133EJAD1	5184	Federal Farm Credit Bank		01/23/2018	5,000,000.00	4,972,675.00	4,997,390.04	2.150	2.169	1,065	1,056	12/23/2020
3133EJAD1	5185	Federal Farm Credit Bank		01/23/2018	5,000,000.00	4,972,675.00	4,999,503.81	2.150	2.154	1,065	1,056	12/23/2020
313383GQ8	4897	Federal Home Loan Bank		07/14/2015	2,500,000.00	2,486,202.50	2,500,196.70	1.300	1.291	1,262	329	12/27/2018
3130AAQQ4	5085	Federal Home Loan Bank		02/22/2017	3,000,000.00	2,997,036.00	3,000,000.00	1.000	1.000	730	386	02/22/2019
3130AAQV3	5087	Federal Home Loan Bank		01/30/2017	3,500,000.00	3,454,325.00	3,500,000.00	1.670	1.670	1,186	819	04/30/2020
313379RB7	5131	Federal Home Loan Bank		08/23/2017	3,000,000.00	2,950,311.00	3,021,228.07	1.875	1.657	1,388	1,226	06/11/2021

Santa Clara Valley Water Dist.
Portfolio Management
Portfolio Details - Investments
January 31, 2018

CUSIP	Investment #	Issuer	Average Balance	Purchase Date	Par Value	Market Value	Book Value	Stated Rate	YTM 365	Term	Days to Maturity	Maturity Date
Federal Agency Issues - Coupon												
313382K69	5132	Federal Home Loan Bank		08/23/2017	3,000,000.00	2,945,760.00	3,013,751.75	1.750	1.598	1,297	1,135	03/12/2021
313383HU8	5139	Federal Home Loan Bank		09/08/2017	3,000,000.00	2,964,486.00	3,023,526.64	1.750	1.410	1,008	862	06/12/2020
313378A43	4962	Federal Home Loan Bank-CN		11/10/2015	3,000,000.00	3,000,273.00	3,001,170.36	1.375	1.000	850	36	03/09/2018
313375K48	4986	Federal Home Loan Bank-CN		12/22/2015	5,000,000.00	5,005,505.00	5,022,141.04	2.000	1.270	997	225	09/14/2018
313376BR5	4995	Federal Home Loan Bank-CN		01/20/2016	5,000,000.00	4,992,945.00	5,024,929.07	1.750	1.165	1,059	316	12/14/2018
313376BR5	4996	Federal Home Loan Bank-CN		01/22/2016	5,000,000.00	4,992,945.00	5,025,918.62	1.750	1.142	1,057	316	12/14/2018
313376BR5	4999	Federal Home Loan Bank-CN		01/21/2016	3,000,000.00	2,995,767.00	3,017,924.73	1.750	1.050	1,058	316	12/14/2018
313376BR5	5000	Federal Home Loan Bank-CN		01/21/2016	3,000,000.00	2,995,767.00	3,016,376.23	1.750	1.110	1,058	316	12/14/2018
313376BR5	5001	Federal Home Loan Bank-CN		01/21/2016	3,000,000.00	2,995,767.00	3,017,456.58	1.750	1.068	1,058	316	12/14/2018
3133X0PF0	5002	Federal Home Loan Bank-CN		01/22/2016	3,000,000.00	3,058,287.00	3,070,145.82	5.375	0.971	936	195	08/15/2018
3130A7PW9	5012	Federal Home Loan Bank-CN		04/18/2016	5,000,000.00	4,939,315.00	4,999,821.18	0.950	0.953	1,082	428	04/05/2019
3130A8H48	5024	Federal Home Loan Bank-CN		07/01/2016	5,000,000.00	4,868,640.00	5,000,000.00	1.150	1.150	1,461	881	07/01/2020
313376BR5	5045	Federal Home Loan Bank-CN		07/07/2016	3,000,000.00	2,995,767.00	3,027,142.13	1.750	0.699	890	316	12/14/2018
313376BR5	5057	Federal Home Loan Bank-CN		09/21/2016	3,000,000.00	2,995,767.00	3,022,276.40	1.750	0.885	814	316	12/14/2018
3130A7L37	5058	Federal Home Loan Bank-CN		10/20/2016	3,000,000.00	2,975,814.00	3,010,624.97	1.250	0.930	876	407	03/15/2019
3133782M2	5060	Federal Home Loan Bank-CN		10/25/2016	3,000,000.00	2,983,356.00	3,017,676.51	1.500	0.958	864	400	03/08/2019
3130A9V32	5062	Federal Home Loan Bank-CN		11/15/2016	5,000,000.00	4,938,450.00	5,000,000.00	1.050	1.050	1,826	1,383	11/15/2021
3130ABEC6	5102	Federal Home Loan Bank-CN		05/26/2017	2,000,000.00	1,969,846.00	2,000,000.00	1.600	1.600	1,096	845	05/26/2020
3130ABEC6	5103	Federal Home Loan Bank-CN		05/26/2017	3,000,000.00	2,954,769.00	3,000,000.00	1.600	1.600	1,096	845	05/26/2020
3130ABPV2	5122	Federal Home Loan Bank-CN		07/14/2017	2,000,000.00	1,997,147.42	1,997,147.42	1.690	1.751	1,081	879	06/29/2020
313378J77	5123	Federal Home Loan Bank-CN		07/14/2017	3,000,000.00	3,023,217.56	3,023,217.56	1.875	1.500	973	771	03/13/2020
313378J77	5144	Federal Home Loan Bank-CN		09/13/2017	3,000,000.00	2,978,907.00	3,027,285.95	1.875	1.436	912	771	03/13/2020
313378J77	5147	Federal Home Loan Bank-CN		10/03/2017	3,000,000.00	2,978,907.00	3,020,295.98	1.875	1.598	892	771	03/13/2020
3130ACKG8	5148	Federal Home Loan Bank-CN		10/24/2017	3,000,000.00	2,927,202.00	3,000,000.00	2.200	2.200	1,826	1,726	10/24/2022
3130A5P86	5169	Federal Home Loan Bank-CN		12/26/2017	2,500,000.00	2,478,572.50	2,501,194.07	1.800	1.981	825	788	03/30/2020
3133714H6	5171	Federal Home Loan Bank-CN		12/26/2017	1,000,000.00	1,016,788.00	1,029,285.18	3.000	1.981	813	776	03/18/2020
3130ACN83	5179	Federal Home Loan Bank-CN		12/29/2017	5,000,000.00	4,935,180.00	4,980,234.16	1.700	2.002	868	834	05/15/2020
3130AD4X7	5183	Federal Home Loan Bank-CN		01/19/2018	5,000,000.00	4,952,715.00	4,984,584.08	2.000	2.180	1,057	1,044	12/11/2020
3137EADP1	4818	Federal Home Loan Mortgage Cor		12/23/2014	3,000,000.00	2,998,662.00	2,998,987.38	0.875	1.220	1,170	34	03/07/2018
3137EADP1	4823	Federal Home Loan Mortgage Cor		01/23/2015	5,000,000.00	4,997,770.00	4,999,280.96	0.875	1.021	1,139	34	03/07/2018
3137EADG1	4870	Federal Home Loan Mortgage Cor		06/25/2015	3,000,000.00	2,988,537.00	3,010,774.96	1.750	1.471	1,435	483	05/30/2019
3134G73M1	4969	Federal Home Loan Mortgage Cor		11/23/2015	3,500,000.00	3,487,253.00	3,496,804.98	1.000	1.190	977	176	07/27/2018
3134G8QB8	5005	Federal Home Loan Mortgage Cor		03/29/2016	3,000,000.00	2,974,614.00	3,000,000.00	1.270	1.270	1,095	421	03/29/2019
3137EADG1	5014	Federal Home Loan Mortgage Cor		04/18/2016	5,000,000.00	4,980,895.00	5,051,016.49	1.750	0.970	1,137	483	05/30/2019
3137EADG1	5015	Federal Home Loan Mortgage Cor		04/18/2016	5,000,000.00	4,980,895.00	5,051,648.43	1.750	0.960	1,137	483	05/30/2019

Santa Clara Valley Water Dist.
Portfolio Management
Portfolio Details - Investments
January 31, 2018

CUSIP	Investment #	Issuer	Average Balance	Purchase Date	Par Value	Market Value	Book Value	Stated Rate	YTM 365	Term	Days to Maturity	Maturity Date
Federal Agency Issues - Coupon												
3137EADG1	5016	Federal Home Loan Mortgage Cor		05/04/2016	3,000,000.00	2,988,537.00	3,030,200.39	1.750	0.980	1,121	483	05/30/2019
3134G9XU6	5027	Federal Home Loan Mortgage Cor		06/30/2016	3,000,000.00	2,973,105.00	3,000,000.00	1.000	1.000	1,278	697	12/30/2019
3134G3ZW3	5040	Federal Home Loan Mortgage Cor		06/28/2016	3,000,000.00	2,992,815.00	3,005,543.57	1.200	0.840	771	188	08/08/2018
3134G9YJ0	5041	Federal Home Loan Mortgage Cor		06/30/2016	1,615,000.00	1,581,346.63	1,615,000.00	1.300	1.300	1,826	1,245	06/30/2021
3137EADZ9	5059	Federal Home Loan Mortgage Cor		10/25/2016	3,000,000.00	2,967,708.00	3,006,948.88	1.125	0.930	902	438	04/15/2019
3134GBV82	5153	Federal Home Loan Mortgage Cor		10/30/2017	3,000,000.00	2,949,801.00	3,000,000.00	2.000	2.000	1,369	1,275	07/30/2021
3134GB4R0	5162	Federal Home Loan Mortgage Cor		12/15/2017	3,000,000.00	2,958,837.00	3,000,000.00	2.250	2.250	1,826	1,778	12/15/2022
3137EAEB1	5056	Fed Home Loan Mort Corp-CN		09/21/2016	3,000,000.00	2,947,989.00	2,995,409.82	0.875	0.981	1,031	533	07/19/2019
3137EAEB1	5080	Fed Home Loan Mort Corp-CN		01/23/2017	3,000,000.00	2,947,989.00	2,979,086.25	0.875	1.360	907	533	07/19/2019
3137EAEB1	5083	Fed Home Loan Mort Corp-CN		01/23/2017	3,000,000.00	2,947,989.00	2,979,033.21	0.875	1.361	907	533	07/19/2019
3137EAEF2	5119	Fed Home Loan Mort Corp-CN		06/30/2017	5,000,000.00	4,910,200.00	4,981,797.04	1.375	1.543	1,025	809	04/20/2020
3137EAEF2	5120	Fed Home Loan Mort Corp-CN		06/30/2017	3,000,000.00	2,946,120.00	2,990,364.53	1.375	1.523	1,025	809	04/20/2020
3137EADR7	5145	Fed Home Loan Mort Corp-CN		09/13/2017	3,000,000.00	2,946,261.00	2,996,360.13	1.375	1.430	961	820	05/01/2020
3135G0A78	5180	FNMA Discount Note		01/18/2018	5,000,000.00	4,948,710.00	4,958,264.18	1.625	2.059	733	719	01/21/2020
3135G0WJ8	4772	Fed Natl Mortgage Assoc		04/23/2014	5,000,000.00	4,990,090.00	4,990,988.69	0.875	1.485	1,489	109	05/21/2018
3135G0WJ8	4863	Fed Natl Mortgage Assoc		06/23/2015	3,000,000.00	2,994,054.00	2,998,331.11	0.875	1.060	1,063	109	05/21/2018
3135G0ZA4	4871	Fed Natl Mortgage Assoc		06/25/2015	3,000,000.00	2,996,313.00	3,015,456.58	1.875	1.370	1,335	383	02/19/2019
3135G0ZY2	4872	Fed Natl Mortgage Assoc		06/25/2015	3,000,000.00	2,978,418.00	3,005,755.44	1.750	1.640	1,615	663	11/26/2019
3135G0ZY2	4873	Fed Natl Mortgage Assoc		06/25/2015	3,000,000.00	2,978,418.00	3,004,710.57	1.750	1.660	1,615	663	11/26/2019
3135G0YT4	4888	Fed Natl Mortgage Assoc		07/02/2015	5,000,000.00	4,990,820.00	5,014,630.86	1.625	1.260	1,244	299	11/27/2018
3135G0YT4	4896	Fed Natl Mortgage Assoc		07/14/2015	2,500,000.00	2,495,410.00	2,507,522.01	1.625	1.250	1,232	299	11/27/2018
3135G0WJ8	4952	Fed Natl Mortgage Assoc		10/26/2015	3,000,000.00	2,994,054.00	2,999,953.62	0.875	0.880	938	109	05/21/2018
3135G0WJ8	4953	Fed Natl Mortgage Assoc		10/26/2015	3,000,000.00	2,994,054.00	2,999,868.36	0.875	0.890	938	109	05/21/2018
3135G0WJ8	4956	Fed Natl Mortgage Assoc		10/28/2015	3,000,000.00	2,994,054.00	3,000,668.58	0.875	0.801	936	109	05/21/2018
3135G0WJ8	4964	Fed Natl Mortgage Assoc		11/19/2015	5,000,000.00	4,990,090.00	4,996,286.59	0.875	1.122	914	109	05/21/2018
3135G0WJ8	4967	Fed Natl Mortgage Assoc		11/23/2015	5,000,000.00	4,990,090.00	4,996,080.18	0.875	1.136	910	109	05/21/2018
3135G0WJ8	4977	Fed Natl Mortgage Assoc		12/15/2015	3,000,000.00	2,994,054.00	2,997,306.51	0.875	1.174	888	109	05/21/2018
3135G0WJ8	4978	Fed Natl Mortgage Assoc		12/15/2015	3,000,000.00	2,994,054.00	2,997,340.41	0.875	1.170	888	109	05/21/2018
3135G0WJ8	4979	Fed Natl Mortgage Assoc		12/15/2015	3,000,000.00	2,994,054.00	2,997,628.35	0.875	1.138	888	109	05/21/2018
3135G0R39	5077	Fed Natl Mortgage Assoc		01/23/2017	3,000,000.00	2,942,139.00	2,973,784.96	1.000	1.517	1,004	630	10/24/2019
3135G0ZG1	5078	Fed Natl Mortgage Assoc		01/23/2017	3,000,000.00	2,981,841.00	3,016,566.77	1.750	1.400	962	588	09/12/2019
3135G0N33	5081	Fed Natl Mortgage Assoc		01/23/2017	3,000,000.00	2,945,757.00	2,975,235.41	0.875	1.436	921	547	08/02/2019
3135G0R39	5082	Fed Natl Mortgage Assoc		01/23/2017	3,000,000.00	2,942,139.00	2,973,900.01	1.000	1.515	1,004	630	10/24/2019
3135G0ZY2	5088	Fed Natl Mortgage Assoc		01/27/2017	3,000,000.00	2,978,418.00	3,015,426.89	1.750	1.460	1,033	663	11/26/2019
3135G0T29	5138	Fed Natl Mortgage Assoc		09/08/2017	3,000,000.00	2,957,841.00	3,008,249.98	1.500	1.385	903	757	02/28/2020

Santa Clara Valley Water Dist.
Portfolio Management
Portfolio Details - Investments
January 31, 2018

CUSIP	Investment #	Issuer	Average Balance	Purchase Date	Par Value	Market Value	Book Value	Stated Rate	YTM 365	Term	Days to Maturity	Maturity Date
Federal Agency Issues - Coupon												
3135G0T29	5181	Fed Natl Mortgage Assoc		01/18/2018	5,000,000.00	4,929,735.00	4,973,731.41	1.500	2.048	771	757	02/28/2020
3135G0T29	5182	Fed Natl Mortgage Assoc		01/19/2018	5,000,000.00	4,929,735.00	4,972,341.21	1.500	2.064	770	757	02/28/2020
3135G0F73	4963	FNMA Discount Notes		11/30/2015	3,000,000.00	2,934,801.00	2,970,056.69	1.500	1.871	1,827	1,033	11/30/2020
3135G0E33	4968	FNMA Discount Notes		11/23/2015	1,500,000.00	1,496,187.00	1,499,687.43	1.125	1.170	970	169	07/20/2018
3135G0E33	4976	FNMA Discount Notes		12/08/2015	3,000,000.00	2,992,374.00	2,999,513.99	1.125	1.160	955	169	07/20/2018
3135G0E33	5011	FNMA Discount Notes		04/18/2016	5,000,000.00	4,987,290.00	5,008,242.16	1.125	0.770	823	169	07/20/2018
3136G3MK8	5018	FNMA Discount Notes		05/25/2016	3,000,000.00	2,945,592.00	3,000,000.00	1.350	1.350	1,279	662	11/25/2019
3136G3MH5	5019	FNMA Discount Notes		05/27/2016	3,000,000.00	2,946,318.00	3,000,000.00	1.250	1.250	1,098	483	05/30/2019
3136G3TU9	5026	FNMA Discount Notes		06/30/2016	5,000,000.00	4,903,980.00	5,000,000.00	1.125	1.125	1,278	697	12/30/2019
3135G0ZE6	5042	FNMA Discount Notes		07/07/2016	3,000,000.00	2,987,526.00	3,042,248.35	1.750	0.721	1,078	504	06/20/2019
3136G0HK0	5043	FNMA Discount Notes		07/07/2016	2,250,000.00	2,240,023.50	2,264,632.12	1.500	0.709	876	302	11/30/2018
3135G0J53	5061	FNMA Discount Notes		10/25/2016	3,000,000.00	2,968,932.00	3,002,334.72	1.000	1.171	854	390	02/26/2019
3135G0P72	5174	FNMA Discount Notes		12/29/2017	1,100,000.00	1,078,920.70	1,088,238.97	1.375	2.044	822	788	03/30/2020
880591EC2	4959	Tennesse Valley Authority		10/28/2015	3,000,000.00	3,014,103.00	3,017,868.04	4.500	0.880	886	59	04/01/2018
		Subtotal and Average	**371,348,492.42**		**387,244,000.00**	**383,878,303.96**	**387,517,096.23**		**1.378**	**1,080**	**582**	
Negotiable CD's - Interest Bearing												
05368TAT8	5186	Avidbank Palo Alto Calif		01/30/2018	240,000.00	239,763.60	240,000.00	1.850	1.876	455	453	04/30/2019
062683AN7	5140	Bank of Hope		09/22/2017	240,000.00	239,195.28	240,000.00	1.600	1.596	546	414	03/22/2019
410493CN8	5161	Hanmi Bank		11/22/2017	235,000.00	233,690.58	235,000.00	1.800	1.800	730	659	11/22/2019
69406PCQ0	5160	Pacific City Bank		11/24/2017	235,000.00	233,254.42	235,000.00	1.700	1.700	731	662	11/25/2019
		Subtotal and Average	**812,419.35**		**950,000.00**	**945,903.88**	**950,000.00**		**1.743**	**614**	**546**	
LAIF												
SYS88-0237LAIF	88-0237LAIF	Local Agency Investment Fund			63,937,454.92	63,937,454.92	63,937,454.92	1.200	1.200	1	1	
		Subtotal and Average	**56,616,555.65**		**63,937,454.92**	**63,937,454.92**	**63,937,454.92**		**1.200**	**1**	**1**	
Medium Term Notes												
037833AJ9	4830	Apple Inc		03/27/2015	2,000,000.00	1,996,820.00	1,998,997.56	1.000	1.200	1,133	91	05/03/2018
478160BR4	5158	Johnson & Johnson		11/16/2017	2,000,000.00	1,980,638.00	1,992,682.21	1.125	1.687	470	393	03/01/2019
594918AH7	5075	Microsoft Corp		01/09/2017	3,000,000.00	3,050,118.00	3,081,549.93	3.000	1.938	1,361	973	10/01/2020
742651DQ2	5068	Private Export Funding Corp		12/30/2016	1,575,000.00	1,553,293.35	1,570,503.37	1.450	1.640	958	560	08/15/2019
		Subtotal and Average	**8,644,226.33**		**8,575,000.00**	**8,580,869.35**	**8,643,733.07**		**1.655**	**1,030**	**560**	

Santa Clara Valley Water Dist.
Portfolio Management
Portfolio Details - Investments
January 31, 2018

CUSIP	Investment #	Issuer	Average Balance	Purchase Date	Par Value	Market Value	Book Value	Stated Rate	YTM 365	Term	Days to Maturity	Maturity Date
Money Market Account												
23380W523	4102	Daily Income US Gov MMF			36,622,519.35	36,622,519.35	36,622,519.35	0.001	0.001	1	1	
		Subtotal and Average	**35,686,853.72**		**36,622,519.35**	**36,622,519.35**	**36,622,519.35**		**0.001**	**1**	**1**	
Apple Deposit Account												
SYS4912	4912	AAPL		07/01/2017	0.00	0.00	0.00	0.005	0.005	1	1	
		Subtotal and Average	**0.00**		**0.00**	**0.00**	**0.00**		**0.000**	**0**	**0**	
Supranational												
4581X0CD8	5187	INTERAMERI DEV		01/30/2018	3,000,000.00	2,978,442.00	2,997,860.27	2.125	2.330	1,014	1,012	11/09/2020
459058ER0	4989	INTL BK RECON & DEVELOP		01/04/2016	3,000,000.00	2,980,566.00	2,992,436.25	1.000	1.380	1,005	246	10/05/2018
45950KCL2	5111	INTL FINANCE CORP		05/26/2017	3,000,000.00	2,964,660.00	3,014,172.63	1.750	1.526	1,039	788	03/30/2020
		Subtotal and Average	**7,651,584.07**		**9,000,000.00**	**8,923,668.00**	**9,004,469.15**		**1.745**	**1,019**	**682**	
Municipal Bonds												
13066YTY5	5054	CA Department Water Resources		09/28/2016	2,953,360.47	2,878,108.85	2,953,360.47	1.713	1.713	1,676	1,185	05/01/2021
801546PE6	5156	Cnty Santa Clara		11/09/2017	3,000,000.00	2,978,910.00	3,017,031.33	2.125	1.891	996	912	08/01/2020
79765R3U1	5164	San Fran CY&Cnty CA PUC WTR		12/28/2017	1,000,000.00	986,180.00	1,000,000.00	2.619	2.619	1,769	1,734	11/01/2022
79765R3R8	5165	San Fran CY&Cnty CA PUC WTR		12/28/2017	400,000.00	398,088.00	400,000.00	2.132	2.132	673	638	11/01/2019
79765R3S6	5167	San Fran CY&Cnty CA PUC WTR		12/28/2017	100,000.00	99,144.00	100,000.00	2.298	2.297	1,039	1,004	11/01/2020
91412GWU5	4828	University of California		03/25/2015	635,000.00	634,504.70	635,000.00	1.418	1.418	1,147	103	05/15/2018
		Subtotal and Average	**8,105,671.92**		**8,088,360.47**	**7,974,935.55**	**8,105,391.80**		**1.896**	**1,336**	**1,037**	
		Total and Average	**494,759,668.47**		**517,417,334.74**	**513,815,139.01**	**517,771,269.78**		**1.280**	**871**	**479**	

Santa Clara Valley Water District

SANTA CLARA VALLEY WATER
5750 Almaden Expressway
San Jose, San Jose, Ca 951
(408)265-2607

Santa Clara Valley Water Dist.
Transaction Activity Report
January 1, 2018 - January 31, 2018
Sorted by Transaction Date - Transaction Date
All Funds

Investment #	Fund	CUSIP	Investment Description	Transaction Type	Transaction Date	Maturity Date	Redemption Type	New Principal	Principal Paydowns	Interest	Total Cash
4102	82	23380W523	Money Market Fund	Purchase	01/02/2018			10,497.50			-10,497.50
4102	82	23380W523	Money Market Fund	Purchase	01/02/2018			15,000.00			-15,000.00
4102	82	23380W523	Money Market Fund	Purchase	01/02/2018			28,125.00			-28,125.00
4102	82	23380W523	Money Market Fund	Purchase	01/02/2018			28,750.00			-28,750.00
4102	82	23380W523	Money Market Fund	Purchase	01/02/2018			3,800,000.00			-3,800,000.00
4102	82	23380W523	Money Market Fund	Purchase	01/02/2018			25,951.14			-25,951.14
5024	82	3130A8H48	FHLB-C 1.15% MAT 07/01/2020	Interest	01/02/2018	07/01/2020				28,750.00	28,750.00
5026	82	3136G3TU9	FNMAD 1.125% MAT 12/30/2019	Interest	01/02/2018	12/30/2019				28,125.00	28,125.00
5027	82	3134G9XU6	FHLMC 1.% MAT 12/30/2019	Interest	01/02/2018	12/30/2019				15,000.00	15,000.00
5041	82	3134G9YJ0	FHLMC 1.3% MAT 06/30/2021	Interest	01/02/2018	06/30/2021				10,497.50	10,497.50
4102	82	23380W523	Money Market Fund	Interest	01/02/2018					25,951.14	25,951.14
		Totals for 01/02/2018						**3,908,323.64**		**108,323.64**	**-3,800,000.00**
4102	82	23380W523	Money Market Fund	Redemption	01/03/2018				13,000,000.00		13,000,000.00
		Totals for 01/03/2018							**13,000,000.00**		13,000,000.00
4102	82	23380W523	Money Market Fund	Redemption	01/04/2018				13,000,000.00		13,000,000.00
88-0237LAIF	82	SYS88-0237LAIF	LAIF 4.958%	Redemption	01/04/2018				15,000,000.00		15,000,000.00
		Totals for 01/04/2018							**28,000,000.00**		28,000,000.00
4102	82	23380W523	Money Market Fund	Purchase	01/05/2018			23,500,000.00			-23,500,000.00
		Totals for 01/05/2018						**23,500,000.00**			-23,500,000.00
4102	82	23380W523	Money Market Fund	Redemption	01/08/2018				2,300,000.00		2,300,000.00
		Totals for 01/08/2018							**2,300,000.00**		2,300,000.00
4102	82	23380W523	Money Market Fund	Redemption	01/09/2018				1,000,000.00		1,000,000.00
		Totals for 01/09/2018							**1,000,000.00**		1,000,000.00
4102	82	23380W523	Money Market Fund	Redemption	01/10/2018				1,700,000.00		1,700,000.00
		Totals for 01/10/2018							**1,700,000.00**		1,700,000.00
4102	82	23380W523	Money Market Fund	Redemption	01/11/2018				200,000.00		200,000.00
		Totals for 01/11/2018							**200,000.00**		200,000.00
4102	82	23380W523	Money Market Fund	Purchase	01/12/2018			171.16			-171.16
4102	82	23380W523	Money Market Fund	Purchase	01/12/2018			22,500.00			-22,500.00
4102	82	23380W523	Money Market Fund	Purchase	01/12/2018			6,000,000.00			-6,000,000.00

Investment #	Fund	CUSIP	Investment Description	Transaction Type	Transaction Date	Maturity Date	Redemption Type	New Principal	Principal Paydowns	Interest	Total Cash
4102	82	23380W523	Money Market Fund	Purchase	01/12/2018			245,000.00			-245,000.00
88-0237LAIF	82	SYS88-0237LAIF	LAIF 4.958%	Purchase	01/12/2018			177,079.76			-177,079.76
4820	82	3137EADN6	FHLMC 0.75% MAT 01/12/2018	Redemption	01/12/2018	01/12/2018	Maturity		3,000,000.00		3,000,000.00
5031	82	3137EADN6	FHLMC 0.75% MAT 01/12/2018	Redemption	01/12/2018	01/12/2018	Maturity		3,000,000.00		3,000,000.00
5071	82	32115RAP0	FNB SC 0.85% MAT 01/12/2018	Redemption	01/12/2018	01/12/2018	Maturity		245,000.00		245,000.00
4102	82	23380W523	Money Market Fund	Redemption	01/12/2018				10,300,000.00		10,300,000.00
4820	82	3137EADN6	FHLMC 0.75% MAT 01/12/2018	Interest	01/12/2018	01/12/2018				11,250.00	11,250.00
5031	82	3137EADN6	FHLMC 0.75% MAT 01/12/2018	Interest	01/12/2018	01/12/2018				11,250.00	11,250.00
5071	82	32115RAP0	FNB SC 0.85% MAT 01/12/2018	Interest	01/12/2018	01/12/2018				171.16	171.16
88-0237LAIF	82	SYS88-0237LAIF	LAIF 4.958%	Interest	01/12/2018					177,079.76	177,079.76
		Totals for 01/12/2018						**6,444,750.92**	**16,545,000.00**	**199,750.92**	**10,300,000.00**
4102	82	23380W523	Money Market Fund	Purchase	01/16/2018			3,000,000.00			-3,000,000.00
4102	82	23380W523	Money Market Fund	Purchase	01/16/2018			1,500,000.00			-1,500,000.00
4102	82	23380W523	Money Market Fund	Purchase	01/16/2018			10,200.00			-10,200.00
5029	82	4581X0CL0	IABD 1.25% MAT 01/16/2018	Redemption	01/16/2018	01/16/2018	Maturity		3,000,000.00		3,000,000.00
5029	82	4581X0CL0	IABD 1.25% MAT 01/16/2018	Interest	01/16/2018	01/16/2018				10,200.00	10,200.00
		Totals for 01/16/2018						**4,510,200.00**	**3,000,000.00**	**10,200.00**	**-1,500,000.00**
4102	82	23380W523	Money Market Fund	Purchase	01/17/2018			1,800,000.00			-1,800,000.00
		Totals for 01/17/2018						**1,800,000.00**			**-1,800,000.00**
5180	82	3135G0A78	FNDN 1.625% MAT 01/21/2020	Purchase	01/18/2018	01/21/2020		4,997,447.92			-4,997,447.92
5181	82	3135G0T29	FNMA 1.5% MAT 02/28/2020	Purchase	01/18/2018	02/28/2020		4,972,766.67			-4,972,766.67
4102	82	23380W523	Money Market Fund	Redemption	01/18/2018				39,947.92		39,947.92
4102	82	23380W523	Money Market Fund	Redemption	01/18/2018				29,166.67		29,166.67
4102	82	23380W523	Money Market Fund	Redemption	01/18/2018				3,400,000.00		3,400,000.00
4102	82	23380W523	Money Market Fund	Redemption	01/18/2018				4,957,500.00		4,957,500.00
4102	82	23380W523	Money Market Fund	Redemption	01/18/2018				4,943,600.00		4,943,600.00
		Totals for 01/18/2018						**9,970,214.59**	**13,370,214.59**		**3,400,000.00**
5183	82	3130AD4X7	FHLB-C 2.% MAT 12/11/2020	Purchase	01/19/2018	12/11/2020		4,984,294.44			-4,984,294.44
5182	82	3135G0T29	FNMA 1.5% MAT 02/28/2020	Purchase	01/19/2018	02/28/2020		4,971,425.00			-4,971,425.00
4102	82	23380W523	Money Market Fund	Purchase	01/19/2018			34,000,000.00			-34,000,000.00
4102	82	23380W523	Money Market Fund	Purchase	01/19/2018			39,375.00			-39,375.00
88-0237LAIF	82	SYS88-0237LAIF	LAIF 4.958%	Purchase	01/19/2018			15,000,000.00			-15,000,000.00
4102	82	23380W523	Money Market Fund	Redemption	01/19/2018				29,375.00		29,375.00
4102	82	23380W523	Money Market Fund	Redemption	01/19/2018				9,444.44		9,444.44
4102	82	23380W523	Money Market Fund	Redemption	01/19/2018				4,942,050.00		4,942,050.00
4102	82	23380W523	Money Market Fund	Redemption	01/19/2018				4,974,850.00		4,974,850.00
5056	82	3137EAEB1	FMAC-C 0.875% MAT 07/19/2019	Interest	01/19/2018	07/19/2019				13,125.00	13,125.00

Investment #	Fund	CUSIP	Investment Description	Transaction Type	Transaction Date	Maturity Date	Redemption Type	New Principal	Principal Paydowns	Interest	Total Cash
5080	82	3137EAEB1	FMAC-C 0.875% MAT 07/19/2019	Interest	01/19/2018	07/19/2019				13,125.00	**13,125.00**
5083	82	3137EAEB1	FMAC-C 0.875% MAT 07/19/2019	Interest	01/19/2018	07/19/2019				13,125.00	**13,125.00**
		Totals for 01/19/2018						**58,995,094.44**	**9,955,719.44**	**39,375.00**	**-49,000,000.00**
4102	82	23380W523	Money Market Fund	Purchase	01/22/2018			326.14			**-326.14**
4102	82	23380W523	Money Market Fund	Purchase	01/22/2018			359.26			**-359.26**
4102	82	23380W523	Money Market Fund	Purchase	01/22/2018			53,437.50			**-53,437.50**
4102	82	23380W523	Money Market Fund	Purchase	01/22/2018			40,625.00			**-40,625.00**
4968	82	3135G0E33	FNMAD 1.125% MAT 07/20/2018	Interest	01/22/2018	07/20/2018				8,437.50	**8,437.50**
4976	82	3135G0E33	FNMAD 1.125% MAT 07/20/2018	Interest	01/22/2018	07/20/2018				16,875.00	**16,875.00**
5011	82	3135G0E33	FNMAD 1.125% MAT 07/20/2018	Interest	01/22/2018	07/20/2018				28,125.00	**28,125.00**
5140	82	062683AN7	BHOPE 1.6% MAT 03/22/2019	Interest	01/22/2018	03/22/2019				326.14	**326.14**
5161	82	410493CN8	HANMI 1.8% MAT 11/22/2019	Interest	01/22/2018	11/22/2019				359.26	**359.26**
5180	82	3135G0A78	FNDN 1.625% MAT 01/21/2020	Interest	01/22/2018	01/21/2020				40,625.00	**40,625.00**
5180	82	3135G0A78	FNDN 1.625% MAT 01/21/2020	Accr Int	01/22/2018	01/21/2020			39,947.92	-39,947.92	**0.00**
		Totals for 01/22/2018						**94,747.90**	**39,947.92**	**54,799.98**	**0.00**
5184	82	3133EJAD1	FFCB 2.15% MAT 12/23/2020	Purchase	01/23/2018	12/23/2020		4,997,370.00			**-4,997,370.00**
5185	82	3133EJAD1	FFCB 2.15% MAT 12/23/2020	Purchase	01/23/2018	12/23/2020		4,999,500.00			**-4,999,500.00**
4102	82	23380W523	Money Market Fund	Purchase	01/23/2018			6,000,000.00			**-6,000,000.00**
4102	82	23380W523	Money Market Fund	Redemption	01/23/2018				4,997,370.00		**4,997,370.00**
4102	82	23380W523	Money Market Fund	Redemption	01/23/2018				4,999,500.00		**4,999,500.00**
		Totals for 01/23/2018						**15,996,870.00**	**9,996,870.00**		**-6,000,000.00**
4102	82	23380W523	Money Market Fund	Purchase	01/24/2018			339.30			**-339.30**
5160	82	69406PCQ0	PCB 1.7% MAT 11/25/2019	Interest	01/24/2018	11/25/2019				339.30	**339.30**
		Totals for 01/24/2018						**339.30**		**339.30**	**0.00**
4102	82	23380W523	Money Market Fund	Redemption	01/25/2018				800,000.00		**800,000.00**
		Totals for 01/25/2018							**800,000.00**		**800,000.00**
4102	82	23380W523	Money Market Fund	Purchase	01/26/2018			**4,400,000.00**			**-4,400,000.00**
		Totals for 01/26/2018						**4,400,000.00**			**-4,400,000.00**
4102	82	23380W523	Money Market Fund	Purchase	01/29/2018			30,450.00			**-30,450.00**
4102	82	23380W523	Money Market Fund	Purchase	01/29/2018			17,500.00			**-17,500.00**
4102	82	23380W523	Money Market Fund	Redemption	01/29/2018				100,000.00		**100,000.00**
4969	82	3134G73M1	FHLMC 1.% MAT 07/27/2018	Interest	01/29/2018	07/27/2018				17,500.00	**17,500.00**
5086	82	3133EG5D3	FFCB 2.03% MAT 01/27/2022	Interest	01/29/2018	01/27/2022				30,450.00	**30,450.00**
		Totals for 01/29/2018						**47,950.00**	**100,000.00**	**47,950.00**	**100,000.00**
5186	82	05368TAT8	AVID 1.85% MAT 04/30/2019	Purchase	01/30/2018	04/30/2019		240,000.00			**-240,000.00**
5187	82	4581X0CD8	INTERA 2.125% MAT 11/09/2020	Purchase	01/30/2018	11/09/2020		2,997,843.75			**-2,997,843.75**

Investment #	Fund	CUSIP	Investment Description	Transaction Type	Transaction Date	Maturity Date	Redemption Type	New Principal	Principal Paydowns	Interest	Total Cash
4102	82	23380W523	Money Market Fund	Purchase	01/30/2018			29,225.00			-29,225.00
4102	82	23380W523	Money Market Fund	Purchase	01/30/2018			15,000.00			-15,000.00
4102	82	23380W523	Money Market Fund	Redemption	01/30/2018				14,343.75		14,343.75
4102	82	23380W523	Money Market Fund	Redemption	01/30/2018				240,000.00		240,000.00
4102	82	23380W523	Money Market Fund	Redemption	01/30/2018				2,983,500.00		2,983,500.00
4102	82	23380W523	Money Market Fund	Redemption	01/30/2018				3,000,000.00		3,000,000.00
5087	82	3130AAQV3	FHLB 1.67% MAT 04/30/2020	Interest	01/30/2018	04/30/2020				29,225.00	29,225.00
5153	82	3134GBV82	FHLMC 2.% MAT 07/30/2021	Interest	01/30/2018	07/30/2021				15,000.00	15,000.00
		Totals for 01/30/2018						**3,282,068.75**	**6,237,843.75**	**44,225.00**	**3,000,000.00**
4102	82	23380W523	Money Market Fund	Purchase	01/31/2018			13,125.00			-13,125.00
4102	82	23380W523	Money Market Fund	Purchase	01/31/2018			3,000,000.00			-3,000,000.00
5038	82	912828UJ7	T-BILL 0.875% MAT 01/31/2018	Redemption	01/31/2018	01/31/2018	Maturity		3,000,000.00		3,000,000.00
4102	82	23380W523	Money Market Fund	Redemption	01/31/2018				4,500,000.00		4,500,000.00
5038	82	912828UJ7	T-BILL 0.875% MAT 01/31/2018	Interest	01/31/2018	01/31/2018				13,125.00	13,125.00
		Totals for 01/31/2018						**3,013,125.00**	**7,500,000.00**	**13,125.00**	**4,500,000.00**
		Grand Total						**135,963,684.54**	**113,745,595.70**	**518,088.84**	**-21,700,000.00**

Santa Clara Valley Water District

Santa Clara Valley Water Dist.
Purchases Report
Sorted by Purchase Date - Issuer
January 1, 2018 - January 31, 2018

SANTA CLARA VALLEY WATER
5750 Almaden Expressway
San Jose, San Jose, Ca 951
(408)265-2607

CUSIP	Investment #	Fund	Sec. Type	Issuer	Original Par Value	Purchase Date	Payment Periods	Principal Purchased	Accrued Interest at Purchase	Rate at Purchase	Maturity Date	YTM	Ending Book Value
05368TAT8	5186	82	NCB	AVID	240,000.00	01/30/2018	04/30 - At Maturity	240,000.00		1.850	04/30/2019	1.850	240,000.00
3133EJAD1	5184	82	FAC	FFCB	5,000,000.00	01/23/2018	06/23 - 12/23	4,997,370.00		2.150	12/23/2020	2.169	4,997,390.04
3133EJAD1	5185	82	FAC	FFCB	5,000,000.00	01/23/2018	06/23 - 12/23	4,999,500.00		2.150	12/23/2020	2.154	4,999,503.81
3130AD4X7	5183	82	FAC	FHLB-C	5,000,000.00	01/19/2018	06/11 - 12/11	4,974,850.00	9,444.44	2.000	12/11/2020	2.180	4,984,584.08
3135G0A78	5180	82	FAC	FNDN	5,000,000.00	01/18/2018	01/21 - 07/21	4,957,500.00	Received	1.625	01/21/2020	2.059	4,958,264.18
3135G0T29	5181	82	FAC	FNMA	5,000,000.00	01/18/2018	02/28 - 08/28	4,943,600.00	29,166.67	1.500	02/28/2020	2.048	4,973,731.41
3135G0T29	5182	82	FAC	FNMA	5,000,000.00	01/19/2018	02/28 - 08/28	4,942,050.00	29,375.00	1.500	02/28/2020	2.064	4,972,341.21
4581X0CD8	5187	82	MC2	IADB	3,000,000.00	01/30/2018	05/09 - 11/09	2,983,500.00	14,343.75	2.125	11/09/2020	2.330	2,997,860.27
			Total Purchases		**33,240,000.00**			**33,038,370.00**	**82,329.86**				**33,123,675.00**

Received = Accrued Interest at Purchase was received by report ending date.