



NON-AGENDA

April 26, 2019

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

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9	Memo from Nina Hawk, COO/WUE, to the Board, dated 04/18/19, regarding SFPUC Drought Planning Scenarios (I-19-0001).
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16	Memo from Alexander Gordon, Emergency Services, to Tina Yoke, COO/IT-AS, dated 04/19/19, regarding Local Hazard Mitigation Plan Annual Progress Report.
	<u>INCOMING BOARD CORRESPONDENCE</u>
31	Board Correspondence Weekly Report: 04/25/19
33	Email from Linda Wyckoff to the Board, dated 04/19/19, regarding Regnart Creek Trail setbacks (C-19-0110).
34	Email from Bruce Preville to Director Kremen, dated 04/19/19, regarding contents of purified water (C-19-0111).
35	Email from Long Le to Director Santos, dated 04/19/19, regarding the Landscape Rebate program (C-19-0112).
37	Email from Gerhard Eschelbeck to Director Hsueh, dated 04/21/19, regarding Stevens Creek Reservoir (C-19-0113).
39	Email from Benaifer Dastoor to the Board, dated 04/21/19, regarding Regnart Creek Trail (C-19-0114).
47	Email from Tony Fong to the Board, dated 04/21/19, regarding Regnart Creek Trail (C-19-0115).
50	Email from Fari Aberg to the Board, dated 04/21/19, regarding Regnart Creek Trail (C-19-0116).
52	Email from Shekar Pasumarthi to the Board, dated 04/21/19, regarding Regnart Creek Trail (C-19-0117).
55	Email from Ilango Ganga to the Board, dated 04/21/19, regarding Regnart Creek Trail (C-19-0118).

- 57 Letter from Ben Stetson to Director Keegan, dated 04/18/19, thanking her for speaking at their event (C-19-0119).
- 58 Letter from Ben Stetson to Director Kremen, dated 04/18/19, thanking him for speaking at their event (C-19-0120).
- 59 Letter from Brent Hastey to Director Varela, dated 04/16/19, regarding the upcoming ACWA/JPIE Executive Committee elections (C-19-0121).
- 61 Email from Prashant Kondawar to the Board, dated 04/23/19, regarding Cinnabar Hills Road Bridge over Almaden Calero Canal (C-19-0122).
- 63 Email from Patrick Ferraro to the Board, dated 04/23/19, regarding the Open Space Credit (C-19-0123).

OUTGOING BOARD CORRESPONDENCE

- 65 Letter from Chair LeZotte to David Bernhardt, US Department of Interior, dated 04/22/19, congratulating him on his recent confirmation as Secretary of the Interior.

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



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

Chief Executive Officer Bulletin Week of April 19 – 25, 2019

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.

Item	IN THIS ISSUE
<u>1</u>	Monthly EH&S Highlights report accessible to all employees
<u>2</u>	28th Annual National River Cleanup Day - Saturday, May 18, 2019
<u>3</u>	<u>Hsueh</u> Notify former Uvas/Llagas Flood Protection Advisory Committee members of the 404 Permit signing with the U.S. Army Corp of Engineers for the Upper Llagas Flood Protection Project I-19-001

Monthly EH&S Highlights report accessible to all employees

Since mid-2006, the Environmental, Health & Safety (EH&S) Unit has compiled a Monthly EH&S Highlights report that has been distributed to the Management Leadership Team and Bargaining Unit Leadership. This report includes incident descriptions, EH&S support on Valley Water projects, safety training that has taken place, and other pertinent information and statistics. These reports are posted monthly on the EH&S webpage for all employees to access.

The EH&S Unit has recently updated the format of this report for ease of reading and better visual appeal. Starting this month, and moving forward, EH&S will release the Monthly EH&S Highlights report via News You Can Use so that all employees can readily and easily access the information.

The report for March 2019, is currently posted on News You Can Use under the Health & Safety section. Going forward, please look for the Monthly EH&S Highlights in News You Can Use Section of the Aqua.gov website.

For further information, please contact Tina Yoke at (408) 630-2385.

28th Annual National River Cleanup Day - Saturday, May 18, 2019

On Saturday, May 18, 2019, from 9 a.m. to Noon, Valley Water, in partnership with the Creek Connections Action Group (CCAG*), will host the 28th Annual National River Cleanup Day (NRCD) in Santa Clara County.

From Palo Alto to Gilroy, 52 cleanup sites have been registered countywide. Last year, a total of 1,354 volunteers attended 48 cleanup sites and picked up a total of 47,353 lbs of trash in three (3) hours. This year, Valley Water has a variety of partners, corporations, nonprofits, and other organizations participating, including Cisco Systems, San Jose State University, Comerica Bank, Fairmont San Jose, Rotary Club of San Jose, Thompson Creek Neighborhood Association, Don Edwards National Wildlife Refuge, various Boy/Girl Scouts, and many others. Valley Water also has new agencies participating, including Kaiser Permanente, PricewaterhouseCoopers, and AmeriCorps. Among these groups, the Youth Commission will also be hosting a cleanup site at the Coyote Creek Outdoor Classroom. Valley Water will be reaching out to Board members to sponsor and/or attend any of the 52 cleanup sites.

Volunteers can register using an interactive map that can be accessed from any desktop or mobile device at <http://bit.ly/NRCD2019SCC>.

A series of newspaper ads have already been published and will continue leading up to National River Cleanup Day. Various other outreach, including NextDoor posts, Social Media, fliers, posters, postcards, eNewsletter, and email blasts are being conducted for volunteer recruitment.

Valley Water will be leveraging the momentum from the volunteers to further encourage them to sign up for the upcoming Coastal Cleanup Day, Adopt-A-Creek Program, and to support other Valley Water volunteer efforts.

*The CCAG is a consortium of public agencies and non-profit organizations that share a goal of protecting Santa Clara County's waterways. These agencies include Valley Water (lead agency), Santa Clara County Parks and Recreation, City of San José (Parks Recreation and Neighborhood Services, Environmental Services Department), City of Santa Clara, City of Palo Alto, City of Sunnyvale, City of Milpitas, City of Cupertino, and West Valley Clean Water Program (Campbell, Monte Sereno, Saratoga and the Town of Los Gatos).

For further information, please contact Rick Callender at (408) 630-2017.

Hsueh

Notify former Uvas/Llagas Flood Protection Advisory Committee members of the 404 Permit signing with the U.S. Army Corp of Engineers for the Upper Llagas Flood Protection Project I-19-001

The Board Member Request directed Valley Water to notify former Uvas/Llagas Flood Protection Advisory Committee members of the 404 Permit signing with the U.S. Army Corp of Engineers (USACE) for the Upper Llagas Flood Protection Project (Project).

A letter to the members of this former committee was provided to Valley Water's Office of the Clerk of the Board. The Office of the Clerk of the Board will research Valley Water's records for contact information of those former committee members and distribute copies of the letter to each of them.

The letter announces that USACE-Regulatory signed the Record of Decision for the Project. The letter further explains that on March 26, 2019, USACE-Regulatory Chief and Valley Water's Chief Executive Officer signed the USACE's 404 regulatory permit for the Project. The Project, when completed, will provide critical flood risk reduction for approximately 1,100 residences, 500 businesses and 1,300 acres of agricultural lands in Morgan Hill, San Martin and Gilroy. The letter

discusses the history and future of the Project and thanks those former committee members for their valuable work and support over the years to move the Project forward.

For further information, please contact Christopher Hakes at (408) 630-3796.

BOARD MEMBER REQUESTS & INFORMATIONAL ITEMS

Report Name: Board Member Requests

Request	Request Date	Director	BAO/Chief	Staff	Description	20 Days Due Date	Expected Completion Date	Disposition
I-19-0006	03/25/19	Kremen	Hawk	Hall	Please provide Director Kremen with the request for information in the attached email.	04/16/19		
R-19-0001	03/26/19	Hsueh	Hawk	Hakes	Notify former Uvas/Llagas Flood Protection Advisory Committee members of the 404 permit signing with the Army Corps of Engineers for the Upper Llagas Flood Protection Project.	04/16/19		
R-19-0003	03/26/19	Keegan	Callender	Gibson	Director Keegan requested that External Affairs (GRU) assist the Homeless Encampment Ad Hoc Committee with the logistics, topic, participants, etc. for the proposed Homeless Summit.	04/16/19		
R-19-0004	04/11/19	Lezotte	Hawk	Hall	Staff is to come back to the Board with information on new rural zoning proposals being considered by the County for unincorporated lands and include information on upcoming planning meetings.	05/05/19		
R-19-0005	04/23/19	Santos	Hawk	Arends	Staff to provide the Board with an update on the District's recharge ponds.	05/15/19		

TO: Board of Directors

FROM: Nina Hawk

SUBJECT: SFPUC Drought Planning Scenarios (I-19-0001) **DATE:** April 18, 2019

BACKGROUND

Per a request from Mr. Peter Drekmeier to Director Kremen on January 15, 2019, which prompted an Informal Board Member Request (assigned as I-19-0001), Valley Water staff modeled Santa Clara County water supply reliability using the SFPUC drought planning scenario for planning year 2040 with and without SFPUC water delivery reductions resulting from the State Water Quality Control Plan for the San Joaquin Basin (Bay Delta Plan). The SFPUC drought planning scenario involves adding hydrology from two critically dry years (1976-77) to immediately follow the 1987-92 hydrology – in other words, an artificially severe sequence used as a planning scenario. A response was published in the March 1, 2019 CEO Bulletin.

UPDATE

Staff has since refined the modeling analysis and determined that using the SFPUC drought planning scenario with and without the Bay Delta Plan both result in more frequent and severe calls for water use reductions. Modeling indicates there are 6-19% more years with an increase in water use reduction frequency under the SFPUC drought planning scenario with and without the Bay Delta Plan. The severity of water use reductions also increases, especially in drought year 1994 (Table 1). In this SFPUC drought planning scenario, year 1994 is equivalent to the drought year 1977. Note that, since the 1977 drought year follows the 1987-1992 drought with minimal opportunity for recovery, the modeled shortage is severe. Overall, future planned investments that meet Valley Water's level of service goal under Valley Water's modeling approach would not be sufficient to meet Valley Water's level of service goal under the SFPUC drought planning scenario.

For further information, please contact Jerry De La Piedra at (408) 630-2257.

Table 1. Water Use Reductions for Santa Clara County for Hydrology Years 1987-1992 and Adding 1976-1997 as In the SFPUC Drought Planning Scenario

Scenario \ Year	1987	1988	1989	1990	1991	1992	1994 (1976)	1994 (1977)
Base Case		20%	20%	40%	40%	30%	10%	10%
SFPUC Drought Scenario	-	20%	20%	40%	40%	30%	20%	50%
SFPUC Drought Scenario + Bay Delta Plan	-	20%	30%	50%	40%	40%	30%	50%

Nina Hawk
 For Nina Hawk
 Chief Operating Officer
 Water Utility Enterprise



MEMORANDUM

FC 14 (02-08-19)

TO: Board of Directors

FROM: Nina Hawk

SUBJECT: North County LSAA Update

DATE: April 19, 2019

This memorandum provides Valley's Water's Board with an update on staff's plans to secure new permits to divert water from local creeks for groundwater recharge. Valley Water has five diversion facilities for which permits, known as Lake or Streambed Alteration Agreements (LSAA), issued by the California Department of Fish and Wildlife (CDFW), address the instream activities associated with the operation and maintenance of these facilities.

Historic and current reservoir and creek operations are focused largely on groundwater recharge. (For background on groundwater recharge operations, see Attachment 1) The previous LSAA's for the five diversion facilities expired on December 31, 2018 and, while interim diversion operations will continue subject to consultation with CDFW, actions are underway to secure new LSAA's to ensure that full recharge operations can continue into the future. Attachment 2 provides a timeline for the historic permitting of these facilities as well as the recent actions taken to obtain new LSAA's for these facilities.

Current Operations:

The physical facilities covered by the LSAA's include flashboard dams, fish ladders, screened diversion intakes and stream gage stations. A summary of the existing structures and their operations status are provided in the table below.

Facility	Status of LSAA Notification	Status of facility
Alamitos Diversion	Revised Notification sent on 4/10/2019	No Active diversion Flashboard dam removed Fish ladder in operational
Coyote Diversion	Preparing revised Notification including BA, hydrologic study and water quality monitoring plan. To be submitted by 6/30/19	Active In-stream diversion/recharge Flashboard dam is in Fish ladder is operational
Kirk Diversion	Preparing revised Notification including BA, hydrologic study and water quality monitoring plan. To be submitted by 6/30/19	Active Diversion to Camden ponds Rubber dam is up No Fish Ladder
Masson Diversion	Preparing revised Notification including BA, hydrologic study and water quality monitoring plan. To be submitted by 6/30/19	No Active Diversions Flashboard dam is in Fish ladder is operational
Mabury (Maintenance agreement only)	Revised Notification for a long-term maintenance agreement is being finalized. To be submitted by 5/1/19	Not making Imported Water releases Flashboard dam removed Fish Ladder is non-operational

Four of the five facilities above, excluding Mabury, have water rights licenses issued by the State Water Resources Control Board conveying the right to divert water for beneficial uses. The LSAA's issued by CDFW convey the conditions by which we are to conduct activities within the creek to keep fish in good condition.

Valley Water staff continues to work in good faith to provide CDFW with the information needed to complete the LSAA process as quickly as possible. To minimize any adverse impacts to fish and wildlife, no instream activities are planned to occur until new LSAs have been issued. This means that flashboard dams that have been removed will stay out, and those that are currently in will remain in and be operated consistent with the terms of the previous agreements.

During the period when we do not have current LSAs, we will not be able to reinstall the two flashboard dams that have been removed. Fortunately, with the current high groundwater levels in the county, this is not expected to impact the groundwater recharge program as there is ample recharge available through the rest of the system.

Next Steps:

Once the revised notifications are submitted, by June 2019, CDFW may respond with questions or request additional information. Once CDFW determines the notifications are complete, they have 60 days to provide a draft agreement. Once we receive the draft agreements, we will have the option to accept the terms and sign the agreements or propose revisions, which would then go back to CDFW for consideration.

Challenges and Complexities:

Going forward, staff will continue working with CDFW to address any issues associated with these facilities and their operation. The challenges in securing new these LSAs, with reference to our past efforts, are summarized below:

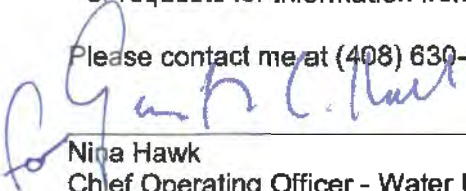
Resources: Reprioritization of existing workload and additional resources have been applied to securing the LSAs, as demonstrated through the environmental restructuring and direction from executive management. Previously, Water Utility Enterprise (WUE) staff were simultaneously working on other notable items including emergency repairs on San Felipe fiber optic facilities, FAHCE EIR, change petitions and permitting to install the VAKI Riverwatcher camera.

Timing: These efforts are now being given high priority among competing work efforts. A database of all permits along with expiration dates is being created to ensure we will have adequate notification. In addition, staff is evaluating the idea of funding a second staff person from CDFW to ensure we have adequate review time for all of Valley Water projects.

Hydrological Complexities: CDFW will request more detailed hydrological information than in past permitting efforts. We are prepared to provide this. In these notifications, they are explicit in their request for hydrology information, specifically flow-habitat relationships. This included information from Fish and Aquatic Habitat Collaborative Effort (FAHCE).

Coordination with Related Projects (FAHCE and Anderson): In securing new LSAs, we will make best efforts to minimize the need for CDFW to request ongoing analysis for LSAs in the context of related efforts including the dam retrofit projects and FAHCE water rights complaints. Because of the complex relationship between these ongoing efforts, it is becoming difficult to evaluate one element without considering others, this may complicate the process and lead to ongoing analysis or requests for information from CDFW.

Please contact me at (408) 630-2736 with any related questions.



Nina Hawk
Chief Operating Officer - Water Utility Enterprise

N. Camacho, M. Richardson, K. Arends, S. Tippetts, G. Hall, V. Gin

ATTACHMENT 1

Background: Groundwater Recharge Operation

Groundwater recharge in the North County occurs both in streams and through recharge facilities, which includes percolation ponds. In order to actively recharge the groundwater basin, water is conveyed to, and stored within, percolation ponds, water then seeps into the groundwater basin for both water supply purposes and to prevent subsidence. Source water for our recharge facilities comes from natural watershed runoff and imported water. Natural watershed runoff is stored in local reservoirs and actively conveyed through creeks, channels and pipelines into our recharge facilities, including percolation ponds. Imported water sources are conveyed through our raw water distribution system and introduced directly into some recharged facilities, including percolation ponds. Imported water is also stored and conveyed within two reservoirs, Anderson and Calero.

As part of the recharge system, under historic water rights licenses, diversion facilities have been installed to actively recharge and divert water into percolation ponds as described above. These water rights for natural stream flows allow for diversion for beneficial use, including recharge. We can also deliver imported water for beneficial uses into streams and percolation ponds per our imported water services contracts. California Department Fish and Wildlife (CDFW) must be notified for diversions of natural flow of any river, creek or lake, which is applicable to instream diversions described below.

The operation and maintenance of diversion structures may affect fish and wildlife; therefore, such activities are subject to California Fish and Game Code §1600 et. seq. that requires notification, a subsequent Lake or Streambed Alteration Agreement (LSAA or agreement) will be issued by CDFW per their determination. LSAA's cover the operation and maintenance of all facilities related to the diversions including flashboard dams, fish ladders, screened diversion intakes, and stream gauges. The notifications submitted to CDFW describe existing diversion operations that maintain fish in good condition, consistent with water rights licenses issued by the State Water Resources Control Board.

ATTACHMENT 2

Lake or Streambed Alteration Agreement (LSAA's) History and Timeline:

Valley Water has five in stream diversions, that requires notification to CDFW, these facilities include Alamitos, Coyote, Kirk, Masson and Mabury. These facilities receive water released from Valley Water reservoirs and pipelines for percolation into the groundwater basin. These five facilities recharge 48 of the 75 percolation ponds within North County. A history and timeline is provided below on the Lake and Streambed Alteration Agreements for these diversions:

1920's and 1930's: The four diversion, Alamitos, Coyote, Kirk and Masson were built and operated under water rights issues by the State Water Resources Control Board.

1987: Valley Water entered into a Memorandum of Understanding (MOU) with the California Department of Fish and Game (now CDFW) for the Installation and Operation of Flashboard Diversion Dams.

2009: The LSAAs for these diversions were first issued in 2009, for a five-year term, to replace a long-term Memorandum of Understanding with CDFW for operation of the facilities.

2014: CDFW agreed to the one-time five-year extension, as allowed by the Fish and Game Code, to December 31, 2018.

2018: In anticipation of the need for renewed agreements, staff began the process of preparing new notifications in early 2018 with the goal of submitting to CDFW in the summer. However, the allocation of resources within the water utility, including planners and biologists, hindered the timely completion of the notifications.

November 30, 2018: Partial notifications were submitted to CDFW. As part of the notifications submitted in November, staff provided as-built plans, more detailed descriptions of operations, and mapped areas of routine maintenance.

January 9, 2019: CDFW sent a letter of incompleteness requesting additional information including: a biological assessment, water quality monitoring plan, and hydrologic studies that include flow-habitat relationships based on the results of instream flow models under development for FAHCE. Additionally, the letter noted an agreement would be required prior to advancing a project (e.g. activities within the creek).

January 17, 2019: Upon discussion with CDFW staff, CDFW supported long-term agreements and requested assessment of passage for Pacific Lamprey, a newly listed State species of concern.

February 7, 2019: A follow up meeting was held with CDFW staff to review the FAHCE model results and clarify the information requested by CDFW. This discussion helped staff understand what modeling information and analysis was to be provided as part of the notifications.

March 22, 2019: A response letter was sent clarifying the request for long-term agreements and transmitting the additional fees required. In addition, the letter explained that the additional information requested by CDFW would be submitted one diversion at a time as the information was completed. This would not only spread out the workload for CDFW staff but also allow any changes that were identified in the first submittal to be incorporated into subsequent submittals, saving time in the process.

April 10, 2019: The first supplemental notification package was sent providing the requested information and analysis for the Alamitos Diversion. The second submittal package for the Mabury Diversion should be submitted by the end of the month. Valley Water intends to complete data gathering and analysis and have the remaining three supplemental packages submitted by June 30, 2019.



MEMORANDUM

FC 14 (02-08-19)

TO: Tina Yoke, COO, Information Technology and Administrative Services

FROM: Alexander Gordon, Manager, Emergency Services and Security

SUBJECT: Local Hazard Mitigation Plan Annual Progress Report

DATE: April 19, 2019

Valley Water's Local Hazard Mitigation Plan (LHMP) is a five-year plan that identifies actions being taken to lessen the impact of natural hazards or potentially removing the threat. The LHMP was adopted by the Board of Directors on April 24, 2018 and approved by the Federal Emergency Management Agency (FEMA) on May 2, 2018. An annual progress report is created, per FEMA guidelines and as detailed in the Valley Water LHMP, which provides updates on implementation of mitigation strategies and actions within the district. The 2019 annual progress report is attached.

Valley Water plans to update its LHMP on a five-year cycle, as required under Title 44 of the Code of Federal Regulation, Section 201.6(d)(3). The five-year update revolves around conducting a current risk assessment that includes the most recent information in regards to natural hazards and their potential impacts within the district service territory. The 2019 annual progress report has resulted in adjustments to the mitigation strategies and actions within the current plan. The current LHMP will be revised to reflect these adjustments. This revision does not take the place of the five-year update. A copy of the revised LHMP will be provided to the State of California and FEMA.

Maintaining a LHMP allows for Valley Water to apply for both post disaster recovery grant funds, as well as mitigation grants as they become available. The LHMP is a public facing plan that seeks public feedback on an annual basis. A key aspect of the LHMP is that it illustrates what Valley Water is doing to improve safety and reliability regarding providing safe clean water and protecting the county from flooding connected to our waterways. Many of the projects and activities that take place at Valley Water are mitigation, such as capital improvement, pipeline and stream maintenance, public outreach and education, and utilization of technology.

This progress report was developed with input by Deputy Operating Officers, Assistant Operating Officers, managers, supervisors and subject matter experts in Water Utility, Watersheds, External Affairs, and Information Technology and Administrative Divisions. Two approval meetings were conducted, which included the contributors listed above, to obtain final review and approval of the progress report content. Valley Water's Office of Communications will be posting external advisories, including newspaper advertisements and social media posts advising the public that the progress report is accessible and open for public feedback for two weeks. The progress report will be available on our external website where the LHMP current resides at <https://www.valleywater.org/LHMP>.


Alexander Gordon

Attachment 1: Santa Clara Valley Water District Local Hazard Mitigation Plan 2019 Annual Report

SANTA CLARA VALLEY WATER DISTRICT LOCAL HAZARD MITIGATION PLAN 2019 ANNUAL REPORT

Local Hazard Mitigation Plan Background

The Federal Emergency Management Agency (FEMA) defines Hazard Mitigation as any action taken to reduce or eliminate the long-term risk to human life and property from natural hazards.

Flood, drought, earthquake, and severe weather are just a few of the hazards to the District's service territory. While natural hazards such as these cannot be prevented, a Hazard Mitigation Plan forms the foundation for a long-term strategy to reduce disaster losses by breaking the repeated cycle of disaster damage and reconstruction.

The federal Disaster Mitigation Act of 2000 (DMA 2000) requires state and local governments to develop hazard mitigation plans as a condition for federal disaster grant assistance. The Santa Clara Valley Water District (the district) has developed a local hazard mitigation plan (LHMP) which was last updated in October, 2017. To prepare the plan, the district organized resources, assessed risks from natural hazards within the district's service territory, developed planning goals and objectives, reviewed mitigation alternatives, and developed an action plan to address probable impacts from natural hazards. By completing this process, the district maintained compliance with the DMA 2000, achieving eligibility for mitigation grant funding opportunities* afforded under the Robert T. Stafford Act. The district's full plan can be viewed on-line at: <https://www.valleywater.org/LHMP>

**Communities with a FEMA-approved LHMP are eligible for FEMA pre- and post-disaster grant funding and for lower costs of flood insurance to residents through the National Flood Insurance Program's (NFIP) Community Rating System (CRS).*

Changes That May Impact Implementation of the Plan / Natural Hazard Events within the Planning Area

During the reporting period, there were no natural hazard events in the planning area that had a measurable impact on people or property. There were no significant changes in the planning area that would have a profound impact on the implementation of the plan.

Summary Overview of the Plan's Progress

The district received final approval of the 2017 Local Hazard Mitigation Plan (LHMP) on May 2, 2018. The initial performance period for this plan will be five (5) years, with an anticipated update to the plan to occur before May 2023. The Hazard Mitigation Plan targeted 48 hazard mitigation initiatives to be pursued during the five-year performance period. Upon reviewing the initiatives for progress during this first reporting period, it was determined that five (5) of the initiatives were either already being addressed as part of or were best addressed as part of other existing initiatives. Four (4) initiatives were discontinued because it was determined that mitigation was not necessary or could not be performed at this time. This resulted in lowering the overall number of mitigation initiatives to thirty-nine (39). As of this reporting period, the following overall progress can be reported:

- 36 out of 39 initiatives (92%) reported ongoing action toward completion.
- 2 out of 39 initiatives (5%) reported no progress.
- 1 out of 39 initiatives (3%) was completed.

The table below reports the status of each of the initiatives that constitute the district's LHMP Mitigation Action Plan.

**SCVWD LOCAL HAZARD MITIGATION PLAN
ACTION PLAN MATRIX – 2019 ANNUAL REPORT**

Action Taken?	Timeline	Priority Changed?	Comment (Describe progress or changed priority)	Status
Santa Clara Valley Water District				
Initiative 1.1—Continue to stockpile repair materials, portable pumps and other supplies to assist with rapid and functional repairs to water utility and watershed infrastructure.				
Yes	Ongoing	No	The district has a supply of equipment and materials, including pipe repair materials, large diameter pipe, valves, boulders (to arrest erosion), portable pumps, hoses, generators and other equipment and materials needed to respond to hazards and outages. Filled sandbags are stocked at sandbag sites annually, in October.	Ongoing
Initiative 1.2—Continue to incorporate the effects of climate change into water utility and watershed infrastructure vulnerability studies.				
Yes	Ongoing	No	This measure has been discontinued as it is addressed in measure 1.5	Discontinue (comment required)
Initiative 1.3—Improve the energy independence of the district’s facilities and infrastructure through energy efficiency, on-site or local renewable energy systems, micro grids, and energy storage facilities. Ensure adequate emergency power is available in the interim.				
Yes	Ongoing	No	The district continues to implement the energy optimization measures (EOMs) recommended by the 2013 Energy Optimization Plan. Thirty-seven of the original forty-nine EOMs have been completed since 2013 and there are currently 7 EOMs in progress. The district is replacing the solar panels at its Headquarters campus solar installation with new and more efficient panels, which will increase power generation and extend the life of the facility. The district is continuing to explore ways to make these projects more cost competitive and to develop more renewable energy projects. The district has back-up power sources available at its primary facilities in the event of emergencies.	Ongoing
Initiative 1.4—Continue to distribute information about disaster preparations through mailings, printed notifications, educational campaigns, social media, digital devices, addressing media inquiries, and in- person events and workshops. This information should be distributed widely and in all commonly spoken languages within the district’s service territory.				
Yes	Ongoing	No	The district conducts an annual flood awareness campaign which includes general disaster preparedness tips. Efforts include paid ads, web/blog posts, media interviews, social media, speaking presentations and community events. Ads are in English, Chinese, Spanish and Vietnamese.	Ongoing

**SCVWD LOCAL HAZARD MITIGATION PLAN
ACTION PLAN MATRIX – 2019 ANNUAL REPORT**

Action Taken?	Timeline	Priority Changed?	Comment (Describe progress or changed priority)	Status
Initiative 1.5—Conduct hazard vulnerability studies, including anticipated climate change impacts, in advance of all new infrastructure siting and construction.				
Yes	Ongoing	No	This is an ongoing district effort. Site analysis is included as part of the capital project planning and design process.	Ongoing
Initiative 1.6—Continue to participate in the Silicon Valley Regional Interoperability Authority (SVRIA) to improve emergency communications between the district and other Santa Clara County jurisdictions.				
Yes	Ongoing	No	The district regularly communicates with SVRIA leadership. The district will migrate to the SVRIA environment following completion of South-County radio sites, most notably Pacheco Peak.	Ongoing
Initiative 1.7—When siting new infrastructure, try to avoid locating facilities in areas of high hazard risk. If this is unavoidable, integrate extensive mitigation measures into the facility to reduce vulnerability from all applicable hazards.				
Yes	Ongoing	No	This measure is discontinued as associated work is captured in measure 1.5	Discontinue (comment required)
Initiative 1.8—Improve estimates of potential damage to district facilities from various potential emergency situations, and integrate these estimates into appropriate planning efforts.				
Yes	Ongoing	No	July 2018, the district completed retro-fit project work on the Penitencia Delivery Main and Penitencia Force Main pipelines utilizing earthquake resistant ductile iron pipe (ERDIP) material. This pipe is segmented in a way that allows for movement of the pipe during seismic events, thus reducing potential damage during earthquakes and other geologic hazards. Potential seismic damage to pipelines was recently assessed and will be further developed in a pipeline risk model to be completed by December 2019. Estimates of repair costs for watershed division assets are located in the 5-year O&M plan and asset management plans.	Ongoing

**SCVWD LOCAL HAZARD MITIGATION PLAN
ACTION PLAN MATRIX – 2019 ANNUAL REPORT**

Action Taken?	Timeline	Priority Changed?	Comment (Describe progress or changed priority)	Status
Initiative 1.9—Update all emergency planning documents every five years to ensure consistency with state and federal laws, eligibility for hazard mitigation grant funding, best practices, local conditions, and updated science.				
Yes	Ongoing	No	The district updated its Local Hazard Mitigation Plan in 2017 and its Emergency Operations Plan in 2018. The district complies with updating its' Dam EAPs on a continuous 5-year review cycle. The district created 2 new EAPs (West Little Llagas creek and Uvas creek). Under the new America's Water Infrastructure Act of 2018, the district will review and revise as necessary, all applicable emergency planning documents no less than every 5 years.	Ongoing
Initiative 1.10—Regularly pursue funding opportunities for hazard mitigation activities.				
Yes	Ongoing	Yes	Pursued funding for Stevens Creek Erosion Repair (approved) and Pope Chaucer Bridge Replacement at San Francisquito Creek. The district also submitted and received approval of grant funding for the San Francisco Bay Shoreline Study Project.	Ongoing
Initiative 1.11—Assess the capability and feasibility of using inter-organizational and public/private water distribution infrastructure (“water-wheeling”) as an alternate or backup.				
Yes	Short Term (<5yrs.)	No	The district has developed agreement templates that can be used in an emergency to wheel retailer water supplies through SCVWD pipelines.	Complete
Initiative 1.12—Install pipeline isolation valves to enable smaller geographic service outages and shorter recovery periods.				
Yes	Long Term (5+yrs.)	No	Two capital projects are underway with completion slated for 2024.	Ongoing
Initiative 1.13—Conduct a Retailer Intertie Study to explore the capacity and interconnectivity of retailer interties.				
No	Short Term (<5yrs.)	No	The district supports this study but has determined it needs to be a retailer led effort.	No Progress
Initiative 1.14—Install interties and connections to public and private groundwater wells for redundancy, including connections between the Snell Pipeline and the Great Oaks Water Company wells, the Santa Clara Distributary and the planned Santa Clara Water Company Serra Tank well, and the Mountain View Distributary and the planned Mountain View Water Company Miramonte well.				
No	Long Term (5+yrs.)	No	The city of Santa Clara is investigating alternative well sites. The city of Mountain View has indicated they do not have plans to construct a Miramonte Well at this time. The Great Oaks project has not yet started.	No Progress

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Action Taken?	Timeline	Priority Changed?	Comment (Describe progress or changed priority)	Status
Initiative 1.15—Implement projects and support regional and state efforts to increase the resiliency, redundancy and reliability in water supply and safety infrastructure.				
Yes	Ongoing	No	<p>California WaterFix: Construction and financing governance structures established in mid-2018. Planning documents and contract amendments in development.</p> <p>Sites Reservoir: Planning documents and project operations are being developed. Phase 1 nearing completion and project seeking funding for Phase 2.</p> <p>Los Vaqueros Reservoir: Design, permitting, and project operations are being developed. Project seeking funding for next phase and development of JPA governance structure.</p> <p>Main-Madrone pipeline: Pipeline replacement is under construction and is scheduled to be completed by summer 2019.</p>	Ongoing
Initiative 1.16—Develop interagency mutual-aid agreements and emergency assistance protocols between the district and surrounding jurisdictions				
Yes	Ongoing	No	The district maintains an agreement with Cal Fire to provide water tenders for emergency assistance and maintains partnerships with CAMAL Net (laboratory service) and CalWARN (water agencies) for emergency assistance and mutual aid.	Ongoing
Initiative 2.1—Work with local jurisdictions in dam inundation zones to ensure residents and businesses are aware of the potential risk, and that dam inundation mitigation strategies are integrated into local planning efforts. Use GIS mapping for risk analysis and communication as appropriate.				
Yes	Ongoing	No	The district facilitated an EAP orientation with Park Rangers in February 2018. In October 2018, a call down drill was conducted with the downstream agencies for all Dam EAPs.	Ongoing
Initiative 2.2—If appropriate, identify critical dam infrastructure at heightened risk from dam failure and develop a plan to protect or retrofit those facilities.				
Yes	Ongoing	No	The district has/is performing seismic studies to identify dams at heightened risk to failure and is performing seismic retrofits / improvements as applicable.	Ongoing

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Action Taken?	Timeline	Priority Changed?	Comment (Describe progress or changed priority)	Status
Initiative 3.1—Evaluate the long-term impact of climate change on future water supplies, and include more severe drought conditions in water supply planning documents.				
Yes	Ongoing	No	As part of the update to the District's Water Supply Master Plan (Master Plan), the Board adopted staff's recommended level of service goal to "develop water supplies designed to meet at least 100 percent of average annual water demand identified in the district's Water Supply Master Plan during non-drought years and at least 80 percent of average annual water demand in drought years." Drought conditions considered in the Master Plan and other water supply documents include all historical droughts that occurred between the years 1922-2015. As part of the Master Plan update, the district also conducted a late-century analysis to better understand the impacts of climate change on the projects being evaluated.	Ongoing
Initiative 3.2—Work with retail water suppliers to offer free or low-cost water audits for residents and businesses within the district's service territory.				
Yes	Ongoing	No	The district works with retailers to offer a free Water Wise Survey Program, which includes two components: an outdoor irrigation survey and an indoor water audit do-it-yourself kit.	Ongoing
Initiative 3.3—Work with retail water suppliers to support real-time water monitoring for all customers.				
Yes	Short Term (<5yrs.)	No	The Water Supply Planning and Conservation Unit have been working with water retailers to promote AMI meter technology. The district also includes messaging on home water use reports that are sent out in collaboration with water retailers.	Ongoing
Initiative 3.4—In coordination with retail water suppliers, host regular workshops and classes on water conservation, including providing information on drought-tolerant landscaping, available rebates for water retrofits, and water efficiency strategies in new buildings. Continue to offer workshops and classes even when drought conditions are not present. Develop outreach materials for water conservation.				
Yes	Ongoing	No	The district conducts an annual water conservation campaign which includes paid ads, outreach materials, videos, social media posts and web/blog posts. These efforts promote district rebate and conservation programs. The district participates in a number of workshops and classes, year-round and supports a multi-agency effort to promote sustainable landscaping classes and events, called South Bay Green Gardens.	Ongoing

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Action Taken?	Timeline	Priority Changed?	Comment (Describe progress or changed priority)	Status
Initiative 3.5—Increase recycled and purified water supplies and expand the existing recycled and purified water infrastructure.				
Yes	Short Term (<5yrs.)	No	The Expedited Purified Water Program is part of the district's strategy to respond to future drought and is consistent with Board of Director's direction to expand the county's water supply. As currently conceived, the program will provide up to 24,000 acre-feet per year (AFY) of purified water for potable reuse to reduce reliance on the other existing sources such as imported and locally-stored water supply.	Ongoing
Initiative 3.6—Explore opportunities to recycle water for non- potable and potable uses.				
Yes	Ongoing	No	The district is developing a Countywide Water Reuse Master Plan in collaboration with recycled water producers, wholesalers, retailers, users, and other interested parties. The Master Plan will identify: the volume of water available for potential potable reuse (PR) development and non-potable reuse (NPR) expansion; the optimal allocation between PR and NPR; options for system integration; recommendations for building upon NPR projects; potential new PR projects; and proposals for governance model alternatives including roles and responsibilities.	Ongoing
Initiative 3.7—As identified in the Capital Improvement Program (CIP), continue to prioritize water supply improvements as they relate to the risks outlined in this Plan. Coordinate future updates to the CIP to support mitigation actions outlined in this Plan.				
Yes	Ongoing	No	This is an ongoing district effort.	Ongoing
Initiative 3.8—Implement projects that increase the resiliency or reliability of future water supplies.				
Yes	Ongoing	No	This work is covered in measure 1.15	Discontinue (comment required)

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Action Taken?	Timeline	Priority Changed?	Comment (Describe progress or changed priority)	Status
Initiative 4.1—Continue to repair and improve storm drain and flood protection systems owned and maintained by SCVWD to better accommodate flood flows.				
Yes	Ongoing	No	Improved facilities are maintained to design flow capacity. Those that are in arrears are included in the 5-year Watershed O&M plan. Completed projects include the following: October 2018 - Coyote Creek Levee Rodent Damage Repair Project: Re-established levee as-built condition due to rodent damage (Upstream and Downstream); October 2018 - Matadero Creek Sediment Removal and Erosion Repair Project: Removed 3,000 cubic yard of sediment, repaired concrete lining under West Bayshore Road, repaired the concrete bed from Virginia Avenue to Smith Creek confluence and from Williams Road to USGS Gage; November 2018 - Stevens Creek Bank and Access/Trail Road Repair: Restored undermined trail due to severe creek erosion.	Ongoing
Initiative 4.2—Monitor creek infrastructure for obstructions and remove any obstructions as quickly as possible.				
Yes	Ongoing	No	Facilities are routinely inspected, blockages cleared and known hot-spots are monitored throughout the rainy season. Trash and debris are removed when safe to do so and in accordance with regulatory permits. Sediment is removed periodically from streams and erosion repaired as resources allow.	Ongoing
Initiative 4.3—Retrofit hardscaped areas on district property, including parking lots and plazas, to use permeable paving, green infrastructure, and other low-impact development design features to allow for increased infiltration, even in heavy rain events.				
Yes	Short Term (<5yrs.)	No	Retrofits to hardscape areas are planned and carried out as needed based on site and operational requirements.	Ongoing
Initiative 4.4—Identify and implement effective flood protection measures around water supply facilities and pumping stations, prioritizing facilities located within the 100-year floodplain.				
No	Ongoing	No	This measure is being discontinued, as the district has only one pumping station and no other water supply facilities within the 100-year floodplain. During flood season, water supply is at low demand and the system can operate without the pump station.	Discontinue (comment required)

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Initiative 4.5—As identified in the Capital Improvement Program (CIP), continue to prioritize flood protection improvements as they relate to the risks outlined in this Plan. Coordinate future updates to the CIP to support mitigation actions outlined in this Plan.				
Yes	Ongoing	No	San Francisquito Creek Flood Protection from the Bay to HWY 101 (Completed December 2018); Permanente Creek Channel Flood Protection (Completed December 2018); continued construction of: McKelvey Park Flood Detention Facility, Rancho San Antonio Park Flood Detention Facility, Lower Berryessa Creek Phase 2 Flood Protection; Cunningham Flood Detention Certification (began construction in June 2018); Upper Llagas Creek Flood Protection (received Regional Water Quality Control Board construction permit in July 2018 and California Department of Fish & Wildlife Incidental Take Permit in October 2018); Sunnyvale East and West Channels Flood Protection (continuing to negotiate construction permits with regulatory agencies);	Ongoing
Initiative 4.6—Develop outreach materials for extreme flood conditions and events.				
Yes	Ongoing	No	The district prepares an annual "Floodplain Mailer" which is sent to every household in a 100-year flood zone (sent Nov 2018). It's in Spanish, English, Chinese and Vietnamese. The district also develops a winter preparedness flyer every year which is distributed in floodprone areas near San Francisquito Creek (sent Nov 2018). The district also maintains a "Flood Ready" web page with tools, tips and helpful resources for emergency preparedness.	Ongoing
Initiative 5.1—Use erosion and sediment control features that provides protection as required by local or state standards for all district construction activities.				
Yes	Ongoing	No	Ongoing for district construction projects. Best Management Practices (BMPs) have been developed and are modified on an ongoing basis. Completed projects include the following: Stevens Creek Erosion Repair (October 2018); Coyote Creek Upstream of HWY 237 Erosion Repair (October 2018); Coyote Creek Downstream of HWY 237 Erosion Repair (October 2018); San Tomas Creek Erosion Repair and Matadero Creek Sediment Removal & Erosion Repair (November 2018). The Uvas Creek Outboard Levee Erosion Repair project began in August 2018 and is expected to complete in May 2019.	Ongoing
Initiative 5.2—Mitigate landslide and debris flows to minimize damage to structure and function of district infrastructure.				
Yes	Ongoing	No	District is monitoring known landslide area. Pipes crossing the Penitencia landslide have been replaced with landslide resistant pipes and structures.	Ongoing

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Initiative 6.1—Continue to monitor the rate of groundwater pumping within the district, and coordinate groundwater pumping and increase groundwater recharge if subsidence begins to occur.				
Yes	Ongoing	No	No permanent subsidence has been observed for many decades due to comprehensive groundwater management. During droughts, adherence to the district's Water Shortage Contingency Plan helps minimize the risk of subsidence. Groundwater and land subsidence monitoring and conditions are described each year in the district's Annual Groundwater Report.	Ongoing
Initiative 7.1—Develop and implement plans to protect key facilities within the sea level rise hazard area as sea levels increase.				
Yes	Ongoing	No	Palo Alto Flood Basin Tide Gate Structure Replacement (completed geotechnical investigation in November 2018); South San Francisco Bay Shoreline Study (Completed 95% design of Reach 1 levee in November 2018).	Ongoing
Initiative 7.2—Coordinate with Santa Clara County, ABAG, Bay Conservation and Development Commission and other agencies, to defend against and retreat from sea level rise.				
Yes	Ongoing	No	South San Francisco Bay Shoreline Project pre-construction activities began September 2018. Construction to begin FY2020	Ongoing
Initiative 8.1—Maintain existing levee inspection and repair program to address seismic vulnerabilities of levee systems.				
Yes	Ongoing	No	The district performs regular inspections and repairs are made as required.	Ongoing
Initiative 8.2—Secure funding to conduct necessary seismic strengthening work on district-owned dams as identified in seismic evaluations.				
Yes	Ongoing	No	This measure is part of the work performed under measure 8.3	Discontinue (comment required)
Initiative 8.3—Replace or retrofit structures that are determined to be structurally deficient, including levees, dams, reservoirs, and tanks. Continue to analyze and identify needs for future upgrades. Evaluate, reinforce, and/or enhance district facilities to mitigate seismic risk.				
Yes	Ongoing	No	Seismic retrofit projects are underway at Anderson, Calero, and Guadalupe dams. Other seismic evaluations are currently being performed at Coyote, Chesbro, and Uvas dams. Future studies are planned for Lenihan and Stevens Creek dam spillways.	Ongoing

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Action Taken?	Timeline	Priority Changed?	Comment (Describe progress or changed priority)	Status
Initiative 8.4—Conduct evaluations of district facilities (Offices, Ancillary Structures) to determine seismic vulnerability.				
Yes	Short Term (<5yrs.)	No	The district completed a seismic assessment of the South County Yard facility in October 2018. Facility assessments are conducted based on operational need.	Ongoing
Initiative 8.5—Avoid siting of new infrastructure in areas of highest liquefaction, ground shaking, and/or fault rupture risk. If siting new infrastructure in these high-risk zones is unavoidable, include significant mitigation measures to reduce the vulnerability to earthquake hazards.				
Yes	Ongoing	No	This measure is discontinued. Work addressing this measure is captured in measure 1.5	Discontinue (comment required)
Initiative 8.6—Replace seismically vulnerable sections of the Almaden Valley Pipeline.				
Yes	Short Term (<5yrs.)	No	Pipeline condition is being continuously monitored with Acoustic Fiber Optic technology. Conceptual level planning for replacing sections of Almaden Valley Pipeline has begun.	Ongoing
Initiative 9.1—Monitor trees and other large objects that may threaten nearby district infrastructure in high wind events, and maintain or reinforce as appropriate.				
Yes	Ongoing	No	The district conducts facility inspections. When threats are identified (including hazardous trees), work orders are submitted to mitigate the problem.	Ongoing
Initiative 10.1—Frequently monitor the status of dry vegetation on District property and around district facilities in wildland and WUI zones, and conduct weed abatement and pesticide application activities as needed.				
Yes	Ongoing	No	The district adheres to annual fire code compliance requirements.	Ongoing
Initiative 10.2—Work with surrounding landowners to ensure adequate fire road access to district facilities.				
No	Short Term (<5yrs.)	No	This mitigation action is being removed because the district already has access to its facilities (buildings and infrastructure), and waterways. Additional access through private land owners is not needed.	Discontinue (comment required)
Initiative 10.3—Identify district-owned waterways and water sources adjacent to any high-fire risk areas, and prepare for increased turbidity as a result of vegetation loss and increased erosion. Conduct mitigation measures as appropriate.				
No	Short Term (<5yrs.)	No	This mitigation action is being removed as there is no identifiable mitigation work that can be performed at this time.	Discontinue (comment required)

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Action Taken?	Timeline	Priority Changed?	Comment (Describe progress or changed priority)	Status
Initiative 10.4—Design and implement mitigation measures to reduce turbidity in waterways and water sources near high-fire risk areas.				
No	Short Term (<5yrs.)	No	This measure is being discontinued because turbidity as a result from fires and vegetation loss that enter waterways will be addressed utilizing Best Management Practices by Operations and Maintenance (same as day-to-day operations).	Discontinue (comment required)

Recommendations for Changes or Enhancements

Based on the review of this report by the Hazard Mitigation Plan Team, the following items were recommendations for future changes or enhancements to the plan:

- Incorporate information from the district's Climate Change Action Plan once it is completed.
- Consider developing green storm water infrastructure / water quality related measures