Valley Water

ANNUAL PROGRESS REPORT JANUARY 1 – DECEMBER 31, 2020

Santa Clara Valley Water District Local Hazard Mitigation Plan

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SANTA CLARA VALLEY WATER DISTRICT
LOCAL HAZARD MITIGATION PLAN
PROGRESS REPORT

REPORTING PERIOD

The reporting period for this progress report is 01-01-2020 through 12-31-2020.

BACKGROUND

The Santa Clara Valley Water District (Valley Water) has developed a hazard mitigation plan to reduce risk from all hazards by identifying resources, information, and strategies for risk reduction. The federal Disaster Mitigation Act of 2000 requires state and local governments to develop hazard mitigation plans as a condition for federal disaster grant assistance. To prepare the plan, Valley Water organized resources, assessed risks from natural hazards, developed planning goals and objectives, reviewed mitigation alternatives, and developed an action plan to address probable impacts from natural hazards. By completing this process, Valley Water has maintained compliance with the Disaster Mitigation Act, achieving eligibility for mitigation grant funding opportunities afforded under the Robert T. Stafford Act. The plan can be viewed online at: https://www.valleywater.org/LHMP.

PURPOSE

The purpose of this report is to provide an update on the implementation of the mitigation initiatives identified in the Santa Clara Valley Water District Local Hazard Mitigation Plan. The objective is to ensure that there is a continuing planning process that will keep the Santa Clara Valley Water District Local Hazard Mitigation Plan dynamic and responsive to the needs and capabilities of Valley Water and its stakeholders.

PLANNING COMMITTEE

For the reporting period, the committee membership is listed in Table 1.

TABLE 1
Planning Committee

Name	Title
Alexander Gordon	Assistant Officer, Emergency, Safety and Security Division
Donna Germany	Program Administrator, Office of Emergency Services
Jose (Jesse) Soto	Manager, Facilities
Linh Hoang	Manager, Office of Communications
Michael Cook	Deputy Administrative Officer, Information Technology Division
Sherilyn Tran	Manager, Office of Civic Engagement
Trisha Howard	Program Administrator, Office of Civic Engagement
Afshin Rouhani	Manager, Water Resources Planning and Policy

Name	Title
Christopher Hakes	Deputy Operating Officer, Dam Safety & Capital Delivery Division
Cody Houston	Acting Manager, Watersheds Operations and Maintenance Engineering Support
Jennifer Codianne	Acting Deputy Operating Officer, Watersheds Operations & Maintenance Division
John Bourgeois	Deputy Operating Officer, Watersheds Stewardship & Planning Division
John Chapman	Acting Manager, Vegetation Field Operations
Kurt Lueneburger	Manager, Environmental Planning
Liang Xu	Manager, Hydrology, Hydraulics and Geomorphology
Lisa Infante	Assistant Officer, Watersheds Stewardship & Planning Division
Mike Sawatzky	Acting Manager, Watersheds Field Operations
Rechelle Blank	Deputy Operating Officer, Watersheds Design and Construction Division
Roger Narsim	Manager, Watersheds Design & Construction Unit 5
Scott Akin	Manager, Watersheds Operations and Maintenance Environmental Support
Bhavani Yerrapotu	Deputy Operating Officer, Treated Water Division
Brandon Ponce	Acting Manager, Treatment Plants Project Delivery
Devin Mody	Acting Assistant Operating Officer, Treated Water Division
Erin Baker	Manager, District-wide Asset Management
Greg Williams	Interim Deputy Operating Officer, Raw Water Division
Heath McMahon	Deputy Operating Officer, Water Utility Capital Division
John Brosnan	Manager, Utility & Electrical Control Systems
Kirsten Struve	Assistant Officer, Water Supply Division
Rolando Bueno	Manager, Pipelines Project Delivery
Surjit Saini	Manager, Laboratory Services
Tim Bramer	Manager, Construction Services
Vanessa De La Piedra	Manager, Groundwater Management
Vincent Gin	Deputy Operating Officer, Water Supply Division

SUMMARY OVERVIEW OF THE PLAN'S PROGRESS

The performance period for the Santa Clara Valley Water District Local Hazard Mitigation Plan became effective on 05-02-2018, with the final approval of the plan by FEMA. The initial performance period for this plan is 5 years, with an anticipated update to the plan to occur before 05-02-2023. The Santa Clara Valley Water District Local Hazard Mitigation Plan originally targeted 48 hazard-mitigation initiatives to be pursued during the 5-year performance period. Upon reviewing the initiatives for progress during the 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:

- 4 out of 39 initiatives (10%) reported progress toward completion.
- 3 out of 39 initiatives (8%) reported no progress.
- 1 out of 39 initiatives (3%) was completed.
- 31 out of 39 initiatives (79%) identified work conducted as an ongoing capability.

Review of the Action Plan

Table 2 reviews the action plan, reporting the status of each initiative. Status is defined as either ongoing (no definitive beginning or end), in progress (some progress has been made this calendar year), no progress (no progress made this calendar year), discontinued (as described above), or completed.

TABLE 2
Action Plan Matrix

Action Taken?	Timeline	Priority / Changed?	Describe Actions Taken or Progress Made	Status
Santa Clara Valley Water District				
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 Capability	High / No	Valley Water 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. Stockpile will be increased with the recent addition of warehouse space.	Ongoing Capability
1.2 Continue to incorporate the effects of climate change into water utility and watershed infrastructure vulnerability studies.				
No	Discontinued		This mitigation action has been discontinued as associated work is addressed in measure 1.5.	Discontinued
1.3 Improve the energy independence of Valley Water'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 Capability	Low / No	Valley Water successfully provided continued system operations through two PG&E Public Safety Power Shutoff (PSPS) events in October 2020 and used the interruptions as an	Ongoing Capability

Action Taken?	Timeline	Priority / Changed?	Describe Actions Taken or Progress Made	Status
			opportunity to improve system resiliency. Valley Water partnered with Tesla Inc. to participate in a Self-Generation Incentive Program (SGIP) under the new Equity Resiliency Budget, which would provide a significant rebate for a full-site backup battery storage system installation at the Penitencia Water Treatment Plant (PWTP) located in High Fire-Threat Districts. Upon further evaluation and clarification from the Pacific Gas and Electric Company (PG&E) and the California Public Utilities Commission (CPUC), PWTP was not eligible to participate in the rebate program due to PG&E later clarifying one of the qualifying PSPS events was due to utility equipment failure while the outage coincided with the PSPS event. To improve local renewable energy portfolio, staff completed the Headquarters solar carport rehabilitation with the solar developer. Valley Water continues to implement the energy optimization measures (EOMs) recommended by the 2013 Energy Optimization Plan. Thirty-seven of the original 49 EOMs have been completed since 2013 and there are currently 2 EOMs in progress.	
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 Valley Water's service territory.				
Yes	Ongoing Capability	Medium / No	Get Flood Ready, Valley Water's annual flood awareness campaign continued to serve as the outreach engagement effort, which includes general disaster preparedness tips provided through an annual mailer. Additional public relations work included paid radio and television ads, web/blog posts, media interviews and social media. Ads are in English, Chinese, Spanish, and Vietnamese. Valley Water's latest iteration of this campaign includes continuing multilingual video content. Valley Water also engaged in promotion of the first ever virtual Get Flood Ready workshop event, developed to remotely outreach to residents and businesses located in hot spots, areas prone to flooding.	Ongoing Capability

Action Taken?	Timeline	Priority / Changed?	Describe Actions Taken or Progress Made	Status
1.5 Conduct hazard vulnerability studies, including anticipated climate change impacts, in advance of all new infrastructure siting and construction.				
Yes	Ongoing Capability	Medium / No	Valley Water staff continues site analysis as part of the Capital project planning and design process.	Ongoing Capability
1.6 Continue to participate in the Silicon Valley Regional Interoperability Authority (SVRIA) to improve emergency communications between Valley Water and other Santa Clara County jurisdictions.				
Yes	Ongoing Capability	Medium / No	Valley Water is currently in the early phases of implementation on this project. Currently, discussing/seeking agreements with outside agencies for the monitoring of emergency "911" type buttons for field radios. Upon completion of this effort, with programming assistance from the county, the full rollout will commence.	Ongoing Capability
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.				
No	Discontinued		This mitigation action has been discontinued as associated work is captured in measure 1.5.	Discontinued
1.8 Improve estimates of potential damage to Valley Water facilities from various potential emergency situations and integrate these estimates into appropriate planning efforts.				
Yes	Ongoing Capability	Low / No	Estimates of repair costs for watersheds and water utility assets are located in the Draft 5-year Watersheds O&M plan and Water Utility Enterprise O&M plan and asset management plans. The water utility Infrastructure Reliability Plan and the Water Utility Asset Management Program Plans feed into future planning efforts.	Ongoing Capability
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 Capability	Low / No	As required by the AWIA, Valley Water submitted certification to the EPA that a Risk and Resiliency Analysis (RRA) of our system was completed by March 31, 2020 and that an	Ongoing Capability

Action Taken?	Timeline	Priority / Changed?	Describe Actions Taken or Progress Made	Status
			Emergency Response Plan (ERP) was completed by September 30, 2020. Valley Water will submit the next certification in March and September 2025. The 5-year timeframe for emergency plan updates is being adhered to. Valley Water's Emergency Operations Plan was updated in February 2020. The Local Hazard Mitigation Plan annual report is being finalized for 2020, which includes a review and update of the plan's mitigation projects. Work on creek- or location-specific Emergency Action Plans (EAPs) continues, including San Francisquito Creek, West Little Llagas Creek, and Uvas Creek. Work on the San Tomas Aquino Creek EAP has continued and is being incorporated as a part of the West Valley Watershed EAP.	
1.10 Regularly pursue funding opportunities for hazard mitigation activities.				
Yes	Ongoing Capability	Medium / No	Valley Water has hired a grant program administrator to assist with finding and applying for grants for Capital Improvement Projects. At this time, applications have been submitted but no new grants have been received.	Ongoing Capability
1.11 Assess the capability and feasibility of using inter-organizational and public/private water distribution infrastructure ("water-wheeling") as an alternate or backup.				
No	Short Term (< 5 yrs.)	Low / No	Valley Water has developed agreement templates that can be used in an emergency to wheel retailer water supplies through Valley Water pipelines.	Completed
1.12 Install pipeline isolation valves to enable smaller geographic service outages and shorter recovery periods.				
Yes	Long Term (5+ yrs.)	High / No	Design of IRP2 Additional Line Valves continued with 60% design completed at Snell Pipeline, 30% design completed at East Pipeline and West Pipeline (2 locations). The Treated Water Isolation Valves Project had no Design Phase progress in 2020 due to lack of resources. Design is scheduled to start in FY22.	In Progress

Action Taken?	Timeline	Priority / Changed?	Describe Actions Taken or Progress Made	Status
1.13 Conduct a Retailer Intertie Study to explore the capacity and interconnectivity of retailer interties.				
Yes	Short Term (< 5 yrs.)	Medium / No	No work has started. Valley Water will continue to work with retailers to identify which agency will lead the project and will provide resources and support once the project begins.	No Progress
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 City of Santa Clara Serra Tank well, and the Mountain View Distributary and the planned City of Mountain View Miramonte well.				
Yes	Long Term (5+ yrs.)	Low / No	The proposed interties are anticipated to be re-evaluated during the upcoming Water Treatment Plant and/or Distribution System Implementation Plans, currently scheduled to be complete in 2023. In addition, the City of Santa Clara and City of Mountain View are continuing to investigate well sites and partnership on future connections is pending the outcome of those studies.	In Progress
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 Capability	High / No	**Delta Conveyance Project**: Completed the Agreement in Principle amendment. Preliminary level of participation and funding agreements executed. CEQA and NEPA review in progress. ESA/CESA permitting conversations with fish agencies is ongoing. **Los Vaqueros Reservoir Expansion**: Development of JPA governance and finance structure ongoing. Modeling and analysis of operations and facilities (Transfer Bethany Pipeline) is under review. Valley Water approved a second funding amendment in December 2020. Project completed final EIR/EIS documents and Feasibility Report. To date, $14.1 million in federal appropriations and $22.9 million in early state funding has been granted. **Sites Reservoir Project**: Project downsized to 1.5 TAF based on a desire to reduce costs. Valley Water approved a second funding agreement amendment in December 2020.	Ongoing Capability

Action Taken?	Timeline	Priority / Changed?	Describe Actions Taken or Progress Made	Status
			CEQA and NEPA review in progress with updated public drafts expected in 2021. Reclamation released the final Feasibility Report making the project eligible for future federal funding. To date, $10 million in federal appropriations and $40.8 million in early state funding has been granted. **Groundwater Banking Projects**: Analysis of groundwater banking projects is underway. Evaluation criteria were developed to rank the available projects and focus resources. Ongoing efforts include planning and analysis of specific groundwater conditions, management, and proposed banking operations as well as development of ideal partnership agreement terms. Various relationships and partnerships are pending with potential pilot programs being considered to test functionality of future large-scale projects. **South Bay Aqueduct Reliability Improvements**: Collaboration with Department of Water Resources to expedite pipeline rehabilitation work including inspection, leak detection and repair, and geotechnical monitoring of landslide areas. A Smartball leak inspection was conducted in November 2020, Weko-Seals installed in December 2020, and a geotechnical study of the landslide was completed. Schedule for additional work is under consideration but expected to occur over the next 8-12 months.	
1.16 Develop interagency mutual-aid agreements and emergency assistance protocols between Valley Water and surrounding jurisdictions.				
Yes	Ongoing Capability	Low / No	Valley Water maintains agreements with CAMAL Net (laboratory service) and CalWARN (water agencies) for emergency assistance and mutual aid. Valley Water's agreement to provide emergency assistance to Cal Fire has expired and a new renewal agreement continues to be reviewed by Cal Fire. Valley Water also participates in the California Disaster and Civil Defense Master Mutual Aid Agreement. Valley Water provided mutual aid assistance during the COVID-19 event in 2020 to Santa Clara County with PPE for healthcare facilities.	Ongoing Capability

Action Taken?	Timeline	Priority / Changed?	Describe Actions Taken or Progress Made	Status
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 Capability	High / No	In September 2020, an orientation slide show on dam EAPs and inundation map interpretation was presented to the Santa Clara County Emergency Management Association. In December 2020, a call down drill was conducted with downstream agencies for all dam Emergency Action Plans (EAPs).	Ongoing Capability
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 Capability	Low / No	Seismic studies to identify dams at heightened risk of failure, and seismic retrofits/ improvements are underway as applicable.	Ongoing Capability
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 Capability	High / No	The Water Supply Master Plan 2040 first annual Monitoring and Assessment Plan (MAP) was presented to the board on October 27, 2020. The Master Plan informs investment decisions by describing the type and level of water supply investments Valley Water is planning to make through 2040, emphasizing drought-resilience strategies using historical water supply data. As part of the MAP effort, Valley Water updated its demand projection approach and developed a new demand model to forecast the county-wide water demands.	Ongoing Capability
3.2 Work with retail water suppliers to offer free or low-cost water audits for residents and businesses within Valley Water's service territory.				
Yes	Ongoing Capability	Low / No	Valley Water 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 Capability

Action Taken?	Timeline	Priority / Changed?	Describe Actions Taken or Progress Made	Status
3.3 Work with retail water suppliers to support real-time water monitoring for all customers.				
Yes	Short Term (< 5 yrs.)	Low / No	Valley Water has been working with its water retailers to promote "Advanced Metering Infrastructure" (AMI) technology and home water use reporting. Additionally, Valley Water has included messaging on home water use reports that are sent out in collaboration with retailers.	In Progress
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 Capability	Medium / No	Valley Water's annual summer water conservation campaign which includes paid ads, outreach materials, videos, social media posts and web/blog posts ran from June - October of 2020. Known as Yards Have Evolved, this latest campaign promoted Valley Water rebate and conservation programs. Valley Water participates in a number of workshops and classes, year-round and supports a multi-agency effort called South Bay Green Gardens, to promote sustainable landscaping classes and events. Additional efforts include development and distribution of a variety of outreach materials to promote water conservation. Planning is underway for the Spring (March - June) and Summer (June - September) 2021 campaign.	Ongoing Capability
3.5 Increase recycled and purified water supplies and expand the existing recycled and purified water infrastructure.				
Yes	Ongoing Capability	Low / No	The Expedited Purified Water Program is part of Valley Water's strategy to respond to future drought and is consistent with Board of Director's direction to expand the county's water supply. Valley Water secured a minimum of 9 MGD of treated effluent from City of Palo Alto and negotiations are underway with the Cities of Palo Alto and Mountain View to establish a long-term lease agreement for the construction of a future purification facility. Discussions continue with the cities of San Jose and Santa Clara to secure additional treated effluent. These	Ongoing Capability

Action Taken?	Timeline	Priority / Changed?	Describe Actions Taken or Progress Made	Status
			discussions will also include best options to address future reverse osmosis concentrate (ROC) management. Valley Water developed two Indirect Potable Reuse (IPR) portfolios based on the Countywide Water Reuse Master Plan (CoRe Plan) with purified water capacity of 10-14 Million Gallons per Day (MGD) as first investment project alternatives. Staff is refining these project designs and adding Raw Water Augmentation (RWA) and Treated Water Augmentation (TWA) flexibility to this evaluation.	
3.6 Explore opportunities to recycle water for non-potable and potable uses.				
Yes	Ongoing Capability	Low / No	Valley Water worked with Palo Alto on their procurement of a consultant to provide design services for the Local Salt Removal facility. This facility will provide up to 2.25 MGD of purified water to be blended with the recycled water produced by Palo Alto Regional Water Pollution Control Plant. This will enhance the quality of the recycled water served to the users in Palo Alto and Mountain View.	Ongoing Capability
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 Capability	Low / No	Cross Valley and Calero Pipelines Inspection and Rehabilitation Project was completed in Fall 2020. Completed 90 percent design for the Rinconada Water Treatment Plant Residuals Remediation Project in December 2020. Completed 30 percent design for the Coyote Pumping Station Adjustable Speed Drive Replacement Project in November 2020.	Ongoing Capability
3.8 Implement projects that increase the resiliency or reliability of future water supplies.				
No	Discontinued		This mitigation action has been discontinued as associated work is covered in measure 1.15.	Discontinued

Action Taken?	Timeline	Priority / Changed?	Describe Actions Taken or Progress Made	Status
4.1 Continue to repair and improve storm drain and flood protection systems owned and maintained by Valley Water to better accommodate flood flows.				
Yes	Ongoing Capability	High / No	Draft 5-Year Watersheds O&M Plan presented to Valley Water Board of Directors on 1/12/2021. Majority of creek sites identified for maintenance and repairs in 2020 were completed under Valley Water's Stream Maintenance Program. In 2020, to maintain design flow conveyance capacity of streams, approximately 49,641 cubic yards of sediment was removed and approximately 1,016 acres of instream vegetation removal was conducted. In addition, approximately 3,393 linear feet of bank stabilization was performed. Under the Watersheds Asset Rehabilitation Program (WARP), planning and design were performed for 11 erosion sites for the Calabazas Creek from Miller Ave to Bollinger Road. A Draft Mitigation Negative Declaration has been prepared to comply with CEQA for this Project. This Project will repair the existing slope failures and will protect future slope failure at these specific locations. Lot line adjustment and fence replacement to 23 parcels are implemented along Calabazas Creek. Another Project, Piedmont Creek channel Concrete wall repair project was planned and designed to get constructed starting in May 2021. Additional projects are investigated at pre-planning level at multiple sites for multiple creeks (Los Gatos Creek, Lower Guad, Downtown Guad, Upper Guad, and other creeks) per the WARP Goals. Previously constructed projects under WARP were monitored per the SMP2 permit requirements for a three-year period as described in the WARP Project Plan.	Ongoing Capability
4.2 Monitor creek infrastructure for obstructions and remove any obstructions as quickly as possible.				
Yes	Ongoing Capability	High / No	Facilities are routinely inspected, blockages are 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. In	Ongoing Capability

Action Taken?	Timeline	Priority / Changed?	Describe Actions Taken or Progress Made	Status
			2020, to maintain design flow conveyance capacity of streams, approximately 49,641 cubic yards of sediment was removed and approximately 1,016 acres of instream vegetation removal was conducted. In addition, approximately 3,393 linear feet of bank stabilization was performed.	
4.3 Retrofit hardscaped areas on Valley Water 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 (< 5 yrs.)	Low / No	Retrofits to hardscape areas are planned and carried out as needed based on site and operational requirements. Hardscape improvements that were planned for 2020 were suspended due to the pandemic.	No Progress
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	Discontinued		This mitigation action has been discontinued, as Valley Water 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.	Discontinued
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 Capability	Low / No	Construction of McKelvey Park Flood Detention Facility was completed, construction of Upper Llagas Creek is ahead of schedule and construction of Rancho San Antonio Park Flood Detention Facility is mostly completed with minimal items remaining. Design of Lower Calera Creek, Lower Penitencia Creek, Upper Llagas Phase 2B, and USACE South San Francisco Bay Shoreline Phase I/Reaches 1-3 are all complete and these projects will be advertised for construction to begin in summer 2021. Design has been completed for Hale Creek Enhancement Pilot Project; however, construction may be delayed to summer 2022. Design and permitting of Sunnyvale East/West Channels, Palo Alto Flood Basin Tide Gate Replacement Project, Coyote Creek (Montague to Tully Road), Upper Penitencia	Ongoing Capability

Action Taken?	Timeline	Priority / Changed?	Describe Actions Taken or Progress Made	Status
			Creek (Coyote Creek to Dorel Drive), and Guadalupe River (Tasman Drive to I-880) is continuing.	
4.6 Develop outreach materials for extreme flood conditions and events.				
Yes	Ongoing Capability	Medium / No	Valley Water's latest "Floodplain Mailer," was sent to Santa Clara County households in or near a 100-year flood zone, in early January 2020. Known as the Get Flood Ready mailer, the content is presented in English, Spanish, Chinese, and Vietnamese. Valley Water maintains a "Flood Ready" web page with tools, tips, and helpful resources for emergency preparedness. Valley Water also provided email informational blasts related to emergency flood preparedness to different community stakeholders.	Ongoing Capability
5.1 Use erosion and sediment control features that provides protection as required by local or state standards for all Valley Water construction activities.				
Yes	Ongoing Capability	Medium / No	Erosion and sediment control features are evaluated and included as a standard practice in all capital improvement projects.	Ongoing Capability
5.2 Mitigate landslide and debris flows to minimize damage to structure and function of Valley Water infrastructure.				
Yes	Ongoing Capability	Medium / No	Valley Water is monitoring a known landslide area. Pipes crossing the landslide have been replaced with landslide resistant pipes and structures.	Ongoing Capability
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 Capability	High / No	Available data does not indicate any evidence of permanent subsidence. Valley Water continues to regularly monitor groundwater levels and subsidence.	Ongoing Capability
7.1 Develop and implement plans to protect key facilities within the sea-level rise hazard area as sea levels increase.				
Yes	Ongoing Capability	Medium / No	USACE rejected bids for South San Francisco Bay Shoreline Project Phase I, Reach 1 in March 2020 and anticipates re-advertising to	Ongoing Capability

Action Taken?	Timeline	Priority / Changed?	Describe Actions Taken or Progress Made	Status
			allow construction to begin by summer 2021. Design and permitting of Palo Alto Flood Basin Tide Gate Replacement Project continued with targeted construction start date in 2021.	
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 Capability	Low / No	South San Francisco Bay Shoreline Project Phase I, Reaches 4 and 5, 60% design plans and specifications were completed in October 2020. Staff participated in meetings and Shoreline Phase II Feasibility Study (Economic Impact Areas 1-4). USACE held an Alternatives Milestone meeting in January 2020 and completed a Project Management Plan in May 2020.	Ongoing Capability
8.1 Maintain existing levee inspection and repair program to address seismic vulnerabilities of levee systems.				
Yes	Ongoing Capability	Medium / No	Valley Water performs regular inspections and repairs are made as required. Valley Water inspects facilities as identified through emergency work procedures following significant seismic events. Damage to levees is addressed as a part of our regular annual maintenance work to reduce risk to infrastructure.	Ongoing Capability
8.2 Secure funding to conduct necessary seismic strengthening work on Valley Water-owned dams as identified in seismic evaluations.				
No	Discontinued		This mitigation action has been discontinued as associated work is covered in measure 8.3.	Discontinued
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 Valley Water facilities to mitigate seismic risk.				
Yes	Ongoing Capability	Medium / No	Seismic retrofit projects are underway at Anderson, Calero, and Guadalupe dams. Seismic improvements are underway at Almaden Dam. Other seismic evaluations are currently being performed at Coyote, Chesbro, Uvas, Lenihan, and Stevens Creek dams.	Ongoing Capability

Action Taken?	Timeline	Priority / Changed?	Describe Actions Taken or Progress Made	Status
8.4 Conduct evaluations of Valley Water facilities (offices, ancillary structures) to determine seismic vulnerability.				
Yes	Short Term (< 5 yrs.)	Low / No	There were no seismic evaluations of Valley Water facilities conducted in 2020.	No Progress
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.				
No	Discontinued		This mitigation action has been discontinued as associated work is covered in measure 1.5.	Discontinued
8.6 Replace seismically vulnerable sections of the Almaden Valley Pipeline.				
Yes	Long Term (5+ yrs.)	Low / No	AVP Replacement – Planning Phase has started. AVP Inspection as part of 10-Year Design Phase has started.	In Progress
9.1 Monitor trees and other large objects that may threaten nearby Valley Water infrastructure in high wind events and maintain or reinforce as appropriate.				
Yes	Ongoing Capability	Low / No	Valley Water conducts facility inspections. When threats are identified (including hazardous trees), work orders are submitted to mitigate the problem.	Ongoing Capability
10.1 Frequently monitor the status of dry vegetation on Valley Water property and around Valley Water facilities in wildland and WUI zones, and conduct weed abatement and pesticide application activities as needed.				
Yes	Ongoing Capability	Medium / No	Valley Water Complies with California Government Code section 51182, which requires the maintenance of a firebreak within 30 feet of occupied structures on its property by removing flammable vegetation or combustible growth. Weed abatement activities are performed March through December. Herbicide application to prevent weed growth is performed October through June.	Ongoing Capability
10.2 Work with surrounding landowners to ensure adequate fire road access to Valley Water facilities.				
No	Short Term (< 5 yrs.)		This mitigation action has been discontinued because Valley Water already has access to	Discontinued

Action Taken?	Timeline	Priority / Changed?	Describe Actions Taken or Progress Made	Status
			its facilities (buildings and infrastructure), and waterways. Additional access through private landowners is not needed.	
10.3 Identify Valley Water-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 (< 5 yrs.)		This mitigation action has been discontinued as there is no identifiable mitigation work that can be performed at this time.	Discontinued
10.4 Design and implement mitigation measures to reduce turbidity in waterways and water sources near high-fire risk areas.				
No	Short Term (< 5 yrs.)		This mitigation action has been 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).	Discontinued

Changes That May Impact Implementation of the Plan

During the COVID-19 pandemic, Valley Water continued performing critical essential work. There were no significant changes noted that had a profound impact on the implementation of the plan.

Recommendations for Changes or Enhancements

The following recommendations have been noted for future updates or revisions to the plan:

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

PUBLIC REVIEW NOTICE

The contents of this report are considered to be public knowledge and have been prepared for total public disclosure. Copies of the report have been provided to the Valley Water Board of Directors, Chief Executive, Operating and Administrative Officers, and to local media outlets. The report is posted on the Valley Water website https://www.valleywater.org/LHMP. Any questions or comments regarding the contents of this report should be emailed to: LHMP@Valleywater.org.

ADDITIONAL COMMENTS

Updates were made to the Valley Water 2017 Local Hazard Mitigation Plan List of Figures / maps as indicated below.

ATTACHMENT A
Meeting Agendas and Minutes

LHMP ANNUAL PROGRESS REPORT MEETING
LHMP Planning Committee

Date:	March 24, 2021
Time:	11:00 AM – 11:40 AM
Location:	Virtual Meeting
Meeting Purpose:	LHMP Annual Review and Report for the period January – December 2020

AGENDA

I. Welcome and Roll Call	Alexander Gordon
II. Power Point Presentation	Alexander Gordon
III. Report Review	Planning Committee

Action Needed from Planning Committee

A. Submit final edits or comments by close of business, Friday, April 2, 2021

Date:	March 29, 2021
Time:	1:00 PM – 1:40 PM
Location:	Virtual Meeting
Meeting Purpose:	LHMP Annual Review and Report for the period January – December 2020

AGENDA

I. Welcome and Roll Call	Alexander Gordon
II. Power Point Presentation	Alexander Gordon
III. Report Review	Planning Committee

Action Needed from Planning Committee

A. Submit final edits or comments by close of business, Friday, April 2, 2021

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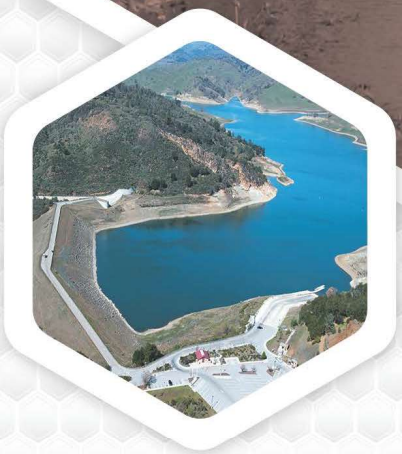
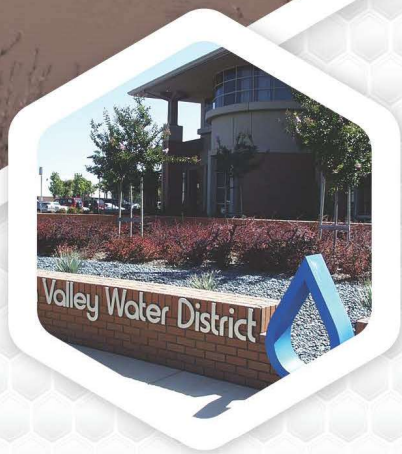
ATTACHMENT B
Meeting Sign-In Sheets

Sign-In Sheet		
Purpose: LHMP Annual Review and Report for the period January – December 2020		**Meeting Date**: 03/24/2021
Facilitator: Alexander Gordon		**Location**: Virtual Meeting
Name of Attendee	**Extension**	**Unit**
Alexander Gordon	2637	Emergency, Safety and Security Division
Donna Germany	2689	Office of Emergency Services
Carmen Gwartney	2057	Emergency, Safety and Security Division
Erin Baker	2608	District-Wide Asset Management
Rolando Bueno	2037	Pipelines Project Delivery
John Chapman	2645	Vegetation Field Operations
Jennifer Codianne	3876	Watersheds Operations & Maintenance Division
Chris Hakes	3796	Dam Safety & Capital Delivery Division
Linh Hoang	2297	Office of Communications
Cody Houston	3163	Watersheds O&M Engineering Support
Kurt Lueneburger	3055	Environmental Planning
Surjit Saini	2268	Laboratory Services
Jay Lee	2231	Watershed Field Operations
Jesse Soto	2244	Facilities Management
Greg Williams	2867	Raw Water Operations Division

ATTACHMENT B
Meeting Sign-In Sheets (continued)

Sign-In Sheet		
Purpose: LHMP Annual Review and Report for the period January – December 2020		**Meeting Date**: 03/29/2021
Facilitator: Alexander Gordon		**Location**: Virtual Meeting
Name of Attendee	**Extension**	**Unit**
Alexander Gordon	2637	Emergency Safety and Security Division
Carmen Gwartney	2057	Emergency Safety and Security Division
Donna Germany	2689	Office of Emergency Services
John Brosnan	2849	Utility Electrical & Control Systems
Trisha Howard	3185	Office of Civic Engagement
Health McMahon	3126	Water Utility Capital Division
Brandon Ponce	2787	Treatment Plants Project Delivery
Bhavani Yerrapotu	2735	Treated Water Division
Hortencia Gonzalez	2489	Treated Water Division
Jason Gurdak	2988	Groundwater Management





Valley Water

Clean Water • Healthy Environment • Flood Protection

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