

# Attachment 2: Draft Priority Actions for Lower Peninsula and West Valley Watersheds

## Flood Risk Reduction Actions

| Action ID | Watershed | Title                                                | Brief Description                                                                                                                                                                                                                                                                      | Activity Type      |
|-----------|-----------|------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|
| FRR-1     | LP        | Stevens Creek Hydrology Update Study                 | Update flood hydrology and hydraulic models to improve flood risk estimates and support future watershed planning.                                                                                                                                                                     | Assessment / Study |
| FRR-2     | LP        | Searsville Watershed Restoration Project             | Partner with Stanford to restore a free-flowing creek system, improve floodplain function, and reconnect natural sediment transport processes.                                                                                                                                         | Partnership        |
| FRR-3     | LP        | San Francisquito Creek Flood Protection (Reach 2)    | Support flood protection improvements and bridge upgrades to reduce flood risk along lower San Francisquito Creek.                                                                                                                                                                     | Partnership        |
| FRR-4     | LP        | Stevens Creek Dam Seismic Stability Assessment       | Evaluate dam performance under earthquake and extreme flood conditions and identify potential improvement options.                                                                                                                                                                     | Assessment / Study |
| FRR-5     | LP        | Palo Alto Tide Gate Rehabilitation                   | Rehabilitate aging tide gates that help protect nearby communities, infrastructure, and creek systems from coastal flooding.                                                                                                                                                           | Project            |
| FRR-6     | LP        | Stevens Creek Flood Protection Project               | Develop flood protection improvements in high-risk reaches of Stevens Creek to reduce flood risk to nearby properties and facilities.                                                                                                                                                  | Project            |
|           |           |                                                      |                                                                                                                                                                                                                                                                                        |                    |
| FRR-1     | WV        | West Valley Watershed Hydraulic Analysis             | Refine watershed hydraulic models and flood risk assessments to support future planning and project development.                                                                                                                                                                       | Assessment / Study |
| FRR-2     | WV        | Saratoga Creek Flood Protection Project              | Evaluate and develop flood risk reduction improvements along a reach of Saratoga Creek near Stevens Creek Boulevard.                                                                                                                                                                   | Project            |
| FRR-3     | WV        | San Tomas Aquino Creek Watershed Sediment Assessment | Assess sediment movement, erosion areas, and future watershed conditions to support resilient sediment management strategies.                                                                                                                                                          | Assessment / Study |
| FRR-4     | WV        | Sunnyvale West Channel Enhancement Project           | Improve flood protection along the West Channel through infrastructure upgrades to reduce flood risk near the Sunnyvale Water Pollution Control Plant, surrounding businesses, and transportation corridors. The project will be developed in coordination with the City of Sunnyvale. | Project            |
| FRR-5     | WV        | Sunnyvale East Channel Enhancement Project           | Upgrade bridges, levees, floodwalls, and other flood management infrastructure along the East Channel to improve system performance and reduce flood risk in the Moffett Park and Sunnyvale area.                                                                                      | Project            |

## Natural Ecosystem Actions

| Action ID | Watershed | Title                                            | Brief Description                                                                                                                 | Activity Type      |
|-----------|-----------|--------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------|--------------------|
| ECO-1     | LP        | Improve Spawning & Rearing Habitat for Steelhead | Add gravel, large wood, pools, and other habitat features to improve conditions for native fish in Stevens Creek.                 | Project            |
| ECO-2     | LP        | SF35 Gage Fish Passage Improvement               | Improve fish passage conditions at the Stevens Creek SF35 gaging station.                                                         | Project            |
| ECO-3     | LP        | Fremont Fish Ladder Improvement                  | Upgrade fish ladder infrastructure to improve fish movement and habitat connectivity on Stevens Creek.                            | Project            |
| ECO-4     | LP        | Hetch Hetchy Drop Structure Fish Passage         | Support the improvement of fish passage at the SFPUC-owned drop structure on Stevens Creek.                                       | Partnership        |
| ECO-5     | LP        | Landels Park Fish Passage Improvement            | Support the improvement of fish passage at two drop structures near Landels Park to support steelhead migration on Stevens Creek. | Partnership        |
| ECO-6     | LP        | Vernon Avenue Fish Passage Improvement           | Improve passage conditions for juvenile and adult steelhead near Vernon Avenue on Stevens Creek.                                  | Project            |
| ECO-7     | LP        | El Camino Real Fish Passage Improvement          | Support the improvement of fish passage near El Camino Real and adjacent storm drain infrastructure on Stevens Creek.             | Partnership        |
| ECO-8     | LP        | Gaging Weir 44 Fish Passage Improvement          | Support the improvement of fish passage at Weir 44 on Stevens Creek while maintaining stream monitoring capabilities.             | Partnership        |
| ECO-9     | LP        | Stevens Reservoir Trap-and-Truck Study           | Evaluate the feasibility of transporting steelhead around Stevens Creek Reservoir to improve access to habitat.                   | Assessment / Study |
| ECO-10    | LP        | Stevens Creek Multiport Outlet Study             | Evaluate reservoir outlet modifications that could improve downstream water temperatures and habitat conditions.                  | Assessment / Study |
| ECO-11    | LP        | Moffett Fish Passage Improvement                 | Improve the existing Moffet fish ladder for performance and habitat connectivity on Stevens Creek.                                | Project            |
| ECO-12    | LP        | Evelyn Avenue Fish Passage Improvement           | Restore stream habitat and improve fish passage opportunities near Evelyn Avenue.                                                 | Project            |
| ECO-13    | LP        | Highway 101 Fish Passage Improvement             | Support the improvement of fish passage barriers at the CalTrans-owned Highway 101 crossing on Stevens Creek.                     | Partnership        |
| ECO-14    | LP        | Permanente Creek Diversion Study                 | Assess opportunities to improve fish passage along the Permanente Creek Diversion.                                                | Assessment / Study |

|                 |            |                                                       |                                                                                                                                                                                                                                                                                                                                    |                    |
|-----------------|------------|-------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|
| ECO-15          | LP         | Stevens Creek Channel Stabilization                   | Stabilize eroding creek reaches while enhancing habitat and channel function.                                                                                                                                                                                                                                                      | Project            |
| ECO-16          | LP         | Barron Creek Channel Improvements                     | Improve aging channel infrastructure while enhancing ecological conditions.                                                                                                                                                                                                                                                        | Project            |
| ECO-17          | LP         | Permanente & Hale Creek Channel Improvements          | Improve aging channel infrastructure while enhancing ecological conditions.                                                                                                                                                                                                                                                        | Project            |
|                 |            |                                                       |                                                                                                                                                                                                                                                                                                                                    |                    |
| ECO-1           | WV         | Regnart Creek Channel Stabilization                   | Address channel erosion and instability along Regnart Creek through targeted improvements that reduce maintenance challenges while enhancing ecological function and watershed resilience.                                                                                                                                         | Project            |
| ECO-2           | WV         | San Tomas Aquino Creek Channel Improvements           | Evaluate erosion, sediment, maintenance challenges, and habitat conditions along San Tomas Aquino Creek to identify long-term, sustainable solutions that improve watershed resilience and ecological function.                                                                                                                    | Project            |
| ECO-3           | WV         | Pond A4 Resilient Habitat Restoration                 | Restore habitat within Pond A4 using nature-based approaches that improve ecological conditions, support wildlife, and enhance long-term resilience to climate change and sea level rise.                                                                                                                                          | Project            |
| ECO-4           | WV         | Calabazas Creek Channel Improvements                  | Evaluate opportunities to improve channel stability, flood risk management, and long-term maintenance effectiveness along lower Calabazas Creek. A study will first identify sustainable and cost-effective solutions to address ongoing sediment, vegetation, erosion, and infrastructure challenges.                             | Project            |
| ECO-5           | WV         | Calabazas and San Tomas Aquino Creek-Marsh Connection | Reconnect Calabazas Creek and San Tomas Aquino Creek to adjacent tidal marsh habitats to improve ecological connectivity, support native wildlife, and enhance long-term ecosystem resilience.                                                                                                                                     | Project            |
|                 |            |                                                       |                                                                                                                                                                                                                                                                                                                                    |                    |
| ECO-18<br>ECO-6 | LP &<br>WV | Modified Channel Ecological Enhancement Planning      | Identify and prioritize opportunities to enhance habitat and ecological function within modified creek channels. Potential projects will be evaluated based on ecological benefits, feasibility, and their ability to maintain flood protection while providing additional community and environmental benefits where appropriate. | Assessment / Study |

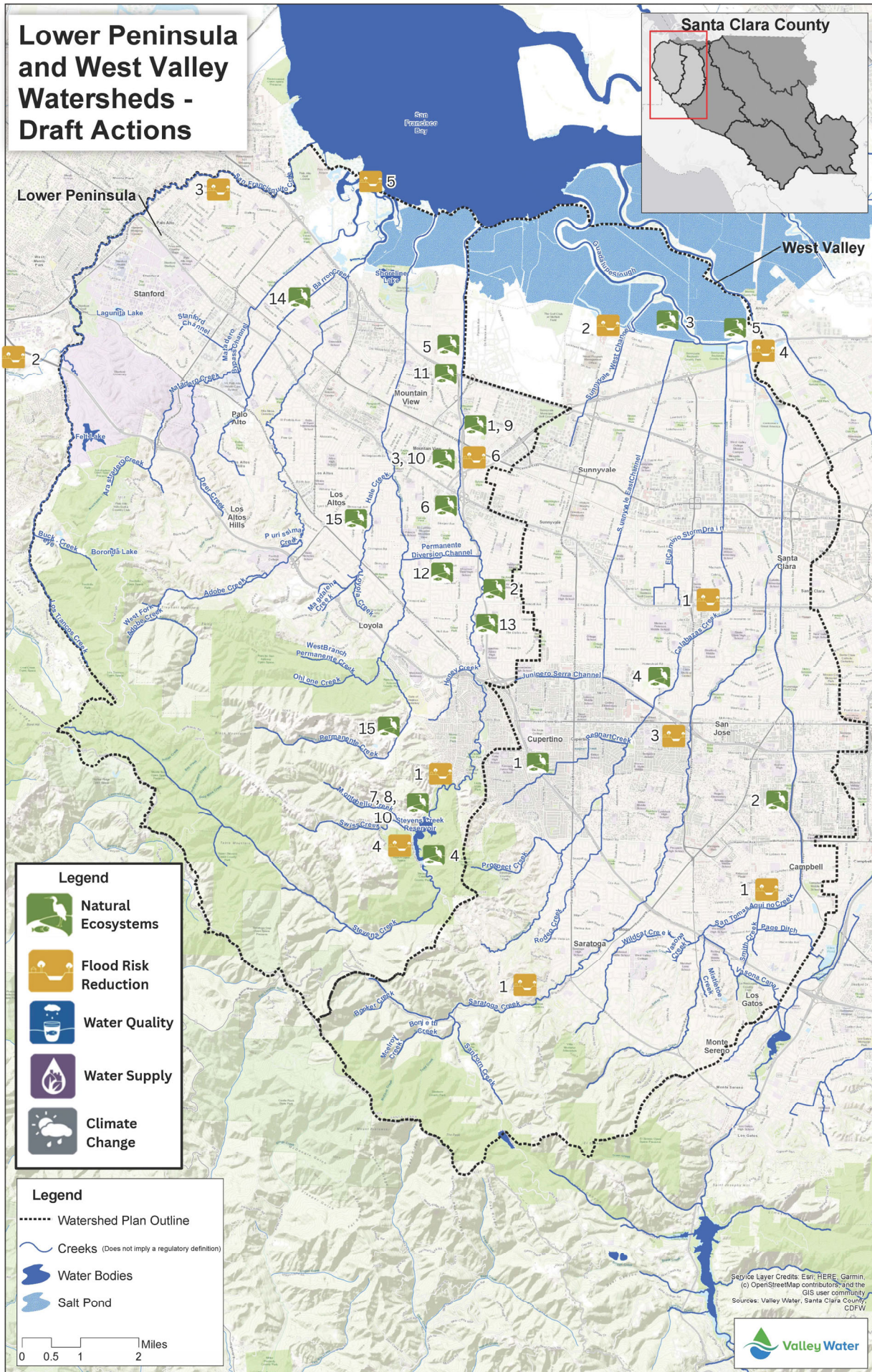
### Climate Change Actions

| Action ID | Watershed | Title                                | Brief Description                                                                                                                                         | Activity Type |
|-----------|-----------|--------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|
| CC-1      | LP & WV   | Greenhouse Gas Reduction Plan Update | Implement Valley Water's Greenhouse Gas Reduction Plan to support progress toward net-zero emissions goals and improve climate resilience.                | Plan          |
| CC-2      | LP & WV   | Carbon Budget Tracking Program       | Develop a carbon budget tracking tool and procedures to help monitor greenhouse gas emissions and track progress toward Valley Water's reduction targets. | Program       |

### Water Quality Actions

| Action ID | Watershed | Title                                                                   | Brief Description                                                                                                                                                                                                                                                       | Activity Type |
|-----------|-----------|-------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|
| WQ-1      | LP & WV   | Partner with Local Municipalities to implement Stormwater Resource Plan | Valley Water plans to partner with municipalities throughout Santa Clara County to update the existing Santa Clara Basin Stormwater Resource Plan and identify projects that improve stormwater management and enhance the water quality of local creeks and waterways. | Partnership   |
| WQ-2      | LP & WV   | Support and Advance Sea Level Rise Groundwater Studies                  | Support and expand studies evaluating the effects of sea level rise and saltwater intrusion on groundwater conditions, to further identify, prioritize, and develop adaptation projects and management strategies that improve long-term watershed resilience.          | Partnership   |

# Lower Peninsula and West Valley Watersheds - Draft Actions



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