

## 1.5 OBJECTIVES

The One Water Framework's five objectives represent intermediary steps to reaching goals. Their purpose is to bring the three higher-level goals into sharper focus as tangible concepts.

For each objective, Valley Water developed two to four key attributes representing critical measures or components of that objective. As the One Water Framework is applied and implemented, Valley Water will track progress in meeting each objective by evaluating various metrics and targets associated with these attributes (see Chapter 4). More specific targets will be included in the forthcoming watershed-based plans. The combination of the objective statements plus their related attributes, metrics, and targets add up to SMART (specific, measurable, achievable, realistic, time based) objectives.

Development of One Water objectives engaged diverse communities that represent Santa Clara County. The effectiveness of the ongoing effort will derive from the quality, duration, and extent of community participation in decision making. Community engagement is woven throughout the following five objectives. Under One Water, engagement is not an end in itself but rather as a means to gathering community support for future priorities that protect, enhance and sustain water resources.



### A. Protect and Maintain Water Supplies

This One Water objective is to protect and maintain a reliable water supply that draws on a diverse mix of water

sources — groundwater, local rainwater, imported water, and recycled water— to supply diverse needs. The objective also acknowledges an ongoing emphasis on expanding local supply, especially recycled water and water conservation, as a means of meeting future demands. While the current One Water Framework focuses more on local rainwater and groundwater and less on recycled water and water being treated at water treatment plants, these are all still elements of One Water in a broader sense.

Valley Water's strategy for maintaining a reliable current and future supply includes efforts to manage demand, to develop recycled water supplies, and to secure and optimize its flexible and interconnected water supplies and infrastructure.

This objective also recognizes the importance of managing local groundwater subbasins to ensure water supply reliability for all uses, avoid permanent land subsidence, and minimize water quality degradation, including from saltwater intrusion. This requires continued implementation of comprehensive conjunctive use programs and the exploration of expanded programs as needed. It also requires the ongoing coordinated use of multiple supply sources, including conserved or recycled water, to offset demands on groundwater, as well as storage of supply in groundwater subbasins for use during water shortages. Sustainable groundwater management supports urban, rural, agricultural, and environmental water supply needs.

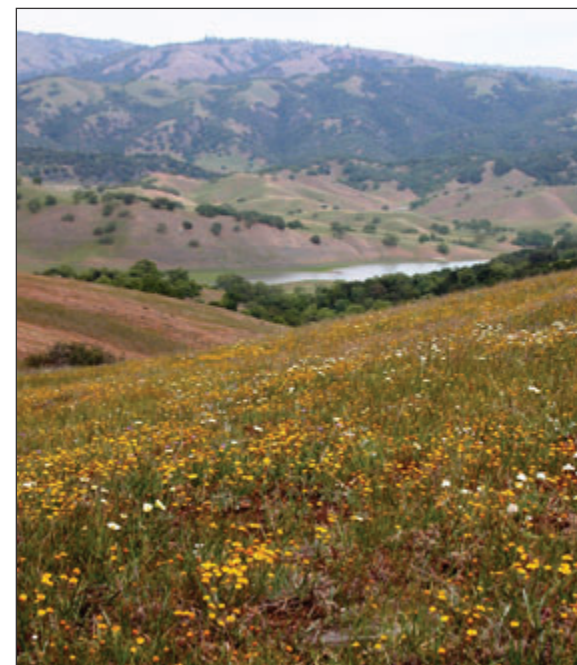


### B. Protect and Improve Surface and Ground Water Quality

This One Water objective is to maintain high quality water in

reservoirs, creeks, groundwater subbasins, and the Bay. The county needs high quality surface water and groundwater to safeguard public and ecological health and to support myriad beneficial uses. Maintaining high water quality involves Valley Water in water quality protection at many scales, ranging from meeting or surpassing regulatory standards for drinking water to preventing pollution and protecting source water (including groundwater).

Meeting this objective, in conjunction with objectives for stream health, will require Valley Water to continue working with others to improve physical, chemical, and biological water quality parameters such as temperature, dissolved oxygen, turbidity, trash, and other pollutants of concern, as well as food supply for fish (benthic macro-invertebrates).



Coyote Ridge over Anderson Lake. Photo: USFWS



### C. Reduce Flood Risk

This One Water objective is to practice, encourage, and support flood and floodplain management that integrates risk reduction with enhancement of natural creek corridors and floodplain functions. By promoting managed flooding and natural flood protection, Valley Water can also meet multiple objectives. One Water projects will be developed to not only enhance natural riparian functions, but also to increase water infiltration, diversify habitats, manage woody debris, provide life-cycle cues to sensitive species, and move gravel and fine sediment through the system.

One component of reducing flood risk is expanding buffer lands adjacent to creeks, reservoirs, the Bay, and other water bodies. These buffers allow for natural creek meanders and periodic overtopping of floodwaters into safe areas. Expanding buffers will also support natural processes, create water-to-land habitat transitions, and provide recreational opportunities along waterways where appropriate.

Expanding landscapes to buffer waterways and water bodies could also offer Valley Water more flexibility in meeting multiple objectives. As high energy flows or floods spill over banks, for example, they reduce erosion, filter through vegetation, and deposit sediment on buffering floodplains rather than in channels where it can impede flow. Buffers will be increasingly critical in the future, as Valley Water works to help creeks, communities, and shorelines adapt to climate change, extreme storms or heat, sea level rise, and increased urbanization.



### D. Protect, Enhance & Sustain the Natural Ecosystem

Resilience is an important concept for One Water integrated planning and can be applied to water-related habitats and systems in the hills, the valley floor, and the baylands (see sidebar). This One Water objective is to strengthen the resilience of natural environments and resources so they can better withstand the stresses and disturbances brought about by urbanization, drought, climate change, and sea level rise. Meeting this objective might involve building more connections between habitats throughout the county. Habitat connectivity, often best achieved along creek corridors, can help sustain native and migratory terrestrial and aquatic species. From an integrated One Water perspective, resilient habitats may occupy the same spaces as areas used for other important water management functions, such as groundwater recharge or flood and water quality protection.

One aspect of promoting habitat resilience in watersheds is to encourage more natural stream flows (in terms of magnitude, timing, and duration) so that they support natural processes. Many habitats, plant communities, and species along creeks are adapted to an historic, if intermittent and changeable, natural hydrograph and climate. The One Water approach is designed to help Valley Water balance multiple objectives, including supporting biologically healthy streams, as well as water supply and flood protection objectives. This balancing will need to be consistent with the Fisheries and Aquatic Habitat Collaborative Effort (FAHCE) program and other operating agreements and requirements.



### E. Mitigate & Adapt to Climate Change

This One Water objective is to prepare for and adapt to global warming and climate change effects that include temperature increases, precipitation changes, weather extremes, and sea level rise. These effects may increase water supply risks and uncertainty; increase the severity or duration of droughts, flooding, and wildfire; and create added stress on native species and riparian and wetland ecosystems.

Managing whole watersheds, with an eye for One Water integration, will be critical in creating the kind of flexibility and resilience in water resources management necessary to mitigate and adapt to uncertainties and unforeseen impacts. Climate change is important across all business areas for Valley Water and so is addressed by functional areas within its attributes and metrics.



*Driveway flooding. Photo: Valley Water*