

Water Supply Strategies

Project	Lead Agency	Description
Water Supply Reliability and Planning		
South County Water Supply Plan	<ul style="list-style-type: none"> • SCVWD 	<ul style="list-style-type: none"> • Developing a long-term water supply plan for southern Santa Clara County • Focus on Llagas Groundwater Sub-basin and Uvas and Llagas watersheds
South County Resources Management Plan	<ul style="list-style-type: none"> • SCVWD 	<ul style="list-style-type: none"> • Protects surface water rights in Uvas watershed • Addresses reservoir re-operations to maintain flows for fisheries
Groundwater Management Plan Update for the San Benito County Portion of the Gilroy-Hollister Groundwater Basin	<ul style="list-style-type: none"> • SBCWD 	<ul style="list-style-type: none"> • Addresses quantity and quality of water in San Benito County • Identifies and evaluates a toolbox of projects considered as part of a coordinated basin-wide approach to groundwater management
Hollister Urban Area Water & Wastewater Master Plan	<ul style="list-style-type: none"> • City of Hollister • SBCWD • San Benito County 	<ul style="list-style-type: none"> • Evaluates urban water resources alternatives based upon the City's varied water supply sources • Address wastewater treatment and disposal options and constraints on growth • Integrate water supply and wastewater disposal options to consider the interrelationships of quality and quantity for both surface and groundwater resources • Develop an integrated urban plan that considers available infrastructure, and includes a schedule and financial plan for implementation
Revised Basin Management Plan	<ul style="list-style-type: none"> • PVWMA 	<ul style="list-style-type: none"> • Provides recommendations to balance the groundwater basin and prevent seawater intrusion in the Pajaro Valley • Includes a combination of management practices and additional water sources
Urban Water Management Plans	<ul style="list-style-type: none"> • Various Individual Efforts among Region's Urban Water Suppliers 	<ul style="list-style-type: none"> • Required of every urban water supplier that provides water to more than 3,000 customers or that delivers over 3,000 AFY of water. • Documents how the supplier plans to ensure the appropriate level of reliability in its water service to meet customer demands during normal, dry and drought years

Recycled Water Projects		
Watsonville Recycled Water Treatment Facility	<ul style="list-style-type: none"> • City of Watsonville • PVWMA 	<ul style="list-style-type: none"> • WRWTF to be located in Watsonville • Market is the coastal region of Pajaro Valley to eliminate coastal pumping • Agricultural use • 4,000 AFY to be produced • Blended with 3,000 AFY of groundwater and surface water • Deliver 7,000 AFY total to coastal region
Watsonville Recycled Water Treatment Facility, Phase II	<ul style="list-style-type: none"> • City of Watsonville • PVWMA 	<ul style="list-style-type: none"> • Addition of nitrification/denitrification facilities to WRWTF and seasonal storage facilities • Year round recycled water production
South County Recycled Water Program	<ul style="list-style-type: none"> • SCRWA • SCVWD • City of Gilroy • City of Morgan Hill 	<ul style="list-style-type: none"> • SCRWA recycled water treatment facility located southeast of Gilroy • Market users in and around is Gilroy and Morgan Hill • Landscape irrigation, crop irrigation and industrial use • 1,500 AFY on average produced • 9 mgd (10,000 AFY) recycled water production capacity
North San Benito County Regional Recycled Water Project	<ul style="list-style-type: none"> • City of Hollister • SBCWD • Water Resources Association of San Benito County 	<ul style="list-style-type: none"> • Regional water recycling treatment facility to be located in Hollister • Proposed market includes Hollister Airport, San Juan Oaks Golf Course and San Juan Valley agricultural users • Agricultural use and landscape irrigation • 2,300 AFY to be produced in near-term
Sunnyslope Recycled Water Project	<ul style="list-style-type: none"> • Sunnyslope County Water District 	<ul style="list-style-type: none"> • SSCWD located in Hollister • Recycled water facility considered as part of SSCWD wastewater treatment facility upgrades • Market is the Ridgemark Golf Course

Desalination Projects		
Pajaro River Watershed Groundwater Desalination Feasibility Study	<ul style="list-style-type: none"> • SBCWD • SCVWD 	<ul style="list-style-type: none"> • 3,000 AFY groundwater demineralization facility • Identification of potential locations for groundwater extraction and treatment • Assessment of desalination technology • Assessment of brine management options • Identification of potential market
SSCWD Groundwater Demineralization	<ul style="list-style-type: none"> • Sunnyslope County Water District 	<ul style="list-style-type: none"> • SSCWD is investigating local water supply options including treated surface water and demineralization of groundwater
North Monterey County Desalination Project	<ul style="list-style-type: none"> • Pajaro/Sunny Mesa Community Services District • Poseidon Resources Corporation 	<ul style="list-style-type: none"> • Located in Moss Landing • Proposed market is Monterey Peninsula, unincorporated area of Monterey County, areas of Pajaro/Sunny Mesa Community District and areas of PVWMA • 20 mgd seawater desalination project (21,000 – 23,000 AFY)
Watsonville Recycled Water Treatment Facility, Phase III	<ul style="list-style-type: none"> • City of Watsonville • PVWMA 	<ul style="list-style-type: none"> • Demineralization of recycled water
Surface Water		
Corralitos Creek Surface Water Intake Enhancement	<ul style="list-style-type: none"> • City of Watsonville 	<ul style="list-style-type: none"> • Modification of surface water intake facility on Corralitos Creek • Ensures long-term reliability of the City's potable water supply from Corralitos Creek • 1,100 AFY existing diversion • 2,000 AFY potential expansion

Harkins Slough	<ul style="list-style-type: none"> • PVWMA 	<ul style="list-style-type: none"> • Seasonal diversion from Harkins Slough, located at confluence of Harkins and Watsonville Sloughs • Water filtered and pumped to Harkins Slough recharge basin for seasonal storage until the irrigation season • 1,100 AFY expected yield • Additional water provided by supplemental wells • 2,000 AFY maximum allowable diversion
Morgan Hill Package Plant	<ul style="list-style-type: none"> • SCVWD • City of Morgan Hill 	<ul style="list-style-type: none"> • Package treatment plant for supplemental M&I supply • Treating CVP import water • Being considered as part of South County Water Supply Plan
Arroyo Dos Picachos	<ul style="list-style-type: none"> • SBCWD 	<ul style="list-style-type: none"> • SBCWD water rights to Arroyo Dos Picachos underutilized • Rehabilitation and improvement of existing diversion structure and development of conveyance pipeline • 4.75 cfs diversion allowed between December 1 and May 1 • 1,422 AFY potential
Arroyo Los Viboras	<ul style="list-style-type: none"> • SBCWD 	<ul style="list-style-type: none"> • 1.9 cfs (1,375 AFY) of unadjudicated seasonal water rights potentially available on Arroyo Los Viboras • Would require coordination with Pacheco Pass Water District, which has existing diversion structure • Modification of existing diversion structure and development of conveyance facilities
Pacheco Creek	<ul style="list-style-type: none"> • SBCWD 	<ul style="list-style-type: none"> • Development of unused water on Pacheco Creek • Modification of existing dam and development of conveyance facilities
San Juan Bautista Surface Water Treatment Plan	<ul style="list-style-type: none"> • City of San Juan Bautista 	<ul style="list-style-type: none"> • Construction of new water treatment plant and new water and sewer lines • Blend treated CVP import water with San Juan Basin groundwater

Uvas Reservoir	<ul style="list-style-type: none"> • SCVWD 	<ul style="list-style-type: none"> • 9,835 AF capacity • Located along Uvas Creek • Water released for percolation and fisheries enhancement along Uvas Creek and supplemental flow in Llagas Creek • Offers flood control benefits • Watershed produces 30,000 AFY on average • SCVWD surface water right on Uvas is 14,000 AFY, not all of this is currently captured in Uvas Reservoir • Potential for expansion or re-operation to increase regional water supply opportunities or local groundwater recharge
Pacheco Reservoir	<ul style="list-style-type: none"> • Pacheco Pass Water District 	<ul style="list-style-type: none"> • 6,143 AF capacity • Located on north fork of Pacheco Creek • Water released for percolation along the North Pacheco Creek • Potential for expansion or re-operation to increase regional water supply opportunities or local groundwater recharge
San Justo Reservoir	<ul style="list-style-type: none"> • SBCWD • USBR 	<ul style="list-style-type: none"> • 10,000 AF capacity • Currently limited to 7,000 AF due to seepage • Provides elevated operational storage for the SBCWD CVP system
Hernandez Reservoir	<ul style="list-style-type: none"> • SBCWD 	<ul style="list-style-type: none"> • 18,300 AF capacity • Located along San Benito River • Water released for percolation along San Benito River • Offers substantial flood control benefits • Due to high groundwater levels downstream not all of the stored water is utilized • Potential for re-operation to increase regional water supply opportunities
Paicines Reservoir	<ul style="list-style-type: none"> • SBCWD 	<ul style="list-style-type: none"> • 2,870 AF capacity • Located off-stream between San Benito River and Tres Pinos Creek • Stores water diverted from San Benito River • Water released for percolation • Potential for reservoir rehabilitation to decrease water losses

Groundwater Management		
Morgan Hill Wellhead Treatment	<ul style="list-style-type: none"> City of Morgan Hill 	<ul style="list-style-type: none"> Wellhead treatment for perchlorate removal Manage existing contaminated groundwater plume, restore groundwater quality
Aromas Water District Wellhead Treatment	<ul style="list-style-type: none"> Aromas Water District 	<ul style="list-style-type: none"> Wellhead treatment for manganese Goal to lower manganese level below the secondary maximum contaminant level of 0.05 mg/L 300 AFY production
Tres Pinos Water Improvement Project	<ul style="list-style-type: none"> Tres Pinos County Water District 	<ul style="list-style-type: none"> Upgrade water supply system Construct 500,000 gallon storage facility Drill new wells to serve as supplemental supply
Cienega Valley	<ul style="list-style-type: none"> SBCWD 	<ul style="list-style-type: none"> Historic water source for City of Hollister Water delivery hindered due to landslide damaging pipeline in 1983 Replacement pipeline with capacity 1.5 MGD (1,680 AFY) 489 AFY maximum allowable diversion Monthly maximum allowable diversion 40.78 AF Potential to extend replacement pipeline an additional mile to connect with the Hollister Conduit of the CVP System in Tres Pinos
Artesian Well Water Recovery	<ul style="list-style-type: none"> PVWMA 	<ul style="list-style-type: none"> Seasonal capture of existing artesian flows and improved management of high water tables near confluence of Uvas Creek and San Benito River for agricultural supply delivered to PVWMA via pipeline or river conveyance
Groundwater and Surface Water Blending	<ul style="list-style-type: none"> SBCWD 	<ul style="list-style-type: none"> Blending of local groundwater with high TDS with imported or local surface waters with lower TDS Considered mainly for San Juan Basin for agricultural use
In-stream and off-stream recharge of imported and local water	<ul style="list-style-type: none"> SCVWD SBCWD 	<ul style="list-style-type: none"> CVP water and other local surface supplies are utilized to recharge groundwater basins (aquifers) in Santa Clara and San Benito counties
South County Groundwater Recharge Project	<ul style="list-style-type: none"> SCVWD 	<ul style="list-style-type: none"> Additional recharge capacity of 11,000 AFY Reduce water supply shortages in the Llagas Subbasin

Main Ave. Pipeline Repair	<ul style="list-style-type: none"> • SCVWD 	<ul style="list-style-type: none"> • Repair the Main Avenue pipeline to enable movement of water from Anderson Reservoir to the Main Avenue Recharge Ponds
Church Ave. Diversion	<ul style="list-style-type: none"> • SCVWD 	<ul style="list-style-type: none"> • Enable the District to utilize the full recharge capacity of the Church Avenue Percolation Ponds. • Protect the District's existing water rights for Chesbro and Uvas Reservoirs, totaling 39,100 acre-feet per year. • Provide potential restoration and enhancement opportunities that would provide additional natural resource benefits.
San Pedro Rock Columns	<ul style="list-style-type: none"> • SCVWD 	<ul style="list-style-type: none"> • Current recharge capacity is limited by clay soils • Rock columns would provide a conduit past the clays to increase recharge.
East Little Llagas Dams	<ul style="list-style-type: none"> • SCVWD 	<ul style="list-style-type: none"> • Spreader dams along East Little Llagas Creek to increase recharge capacity
Coastal Distribution System	<ul style="list-style-type: none"> • PVWMA • City of Watsonville 	<ul style="list-style-type: none"> • Network of pipes to deliver recycled water to agricultural industry for use in the Coastal Plain of the Pajaro Valley • Delivery of recycled water reduces the demand on the Coastal groundwater basin, as well as provides a source of recharge water to the ground via land irrigation
Inland Distribution System	<ul style="list-style-type: none"> • PVWMA 	<ul style="list-style-type: none"> • Supplement supply of water to agricultural users located east of Highway 1. • Reduce overall groundwater pumping during times when alternative sources are available
Aquifer Storage and Recovery	<ul style="list-style-type: none"> • PVWMA • City of Watsonville 	<ul style="list-style-type: none"> • Utilizing surface water to inject water into the ground with later extraction of water from the same aquifer • Purpose is to store excess water in wet years, and utilize this groundwater supply in dry years
Tile drains for localized groundwater level management	<ul style="list-style-type: none"> • SBCWD • Farm Bureau • RCD 	<ul style="list-style-type: none"> • Tile drains are utilized throughout San Benito County to drain agricultural lands, and therefore, lower the local water table to optimize agricultural production
Tree Belt Evapotranspiration	<ul style="list-style-type: none"> • SBCWD 	<ul style="list-style-type: none"> • Planting of tree belts. • Trees will utilize groundwater uptake to grow, and locally lower groundwater table

Imported Water		
San Luis Reservoir Low Point Project	<ul style="list-style-type: none"> • SCVWD • SBCWD • San Luis Delta Mendota Water Authority • Bureau of Reclamation 	<ul style="list-style-type: none"> • Implement structural or non-structural measures that will increase the certainty of meeting the requested delivery schedule of annual allocations to CVP contractors dependent on San Luis Reservoir. • Increase the reliability and quantity of annual allocations to CVP contractors.
Spot Market Transfers	<ul style="list-style-type: none"> • SCVWD • SBCWD 	<ul style="list-style-type: none"> • Purchases of water from the open market, and subsequent transfer of that water, when necessary.
Mercy Springs	<ul style="list-style-type: none"> • PVWMA • SCVWD • Westlands Water District 	<ul style="list-style-type: none"> • PWMA entered into an agreement for the assignment of 6,260 AFY of contracted CVP water from the Mercy Springs Water District • Joint agreement between SCVWD, PVWMA, and Westlands Water District • PVWMA must acquire all or a portion of this water supply between 2008 and 2017; however, if PVWMA does not develop facilities to acquire this water by 2017, SCVWD and Westlands Water District will be the sole recipients of all water entitlements assigned under this contract.
Banking and Storage Agreements	<ul style="list-style-type: none"> • SCVWD • SBCWD 	<ul style="list-style-type: none"> • Water banking and storage in facilities such as Semitropic Water Storage District
PVWMA CVP entitlement	<ul style="list-style-type: none"> • PVWMA 	<ul style="list-style-type: none"> • The PVWMA currently has a future CVP entitlement of 19,900 AFY and a current contract of 6,260 AFY purchased from Mercy Springs. • The CVPIA restricted the USBR from entering into new long-term water supply contracts until it fulfills various environmental requirements. Since the USBR is not expected to fulfill these requirements for several years, negotiations for a new CVP contract for PVWMA's 19,900 AFY entitlement have been delayed. (Revised BMP)
Purchase of Additional CVP or SWP water entitlements	<ul style="list-style-type: none"> • PVWMA 	<ul style="list-style-type: none"> • If necessary, PVWMA will consider the purchase of additional water supplies from the CVP or financial support of the SCVWD purchase of SWP for use in the watershed

Import Pipeline Project	<ul style="list-style-type: none"> • PVWMA • City of Watsonville 	<ul style="list-style-type: none"> • Construction of a 23-mile import pipeline for transport of CVP water to the proposed CDS • The PVWMA currently has a future CVP entitlement of 19,900 AFY and an existing contract for 6,260 AFY
Water Transfers		
CVP Water Transfers within the San Felipe Division	<ul style="list-style-type: none"> • SBCWD • SCVWD • PVWMA 	<ul style="list-style-type: none"> • CVP water is would be optimized by maximizing wet year deliveries through water transfers and banking agreements
Other Water Transfers and Banking Agreements	<ul style="list-style-type: none"> • SBCWD • SCVWD • PVWMA 	<ul style="list-style-type: none"> • Could include groundwater, recycled water, and surface water banking and transfers between water agencies and their associated facilities within the Pajaro River basin
Water Conservation		
Agricultural Water Conservation Measures	<ul style="list-style-type: none"> • Various Efforts among Agencies 	<ul style="list-style-type: none"> • Agricultural education and outreach programs sponsored by SBCWD, SCVWD, PVWMA, RCDs and Farm Bureaus • California Irrigation Management Information System (CIMIS) Data Dissemination • SCVWD Water Use Efficiency Nursery Program • SBCWD Irrigation Equipment Improvement Program • SBCWD Soil Moisture Monitoring
Urban (Business and Residential) Conservation Measures	<ul style="list-style-type: none"> • Various Efforts among Agencies 	<ul style="list-style-type: none"> • Various public outreach programs sponsored by SBCWD, SCVWD, PVWMA and City of Watsonville • Various Conservation Devices and Water Efficiency Rebate Programs • SBCWD Large Landscape Irrigation Evaluation • SBCWD Watering Index Program • SBCWD Residential Water Survey Programs and Plumbing Retrofits • SBCWD System Water Audits, Leak Detection, and Repair • SCVWD Irrigation Technical Assistance Program • SCVWD Evapotranspiration Controller Pilot Program • SCVWD Water-Wise House Call Program • SCVWD Water-Efficient Technologies Program • PVWMA web page: Watersavingtips.org

<p>Studies, Research, Pilot Programs, and Future Projects</p>	<ul style="list-style-type: none"> • Various Efforts among Agencies 	<ul style="list-style-type: none"> • PVWMA and SCVWD Demonstration Gardens • SCVWD Residential Water Conservation Baseline Study • SCVWD Commercial, Industrial, Institutional Water Use Survey Program • SCVWD Irrigation Submeter Study • SCVWD Irrigation Retrofit Program • SCVWD Water-Efficient Landscape Rebate Pilot Program • SCVWD Artificial Turf Feasibility Study
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