Upper Santa Clara River IRWMP: Candidate and Pending Projects

PROJECTS READY FOR PRIORITIZATION PROCESS

	Project Name	Partners	Related Projects	Description	Location	Benefits and Costs
Castaic Lake Water Agency (CLWA) Sponsored Projects						
CLWA-1	Recycled Water Program, Phase II	None listed	CLWA-5	Part of CLWA's Recycled Water Master Plan. Includes the planning, design and construction of CLWA's next phase of recycled water improvements, including a new storage tank and various recycled water pipelines. The recycled water pipelines will transport recycled water from the existing Valencia Water Reclamation Plant to a new recycled water storage tank and recycled water customers.	Valencia Water Reclamation Plant and various local streets in Valencia, CA	Reduce Water Demand: Yes, not quantified Improve Operational Efficiency: NA Enhance Water Supply: ~1600 AFY Improve Water Quality: NA Promote Resource Stewardship: Yes, not quantified Capital Cost: $19M O&M Cost: $20K/yr Consistent with Plan Docs: Yes
CLWA-2	Electrolysis and Volatilization for Bromide Removal & DBP Reduction	Carollo Engineers; Metropolitan Water District of Southern California	CLWA-3	Bromide is a non-volatile anion found in all natural waters. Removing bromide using existing technologies is cost prohibitive for large scale water treatment. CLWA has developed a technology that can remove bromide from source waters. Water is passed between dimensionally stable anodes (DSAs) and the bromide is oxidized to bromine. Water is also oxidized to oxygen gas and hydrogen ions. This produces a very low pH near the surface of the DSAs and large volumes of very fine gases, resulting in the volatilization of bromine. CLWA has published several papers on the topic and received research funds from the American Water Works Association Research Foundation for this project. The process has already been shown to be effective at both removing bromide and reducing the concentrations of brominated disinfection byproducts which bromide causes.	CLWA Rio Vista Treatment Plant, Santa Clarita, CA	Reduce Water Demand: NA Improve Operational Efficiency: NA Enhance Water Supply: ~20,000 gpd treated Improve Water Quality: Yes, not quantified Promote Resource Stewardship: NA Capital Cost: $40-60K O&M Cost: $100K/yr Consistent with Plan Docs: unknown

PROJECTS READY FOR PRIORITIZATION PROCESS

	Project Name	Partners	Related Projects	Description	Location	Benefits and Costs
Castaic Lake Water Agency (CLWA) Sponsored Projects						
CLWA-3	Feasibility of Using Electrolysis and Volatilization for Chloride Removal	Los Angeles County Sanitation Districts; Carollo Engineers	CLWA-2	Chloride is a non-volatile anion found in all natural waters. Removing chloride using existing technologies is cost prohibitive for large scale water treatment. CLWA has developed a technology that can remove bromide from source waters. Water is passed between dimensionally stable anodes and the bromide is oxidized to bromine. Water is also oxidized to oxygen gas and hydrogen ions. This produces large volumes of very fine gases resulting in the volatilization of bromine. CLWA has published several papers on the topic and received research funds from the American Water Works Association Research Foundation for this project. Since chloride and bromide (and bromine and chlorine) have fairly similar chemistries, the same process may work for the oxidation and volatilization of chloride as well. The proposed project is to operate a pilot-scale treatment plant and conduct studies to determine if the process that removes bromide can also remove chloride from local waters. If effective, the process could be applied to Castaic Lake water and the waters of the Santa Clara River watershed.	CLWA Rio Vista Treatment Plant, Santa Clarita, CA	Reduce Water Demand: NA Improve Operational Efficiency: NA Enhance Water Supply: ~20,000 gpd treated Improve Water Quality: Yes, not quantified Promote Resource Stewardship: NA Capital Cost: $60-80K O&M Cost: $125K/yr Consistent with Plan Docs: unknown
CLWA-4	Large Landscape Efficiency Improvement Program	SCWD, NCWD		This project will start with an education component so the on- site maintenance staff will have an understanding of the issues that lead to increased water demand and the tools to recognize and correct those issues. The site will get an ET controller with a rain shut off device and some high distribution uniformity heads with a low application rate of the correct size installed to demonstrate the maximum achievable results for the unique area. Sites will be chosen on a projected cost versus benefit basis.	Large Landscapes in the Santa Clarita Valley including Landscape Maintenance districts, HOA common areas and regional and local parks.	Reduce Water Demand: Yes by 2 percent Improve Operational Efficiency: Demand reduced by 800 AFY treated water Enhance Water Supply: Yes, not quantified Improve Water Quality: Yes, not quantified Promote Resource Stewardship: NA Capital Cost: $450-$675K O&M Cost: $500-$1,000/yr Consistent with Plan Docs: unknown

Upper Santa Clara River IRWMP: Candidate and Pending Projects

PROJECTS READY FOR PRIORITIZATION PROCESS

	Project Name	Partners	Related Projects	Description	Location	Benefits and Costs
Castaic Lake Water Agency (CLWA) Sponsored Projects						
CLWA-5	Customer Recycled Water Incentive Program	NCWD, LACWWD NO.36, SCWD, VWC, SCVSD	CLWA-1	CLWA is planning to expand its existing recycled water system as noted in project CLWA-1. This project would fund hook-up costs to the system providing an incentive for the end-user to use recycled water. Project would consist of providing financing to customers to pay for a licensed plumber/contractor to connect to the recycled water system or to pay for the meter or other equipment connect to the system. Financing would be very favorable terms that could be repaid by paying potable rates for recycled water and using the difference to pay for the hook-up costs.	CLWA service area	Reduce Water Demand: Yes, not quantified Improve Operational Efficiency: NA Enhance Water Supply: Increase recycled water use by 1,600 AFY Improve Water Quality: NA Promote Resource Stewardship: Yes, not quantified Capital Cost: $1M-$10M O&M Cost: $100K/yr Consistent with Plan Docs: Yes

CLWA is listed as a partner for the following projects:

SCVSD-1: East Santa Clara River Wetlands and Recycled Water Project

SVCSD-2: Valencia and Saugus Water Reclamation Plants - Ultraviolet Disinfection System Facilities

SCVSD-3: SCVSD Self-Regenerating Water Softeners (SRWS) Public Outreach and Rebate Program

VWC-2: Implementation of Santa Clarita Valley Water Conservation Strategic Plan

City of Santa Clarita Sponsored Projects						
Santa Clarita-1	Upper Santa Clara River Arundo/Tamarisk Removal Program (SCARP) Implementation	VCRCD, LACDPW, Angeles National Forest	Former separate projects LACDPW-12 and USFS-1 have been combined with Santa Clarita-1.	The VCRCD is implementing an environmentally beneficial project in the Upper Santa Clara River watershed including its tributaries (approximately 16,300 acres) – the Upper Santa Clara River Arundo/Tamarisk Removal Plan (SCARP). Restoration of riparian habitat, increase of water quantity, improvement of water quality, and reduction of flood/wildfire hazard will be accomplished through the removal of invasive plant species, some of which have colonized in large extents of the Upper Santa Clara River watershed. The primary species of concern are arundo (*Arundo donax*) and tamarisk (*Tamarix spp.*). The current estimate is approximately 1,500 acres. However, since the SCARP implementation is a long-term project with extensive costs and logistical issues, the VCRCD is requesting funding to cover a 10-year implementation period.	Approximately 16,300 acres within 500-year floodplain of river and tributaries, Angeles Forest Highway west to the Los Angeles County line.	Reduce Water Demand: Yes, not quantified Improve Operational Efficiency: NA Enhance Water Supply: 7,773 AF will be recharged to the groundwater basin Improve Water Quality: Yes, not quantified Promote Resource Stewardship: Yes, not quantified Capital Cost: $4M-$12M O&M Cost: $1.5M-$4M Consistent with Plan Docs: Yes

PROJECTS READY FOR PRIORITIZATION PROCESS

	Project Name	Partners	Related Projects	Description	Location	Benefits and Costs
City of Santa Clarita Sponsored Projects						
Santa Clarita-3	Discovery River Park and Conservation Area	None listed	Santa Clarita-1, Santa Clarita-2	This project will capture 100 percent of urban runoff and allow groundwater, now diverted or pumped off-site, to return to the river. Water will flow through planted filtration and bioswales and drain into retention basins and a restored spring-fed pond consistent with historic flow patterns. No unfiltered or untreated urban water will flow into the river or off site. An overflow system will allow rainfall greater than a 50-year storm to gradually enter the river. The interpretive center will be the first of its kind, located in a suburban area, dedicated to storm water management, water conservation, and the Santa Clara River's preservation. The center and its demonstration garden represent a tool for learning about how restoration and conservation has relevance in a suburban community and will provide guidance, direction, and advocacy of sustainable water use. The ecosystem restoration plan includes integrating native planting with adapted, non-invasive species relevant to the Southern California suburban environment.	The project is located along the west side of Canyon View Drive, in the community of Canyon Country within the City of Santa Clarita. It is partially located within the Santa Clara River, a Significant Ecological Area (SEA) as identified in the City's General Plan.	Reduce Water Demand: Yes, not quantified Improve Operational Efficiency: NA Enhance Water Supply: Yes, not quantified Improve Water Quality: Yes, not quantified Promote Resource Stewardship: Yes, not quantified Capital Cost: $1.6M-$1.85M O&M Cost: $25k/yr Consistent with Plan Docs: Yes

The City of Santa Clarita has been listed as partner for the following projects:

SCVSD-1: East Santa Clara River Wetlands and Recycled Water Project

SCVSD-3: SCVSD Self-Regenerating Water Softeners (SRWS) Public Outreach and Rebate Program

Los Angeles County Department of Public Works (LACDPW) Sponsored Projects						
LACDPW-1	Lower San Francisquito Spreading Grounds	LACFCD	LACDPW-11, LACDPW-15, LACDPW-16	This project consists of building a recharge facility and diversion. Flows will be redirected to the west bank and to the property adjacent to the river where basins for recharge will be excavated. An earthen diversion will wash out during major storms and it will later need to be rebuilt. There may be opportunities for habitat restoration and passive recreation in the surrounding areas. Trash that washes into the river will be collected in the basins and removed regularly.	Upstream of Decoro Drive, north bank, Santa Clarita, CA	Reduce Water Demand: NA Improve Operational Efficiency: NA Enhance Water Supply: 100-1,000 AFY Improve Water Quality: Yes, not quantified Promote Resource Stewardship: 47 acres in the floodplain Capital Cost: $3M-$6M O&M Cost: $25k/yr Consistent with Plan Docs: unknown

PROJECTS READY FOR PRIORITIZATION PROCESS

	Project Name	Partners	Related Projects	Description	Location	Benefits and Costs
Los Angeles County Department of Public Works (LACDPW) Sponsored Projects						
LACDPW-2	Newhall Creek In-River Spreading Grounds	LACFCD		The Newhall Creek In-River Spreading Grounds Project would consist of excavating a portion of the river and widening the river to provide in-stream recharge basins. Habitat could be restored along the river. The berms would be washed out during high flows and would need to be reestablished. Trash would be detained in and then removed from the outer basins.	Near confluence of Newhall Creek and Santa Clara River South Fork, Santa Clarita, CA	Reduce Water Demand: NA Improve Operational Efficiency: NA Enhance Water Supply: 1-100 AFY Improve Water Quality: Yes, not quantified Promote Resource Stewardship: 5 acres in floodplain Capital Cost: $2M-$5M O&M Cost: $25k/yr Consistent with Plan Docs: unknown
LACDPW-3	Placerita Creek Off-River Spreading Grounds	LACFCD		The Placerita Creek Off-River Spreading Grounds Project would consist of building a recharge facility and a diversion structure. Storm flows from the creek and from the South Fork of the Santa Clara River would be diverted into a spreading basin using an earthen berm. Trash would wash into the spreading grounds and be removed post-storm. The spreading grounds could incorporate habitat restoration and/or passive recreation.	Near confluence of Placerita Creek and Santa Clara River South Fork, Santa Clarita, CA	Reduce Water Demand: NA Improve Operational Efficiency: NA Enhance Water Supply: 100-1,000 AFY Improve Water Quality: Yes, not quantified Promote Resource Stewardship: 17 acres of floodplain Capital Cost: $3M-$7M O&M Cost: $25k/yr Consistent with Plan Docs: unknown
LACDPW-4	Santa Clara In-River Spreading Ground No. 1	LACFCD		The recharge basins would be constructed on the outer edges of the river and earthen levees would be constructed to direct flows to the basins from the center of the river. Storm flows would meander through the river section allowing more time for percolation. Higher flows would wash out the diversion, and it would be reconstructed post storm. The project consists of 61 acres providing 183 AF of storage and water conservation benefit of 550 AF. There are opportunities for habitat restoration in the surrounding areas. Trash would typically be detained in the outer basins and removed post storm.	Between Cocklebur Lane and Soledad Street upstream and downstream of Conveyer Belt, Santa Clarita, CA	Reduce Water Demand: NA Improve Operational Efficiency: NA Enhance Water Supply: 100-1,000 AFY Improve Water Quality: Yes, not quantified Promote Resource Stewardship: 61 acres in floodplain Capital Cost: $4M-$7M O&M Cost: $25k/yr Consistent with Plan Docs: unknown

PROJECTS READY FOR PRIORITIZATION PROCESS

	Project Name	Partners	Related Projects	Description	Location	Benefits and Costs
Los Angeles County Department of Public Works (LACDPW) Sponsored Projects						
LACDPW-5	Santa Clara In-River Spreading Ground No. 2	LACFCD		The spreading grounds would utilize earthen levees to redirect flows to the outside banks of the river. Small recharge basins and finger levees along the outer banks would slow flows and increase recharge in this stretch of the river. Trash would typically be detained in the outer basins and removed from the river post-storm. High flows would wash out the low levees, and they would be rebuilt after larger storms. Adjacent areas may provide opportunities for habitat restoration and possible invasive species removal.	Upstream of Lang Station Road, Santa Clarita, CA	Reduce Water Demand: NA Improve Operational Efficiency: NA Enhance Water Supply: 100-1,000 AFY Improve Water Quality: Yes, not quantified Promote Resource Stewardship: 18 acres in floodplain Capital Cost: $2M-$5M O&M Cost: $25k/yr Consistent with Plan Docs: unknown
LACDPW-6	Santa Clara Off-River Spreading Ground	LACFCD		The project would install a diversion in the Santa Clara River that would convey water to the adjacent property where recharge basins would be constructed. Trash would be collected in the spreading grounds. The stream flow gages would be placed to determine the amount of water that is being directed to the spreading grounds. The spreading grounds would have a total area of 53 acres and a storage capacity of 223 AF. Passive recreation and habitat restoration could be incorporated into the design of the facility.	Upstream of Whites Canyon Road, crossing on Santa Clara, Santa Clarita, CA	Reduce Water Demand: NA Improve Operational Efficiency: NA Enhance Water Supply: 100-1,000 AFY Improve Water Quality: Yes, not quantified Promote Resource Stewardship: 53 acres in floodplain Capital Cost: $4M-$7M O&M Cost: $25k/yr Consistent with Plan Docs: unknown
LACDPW-7	Santa Clara River Rubber Dam No. 1	LACFCD		An air inflatable rubber dam will be constructed at the proposed location. During storm flows, the rubber dam will inflate, and the water will pond and percolate behind the rubber dam. During nonstorm weather, the rubber dam will stay deflated to allow lower flows in the river to pass without obstruction. Habitat will be restored along the river. Trash that collects behind the rubber dam will be removed.	Santa Clara River, Bouquet Canyon Road Bridge, Santa Clarita, CA	Reduce Water Demand: NA Improve Operational Efficiency: NA Enhance Water Supply: 100-1,000 AFY Improve Water Quality: Yes, not quantified Promote Resource Stewardship: Yes, not quantified Capital Cost: $5M-$7M O&M Cost: $25k/yr Consistent with Plan Docs: unknown

PROJECTS READY FOR PRIORITIZATION PROCESS

	Project Name	Partners	Related Projects	Description	Location	Benefits and Costs
Los Angeles County Department of Public Works (LACDPW) Sponsored Projects						
LACDPW-8	Santa Clara River Spreading Ground	LACFCD		This project would construct earthen levees in the river to slow down and spread flows across the river. Another levee would direct flows to an adjacent property along the south bank. The diversion levee would wash-out during higher flows to minimize damage to the proposed levees. The off-river portion of this proposal could be designed to incorporate habitat and passive recreation. Trash would be diverted and detained at the basins for post-storm removal.	Santa Clara River between Highway 14 and Sand Canyon Road, Santa Clarita, CA	Reduce Water Demand: NA Improve Operational Efficiency: NA Enhance Water Supply: 100-2,000 AFY Improve Water Quality: Yes, not quantified Promote Resource Stewardship: Yes, not quantified Capital Cost: $7M-$10M O&M Cost: $25k/yr Consistent with Plan Docs: unknown
LACDPW-9	South Fork Santa Clara River Rubber Dam No. 1 and Spreading Ground	LACFCD		An air-inflatable rubber dam will be installed utilizing the location of an existing drop structure. During storm flows the rubber dam will inflate, and water will pond and percolate behind the rubber dam. The rubber dam will also divert the water to the proposed spreading basins which will then also percolate into the aquifers. After the water percolates, the rubber dam will slowly deflate and lay flat across the drop structure allowing lower flows in the river to pass without obstruction.	Under the pedestrian bridge at Newhall Avenue, adjacent to Santa Clara River South Fork, Santa Clarita, CA	Reduce Water Demand: NA Improve Operational Efficiency: NA Enhance Water Supply: 100-1,000 AFY Improve Water Quality: Yes, not quantified Promote Resource Stewardship: Yes, not quantified Capital Cost: $5M-$9M O&M Cost: $50k/yr Consistent with Plan Docs: unknown
LACDPW-10	South Fork Santa Clara River Rubber Dam No. 2	LACFCD		This project will involve the installation of an inflatable-rubber dam to aid in conserving storm water within the river. Since the rubber dam will be installed on an existing drop structure, the native ground surface will not be disturbed. During storm flows, the rubber dam will inflate, and water will pond and percolate behind the dam. After the water percolates, the rubber dam will slowly deflate and lay flat across the drop structure and allow lower flows in the river to pass without obstruction. Habitat could be restored along the banks of the river. Trash that washes into the river will be collected at the rubber dam and it will be removed.	Santa Clara River South Fork, near Covala Drive, Santa Clarita, CA	Reduce Water Demand: NA Improve Operational Efficiency: NA Enhance Water Supply: 100-1,000 AFY Improve Water Quality: Yes, not quantified Promote Resource Stewardship: Yes, not quantified Capital Cost: $5M-$7M O&M Cost: $25k/yr Consistent with Plan Docs: unknown

PROJECTS READY FOR PRIORITIZATION PROCESS

	Project Name	Partners	Related Projects	Description	Location	Benefits and Costs
Los Angeles County Department of Public Works (LACDPW) Sponsored Projects						
LACDPW-11	South Fork Santa Clara River Rubber Dam No. 3	LACFCD	LACDPW 1, LACDPW-15, LACDPW-16	This project will install an air-inflatable rubber dam, utilizing the location of an existing drop structure. During storm flows the rubber dam will inflate, and water will pond and percolate behind the rubber dam. After the water percolates, the rubber dam will slowly deflate and lay flat across the drop structure. This will allow the lower flows in the river to pass without obstruction. Habitat will be restored along the banks of the river. Trash that washes into the river and collects behind the rubber dam will be removed.	Santa Clara River South Fork, near the continuation of Pueblo Drive, Santa Clarita, CA	Reduce Water Demand: NA Improve Operational Efficiency: NA Enhance Water Supply: 100-1,000 AFY Improve Water Quality: Yes, not quantified Promote Resource Stewardship: Yes, not quantified Capital Cost: $5M-$7M O&M Cost: $25k/yr Consistent with Plan Docs: unknown
LACDPW-13	Acquisition of Land in the Flood Plain of the Upper Santa Clara River	None listed	RMC-1, SCOPE-1	This project entails the acquisition of land in the Upper Santa Clara River flood plain by willing sellers in order to restrict their future development and restore lands to their natural condition.	Throughout the Upper Santa Clara River, Los Angeles County, CA	Reduce Water Demand: NA Improve Operational Efficiency: NA Enhance Water Supply: Yes, not quantified Improve Water Quality: Yes, not quantified Promote Resource Stewardship: Yes, not quantified Capital Cost: unknown O&M Cost: unknown Consistent with Plan Docs: unknown
LACDPW-14	Acton Master Drainage Plan	None listed		Phased development of flood control facilities to mitigate flooding in the Acton community. Proposed improvements include four debris basins, five multi-use retention facilities, and low impact water quality enhancement flood control facilities.	Throughout the Upper Santa Clara River, Los Angeles County, CA	Reduce Water Demand: NA Improve Operational Efficiency: Yes, not quantified Enhance Water Supply: NA Improve Water Quality: NA Promote Resource Stewardship: Yes, not quantified Capital Cost: $10M-50M O&M Cost: unknown Consistent with Plan Docs: unknown

PROJECTS READY FOR PRIORITIZATION PROCESS

	Project Name	Partners	Related Projects	Description	Location	Benefits and Costs
Los Angeles County Department of Public Works (LACDPW) Sponsored Projects						
LACDPW-15	South Fork Santa Clara River Rubber Dam No. 4	LACFCD	LACDPW-1, LACDPW-11, LACDPW-16	Utilizing the location of an existing drop structure, this project will install an air-inflatable rubber dam. During storm flows the rubber dam will inflate, and water will pond and percolate behind the rubber dam. After the water percolates, the rubber dam will slowly deflate and lay flat across the drop structure and allow lower flows in the river to pass without obstruction. Habitat will be restored along the banks of the river. The adjacent power line easement provides opportunities for habitat restoration and possible recreation. Trash will be removed at the rubber dam after storms.	Santa Clara River South Fork, Valencia Boulevard Bridge, Santa Clarita, CA	Reduce Water Demand: NA Improve Operational Efficiency: NA Enhance Water Supply: 100-1,000 AFY Improve Water Quality: Yes, not quantified Promote Resource Stewardship: Yes, not quantified Capital Cost: $5M-$7M O&M Cost: $25k/yr Consistent with Plan Docs: unknown
LACDPW-16	Upper San Francisquito Spreading Grounds	LACFCD	LACDPW 1, LACDPW-11, LACDPW-15	This project will construct earthen levees that will divert water to the outside limits of the creek where recharge basins will be constructed. During higher flows, the earthen levee would wash out and regular maintenance to restore the levees will be necessary. There may be opportunities for habitat restoration and passive recreation in the surrounding areas. Trash that washes into the creek will be detained at the recharge basins and will be removed.	Upstream of Copper Hill Drive, Santa Clarita, CA	Reduce Water Demand: NA Improve Operational Efficiency: NA Enhance Water Supply: 100-2,000 AFY Improve Water Quality: Yes, not quantified Promote Resource Stewardship: Yes, 54 acres within floodplain Capital Cost: $3M-$6M O&M Cost: $25k/yr Consistent with Plan Docs: unknown

LACDPW is listed as partner for the following project:

Santa Clarita-1: Upper Santa Clara River Arundo/Tamarisk Removal Program (SCARP) Implementation

Newhall County Water District (NCWD) Sponsored Projects						
NCWD-1	Wellhead Treatment for NC 10	None listed	SCWD-1, VWC-1, SCVSD-2	The project would provide treatment to remove naturally occurring manganese and iron from the groundwater. Treatment would bring the manganese and iron levels below the secondary MCL of 50 ppb and 300 ppb respectively. In February of 2005 an iron and manganese removal feasibility study was completed for Newhall Well No. 10. The study found that there were treatment options that could bring iron levels below 100 ppb and manganese levels below 20 ppb.	The proposed treatment plant site is adequate for a typical treatment train (about 250 feet by 200 feet) and is located on San Fernando Road. The site is located within a mixed industrial/residential use area. Santa Clarita, CA	Reduce Water Demand: NA Improve Operational Efficiency: Reduces demand by 870 AFY Enhance Water Supply: 870 AFY would be made available to NCWD (Newhall) Improve Water Quality: Manganese levels below secondary MCL of 50 ppb; iron levels below secondary MCL of 300 ppb. Promote Resource Stewardship: NA Capital Cost: $826K-$1M O&M Cost: $32.50/AF Consistent with Plan Docs: Yes

PROJECTS READY FOR PRIORITIZATION PROCESS

	Project Name	Partners	Related Projects	Description	Location	Benefits and Costs
Newhall County Water District (NCWD) Sponsored Projects						
NCWD-3	Removal of the Sewer Trunk Line from the Santa Clara Riverbed	LACDPW, City of Santa Clarita		The main objective of this sewer realignment project is to relocate the remaining portion of the 2-S Trunk Sewer out of the Santa Clara River by routing sewage across the Santa Clara River underneath the Sand Canyon Bridge into a Los Angeles County sewer, and relocating a portion of the existing trunk sewer into the paved section of the Lost Canyon Road. The proposed sewer abandonment includes 4,881 linear feet of 15-, 18-, 21-, and 24-inch sewer pipe. The relocation of the sewer would prevent the discharge of untreated sewerage directly into the Santa Clara River as a result of storm damage.	Parts of the Pinetree sewer trunk line are located in the Santa Clara River bed. The project will remove the sewer from the stream bed and relocate it into the public right-of-way and out of the flow of the stream bed. Santa Clarita, CA	Reduce Water Demand: NA Improve Operational Efficiency: NA Enhance Water Supply: NA Improve Water Quality: Yes, not quantified Promote Resource Stewardship: Yes, not quantified Capital Cost: ~$1.7-M-$2.5M O&M Cost: $20K/yr Consistent with Plan Docs: unknown

NCWD is listed as partner for the following projects:

CLWA-5: Customer Recycled Water Incentive Program

SCWD-2: Consolidation of Water Mutuals

VWC-2: Implementation of Santa Clarita Valley Water Conservation Strategic Plan

Rivers and Mountains Conservancy (RMC) Sponsored Projects						
RMC-1	Acquisition of River Channel and Major Tributaries for Watershed Protection	Santa Monica Mountains Conservancy, The Nature Conservancy	SCOPE-1, LACDPW-13	The purpose of this project is to preserve the natural floodplain of the upper reaches of the river for water conservation and habitat protection. In addition, the project would address preservation of recharge capacity, preservation of habitat values, protection from flooding, and protection from pollution and water based recreation. By acquiring the riparian and flood plain parcels, they can remain undeveloped and therefore continue to provide watershed benefits in perpetuity.	Upper reaches of the Santa Clara River and its major tributaries	Reduce Water Demand: NA Improve Operational Efficiency: NA Enhance Water Supply: Yes, not quantified Improve Water Quality: Yes, not quantified Promote Resource Stewardship: Yes, not quantified Capital Cost: $5k-$10k/acre O&M Cost: TBD Consistent with Plan Docs: Yes

PROJECTS READY FOR PRIORITIZATION PROCESS

	Project Name	Partners	Related Projects	Description	Location	Benefits and Costs
Santa Clarita Valley Sanitation District (SCVSD) Sponsored Projects						
SCVSD-1	East Santa Clara River Wetlands and Recycled Water Project	City of Santa Clarita, NCWD, SCWD	NCWD-2 and SCWD 3 have been combined with SCVSD-1	The East Santa Clara River Wetlands and Recycled Water Project is a multi-phase project. Phase I is a feasibility study to investigate potential impacts that the discharge of recycled water in the eastern Santa Clara River would have on surface water and groundwater quality, as well as the creation/development of wetland and riparian habitat. The feasibility study would also identify potential recreational opportunities. A set of recommended project(s) would be developed for Phase II implementation. Phase II of the project would involve: (1) design and construction of a line to convey recycled water to the NCWD and SCWD service areas and to discharge recycled water to eastern Santa Clara River; and (2) construction of wetlands using recycled water which will also provide recreational opportunities (e.g., regional walking trails, cycling paths and green belts). Phase II of the project would be implemented after completion of the Phase I studies, assuming that a recommended set of project(s) are identified as feasibile.	Reach 7 portion of the Santa Clara River (bound by Lang gauging station and Bouquet Canyon Bridge), Santa Clarita, CA	Reduce Water Demand: Yes, not quantified Improve Operational Efficiency: NA Enhance Water Supply: Yes, not quantified Improve Water Quality: Yes, not quantified Promote Resource Stewardship: Yes, not quantified Capital Cost Phase I: $300k-$600k; Capital Cost Phase II: $10M-$20M O&M Cost: TBD Consistent with Plan Docs: Yes
SCVSD-2	Valencia and Saugus Water Reclamation Plants - Ultraviolet Disinfection System Facilities	CLWA	SCVSD-3, VWC-1, NCWD-1	The Saugus and Valencia Water Reclamation Plant UV Disinfection Facilities will reduce chloride loading from chloramination, preserve and expand the use of recycled water in the Upper Santa Clara River IRWMP Region, which is an important component of the Valley's water resources, and improve recycled water quality by reducing chloride levels and reducing the potential to generate disinfection byproducts, such as trihalomethanes and NDMA. The project will demonstrate the sequential use of free chlorine/UV disinfection as an alternative disinfection method to the current disinfection method utilizing chloramination.	Valencia Water Reclamation Plant and Saugus Water Reclamation Plant, Santa Clarita, CA	Reduce Water Demand: Yes, not quantified Improve Operational Efficiency: NA Enhance Water Supply: Up to 17,000 AFY Improve Water Quality: Yes, not quantified Promote Resource Stewardship: Yes, not quantified Capital Cost: $11.5M-$13.2M O&M Cost: $500k/yr Consistent with Plan Docs: unknown

SCVSD is listed as partner for the following projects:

CLWA-5: Customer Recycled Water Incentive Program

VWC-1: Water Quality Improvement Program

PROJECTS READY FOR PRIORITIZATION PROCESS

	Project Name	Partners	Related Projects	Description	Location	Benefits and Costs
Santa Clarita Valley Sanitation District (SCVSD) Sponsored Projects						
SCVSD-3	SCVSD Self-Regenerating Water Softeners (SRWS) Public Outreach and Rebate Program	City of Santa Clarita, CLWA	SCVSD-2, VWC-1, NCWD-1, Santa Clarita-2	Since 2003, the District has aggressively targeted voluntary removal of residential SRWS with a multi-pronged public education campaign and rebate program. However, it is unlikely that this program alone will accomplish the goal of removal of SRWS predating 2003 within the necessary time period. The District's goal is to reduce chloride in an environmentally-friendly, cost-effective and timely manner. The upgraded rebate program (the project) will offer homeowners reasonable value for SRWS units, as well as assistance with removal and disposal of the units, consistent with provisions of SB 475, which took effect January 1, 2007. The intent is to provide incentive to remove SRWS units expeditiously on a voluntary basis. Reasonable value for SRWS units will be based on the average retail value of units assuming a 12-year service life and straight-line depreciation. Following the effective date of an ordinance banning all existing water softener that implements the provisions of SB 475, assuming it passes in a referendum as required under SB 475, rebate amounts will be redu	SCVSD's service area	Reduce Water Demand: Yes, not quantified Improve Operational Efficiency: NA Enhance Water Supply: Up to 17,000 AFY Improve Water Quality: Yes, not quantified Promote Resource Stewardship: Yes, not quantified Capital Cost: $4.7M O&M Cost: NA Consistent with Plan Docs: unknown
Santa Clarita Water Division (SCWD) Sponsored Projects						
SCWD-2	Consolidation of Water Mutuals	California Department of Public Health (DPH)		This project would involve designing more efficient distribution systems within ten water mutuals and replacing existing distribution lines with new, current standard approved piping. Also, the master meter would be removed and every residence would be metered individually. This would ensure good water quality throughout these areas with routine water sampling and testing and system flushing. System pressure would be more consistently maintained throughout these areas so risk of contaminating backflow events would be reduced.	Ten separate locations east of Bouquet Canyon Road to just east of Sand Canyon Road on both north and south sides of Reach 7 of the Santa Clara River. Santa Clarita, CA	Reduce Water Demand: NA Improve Operational Efficiency: Yes, not quantified Enhance Water Supply: NA Improve Water Quality: Yes, not quantified Promote Resource Stewardship: NA Capital Cost: $1M-$5M O&M Cost: Unknown Consistent with Plan Docs: unknown

SCWD has been listed as a partner for the following projects:

CLWA-5: Customer Recycled Water Incentive Program

VWC-2: Provide Funding to Implement Innovative and Cost-Effective Water Conservation Programs

PROJECTS READY FOR PRIORITIZATION PROCESS

	Project Name	Partners	Related Projects	Description	Location	Benefits and Costs
Valencia Water Company (VWC) Sponsored Projects						
VWC-1	Water Quality Improvement Program	SCVSD, City of Santa Clarita	SCVSD-2, SCVSD-3, NCWD-1, SCWD-1	The proposed Water Quality Improvement Program is a demonstration project that employs pellet softening technology to reduce the concentration of calcium in water produced from an existing water supply well. The softened water will be delivered to approximately 430 existing homes. The objectives of the project are to confirm consumer acceptance of a centralized water softening system, measure region-wide environmental protections, evaluate economic benefits to customers and the community, and optimize the pellet softening treatment process. Pellet softening is the process of mineral extraction through precipitation. The system utilizes a cylindrical column with a sand bed. Hard water enters the bottom of the column and the pH is elevated using sodium hydroxide. The sand bed becomes fluidized and the calcium crystallizes around grains of sand - creating white spherical pellets of calcium carbonate. As the water passes through the column the pH is then reduced using carbon dioxide. As the pellets grow they are removed and can be reused in various industries such as steel, textile, and agriculture.	VWC Well No. 9, 25001 Decoro Drive Valencia, CA	Reduce Water Demand: Yes, not quantified Improve Operational Efficiency: Yes, not quantified Enhance Water Supply: Yes, not quantified Improve Water Quality: Yes, not quantified Promote Resource Stewardship: Yes, not quantified Capital Cost: $1.3M-$1.7M O&M Cost: $170k/yr Consistent with Plan Docs: Yes
VWC-2	Implementation of Santa Clarita Valley Water Conservation Strategic Plan	NCWD, SCWD, LACWWD NO. 36, CLWA		Reducing the amount of imported water needed to meet the long term water supply needs of the Santa Clarita Valley is an important goal of the local water purveyors and offers important state-wide benefits. Although water conservation efforts have been on-going, the local water agencies recognize that more needs to be done to eliminate wasteful water use. Implementing conservation programs will require a sustained effort over many years. In order to efficiently organize a comprehensive plan, the water agencies have retained a consultant to prepare a Water Conservation Strategic Plan for the Santa Clarita Valley. The following elements are included in the plan: 1) Specify the conservation planning goals, 2) Develop a customer profile, 3) Develop means of measuring savings, 4) Identify water conservation measures, 5) Analyze costs and benefits, 6) Selection of conservation measures, and 7) Development of an implementation plan. Those programs and measures deemed to be cost-effective will be selected for implementation by the purveyors. The Plan is expected to be completed in early 2008.	Within CLWA service area, Santa Clarita & Unincorporated Los Angeles County, CA	Reduce Water Demand: Up to 13,000 AFY Improve Operational Efficiency: Yes, not quantified Enhance Water Supply: Up to 13,000 AFY Improve Water Quality: NA Promote Resource Stewardship: Yes, not quantified Capital Cost: $1M-$5M O&M Cost: TBD Consistent with Plan Docs: Yes

VWC has been listed as a partner for the following projects:

CLWA-5: Customer Recycled Water Incentive Program

Upper Santa Clara River IRWMP: Candidate and Pending Projects

PENDING PROJECTS

	Project Name	Partners	Related Projects	Description	Location	Benefits and Costs
City of Santa Clarita Sponsored Projects						
Santa Clarita-2	Water Quality Education Program	None listed	SCVSD-3, CHC-1	Provide coordinated, consistent and clear messages to the general public, youth, and other groups on protecting water quality in the River. Topics include chloride, nutrients, littering, dumping in the storm drain, integrated pest management, best management practices, Enviroscape, demonstration sites and other methods.	Santa Clarita Valley and watershed area	
Community Hiking Club Stewardship Committee (CHC) Sponsored Projects						
CHC-1	Trash Removal and Non-Native Removal in Tributaries to the Santa Clara River	Placerita Nature Center, Friends of the River, Friends of the Inyo, Mountains Recreation Conservation Authority (MRCA)	Santa Clarita-2	The first priority would be to map all invasives and accumulated trash. Although we currently have access to tools, new and updated tools would be desirable. The project will be organized by the Community Hiking Club under the direction of Dianne Erskine-Hellrigel who has organized all past stewardship events. The CHC Stewardship Director, Sylvia Altamirano will assist. Much of the labor force is volunteer, pooled from our membership of 1,200 community members. The organization of each project would be a full time occupation, with the actual clean up and eradication events occurring on the weekends when volunteers are available.	Project would include Placerita Canyon, Elsmere Canyon, Whitney Canyon, East/Rice Canyon, Towsley/Wiley Canyon, Pico Canyon	
Los Angeles County Department of Public Works (LACDPW) Sponsored Projects						
LACDPW-17	Hasley Canyon Road Watermain, Turnout Connection, and Pump Station	None listed		This project would construct a new turnout, pump station, and 6,900 feet of 16 inch transmission main. The proposed transmission main would run south along The Old Road for 1,100 feet, then run southwest along Hasley Canyon Road for 3,120 feet before branching off into two sections. One section will head in a northwest direction on Hasley Canyon Road for 2,120 ft. The other section will continue south for 530 feet to Industry Drive where the new transmission main will tie into an existing 12-inch water main. Also proposed is the construction of a new pump station along Hasley Canyon Road to boost pressure to District 1598 pressure zone.	LACWWD NO. 36, Val Verde. Along The Old Road, Hasley Canyon Road, and Industry Drive	
LACDPW-18	Replacement of 8-inch Water Main Along Del Valle Road	None listed		The proposed project is to replace 6,900 linear feet of aging 8 inch water main along Del Valle Road from Hasley Canyon Road to Chiquito Canyon Road with a 12 inch pipeline.	LACWWD NO. 36, Val Verde. Along Del Valle Road from Hasley Canyon Road to Chiquito Canyon Road	

Upper Santa Clara River IRWMP: Candidate and Pending Projects

PENDING PROJECTS

	Project Name	Partners	Related Projects	Description	Location	Benefits and Costs
Los Angeles County Department of Public Works (LACDPW) Sponsored Projects						
LACDPW-19	Crown Valley Water Main Replacement	None listed		This project proposes to install approximately 7000 linear feet of 16 inch steel water main to run parallel to the existing water main. The proposed new line would begin with approximately 300 feet along Corey Avenue, connected from Soledad Canyon Road to Crown Valley Road. The main would extend approximately 6700 feet northward along Crown Valley Road and Connect to the 33025 N. Crown Valley Pump Station.	LACWWD NO. 37, Acton. From 33025 N. Crown Valley to intersection with Soledad Canyon	
LACDPW-20	North Tank Pump Station	None listed		This project consists of constructing a new pump station near the intersection of Aliso Canyon and Soledad Canyon to reduce demand on the Crown Valley pump station. The main inlet into the Crown Valley pump station is undersized for the current flow. In addition to a new pump station, a segment of pipe would have to be constructed from the pump station along Soledad Canyon Road to the intersection with the 3483 pressure zone to direct the flow to the North Tank.	LACWWD NO. 37, Acton. Intersection of Soledad Canyon Road and Aliso Canyon Road	
Santa Clarita Organization for Planning and the Environment (SCOPE) Sponsored Projects						
SCOPE-1	Santa Clara River Floodplain Acquisition	Potential partners: LACFCD and or/ The Nature Conservancy	LACDPW-13, RMC-1	Provide flood control by leaving the flood plain in its natural state so that flood waters can spread. Project area would accommodate a recreational area and provide for natural bioremediation to clean urban runoff before it reaches the river. Potential to enhance groundwater recharge.	Any available floodplain lots of the Santa Clara River Eastern reaches from Bouquet Canyon Road to Aqua Dulce identified as acquisition habitat by The Nature Conservancy	
Unsponsored Projects Submitted						
SCOPE-2*	Upper Santa Clara River Recycled Water Sanitation Plant Expansion	Potential partners: SCVSD, LACFCD, Santa Monica Mountains Conservancy (SMMC), Water Agencies	CLWA-1, CLWA-5, SCVSD-2, NCWD-2	Build a small tertiary treatment sanitation facility in the Sand Canyon, Upper Santa Clara River watershed area to treat local residential effluent and then use the recycled water to recharge the upper watershed.	Santa Clara River floodplain north of Sand Canyon	

* This project was submitted by SCOPE, however there is currently no agency willing to sponsor at this time.