



Upper Santa Clara River Proposition 84 IRWM Plan Implementation Grant Attachment 9 Preferences

The objectives of the Upper Santa Clara River IRWM Plan strongly correlate to the Proposition 84 Program Preferences, which include the Statewide Priorities. Because the proposed projects were developed in response to the objectives of the IRWM Plan, this Proposal also has a significant connection to the Program Preferences and Statewide Priorities. The following six proposed projects meet 12 of 14 of the Proposition 84 Program Preferences and Statewide Priorities as summarized in the matrix below:

1. Santa Clarita Valley Water Use Efficiency Strategic Plan Programs (CLWA-3)
2. Santa Clarita Water Division Water Use Efficiency Programs (SCWD-2)
3. Foothill Feeder Connection (CLWA-8)
4. Pellet Water Softening Treatment Plant - Phase 1 (NCWD-2)
5. Automatic Water Softener Rebate and Public Outreach Program (SCVSD-1)
6. USCR Arundo/Tamarisk Removal Program (SCARP) Implementation (SC-1/BCN-1)

Program Preferences	SCV WUE Strategic Plan Programs	SCWD WUE Programs	Foothill Feeder Connection	Pellet Water Softening Treatment Plant - Phase 1	AWS Rebate & Public Outreach Program	Arundo/Tamarisk Removal Program
INCLUDE REGIONAL PROJECTS/PROGRAMS	▲	▲	▲	▲	▲	▲
INTEGRATE WATER MANAGEMENT WITHIN HYDROLOGIC REGION	▲	▲	▲	▲	▲	▲
EFFECTIVELY RESOLVE SIGNIFICANT WATER-RELATED CONFLICTS	▲	▲		▲	▲	▲
CONTRIBUTE TO ATTAINMENT OF ONE OR MORE OBJECTIVES OF CALFED	▲	▲		▲	▲	
ADDRESS CRITICAL WATER SUPPLY/QUALITY NEEDS OF A DAC						
INTEGRATE WATER MANAGEMENT WITH LAND USE PLANNING FOR FLOOD MANAGEMENT PROJECTS THAT PROVIDE MULTIPLE BENEFITS	▲	▲			▲	▲
ADDRESS STATEWIDE PRIORITIES OF:	Not Applicable					
A. DROUGHT PREPAREDNESS	▲	▲	▲			▲
B. USE AND REUSE WATER MORE EFFICIENTLY	▲	▲	▲	▲	▲	▲
C. CLIMATE CHANGE RESPONSE ACTIONS	▲	▲		▲	▲	▲
D. EXPAND ENVIRONMENTAL STEWARDSHIP	▲	▲		▲	▲	▲
E. PRACTICE INTEGRATED FLOOD MANAGEMENT						▲
F. PROTECT SURFACE WATER AND GROUNDWATER QUALITY	▲	▲		▲	▲	▲
G. IMPROVE TRIBAL WATER AND NATURAL RESOURCES						
H. ENSURE EQUITABLE DISTRIBUTION OF BENEFITS	▲	▲	▲	▲	▲	▲



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Include Regional Projects or Programs

Relevant Projects:

- (1) *Santa Clara Valley Water Use Efficiency Strategic Plan Programs (CLWA-3),*
- (2) *Santa Clarita Water Division Water Use Efficiency Programs (SCWD-2),*
- (3) *Foothill Feeder Connection (CLWA-8),*
- (4) *Pellet Water Softening Treatment Plant - Phase 1 (NCWD-2),*
- (5) *Automatic Water Softener Rebate and Public Outreach Program (SCVSD-1), and*
- (6) *USCR Arundo/Tamarisk Removal Program (SCARP) Implementation (SC-1/BCN-1)*

The development of the IRWM Plan and the 2013 Plan Update has provided an ongoing forum in which the Stakeholders can collaborate and develop regional partnerships and programs. The intent is to use the Proposition 84 Implementation projects to further these regional partnerships leading to regional solutions. The six projects in this Proposal not only address regional issues, but benefit the Region as a whole. The first project - Santa Clara Valley (SCV) Water Use Efficiency (WUE) Strategic Plan Programs (CLWA-3) was developed out of a collaborative process of all the public water systems in the SCV (Castaic Lake Water Agency (CLWA), Valencia Water Company, Santa Clarita Water Division, Newhall County Water District, and Los Angeles County Waterworks District 36). The SCV WUE Strategic Plan Programs will affect the entire CLWA service area, including the service areas of the four retailers. The SCV WUE Strategic Plan Programs Project will affect the demand for all but a small amount of the water delivered in the entire SCV. The Santa Clarita Water District (SCWD) WUE Programs Project addresses specific needs that are not addressed in the SCV WUE Strategic Plan Programs. SCWD serves 41 percent of the Santa Clarita Valley and has specific needs and consumption data that can be used to implement the large landscape water budgets in the Region.

The purpose of the Foothill Feeder Connection project is to bring additional capacity to CLWA's potable water system, consequently improving system reliability for the entire region.

The Pellet Water Softening Treatment Plant – Phase 1 Project develops the necessary engineering analysis to ensure the groundwater can be used to improve drinking water quality by reducing calcium carbonate hardness, which will consequently also increase the use of local groundwater and reduce demand on the imported Delta water supply, once the Project is completed. Likewise, the Automatic Water Softener Rebate and Public Outreach Program (SCVSD-1) will directly address the Los Angeles Regional Water Quality Control Board (RWQCB) Basin Plan's chloride reduction goal; thereby improving the region's water quality.

The USCR Arundo/Tamarisk Removal Program (SCARP) Implementation (SC-1/BCN-1) will utilize the resources and expertise of a local agency, the City of Santa Clarita as well as a group of homeowners along the Bouquet Canyon Creek to protect the most significant regional resource, the USCR. Due to the nature of arundo and tamarisk, it is necessary to undertake removal and restoration in the upper reaches of a watershed to prevent "re-seeding" of the noxious weed in lower river reaches. Therefore removal in the USCR not only benefits habitat and ecological processes in the upper watershed, it enhances and preserves arundo and tamarisk removal in the lower watershed.

Certainty of Achieving Program Preferences, Breadth and Magnitude of Program Preference Achieved

Review of the projects selected demonstrates that this Proposal includes regional projects and programs. The projects selected for this proposal are regional in many aspects. The projects address regional issues. The projects affect a large geographic area and benefit downstream users. The projects address a range of issues (water demand, water quality, water supply reliability, and environmental habitat quality). Project benefits apply to the SCV, the USCR Region, the lower SCR Region (within the Watersheds Coalition of Ventura County Region), as well as statewide.

Integrate Water Management Programs and Projects

Relevant Projects:

- (1) *Santa Clara Valley Water Use Efficiency Strategic Plan Programs (CLWA-3),*
- (2) *Santa Clarita Water Division Water Use Efficiency Programs (SCWD-2),*
- (3) *Foothill Feeder Connection (CLWA-8),*
- (4) *Pellet Water Softening Treatment Plant - Phase 1 (NCWD-2),*
- (5) *Automatic Water Softener Rebate and Public Outreach Program (SCVSD-1), and*



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(6) USCR Arundo/Tamarisk Removal Program (SCARP) Implementation (SC-1/BCN-1)

The six projects in this Proposal, while separate and distinct from each other, together create a multifaceted approach to the fundamental issue in the SCV, water supply reliability. The projects address water supply reliability in the following ways:

- *Santa Clara Valley Water Use Efficiency Strategic Plan Programs (CLWA-3)* - reduce demands on the regional water supply.
- *Santa Clarita Water Division Water Use Efficiency Programs (SCWD-2)* - reduce demands on the regional water supply.
- *Foothill Feeder Connection Project (CLWA-8)* – increase the capacity of CLWA’s regional potable water system and improve system reliability.
- *Pellet Water Softening Treatment Plant - Phase 1 (NCWD-2)* – the completed 3 phased project will enhance local water supplies without requiring additional imported water supplies.
- *Automatic Water Softener Rebate and Public Outreach Program (SCVSD-1)* - improves quality of recycled water discharged to local receiving waters; thereby complying with Basin Plan TMDLs for chloride.
- *USCR Arundo/Tamarisk Removal Program (SCARP) Implementation (SC-1/BCN-1)* - decreases loss of local water supply to noxious non-native weeds.

Conversely, because of the projects are so diverse and different in natures, they represent a complete and whole approach to water supply management in the SCV and USCR. The suite of projects addresses the need to reduce water demand, increase water supply, improve and protect water quality, and promote resource stewardship.

Certainty of Achieving Program Preferences, Breadth and Magnitude of Program Preference Achieved

This proposal takes separate projects that as a group represent a complete set of water management practices working toward improved water supply reliability.

Resolve Significant Water-Related Conflicts

Relevant Projects:

- (1) *Santa Clara Valley Water Use Efficiency Strategic Plan Programs (CLWA-3)*,
- (2) *Santa Clarita Water Division Water Use Efficiency Programs (SCWD-2)*,
- (4) *Pellet Water Softening Treatment Plant - Phase 1 (NCWD-2)*,
- (5) *Automatic Water Softener Rebate and Public Outreach Program (SCVSD-1)*, and
- (6) *USCR Arundo/Tamarisk Removal Program (SCARP) Implementation (SC-1/BCN-1)*

The intent of the USCR IRWM Plan is to create an ongoing framework and a collaborative process whereby conflict between different water uses can be avoided or reduced. In the past, development was not always done with due regard for habitat preservation or restoration. However increasing priority is being given to changing the process of water resource development and human use to conduct these activities in ways which will not damage natural resources and to restore damaged natural habitats so that they not only survive but thrive. In the Region, local jurisdictions are working in conjunction with habitat preservation advocacy groups, in an attempt to restore balance and improve water quality of one of the last large, natural riparian ecosystems in Southern California. The SCV WUE Strategic Plan Programs Project, the SCWD WUE Programs Project, and USCR Arundo/Tamarisk Removal Program (SCARP) Implementation Project have been promulgated from this desire to balance the different water uses in the Region. Both the two WUE Program Projects will reduce human demand on the various regional water sources. The USCR Arundo/Tamarisk Removal Program (SCARP) Implementation Project will improve the local natural riparian ecosystem of the SCR.

Another significant water related conflict in the Region is how and in what quantities, the chloride levels in the SCR should be managed. The USCR gains chlorides through the use of imported water, wastewater treatment, and the use of illegal residential self-regenerating softeners. Downstream crops may be negatively impacted by high chloride levels. Projects included in this proposal assist in lowering the chloride levels to comply with the Basin Plan TMDL. For example, the Automatic Water Softener Rebate and Public Outreach Program will remove the remaining illegal residential automatic water softeners in the Santa Clarita Valley through a combination of activities. The multi-faceted effort is expected to achieve a reduction in the chloride discharged from the water reclamation plants (WRPs) up to



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approximately 5 mg/L and to prevent backsliding (residents installing and/or using illegal automatic water softeners). To complement this program, the Pellet Water Softening Treatment Plant - Phase 1 Project will accomplish the necessary engineering documentation required to complete a project that will improve drinking water quality by reducing calcium carbonate hardness.

Certainty of Achieving Program Preferences, Breadth and Magnitude of Program Preference Achieved

The commitment to reducing water related conflicts in the Region is demonstrated by: (a) the ongoing participation of a broad range of stakeholders in the IRWM Plan, and (b) the selection of a suite of projects that, when implemented, reduce water related conflicts in the Region.

The magnitude by which project implementation will reduce water conflicts in the region cannot be quantified. However, these projects represent an early and important step. Over time the success of these projects will lead to similar actions and the projects in turn could have a large cumulative positive benefit.

Contribute To Attainment of Calfed Bay-Delta Program

Relevant Projects:

- (1) *Santa Clara Valley Water Use Efficiency Strategic Plan Programs (CLWA-3),*
- (2) *Santa Clarita Water Division Water Use Efficiency Programs (SCWD-2),*
- (4) *Pellet Water Softening Treatment Plant - Phase 1 (NCWD-2), and*
- (5) *Automatic Water Softener Rebate and Public Outreach Program (SCVSD-1)*

The USCR Region receives imported State Water Project (SWP) water delivered through the Sacramento-San Joaquin Delta; actions to reduce water demand and to enhance local water supply would contribute to the success of the CALFED Bay-Delta Program. Implementation of all five programs will yield avoided SWP imports of 380 acre-feet per year (AFY). For the second WUE Project (SCWD-2), implementation of three (out of ten) SCWD Strategic Plan Programs will yield avoided SWP imports of 156 AFY.

There is one project in the suite of proposed projects that focuses on removing illegal residential automatic water softeners for water quality related reasons. The Automatic Water Softener Rebate and Public Outreach Program (SCVSD-1) focuses on illegal residential automatic water softeners (AWS) (also called self-regenerating water softeners) that produce a high chloride, brine discharge to the wastewater system. In addition, because this type of water softener requires water to regenerate the resin every couple days, by removing the AWS from use, this Project reduces the water demand in the Region and reduces the demand on the Delta. A second project, Pellet Water Softening Treatment Plant - Phase 1 (NCWD-2), completes the engineering tasks required for a multi-phased project that will encourage more local groundwater supply usage and less use on the SWP imported supply. This project when all phases are completed will improve source water quality by reducing naturally occurring calcium water hardness, which will reduce water demand, because hard water contributes to the inefficiency of household appliances, increases the need for additional soaps and detergents, and contributes to the increased use of point-of-use treatment devices, all of which increase water use.

Certainty of Achieving Program Preferences, Breadth and Magnitude of Program Preference Achieved

The certainty of achieving this program preference is high, assuming funding is made available for implementation. The estimates of water demand reduction are based on past experience with similar water use efficiency programs implemented in the USCR Region as analyzed in the SCV WUE Strategic Plan and the SCWD WUE Strategic Plan. Likewise, the reduction in demand resulting from the Automatic Water Softener Rebate and Public Outreach Program (SCVSD-1) Project has been studied and confirmed in multiple technical studies.

Implementation of this Proposal could reduce future dependence on water imported from the Sacramento-San Joaquin Delta region by nearly 956 AFY.

Address Water Supply and Water Quality Needs of Disadvantaged Communities

During development of the adopted 2008 IRWM Plan, no communities that met the strict State definition of a Disadvantaged Community (DAC) were identified. During the 2013 IRWM Plan Update, DWR's newly developed



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DAC mapping tool was used to search for DACs within the Region. DWR's mapping tool is based on American Community Service data between 2006 and 2010 and it was found that none of the communities within the Region met the defined standard for a DAC that has a median household income (MHI) of less than 80 percent of the statewide annual MHI. A MHI of less than \$48,706 meets this threshold (DWR 2012). This means that all areas reported average median household incomes greater than 80 percent of the statewide annual MHI for that period. The County had a reported MHI of \$55,476 and the City of Santa Clarita had a reported MHI of \$82,642 during that period. The Santa Clarita Valley Planning area had a reported average annual household income of \$83,900 in 2004 (City of Santa Clarita and County of Los Angeles 2004). While no disadvantaged communities that met the strict state definition were identified, both the City of Santa Clarita and the County have identified areas where particular outreach efforts are merited, due either to substandard infrastructure, substandard housing, or similar concerns.

In the spirit of providing "a safe, clean, affordable, and sufficient water supply to meet the needs of California residents, farms, and businesses" (CWC §79501(b)), an outreach effort directed at DAC members was developed during the 2008 IRWM Plan process. During this initial effort, as well as during the 2013 IRWM Plan Update with the assistance of DWR's DAC Mapping Tool, no DACs were identified within the Region. As a result, the subcommittee has not actively conducted outreach during the IRWM Plan update.

Certainty of Achieving Program Preferences, Breadth and Magnitude of Program Preference Achieved

The six projects of this Proposal have broad benefits for all persons in the Region.

Effectively Integrate Water Management with Land Use Planning

Relevant Projects:

- (1) *Santa Clara Valley Water Use Efficiency Strategic Plan Programs (CLWA-3),*
- (2) *Santa Clarita Water Division Water Use Efficiency Programs (SCWD-2),*
- (5) *Automatic Water Softener Rebate and Public Outreach Program (SCVSD-1), and*
- (6) *USCR Arundo/Tamarisk Removal Program (SCARP) Implementation (SC-1/BCN-1)*

The IRWM Plan has the benefit of participation from all land use planning entities within the Upper Santa Clara watershed: the City of Santa Clarita and the County of Los Angeles.

Coordination with the land use entities has led to the determination that accommodating a growing population depends on improving water use efficiency and enhancing local supplies. The SCV WUE Strategic Plan Programs and the SCWD WUE Programs Projects are a direct response to the need to accommodate anticipated population growth. The two WUE Projects are designed to help CLWA and water retailers meet their 20 by 2020 requirements under SBX7-7. SCV and SCWD Large Landscape Audit & Incentive Program will target the City of Santa Clarita Landscape Maintenance Districts, Los Angeles County Parks and Homeowner's Associations. SCV CII Audit & Customized Incentive Program will target major non-residential users including amusements parks, colleges and universities, hotels, hospitals and other customers identified by the retail water agencies. Residential SCV Landscape Contractor Certification and Weather-Based Irrigation Controller (WBIC) Program would target all landscape contractors and maintenance companies in the SCV.

An important consideration for land use entities is providing a mix of land uses, including open space and recreational opportunities. The SCR has been designated a "Significant Ecological Area" (SEA) within the joint City of Santa Clarita and Los Angeles County land use plan, "One Valley, One Vision" (also called the Santa Clarita Area Plan). SEAs are defined as ecologically important land and water systems that are valuable as plant or animal communities, often important to the preservation of threatened or endangered species, and conservation of biological diversity. The SCR is also defined in One Valley, One Vision as a significant scenic resource for the Region. Water management can be done in a manner to enhance, rather than detract from, land use plans to protect regional resources. Both the USCR Arundo/Tamarisk Removal Program (SCARP) Implementation and the Automatic Water Softener Rebate and Public Outreach Program are projects that will contribute to the protection and enhancement of the Santa Clara River. The USCR Arundo Removal Project will eliminate approximately 42 acres of arundo from land along two tributaries of the SCR. Removal will promote the reestablishment of native habitat and native species, and improve the watershed by removing this invasive weed. In addition, removal will result in increased river flows, as arundo consumes almost three times the amount of water used by native species. Removal of the thick stands of arundo will reduce river erosion while protecting adjacent land uses from flooding. Likewise, Automatic Water Softener Rebate and Public Outreach Program



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will improve the water quality of the river (by decreasing the amount of chloride put into the river from the two water reclamation plants) and thereby protect the river resource.

Certainty of Achieving Program Preferences, Breadth and Magnitude of Program Preference Achieved

The certainty of achieving this program preference is high, assuming funding is made available for implementation. All projects in the Proposal are consistent with local land use plans and projects enhance land use protections contained in local land use plans.

As described earlier, implementation of this proposal could reduce future dependence on water imported from the Sacramento-San Joaquin Delta region by nearly 956 AFY.

For Flood Management - Projects That Provide Multiple Benefits

This application is not seeking Proposition 1E funding and therefore this Program Preference is not applicable.

Statewide Priorities

Drought Preparedness

Relevant Projects:

- (1) *Santa Clara Valley Water Use Efficiency Strategic Plan Programs (CLWA-3),*
- (2) *Santa Clarita Water Division Water Use Efficiency Programs (SCWD-2),*
- (3) *Foothill Feeder Connection (CLWA-8), and*
- (6) *USCR Arundo/Tamarisk Removal Program (SCARP) Implementation (SC-1/BCN-1)*

The IRWM Plan focuses on drought preparedness. Three of the five objectives selected by the Stakeholder group related to drought preparedness:

- Reduce Water Demand - Implement technological, legislative and behavioral changes that will reduce use demands for water
- Improve Operational Efficiency - Maximize water system operational flexibility and efficiency, including energy efficiency.
- Increase Water Supply - Understand future regional demands and obtain necessary water supply sources.

One way to lessen the severity of a drought's effect on SCV is to prepare in advance by: (a) diversifying the various sources of supply, (b) developing a "drought-proof" supply, (c) identifying the types of water uses in the Region, and (d) reducing demand from non-essential uses.

The Foothill Feeder Connection (CLWA-8) Project will provide initially 6 million gallons per day (MGD) of additional capacity to CLWA's potable water system (and up to a maximum of 30 MGD (or 33,600 AFY) additional capacity when the Rio Vista Water Treatment Plant (RVWTP) is expanded in the future), consequently improving system reliability.

Data gathered as part of the two WUE Programs will provide a picture of various water uses in the SCV. These data will help target water demand reductions under all conditions, but could be vital in reducing non-essential uses in the event of a drought. Removal of Arundo and Tamarisk (SC-1/BCN-1), both voracious water users, preserves river flow and will improve groundwater recharge from the river that water agencies must rely on during droughts. These programs will allow for better management of the local water resources.

As described earlier, since preparation of the 2008 Plan, SBX7-7 has been enacted, mandating that urban water suppliers reduce statewide water use (in gallons per capita per day) by 20 percent by 2020. Methods of complying with SBX7-7 include enhanced water conservation, water use efficiency, and water supply reliability. The majority of the projects proposed increase the efficiency of the local and imported supply through conservation, new treatment options, and environmental stewardship. The savings from implementation of the two WUE Projects would save approximately 536 AFY.

In addition these projects compliment the Climate Change Study being undertaken as part of the 2013 IRWM Plan Update. The Climate Change Study will not only evaluate the Region's vulnerability to climate change, but will develop adaptive strategies. These strategies will be incorporated to ensure the reliability of the local supply and reduce the



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dependence on imported waters. Also supporting climate change responses is the increased use of local water supplies which will reduce greenhouse gases.

Certainty of Achieving Program Preferences, Breadth and Magnitude of Program Preference Achieved

The certainty of achieving this program preference is high, assuming funding is made available for implementation. As described earlier, three of five objectives selected by stakeholders relate to drought preparedness, demonstrating the high level of commitment by water agencies, local land use agencies, and environmental groups to drought preparedness. The Region has already undertaken water use efficiency programs and recycled water projects and this proposal will build upon these past successes.

The SCV WUE Strategic Plan Programs would save approximately 308 AFY of imported SWP water. The SCWD WUE Programs are estimated to save 156 AFY of imported SWP water. The Foothill Feeder Connection (CLWA-8) Project would increase CLWA's potable water supply by 33,600 AFY once it is initiated. Finally, the Arundo and Tamarisk Removal Project will create a water savings of 840 AFY. Assuming 50% of water savings is available to offset imported water needs from the SWP, this project results in a total imported water savings of 420 AFY.

Use and Reuse Water More Efficiently

Relevant Projects:

- (1) Santa Clara Valley Water Use Efficiency Strategic Plan Programs (CLWA-3),
- (2) Santa Clarita Water Division Water Use Efficiency Programs (SCWD-2),
- (3) Foothill Feeder Connection (CLWA-8),
- (4) Pellet Water Softening Treatment Plant - Phase 1 (NCWD-2),
- (5) Automatic Water Softener Rebate and Public Outreach Program (SCVSD-1), and
- (6) USCR Arundo/Tamarisk Removal Program (SCARP) Implementation (SC-1/BCN-1)

As demonstrated above, this Proposal will implement water use efficiency, water conservation, and water treatment to improve water quality. By reducing demands and adding another local source to the water supply portfolio, this proposal is an early step towards climate change adaptation. In addition, the USCR Arundo Removal project works toward re-establishment of native species, natural habitat, and natural hydrologic processes in the upper watershed, another recognized climate adaptation strategy.

Certainty of Achieving Program Preferences, Breadth and Magnitude of Program Preference Achieved

The certainty of achieving this program preference is high, assuming funding is made available for implementation. The Stakeholders of the USCR IRWM Plan are committed to using and reusing water more efficiently. This is verified by the nature of the projects selected and by the Salt and Nutrient Management Plan which is being undertaken as part of the 2013 IRWM Plan Update. The Salt and Nutrient Management Plan will allow the Region to most effectively use recycled water without degrading the local groundwater supply. The plan will facilitate further expansion of recycled water projects in the future so that the most efficient use of water can occur while minimizing the impacts of salt and nutrient accumulation.

The SCV WUE Strategic Plan Programs will reduce demand by 308 AFY of water. The SCWD WUE Programs are estimated to save 156 AFY of water. The Foothill Feeder Connection (CLWA-8) Project would increase CLWA's potable water supply by 33,600 AFY once it is initiated. Finally, the Arundo and Tamarisk Removal Project is anticipated to save over 840 AFY.

Climate Change Response Actions

Relevant Projects:

- (1) Santa Clara Valley Water Use Efficiency Strategic Plan Programs (CLWA-3),
- (2) Santa Clarita Water Division Water Use Efficiency Programs (SCWD-2),
- (4) Pellet Water Softening Treatment Plant - Phase 1 (NCWD-2),
- (5) Automatic Water Softener Rebate and Public Outreach Program (SCVSD-1), and



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(6) USCR Arundo/Tamarisk Removal Program (SCARP) Implementation (SC-1/BCN-1)

As described above, this proposal includes projects that address adaptation to climate change. Implementation of this proposal would diversify the supply sources available in the Region, promote water use efficiency, and result in increased use of local groundwater supply thus reducing the demand on the Delta supply. Importantly, the improved quality of the local groundwater supply source will require less energy and result in fewer greenhouse gas emissions than a like amount of imported water (see Attachment 8 for the full analysis). Energy savings (and greenhouse gas emission reductions) are enhanced by the reduced water demands. The two WUE Program Projects have specific water saving projects that will reduce not only water demand, but wastewater loads as well.

The goal of the Automatic Water Softener Rebate and Public Outreach Program is to remove the remaining illegal residential automatic water softeners in the Sanitation District's service area, and thereby reduce the chloride load in the Sanitation District's final effluent and recycled water at the Saugus and Valencia Water Reclamation Plants (WRPs) by up to 5 mg/L, and prevent backsliding (residents installing and/or using illegal automatic water softeners). This program will reduce greenhouse gas emissions by minimizing the size of future chloride compliance facilities that would otherwise be required to remove chloride from the WRP discharges.

Certainty of Achieving Program Preferences, Breadth and Magnitude of Program Preference Achieved

Review of the projects selected demonstrates that this Proposal will benefit climate change response. These projects are an early step in climate change response that will be enhanced by the Climate Change Study which is being prepared as part of the 2013 Update IRWM Plan. The Climate Change Study will identify vulnerability of the Region to climate change, evaluate potential climate change impacts, identify and evaluate potential adaptation strategies, and will make recommendations as to how to collect and utilize greenhouse gas emissions data within the IRWM Plan framework.

Expand Environmental Stewardship

Relevant Projects:

- (1) Santa Clara Valley Water Use Efficiency Strategic Plan Programs (CLWA-3),*
- (2) Santa Clarita Water Division Water Use Efficiency Programs (SCWD-2),*
- (5) Automatic Water Softener Rebate and Public Outreach Program (SCVSD-1), and*
- (6) USCR Arundo/Tamarisk Removal Program (SCARP) Implementation (SC-1/BCN-1)*

The two WUE Program Projects both reduce runoff from irrigation to local channels; thereby reducing the amount of pollution in the streams and rivers. The Automatic Water Softener Rebate and Public Outreach Program (SCVSD-1) Project will help promote pollution prevention over constructing more wastewater treatment facilities. This Project is looking out for the environment as well as improving the quality of the Santa Clara River by reducing the chloride discharged into the river.

Another ecological threat addressed by this Proposal is the presence of arundo and tamarisk in the SCR. In a study commissioned by the Ventura County Resource Conservation District, the impacts of arundo and tamarisk include high water consumption, reduced biodiversity, bank erosion, and channel alteration.

Certainty of Achieving Program Preferences, Breadth and Magnitude of Program Preference Achieved

This proposal contains projects that practice, promote, improve, and expand environmental stewardship; therefore certainty of achieving this Statewide Priority is high. The magnitude of benefits is great. Benefits from the Automatic Water Softener Rebate and Public Outreach Program (SCVSD-1) Project would include the entire Santa Clara River and all of its downstream users. Benefits of the SCR Arundo Removal Project are also widespread as it is necessary to undertake removal in the upper watershed to enable eradication efforts throughout the river system.

Practice Integrated Flood Management

Relevant Projects:

- (1) USCR Arundo/Tamarisk Removal Program (SCARP) Implementation (SC-1/BCN-1)*

This proposal contains one project that augments the productivity of the SCR floodplain while providing protective measures against losses resulting from flooding.



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As described by the California Water Plan, arundo displaces native vegetation along waterways, impedes flow during floods, and is a heavy water user. Further, arundo that clogs floodways eventually ends up downstream, resulting in expensive beach clean-ups. Removal serves to improve habitat for the native species, reduce flood risk, and reduce water losses. Therefore, arundo removal itself is a non-structural flood management strategy that has multiple benefits.

Certainty of Achieving Program Preferences, Breadth and Magnitude of Program Preference Achieved

Integrated flood management is a multi-strategy approach that employs both structural and non-structural measures to maximize the benefits of floodplains while minimizing potential for loss of life and property damage from flooding. The projects in this proposal are near-term approaches to addressing integrated flood management. However, the commitment to integrated flood management is also long-term. The IRWM Plan Update is undertaking a Climate Change Study that will greatly inform the description of future flood vulnerabilities and identify adaptation strategies. The Climate Change Study will provide a means to consider uncertainty and risk not only for water management but specifically for flood management.

Protect Surface Water and Groundwater Quality

Relevant Projects:

- (1) Santa Clara Valley Water Use Efficiency Strategic Plan Programs (CLWA-3),
- (2) Santa Clarita Water Division Water Use Efficiency Programs (SCWD-2),
- (4) Pellet Water Softening Treatment Plant - Phase 1 (NCWD-2),
- (5) Automatic Water Softener Rebate and Public Outreach Program (SCVSD-1), and
- (6) USCR Arundo/Tamarisk Removal Program (SCARP) Implementation (SC-1/BCN-1)

The majority of projects associated with this proposal protect surface and groundwater quality.

The two WUE Programs targets outdoor water application, including large landscape audits, installation of WBICs, and specialized training for landscape contractors and maintenance companies. These programs will limit application of excessive water and, therefore, undesirable salts and nutrients to the landscape. These programs will reduce runoff and improve the quality of any receiving waters. In addition, water use information from the audits and landscape programs will allow the Region to better manage the salts and nutrients through reductions of imported water, and greater accounting of where salts and nutrients are applied in the watershed.

The Pellet Water Softening Treatment Plant - Phase 1 Project completes the engineering phase of a multi-phase project that when constructed will allow NCWD to improve drinking water quality by reducing calcium carbonate hardness, which will consequently also reduce the need for point-of-use water softeners, some types of which discharge chloride into the Santa Clara River. This Project complements the Automatic Water Softener Rebate and Public Outreach Program (SCVSD-1) Project that should remove the remaining illegal residential automatic water softeners in the SCV through a combination of activities. The multi-faceted effort is expected to achieve a reduction in the chloride discharged from the WRPs up to 5 mg/L.

Arundo and tamarisk are major threats to the beneficial uses of the USCR. These weeds are pervasive and provide no redeeming wildlife value. These weeds clog flood channels, pose an increased wildfire risk and result in heavy stream erosion. Unlike native vegetation, arundo and tamarisk do not shade the riparian area. Lack of shade alters pH and oxygen levels and increases toxicity of undesirable nutrients such as ammonia.

Certainty of Achieving Program Preferences, Breadth and Magnitude of Program Preference Achieved

The certainty of achieving this program preference is high, assuming funding is made available for implementation. The outcomes from the two proposed WUE Programs are well understood given past experience with similar water use efficiency programs implemented in the USCR Region. Implementation of this proposal will decrease polluted runoff, reduce the chloride levels in the SCR, and assist the agencies in complying with the Basin Plan. Besides preventing degradation the Proposal will enhance water quality through reestablishment of native vegetation leading to improved pH, improved oxygen levels and less sedimentation.



Upper Santa Clara River Proposition 84 IRWM Plan Implementation Grant Attachment 9 Preferences

Improve Tribal Water and Natural Resources

The SCV is within the historic range of the Tataviam Band of Mission Indians, though there are no tribal lands within the Region. The IRWM Plan has solicited the input and participation from a broad Stakeholder group, including a specific solicitation to the Tataviam. Unfortunately, no tribal representatives have participated to date. The IRWM Plan Stakeholders will continue to solicit tribal participation.

Certainty of Achieving Program Preferences, Breadth and Magnitude of Program Preference Achieved

The six projects of this proposal have broad benefits for all persons in the Region.

Ensure Equitable Distribution of Benefits

Relevant Projects:

- (1) *Santa Clara Valley Water Use Efficiency Strategic Plan Programs (CLWA-3),*
- (2) *Santa Clarita Water Division Water Use Efficiency Programs (SCWD-2),*
- (3) *Foothill Feeder Connection (CLWA-8),*
- (4) *Pellet Water Softening Treatment Plant - Phase 1 (NCWD-2),*
- (5) *Automatic Water Softener Rebate and Public Outreach Program (SCVSD-1), and*
- (6) *USCR Arundo/Tamarisk Removal Program (SCARP) Implementation (SC-1/BCN-1)*

As described earlier, the IRWM Plan has not identified communities that met the State definition for a DAC. Additional outreach directed at economically disadvantaged areas and populations did not find any water quality or supply issues unique to DACs. Likewise, outreach to California Native American Tribes did not identify any critical water supply or water quality needs. However, this proposal contains regional project and programs that benefit a large geographic area. The projects and programs of this proposal do not adversely affect one particular group but rather equitably distribute benefits to a broad geographic area and all residents and water users of that area.

Certainty of Achieving Program Preferences, Breadth and Magnitude of Program Preference Achieved

The IRWM Plan process included considerable effort to include disadvantaged communities as well as California Native American Tribes. Extensive outreach did not point to any safe drinking water, wastewater, or other unique water-related needs of these populations.