

Attachment
11

Stormwater Flood Management Grant Proposal
Lower Silver Creek, Reach 4-6
Program Preferences

Attachment 11 consists of the following items:

- ✓ **Program Preferences.** Attachment 11 contains detailed information on how the proposal will meet the program preferences described in the IRWM Guidelines.

Program Preferences Met by Proposal

The Project meets six of the eight Program Preferences identified in the Proposition 84 and Proposition 1E IRWM Guidelines. This attachment details the specific Program Preferences that are met by the Project, the certainty that the Proposal will meet the Program Preferences, and the breadth and magnitude to which the Program Preferences will be met. **Table 11-1**, below, identifies the Program Preferences which the project will assist in meeting.

Table 11-1: Program Preferences Met by Project

Project	Program Preferences							
	Include Regional Projects or Programs	Integrates Projects Within an Identified Region or IRWM Sub-region	Contribute to Attainment of One or More CALFED Objectives	Effectively resolves Significant Water-related Conflicts within or between Regions	Address Critical Water Supply or Quality Needs of DAC	Integrates Water Management with Land Use Planning	Eligible for SWFM Funding	Address Statewide Priorities
Lower Silver Creek (Reaches 4-6) and Lake Cunningham Flood Protection Project		✓	✓		✓	✓	✓	✓

Integrates Projects Within An Identified Region or IRWM Sub-Region

The Project is located in the Coyote Creek watershed, which is the largest watershed (or sub-region) in Santa Clara County and drains approximately 320 square miles along the eastside of the County. Coyote Creek empties into South San Francisco Bay along with other watersheds including the Guadalupe River. The Project will integrate with projects both up- and down-stream of Lower Silver Creek to provide comprehensive flood protection within the Coyote Creek Watershed and watershed restoration benefits within the larger South Bay Region. Downstream, the Project will integrate with numerous priority projects including:

- (32)¹ Fisheries and Aquatic Habitat Collaborative Effort (SCVWD)
- (35) Guadalupe River Watershed Habitat Enhancement (SCVWD)
- (36) Infrastructure Reliability Improvements in Santa Clara County (SCVWD)
- (49) Lower Silver Creek, I-680 to Cunningham (Reaches 1-3)
- (52) Milpitas Transit Area Recycled Water Project (City of San Jose)
- (59) Permanente Creek Flood Protection (SCVWD)
- (85) Regional Flood Agencies Forum (SCVWD)
- (96) Santa Clara Valley Water District Aquifer Storage and Recovery Project (SCVWD)
- (105) South Bay Salt Pond Restoration Project & South San Francisco Bay Shoreline Study: Early Implementation Activities (Santa Clara County)
- (112) Urban Creek Trash Reduction Program (SCVWD)
- (120) Mid-Coyote (SCVWD)

Upstream, the Project will integrate flood control improvements proposed as part of the (110) Thompson Creek Stream Stabilization Project, which extends from Quimby Road to Aborn Road . As provided, the Project will contribute to both short- and long-term implementation priorities across four functional areas of water management (Water Supply and Water Quality; Wastewater and Recycled Water; Flood Protection and Stormwater Management; and Watershed Management and Habitat Protection and Restoration). Additionally it is important to note that the District is the sponsor for several of these projects, thus demonstrating its commitment to actively participating in the Bay Area IRWMP planning process and establishment of short-term and long-term priorities.

Contributes to Attainment of One or More CALFED Objectives

The Project contributes to the attainment of two CALFED Bay-Delta Program objectives – the water quality and ecosystem restoration objectives. In fact, the two objectives are linked as it is ecosystem restoration that leads to water quality improvements. The CALFED water quality objective is met because the Project improves the hydrologic function of Lower Silver Creek by controlling excessive in-stream erosion and sedimentation, establishing and expanding the existing riparian corridor, and facilitating a reduction in trash impairment for Lower Silver Creek., which is listed on U. S. EPA's 303(d) list. The Project contributes significantly to ecosystem restoration as it employs sediment removal, vegetation management, bank protection, natural channel formation, and creation of habitat acreages for emergent wetlands, open water/emergent wetlands, riparian habitat, and uplands. Lower Silver Creek empties into the southern part of the San Francisco Bay which is part of the CALFED Program area.

Addresses Critical Water Supply or Quality Needs of DAC

Lower Silver Creek winds its way through parts of San Jose that are considered a disadvantaged community (DAC). A DAC has an annual median household income that is less than 80 percent of the statewide annual median household income. Figure 11-1 below presents a DAC overlay within the Project area. The Project provides water quality benefits to several DAC communities in northern San Jose. The Project contributes to the protection and improvement of the quality of water resources by reducing mass loading of pollutants to San Francisco Bay through the preservation, enhancement, and widening of the Lower Silver Creek stream corridor to improve filtration of point and non-point source pollutants. This Project also will help benefit the 303(d) list impairment for trash on lower Silver Creek.

Integrates Water Management with Land Use Planning

Beyond these habitat improvements, the Project also integrates improved public access through the incorporation of a multiple-use trail that would not only provide maintenance access, but integrate with the City of San Jose planned trail network. The City of San Jose has prepared a master plan that guides the development of a six-mile trail system that will connect Lake Cunningham to the Coyote Creek Trail with the Lower Silver Creek a part of that trail. San Jose's trails are part of a 550-mile network that, when completed, will encircle the San Francisco Bay. The trail will benefit several neighborhoods including East

¹ Note: the Project numbers correspond with those provided in Table F-2, Project Assessment Results, of the Bay IRWM Plan.

Valley/680 communities, Mayfair, Five Wounds/Brookwood Terrace, and Thirteenth Street. The following link provides additional information on the trail system
<http://www.sjpark.org/Trails/SilverCrLower/SilverCrLower.asp>.

SWFM Funding Eligibility

The Project is eligible for funding as the region – the Bay Area Region – has been accepted into the IRWM grant program through the Regional Acceptance Process. The Project is part of the Bay Area Integrated Regional Water Management Plan. The District has prepared and implemented a GWMP in compliance with CWC 10753.7, as the Project has the potential for groundwater impacts. The District has submitted a complete UWMP in 2005 and will be submitting an adopted 2010 UWMP by the DWR deadline this year. The District is compliant with AB 1420. The District intends to comply with CWC 10920 that will establish a groundwater monitoring program.

The Project is eligible for SWFM funding because:

- The project is not part of the State Plan Flood Control (SPFC).
- The project is designed to manage stormwater runoff and reduce flood damage.
- The project yields multiple benefits including water quality improvements, habitat restoration, cooling, and reduction in sedimentation.
- The project is consistent with the applicable regional Water Quality Control Plan to manage stormwater runoff to reduce flood damages.

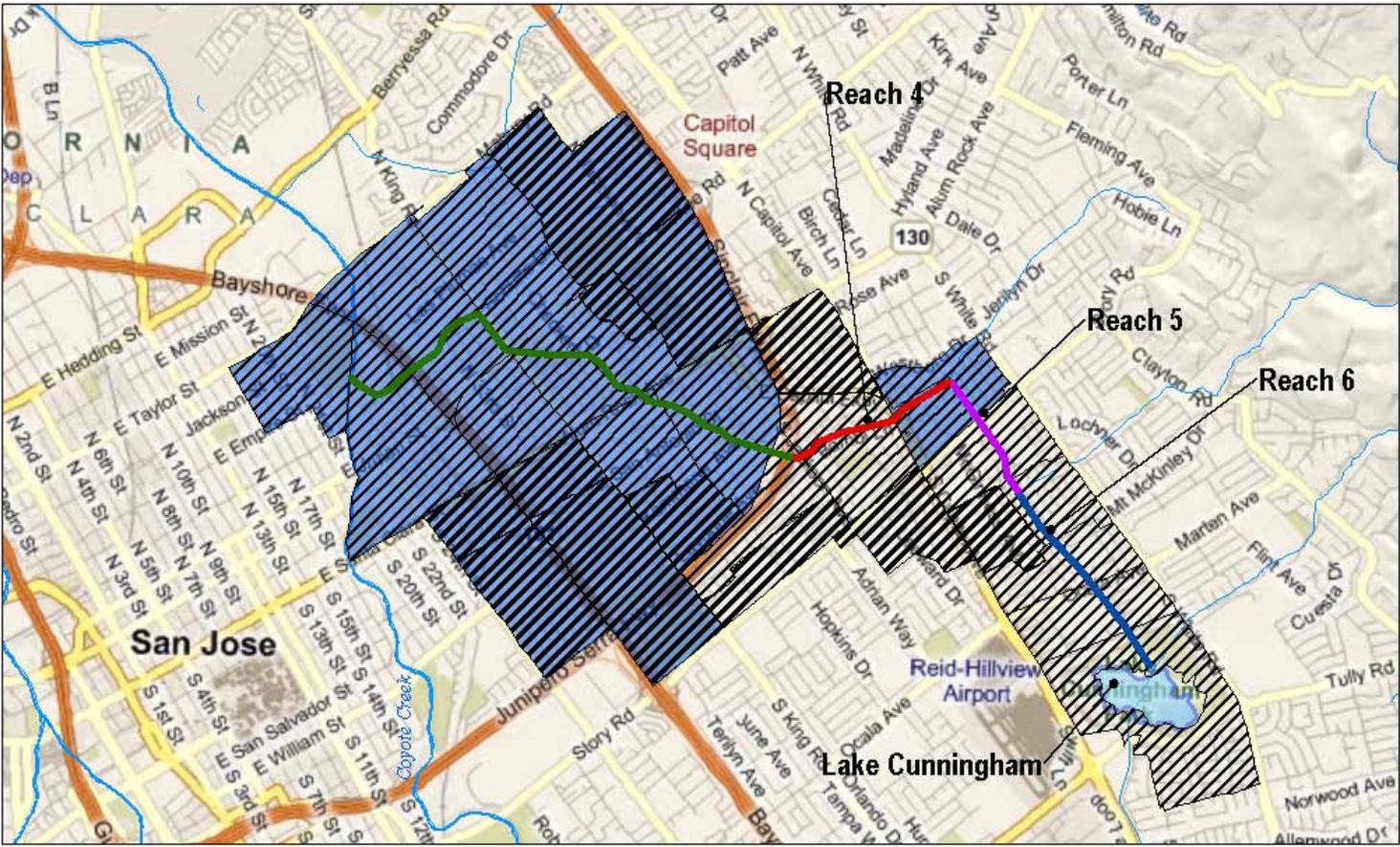


Figure 11-1. Disadvantaged Communities

<p>Lower Silver Creek (Individual Reaches)</p> <ul style="list-style-type: none"> — Reaches 1-3 (Construction Complete) — Reach 4 — Reach 5 — Reach 6 		<p>Disadvantaged Communities</p> <ul style="list-style-type: none"> Lake Cunningham Minority Census Tracts 	
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Project: Lower Silver Creek Flood Protection Project
 Source: Bing Maps, 2011, American Community Survey, 2000



Addresses Statewide Priorities

The Project addresses numerous Statewide Priorities as identified on page 13 of the Propositions 84 and 1E Guidelines. **Table 11-2** below graphically illustrates the Statewide Priorities addressed by the Project.

Table 11-2: Addressing Statewide Priorities

Project	Assists in Meeting Statewide Priorities							
	Drought Preparedness	Use and Reuse Water More Efficiently	Climate Change Response Actions	Expand Environmental Stewardship	Practice Integrated Flood Management	Protect Surface Water Quality	Improve Tribal Water and Natural Resources	Ensure Equitable Distribution of Benefits
Lower Silver Creek (Reaches 4-6) and Lake Cunningham Flood Protection Project			✓	✓	✓	✓		✓

The project addresses five Statewide Priorities:

- **Climate Change Response Actions** – A climate change consequence is a rising sea level which would increase the likelihood of flooding. The Project will reduce the impact of rising sea level when combined with a flooding event. In addition, the Project establishes river hydrology that will encourage the re-population of fish within Lower Silver Creek and increase habitat availability.
- **Environmental Stewardship** – As previously mentioned, the Project controls excessive in-stream erosion and sedimentation, establishes and expands the existing riparian corridor, and facilitates a reduction in trash impairment for Lower Silver Creek, which is listed on U. S. EPA’s 303(d) list. The Project employs vegetation management, stream bank protection, and creation of habitat acreages for emergent wetlands, open water/emergent wetlands, riparian habitat, and uplands.
- **Practice Integrated Flood Management** – The Project protects 3,800 homes and businesses from a 100-year flood event. The Project balances environmental quality and protection from flooding in a cost-effective manner as it will provide a 4.6-mile low-flow channel from Coyote Creek to Lake Cunningham that will facilitate potential migration of anadromous fish through the creation of Shaded Aquatic Riverine (SAR) habitat.
- **Protect Surface Water Quality** – The project contributes to the protection and improvement of the quality of water resources by reducing mass loading of pollutants to San Francisco Bay through the preservation, enhancement, and widening of the Lower Silver Creek stream corridor to improve filtration of point and non-point source pollutants. This Project also helps benefit the 303(d) list impairment for trash on lower Silver Creek. Likewise, increased shading as a result of the establishment of SAR habitat is expected to decrease summer water temperatures.
- **Ensure Equitable Distribution of Benefits** – The Project will contribute to the promotion of economic, social, and environmental sustainability as Lower Silver Creek and Lake Cunningham are adjacent and a part of both disadvantaged and other communities. The Project distributes the benefits of ecosystem improvements, flood protection benefits, improved in-stream flow conditions and in-stream erosion and sedimentation control, water quality improvements, and habitat conservation for species.

Certainty that the Proposal will meet Program Preferences

Both components of the Project have undergone extreme scrutiny and therefore, there is great certainty the Project selected for this proposal will meet the Program Preferences. The project meets criteria designed to address Proposition 1E and achieve the Bay Area IRWM Plan objectives. The Project has the ability to achieve its required benefits, is technically feasible, has secured 55 percent of matching funds, and is implementable within a reasonable length of time after the grant award date.

A partial listing of the existing data and studies that demonstrate the project is technically sound and likely to be implemented are found below in **Table 11-3** (a full list of data and studies can be found in the application Appendices section).

Table 11-3: Existing Data and Studies

Project	Existing Data and Studies
Lower Silver Creek (Reaches 4-6) and Lake Cunningham Flood Protection Project	<ul style="list-style-type: none"> • Lower Silver Creek Final Watershed Plan and Environmental Impact Report/Environmental Impact Statement (EIR/EIS), Santa Clara Valley Water District and NRCS, July 1983 • Lower Silver Creek Watershed Project 1998 Plan Update, SCVWD and NRCS, September 2001 • Lower Silver Creek Watershed Project Updated Mitigation and Monitoring Program (MMP), SCVWD, dated December, 2001 addendum • Lower Silver Creek Watershed Project Maintenance Plan (Plan) dated August 2001 • Coyote Watershed Aesthetic Guidelines, SCVWD, December 2000 • Lower Silver Creek, R4-6, Jurisdiction Determination. NRCS July 1997 • Lower Silver Creek Watershed, 1983 Recommended Plan as modified by the 1998 Plan Update, Final Initial Study/Mitigated Negative Declaration (SCH # 2000102034) and Environmental Assessment, SCVWD and NRCS, December 2000 • Lower Silver Creek Watershed Project 1998 Plan Update, Addendum to the Initial Study/Negative Declaration (SCH # 2000102034) and Environmental Assessment/Finding of No Significant Impact, SCVWD and NRCS, September 2001 • Lower Silver Creek Watershed Project 1998 Plan Update, Second Addendum to the Initial Study/Negative Declaration (SCH # 2000102034) and Environmental Assessment/Finding of No Significant Impact, SCVWD and NRCS, January 2004 • Schedule Priority for Lake Cunningham Improvements, Jay Aldean, PE, March 2003 • Lower Silver Creek Water Project, Section 404(b)1 Alternatives Analysis and Plan Update, SCVWD and NRCS, December 1998 • Supplemental Watershed Plan, Lower Silver Creek, SCVWD and NRCS, January 2001 • Lake Cunningham Improvement Project, Project Number: 402611, SCVWD, December 2003 • Geotechnical Design Report for Lower Silver Creek, Reaches 5-6, Geotechnical Consultants, Inc. June 2002 • Phase 1 Environmental Assessments, Lower Silver Creek, Reaches 4-6, D&M Consulting Engineers, September 2000 • Site Investigation Report for Lower silver Creek, Reach 4, Parikh

Project	Existing Data and Studies
	<p>Consultants, Inc. July, 2001</p> <ul style="list-style-type: none"> • Phase 2 Hazardous Materials Investigation, Reaches 5-6, Persons, March 2001 • Geotechnical Investigation Report for Lower Silver Creek, Reaches 5-6, Geotechnical Consultants, Inc. August 2003 • Thompsons Creek Hydromodification Plan, GeoSyntec Consultants, Balance Hydrologics, Inc., Philip Williams & Associates, and RMC. March 2003 • Lower Silver Creek, Reaches 4-6, Cultural Resources, Section 106 Report, Prepared by NRCS, 1997 • Coyote Watershed Program, Lower Silver Creek Improvement Project Final Hydraulic Report, Schaaf & Wheeler Consulting Engineers, 2002. • Lower Silver Creek Watershed Project Mitigation and Monitoring Program (MMP), SCVWD, dated December, 1999 • Lower Silver Creek Reach 6b, Draft Basis of Hydraulic Design, Schaaf & Wheeler Consulting Engineers, February 5, 2010 • Lower Silver Creek Reaches 4, 5, and 6 Design Optimization Memorandum, RMC, July 2009 • Lower Silver Creek Watershed Project/Reaches 4, 5 and 6 Design Improvements and Renderings, January 2010 • Lower Silver Creek Flood Protection Project, Reaches 4-6, Appraisal/Acquisition/Relocation Status Report, Associated Right-of-Way Services, September 2010 • Limited Site Investigation Report, Santa Clara Valley Water District, Lower Silver Creek Reach 6B, Geocon Consultants Inc. dated March, 2010. • Limited Site Investigation Report Lower Silver Creek Reaches 4, 5, And 6A San Jose, California, Geocon Consultants, Inc. May 2010 • Lower Silver Creek, Reaches 4-6, Construction Phase Work Plan, RMC and SCVWD, August 2010 • NRCS Agreement • SCVWD Budget Reports and Contractor Bid Docs • RMC Program Management Contract and Budget Remaining • Lake Cunningham Work Plan and Construction Estimate • District Standard Specifications • Lower Silver Creek, Reaches 4-6A, Flood Protection and Creek Restoration Project 100% Design Report Ruggeri, Jensen, Azar & Associates, for SCVWD, May 28, 2010) • Lower Silver Creek, Reaches 4-6A, Flood Protection and Creek Restoration Project Design Engineering Plans and Specs, Ruggeri, Jensen, Azar & Associates, for SCVWD, June 2010 • Lower Silver Creek, Reaches 4-6A, Flood Protection and Creek Restoration Project Design Engineering Specifications, Ruggeri, Jensen, Azar & Associates, for SCVWD, June 2010 • Lower Silver Creek, Reach 6B Rough Grading. 60% Design

Project	Existing Data and Studies
	<p>Engineering Report. MTC. June 2010</p> <ul style="list-style-type: none"> • Lower Silver Creek, Reach 6B Rough Grading. 60% Design Engineering Plans. MTC. June 2010 • Lower Silver Creek, Reach 6B Rough Grading. 60% Design Engineering Specifications. MTC. June 2010

Breadth and Magnitude to Which Program Preference will be met

The breadth and magnitude to which the Program Preferences will be met by the Project can be gauged by examining the breadth and magnitude to which the Project meets IRWM Plan goals. The Bay Area IRWM Plan goals are described in detail in Attachment 3 – Work Plan on page 3.

The Bay Area IRWM Plan articulates six goals, five of which this Project will meet. Those goals are as follows:

1. Promote economic, social, and environmental sustainability
2. Improve water supply reliability
3. Protect and improve hydrologic function
4. Protect and improve quality of water resources
5. Protect public health, safety and property
6. Create, protect, enhance, and maintain environmental resources and habitats

Table 11-4 provides both quantitative and qualitative data on the breadth and magnitude to which the projects meet the IRWM Plan goals

Table 11-4: Quantitative and Qualitative Data – IRWM Plan Goals

Breadth/Magnitude to Which Project Achieves IRWM Plan Objectives	
Promote economic, social, and environmental sustainability	<p>The multiple benefits of the Project have led to broad support from the surrounding cities and the local communities. The communities understand that the multiple benefits of the Project will lead to a more attractive environment which in turn increases economic viability of the City of San Jose. The Project received ARRA funding to complete the design for Reaches 4-6 and part of the construction costs which added to the sustainability and viability of the Project. The Project serves both disadvantaged and non-disadvantaged populations which socially benefits the entire region. Environmental sustainability is promoted by not only reducing the risk of flooding to homes and businesses but by factoring in the added benefits of erosion and sedimentation control, increased riparian vegetation, water quality improvements, improved fish passage, and management of pests and invasive species.</p>
Improve Water Supply Reliability	N/A
Protect and improve hydrologic function	<p>The Project contributes to the protection and improvement of hydrologic function by controlling excessive in-stream erosion and sedimentation, improving in-stream flow conditions through the provision of a low-flow channel and increased riparian vegetation, and by reducing flooding and channel bank failures. The expansion of Lake Cunningham will increase flood storage thereby facilitating improved flood management.</p>

Breadth/Magnitude to Which Project Achieves IRWM Plan Objectives	
Protect and improve quality of water resources	The Project protects and improves the quality of water resources by reducing mass loading of pollutants to San Francisco Bay through the preservation, enhancement, and widening of the Lower Silver Creek stream corridor to improve filtration of point and non-point source pollutants. This Project would also help benefit the 303(d) list impairment for trash on lower Silver Creek.
Protect public health, safety, and property	The Project contributes to the protection of public health, safety, and property by removing homes, business, and roads from the 100-year flood zone of Lower Silver Creek. The Project will increase the capacity of the creek channel to safely handle a 100-year flood event and remove 3,800 parcels from the 100-year flood plain. Studies conclude that modifications to Lake Cunningham could provide an additional storage to further reduce the peak discharge downstream from the calculated peak of 5,060 cfs at Tully Road, to 2,810 cfs at Cunningham Avenue through properly designed stormwater control structures. Additionally, the Project will improve access to the creek channel, which in turn, will enhance maintenance activities to maintain the channel's engineered capacity. The management of invasive species also will lead to a healthier environment.
Create, protect, enhance, and maintain environmental resources and habitats.	The Project creates, protects, enhances, and maintains environmental resources by conserving and restoring habitat for species protection. Wetlands and riparian areas will be acquired, protected and/or restored, fish passage will be improved, pests and invasive species will be better managed, and the structural complexity of the stream will be restored. The Project will provide a 4.6-mile low flow channel from Coyote Creek to Lake Cunningham to facilitate the potential migration of anadromous fish. Decreased summer water temperatures will result from shading through increased riparian canopy cover aiding fish migration. A sediment transport channel would be sized to mobilize and transport sediment at ecologically relevant frequencies, integrate up to 5 acres of shaded riparian aquatic habitat, and create up to 12 acres of jurisdiction waters.