

**Pajaro River Watershed Integrated Regional Water Management Plan Update
Project Solicitation Form**

PROJECT OVERVIEW

General Project Information

Project Title:	Uvas Creek Fish Passage Improvement at UPRR Crossing
Project Location:	Along Bolsa Road north of Bloomfield Avenue in Gilroy, CA
Estimated Cost:	\$1,400,000

Brief Project Description (1 to 2 sentences):

The proposed project site is the number one migration barrier for Steelhead on Uvas Creek. The proposed project will remove the existing denil fishway ladder and concrete lining beneath the railroad crossing and replace it with a roughened channel configuration.

Project Proponent Information

Contact Name:	Scott Katric
Affiliation:	Santa Clara Valley Water District
Address:	5750 Almaden Expressway, San Jose, CA 95118
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Email:	skatric@valleywater.org

Other participating agencies/organizations (if applicable):

No funding partners, but SCVWD staff collaborating with NMFS and DFG. Additional coordination with the Union Pacific Railroad is also occurring.

DETAILED PROJECT INFORMATION

Description

Please provide a description of your project (including the location) and its purpose, what will be constructed and/or implemented, how the project will function, the area(s) and/or entities that will be affected by or will benefit from the project, and any potential obstacles to implementation.

The Union Pacific Railroad (UPRR) crossing of Uvas Creek at Bolsa Road has long been considered the most critical steelhead fish passage barrier in the Uvas Creek watershed. The site currently has a Denil style fishway which was originally installed by the Federation of Fly Fishers in 1982. The existing fish passage ladder configuration is in disrepair, does not meet current fish passage criteria and channel conditions have changed since installation of the ladder. This project proposes to remove the denil ladder and portions of the existing concrete lining beneath the railroad crossing, then construct a new roughened channel fish passage structure to ensure fish passage at a larger range of flows throughout the migration period for steelhead. The roughened channel design concept will result in fish passage at much lower flows than currently possible, in addition, will provide much better out-migration conditions for juvenile fish. The construction of this improvement will also include upstream and downstream channel stabilization measures to assist with stabilizing channel incision issues that have occurred downstream of the concrete lining beneath the railroad crossing. The proposed project is expected to be self-maintaining and thereby reduce ongoing maintenance costs associated with the current fish

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ladder.

Technical Feasibility

Discuss the technical feasibility of the project. If possible, cite references that contain information about the proposed project and detail the technical feasibility of the project.

The proposed project is technically feasible. The difficult portion of this project will be demolition and grading work beneath an operating railroad system.

Pajaro River Watershed IRWM Regional Goals & Objectives

Put an X next to any goal that the proposed project will achieve.

Water Supply

- | | |
|--|---|
| | 1. Meet 100% of M&I and agriculture demands (both current and future conditions) in wet to dry years including the first year of a drought. |
| | 2. Meet 85% M&I and 75% agriculture demands (both current and future conditions) in second and subsequent years of a drought. |
| | 3. Identify and address water supply needs of disadvantaged communities in the Pajaro River Watershed. |
| | 4. Implement water conservation programs to reduce M&I and agricultural water use consistent with SBx7-7 and CVPIA. |
| | 5. Maximize the use of recycled water during the irrigation season and expand other uses of recycled water. |
| | 6. Optimize the use of groundwater and aquifer storage. |
| | 7. Maximize conjunctive use opportunities including interagency conjunctive use. |
| | 8. Optimize and sustain the use of existing import surface water entitlements from the San Felipe Unit. |
| | 9. Maximize the beneficial use of existing local water supplies while protecting existing surface water rights. |

Water Quality

- | | |
|----------|--|
| X | 1. Meet or exceed all applicable groundwater, surface water, wastewater, and recycled water quality regulatory standards. |
| | 2. Identify and address the drinking water quality of disadvantaged communities in the Pajaro River Watershed. |
| | 3. Protect groundwater resources from contamination including salts and nutrients. |
| | 4. Address impacts from surface water runoff through implementation of Best Management Practices or other surface water management strategies. |

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5. Meet or exceed delivered water quality targets established by recycled water users.

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Flood Protection

x	1. Implement flood management strategies throughout the watershed that provide multiple benefits.
0	2. Reach consensus on the Pajaro River Risk Reduction Project necessary to protect existing urban areas and infrastructure from flooding and erosion from the 100-
	3. Work with stakeholders to preserve existing flood attenuation by implementing land management and conservation strategies throughout the watershed.
x	4. Develop approaches for adaptive management to minimize maintenance requirements and protect quality and availability of water while preserving ecologic and
	5. Provide community benefits beyond flood protection such as public access, open space, recreation, agriculture preservation and economic development.

Environmental Protection and Enhancement

x	1. Address opportunities to enhance the local environment and protect and/or restore natural resources, in cooperation with landowners, when developing water
x	2. Improve biological and cultural resources, including riparian habitats, habitats supporting sensitive plant or animal species and archaeological/historic sites when
	3. Address opportunities to protect, enhance, or restore habitat to support Monterey Bay National Marine Sanctuary marine life in conjunction with water supply
	4. Address opportunities for open spaces, trails, parks along creeks and other recreational projects in the watershed that can be incorporated with water management

Integration and Coordination

Put an X next to any Resource Management Strategies (RMS) that the proposed project will address.

Reduce Water Demand	Agricultural Water Use Efficiency	
	Urban Water Use Efficiency	
Improve Operational Efficiency and Transfers	Conveyance - Delta	
	Conveyance - Regional/local	
	System Reoperation	
	Water Transfers	
Increase Water Supply	Conjunctive Management & Groundwater Storage	
	Desalination	
	Precipitation Enhancement	
	Recycled Municipal Water	
	Surface Storage - CALFED	
	Surface Storage - Regional/local	
Improve Water Quality	Drinking Water Treatment & Distribution	
	Groundwater Remediation /Aquifer Remediation	
	Matching Quality to Use	

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	Pollution Prevention	0
	Salt & Salinity Management	
	Urban Runoff Management	
Improve Flood Management	Flood Risk Management	
Practice Resources Stewardship	Agricultural Lands Stewardship	
	Economic Incentives (Loans, Grants, & Water Pricing)	
	Ecosystem Restoration	x
	Forest Management	
	Recharge Area Protection	
	Water-Dependent Recreation	
	Watershed Management	x
Other Strategies	Crop Idling for Water Transfers	
	Dewvaporation or Atmospheric Pressure Desalination	
	Fog Collection	
	Irrigated Land Retirement	
	Rainfed Agriculture	
	Waterbag Transport/Storage Technology	
Please describe:	the proposed project will stabilize the stream bed, thereby reducing channel incision and streambank instability once completed. The project will enhance fish passage for Steelhead, improving the ecosystem and assisting with other watershed efforts to improve steelhead viability.	

List the projects that were integrated to develop a single proposed project, if applicable.

List the agencies and organization that are working together to implement the project.

SCVWD has been consulting with DFG and NMFS on the proposed concept and design drawings.

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Climate Change Mitigation and Adaptation

Put an X next to any climate change adaptation or mitigation strategy the proposed project will contribute to.

Adaption Strategies

<input type="checkbox"/>	Improve water supply reliability
<input type="checkbox"/>	Expand conjunctive use of multiple water supply sources
<input type="checkbox"/>	Increase water use and/or reuse efficiency
<input type="checkbox"/>	Provide additional water supply
<input checked="" type="checkbox"/>	Promote water quality protection
<input type="checkbox"/>	Reduce water demand
<input type="checkbox"/>	Advance / expand recycled water use
<input type="checkbox"/>	Promote urban runoff reuse
<input type="checkbox"/>	Address sea level rise
<input type="checkbox"/>	Address other anticipated climate change impacts
<input type="checkbox"/>	Improve flood control
<input checked="" type="checkbox"/>	Promote habitat protection
<input checked="" type="checkbox"/>	Establish migration corridors
<input type="checkbox"/>	Re-establish river-floodplain hydrologic continuity
<input checked="" type="checkbox"/>	Re-introduce anadromous fish populations to watershed
<input type="checkbox"/>	Enhance and protect watershed forest and meadow systems

Please describe: The proposed project will improve water quality by removing existing creek modifications that promote erosive conditions that are currently scouring the creek bed and banks. The proposed project will provide improve stream flow conditions thereby protecting stream side habitat and also allow anadromous fish to move upstream during low flow conditions, possibly enhancing fish populations in the watershed.

Mitigation Strategies

<input type="checkbox"/>	Increase water use efficiency or promote energy-efficient water demand reduction
<input type="checkbox"/>	Improve water system energy efficiency
<input type="checkbox"/>	Advance / expand recycled water use
<input type="checkbox"/>	Promote urban runoff reuse
<input type="checkbox"/>	Promote use of renewable energy sources
<input type="checkbox"/>	Contribute to carbon sequestration

Please describe:

Does the proposed project reduce regional greenhouse gas emissions and/or improve energy efficiency? If so, explain how.

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Social Benefits and Impacts

Does the project provide specific benefits to disadvantaged communities and/or Native American tribal communities? If so, explain.

Does the project address any known environmental justice issues?

Project Cost

Total Estimated Capital Cost	\$1,400,000
Annual Operation & Maintenance (O&M) Cost	\$1,000
Cost Basis (Year)	2012%
Source(s) of Funding for Capital	Santa Clara Valley Water District
Source(s) of Funding for O&M Cost	Santa Clara Valley Water District
Project Life (years)	25
Provide link to project cost estimate, if available	

Economic Feasibility

Has a benefit:cost or cost effectiveness analysis been completed for your project? If so, please cite reference and briefly summarize. If no economic analysis has been completed for the project, the project may receive zero points out of a possible 100 points for the financial considerations criteria unless the project is a DAC project. If the project is not a DAC project but the B:C ratio is expected to be greater than 1, please provide a justification. The lack of an economic analysis may also affect the project's readiness score.

No cost:benefit analysis has been performed.

If known, please provide the Benefit:Cost Ratio.

Provide a detailed discussion of the benefits the project will provide. To the extent possible, quantify changes and benefits (e.g. water quality and water supply benefits) that will result from project implementation; otherwise, describe benefits qualitatively.

The current fish ladder configuration does not provide adequate upstream fish passage during a wide range of stream flows, is unpassable for upstream migration during low flows and provides no low flow channel or attractant flow for juvenile outmigration during low flows. In addition, the current fish ladder regularly requires maintenance to keep it free of debris. The proposed project will not include any ladder structure, instead the channel invert will be modified using updated fish passage techniques learned a DFG/NMFS fish passage training to provide low velocity refuge during all flows

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utilizing a roughened channel approach. This approach should not require regular maintenance to clear debris since the channel invert will be lined with rock riprap. Since this concept will have a distinct low flow channel, both upstream and downstream migration will be greatly improved for all ranges of flows.

Project Readiness

Proposed Project Start Date:	Summer 2014
Anticipated Project Completion Date:	Summer 2014

Please Indicate the status (pending, in process, complete) of the following.

Project Element	Status	% Complete	Estimated Completion Date
<i>Feasibility Study</i>	complete		
<i>Preliminary design</i>	in progress	60	Jun-13
<i>CEQA/NEPA</i>	pending	0	Dec-13
<i>Permit Acquisition</i>	pending	0	Dec-13
<i>Construction Docs</i>	in progress	30	Dec-13

NMFS has programmatic environmental document that covers proposed project