

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

PROJECT OVERVIEW

General Project Information

Project Title:	Soap Lake Floodplain Preservation Project
Project Location:	Santa Clara and San Benito Counties
Estimated Cost:	\$34,000,000

Brief Project Description (1 to 2 sentences):

This project provides non-structural flood protection through preservation of approximately 9,000 acres of agricultural lands in the Soap Lake Floodplain. The floodplain provides natural flood storage and attenuation for the Pajaro River Watershed and reduces the flow that needs to be carried through the downstream channel. The preservation plans also include the implementation of riparian restoration and BMP activities.

Project Proponent Information

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Affiliation:	Pajaro River Watershed Flood Prevention Authority
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Other participating agencies/organizations (if applicable):

San Benito County Water District, San Benito County, Santa Clara Valley Water District, Santa Clara County, Santa Cruz Zone 7 Flood District, Santa Cruz County, Monterey County Water Resources Agency, Monterey County

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.

Soap Lake is a floodplain within the watershed that has been found to be an extremely important flood protection feature. It acts like a natural detention basin, storing water and reducing peak flows that would otherwise increase flooding in the lower Pajaro River in the Watsonville area. The proposed project would not build any structural facilities, but instead would include obtaining flood easements for the land within the Soap Lake floodplain. The objective is to maintain the current flood protection benefits provided by the Soap Lake floodplain by protecting the area from changes that would impact the flood protection properties of the floodplain. The purchase of easements would restrict development and preserve agriculture and open space in the approximately 9,000 acre floodplain with the goal of preserving the floodplain attenuation benefits. Several conservation easements have already been obtained within the Soap Lake project area totaling over 1,000 acres and funding has been secured for another 1,200 acres, leaving only 6,800 acres requiring additional funding. This project would maintain the current hydrologic and hydraulic conditions at the project site and

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adjacent properties. The floodplain limits would not be changed. The project would minimize the effects of flooding on developments both within and downstream of the study area by preventing development on the property and additional flooding downstream. Floodprone land acquisition could also help create recreational opportunities, maintain agricultural land and open space, preserve riparian habitat and enhance ground water quality. The primary obstacles to implementation is the availability of property for sale in the floodplain and the funding to secure the easements.

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 FPA completed several studies documenting the feasibility of the project including: (1) Phase 1 Hydrologic and Sediment Modeling (July 2002) (2) Phase 2 Flood Protection Alternatives Study (April 2003) (3) Phase 3 Selection of Projects and CEQA Analysis (March 2005)

Pajaro River Watershed IRWM Regional Goals & Objectives

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

Water Supply

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

Water Quality

- | | |
|-------------------------------------|---|
| <input checked="" type="checkbox"/> | 1. Meet or exceed all applicable groundwater, surface water, wastewater, and recycled water quality regulatory standards. |
|-------------------------------------|---|

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	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.
x	4. Address impacts from surface water runoff through implementation of Best Management Practices or other surface water management strategies.
	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.
x	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-
x	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
x	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
x	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	
	Salt & Salinity Management	
	Urban Runoff Management	
Improve Flood Management	Flood Risk Management	x
Practice Resources Stewardship	Agricultural Lands Stewardship	x
	Economic Incentives (Loans, Grants, & Water Pricing)	X
	Ecosystem Restoration	x
	Forest Management	
	Recharge Area Protection	x
	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:		

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

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

San Benito County Water District, San Benito County, Santa Clara Valley Water District, Santa Clara County, Santa Cruz Zone 7 Flood District, Santa Cruz County, Monterey County
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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 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 checked="" type="checkbox"/>	Improve flood control
<input checked="" type="checkbox"/>	Promote habitat protection
<input checked="" type="checkbox"/>	Establish migration corridors
<input checked="" type="checkbox"/>	Re-establish river-floodplain hydrologic continuity
<input type="checkbox"/>	Re-introduce anadromous fish populations to watershed
<input type="checkbox"/>	Enhance and protect watershed forest and meadow systems

Please describe:

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.

Social Benefits and Impacts

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

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Does the project address any known environmental justice issues?

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Project Cost

Total Estimated Capital Cost	\$34,000,000
Annual Operation & Maintenance (O&M) Cost	\$120,000
Cost Basis (Year)	2012
Source(s) of Funding for Capital	50% grants matched by 50% land conservation organizations cost share
Source(s) of Funding for O&M Cost	FPA annual member contributions
Project Life (years)	Perpetuity
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.

The project is a DAC project. Preliminary Benefit Cost calculations have been completed. Preliminary results indicate a B/C ratio greater than 2.2.

If known, please provide the Benefit:Cost Ratio. 2.2

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 Soap Lake Floodplain reduces 100-year flows in the Pajaro River by 16,000 cfs. The reduced flows allow the downstream levee height to be designed approximately 4 feet lower than if these flows had to be conveyed. The approximate incremental cost of the higher levees is at least \$100,000,000, not accounting for land acquisition costs and the raising of the Railroad Bridge and Highway 1 Bridge.
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Project Readiness

Proposed Project Start Date:	In progress
Anticipated Project Completion Date:	Funding dependent

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

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Project Element	Status	% Complete	Estimated Completion Date
<i>Feasibility Study</i>	Complete	100	
<i>Preliminary design</i>	Complete	100	
<i>CEQA/NEPA</i>	Complete	100	
<i>Permit Acquisition</i>	N/A	N/A	
<i>Construction Docs</i>	N/A	N/A	