PROJECT OVERVIEW

General Project Information

Project Title:	Integrated Watershed Restoration Program (IWRP) for the Pajaro Watershed
Project Location:	Applicable across the entire watershed
Estimated Cost:	$500,000

Brief Project Description (1 to 2 sentences):

IWRP is considered a model program for collaborative conservation and has been successful at working across public and private entities to develop high priority and cost-effective multi-benefit conservation projects. This project will leverage design money provided by the State Coastal Conservancy and others to identify and implement at least 5 critical upland, riparian, stream and wetland projects in the Pajaro River watershed that protect water quality, preserve or increase flood attenuation and provide wildlife habitat and connectivity.

Project Proponent Information

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Other participating agencies/organizations (if applicable):

State Coastal Conservancy, Department of Fish and Game, US Fish and Wildlife Service, Natural Resource Conservation Service, NMFS, Central CCRWQCB, Loma Prieta RCD, San Benito RCD, Santa Clara County OSA, TNC, POST, and other organization part of the Conservation Collaborative

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 goal of Integrated Watershed Restoration Program (IWRP) for the Pajaro River Watershed is to facilitate and coordinate projects to improve fish and wildlife habitat, water quality, and flood management and water supply protection using a voluntary, non-regulatory, regional approach. Typical IWRP restoration projects range from sediment reduction, and habitat restoration projects to implementation of on-farm Best Management Practices to improve resources and manage water supplies. IWRP has also completed several high profile mutli-benefit projects that include flood water retention, water supply protection, and habitat enhancement in two tributaries to the Pajaro, Corralitos Creek and Watsonvllle Slough. IWRP has been functioning in Santa Cruz County since 2003 and, through support from our state and federal partners, was expanded to cover Monterey and San Mateo

counties in 2010. IWRP is a mechanism to include resources agencies early on in the design phase of projects in order to develop broad support for projects through collaborative design and documentation. IWRP also serves as a mechanisms to prioritize projects for the watershed based on meeting the mandates of the agencies, resources available for implementation and scientifically based priority areas. Based on requests from the DFG, CCRWQCB, NMFS and USFWS, we are proposing to create a stand-alone program for the Pajaro that would leverage existing design and permit funds from the State Coastal Conservancy and build on the current three-RCD/4 County effort to identify, design and implement multi-benefit, high priority conservation projects throughout the Pajaro.

The RCD, the Coastal Conservancy, the NRCS and resource agency partners have worked collectively to finalize the conservation of a diversity of lands in the lower watershed and to develop plans for addressing chronic sediment loading, flooding, and riparian degradation throughout the upper watershed. The IWRP Santa Cruz partnership is now working with a large group of local landowners/growers on implementing large scale conservation projects to improve recharge, manage storm water/flooding on prime farmland, improve water quality, and restoration degraded coastal wetlands and the species that rely on them. The IWRP Partners are in the process of developing a short-list of high priority projects that would be implemented through this grant. The majority of the design and permit costs for each of these projects will be covered through match and each project will be developed in a collaborative way to facilitate streamlined permitting.

Using this time-test formula, IWRP Santa Cruz has implemented over 90 projects with a vast array of public and private partners over the past 10 years.

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.

Key obstacles to implementation of conservation projects include: conflicting mandates and requirements from various permitting agencies, lack of strong technical background of the project proponents, time and cost of securing permits, and difficulty in obtaining design funds. IWRP was specifically designed to address these obstacles and create a forum for ensuring that state,

federal, and local funds were/are used to design and permit the highest priority projects, with the best available science, in a collaborative manner, that leads to projects that are easy to permit. IWRP has a proven track record in Santa Cruz County and now is working effectively in San Mateo and Monterey County. Through the leadership of the State Coastal Conservancy and local RCD's IWRP has been able to obtain dedicated staff time from all of the state and federal resource agencies, enabling early input and review of projects- which leads to a sense of communal ownership of projects and simplified permitting. While IWRP is clearly not a panacea to fix all the existing problems related to delivery of conservation projects, the program has gone a long way toward making collaboration real, meaningful, and cost-effective. IWRP lead to the creation of the Santa Cruz Co Permit Coordination Program, the first countywide program of its type and a model of success as well as creation of NMFS' first programmatic biological opinion to cover all salmonid restoration projects. Both of these efforts have significantly simplified the process of environmental compliance and permitting and helped to guide project proponents to develop projects that will be permitted

Pajaro River Watershed IRWM Regional Goals & Objectives

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

	Water Supply
0	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.
0	2. Meet 85% M&I and 75% agriculture demands (both current and future conditions) in second and subsequent years of a drought.
0	3. Identify and address water supply needs of disadvantaged communities in the Pajaro River Watershed.
x	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.
x	6. Optimize the use of groundwater and aquifer storage.
0	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.
x	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.
x	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.

Flood Protection

x	1. Implement flood management strategies throughout the watershed that provide multiple benefits.
	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-year event and
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 stream functions.
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 management
x	2. Improve biological and cultural resources, including riparian habitats, habitats supporting sensitive plant or animal species and archaeological/historic sites when implementing
x	3. Address opportunities to protect, enhance, or restore habitat to support Monterey Bay National Marine Sanctuary marine life in conjunction with water supply management strategies.
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 strategies,

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	x
	Desalination	
	Precipitation Enhancement	
	Recycled Municipal Water	
	Surface Storage - CALFED	
	Surface Storage - Regional/local	0
Improve Water Quality	Drinking Water Treatment & Distribution	
	Groundwater Remediation /Aquifer Remediation	0
	Matching Quality to Use	

	Pollution Prevention	x
	Salt & Salinity Management	x
	Urban Runoff Management	x
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	x
	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: This project allows for the prioritization and streamlining of restoration projects that benefit water supply, water quality and habitat. The implementation of projects more quickly and with support of multiple agencies means that more projects can get done efficiently.

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

Permit Coordination Program, Rural Stewardship Program, Groundwater Recharge, Soap Lake Conservation and Restoration, Upland Conservation and any other project involving mitigation requirements or restoration would benefit from this project.

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

RCDSCC, SBRCD, LPRCD

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

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

Please describe: IWRP focuses on identification, design, permit and implementation of multi-benefit conservation projects and has a track record of completing projects that directly or indirectly address all of the "x" marked boxes above.

Mitigation Strategies

X	Increase water use efficiency or promote energy-efficient water demand reduction
	Improve water system energy efficiency
	Advance / expand recycled water use
	Promote urban runoff reuse
	Promote use of renewable energy sources
X	Contribute to carbon sequestration

Please describe: See above

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

No.

Social Benefits and Impacts

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

The IWRP process and projects have help any community through the planning and permitting of restoration projects. This includes reducing the time and cost to project implementation for any DAC or Native American tribal community.

Does the project address any known environmental justice issues?

No.

Project Cost

Total Estimated Capital Cost	$500,000
Annual Operation & Maintenance (O&M) Cost	$0
Cost Basis (Year)	
Source(s) of Funding for Capital	Potentially Coastal Conservancy, Grants from local and state sources.
Source(s) of Funding for O&M Cost	Grants from local and state sources.
Project Life (years)	2
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.

Experience working in and around the Pajaro suggests that implementation of projects like those describe above provide a high return on investment due to the multi-benefits. While it is difficult to conduct a C:B on projects that have not yet been defined, the

RCD of Santa Cruz County, in partnership with the Santa Clara County OSA and Sonoma County Ag and Open Space Preservation District, is working with a well-established economics firm to develop new tools for C:B of conservation and infrastructure projects that include economic values for ecosystem services such as water supply protection, flood control, water quality, carbon sequestration, etc. This new tool is already in the process of being approved by FEMA and the Army Corps of Engineers and we expect this tool to be approved by DWR in the next 2 years.
In addition, experience from using this program in the Santa Cruz area suggests that there is a cost savings to projects through reduced time and money spent on getting project through the planning, design and permitting phases using this program.

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 overarching benefit of establishing IWRP in the Pajaro will focus on creation of a coordinated program to help public and private landowners implement conservation projects on-site. Based on the current list of potential projects, IWRP efforts are likely to focus on protection and enhancement of habitat for anadramous fisheries in the Uvas, Llagas, and Pacheco sub watersheds (IWRP has already been responsible for removing all fish passage barriers in the Corralitos sub watershed); floodplain restoration and flood attenuation projects in and around Soap Lake; restoration and enhancement of uplands and upslope ponds/wetlands to improve water quality, enhance recharge, and provide habitat for amphibians; and implementation of vegetated treatment systems and water use efficiency measures to reduce farm related water quality and quantity issues.

Project Readiness

Proposed Project Start Date:	4/1/13
Anticipated Project Completion Date:	10/1/15

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

Project Element	**Status**	**% Complete**	**Estimated Completion Date**
Feasibility Study	in process	20	2013
Preliminary design	pending		
CEQA/NEPA	pending		
Permit Acquisition	pending		
Construction Docs	pending		