SACRAMENTO - SAN JOAQUIN DELTA CONSERVANCY
A California State Agency

PROP 1
GOVERNOR EDMUND G. BROWN, JR.
WATER BOND 2014
RELIABILITY | RESTORATION | RESILIENCE

Proposition 1 Grant Program

2015-16 Staff Recommendation

I. Project Overview

Project Title	Three Creeks Parkway Restoration Project		
Applicant	American Rivers		
Project Number	Prop 1-Y1-2015-009	**Category**	2
County	Contra Costa	**Funding Request**	$839,485
Score	86.8	**Total Project Cost**	$4,659,294
Staff Recommendation: Conditional approval of reservation of funds pending CEQA review, and conditional upon submittal of proof and verification of adequate water rights; and a signed agreement with the landowner.		**Funding Recommended**	$836,409

II. Staff Recommendations

Delta Conservancy staff recommends that the Board conditionally reserve funding for the Three Creeks Parkway Restoration Project (#Prop 1-Y1-2015-009) proposed by American Rivers for a reduced sum of $836,409. The applicant requested $839,485; from this amount $3,076 of estimated costs for three tours of the restoration site were deemed ineligible for Prop 1 funding because these tours do not contribute to planning or implementation for the project. Funding will be reserved until environmental review has been completed and the Board has approved the Responsible Agency findings. This reservation of funds does not constitute approval of the requested funding and the Board reserves the discretion to approve or reject the funding request once it reviews the CEQA documentation for the project. It is expected that the environmental document and lead agency findings will be completed by September 2016. Additionally, staff recommends that the Board's reservation of funds be conditional upon the following: (1) submittal of proof and verification of adequate water rights; and (2) a signed agreement with the landowner, the Contra Costa County Flood Control and Water Conservation District (District), that formalizes the applicant's right to implement and maintain the proposed project, and the District's role in the proposed project.

American Rivers and their partners – the District, Friends of Marsh Creek Watershed (FOMCW), and the City of Brentwood – have proposed a multibenefit ecosystem restoration project at the confluence of Marsh, Sand, and Deer Creeks (Three Creeks) that will convert a denuded flood control channel into a healthy riparian corridor. The Three Creeks Parkway Restoration Project will restore native vegetation on 12.5 acres along nearly a mile of Marsh Creek, and floodplain and riparian habitat along 4,000 linear feet of creek. These restoration actions will provide important habitat, increase flood protection, and contribute to achieving water quality objectives in the Delta.

This project is ready for implementation; it is well-supported locally and is being advanced by an effective, cross-sector partnership with a history of working together and extensive applicable expertise. The scientific foundation of the project draws on literature that extols the ecosystem benefits of floodplain restoration and habitat corridors, and the water quality benefits of riparian vegetation. The habitat restoration, habitat connectivity, and flood protection benefits of the project are being designed specifically to address the resource demands of a changing climate. Project proponents are advancing innovative, non-structural means of integrating habitat restoration, flood protection, and adaptive management into this project.

This project is well-designed and clearly consistent with Prop 1's emphasis on multiple benefits. These characteristics make this project a standard-bearer for multibenefit floodplain restoration in the Delta. By approving this project, the Conservancy will be funding a project with important ecosystem benefits and a high likelihood of success.

Staff has prepared the text and tables below based on staff's best understanding of the information provided in the application. The Conservancy has received comments on the proposal from the Delta Stewardship Council and the Delta Protection Commission. If approved, staff will work with the applicant to further refine the project's scope of work and performance measures, and to address comments prior to entering into a grant agreement.

III. Project Summary

Project Description:

The project team's overall goal is to reestablish the thriving habitat and functional floodplains that are at the heart of healthy creek and wetland ecosystems. This project will restore almost a mile of Marsh Creek, including its confluences with Sand Creek and Deer Creek, within the city limits of Brentwood, CA. By re-contouring the banks of Marsh Creek to create a floodplain bench and installing native trees and understory vegetation, project proponents will create a 4,000-foot corridor of floodplain with a shaded stream channel surrounded by 12.5 acres of native vegetation. This project is part of a larger effort by a collaborative team to restore and improve habitat along the entire length of Marsh Creek from Mount Diablo to the Delta. The overarching vision for Marsh Creek is that of a stream of clean, cold water, surrounded by stands of native trees and a spread of grasses and wildflowers – a vital and healthy habitat corridor between protected conservation areas on the Delta shoreline and Mt. Diablo State Park. Over the past decade, the project team has been working to achieve this vision, organizing community members, building a fish ladder, designing restoration projects, and restoring a two-acre site along the creek.

The proposed project will greatly enhance the habitat of the Marsh Creek watershed ecosystem and increase its resilience to climate change by allowing flood events, which are likely to become more common in California according to climate change models, to be better accommodated. It will also improve the quality of life for Delta residents in one of the most densely developed areas of the Delta by reducing flood risk, improving recreational opportunities, and providing a place to make meaningful connections with the natural world of the Delta region. Project proponents are maximizing voluntary landowner participation: the landowner (the District), and surrounding landowners are involved in and supportive of the proposed project. Prop 1 funds will allow the project team to leverage funding from other state agencies and a private developer to implement a project with many tangible benefits for the Delta ecosystem and for local communities.

Location (Site Description):

The project is located in the Marsh Creek watershed in Contra Costa County. Historically, lower Marsh Creek spread out onto an alluvial floodplain, which created rich agricultural land. Over the last 20 years, subdivisions, new roads, and a major highway have replaced agricultural land. The creek channel was straightened in the 1950s and is currently managed as a trapezoidal flood control channel that is chemically mowed to prevent riparian vegetation from decreasing flood capacity. Marsh Creek was designed to flow quickly into the Delta and the banks of the channel consist of non-native grasses without a floodplain. The project site falls within the city limits of Brentwood, CA. The applicant provided a deed as proof that the site is owned by the Contra Costa County Flood Control and Water Conservation District, and a letter from the District indicating that the applicant is working with the district to formalize the applicant's right to implement and maintain the proposed project, and the District's role in the proposed project.

IV. Implementation of California Water Action Plan and Consistency with Prop 1 and Conservancy Enabling Legislation

State Priority/Plan	Action	Project Benefits
Proposition 1	Ch. 6 79732(a)(2) Implement watershed adaptation projects in order to reduce the impacts of climate change on California's communities and ecosystem.	Contributes to a corridor of habitat for fish and wildlife that runs from the Delta to Mt. Diablo. This habitat connectivity will allow species to move along an elevational gradient in order to accommodate climate change. Further, this project will allow for greater flood protection.
	Ch. 6 79732(a)(4) Protect and restore aquatic, wetland, and migratory bird ecosystems, including fish and wildlife corridors and the acquisition of water rights for instream flow.	Contributes to a corridor of habitat for fish and wildlife that runs from the Delta to Mt. Diablo. This habitat and its connectivity between Mt. Diablo and the Delta will benefit many Delta species.

State Priority/Plan	Action	Project Benefits
Proposition 1	Ch. 6 79732(a)(11) Reduce pollution or contamination of rivers, lakes, streams, or coastal waters, prevent and remediate mercury contamination from legacy mines, and protect or restore natural system functions that contribute to water supply, water quality, or flood management instream flow.	Restores vegetation will help to remove urban and agricultural pollutants from the waterway.
	Ch. 6 79732(a)(12) Assist in the recovery of endangered, threatened, or migratory species by improving watershed health, instream flows, fish passage, coastal or inland wetland restoration, or other means, such as natural community conservation plan and habitat conservation plan implementation.	Restores habitat that will benefit a range of state and federally listed species including Chinook, Steelhead, and Swainson's Hawk.
California Water Action Plan	Action 2. Increase regional self-reliance and integrated water management across all levels of government.	Integrates water management at the level of individual development, city, county and state.
	Action 3. Achieve the co-equal goals for the Delta.	Protects and restore Delta ecosystems.
	Action 4. Protect and restore important ecosystems.	Protects and restores floodplain and riparian habitats that support several listed species.
	Action 8. Increase flood protection.	Creates floodplains that will better accommodate flood events.
Delta Conservancy Enabling Legislation	§32301(i)(1) Protect and enhance habitat and restoration.	Restores 4,000 linear feet of native vegetation.
	§32301(i)(2) Provide increased opportunities for tourism and recreation.	Shaded wildlife corridor will incorporate local trail systems to encourage community to visit the site.
	§32301(i)(3) Increase the resilience to floods.	Creates and maintains floodplains that will better accommodate flood events.
	§32301(i)(4) Protect and improve water quality.	Restores vegetation will help to remove urban and agricultural pollutants from the waterway.
	§32301(i)(6) Restore the region's physical and living resources.	Restores the creek to a more natural state both physically and biologically.

State Priority/Plan	Action	Project Benefits
Delta Conservancy Enabling Legislation	§32301(i)(7) Assist locals with NCCPs.	Project site is adjacent to and consistent with the local HCP/NCCP efforts. While this property is consistent with the local HCP, it is not serving as mitigation and therefore is eligible for Prop. 1 funds.
	§32301(i)(8) Promote environmental education.	Provides locations where communities and nearby schools can engage in environmental education in the area.
Delta Conservancy Strategic Plan	Objective 3.2: Lead Delta ecosystem restoration activities consistent with Conservancy authorities, the Delta Plan and other regional plans and guidance, through a voluntary Delta Restoration Network, and based on adaptive management. Strategy 3.2.2: Establish, enhance and maintain migratory corridors for fish, birds and other animals. Strategy 3.2.3: Protect and enhance wetland and upland habitats on subsided lands, as consistent with agricultural operations.	Establishes and maintains 4,000 linear feet of restored native habitat that will serve as a corridor for fish and wildlife. Creates floodplain habitat that will benefit wetland and aquatic species.
Delta Plan	WR R1. Implement water efficiency and water management planning laws.	Implements stormwater management plans.
	ER P2. Restore habitats at appropriate elevations.	Creates a section of habitat corridor that will help to link Mt. Diablo and the Delta.
	ER R2. Prioritize and implement projects that restore Delta habitat.	Restores 4,000 linear feet of riparian and floodplain Delta habitat.
	DP R11. Provide new and protect existing recreation opportunities.	Creates native habitat that is incorporated into existing trail systems and that will provide increasing opportunities for recreation.
	DP R14. Enhance nature-based recreation.	The native vegetation established by this project will create natural habitat that will encourage nature-based recreation.
	RR P4. Floodplain protection.	Creates and maintains floodplain habitat.

V. Outcomes/Outputs

Project Goals	Desired Project Outcomes	Output Indicators
Improve habitat, flood management, water quality, ecosystem resilience in the Marsh Creek watershed	Floodplain and native vegetation is restored along 4,000 linear feet of Marsh Creek between Dainty Avenue and the Union Pacific Railroad Habitat is improved by restoring 12.5 acres, including 3.6 acres of frequently inundated floodplain (seasonal wetland), 5.2 acres of woody riparian vegetation, and 5.3 acres of grasslands and native scrub. Improve water quality and diversity of aquatic organisms.	Excavate and widen channel by 20 – 40 feet along 4,000 linear feet 20-40 feet of new frequently inundated floodplain bench excavated along 4,000 linear feet of channel Gradual 3:1 sloped banks graded along channel from top of bank to new flood plain 13,200 Native plants planted (200 15 gal. trees, 2,000 5 gal. trees and shrubs, 11,000 1 gal. or smaller herbaceous plants) Revegetate 12.5 acres uplands, bank, floodplain and channel margin with native vegetation along 4,000 linear feet of channel Apply native hydro-seed mix of grasses and forbes over 5.3 acres Preemptive and proactive management to limit invasive plant species Create and revegetate area to improve water quality and habitat for aquatic species Revegetate area to provide habitat for a diversity of avian, fish, herp, and mammal species

VI. Budget

The total cost for this project is $4,659,294. Staff recommends approving $836,409. The Delta Conservancy is being asked to approve $839,485 in Prop 1 funds. This request includes an estimated $3,076 of funding for three tours of the creek and restoration site that were deemed ineligible for Prop. 1 funding and have been removed from the budget. The DWR Urban Stream Restoration Grant is contributing $744,404 (cash), the Contra Costa Flood Control District is contributing $2,125,405 ($1,400,000 cash and $725,405 in-kind), and American Rivers is contributing $950,000 (cash).

VII. Consistency with Grant Program Guidelines

Readiness (Including CEQA Status if Applicable):

The applicant aims to begin the project in the summer of 2017 and complete it by the end of 2018. A site plan has been created, and a construction plan is in the process of being drawn up. Subcontractors for the construction have not yet been selected. The applicant has reported that a consultant has been hired to draft the needed CEQA documents. These are scheduled to be complete by July of 2016; no public information is available about the

status of these documents. Conservancy staff will examine the CEQA documents as soon as they are made available, and, once certified, will provide proposed Responsible Agency finding to the Board for approval. All other needed permits are anticipated to be complete by January 2017.

Local Support:

The project proponents have formed partnerships with a range of partners that have a long history of successful restoration projects in the area. Through the inclusion of letters of support, the project clearly demonstrated local support. Seven letters of support accompanied this proposal; they came from one state senator, one state assemblyperson, one city government, three local districts, and one local NGO. While the application did not include a County resolution, a Resolution of Support from the Contra Costa County Flood Control & Water Conservation District was included. The applicant failed to complete the "Community Support and Integration" section of the application, and did not consult with the Delta Protection Commission (DPC) prior to submittal of their grant application, however the DPC indicated support for the project in its subsequent review.

This project will benefit the developing lands surrounding the project site. Local property owners have agreed that there will be value added to their properties if this project is completed. The project will integrate planning by local jurisdictions by expanding Habitat Conservation Plan/Natural Community Conservation Plan (HCP/NCCP) projects that will be adjacent to, but not overlapping with, this restoration work. This restoration project is consistent with similar projects in Contra Costa County and has already been incorporated into the Contra Costa HCP/NCCP. While this property is consistent with the local HCP, it is not serving as mitigation and therefore is eligible for Proposition 1 funds.

Scientific Merit:

The scientific merit of this proposal is well supported by numerous recent scientific studies and management plans which demonstrate the importance and benefits of flood plains for fish and wildlife communities, the importance of habitat corridor for connectivity, and the benefits of floodplains and vegetation for water quality. This proposal calls for a non-structural approach to habitat restoration and flood management. Instead of focusing on the construction of levees, this proposal plans to create a situation where the creek is allowed more space to accommodate 100-year flood events within a newly created floodplain, while also supporting native vegetation and wildlife. The techniques and principles that the applicant is using to guide their approach are scientifically sound.

Long Term Management & Adaptive Management Plan:

The applicant lays out a clear approach to long-term management that is supported by the project's monitoring plan and allows for adaptive management of the site. The restored site will require little maintenance because the installed vegetation will maintain bank stability, and will not contribute significant woody debris that might interfere with flood conveyance. Long term management will be insured by an endowment of $150,000 created specifically to fund maintenance of the site. This endowment fund will support the Friends of Marsh Creek Watershed to monitor the site for invasive species and native plant mortality. This information will allow for adaptive management of the native vegetation by the District to target invasive weeds and replant native vegetation that suffers mortality.

These actions will also be supported by the endowment. The endowment will also allow the District to monitor the channel topography and adaptively manage any aggrading or degrading conditions to the channel.

Monitoring and Assessment:

The applicant has proposed a robust monitoring plan that will provide data on the short- and long-term success of the project. The primary ecological goals for the Three Creeks restoration project are to increase the area of frequently inundated floodplain and native vegetation alongside the Marsh Creek flood control channel. The purpose of monitoring the project site is to determine if the project has met or is meeting the ecological goals of the creek restoration. The objectives of the monitoring plan are to: (1) Measure the survival, vigor, and diversity of the vegetation planted on the restoration site including the presence of invasive species; (2) Measure channel stability, erosion, and floodplain aggradation over time; (3) Measure the area, frequency, timing and duration of inundation on restored floodplain; (4) Measure the impact of the project on water quality (temperature, nutrients, etc.); (5) Measure presence and diversity of species using the restored site; and (6) Measure public opinion regarding the value of the restoration.

Climate Change Considerations:

Climate change is effectively considered from several angles. This project will improve flood protection and, in doing so, help protect surrounding communities from the increasingly flashy stream system that is predicted by climate change models for central California. A habitat corridor connecting the Delta to Mount Diablo will allow for the movement of fish and wildlife along an elevational gradient which will aid the range changes that are predicted by climate change models. Additionally, the 200 large trees that will be planted on the creek banks will sequester carbon, helping to reduce the carbon contribution to the atmosphere. These trees will also shade the creek helping to buffer against the effects of a warming climate.

Project Location Map