

**Sacramento-San Joaquin Delta Conservancy
Proposition I Grant Concept Proposal**

August 31, 2017

Project Name: Bay Point Restoration Project

Project Location: The project is located at Bay Point Regional Shoreline in the unincorporated community of Bay Point in northern Contra Costa County, California.

Project Category: Category 2 Implementation Project

Programmatic Focal Area: Ecosystem Protection, Restoration and Enhancement

Grant Funding Term: September 1, 2018 to August 31, 2021

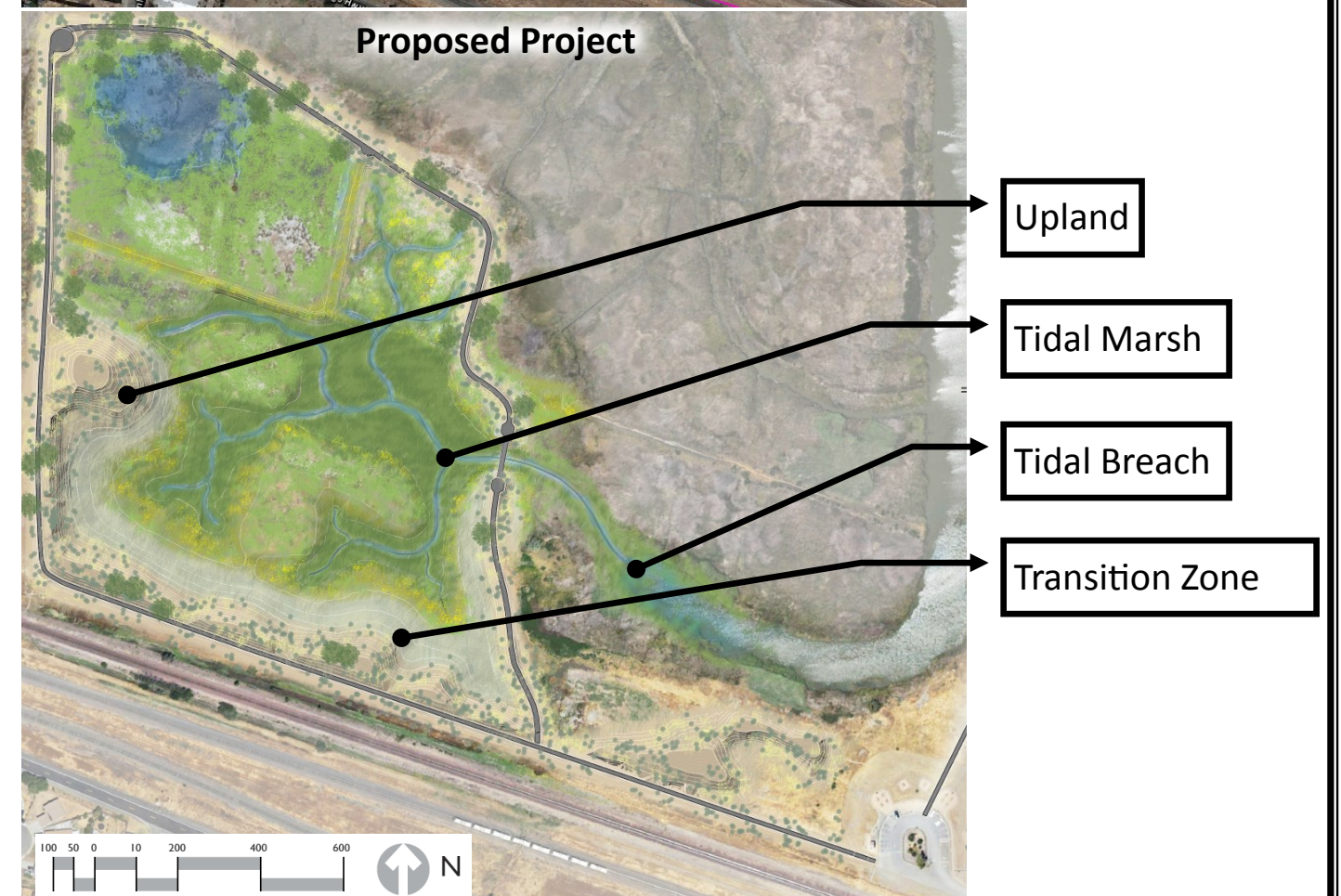
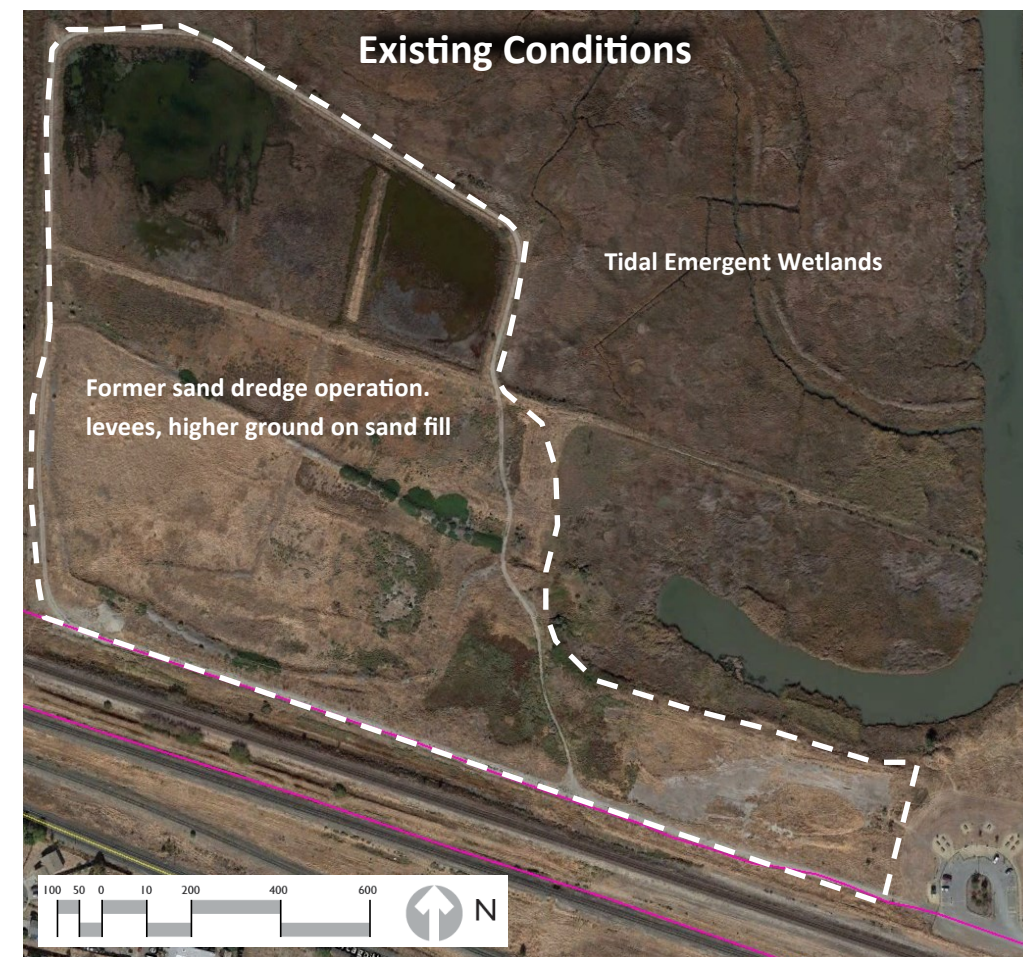
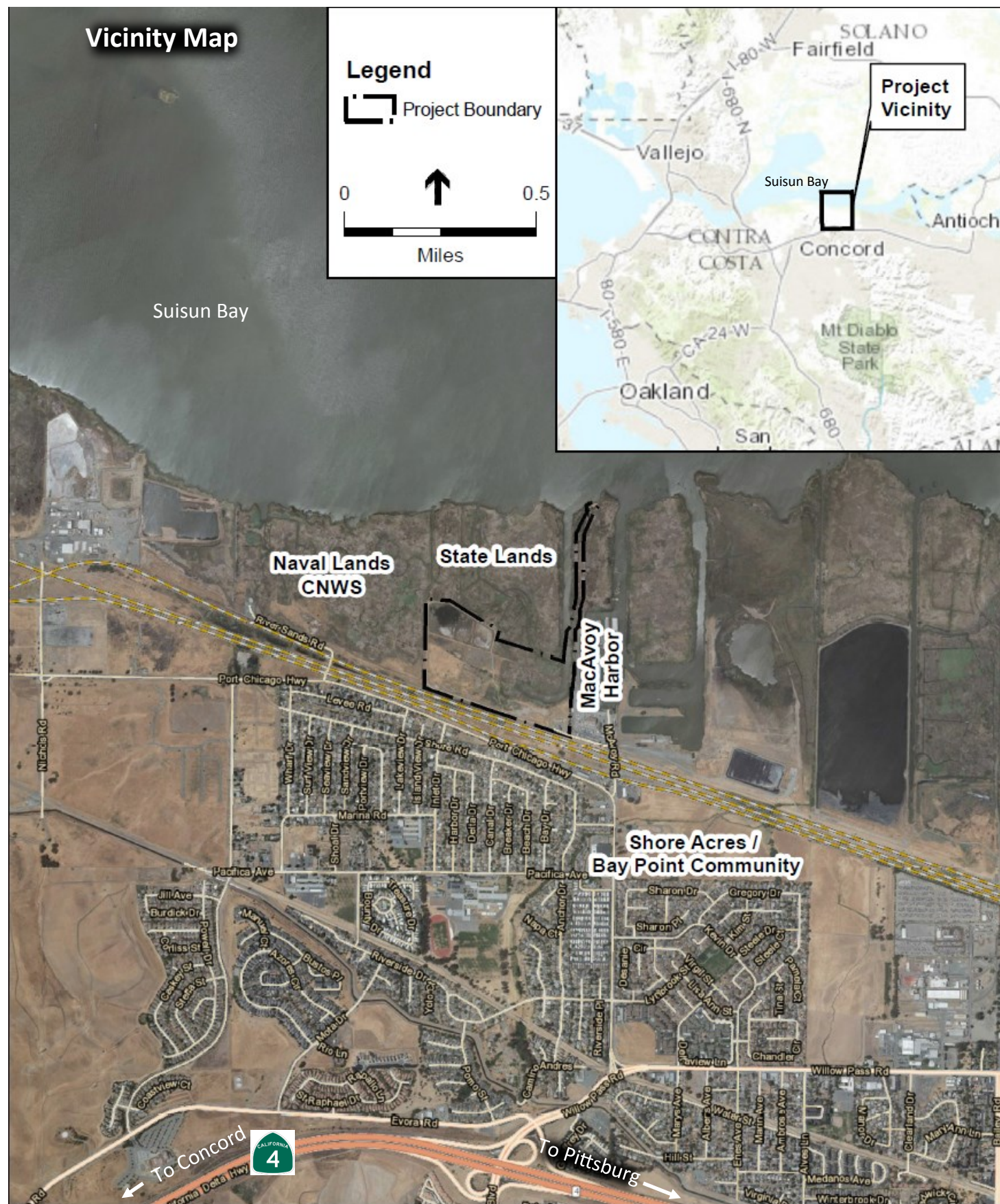
Organizational Name/Type: East Bay Regional Park District, a California special district

Primary Contact Name: Tiffany Margulici, Grants Manager
East Bay Regional Park District
2950 Peralta Oaks Court
Oakland, CA 94609
(510) 544-2204
tmargulici@ebparks.org

Federal Tax ID: 94-6000591



Bay Point Wetlands, Contra Costa County



Concept Proposal Narrative

I. Project Description and Organizational Capacity

Need for the Project: The Project Area is marginal quality seasonal wetlands, brackish tidal marsh and uplands. Approximately 27 acres of this area is diked marshland historically used for dredged sand processing. Wildlife habitat has been degraded by imported fill and industrial use. The Project Area is hydrologically disconnected from adjacent high value tidal marsh that provides high quality habitat endangered salt marsh harvest mouse and Ridgeways rail, waterfowl, shorebirds, passerine birds, mammals, reptiles, amphibians, fish and invertebrates. Sea level rise projections show that adjacent high marsh and transition habitat will be lost if no action is taken. The project presents a unique opportunity to offset these impacts by restoring hydrologic connectivity and designing for future transition zones and high marsh habitats.

Goals and Objectives: The project has four restoration goals and related objectives for restoring and enhancing wetlands and uplands, providing wildlife habitat and adapting to sea level rise. Proposed performance measures describing objectives, outcomes, outputs and completion dates are included in the attached supplementary “Concept Proposal Performance Measures” table.

Goal #1: Restore Wetlands. The project will restore and enhance approximately 17.9 acres of wetlands and special aquatic sites. This consists of approximately 16.0 acres of tidal marsh and channel, 1.6 acres of tidal panne and 0.3 acres of seasonal wetland.

Goal #2: Enhance Uplands. Establish approximately 11.1 acres of coastal grassland and coastal scrub by recontouring upland areas and planting with native vegetation.

Goal #3: Enhance Wildlife Habitats. Restore approximately 29 acres of wildlife habitat in wetlands, uplands and transitional areas. Restored tidal wetlands will provide new habitat for several special-status species, including California black rail, Ridgeways rail, Suisun song sparrow, tricolored blackbird, salt marsh common yellowthroat, salt marsh harvest mouse, Suisun shrew and several Delta fish species. Restored seasonal wetlands will benefit waterfowl and shorebirds. Restored uplands will provide habitat for loggerhead shrike and raptors such as white-tailed kite, northern harrier and burrowing owl.

Goal #4: Adapt to Sea Level Rise. The project will be designed to provide long term value for key species by taking an adaptive retreat approach to sea level rise. Habitat design will ensure a mix of diverse habitat types, including transition zone and high marsh, to help offset sea level rise impacts. The plan will be self-sustaining with tidal channels and other marsh features maintained passively through tidal exchange and seasonal inundation.

General Tasks and Deliverables: The Bay Point project will design and construct habitat improvements in a 57-acre project area. Several tasks are required to complete the project. These are described along with a deliverable date or metric for each task.

- Draft and final construction plans, specifications and estimates. Draft plans are complete and final plans are being developed – *Metric: Project Engineer’s approval by winter 2018.*
- Permit applications to federal, State and local agencies, including the US Army Corps of Engineers, US Fish and Wildlife Service, National Marine Fisheries Service, San Francisco Bay Conservation and Development Commission, San Francisco Regional Water Quality Control Board, California Department of Fish and Wildlife and Contra Costa County. All permit applications have been submitted – *Metric: Permit approvals by 2018.*

- Competitive bidding and bid award – *Metric: EBRPD Board of Directors approval by 2019.*
- Project construction and management, as built plans — *Metric: EBRPD project acceptance and contract closeout by 2020.*
- Processing and payment of contractor invoices – *Metric: Payment within 30-days through life of construction contracts.*
- Monitoring and reporting on grant and permit requirements - *Metric: Meets required submission dates through life of grant contract.*
- Long-term maintenance. Anticipated to be conducted for at least five years and potentially ten to meet permit requirements and implement adaptive management actions – *Metric: Regulatory sign-off as complete.*

Experience and Qualifications: The East Bay Regional Park was established in 1934 as a California special district. It currently operates and manages over 120,000 acres of land in 65 regional parks. The Park District has approximately 805 employees, including planners, project managers, biologists and rangers that will be involved in the day to day management of the completed project. The project team also includes several scientists and engineers from Environmental Science Associates (ESA) and the project area is currently being managed by Habitat Restoration Sciences, Inc. for invasive non-native weeds in advance of restoration work.

Over the past twenty years the Park District has performed more than thirty restoration and enhancement projects within several of its parks. Most recently this has included the Dotson Family Marsh at Point Pinole Regional Shoreline in Richmond, and Albany Beach and Berkeley Meadow at McLaughlin Eastshore State Park in Berkeley and Albany.

Mr. Chris Barton is the project manager for the Bay Point Project. Mr. Barton has been at the Park District for 10+ years and has managed more than a dozen restoration projects, including Dotson Family (Breuner) Marsh in Richmond, Berkeley Meadow and Albany Beach. He is currently developing a riparian and wetland restoration project at Coyote Hills Regional Park in Fremont and a beach/dune restoration project in Albany. Chris is the Park District lead in the planning and implementation of the East Contra Costa County Habitat Conservation Plan.

2. Funding Request and Budget

The \$2,920,000 Delta Conservancy Prop I Grant would fully fund the project, which has an estimated total cost of \$4,705,000. Cost estimate encompasses all hard and soft costs including 10-years of maintenance and monitoring which will be funded by EBRPD Measure WW Bonds.

Project has \$1,200,000 in local and federal cost share funds:

- \$450,000 Contra Costa County
- \$750,000 Outdoor Recreation Legacy Partnership/Land and Water Conservation Fund

Project leverages \$270,000 in other state funds:

- \$70,000 Housing Related Parks Project State Grant
- \$200,000 California State Parks Habitat Conservation Fund Grant

Of the \$2,920,000 Delta Conservancy Prop I request, \$90,000 is requested for staff time (project management, design review and regulatory agency coordination and permit submission). \$2,740,000 is requested for subcontractors (including design, engineering, permitting, construction contract, construction management, design support during construction, biological monitoring and environmental compliance). In addition, \$90,000 is requested for Year 1 and 2 of maintenance and monitoring (also in the subcontractor category).

Years 3-7 of maintenance and monitoring would be funded by \$315,000 in EBRPD Measure VWW Bonds. While not included in either cost share or leveraging, it is important to note that this funds are available to ensure the long-term success of the project.

The District has Grants Department with a full-time Grants Manager, Administrative Analyst and Account Clerk who are exclusively dedicated to grant management, grant compliance, invoicing and grant reporting. These positions are part of the District's General Fund budget.

3. **State Priorities and Project Benefits**

The project supports and is consistent with several statewide plans, policies and programs.

Proposition 1: The project supports many of the Proposition 1 goals, including the following:

- ✓ Protect and restore aquatic, wetland and migratory bird ecosystems including fish and wildlife corridors and the acquisition of water rights for in-stream flow.
- ✓ Protect and restore coastal watersheds including but not limited to, bays, marine estuaries and near shore ecosystems.
- ✓ 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.
- ✓ 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.

California Water Action Plan: The project will promote and implement the *Restoration and Resilience* goals of the Plan. The project will also work towards:

- ✓ Action #3 - "Achieve the Co-Equal Goals for the Delta" by protecting, restoring and enhancing the Delta ecosystem.
- ✓ Action #4 "Protect and Restore Important Ecosystems" by restoring coastal wetlands.

Conservancy's Enabling Legislation: The project is consistent with the Conservancy's enabling legislation. It implements ecosystem restoration in the Delta and advances environmental protection and the economic well-being of delta residents in that it

- ✓ Protects, enhances and restores habitat (PRC §32322(b)(1));
- ✓ Protects, conserves and restores the region's living resources (PRC §32322(b)(9)) via climate change adapted design to provide habitat for special status species in areas projected to be lost by year 2050;
- ✓ Provides increased opportunities for recreation in the Delta (PRC §32322(b)(3)) by improving physical and visual public access to the Delta (trails and overlooks);
- ✓ Facilitates the promotion of environmental education (PRC §32322(b)(12)) to nearby severely disadvantaged and open space deprived community by providing EBRPD's naturalists a real time classroom to teach about climate change, ecology and habitat restoration science in the context of the Bay/Delta ecosystem.
- ✓ Protects and improves water quality (PRC §32322(b)(6)) by increasing the amount of bayland and tidal channels;

Conservancy's 2017 Strategic Plan: The draft plan identifies three broad goals. Goal #2, Ecosystem Vitality, establishes several plan objectives, including:

- ✓ Objective 1 - Protect, restore or enhance habitat and improve water quality through implementation of grant-funded projects.
- ✓ Objective 8 - Fund Proposition I-eligible projects that provide ecological, watershed, and/or water quality benefits.
- ✓ Objective 9 - Seek funding and project development resources for high priority restoration projects identified through regional planning efforts.

Delta Plan: Strategy 4.2 Restore Habitat of the Delta Plan includes restoring habitats at appropriate elevations, restoring habitat that support food webs and provide habitat for native species. The project will restore 17 acres of tidal wetlands, 4 acres of seasonal wetlands, 10 acres of coastal prairie and use the adaptive retreat approach to sea level rise.

Recovery Plans: Salt Marsh Harvest Mouse and California Clapper Rail (Ridgeway's rail) USFWS, 1984; and USFWS Tidal Marsh Ecosystem Recovery Plan, 2015 http://www.fws.gov/sacramento/es/Recovery-Planning/Tidal-Marsh/es_recovery_tidal-marsh-recovery.htm

San Francisco Estuary Partnership Comprehensive Conservation and Management Plan -

- ✓ Protect, restore, and enhance ecological conditions and processes that support self-sustaining natural communities.
- ✓ Eliminate or reduce threats to natural communities.
- ✓ Increase resilience of communities at risk from climate change impacts while promoting and protecting natural resources.
- ✓ Promote integrated, coordinated, multi-benefit approaches to increasing resiliency.
- ✓ Reduce contaminants entering the system and improve water quality.

Bay Area Integrated Regional Water Management Plan -

- ✓ Protect and Improve Watershed Health, Function and Bay Water Quality.
- ✓ Create, Protect, Enhance and Maintain Environmental Resources and Habitats.

Baylands Ecosystem Habitat Goals -

- ✓ Restore tidal marsh in diked and muted tidal areas.
- ✓ Enhance and restore tidal marsh transitions and protective buffers.
- ✓ Contain or eliminate populations of perennial pepperweed.
- ✓ Prevent spread of invasive species coincident with marsh migration.

4. **Readiness**

Habitat restoration design and CEQA is complete. All of the project permit applications are complete and have been submitted for processing. The project design has advanced to 60% and permits and final bid package should be completed by April of 2018. The project is included in the Park District's capital improvement program and is positioned to go out to bid for the 2018 or 2019 construction season depending on the availability of funding.

5. **Local Support**

The District has a well-developed system for communicating with its constituency. Regular project updates are posted on its website, notices and project fact sheets are provided at park entrances. Staff

regularly communicates with elected officials, community leaders and environmental advocates, conducts press releases and interviews, supports community events and conducts interpretive and recreation programs at Bay Point Regional Shoreline to increase awareness about the delta habitat and restoration needs at this unique location.

The land use planning process completed in 2001 engaged residents of the target neighborhoods in the project's development and included several community meetings. Community engagement and support of the project has been strong and ongoing. Additional public meetings and presentations to stakeholders have been made in the past year to keep interested parties up to date on progress EBRPD has made towards implementing the restoration and public access portions of the 2001 development plan.

Multiple levels of government are engaged and supportive of the project including the San Francisco Bay Joint Venture, Contra Costa County, the State Lands Commission, Ambrose Park and Recreation District, State Senator Stephen Glazer, and County Supervisor Federal Glover. Letters of support will be included with the full application.

6. Scientific Merit

Project goals, objectives and design are grounded in the science of plans guiding ecosystem restoration and water quality protection/improvement in the Bay/Delta, including:

- San Francisco Bay Area Wetlands Ecosystem Goals Project (Goals Project 2015) in that the Project restores wetlands and broad transition zone in a way that is resilient to sea level rise (additional discussion below).
- San Francisco Bay Plan (Bay Plan; BCDC 2012) in that the project restores wetlands, improves shoreline public access, and includes features to increase sea-level rise resiliency (additional discussion below).
- U.S. Fish and Wildlife Service Recovery Plan for Tidal Marsh Ecosystems of Northern and Central California (USFWS 2013) in that the Project restores tidal wetlands and adjacent habitats critical to marsh-dependent special status species, as specified in the Plan.
- California State Wildlife Action Plan (CDFW 2015) in that the Project creates habitat beneficial to special status species.
- California Water Action Plan (California Natural Resources Agency et al. 2016) in that the Project creates and enhances native species conditions in the Delta.
- San Francisco Bay Integrated Regional Water Management Plan (Kennedy Jenks et al. 2013) in that the Project implements a priority project specified in the Plan

The project implements the San Francisco Bay Goals Project (Goals Project 2015) which identifies habitat restoration goals for San Francisco Bay as a whole, with additional specificity for the Suisun Bay subregion, and the Contra Costa North shoreline. The Goals Report recommends restoring a large band of tidal marsh within the southern edge of the Suisun Subregion, in large part to improve fish habitat and productivity. For tidal marsh in Contra Costa North, the Habitat Goals Report specifically recommends: restoring tidal marsh in diked and muted tidal marsh areas to create a tidal marsh corridor along the shore; improving water management to enhance diked wetlands where tidal marsh cannot be restored; including broad transition zones with diverse plant communities between marshes and adjacent uplands; and creating terrestrial buffers along this corridor to protect baylands habitats and wildlife from disturbance.

Bay Point Regional Shoreline is located within the region of the Bay-Delta that has been designated by the U.S. Fish and Wildlife Service and National Marine Fisheries Service as Critical Habitat and Essential Fish Habitat for a number of special-status fish species, including delta smelt, winter-, spring-, fall-, and late fall-run Chinook salmon; steelhead, green sturgeon, northern anchovy, Pacific sardine, and starry flounder (USFWS, 2013). In addition, the Suisun Bay area – which includes the area adjacent to Bay Point – is the focus of efforts by resource and regulatory agencies to improve fisheries. This includes managing freshwater outflows from Central Valley rivers and the Delta to position the low salinity mixing zone in Suisun Bay to maximize food web productivity and improve rearing habitat functions for fish (USBR, 2013). With these regional planning considerations in mind, Bay Point is in a good location to benefit multiple special-status fish species and tidal marsh restoration at Bay Point fits well with these regional efforts to improve the aquatic ecosystem and aid in the recovery of Bay-Delta fisheries (ESA, 2017).

The Bay Point Project was planned and designed using current science by Environmental Science Associates under the direction of Michelle Orr (ESA 2017). Channel hydrology, sea level rise and sediment supply were key considerations in designing a resilient project that will not require dredging, but that will accrete sediment on the marsh plain to keep pace with sea level rise (Orr, 2012; Williams, 2002; NOAA CO-OPS, 2010).

The project uses a 30-year planning horizon, designing the restoration features to be resilient to a sea-level rise of 24 inches of sea level rise. The selected sea-level rise scenario is representative of the high estimate recommended in California State guidance (NRC 2012) and is consistent with scenarios in the BCDC Contra Costa County “Adapting to Rising Tides” Project (Contra Costa County Public Works, 2016).

The project follows the 3 phase 9 step adaptive management framework adopted by the Delta Stewardship Council. Phases 1 (Plan) is supported by and formulated with the conclusions, findings and recommendations of existing publications (see literature cited). Phase 2 (Do) is based on field work and site evaluation conducted by the project team to identify implementation opportunities and constraints and determine appropriate actions to include in the project scope (ESA, 2017). Phase 3 (evaluate and respond) is tied to EBRPD’s long term program for maintenance and monitoring. Post-construction maintenance and monitoring will occur for at least five years. A maintenance and monitoring plan will be developed using the best available science to track and ensure project goals are achieved and the Phase 3 (evaluate and respond) component of the adaptive management framework is implemented. The plan will also address compliance with regulatory permit conditions.

Literature citations are included as a supplementary attachment.



Concept Proposal Budget Table

Instructions: Enter projected funding requests into the yellow highlighted cells in the table below. All funding requests should be based on projected expenses that are eligible, and must conform to the descriptions of the cost categories provided on **pages 38-39 of the Grant Guidelines**. More information about the budget and cost share should be provided in the concept proposal narrative, as explained on **page 18 of the Grant Guidelines**.

Bay Point Restoration

Budget Category	Projected Funding Request	Cost Share
	Conservancy	Cost Share
Personnel Services	\$ 90,000.00	
Operating Expense (General)		
Operating Expenses (Subcontractor)	\$ 2,830,000.00	\$ 1,200,000.00
Operating Expenses (Equipment)		
Acquisition Cost		
Indirect Costs		
TOTAL	\$ 2,920,000.00	\$ 1,200,000.00

Concept Proposal Performance Measures Table

PROJECT TITLE: BAY POINT RESTORATION PROJECT

Objective	Outcome	Outputs	Output Completion Dates
1. Restore and enhance approximately 17.9 acres of wetlands and special aquatic sites. (Goal #1)	<ol style="list-style-type: none"> 1. Establish 80% vegetative cover of marsh plain. Vegetation will consist of primarily native wetland vegetation, such as pickleweed, saltgrass and sedges. 2. Provide self-scouring fully-tidal channels where neither excessive erosion or siltation occurs that might adversely affect the long term success of tidal wetland areas. 3. Limit vegetative cover of pannes to less than 20% cover by controlling vegetation with special focus on invasive non-native species. 	<ol style="list-style-type: none"> 1. Restore and enhance 16.0 acres of tidal marsh by removing imported fill and improving tidal circulation. 2. Create 1.6 acres of tidal panne in higher elevation tidal areas by elevating soil salinities to prevent vegetative growth. 3. Create 0.3 acres of seasonal wetland by removing imported fill and establishing a moisture regime that allows for seasonal ponding and/or soil saturation. 4. Reduce the extent of highly invasive species, such as perennial pepperweed, by 75% through implementation of a vegetation management plan. 	<p>2025</p> <p>2025</p> <p>2025</p> <p>2020</p>
2. Establish approximately 11.1 acres of coastal grassland and coastal scrub. (Goal #2)	<ol style="list-style-type: none"> 1. Establish native plant cover on steep slopes to reduce erosion. 2. Reduce monoculture stands of invasive non-native species and increased plant diversity 	<ol style="list-style-type: none"> 1. Remove fill material that may contain soil contaminants. 2. Recontour upland areas to allow for self-sustaining, relatively weed-free vegetation. 	<p>2020</p> <p>2020</p>

Objective	Outcome	Outputs	Output Completion Dates
	3. Establish approximately 90% vegetative cover. 4. Increase connectivity between wetland and upland habitats.	3. Implement early detection and rapid response program to avoid and control weed outbreaks, placing the highest priority on those threatening to establish a monoculture. 4. Plant areas with native vegetation. This may include direct seeding or container plants.	2020 2020
3. Restore approximately 29 acres of wildlife habitat in wetlands, uplands and transitional areas. (Goal #3)	1. Tidal wetlands will provide habitat for several special-status species, including California black rail, Ridgeways rail, Suisun song sparrow, tricolored blackbird, salt marsh common yellowthroat, salt marsh harvest mouse, Suisun shrew and several Delta fish species. 2. Restored seasonal wetlands will benefit waterfowl and shorebirds. 3. Restored uplands will provide habitat for loggerhead shrike and raptors, such as white-tailed kite, northern harrier and burrowing owl. 4. Transitional areas will provide habitat for wildlife displaced as a result of sea level rise.	1. Remove barriers to tidal circulation to allow for creation of tidal habitats. 2. Remove predator corridors by removal of levees and connection to levee corridors that extend into the existing emergent tidal marsh. 3. Remove imported fill and recontour slopes to establish natural habitat free of debris and other hazards. 4. Remove invasive non-native species to allow for establishment of native vegetation and forage for wildlife. 5. Plant native vegetation where necessary to establish cover.	2020 2020 2020 2020 2020

Objective	Outcome	Outputs	Output Completion Dates
4. Design project to provide long-term value for key species by taking an adaptive retreat approach to sea level rise. (Goal #4)	I. Restored habitat should remain viable for up to 24 inches of sea level rise.	<ul style="list-style-type: none"> 1. Habitat design will ensure a mix of diverse habitat types, including transition zone and high marsh, to help offset sea level rise impacts. 2. Tidal areas and adjacent transitional areas will be contoured to allow for transgression of tidal habitat inland as sea levels rise. 3. As-built construction drawings. 4. The plan will be self-sustaining with tidal channels and other marsh features maintained passively through tidal exchange and seasonal inundation. 	<div>2018</div> <div>2020</div> <div>2020</div> <div>2020</div>

BCDC (San Francisco Bay Conservation and Development Commission), 2012. San Francisco Bay Plan. Reprinted in 2012. Available online at www.bcdc.ca.gov/pdf/bayplan/bayplan.pdf

CDFW (California Department of Fish and Wildlife), 2015. California State Wildlife Action Plan: A Conservation Legacy for Californians – 2015 Update: Volume I Plan Update. Available online at <https://www.wildlife.ca.gov/SWAP/Final>

California Natural Resources Agency, California Department of Food & Agriculture, and California Environmental Protection Agency, 2016. California Water Action Plan 2016. Available online at http://resources.ca.gov/docs/california_water_action_plan/Final_California_Water_Action_Plan.pdf

Contra Costa Public Works, Contra Costa County Flood Control and Water Conservation District, and Bay Development and Conservation District, 2016. Adapting to Rising Tides Contra Costa County Sea Level Rise Vulnerability Assessment Final Report.

ESA, Bay Point Restoration and Public Access Plan, 2017.

Goals Project. 2015. The Baylands and Climate Change: What We Can Do. Baylands Ecosystem Habitat Goals Science Update 2015 prepared by the San Francisco Bay Area Wetlands Ecosystem Goals Project. California State Coastal Conservancy, Oakland, CA.

Kennedy/Jenks Consultants, ESA, Kearns & West, and Zentraal, 2013. San Francisco Bay Integrated Regional Water Management Plan. Available at http://www.water.ca.gov/irwm/grants/docs/PlanReviewProcess/San_Francisco_Bay_Area_IRWMP%20Plan/San%20Francisco%20Bay%20Area%20IRWMP%20Final_September%202013.pdf

NOAA CO-OPS (National Oceanic and Atmospheric Administration Center for Operations Oceanographic Products and Services), 2010. URL: <https://tidesandcurrents.noaa.gov/benchmarks/9415144.html>. Accessed October 2017.

NRC (National Research Council), 2012. “Sea-Level Rise for the Coasts of California, Oregon, and Washington: Past, Present, and Future.” Prepublication. National Academy Press: Washington, D. C.

Orr, M. and L. Sheehan, 2012. Memo to Rebecca Sloan, ICF. BDCP Tidal Habitat Evolution Assessment. August.

USBR (U.S. Bureau of Reclamation), U.S. Fish and Wildlife Service, California Department of Fish and Wildlife, 2013. Suisun Marsh Habitat Management, Preservation and Restoration Plan. URL: https://www.usbr.gov/mp/nepa/documentShow.cfm?Doc_ID=17283

Williams, P. B., Orr, M. K. and Garrity, N. J., 2002. Hydraulic Geometry: A Geomorphic Design Tool for Tidal Marsh Channel Evolution in Wetland Restoration Projects. Restoration Ecology, vol. 10, pp. 577–590.

USFWS (U.S. Fish and Wildlife Service), 2013. Recovery Plan for Tidal Marsh Ecosystems of Northern and Central California. Sacramento, California.