

COASTAL CONSERVANCY

Staff Recommendation
February 15, 2024

TOLAY CREEK BAYLANDS RESTORATION PLANNING PROJECT

Project No. 23-086-01
Project Manager: Jessica Davenport

RECOMMENDED ACTION: Authorization to disburse up to \$1,241,200 to Sonoma Land Trust to plan for ecological restoration of 337 acres of baylands and alluvial fan in the Tolay Creek Baylands in Sonoma County by conducting community engagement, preparing preliminary designs and environmental compliance documents, and developing a permitting strategy.

LOCATION: Tolay Creek Baylands, Sonoma County

EXHIBITS

- Exhibit 1: [Project Location Maps](#)
Exhibit 2: [Project Photo](#)
Exhibit 3: [Project Letters](#)
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RESOLUTION AND FINDINGS

Staff recommends that the State Coastal Conservancy adopt the following resolution and findings.

Resolution:

The State Coastal Conservancy hereby authorizes a grant of an amount not to exceed one million two hundred forty-one thousand two hundred dollars (\$1,241,200) to Sonoma Land Trust (“the grantee”) to plan for ecological restoration of 337 acres of baylands and alluvial fan in the Tolay Creek Baylands in Sonoma County by conducting community engagement, preparing preliminary designs and environmental compliance documents, and developing a permitting strategy.

Prior to commencement of the project, the grantee shall submit for the review and written approval of the Executive Officer of the Conservancy (Executive Officer) the following:

1. A detailed work program, schedule, and budget.
2. Names and qualifications of any contractors to be retained in carrying out the project.

In addition, to the extent appropriate, the grantee shall incorporate the guidelines of the Conservancy's Coastal Access Project Standards into the preliminary designs.

Findings:

Based on the accompanying staff recommendation and attached exhibits, the State Coastal Conservancy hereby finds that:

1. The proposed authorization is consistent with Chapter 3 of Division 21 of the Public Resources Code, regarding the Climate Ready Program.
2. The proposed project is consistent with the current Conservancy Project Selection Criteria.
3. Sonoma Land Trust is a nonprofit organization organized under section 501(c)(3) of the U.S. Internal Revenue Code.

STAFF RECOMMENDATION

PROJECT SUMMARY:

Staff recommends the Conservancy authorize a grant of up to \$1,241,200 to Sonoma Land Trust (SLT) to plan for ecological restoration of 337 acres of baylands and alluvial fan in the Tolay Creek Baylands in Sonoma County by conducting community engagement, preparing preliminary designs and environmental compliance documents, and developing a permitting strategy (Exhibit 1).

The Tolay Creek Baylands Restoration Planning Project includes a 337-acre project area that will directly benefit from planned restoration actions and a larger planning area, which also includes downstream lands and waters that will potentially benefit from or be impacted by increased tidal flows associated with the restoration of the project area (Exhibit 1). The project area includes the 196-acre Tolay Creek Unit North of the Napa-Sonoma Marshes Wildlife Area, owned by the California Department of Fish and Wildlife (CDFW); roughly 82 acres of creek channel owned by the California State Lands Commission (SLC); and 59 acres of private land held by a single landowner. SLT has secured the right to access CDFW lands for restoration planning, is applying for a lease to access SLC lands, and is in negotiations with the landowner for access to the private land.

The Tolay Creek Baylands project area presents an opportunity to restore natural tidal wetland and creek functions by directly connecting diked and muted tidal wetlands with an adjacent alluvial fan and upland transition zone. This would be accomplished by selectively breaching or removing existing dikes, excavating tidal channels, potentially importing marsh fill, and selectively grading and revegetating.

Such bayland-upland connections are identified in the Baylands Ecosystem Habitat Goals Science Update (2015) as vital to building climate resilience both for habitats and species by providing sediment for marsh accretion, freshwater mixing, space for marsh migration, and a corridor for species to access diverse habitats. In order to restore this site prior to 2030, when sea level rise is expected to accelerate, planning and design for the project must begin immediately.

Further, the eventual restoration of the project area will greatly increase the volume of tidal flows in Tolay Creek under the State Route (SR) 37 Tolay Creek Bridge. Many of the North Bay's conservation organizations came together during the past decade to form the SR 37-Baylands Group, advocating for a redesign of SR 37 in a manner that facilitates wetland restoration on both sides of the roadway. As a result of this advocacy, the transportation agencies have committed to lengthening the Tolay Creek Bridge to enable tidal wetland restoration in the project area.

The Tolay Creek Baylands Restoration Planning Project consists of conducting outreach and preliminary plan development, preparing engineering designs and environmental compliance documentation for restoration of tidal wetland, alluvial fan, and associated habitats, and examining opportunities for public access and improved flood protection. The project includes mapping and assessing existing access points, trails, and recreational opportunities, including Bay Trail integration, relevant to restoration planning.

The project's specific tasks include the following:

- **Community Engagement.** SLT will lead outreach efforts with tribal representatives, landowners, Sonoma-Marín Area Rail Transit (SMART), highway transportation agencies, and other interested parties and groups. SLT will work closely with the Federated Indians of the Graton Rancheria and other tribes from the outset to ensure that the project meets tribal goals and objectives. SFEI will lead a Technical Advisory Committee (TAC) that efficiently coordinates with ongoing TAC engagement on with the Sonoma Creek Baylands restoration project.
- **Baseline Conditions.** Baseline studies will be conducted to identify land ownership, infrastructure, and easements, physical site conditions such as topography, tides and flooding, baseline biological resources, wetland delineation, rare plant surveys, cultural resources assessment, geotechnical evaluation, and select contaminants sampling.
- **Alternatives Assessment and Feasibility.** The project team will develop three to four project alternatives, including a no-action alternative, reflecting different ways of achieving the project goals given site conditions, constraints, and landowner participation. The alternatives will integrate bridge replacement designs, currently in development as part of a separate project led by the Metropolitan Transportation Commission and Caltrans, for the SR 37 crossing of Tolay Creek. A preferred alternative will be selected for advancement to preliminary design.
- **Hydrologic and Hydrodynamic Modeling.** Hydrologic and hydrodynamic models will be developed to aid in evaluating and refining various restoration concepts and identifying potential benefits or impacts to the project area. The models will simulate existing and future hydrology with sea level rise and extreme rainfall conditions under climate change to assess and enhance project resilience to climate change.
- **Preliminary Design.** The preferred alternative will be advanced to a preliminary design level, sufficient to support environmental review under the California Environmental Quality Act (CEQA). The design process will include select data collection, civil and geotechnical engineering, development of design drawings, quantities and cost estimation, and report documentation.

- **Environmental Compliance Documentation.** Environmental review will be completed under CEQA.
- **Permitting Strategy.** In addition, a roadmap and cost estimate for project permitting will be developed to support future phases of the project. While the project team will not submit permit applications in this phase of the project, the team will seek early consultation on permitting from the Bay Restoration Regulatory Integration Team (BRRIT).

This project advances implementation of the 2020 Sonoma Creek Baylands Strategy (Strategy) to restore ecosystem function and improve climate resilience within the Tolay Creek Baylands. The Strategy, funded by the San Francisco Bay Restoration Authority, includes a conceptual plan for landscape-scale restoration, flood protection, and public access in the Sonoma Creek Baylands.

The Strategy was led by SLT in collaboration with the project partners, including the San Francisco Estuary Institute (SFEI) and Ducks Unlimited. It was developed in collaboration with a Technical Advisory Committee (TAC) composed of natural resource and regulatory agencies, independent scientists, and restoration practitioners. In 2023, the Conservancy and the California Wildlife Conservation Board authorized funding to Ducks Unlimited the Sonoma Creek Baylands Restoration Planning Project. The Tolay Creek Baylands Restoration Planning Project complements and extends that effort, and the two projects will be closely coordinated. The TAC developed for the Strategy will continue to advise on design for both projects. The Federated Indians of Graton Rancheria (FIGR) have agreed to serve on the leadership team, TAC or in another advisory capacity for both projects, as described in more detail under Project Selection Criteria #3 below.

Site Description: Tolay Creek drains the southern tip of the Sonoma Mountain chain, including Tolay Lake (Exhibit 1). After meandering through the 2,932-acre Tolay Lake Regional Park (which was acquired and planned with support from the Conservancy), it enters a confined drainage ditch, the former location of a broad alluvial fan, marking the transition between upland and bayland. It enters the project area near the Sonoma Raceway (Exhibit 2), a zone that contains seasonal wetlands. Continuing through culverts under the SMART rail line, the creek flows into a muted tidal wetland within the CDFW Tolay Creek Unit North, which is bounded by a neighboring levee protecting Tubbs Island. This former tidal channel once marked the confluence of fresh and saltwater providing a complex mosaic of habitats. Today's channel, barely five feet wide, flows along the base of the levee to the Tolay Creek Bridge.

Important infrastructure influencing the project area includes SR 37, Highway 121, the SMART rail line, and private levees. The Tolay Creek Bridge, part of SR 37, greatly restricts tidal exchange due to its confined width. As mentioned above, planning to lengthen the bridge is currently underway.

Rare species with potential to occur in the project area include salt marsh harvest mouse, Ridgway's rail, black rail, California red-legged frog, western pond turtle, steelhead, chinook salmon, pappose tarplant, Point Reyes bird's-beak, soft bird's-beak, Mason's lilaeopsis, and Suisun marsh aster. Although only locally rare, a family of beaver lives within the tidal-fluvial

interface within the project area, adding biological diversity not typically seen in modern bayland environments.

Grant Applicant Qualifications: SLT is a non-profit land conservation organization that has acquired and restored wetlands in the San Pablo Baylands region of Sonoma County since the mid-1980s. SLT's achievements within the San Pablo Baylands include acquisition of nearly 8,000 acres, including subsequent transfer of Haire Ranch and Sears Point to the San Pablo Bay National Wildlife Refuge. SLT led the development of the Sonoma Creek Baylands Strategy, which this project will advance. SLT has worked closely with private landowners, California Native American tribes, conservation organizations, and other public agencies at all levels of government to facilitate restoration projects throughout Sonoma County. SLT will take the lead on tribal, scientific, and stakeholder outreach.

SLT intends to enter into agreements with Environmental Science Associates (ESA) and SFEI to lead the proposed activities. ESA has conducted design, permitting, compliance, and construction for dozens of tidal restoration projects in San Francisco Bay. ESA is currently contracted by the Metropolitan Transportation Commission (as a subcontractor under a contract with AECOM) to conduct hydraulic modeling to aid in selecting the necessary SR 37 bridge length to accommodate full restoration of the Tolay Creek Baylands. SLT, ESA, and SFEI have shown that they have the experience and expertise to conduct a successful project.

CONSISTENCY WITH CONSERVANCY'S PROJECT SELECTION CRITERIA:

The proposed project is consistent with the Conservancy's Project Selection Criteria, last updated on September 23, 2021, in the following respects:

Selection Criteria

1. Extent to which the project helps the Conservancy accomplish the objectives in the Strategic Plan.

See the "Consistency with Conservancy's Strategic Plan" section below.

2. Project is a good investment of state resources.

This collaborative project will develop plans for the restoration of 337 acres of habitat, primarily tidal marsh, as significant contribution toward the regional target of 100,000 acres of tidal marsh in San Francisco Bay (Baylands Ecosystem Habitat Goals Project (1999, 2015)). The project will also advance the State's 30x30 Executive Order, which calls for strategically prioritizing investments in cooperative, high-priority actions that promote biodiversity protection, habitat restoration, wildfire-resilience, and sustainably managed landscapes. CDFW designates the San Pablo Bay Estuaries as Areas of Conservation Emphasis (ACE) with the highest ACE ranking (5) for State Species Biodiversity, State Aquatic Biodiversity, Aquatic Native Species, and State Irreplaceability. Implementation of this project will improve critical breeding habitat for the endangered salt marsh harvest mouse and near-threatened Ridgway's rail. It will also increase foraging habitat for fish, invertebrates, and waterbirds. The project follows best practices for the development of ecological restoration designs based on completion of technical studies, development of alternatives, and evaluation of environmental impacts under CEQA.

3. Project includes a serious effort to engage tribes. Examples of tribal engagement include good faith, documented efforts to work with tribes traditionally and culturally affiliated to the project area.

When Ducks Unlimited, SLT, and others began work on the Conservancy-funded Sonoma Creek Baylands Restoration Project, SLT met with FIGR to discuss how they would prefer to be involved. The outcome is a seat on the leadership team, thereby ensuring that FIGR is proactively engaged as the design plans are being developed.

For the Tolay Creek Baylands Restoration project, FIGR has indicated that they would again like to serve on the leadership team, TAC, and/or in another advisory capacity and would like the option of using their grant funds to hire a consultant to answer specific project-related cultural resource and/or cultural value questions. SLT will work with its archaeological consultants to identify additional tribes that may have an interest in the area.

4. Project benefits will be sustainable or resilient over the project lifespan.

The Sonoma Creek Baylands Strategy, which provides the underpinning for this project, considers the impacts to the landscape in a 100-year planning horizon using the projected sea level rise of 1.9 feet by 2050, and 5.7 feet by 2100 in San Francisco Bay. The project partners have worked for many years to plan for restoration at a landscape-level while advocating for resilient infrastructure improvements, including redesign of State Route 37 and the SMART rail line, to achieve sustainable habitat and flood alleviation benefits in the face of the pressures of accelerating climate change.

The project will address the impacts of climate change by planning the restoration of diverse baylands habitats and natural processes. The project will develop restoration designs that conserve existing marshes and reconnect newly restored marshes with upland and estuarine sediment sources, thereby increasing the resilience of the marshes.

5. Project delivers multiple benefits and significant positive impact.

The project will plan for restoration of 337 acres of tidal wetland, alluvial fan, and associated habitats, while examining opportunities for public access and improved flood protection. Subsequent implementation is expected to lead to restored wildlife movement corridor through the upgraded crossing at SR 37 and restored connectivity between uplands and the bay. The project will be developed in tandem with the SR 37 bridge replacement project to ensure the projects are compatible. Additionally, the project team will engage the SMART railroad to identify actions to improve the flow of water (and sediment) under its tracks, reducing the risk of flooding and submergence of the tracks while simultaneously building habitat resilience.

6. Project planned with meaningful community engagement and broad community support.

SLT will lead outreach efforts with tribal representatives, landowners, SMART, highway transportation agencies, and other interested parties and groups. This continues the outreach that began during the Sonoma Creek Baylands Strategy development. SLT will work closely with the FIGR and other tribes from the outset to ensure that the project meets tribal goals and objectives. SFEI will lead a Technical Advisory Committee (TAC) that efficiently coordinates with

ongoing TAC engagement on with the Sonoma Creek Baylands Restoration Project. State and federal elected representatives have provided letters of support (Exhibit 3).

PROJECT FINANCING

Coastal Conservancy	\$1,515,000
Project Total	\$1,515,000

It is anticipated that the Conservancy’s funding will come from a FY23/24 appropriation of General Funds to the Conservancy for “urgent sea-level level rise adaptation and coastal resilience needs using nature-based solutions or other strategies.” (Budget Act of 2023 (SB 101).) The proposed project qualifies for use of these funds because it will address sea level rise adaptation needs by planning for restoration of tidal wetlands and connecting them with an adjacent alluvial fan and upland transition zone, which will build sea level rise resilience by providing sediment for marsh accretion and space for marsh migration.

CONSISTENCY WITH CONSERVANCY’S ENABLING LEGISLATION:

The project is consistent with Chapter 3 of Division 21, specifically Section 31113 which authorizes the Conservancy to address the impacts and potential impacts of climate change on resources within the Conservancy’s jurisdiction (Section 31113(a)).

Pursuant to Sections 31113(b) and (c), the Conservancy is authorized to award grants to nonprofit organizations and public agencies for projects within the Conservancy’s jurisdiction that address extreme weather events, sea level rise, flooding, and other coastal hazards that threaten coastal communities, infrastructure, and natural resources. The project is in one of the nine counties of the Conservancy’s San Francisco Bay Area Conservancy Program and therefore within the Conservancy’s jurisdiction

Consistent with Sections 31113 (b) and (c), the authorized funding will be awarded to Sonoma Land Trust, a nonprofit organization that will use the funding to plan for restoration of tidal marsh, a habitat type that has been significantly reduced in area throughout the San Francisco Bay Estuary over the past century. It is necessary to restore this habitat in order to address sea level rise and to conserve endangered species such as the Ridgway’s rail and salt marsh harvest mouse and to protect regional biodiversity.

The project is consistent with Section 31113(d) because it will plan for protection and expansion of coastal estuaries and lagoons that provide critical feeding and nursery habitat for juvenile fish species and foraging habitat for migratory waterfowl and other waterbirds, including eelgrass habitat. In addition, it is consistent with Section 31113(d) because it will plan for providing multiple benefits, including habitat for numerous native species, flood risk management, and recreational opportunities.

CONSISTENCY WITH CONSERVANCY’S [2023-2027 STRATEGIC PLAN](#):

Consistent with **Goal 3.2, Restore or Enhance Habitats**, the project will prepare a plan for restoring and enhancing tidal wetlands in San Francisco Bay that are extremely important to protecting biodiversity and restoring the functioning of natural systems.

Consistent with **Goal 4.1 Sea Level Rise Adaptation**, the proposed project will develop a restoration plan that will increase resilience of the natural and built environment of the Sonoma Creek Baylands landscape to sea level rise and other climate change impacts.

CEQA COMPLIANCE:

Authorizing the recommended grant is exempt from review under CEQA pursuant to the CEQA Guidelines at California Code of Regulations, Title 14, Sections 15262, which exempts feasibility and planning studies for possible future actions from the requirement to prepare an Environmental Impact Report or negative declaration, and 15306, which exempts from CEQA basic data collection, research, and resource evaluation activities that will not disturb environmental resources. The proposed tasks to be funded are planning and outreach, and preparation of designs, environmental review and permitting strategies, none of which will impact any environmental resources and all of which will be undertaken for possible future actions that the Conservancy has not yet approved, adopted, or funded. Upon approval of the project, Conservancy staff will file a Notice of Exemption.