

COASTAL CONSERVANCY

Staff Recommendation
September 14, 2023

SONOMA CREEK BAYLANDS RESTORATION PLANNING PROJECT, PHASE 1

Project No. 23-052-01
Project Manager: Jessica Davenport

RECOMMENDED ACTION: Authorization to disburse up to \$3,428,460 to Ducks Unlimited to conduct outreach and planning and to prepare engineering designs and environmental compliance documentation for landscape-scale ecological restoration, flood protection, and public access on 6,000 acres in the Sonoma Creek Baylands in Sonoma County.

LOCATION: Sonoma Creek Baylands, Sonoma County

EXHIBITS

Exhibit 1: [Project Location Maps](#)

Exhibit 2: [Project Photos](#)

Exhibit 3: [Project Letters](#)

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 three million four hundred twenty-eight thousand four hundred sixty dollars (\$3,428,460) to Ducks Unlimited (“the grantee”) to conduct outreach and planning and to prepare engineering designs and environmental compliance documentation for landscape-scale ecological restoration, flood protection, and public access on 6,000 acres in the Sonoma Creek Baylands in Sonoma County.

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.

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 impacts of climate change.
2. The proposed project is consistent with the current Conservancy Project Selection Criteria.
3. Ducks Unlimited 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 disbursement of up to \$3,428,460 to Ducks Unlimited (DU) to conduct outreach and planning and to prepare engineering designs and environmental compliance documentation for landscape-scale ecological restoration, flood protection, and public access on 6,000 acres in the Sonoma Creek Baylands in Sonoma County (Exhibit 1).

Much of what used to be tidal marsh in the low-lying lands along Sonoma Creek has been transformed into diked agricultural baylands and managed wetlands. Levee construction and draining have caused significant losses of tidal marsh habitat, a reduction in tidal prism, and the creation of a sediment trap in the historic channels. Both freshwater and tidal channels have been confined by levees, simplifying the historic tidal channel network that connected Sonoma Creek to its surrounding baylands and blocking the movement of sediment from the uplands into the marshes. The former marshes have subsided, and most properties rely on pumps and repeated levee repairs to keep the land from flooding, although entire parcels can be inundated for weeks and sometimes months. These challenges will worsen with accelerating sea level rise and increased storm frequency and intensity, both associated with climate change. In the absence of new, large-scale wetland restoration, the project area will experience continued and increased flooding, infrastructure damage, and habitat loss.

The proposed project will develop plans, designs, and environmental compliance documentation to restore up to 6,000 acres of estuarine wetlands and associated habitats, while expanding public access and maintaining or improving flood protection. This work will carry forward the vision of the Sonoma Creek Baylands Strategy (Strategy) to eventually restore ecosystem function and increase the sea level rise resilience of the entire 35,000-acre planning area. The Strategy, completed in May 2020, includes a preferred conceptual plan for landscape-scale restoration, flood protection, and public access in the Sonoma Creek Baylands.

The Strategy was developed in collaboration with a wide range of partners, including agency landowners and technical experts. The Project Team that developed the Strategy, led by the

Sonoma Land Trust (SLT), included the San Francisco Estuary Institute (SFEI), DU, Point Blue Conservation Science, the consulting firm Environmental Science Associates, and the U.S. Fish and Wildlife Service (USFWS). The Science Advisory Panel included Sonoma County Water Agency (Sonoma Water), California Department of Fish and Wildlife (CDFW), and Sonoma Resource Conservation District, among others.

The proposed project will advance implementation of the Strategy in collaboration with many of the same partners, while further expanding the network of participants to include tribal representatives and other interested groups. Specific elements of the proposed project include the following:

- **Project Management and Tribal Consultation.** DU and its partners, including SLT, USFWS, Natural Resource Conservation Service (NRCS), and Sonoma Water, will enter into a Memorandum of Understanding to identify roles and responsibilities of members of the project management team. DU will lead the team. Tribal input and participation will be built into the project and tribes will be invited to take a project leadership role, if desired. Tribal engagement is further described under Project Selection Criteria #3 below.
- **Planning, Outreach, and Coordination.** SLT, with the support of DU, will lead targeted outreach efforts with tribal representatives, landowners, and other interested parties and groups, a continuation of outreach that began as part of the Strategy. The project team will develop project goals and objectives and will seek to build community support for the project through identifying public access opportunities and maintaining or improving the existing level of flood protection for remaining infrastructure. SFEI will lead a Technical Advisory Committee.
- **Design.** The design process will include documentation of baseline conditions, data collection, and civil, geotechnical, and structural engineering, as appropriate. The existing conditions analysis will include topography and soil conditions; existing infrastructure and easements (see Site Conditions section below for details); and select contaminants sampling; among other elements. These efforts will build on existing conditions documentation that has been prepared previously for Skaggs Island and Haire Ranch. Results from the analysis will be used to identify opportunities and constraints for the developed project goals and objectives. Hydrologic, hydrodynamic, and groundwater models will be developed to aid in evaluating various restoration concepts and identifying potential benefits or impacts to the project area. The restoration designs will be prepared to the level appropriate for the environmental review.
- **Environmental Review.** Environmental review will be completed under the California Environmental Quality Act (CEQA) and National Environmental Policy Act. A detailed project description, plans, and exhibits will be developed, and potential environmental effects will be identified and analyzed. The project team will seek early consultation on permitting from the Bay Restoration Regulatory Integration Team (BRRIT), a dedicated group of staff from six state and federal agencies focused on permitting multi-benefit tidal wetlands restoration projects. The project team's intent is to submit permit applications to the BRRIT in a subsequent phase of the project.

The design goals of the proposed project are to restore natural processes to estuarine habitats, connect important marsh migration zones, reduce chronic flooding, and improve overall habitat connectivity in the watershed. The designs will provide a mosaic of habitats to benefit a large diversity of wildlife, including state and federally listed species. Species that will benefit from the project include California Ridgway's rail, California black rail, salt marsh harvest mouse, Chinook salmon, steelhead, longfin smelt, red-legged frog, and many special-status plant species including Point Reyes bird's-beak, soft bird's-beak, Suisun Marsh aster, and federally endangered Contra Costa goldfields.

Site Description:

The 6,000-acre project site includes up to six parcels on the eastern side of the Sonoma Creek Baylands (Exhibit 1):

- **Skaggs Island** (3,150 acres) **and Haire Ranch** (1,080 acres), owned by USFWS and part of the San Pablo Bay National Wildlife Refuge (Refuge);
- **Camp 4** (1,100 acres), owned by SLT with a conservation easement owned by the U.S. Department of Agriculture NRCS;
- **Camp 5** (286 acres), privately owned, in negotiation for fee simple purchase by SLT and a conservation easement by NRCS; and
- **Two Sonoma Valley County Sanitation District (SVCS) parcels** (370 acres).

DU has entered into an agreement with USFWS and intends to enter into agreements with SLT and Sonoma Water to lead the proposed planning activities for their properties. (Sonoma Water manages the county sanitation districts, including SVCS, which provide wastewater treatment, reclamation, and disposal.)

These six parcels are under various types of management. Skaggs Island and Haire Ranch are part of the Refuge managed by USFWS for habitat values, public access, and flood protection. The SVCS parcels are actively managed by their maintenance staff to restore historic wetlands, provide public access, and put reclaimed water to beneficial use. SLT has acquired Camp 4 and plans to acquire Camp 5, both of which are currently farmed for oat hay, and manage them for habitat purposes, and limited public access on Camp 4, until they can transfer them to a public agency.

The project area is surrounded by public and private land. The public land is primarily wildlife areas owned and managed by CDFW and USFWS. The private land includes oat hay farms, vineyards, and a hunting club.

Within the project area, much of what used to be tidal marsh has been transformed into agricultural baylands (hayfields) and diked wetlands with linear strips of tidal marsh, adjacent to tidal sloughs, between each adjacent parcel. Current habitat and species use varies by parcel (Exhibit 2).

- **Skaggs Island:** Skaggs Island is former estuarine tidal habitat that was diked and drained in the early 1900's for agriculture and then used as a US Navy Communication Station, before being added to the Refuge in 2011. Skaggs Island is subsided (approximately 7 feet on average) and a stretch of the perimeter levee overtops with some frequency.

Skaggs Island is surrounded by tidal estuarine marsh. Eighteen special-status wildlife species have been documented or are assumed present at Skaggs.

- **Haire Ranch:** The Haire Ranch Unit, just north of Skaggs Island, was farmed for more than 75 years before it was acquired in 2013 by SLT with Conservancy and other funding and added to the Refuge. Haire Ranch was converted to open water and seasonal managed wetlands in 2018 and enhanced in 2022. Deep water comprises approximately 72 acres while 671 acres are seasonal wetlands interspersed with deeper wetland swales and potholes. Haire Ranch provides seasonal freshwater wetland habitat for waterfowl and shorebirds, as well as foraging and perching habitat for raptors.
- **Camp 4 and Camp 5:** Camp 4 and 5 are dominated by annually disced agricultural fields interspersed with drainage ditches. The annual planting and harvesting regime limits habitat value on much of the two sites, although fringing wetlands along drainage ditches provide habitat for nesting birds.
- **Two SVCS D parcels:** Known as Hudeman Slough Enhancement Wetlands (Hudeman Wetlands), the parcels are owned by SVCS D and are managed by Sonoma Water. The historic baylands were leveed in the 1950s and portions of the property were farmed as late as the 1980s. The SVCS D acquired the property in 1988 with funding from the Conservancy to implement the Hudeman Slough Wetland Enhancement Project, which restored historic wetlands, created public access, and put reclaimed water to beneficial use by maintaining freshwater wetland habitat. The Hudeman Wetlands include approximately 120 acres of grasslands, freshwater ponds, seasonal freshwater wetlands, seasonal saline wetlands, permanent ponds, and diked brackish marsh. While this habitat is functioning well, it requires maintenance of levees and water control structures, and restoring the area to tidal wetlands is a more sustainable management approach, particularly in the face of sea level rise.

Infrastructure in the project area includes a Pacific Gas & Electric (PG&E) substation and power lines, the Sonoma-Marin Area Rail Transit (SMART) rail line (along the edge of project site); state and county roads; the Skaggs Island bridge spanning Napa Slough, a water pipeline, an aircraft navigation tower, and water control infrastructure used to pump rainwater out of the subsided land. SVCS D's North Bay Water Reuse Program Pipeline, which delivers tertiary treated wastewater to various properties, runs through the northern portion of the project area, and contracts with recipients of the treated wastewater would potentially need to be reviewed and evaluated. In addition, Skaggs Island contains an operational radio beacon tower that aids aircraft pilots in navigation, a legacy of its history as a US Navy Communication Station. USFWS has been in discussion with the Federal Aviation Administration, and additional investigations and discussions are needed to determine whether the tower will need to be protected in place or can be removed.

NRCS holds Wetland Reserve Easements on Haire Ranch and Camp 4 and is in the process of acquiring an easement on Camp 5. PG&E, SMART, and Caltrans hold easements along their respective infrastructure. The potential for navigation easements and other relevant land use

restrictions will be evaluated in proximity to the two small regional airports, Sonoma Valley Airport and Sonoma Skypark, in the vicinity of the project area.

Grant Applicant Qualifications: Funding from this authorization would go to DU, a nonprofit organization with extensive experience restoring tidal wetlands and habitat for waterfowl and other species in the San Pablo Baylands, where the project is located. DU led planning, design, and implementation for nearby wetland restoration projects, including Cullinan Ranch, Sears Point, and the initial project at Haire Ranch to establish seasonal wetlands prior to tidal restoration. DU will take the lead on engineering design and environmental compliance tasks.

DU and SLT are co-leads for this project. 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, conserving more than 6,500 acres and leading successful large-scale planning and restoration projects. SLT's work and achievements within the San Pablo Baylands include acquisition of Haire Ranch and the transfer of the property to the Refuge. SLT led the development of the Sonoma Creek Baylands Strategy, which this project will advance. SLT will take the lead on tribal, scientific, and stakeholder outreach.

Plans for long term management and maintenance of the project area vary by parcel. The SVCSD parcels will be actively managed by Sonoma Water maintenance staff. Skaggs Island and Haire Ranch are part of the Refuge, where USFWS is committed to long term management, including maintaining levees, water control structures, and public access locations, and conducting targeted weed control. Sonoma Land Trust plans to acquire Camp 4 and Camp 5 and manage them until they can transfer to a public agency.

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 6,000 acres of habitat, primarily tidal marsh, as significant contribution toward the regional target of 100,000 acres of tidal marsh in San Francisco Bay (Bayland 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-resilient, 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 California Ridgway's

rail. It will also increase foraging habitat for federally threatened green sturgeon, steelhead and chinook, as well as other fish, invertebrates, and waterbirds.

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.

As noted above, SLT will take the lead on tribal, scientific, and stakeholder outreach for this project. During the development of the Sonoma Creek Baylands Strategy, SLT consulted with the Federated Indians of Graton Rancheria (FIGR) on issues of cultural resources and tribal involvement, and this consultation resulted in SLT committing to include tribal representation in project planning. Concurrent to SLT's efforts, NRCS initiated its Section 106 consultation in the fall of 2022 and is working with up to five tribes, including FIGR, in its conservation easement acquisition. The project budget includes funding for stipends for continuing tribal participation, and tribes will be invited to take a leadership role in project planning, if desired.

4. Project delivers multiple benefits and significant positive impact.

The project is planning for restoration of 6,000 acres of tidal wetland and mudflat habitat in the San Francisco Estuary, a globally important estuary and the largest on the west coast. Tidal wetland and mudflat habitat will provide valuable green infrastructure that functions as resilient nature-based shoreline protection in the face of sea level rise and a predicted increase in storm events and flooding. The project will provide multiple benefits including fish and wildlife enhancements, as well as recreational opportunities. During the planning process, the project management team will assess opportunities to provide boating, fishing, and hunting access to historically excluded communities and facilities accessible to people with disabilities; multilingual signage in the project area detailing information about public access local ecology; and improved opportunities for wildlife-oriented recreation, such as bird watching, kayaking, and hiking.

5. 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 proposed project, when ultimately constructed, will address the impacts of climate change by coordinating the restoration and enhancement of diverse baylands habitats and integrating natural processes to increase climate resiliency in the Sonoma Creek Baylands. The project will increase the resilience of the marshes by developing restoration designs that conserve existing marshes and reconnect newly restored marshes with upland and estuarine sediment sources.

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

SLT, with the support of DU, will lead targeted outreach efforts with tribal representatives, landowners, and other interested parties and groups, a continuation of outreach that began as part of the Sonoma Creek Baylands Strategy. SLT will work with surrounding landowners, and SLT and DU anticipate working with a variety of other groups including the Sonoma Valley Groundwater Sustainability Agency, Sonoma County Farm Bureau, State Route 37 Policy Committee, Sonoma County Agricultural Preservation and Open Space District, the San Francisco Bay Trail, the State Route 37-Baylands Group, and others. DU will develop an equitable engagement plan that will describe engagement that has occurred to date and lay out proposed actions to increase inclusivity of people served by the project.

PROJECT FINANCING

Coastal Conservancy	\$3,428,460
California Wildlife Conservation Board	\$3,428,528
DU	\$100,000
Project Total	\$6,956,988

It is anticipated that the Conservancy’s funding under this authorization for this project will come from an FY22/23 appropriation from the Greenhouse Gas Reduction Fund to the Conservancy for the Climate Ready Program for nature-based projects to address sea level rise (Budget Act of 2022, as amended by AB 178, Chapter 45, Statutes of 2022). The Greenhouse Gas Reduction Fund Investment Plan and Communities Revitalization Act (Health and Safety Code (HSC) Sections 39710 – 39723) requires that GGRF funds be used to (1) facilitate the achievement of reductions of GHG emissions consistent with the Global Warming Solutions Act of 2006 (HSC Sections 38500 *et seq*), and (2) to the extent feasible, achieve other co-benefits, such as maximizing economic, environmental and public health benefits and directing investment to disadvantaged communities (HSC 39712(b)). The Global Warming Solutions Act of 2006 sets forth (among other things) certain GGRF funding priorities (HSC Section 38590.1). The California Legislature has also appropriated GGRF funds to the Conservancy to protect communities and natural resources from sea level rise (The Budget Act of 2022, as amended by AB 179, Chapter 249, Statutes of 2022).

The California Air Resources Board (“CARB”) has adopted guidelines that establish program goals that agencies must achieve with their GGRF funds. Consistent with the CARB 2018 Funding Guidelines, the proposed project will help the Conservancy meet its GGRF program goals because the project will:

- Facilitate GHG emission reductions (which includes carbon sequestration) and further the purposes of AB 32 and related statutes; and
- Leverage funds to provide multiple benefits and to maximize benefits.

The proposed project will meet these objectives by planning to restore tidal wetland habitat, which will reduce greenhouse gas emissions because tidal wetland habitat is one of the most carbon dense ecosystems in the world. The proposed project is also consistent with this funding source because the restoration to be planned will protect and enhance tidal wetlands that

support natural infrastructure providing multiple benefits, including fish and wildlife enhancements, flood management, and recreational opportunities.

Unless specifically identified as “Required Match,” the other sources of funding and in-kind contributions described above are estimates. The Conservancy does not typically require matching funds or in-kind services, nor does it require documentation of expenditures from other funders or of in-kind services. Typical grant conditions require grantees to provide any funds needed to complete a project.

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 Section 31113(b) and (c), the Conservancy is authorized to award grants to nonprofit organizations and public agencies to undertake Climate Ready projects, including those that address extreme weather events, sea level rise, flooding, and other coastal hazards that threaten coastal communities, infrastructure, and natural resources.

Consistent with Section 31113(c), the authorized funding will be awarded to DU, 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 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 plans 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 restoration plans 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, preparation of designs, and environmental review and permitting, 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.