EAST CONTRA COSTA COUNTY HABITAT CONSERVANCY

City of Brentwood

City of Clayton

City of Oakley

City of Pittsburg

Contra Costa County

GOVERNING BOARD

Monday, February 23, 2026
1:30 pm

City of Brentwood, Council Chambers
150 City Park Way, Brentwood, CA 94513

IMPORTANT NOTICE ABOUT MEETING PARTICIPATION

East Contra Costa County Habitat Conservancy (Conservancy) Board members will be participating from the City of Brentwood. Members of the public are invited to attend and participate at the City of Brentwood, Council Chambers, 150 City Park Way, Brentwood, CA 94513. Members of the public are invited to attend and participate in-person or remotely with the information provided below.

As a courtesy and technology permitting, members of the public may provide live remote oral public comment via the Zoom Platform. However, the Conservancy cannot guarantee that the public's access to teleconferencing technology will be uninterrupted, and technical difficulties may occur from time to time. In those instances, so long as the public may still attend the meeting in person, the meeting will continue.

HOW TO PARTICIPATE
The public is invited to participate in the Conservancy's Governing Board meeting using any of the following methods:

IN PERSON:
Members of the public can provide in-person comments in the Council Chambers. Members of the public are encouraged, but not required, to fill out a speaker card. The Council Chambers will have seating available for members of the public to attend in person up to full seating capacity.

REMOTE:
Access the meeting live online at: https://cccounty-us.zoom.us/j/86942969821

Access the meeting by telephone: 855-758-1310

Meeting ID: 8694 2969 821

Persons who wish to address the Board during public comment or with respect to an item that is on the agenda may do so either online or by telephone. If accessing the meeting online, request to speak by clicking the "raise hand" function. If accessing the meeting by telephone, request to speak by pressing #2.

AGENDA

1) **1:30 p.m. Convene meeting.**

2) **Introductions.**

3) **Public Comment on items that are not on the agenda**.
Public comment on items on the agenda will be taken with each agenda item (3 minutes each speaker).

4) **Consider the following CONSENT items:**

   a) **APPROVE the Meeting Record from the East Contra Costa County Habitat Conservancy ("Conservancy") Governing Board meeting of December 15, 2025.**

   b) **ACCEPT update report on the Conservancy's Endowment Account.**

   c) **Consider the following actions related to the Conservancy's Science and Research Grant Program:**

      i) **APPROVE the Request for Proposals (RFP) for the East Contra Costa County Habitat Conservancy's Science and Research Grant Program; and**

      ii) **DETERMINE the action requested is not a "project" subject to the California Environmental Quality Act (CEQA) pursuant to CEQA Guidelines Section 15378(b)(4) and/or (5).**

   d) **Consider the following actions related to the U.S. Army Corps of Engineers' Regional General Permit (RGP 1) and use of Conservancy's existing restoration projects for the RGP 1 and the In Lieu Fee Program:**

      i) **AUTHORIZE the Executive Director to finalize and sign letters to the U.S. Army Corps of Engineers reporting on the use of RGP 1 and committing to support management of the Conservancy's previously restored wetlands to facilitate their use as mitigation for projects covered by Regional General Permit 1 and the East Contra Costa County In Lieu Fee Program; and**

      ii) **DETERMINE the action requested is exempt from the California Environmental Quality Act pursuant to CEQA Guidelines Section 15307 and/or 15308.**

   e) **ACCEPT update report on the East Bay Regional Park District's (EBRPD) District Plan.**

   f) **Consider the following actions related to the California Department of Fish and Wildlife (CDFW) Local Assistance Grant Award and Contracting:**

      i) **AUTHORIZE the Executive Director to execute a contract with the Contra Costa Resource Conservation District (CCRCD) not to exceed $49,400 for the term March 15, 2026 through March 31, 2028 to complete a study regarding "Movements and Identifying Nesting Habitat of Western Pond Turtles in East Contra Costa County".**

ii) **DETERMINE the action requested is not a "project" subject to CEQA pursuant to CEQA Guidelines Section 15378(b)(4) and/or (5).**

5) **Consider the following actions related to the Knightsen Wetland Restoration Project:**

   a) **ACCEPT update on the Knightsen Wetland Restoration Project.**

   b) **ADOPT resolution 2026-01 to authorize the Executive Director to amend a contract, and to submit applications for local, state, and federal permits, needed to complete designs for and construct the Project.**

6) **Adjourn. The next regular Governing Board meeting will be on April 27, 2026.**

If you have questions about this agenda or desire additional meeting materials, you may contact Maureen Parkes of the Contra Costa County Department of Conservation and Development at 925-655-2909. The Conservancy will provide reasonable accommodation for persons with disabilities planning to participate in this meeting who contact staff at least 24 hours before the meeting.

EAST CONTRA COSTA COUNTY HABITAT CONSERVANCY

DATE: February 23, 2026

TO: Governing Board

FROM: Conservancy Staff

SUBJECT: **Governing Board Meeting Record for December 15, 2025**

RECOMMENDATION

APPROVE the Meeting Record from the East Contra Costa County Habitat Conservancy ("Conservancy") Governing Board meeting of December 15, 2025.

DISCUSSION

Please find the draft meeting record attached.

CONTINUED ON ATTACHMENT: Yes
ACTION OF BOARD ON: February 23, 2026 APPROVED AS RECOMMENDED: _____
OTHER: _____

VOTE OF BOARD MEMBERS

___ UNANIMOUS

AYES: _____
NOES: _____
ABSENT: _____
ABSTAIN: _____

I HEREBY CERTIFY THAT THIS IS A TRUE AND CORRECT COPY OF AN ACTION TAKEN AND ENTERED ON THE MEETING RECORD OF THE CONSERVANCY GOVERNING BOARD ON THE DATE SHOWN.

ATTESTED

_____
John Kopchik, SECRETARY OF THE EAST CONTRA COSTA COUNTY HABITAT CONSERVANCY

BY:_____, DEPUTY

Draft Meeting Record

East Contra Costa County Habitat Conservancy
Monday, December 15, 2025
1:30 pm

City of Brentwood, Council Chambers
150 City Park Way
Brentwood, CA 94513

Clayton City Hall
6000 Heritage Trail - 3rd Fl Conf. Room
Clayton, CA 94517

1) **The Board convened the meeting at 1:37 pm.**

2) **Introductions.**

Governing Board members in attendance were:

Diane Burgis	Contra Costa County
Hugh Henderson	City of Oakley
Arlene Kobata	City of Pittsburg
Tony Oerlemans	City of Brentwood
Kim Trupiano	City of Clayton

Conservancy staff and consultants in attendance were:

John Kopchik	Conservancy Secretary
Abigail Fateman	Conservancy Executive Director
Joanne Chiu	Conservancy Staff
Allison Cloney	Nomad Ecology
Chris Beale	Conservancy Legal Counsel, Resources Law Group
Robert Spencer	Urban Economics
Sally Nielsen	Insight Data & Economic Analysis
Kathryn Gaffney	ICF Consulting

Other attendees (who were present on the video meeting, who signed the sign-in sheet or spoke on an item):

Ejyo Remington	BioMaAS Inc. Environmental Consultants

3) **Public Comment on items that are not on the agenda**.
There were no public comments.

4) **Consider the following CONSENT items:**

   a) **APPROVE the Meeting Record from the East Contra Costa County Habitat Conservancy ("Conservancy") Governing Board meeting of October 27, 2025.**

   b) **ACCEPT update on the Conservancy's Endowment Account.**

   c) **Consider the following actions related to legislative matters:**

      i. **ADOPT the 2026 Federal, State, and Local Legislative Platform;**
      ii. **SUPPORT the California Habitat Conservation Planning Coalition 2026 Legislative Platform;**

iii. **AUTHORIZE the Chair or staff, as appropriate, to communicate items on the Platform to relevant members and staff of the U.S. Congress and the California Legislature, relevant federal and state agencies, potential advocacy partners and others;**
iv. **AUTHORIZE payment of $5,000 as membership dues for the California Habitat Conservation Planning Coalition in 2026;**
v. **AUTHORIZE payment of $5,000 toward funding a lobbyist to represent the California Habitat Conservation Planning Coalition's and the Conservancy's 2026 State Legislative Platform;**
vi. **AUTHORIZE payment of $2,000 as membership dues for the National Habitat Conservation Plan Coalition in 2026; and**
vii. **AUTHORIZE payment of $2,750 as membership dues for Together Bay Area in 2026.**

d) **Consider the following actions related to the Conservancy's Public Advisory Committee:**

i. **REVIEW the composition of the Conservancy's PAC, attendance of Committee Members, and provide recommendations; and**
ii. **ACCEPT update on the Public Advisory Committee's activities in 2025.**

Items 4a – 4d were approved as recommended by staff. (5-0: Burgis, Henderson, Kobata, Oerlemans and Trupiano)

5) **Consider the following actions related to the submittal of applications to extend the term of the HCP/NCCP permits for an additional 30 years (60 years total) and make associated amendments required to accommodate the extended term.**

ADOPT Resolution 2025-04 to do the following:

a) **APPROVE and ADOPT the Addendum to the Final Environmental Impact Statement/Environmental Impact Report for the East Contra Costa County Habitat Conservation Plan and Natural Community Conservation Plan, and make related CEQA findings; and**

b) **DIRECT the Executive Director to file a Notice of Determination with the County Clerk, in accordance with Public Resources Code section 21152(a) and CEQA Guidelines section 15094; and**

c) **AUTHORIZE and DIRECT the Executive Director to submit applications to the United States Fish and Wildlife Service and the California Department of Fish and Wildlife for proposed amendments to the East Contra Costa County Habitat Conservation Plan/Natural Community Conservation Plan ("HCP/NCCP"), the HCP/NCCP Implementing Agreement, and the associated federal Endangered Species Act permit and state Natural Community Conservation Planning Act permit.**

Ms. Fateman provided an introduction and overview of the application to extend the ECCC HCP/NCCP permit term by an additional 30 years on behalf of the East Contra Costa County Habitat Conservancy. She then introduced Robert Spencer of Urban Economics, who presented the financial analysis, with a focus on projected costs and funding considerations. Board member Diane Burgis raised questions regarding adaptive management, public access, and fuel management. Ms. Fateman clarified that no changes are proposed to the HCP/NCCP

Plan language. As a result, existing management actions will remain consistent with those outlined in the Plan and the applicable Preserve Management Plans.
Items 5a – 5c were approved as recommended by staff. (5-0: Burgis, Henderson, Kobata, Oerlemans and Trupiano)

6) **Consider APPROVING the 2026 Conservancy Work Plan.**
Ms. Fateman provided an overview of the proposed 2026 Conservancy Work Plan, noting that the Work Plan had been reviewed by the Public Advisory Committee at their November meeting. The 2026 Conservancy Work Plan was approved as recommended by staff. (5-0: Burgis, Henderson, Kobata, Oerlemans and Trupiano)

7) **Consider the following items related to Conservancy finances:**

   a) **REVIEW the 2025 Budget Status.**

   b) **APPROVE the 2026 Conservancy Budget.**

   c) **AUTHORIZE the Executive Director to execute annual contracts with the following firms for on-going services for conservation strategy implementation, administrative support, legal services, finance management and preserve management:**
      - **ICF Jones and Stokes: not to exceed $150,000 for the term from January 1, 2026 to December 31, 2026;**
      - **Nomad Ecology: not to exceed $360,000 for the term from January 1, 2026 to December 31, 2026;**
      - **Monk and Associates: not to exceed $70,000 for the term from January 1, 2026 to December 31, 2026;**
      - **H.T. Harvey and Associates: not to exceed $50,000 for the term from January 1, 2026 to December 31, 2026;**
      - **Shannon Wilson: not to exceed 40,000 for the term from December 15, 2025 to December 31, 2026;**
      - **The Catalyst Group: not to exceed $15,000 for the term from January 1, 2026 to December 31, 2026;**
      - **Consero Solutions: not to exceed $40,000 for the term from January 1, 2026 to December 31, 2026;**
      - **Resources Law Group: not to exceed $150,000 for the term from December 15, 2025 to December 31, 2026;**
      - **Urban Economics: not to exceed $100,000 for the term from December 15, 2025 to December 31, 2026;**
      - **Maze and Associates: not to exceed $30,000 for the term from January 1, 2026 to December 31, 2026;**
      - **Save Mount Diablo: not to exceed $40,000 for the term from January 1, 2026 to December 31, 2026;**
      - **California Retaining Walls, Co.: not to exceed $375,000 for the term from January 1, 2026 to December 31, 2026; and**
      - **Hanford ARC: not to exceed $100,000 for the term from January 1, 2026 to December 31, 2026.**

   d) **AUTHORIZE the Executive Director to execute contract amendments for on-going services for administrative support, land management, restoration services and on-call biological support:**

- **Watershed Nursery: no change in the contracting limit and extend the term from December 31, 2025 to December 31, 2026;**
- **East Bay Regional Park District (Roddy Ranch Golf Course Project Design): no change in the contracting limit and extend the term from December 31, 2025 to December 31, 2026.**
- **Balance Hydrologics: no change in the contracting limit and extend the term from December 31, 2025 to December 31, 2026;**
- **Restoration Design Group: no change in the contracting limit and extend the term from December 31, 2025 to December 31, 2026; and**
- **Dudek: no change in the contracting limit and extend the term from December 31, 2025 to December 31, 2026.**

e) AUTHORIZE the Executive Director to execute a cost-sharing agreement with the East Bay Regional Park District for $100,000 for land acquisition through December 31, 2026.

Ms. Chiu provided an overview of Finance Items 7a and 7b. Ms. Fateman provided an overview of Finance Items 7c, 7d, and 7e; and provided a general explanation of the RFQ process for recruiting new on-call consultant teams, reviewing applications, and staff recommendations. All items were approved as recommended by staff. (5-0: Burgis, Henderson, Kobata, Oerlemans and Trupiano)

8) Consider the following actions related to Conservancy Governing Board administrative matters:

a) CONFIRM Conservancy Chair and Vice Chair for 2026;

b) SET the Conservancy Governing Board Meeting calendar for 2026; and

c) SCHEDULE a Conservancy Governing Board special meeting for January 2026.

Items 8a and 8b were approved as recommended by staff. (5-0: Burgis, Henderson, Kobata, Oerlemans and Trupiano)

Item 8c: The Governing Board directed staff to coordinate scheduling the special meeting for January 2026 with all board members.

9) Adjourn. The next regular Governing Board meeting is to be determined (See Item 8). The meeting adjourned at 2:48 p.m.

EAST CONTRA COSTA COUNTY HABITAT CONSERVANCY

DATE: February 23, 2026

TO: Governing Board

FROM: Conservancy Staff (Joanne Chiu)

SUBJECT: Endowment Account Update

RECOMMENDATION

ACCEPT update report on the Conservancy's Endowment Account.

SUMMARY AND BACKGROUND

The UBS Consolidated Report prepared for the Regional Parks Foundation Group ECCCHC Endowment is attached. This report is provided to the Governing Board at each meeting.

Endowment Account Background

The Conservancy's endowment account (Endowment Account) was established with the Regional Parks Foundation in 2020. After the HCP/NCCP permit term ends, distributions from the Endowment Account will be used for long-term management and monitoring of the Preserve System.

The Endowment Account is funded by:

1) Pre-HCP mitigation fees directed to the HCP/NCCP,
2) Lease revenue on Preserve properties (residential, telecommunication sites, wind, agricultural),
3) Transfer fees related to development agreements,
4) Contributions to Recovery, and
5) HCP/NCCP mitigation fees.

When establishing the Endowment Account, the Governing Board directed Conservancy staff to request that pre-HCP mitigation fees that were directed to the HCP/NCCP, as well as portion of collected lease revenue from Preserve properties, be used for the initial deposit to the Endowment Account. Per the Lease Revenue Allocation Agreement between the Conservancy and the East Bay Regional Park District ("Park District"), the Park District will distribute a

CONTINUED ON ATTACHMENT: Yes
ACTION OF BOARD ON: February 23, 2026 APPROVED AS RECOMMENDED: _____
OTHER: _____

VOTE OF BOARD MEMBERS

___ UNANIMOUS
AYES: _____
NOES: _____
ABSENT: _____
ABSTAIN: _____

I HEREBY CERTIFY THAT THIS IS A TRUE AND CORRECT COPY OF AN ACTION TAKEN AND ENTERED ON THE MEETING RECORD OF THE CONSERVANCY GOVERNING BOARD ON THE DATE SHOWN.

ATTESTED _____
John Kopchik, SECRETARY OF THE EAST CONTRA COSTA COUNTY HABITAT CONSERVANCY

BY: _____, DEPUTY

percentage of lease revenue collected on Preserve properties toward the Endowment Account on an annual basis.

Urban Economics, the Conservancy consultant who performs the periodic mitigation fee audits and assisted with the Endowment Account establishment, is continuing to develop the endowment funding plan which will provide guidance on allocations of development fee revenue to the Endowment Account. As the endowment funding plan moves forward, the Conservancy was advised by Urban Economics to transfer mitigation fee payments from the Summer Lake development as well as any transfer fees to the Endowment Account, all of which are the same category of funds as the initial deposits to the Endowment Account. On this recommendation, the Board approved transferring these funds over to the Endowment Account in 2023 and will continue to do so for future payments from the Summer Lake development and any transfer fees received. Eventually, a portion of mitigation fee revenue will be directed toward the Endowment Account.

The following table details deposits into the Endowment Account.

Total Deposits to the Endowment

	Source	Deposit
2020	Preserve System Lease Revenue 2008-10/2020	$1,103,556.00
2020	Summer Lake Mitigation Fees and Pinn Bros Transfer Fees	$1,997,000.00
2021	Preserve System Lease Revenue Remainder of 2020	$72,596.89
2022	CWF Pre-HCP Projects and Pinn Bros/Monte Vista Transfer Fees	$3,376,641.53
2022	Preserve System Lease Revenue 2021	$125,929.30
2023	Preserve System Lease Revenue 2022	$172,753.25
2023	Meritage Homes Donation	$150,000.00
2023	Summer Lake Mitigation Fee (Payment 3 of 5, less 2.5% CWF fee)	$487,500.00
2023	Pinn Bros/Monte Vista Transfer Fees	$33,786.48
2024	Preserve System Lease Revenue 2023	$181,368.87
2025	Pinn Bros/Monte Vista Transfer Fees	$8,652.00
2025	Preserve System Lease Revenue 2024	$143,856.00
	TOTAL	$7,853,640.32

The endowment account balance as of January 30, 2026, is $11,691,794.36.

ATTACHMENT

- Excerpt from January 2026 UBS Portfolio Summary Report

UBS Financial Services Inc.
305 Lytton Avenue
Palo Alto CA 94301-1431

ENQ70080575630126 KP 0

Summary of your UBS Portfolio

January 2026

REGIONAL PARKS FOUNDATION
PO BOX 2527
CASTRO VALLEY CA 94546-0527

Your Financial Advisor:
UBS INSTITUTIONAL CONSULTING NORTH STAR ADVISORS
Branch: 650-289-7000/800-544-6611

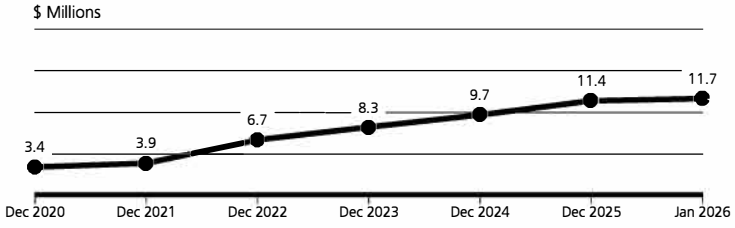
Visit our website:
www.ubs.com/financialservices

Value of your portfolio

	on December 31 ($)	on January 30 ($)
Your assets	11,375,285.79	11,691,794.36
Your liabilities	0.00	0.00
Value of your portfolio	**$11,375,285.79**	**$11,691,794.36**
Accrued interest in value above	$9,158.34	$10,016.60

As a service to you, your portfolio value of $11,691,794.36 includes accrued interest.

Tracking the value of your portfolio



Sources of your portfolio growth during 2026

Value of your portfolio at year end 2025	$11,375,285.79
Net deposits and withdrawals	-$19,313.11
Your investment return:	
Dividend and interest income	$15,713.97
Change in value of accrued interest	$858.26
Change in market value	$319,249.45
Value of your portfolio on Jan 30, 2026	**$11,691,794.36**

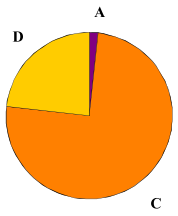
Your portfolio balance sheet

Summary of your assets

		Value on January 30 ($)	Percentage of your portfolio
A	Cash and money balances	200,272.76	1.71%
B	Cash alternatives	0.00	0.00%
C	Equities	8,785,030.91	75.14%
D	Fixed income	2,706,490.69	23.15%
E	Non-traditional	0.00	0.00%
F	Commodities	0.00	0.00%
G	Other	0.00	0.00%
Total assets		**$11,691,794.36**	**100.00%**

Value of your portfolio **$11,691,794.36**

Your current asset allocation



- *Cash and money balances* may include available cash balances, deposit balances at UBS Bank USA and other participating banks through the UBS Bank Sweep Programs and the UBS FDIC-Insured Deposit Program, and money market fund sweep balances. See *Important information about your statement* at the end of this document.

Eye on the markets

	Percentage change	
Index	January 2026	Year to date
S&P 500	1.45%	1.45%
Russell 3000	1.55%	1.55%
MSCI - Europe, Australia & Far East	5.22%	5.22%
Barclays Capital U.S. Aggregate Bond Index	0.11%	0.11%

Interest rates on January 30, 2026
3-month Treasury bills: 3.54%
One-month SOFR: 3.68%

EAST CONTRA COSTA COUNTY HABITAT CONSERVANCY

DATE: February 23, 2026

TO: Governing Board

FROM: Conservancy Public Advisory Committee and Staff (Abigail Fateman)

SUBJECT: **Conservancy Science and Research Grant Program**

RECOMMENDATION

Consider the following actions related to the Conservancy's Science and Research Grant Program:

i) **APPROVE the Request for Proposals (RFP) for the East Contra Costa County Habitat Conservancy's Science and Research Grant Program; and**

ii) **DETERMINE the action requested is not a "project" subject to the California Environmental Quality Act (CEQA) pursuant to CEQA Guidelines Section 15378(b)(4) and/or (5).**

DISCUSSION

In April 2015, the Board directed the Conservancy's Public Advisory Committee (PAC) to provide suggestions for involving individuals, educational organizations, and other public organizations in research opportunities on the Preserve System. The direction specifically referred to the Plan sections related to collaborating with individuals as well as colleges and universities "to conduct research on preserve lands to address key management questions." In its discussion of the monitoring and adaptive management program for the Conservancy Preserve System, the HCP/NCCP contemplates various approaches to inform preserve monitoring and management activities (Chapter 7). One approach that is highlighted is "Directed Science."

CONTINUED ON ATTACHMENT: Yes
ACTION OF BOARD ON: February 23, 2026 APPROVED AS RECOMMENDED: _____
OTHER: _____

VOTE OF BOARD MEMBERS

___ UNANIMOUS

AYES: _____

NOES: _____

ABSENT: _____

ABSTAIN: _____

I HEREBY CERTIFY THAT THIS IS A TRUE AND CORRECT COPY OF AN ACTION TAKEN AND ENTERED ON THE MEETING RECORD OF THE CONSERVANCY GOVERNING BOARD ON THE DATE SHOWN.

ATTESTED

_____

John Kopchik, SECRETARY OF THE EAST CONTRA COSTA COUNTY HABITAT CONSERVANCY

BY: _____, DEPUTY

The Conservancy has engaged in several scientific endeavors (research and pilot projects) with the East Bay Regional Park District (EBRPD) and consulting scientists. These efforts include development of the Historical Ecology Report, studying golden eagle flight patterns to better understand the interactions eagles have with wind turbines, refining the understanding of blooming periods of specific special status plants, monitoring the success of translocated vernal pool crustacean inoculum (fairy shrimp cysts) to constructed/restored wetlands, and studying manzanita and pine tree die-off on Mount Diablo. These studies and pilot projects inform management actions and lay the groundwork for future research, monitoring, and management.

The Conservancy PAC and Governing Board released a Request for Proposals (RFP) to fund small research projects on the Preserve System in 2016, 2017, 2018, 2021, 2023 and 2025. In 2025 there were no responses to the RFP, so no funds were awarded. The PAC recommends releasing the RFP again in 2026.

The grants that have been awarded through this program are shown on Attachment E of the attached RFP. The PAC will review the proposals submitted by the deadline at their August meeting and forward funding recommendations to the Governing Board.

ATTACHMENT

- Conservancy's 2026 Science and Research Grant Program Request for Proposals

East Contra Costa County Habitat Conservancy

East Contra Costa County Habitat Conservancy
Science and Research Grant Program
Request for Proposals 2026

Overview

The East Contra Costa County Habitat Conservancy (Conservancy) is a joint exercise of powers authority formed by Contra Costa County and the Cities of Brentwood, Clayton, Oakley, and Pittsburg to implement the East Contra Costa County Habitat Conservation Plan/Natural Community Conservation Plan (HCP/NCCP or Plan). The HCP/NCCP provides a framework to protect natural resources in eastern Contra Costa County, while streamlining the environmental permitting process for impacts on endangered species. The Plan also provides comprehensive species, wetlands, and ecosystem conservation and contributes to the recovery of endangered species in northern California. The complete Plan can be downloaded from the Conservancy website at www.cocohcp.org.

The heart of the conservation strategy is a system of new preserves linked to existing protected areas to form a network of protected lands in eastern Contra Costa County. In addition to supporting ecosystem processes, habitat, and species, the preserves will also support other uses such as recreation, grazing, and crop production, as long as these uses are compatible with the biological goals and objectives of the HCP/NCCP. The conservation strategy is designed to achieve the biological goals and objectives established for each natural community and the covered species that each community supports (Chapter 2 of the HCP/NCCP). The Conservancy specifically targets the conservation of habitats that support 28 species. These species include plants, invertebrates, amphibians, reptiles, birds, and mammals. A full list of the species is included as Attachment A (Table 3-8).

Under this Science and Research Grant Program (Grant Program), the Conservancy may fund research that endeavors to illuminate, and where possible to resolve, uncertainties associated with adaptive management of natural communities and covered species. Research selected for funding will aid in achieving the biological goals and objectives of the Plan and inform management actions and/or contribute to the general understanding of a covered species. Such research will generally relate to the following:

- Efficacy of natural community enhancement/creation/restoration techniques,
- Refining ecological requirements of covered species,
- Response of covered species and natural communities to implementation of management actions within the Preserve System, or
- Strategies to conduct management or monitoring actions that support and/or lead to better management of natural communities, covered species, and/or on-site cultural resources.

Additional Information Provided

- Attachment A: Species Target List – Excerpt from Chapter 3, Table 3-8.
- Attachment B: Current Land Acquisition Map (Note: these properties, though not open to the public are available for field work. Applicants are encouraged to conduct research on the newly preserved lands.)
- Attachment C: Excerpt from Chapter 7, Table 7-2: Potential Research Projects (Note: these were ideas set forth in the plan prior to implementation. Other research topics that inform land and species management actions are encouraged).
- Attachment D: Excerpt from Chapter 5, Table 5-1: Natural Community-level and Additional Species-specific Biological Goals and Objectives.
- Attachment E: Past and Current Funded Research Efforts sponsored by the ECCC Habitat Conservancy.
- KMZ data (can be used in Google Earth) for the current land acquisitions is available on the Conservancy's website: https://www.cocohcp.org/269/Data .

Eligibility

The Conservancy seeks project proposals across all scientific disciplines that advance the Plan's conservation strategy (HCP/NCCP Chapter 5), monitoring and adaptive management program (HCP/NCCP Chapter 7), and/or inform successful compliance with the biological goals and objectives of the HCP/NCCP (HCP/NCCP Table 5-1, Attachment D). Potential research projects identified by the HCP/NCCP are included in HCP/NCCP Table 7-2 (Attachment C). The outreach and education activities specified in the Plan may also be funded as a part of this Grant Program.

Projects must be located within the HCP/NCCP's Inventory Area. Projects may be proposed by a governmental agency, academic institution, consulting firm, non-profit, or other professional scientific entity, or a partnership between such organizations. The applicant must be able to enter into a contract with the Conservancy and meet insurance and tax reporting requirements. The applicant must also be able to satisfy insurance requirements for the East Bay Regional Park District encroachment permit.

This grant program is intended to produce relevant scientific information that can inform successful conservation and recovery activities. It is intended to recruit new agencies and people to engage in activities on the Preserve.

Grant Program Terms and Conditions

Grant Term

The maximum term of the grant agreement will be 2 years unless otherwise agreed to by all parties to the agreement.

Access Authorization

Prior to commencing work under this grant, individuals working on the grant must coordinate with the Conservancy to ensure proper access authorization is established. This will involve coordination with the Conservancy and the East Bay Regional Park District staff.

Budget

There is a budget of up to $30,000 for this round of awards (2-year cycle). The Conservancy will consider awards of any amount up to $30,000. The Conservancy may choose not to award all of the allocated funds or expand the funds if budget allows. Note that overhead costs may not exceed 5% of the requested funds. Identify any other confirmed sources of funding for the proposed research. Please discuss if your proposal is scalable if full funding is not available.

Matching Funds

The Conservancy has limited funds. It is anticipated that funding provided by the Conservancy will be matched or supplemented by other entities to increase the level of research and to achieve results that integrate broader issues in the research community. Projects providing 25% or more of the project cost as matching or supplemental funds may be awarded more points than those that provide less than 25% matching funds. Matching fund sources may include contributions derived from other available funding sources, program fees, and/or the value of third-party in-kind services (e.g., volunteer and staff services, pro-bono professional services).

Schedule and Reporting

Each proposal must include a project schedule detailing approximate dates of task(s) completion with milestones. If selected, during implementation, applicant will be required to provide an update via email to the Conservancy of project progress at least once every six months. An alternative schedule may be proposed to align with project milestones. A final report, including identified deliverables with a possible presentation to the Conservancy's Public Advisory Committee, will be due at project completion.

Submittal Instruction and Review Process

Before submitting the proposal, check all calculations and ensure that all required items listed below are addressed. Inaccuracies and omissions will be grounds for rejection. All proposals will become part of the Conservancy's official public records and will be available for public review.

Proposal Submittal Requirements

Narratives should be formatted in 12 point typed font and minimum margins of one inch. While there is no restriction on page length, applicants should convey the purpose of the proposal as succinctly as appropriate to convey the necessary information. **All proposals must have separate headings to address each of the seven required elements listed below**:

1. **APPLICANT:** Identify the organization, contact information (i.e., phone, email, mailing address), and individuals who will be implementing the proposal. Include qualifications of organization and key staff or volunteers.

2. **PROJECT TITLE AND DESCRIPTION:** Provide a complete project description including: a concise title of the project, necessary activities and duration of activities. If the project is associated with a specific location, please include a map. Include a list of tasks and/or activities as well as deliverables.
3. **RELATIONSHIP TO THE HCP/NCCP:** Include information on how the project advances the Plan's conservation strategy, supports the land and species management, and/or informs successful compliance with the biological goals and objectives of the HCP/NCCP.
4. **BUDGET:** Provide a budget that includes the requested amount of funding and the proposed use of the funds. If the project includes distinct tasks, the budget should list each separate task for which funds are being requested. Include costs for which the grantee will request funding including: equipment, staffing, travel, and other expenses. **Clearly highlight the amount of funds requested** as well as any other contributions to the projects.
5. **MATCHING FUNDS:** If matching funds are being leveraged, provide relevant information on any matching funds.
6. **PERMITS:** List any local, state or federal permit clearances that have been acquired and/or are needed, where applicable. If a recovery permit(s) pursuant to Section 10(a)(1)(a) of the ESA is required to complete the research, identify the individual(s) with that qualification.
7. **INSURANCE:** Grantees accessing the Preserve System must provide proof of insurance listing the East CCC Habitat Conservancy and the East Bay Regional Park District as additional insured parties. Insurance requirements will be provided upon award and are available upon request.
8. **SCHEDULE:** Include a project schedule detailing approximate dates of task(s) (start and end dates) and deliverables. Refer to the 'Schedule' section on Page 5 for key Conservancy deadlines.

Criteria for Decision-Making

Proposals will be evaluated on the following criteria, with points awarded up to the following maximum points per criteria (Max: 110 points):

- Organizational capacity and relevant experience – 10 points
- Evidence project supports the conservation strategy and/or biological goals and objectives of the HCP/NCCP – 30 points
- Project addresses a data/information gap in land and species management practices in the Preserve System – 25 points
- Budget narrative and financial management/ percentage of project cost provided by Applicant's Matching Funds – 20 points
- Project readiness – Extent that the organization has completed initial planning and permitting requirements and approvals – 15 points
- Discretionary Points: Available for additional aspects of the project or applicant qualifications including: engaging youth/students, volunteers, public education and outreach. Additional consideration will be given to applicants with no open research grants with the Conservancy. - 10 points

Schedule

The Conservancy will accept research proposals until Monday, August 3, 2026 at 5 p.m. The Conservancy will review applications at the August 13th Public Advisory Committee meeting and consider final funding decisions on the proposals at the August 24th Conservancy Governing Board meeting. Work may begin on research projects as early as September 14th, 2026 if all administrative paperwork (contracts, insurance, permits, EBRPD scientific research permit, etc.) are complete. These dates are subject to change.

All meetings are open to the public. Agendas for these meetings are available on the Conservancy's website. Depending on the proposals received and/or the funding available, the Conservancy may choose to fund multiple proposals. The Conservancy may also choose to fund no proposals.

Proposals must be submitted **electronically as a PDF** to Maureen Parkes at Maureen.Parkes@dcd.cccounty.us by Monday, August 3, 2026 **at 5 p.m.**

Attachments

- Attachment A: Species Target List – Excerpt from Chapter 3, Table 3-8.
- Attachment B: Current Land Acquisition Map (Note these properties, though not open to the public are available for field work. Applicants are encouraged to conduct research on the newly preserved lands.)
- Attachment C: Excerpt from Chapter 7, Table 7-2: Potential Research Projects (Note: these were ideas set forth in the plan prior to implementation. Other research topics that inform land and species management actions are encouraged).
- Attachment D: Excerpt from Chapter 5, Table 5-1: Natural Community-level and Additional Species-specific Biological Goals and Objectives and Associated Conservation Measures.
- Attachment E: Past and Current Funded Research Efforts sponsored by the ECCC Habitat Conservancy.

Table 3-8. Special-Status Species Proposed for Coverage

Common Name	Scientific name	Status[1] State	Status[1] Federal
Mammals			
Townsend's western big-eared bat	*Corynorhinus townsendii townsendii*	CSC	–
San Joaquin kit fox	*Vulpes macrotus mutica*	ST	FE
Birds			
Tricolored Blackbird	*Agelaius tricolor*	CSC-1	–
Golden Eagle	*Aquila chrysaetos*	FP	BGPA
Western Burrowing Owl	*Athene cunicularia hypugea*	CSC-1	–
Swainson's Hawk	*Buteo swainsoni*	ST	–
Reptiles			
Silvery legless lizard	*Anniella pulchra pulchra*	CSC	–
Alameda whipsnake	*Masticophis lateralis euryxanthus*	ST	FT
Giant garter snake	*Thamnophis gigas*	ST	FT
Western pond turtle	*Clemmys marmorata*	CSC	–
Amphibians			
California tiger salamander	*Ambystoma californiense*	CSC	FT
California red-legged frog	*Rana aurora draytonii*	–	FT
Foothill yellow-legged frog	*Rana boylii*	CSC	–
Invertebrates			
Longhorn fairy shrimp	*Brachinecta longiantenna*	–	FE
Vernal pool fairy shrimp	*Brachinecta lynchi*	–	FT
Midvalley fairy shrimp	*Brachinecta mesovallensis*	–	–
Vernal pool tadpole shrimp	*Lepidurus packardi*	–	FE
Plants		**CNPS**	
Mount Diablo manzanita	*Arctostaphylos auriculata*	1B	–
Brittlescale	*Atriplex depressa*	1B	–
San Joaquin spearscale	*Atriplex joanquiniana*	1B	–
Big tarplant	*Blepharizonia plumosa*	1B	–
Mount Diablo fairy lantern	*Calochortus pulchellus*	1B	–
Recurved larkspur	*Delphinium recurvatum*	1B	–
Round-leaved filaree	*Erodium macrophyllum*	1B	–
Diablo helianthella	*Helianthella castanea*	1B	–
Brewer's dwarf flax	*Hesperolinon breweri*	1B	–
Showy madia	*Madia radiata*	1B	–
Adobe navarretia	*Navarretia nigelliformis* ssp. *nigelliformis*	–	–

[1]Status:

Federal
FE Federally Endangered
FT Federally Threatened
BGPA Bald and Golden Eagle Protection Act

State
ST State Listed as Threatened
CSC California Special Concern Species
CSC-1 Bird Species of Special Concern; First Priority
FP Fully Protected

California Native Plant Society
1B Rare or Endangered in California and Elsewhere

East Contra Costa County HCP/NCCP Preserve System Lands as of 12/12/2025

Agenda Item 4c
Attachment B

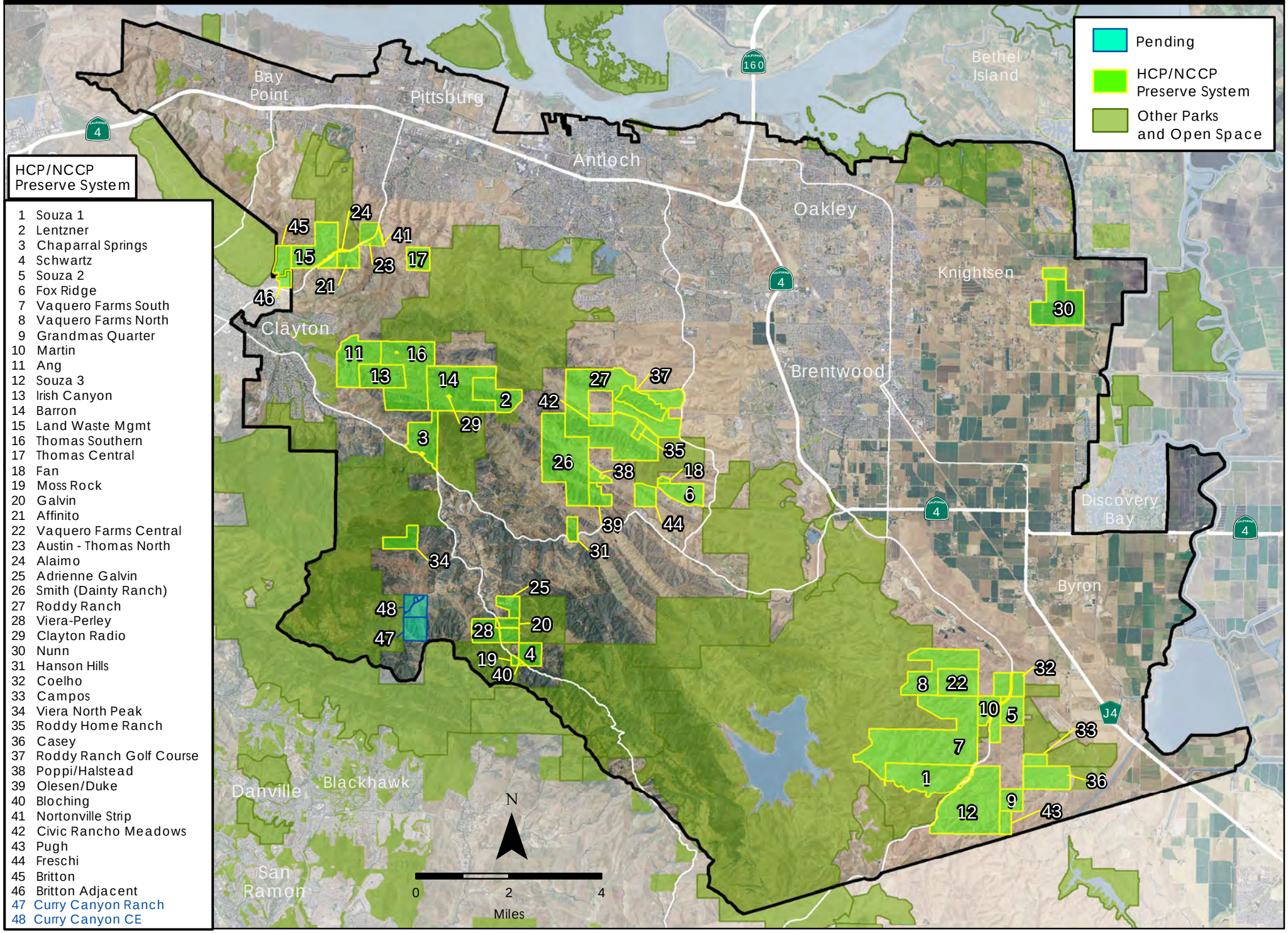


Table 7-2. Potential Research Projects

Conservation Measure (Chapter 5 of the Plan)	Potential Research Projects
2.2 Manage Wetlands and Ponds	• Determine the effectiveness of small checkdams in arresting stream-channel erosion in seasonal alkali wetlands. • Use experimental-management techniques to test different creation/restoration methods (i.e., use pre- and post-treatment monitoring, replication, controls). • Conduct pilot project to determine the relative benefit to California red-legged frog, California tiger salamander, and western pond turtle of different pond treatments such as access/exclusion by livestock, vegetated/unvegetated banks, and pond depth and duration.
2.4 Manage Grassland	• Develop a pilot project to determine the feasibility of grassland enhancement on a large scale: investigate the effect of management actions on native grassland species. • Develop projects that test the effect of different grazing practices (e.g., grazing intensity, duration, season, type of livestock) on the maintenance and regeneration of native grasses and forbs. If possible, combine grazing treatments with other management techniques such as prescribed burns and hand seeding to detect interactions among management treatments.
2.5 Manage Natural Burrow Availability and Prey Base in Grasslands	• Develop a pilot project of management methods to increase prey for covered grassland species. Consider using methods already developed and applied to the Los Vaqueros Watershed to monitor ground squirrel population density as an indicator of habitat quality for San Joaquin kit fox.
2.6 Manage Oak Woodland and Oak Savanna	• Test alternative methods of oak plantings, irrigation, and herbivory protection to maximize sapling survival.
2.10 Restore Streams and Riparian Woodland/Scrub to Compensate for Habitat Loss and Increase Biodiversity	• Initiate a pilot project to develop restoration measures for individual sites or stream reaches based on specific geomorphic, hydraulic, and hydrologic conditions; extent and quality of existing habitats (e.g., percent native vegetation and presence/absence of exotic wildlife such as bullfrogs or cowbirds); existing wildlife use; and the potential for adverse effects (e.g., disturbance and/or removal of existing wetland habitat.

Table 7-2. Continued

Conservation Measure (Chapter 5 of the Plan)	Potential Research Projects
3.1 Protect and Enhance Roosting Habitat for Townsend's Western Big-eared Bat	• Develop a pilot project to evaluate the suitability of artificial hibernacula for use by Townsend's big-eared bat.
3. 4 Temporarily Create Artificial Burrows in Grasslands to Attract and Retain Burrowing Owls	• Determine the most effective artificial-burrow designs and placement strategies for attracting burrowing owls and ensuring reproductive success of owls that use artificial burrows.
3.5 Install Temporary Artificial Perches to Attract and Retain Burrowing Owl	• Determine the effectiveness of artificial perch sites in attracting use by burrowing owls and the most effective perch designs and placement strategies (e.g., height above ground level, location relative to available burrows).
3.10 Plant Salvage when Impacts are Unavoidable	• Use pilot projects to develop methods for salvaging and propagating covered-plant species from impact sites and for reestablishing salvaged plants at new locations to establish new populations.

Table 5-1. Natural Community-level and Additional Species-specific Biological Goals and Objectives and Associated Conservation Measures

Covered Species Expected to Benefit from Wetlands (and other Aquatic) Biological Goals and Objectives:

Tricolored blackbird
California red-legged frog
California tiger salamander
Giant garter snake
Western pond turtle
Vernal pool fairy shrimp
Vernal pool tadpole shrimp
Longhorn fairy shrimp
Midvalley fairy shrimp
Adobe navarretia
Brittlescale [Grassland]

Notes:

- Goals and objectives are organized by natural community type. Community-level goals and objectives that support multiple covered species are presented first within each section. Species-specific goals and objectives are developed and presented only when the community-level goals do not adequately address the species' needs.
- Habitat shown in brackets is the habitat with which the species is primarily associated; any specific Biological Goals and Objectives pertaining to this species are addressed in their primary habitat.

Wetlands (and other Aquatic) Biological Goals and Objectives	Conservation Measures
Goal 1: Preserve wetlands and ponds in the inventory area	
Objective 1.1. Acquire perennial wetlands at a ratio of 1:1 of wetted acres (estimated to be 75 wetted acres with the maximum urban development area) and protect as part of the Preserve System	**Conservation Measure 1.1.** Acquire Lands for Preserve System
Objective 1.2. Acquire seasonal wetlands at a ratio of 3:1 of wetted acres (estimated to be 177 acres of seasonal wetland complex with the maximum urban development area) and protect as part of the Preserve System	**Conservation Measure 1.3.** Prepare and Implement Agricultural Management Plans for Cultivated Agricultural Lands
Objective 1.3. Acquire alkali wetlands at a ratio of 3:1 of wetted acres (estimated to be 96 acres of alkali wetland complex with the maximum urban development area) and protect as part of the Preserve System in Zones 2, 5, and 6	
Objective 1.4. Acquire ponds at a ratio of 2:1 of wetted acres (estimated to be 16 wetted acres with the maximum urban development area) and protect as part of the Preserve System	
Objective 1.5. Acquire at least seven of the 13 ponds in Subzone 2c to provide suitable breeding habitat for tricolored blackbird, California tiger salamander, California red-legged frog, and/or western pond turtle	
Objective 1.6. Acquire slough/channel at a ratio of 0.5:1 of wetted acres (estimated to be 36 wetted acres with the maximum urban development area) and protect as part of the Preserve System	
Objective 1.7. Acquire aquatic (open water) at a ratio of 1:1 of wetted acres (estimated to be 17 wetted acres with the maximum urban development area) and protect as part of the Preserve System	
Objective 1.8. Preserve and maintain contiguous wetland-upland complexes	

Table 5-1. Continued

Wetlands (and other Aquatic) Biological Goals and Objectives	Conservation Measures
Goal 2: Maintain and enhance hydrogeomorphic and ecological function of wetlands and ponds to promote covered species, native biological diversity, and habitat heterogeneity	
Objective 2.1. Maintain or increase native emergent vegetation where appropriate	**Conservation Measure 1.2.** Prepare and Implement an Exotic Plant Control Program for the Preserve System
Objective 2.2. Reduce sediment deposition and transport where appropriate	
Objective 2.3. Maintain or increase wetland and pond capacity and water duration as appropriate.	**Conservation Measure 1.3.** Prepare and Implement Management Plans for Cultivated Agricultural Lands
Objective 2.4. Maintain or increase flows to and connectivity among wetlands and wetland complexes as appropriate	**Conservation Measure 2.2.** Manage Wetlands and Ponds
Objective 2.5. Eliminate or reduce non-native animals	
Objective 2.6. Eliminate or reduce exotic plants	
Objective 2.7. Maintain or enhance upland habitat in close proximity to wetlands and ponds to support the life-history requirements of wetland-dependent covered species	
Goal 3: Restore wetlands and create ponds in Preserve System to compensate for permanent loss of these habitats	
Objective 3.1. Restore perennial wetlands in-kind at a ratio of 1:1 of wetted acres (estimated to be 75 wetted acres with the maximum urban development area)	**Conservation Measure 2.3.** Restore Wetlands and Create Ponds
Objective 3.2. Restore alkali wetlands in-kind at a ratio of 2:1 of wetted acres (estimated to be 64 acres of alkali wetland complex with the maximum urban development area)	
Objective 3.3. Restore seasonal wetlands in-kind at a ratio of 2:1 of wetted acres (estimated to be 118 acres of seasonal wetland complex with the maximum urban development area)	
Objective 3.4. Create ponds in-kind at a ratio of 1:1 (estimated to be 8 acres with the maximum urban development area) to support California tiger salamander, California red-legged, and/or western pond turtle	
Objective 3.5. Compensate for loss of slough/channel by either restoring slough/channel at a ratio of 1:1 where feasible or restoring riparian woodland/scrub in Zone 6 at a ratio of 0.5:1	
Objective 3.6. Compensate for loss of aquatic (open water) by creating ponds at a ratio of 0.5:1 (estimated to be 9 acres of ponds with the maximum urban development area) to support California tiger salamander, California red-legged, and/or western pond turtle	
Objective 3.7. Compensate for loss of aquatic (open water) by creating ponds at a ratio of 0.5:1 (estimated to be 9 acres of ponds with the maximum urban development area) to support California tiger salamander, California red-legged, and/or western pond turtle	

Table 5-1. Continued

Wetlands (and other Aquatic) Biological Goals and Objectives	Conservation Measures
Goal 4: Restore wetlands and create ponds in the Preserve System to contribute to recovery of covered species	
Objective 4.1. Restore 10 wetted acres of perennial wetlands	**Conservation Measure 2.3.** Restore Wetlands and Create Ponds
Objective 4.2. Restore 5 wetted acres of alkali wetlands	
Objective 4.3. Restore 20 wetted acres of seasonal wetlands	
Objective 4.4. Create 8 acres of ponds to support California tiger salamander, California red-legged, and/or western pond turtle	
Goal 5: Enhance habitat for tricolored blackbird in the Preserve System	
Objective 5.1. Restore perennial wetlands so that at least 25% will provide breeding habitat	**Conservation Measure 2.2.** Manage Wetlands and Ponds
Objective 5.2. Restore perennial wetlands to provide breeding habitat at least 1 mile from black-crowned night heron colonies and within flight distance of blackbird foraging habitat	**Conservation Measure 2.3.** Restore Wetlands and Create Ponds **Conservation Measure 3.2.** Minimize Predation on Tricolored Blackbird Colonies
Goal 6: Compensate for temporary and permanent loss of giant garter snake habitat	
Objective 6.1. Replace suitable upland and aquatic habitat at a ratio of 1:1 to 3:1 according to USFWS guidelines	**Conservation Measure 3.6.** Compensate for Loss of Giant Garter Snake Habitat
Objective 6.2. Emphasize the restoration of suitable habitat for giant garter snake on Dutch Slough	
Goal 7: Maintain or increase the population and distribution of western pond turtle	
Objective 7.1. Increase number and distribution of basking sites and underwater refugia in ponds	**Conservation Measure 3.7.** Enhance Habitat for Western Pond Turtle
Goal 8: Compensate for loss of occupied covered shrimp habitat	
Objective 8.1. Preserve occupied habitat within the Preserve System at a ratio of 3:1 or dedicate an equivalent number of mitigation bank credits	**Conservation Measure 3.8.** Compensate for Loss of Occupied Covered Shrimp Habitat
Objective 8.2. Restore suitable habitat within the Preserve System at a ratio of 2:1 or dedicate an equivalent number of mitigation bank credits	
Goal 9: Protect populations of adobe navarretia within wetlands	
Objective 9.1. Identify, protect, and maintain populations of adobe navarretia in the inventory area	**Conservation Measure 1.1.** Acquire Lands for Preserve System

Table 5-1. Continued

Covered Species Expected to Benefit from Grassland Biological Goals and Objectives	
San Joaquin kit fox	Recurved larkspur
Townsend's big-eared bat	Round-leaved filaree
Western burrowing owl	Showy madia [Oak woodland]
Golden eagle	Swainson's hawk [Streams and Riparian woodland/scrub]
Silvery legless lizard	Tricolored blackbird [Wetlands]
Big tarplant	Alameda whipsnake [Chaparral/scrub]
San Joaquin spearscale	Western pond turtle [Wetlands]
Brittlescale	California tiger salamander [Wetlands]
	California red-legged frog [Wetlands]

Grassland Biological Goals and Objectives	Conservation Measures
Goal 10: Preserve sufficient habitat in the inventory area to maintain viable populations of grassland-dependent covered species	
Objective 10.1. Preserve 13,000 acres of annual grassland and 900 acres of alkali grassland	**Conservation Measure 1.1.** Acquire Lands for Preserve System
Objective 10.2. Protect native grassland alliances within the Preserve System	
Goal 11: Enhance grassland to promote native biological diversity and habitat heterogeneity	
Objective 11.1. Increase the relative cover of native grasses and forbs in native grassland vegetation alliances and other grassland types	**Conservation Measure 1.4.** Prepare and Implement an Exotic Plant Control Program for the Preserve System
Objective 11.2. Increase structural diversity by creating and maintaining a mosaic of grassland types and conditions	**Conservation Measure 2.4.** Manage Grassland
Objective 11.3. Reduce the biomass, cover, and extent of exotic plants (i.e., non-native invasive plants) in the Preserve System	
Goal 12: Increase availability of burrows within grassland for San Joaquin kit fox, California tiger salamander, California red-legged frog, and western burrowing owl	
Objective 12.1. Increase the number and distribution of California ground squirrel burrows	**Conservation Measure 2.5.** Manage Natural Burrow Availability and Prey Base in Grasslands

Table 5-1. Continued

Grassland Biological Goals and Objectives	Conservation Measures
Goal 13: Preserve the most important movement routes and core habitat for San Joaquin kit fox	**Conservation Measure 1.1.** Acquire Lands for Preserve System
Objective 13.1. Preserve 2,500 acres of annual grassland in Deer, Horse, and Lone Tree Valleys (Subzones 2e, 2f, and 2h) to protect, to the extent feasible, the two most important movement routes for San Joaquin kit fox between Black Diamond Mines Regional Preserve and Cowell Ranch State Park	
Objective 13.2. Preserve an important movement route for San Joaquin kit fox between Alameda County and Contra Costa County by protecting habitat in Zone 5 between the County line, the Byron Airport Habitat Mitigation Lands, and the Los Vaqueros Watershed	
Objective 13.3. Preserve 5,300 acres of annual grassland and 750 acres of alkali grassland in Subzones 5a, 5c, and 5d as suitable core habitat	
Goal 14: Maintain or increase population size and distribution of Townsend's western big-eared bat in the Preserve System	
Objective 14.1. Preserve hibernacula and maternity roosts of Townsend's western big-eared bat	**Conservation Measure 1.1.** Acquire Lands for Preserve System
Objective 14.2. Enhance roosting habitat by protecting any abandoned mine, cave, or building in the Preserve System and, if feasible, creating artificial hibernacula	**Conservation Measure 1.5.** Prepare and Implement a System-wide Recreation Plan for the Preserve System
	Conservation Measure 3.1. Protect and Enhance Roosting Habitat for Townsend's Western Big-Eared Bat
Goal 15: Maintain or increase population size and distribution of golden eagles in the inventory area	
Objective 15.1. Acquire land in the Preserve System that includes occupied nests and suitable nest sites	**Conservation Measure 1.1.** Acquire Lands for Preserve System
Objective 15.2. Retire wind turbine leases within the Preserve System, when feasible	**Conservation Measure 3.3.** Protect Golden Eagle Nest Sites within Preserve System
Goal 16: Maintain or increase population size and distribution of western burrowing owl	
Objective 16.1. Install artificial burrows and perches as temporary attractants, where appropriate	**Conservation Measure 1.1.** Acquire Lands for Preserve System
	Conservation Measure 3.4. Temporarily Create Artificial Burrows in Grasslands to Attract and Retain Burrowing Owls
	Conservation Measure 3.5. Install Temporary Artificial Perches to Attract and Retain Burrowing Owls

Grassland Biological Goals and Objectives	Conservation Measures
Goal 17: Protect in the Preserve System at least 11 unprotected occurrences of grassland-dependent covered plants	
Objective 17.1. Protect populations of covered plants that are at least as large and as healthy* as populations lost to covered activities	**Conservation Measure 1.1.** Acquire Lands for Preserve System
Objective 17.2. Protect at least two occurrences of brittlescale outside currently protected public lands	
Objective 17.3. Protect at least three occurrences of big tarplant outside currently protected public lands	
Objective 17.4. Protect at least two occurrences of recurved larkspur outside currently protected public lands	
Objective 17.5. Protect at least two occurrences of round-leaved filaree outside currently protected public lands	
Goal 18: Enhance populations of grassland-dependent covered plants	
Objective 18.1. Increase population size and distribution of grassland-dependent covered plants, where feasible and biologically desirable	**Conservation Measure 3.9.** Conduct Experimental Management to Enhance Covered Plant Populations

Covered Species Expected to Benefit from Oak Woodland Biological Goals and Objectives:	
Showy madia	California tiger salamander [Wetlands]
San Joaquin kit fox [Grassland]	Western pond turtle [Wetlands]
Golden eagle [Grassland]	Mt. Diablo fairy lantern [Chaparral/scrub]
Silvery legless lizard [Grassland]	Diablo helianthella [Chaparral/scrub]
California red-legged frog [Wetlands]	Brewer's dwarf flax [Chaparral/scrub]

Oak Woodland Biological Goals and Objectives	Conservation Measures
Goal 19: Preserve oak woodland and oak savanna in the inventory area.	
Objective 19.1. Protect 900 acres of oak woodland and oak savanna	**Conservation Measure 1.1.** Acquire Lands for Preserve System
Goal 20: Maintain the current canopy coverage of oaks and other native overstory trees within oak woodland and oak savanna land-cover types	
Objective 20.1. Ensure tree recruitment and age structure are adequate to replace lost trees and maintain canopy coverage	**Conservation Measure 1.4.** Prepare and Implement an Exotic Plant Control Program for the Preserve System
Objective 20.2. Reduce competition between tree seedlings and other plants to enhance survival rates of tree seedlings and saplings	**Conservation Measure 2.6.** Manage Oak Woodland and Oak Savanna

Table 5-1. Continued

Oak Woodland Biological Goals and Objectives	Conservation Measures
Goal 21: Enhance oak woodland and oak savanna to promote biological diversity and habitat heterogeneity	
Objective 21.1. Increase the proportion of native species in oak woodland and oak savanna understories	**Conservation Measure 2.6.** Manage Oak Woodland and Oak Savanna
Objective 21.2. Leave in place snags, dead trees, and downed wood	
Goal 22: Restore oak savanna to compensate for its loss from covered activities	
Objective 22.1. Replace oak savanna vegetation alliances (in kind) that are lost to covered activities at a ratio of 1:1	**Conservation Measure 1.1.** Acquire Lands for Preserve System
Objective 22.2 Establish within 50 years of initiating restoration a sufficient number of blue or valley oak trees to provide a percent tree canopy cover equal to or up to 10% greater than the percent canopy cover in oak savanna stands removed by covered activities	**Conservation Measure 2.7.** Compensate for loss of Oak Savanna
Goal 23: Protect populations of showy madia within oak woodland and grassland.	
Objective 23.1. Identify and maintain or increase populations of showy madia in the inventory area	**Conservation Measure 1.1.** Acquire Lands for Preserve System
	Conservation Measure 3.9. Conduct Experimental Management to Enhance Covered Plant Populations

Covered Species Expected to Benefit from Chaparral/Scrub Biological Goals and Objectives	
Alameda whipsnake	Diablo helianthella
Mount Diablo manzanita	Brewer's dwarf flax
Mount Diablo fairy lantern	

Chaparral/Scrub Biological Goals and Objectives	Conservation Measures
Goal 24: Preserve chaparral/scrub in the inventory area	
Objective 24.1. Protect 550 acres of chaparral/scrub that support a diversity of native plant alliances including chaparral, California sage scrub, and black sage scrub	**Conservation Measure 1.1.** Acquire Lands for Preserve System
Goal 25: Enhance chaparral/scrub to promote native biological diversity and habitat heterogeneity	
Objective 25.1. Maintain or mimic the natural fire regime	**Conservation Measure 2.8.** Manage Chaparral/Scrub
Objective 25.2. Maintain a mosaic of stand ages and species composition across the landscape	
Objective 25.3. Promote canopy gaps within chaparral/scrub patches	

Table 5-1. Continued

Chaparral/Scrub Biological Goals and Objectives	Conservation Measures
Goal 26: Contribute substantially to the recovery of Alameda whipsnake in the inventory area by protecting and enhancing chaparral/scrub	
Objective 26.1. Preserve an average of 70% of currently unprotected core and perimeter whipsnake habitat in Subzones 2a, 2b, 2c, 3a, and Zone 4	**Conservation Measure 1.1.** Acquire Lands for Preserve System **Conservation Measure 2.8.** Manage Chaparral/Scrub
Objective 26.2. Preserve whipsnake movement habitat between patches of core whipsnake habitat, including the linkage in Zone 2 and Subzone 3a between Black Diamond Mines Regional Preserve and Mount Diablo State Park	
Objective 26.3. Maintain diverse canopy-coverage stages	
Goal 27: Protect in the Preserve System at least eight occurrences of chaparral-dependent covered plants	
Objective 27.1. Protect populations of covered plants that are at least as large and as healthy* as populations lost to covered activities	**Conservation Measure 1.1.** Acquire Lands for Preserve System
Objective 27.2. Protect at least two occurrences of Mt. Diablo manzanita outside currently protected public lands	
Objective 27.3. Protect at least two occurrences of Diablo helianthella outside currently protected public lands	
Objective 27.4. Protect at least three occurrences of Brewer's dwarf flax outside currently protected public lands	
Objective 27.5. Protect at least one occurrence of Mount Diablo fairy lantern outside currently protected public lands	

Covered Species Expected to Benefit from Streams and Riparian Woodland/Scrub Biological Goals and Objectives	
Swainson's hawk	Western pond turtle [Wetlands]
Foothill yellow-legged frog	California red-legged frog [Wetlands]

Streams and Riparian Woodland/Scrub Biological Goals and Objectives	Conservation Measures
Goal 28: Preserve streams and riparian woodland /scrub in the inventory area	
Objective 28.1. Protect a minimum of 5 linear miles of stream to compensate for permanent loss of habitat	**Conservation Measure 1.1.** Acquire Lands for Preserve System
Objective 28.2. Acquire riparian/scrub at a ratio of 2:1 (estimated to be 70 acres for maximum urban development area) and protect as part of the Preserve System	

Table 5-1. Continued

Streams and Riparian Woodland/Scrub Biological Goals and Objectives	Conservation Measures
Goal 29: Enhance riparian woodland/scrub to promote native biological diversity and habitat heterogeneity	
Objective 29.1. Maintain or increase the cover, width, and connectivity of existing riparian vegetation consistent with current stream and habitat function	**Conservation Measure 1.4.** Prepare and Implement an Exotic Plant Control Program for the Preserve System
Objective 29.2. Reduce the biomass, cover, and extent of exotic plants in the Preserve System	**Conservation Measure 2.9.** Manage Streams and Riparian Woodland/Scrub
	Conservation Measure 2.10. Restore Streams and Riparian Woodland/Scrub to Compensate for Habitat Loss and to Increase Biodiversity
Goal 30: Maintain and enhance instream aquatic habitat for covered species and native fish	
Objective 30.1. Promote the natural disturbance regime (e.g., flooding, sediment deposition, and scour)	**Conservation Measure 2.9.** Manage Streams and Riparian Woodland/Scrub
Objective 30.2. Reduce water temperature and temperature variation	**Conservation Measure 2.10.** Restore Streams and Riparian Woodland/Scrub to Compensate for Habitat Loss and to Increase Biodiversity
Objective 30.3. Increase inputs of organic matter where appropriate	
Objective 30.4. Reduce sediment input and downstream sediment transport and deposition, where appropriate	
Objective 30.5. Maintain and enhance instream structural diversity, where appropriate	
Objective 30.6. Improve stream flow and connectivity for native aquatic wildlife	
Objective 30.7. Control or reduce non-native animals including bullfrogs and fish	
Goal 31: Restore streams and riparian woodland/scrub	
Objective 31.1. Restore at least 20 acres of riparian woodland/scrub in addition to that required above as compensation for habitat loss	**Conservation Measure 2.9.** Manage Streams and Riparian Woodland/Scrub
Objective 31.2. Replace riparian woodland/scrub at a ratio of 1:1 in the Preserve System to compensate for its loss from covered activities (estimated to be 30 acres with maximum urban development area)	**Conservation Measure 2.10.** Restore Streams and Riparian Woodland/Scrub to Compensate for Habitat Loss and to Increase Biodiversity
Objective 31.3. Restore species richness and diversity, vegetative cover, wildlife habitat function and hydrologic function	
Goal 32: Maintain or increase population size and distribution of Swainson's hawk in the inventory area	
Objective 32.1. Acquire land in the Preserve System that includes occupied nests and suitable nest sites	**Conservation Measure 1.1.** Acquire Lands for Preserve System
Objective 32.2. Acquire at least 3,750 acres of modeled suitable foraging habitat for Swainson's Hawk near Kellogg Creek, near Marsh Creek, adjacent to Dutch Slough, or in suitable grassland areas	

Table 5-1. Continued

Streams and Riparian Woodland/Scrub Biological Goals and Objectives	Conservation Measures
Goal 33: Protect, maintain, or increase populations of foothill yellow-legged frog	
Objective 33.1. Acquire land in Zone 4 along the upper reaches of Marsh Creek where high-quality breeding and dispersal habitat for foothill yellow-legged frog exists	**Conservation Measure 1.1.** Acquire Lands for Preserve System

* Healthy populations of plants are defined by physical condition, age structure, reproductive success, diversity and availability of suitable habitat, long-term observation of population.

Past and Current Grant Funded Research Efforts

Note: Cells in grey are funded through the Conservancy's small grant program

Organization	Amount	Source	Topic	Dates
San Francisco Estuary Institute / Conservancy / Contra Costa Watershed Forum	$270,000	CA Dept. of Fish and Wildlife & CA Coastal Conservancy	Historical Ecology of East Contra Costa County	Complete 2011
East Bay Regional Park District (EBRPD)	$140,000	Moore Foundation	Monitoring Golden Eagle movement patterns and interactions with turbines in the Vasco/Altamont Wind Resource Area	Complete 2017
East Bay Regional Park District (EBRPD)	$110,000	Moore Foundation	Bat mortality associated with Wind Turbine in the Vasco/Altamont Wind Resource Area	Complete 2018
Nomad Ecology	$50,000	CA Dept. of Fish and Wildlife	Rare plant management/Invasive plant control	Complete 2018
East Bay Regional Park District (EBRPD)/ Conservancy/Vollmar Consulting	$121,691	U.S. Bureau of Reclamation/ U.S. Fish and Wildlife	This is a proposal to study longhorn fairy shrimp. The selected sites are not on Conservancy Preserve properties -- they are adjacent, at Vasco Caves and on CCWD property.	Complete 2021
Nomad Ecology	$50,000	CA Dept. of Fish and Wildlife	Developing weed mapping techniques using remote sensing	Complete 2019
East Bay Regional Park District	$5,502	HCP/NCCP grant program	Fossorial mammal burrow monitoring in Vasco Caves and Vasco Hills Regional Preserves	Complete 2022
East Bay Regional Park District	$9,960	HCP/NCCP grant program	Repeat Raptor Surveys of 2006-2007 to Measure Responses to wind turbine decommissioning	Complete 2022
US Geological Survey/East Bay Regional Park District	$14,970	HCP/NCCP grant program	Study of Ecological Requirements and Conservation Priorities for Golden Eagles	Complete 2020
San Francisco State University	$5,000	HCP/NCCP grant program	Analyzing Fungal Disease Risk of California Tiger Salamander	Incomplete 2021
Nomad Ecology	$48,000	CA Dept. of Fish and Wildlife	Burrowing owl population survey of Byron/Vasco area.	Complete 2019
East Bay Regional Park District / Smallwood	$110,000	Moore Foundation	Dog Detections of Bat and Bird Fatalities in the Altamont	Complete 2020
Save Mount Diablo	$30,000	HCP/NCCP grant program	Manzanita and Pine Tree Die off on Mount Diablo	Complete 2022
Nomad Ecology	$20,000	CA Dept. of Fish and Wildlife	Endemic Manzanita Die-off: Mapping, Sampling, and Analysis	Complete 2025
US Geological Survey/East Bay Regional Park District	$45,000	Contra Costa County Avian Fund	County-wide Golden Eagle Nest Surveys	Complete 2024

Contra Costa Resource Conservation District	$29,967	HCP/NCCP grant program	eDNA monitoring of restored livestock ponds	Complete 2025
Contra Costa Resource Conservation District	$49,400	CA Dept. of Fish and Wildlife	Tracking Movements and Identifying Nesting Habitat for Western Pond Turtles	Incomplete 2028

Note: These efforts listed in the table above are independent of the Conservancy's ongoing preserve management and monitoring activities of restoration projects and the preserve.

EAST CONTRA COSTA COUNTY
HABITAT CONSERVANCY

DATE: February 23, 2026

TO: Governing Board

FROM: Conservancy Staff (Abigail Fateman)

SUBJECT: The U.S. Army Corps of Engineers' Regional General Permit (RGP 1) and use of Conservancy's existing restoration projects for the RGP 1 and the In Lieu Fee Program.

RECOMMENDATION

Consider the following actions related to the U.S. Army Corps of Engineers' Regional General Permit (RGP 1) and use of Conservancy's existing restoration projects for the RGP 1 and the In Lieu Fee Program:

i) **AUTHORIZE the Executive Director to finalize and sign letters to the U.S. Army Corps of Engineers reporting on the use of RGP 1 and committing to support management of the Conservancy's previously restored wetlands to facilitate their use as mitigation for projects covered by Regional General Permit 1 and the East Contra Costa County In Lieu Fee Program; and**

ii) **DETERMINE the action requested is exempt from the California Environmental Quality Act pursuant to CEQA Guidelines Section 15307 and/or 15308.**

BACKGROUND

Since 2012, 31 projects that have received permit coverage through the East Contra Costa County Habitat Conservation Plan and Natural Community Conservation Plan (HCP/NCCP) have also received permit coverage under RGP 1 and have therefore also required mitigation for impacts to federal waters under the Clean Water Act. The Conservancy has been required to report to the U.S. Army Corps of Engineers (USACE) on projects that have used RGP 1, and on wetland mitigation projects that have been completed, to stay in compliance with the interim mitigation strategy associated with the Regional General Permit. This requirement applied to the Conservancy until such time as a programmatic agreement, known as the East Contra Costa County In-Lieu Fee Program Enabling Instrument (ILF Agreement), is put in place to establish

CONTINUED ON ATTACHMENT: Yes
ACTION OF BOARD ON: February 23, 2026 APPROVED AS RECOMMENDED: _____
OTHER: _____

VOTE OF BOARD MEMBERS

___ UNANIMOUS

AYES: _____
NOES: _____
ABSENT: _____
ABSTAIN: _____

I HEREBY CERTIFY THAT THIS IS A TRUE AND CORRECT COPY OF AN ACTION TAKEN AND ENTERED ON THE MEETING RECORD OF THE CONSERVANCY GOVERNING BOARD ON THE DATE SHOWN.

ATTESTED

_____
John Kopchik, SECRETARY OF THE EAST CONTRA COSTA COUNTY HABITAT CONSERVANCY

BY:_____, DEPUTY

an In-Lieu Fee Program (ILF Program) and memorialize the process by which the Conservancy will utilize fee revenue to fund wetland restoration projects to satisfy the RGP 1 mitigation requirements. With the approval of the ILF Agreement in late 2025, this is the final reporting and financial assurances letter that will be sent to the USACE for the RGP 1 interim mitigation strategy.

For the past several years, as the ILF Agreement was negotiated, the interim mitigation strategy has been used to coordinate mitigation required under RGP 1 with HCP/NCCP wetland restoration projects funded by HCP/NCCP fees. During this time, the Corps' proposed approach was "permittee-responsible compensatory mitigation," an option defined in the federal Compensatory Mitigation Rule (33 CFR Part 332). Under this approach, until the ILF Agreement was approved, the Conservancy would document for the Corps that applicants receiving authorization under RGP 1 would fulfill compensatory mitigation requirements under the Clean Water Act by designating a portion of one or more of the Conservancy's existing wetland restoration sites as the compensatory mitigation for each applicant's project. The Corps initially approved this interim mitigation strategy for up to one year, and subsequently extended this approval to be ongoing until such time that the interim mitigation strategy was replaced by the ILF Program, provided the Conservancy worked diligently to complete the ILF Program.

Before the Conservancy's existing wetland restoration sites can be deemed eligible by the Corps for permittee-responsible mitigation purposes, the Conservancy must submit detailed information to the Corps on each site. This information includes point by point documentation of how the site complies with each requirement of the Corps' Compensatory Mitigation Rule (33 CFR 332.4[c]2-14). For the Conservancy's existing wetland restoration sites, the required documentation already exists in the form of construction plans and Mitigation and Monitoring Plans for each project. However, the Corps requires detailed monitoring reports on the ongoing performance of the restoration sites used for the interim mitigation strategy.

There is one condition of the Compensatory Mitigation Rule for which the Corps requests additional assurance from the Conservancy before a restoration site may provide compensatory mitigation under the interim mitigation strategy. The Rule requires financial assurances intended to ensure that mitigation projects will be successfully completed and meet their established performance standards (33 CFR 332.3(n)). Since the Conservancy's wetland restoration sites have been constructed, the need in this case is to ensure that ongoing monitoring and management will take place until the projects' performance standards are met. The commitment to fund monitoring and management need only apply to the acreage of the restoration site used as permittee-responsible mitigation, i.e., the financial commitment is only required for the number of acres needed to meet the mitigation requirements of projects covered by RGP 1 during the interim mitigation strategy.

Over the lifetime of RGP 1 the Board has approved a letter providing the required financial assurances for restoration projects multiple times. Initially provided in 2012, an updated letter has been provided to the USACE periodically as RGP 1 covered additional projects and additional completed restoration projects were needed for mitigation under the interim mitigation strategy. To allow continued use of certain of the Conservancy's wetland restoration sites as mitigation for projects covered by RGP 1, staff seeks authorization from the Board to provide an updated formal financial commitment to the USACE. Specifically, staff is recommending that the financial commitment be provided for portions of the following five project sites: Souza I,

Souza II, Souza II Corral, Hess Creek, and Upper Hess Watershed. No commitment to the USACE would be made for acres that are not actually used for mitigation during the period. A draft of this letter is included as an attachment.

The financial commitment required by the Corps is not much different than the Conservancy's obligation under the HCP/NCCP to fund monitoring and maintenance of restoration projects. The Board has already approved sufficient funding for monitoring and maintenance for the entirety of all sites restored to date. Likewise, the most expensive portion of a wetland restoration project is the construction. Since construction is complete for all of the restoration projects in question, the financial commitment to the USACE would apply only to a relatively small portion of the funding for such sites. The only difference between the financial commitment required for the USACE and the HCP/NCCP's funding obligation is that, during the interim mitigation strategy, there may be specific acreage of restored wetlands at a site that is allotted to mitigate a specific project impact. The financial commitment to the USACE would cover that specific acreage only and could require monitoring pertaining specifically to that acreage.

Attachments:

- Draft letter to the USACE extending financial assurances to portions of additional restoration projects.
- Draft letter to the USACE providing the Final Reporting on the use of RGP 1 through December 1, 2025

EAST CONTRA COSTA COUNTY HABITAT CONSERVANCY

City of Brentwood
City of Clayton
City of Oakley
City of Pittsburg
Contra Costa County

February 23, 2026

Michael S. Jewell
Chief Regulatory Division
U.S. Army Corps of Engineers
Sacramento District
1325 J Street
Sacramento, CA 95814-2922

RE: Commitments on Existing Wetland Mitigation Projects

Dear Mr. Jewell:

The Governing Board of the East Contra Costa County Habitat Conservancy ("Conservancy") has authorized this letter to confirm financial assurances for additional portions of acreage of the Conservancy's existing wetland establishment/rehabilitation projects ("restoration projects") in order to increase the acreage eligible to provide mitigation under the Regional General Permit, permit number RGP #1 ("RGP") originally approved by the U.S. Army Corps of Engineers ("Corps") in 2012 and most recently renewed in 2025.

So that the RGP may be effectively implemented during the interim period before the ILF Program takes effect, the Conservancy is willing to enable use of restoration projects as permittee-responsible mitigation (as required by 33 CFR 332.4[c]14.), an approach the Corps has referred to as the Interim Mitigation Strategy. The Corps has indicated that financial assurances from the Conservancy Board relating to monitoring and maintenance of restoration projects are needed to implement the Interim Mitigation Strategy. This financial assurance is being provided to satisfy that requirement. As the Corps and the Conservancy transition to an In-Lieu Fee ("ILF") Program with the Corps, that was approved in late 2025, this separate assurance will not continue as part of RGP reporting.

The Conservancy previously provided a letter confirming its commitment to fund the monitoring and maintenance of portions of three of its restoration projects (the Souza II Wetland Restoration Project, the Upper Hess Creek Watershed Restoration Project and the Souza I Restoration Project) until these committed features meet success criteria.

This letter shall serve as formal confirmation of the Conservancy's commitment to fund the monitoring and maintenance of portions of two additional restoration projects (Hess Creek Restoration Project and the Souza II Corral) until these portions meet success criteria.

This financial commitment applies only to the acreage and linear feet of designated restoration sites actually committed as permittee-responsible mitigation during the interim period (i.e. if no permittee-responsible mitigation is approved for these sites the Conservancy Board will have no obligation to the Corps to fund any monitoring or maintenance at the sites). Table 1 details mitigation requirements for each site. The Conservancy reserves the right to assign the responsibility of long-term maintenance of restoration projects to a third party.

Table 1. Summary of Compensatory Commitment and Conservancy IMS Projects that Compensate for Impacts under RGP through December 1, 2025

Wetland Types	Total Required Created or Restored (from Table 1)[1]	Committed Restored/Created Acres by Conservancy IMS Site					Total
		Souza I	Souza II	Upper Hess	Hess Creek	Souza II Corral	
Stream (linear ft)	**1,402 (R)**	-	1,402	-	-	-	**1,402**
Seasonal Wetland (acre)	**2.812 (R)**	1.100	1.074[2]	0.238	-	0.400	**2.812**
Alkali Wetland (acre)	**0.266 (R)**	-	0.266[2]	-	-	-	**0.266**
Permanent Wetland (acre)	**0.04 (R)**	-	0.04	-	-	-	**0.04**
Pond (acre)	**0.01 (C)**	-	-	0.01	-	-	**0.010**
Riparian (acre)	**0.610**	-	-	-	0.610	-	**0.610**

[1] As shown in Table 5-16 and Table 5-17 in the HCP. (R) = restoration required and (C) = creation required. For streams, restoration (not creation) is required.

[2] At Souza II, a total 1.17 acres of alkali wetland and 0.17 acres of seasonal wetland were created for a total of 1.34 acres of seasonal wetlands. Of these 1.34 acre, 0.64 were placed in the seasonal wetland column and 0.70 were placed in the alkali wetland column, in order to meet mitigation requirements.

Thank you for your efforts to work with the Conservancy on regional wetlands permitting.

Sincerely,

Abigail Fateman
Executive Director

EAST CONTRA COSTA COUNTY HABITAT CONSERVANCY

City of Brentwood

City of Clayton

City of Oakley

City of Pittsburg

Contra Costa County

February 23, 2026

Laura Shively
Mitigation Banking Specialist
Regulatory Division
U.S. Army Corps of Engineers, Sacramento District
1325 J Street, Room 1350
Sacramento, CA 95814-2922
(transmitted electronically: Laura.B.Shively@usace.army.mil)

RE: Final Conservancy Reporting to the U.S. Army Corps of Engineers related to the Compensatory Mitigation Strategy for RGP 1 through December 1, 2025 (end of RGP 1 term)

Background

The East Contra Costa County Habitat Conservation Plan/Natural Community Conservation Plan (HCP/NCCP or Plan) was fully approved in 2007 and its implementation is managed by the East Contra Costa County Habitat Conservancy (Conservancy). The HCP/NCCP is intended to provide an effective framework to protect natural resources in eastern Contra Costa County, while improving and streamlining the environmental permitting process for impacts to endangered species and sensitive habitat types, including wetlands and streams, which would result from implementation of "covered activities."

As part of its conservation strategy, the HCP/NCCP was designed to compensate for the loss of waters of the United States and is intended to serve as the basis for compensatory mitigation associated with applications to the U.S. Army Corps of Engineers (USACE) under Section 404 of the Clean Water Act for dredge or fill activities within waters. The USACE Sacramento District has issued a Regional General Permit (RGP 1) that applies to covered activities under the HCP/NCCP. The RGP is intended to coordinate USACE regulation under Section 404 with the HCP/NCCP by establishing avoidance, minimization and mitigation standards that are consistent with the HCP/NCCP (e.g., the RGP relies on mitigation ratios established in the HCP/NCCP). Pursuant to the federal Mitigation Rule (33 CFR Part 332), the Conservancy requested the establishment of an In-Lieu Fee (ILF) program that will work in conjunction with the RGP and the existing HCP/NCCP mitigation program, including the current HCP/NCCP aquatic resources mitigation fees collected by the Conservancy. During the interim period after RGP adoption and before the ILF Program was approved, an Interim Mitigation Strategy was used for compensatory mitigation. In late 2025 the ILF Program was approved by the Conservancy and the USACE. This is the final reporting related to the Interim Mitigation Strategy.

The Interim Mitigation Strategy provided permittee-responsible compensatory mitigation consistent with its definition and required elements contained in the federal Mitigation Rule (33 CFR Part 332; hereafter, "mitigation rule"). The approach relied on one or more of the existing establishment/rehabilitation projects implemented by the Conservancy under the HCP/NCCP. During the period before the ILF program was approved, the Conservancy demonstrated to the USACE that applicants receiving authorization under the RGP would fulfill compensatory Section 404 mitigation requirements by designating a portion of one or more of the Conservancy's existing establishment/rehabilitation sites as the compensatory mitigation for an applicant's

project. Before the Conservancy's existing establishment/rehabilitation sites could be deemed eligible by the USACE for use during the interim period, the Conservancy had to submit a comprehensive site specific report to USACE, including detailed documentation demonstrating site compliance with each requirement of the mitigation rule for a final mitigation plan (33 CFR 332.4[c]2-14).

The details of the Interim Mitigation Strategy and how to demonstrate compliance with mitigation requirements are detailed in the Draft *Compensatory Mitigation Strategy for ECCC HCP/NCCP Prior to Approval of a Proposed In-lieu Fee Program* dated June 4, 2013.

RGP Implementation Summary to date

This report summarizes projects that were permitted under the RGP from its approval in 2012 to December 1, 2025 and their impacts under Section 404 (Table 1). The Conservancy has completed nine wetland establishment/rehabilitation projects to date. Five of the nine Conservancy-built existing establishment/rehabilitation projects fulfill mitigation requirements for project impacts, and therefore only these five restoration projects are discussed in this document: Souza I Restoration Project, Souza II Restoration Project, Upper Hess Creek Watershed Restoration Project, Hess Creek Restoration Project, and Souza II Corral Seasonal Wetland Restoration Project. Included in this document (see attachments) is detailed information on each of the existing wetland establishment/rehabilitation projects the Conservancy has used to mitigate for impacts authorized by the RGP, and a description of how they comply with each requirement of the mitigation rule.

Table 13 provides a summary of restoration and creation of wetland and stream features that are being committed by the Conservancy to mitigate for projects incurring impacts to wetland habitats. All committed wetland habitat types meet mitigation obligations to date, and provide stay ahead buffers for permit issuance to continue.

Applicant's Projects Receiving Authorization under the RGP

A total of 31 projects received authorization under the RGP between RGP approval in 2012 and December 1, 2025 (Table 1). The applicants include the East Contra Costa County Habitat Conservancy (1 project), Contra Costa County Public Works Department (15 projects), NorthPoint Development (1 project), East Bay Regional Park District (3 Projects), Chevron Pipeline Company (2 projects), Contra Costa Transportation Authority (1 project), City of Pittsburg (2 projects), Clayton Estates, LLC (1 project), Contra Costa Communities, LLC (2 projects), City of Brentwood (1 project), Westgate Ventures (1 project), and City of Oakley (1 project). In addition to the 31 projects listed above and in Table 1, East Contra Costa County Habitat Conservancy's Horse Valley Restoration Project was permitted under the RGP (SPK-2017-00055). It is not included in Table 1 because it was a restoration project, (SPK-2017-00055) did not have IMS requirements.[1] Similarly, Contra Costa County Flood Control and Water Conservation District's Three Creeks Parkway Restoration Project was permitted under the RGP (SPK-2016-00934). It is self-mitigating and did not have IMS requirements.[2]

[1] The impacts for the East Contra Costa County Habitat Conservancy's Horse Valley Restoration Project are not included in the total impacts because it is a restoration project. The file number is SPK-2017-00055, and the date issued was March 28, 2016. It had permanent impacts to 0.1 acres of stream and temporary impacts to 0.37 acres of stream.

[2] The impacts for the Contra Costa County Flood Control and Water Conservation District's Three Creeks Parkway Restoration Project are not included in the total impacts because it is a restoration project. The file number is SPK-2016-00934, and the date issued was October 28, 2019. It had temporary impacts to 0.057 acres of stream. (4,000 linear feet).

Permanent impacts of these 31 projects totaled 1,402 linear feet of stream, 1.389 acres of seasonal wetland, 0.133 acre of alkali wetland, 0.065 acre of permanent wetland, 0.01 acre of pond, and 0.610 acre of riparian. Temporary impacts[3] totaled 1,452 linear feet of stream, 0.068 acre of seasonal wetland, 0.239 acre of alkali wetland, 0.038 acre of permanent wetland, 0.404 acre of pond, and 0.414 acre of riparian.

Riparian impacts are included in Table 1 for context even though they are not Corps jurisdictional.

[3] Temporary impacts are included for informational purposes and context. However, these do not require mitigation.

Table 1. Summary of Impacts to Wetlands and Waters by Projects Permitted under RGP 1 through December 1, 2025

Project Name[1]	Applicant	File No.	Date Issued	Permanent Impacts to Jurisdictional Features								Temporary Impacts to Jurisdictional Features[2]							Feature Type Impacted (Land Cover Type)	Mitigation Ratio per Feature per Project (based on Permanent Impacts only)[3]	Total Acreage or Linear Feet Requiring Mitigation						Interim Mitigation Strategy Site
				Stream (linear ft)	Stream (acre)	Seasonal Wetland (acre)	Alkali Wetland (acre)	Perm. Wetland (acre)	Pond (acre)	Slough/ Channel (acre)	Riparian (acre)	Stream (linear ft)	Stream (acre)	Seasonal Wetland (acre)	Alkali Wetland (acre)	Perm. Wetland (acre)	Pond (acre)	Riparian (acre)			Stream (linear ft)	Seasonal Wetland (acre)	Alkali Wetland (acre)	Perm. Wetland (acre)	Pond (acre)	Ripa-rian (acre)	
Marsh Creek Road Safety Improvements-1 Mile East of Russelmann Park Rd	Contra Costa County Public Works Department	SPK-2012-01317	Jan. 15, 2012	148	0.02	-	-	-	-		-	21	0.01	-	-	-	-	-	Stream	1:1 (R)	148	-	-	-	-	-	Souza II
Deer Valley Road Safety Improvement Project	Contra Costa County Public Works Department	SPK-2010-01236	May 16, 2012	-	-	-	0.133	-	-		-	-	-	-	0.227	-	-	-	Alkali Wetland	2:1 (R)	-	-	0.266	-	-	-	Souza II
Deer Valley Shoulder Widening Project	Contra Costa County Public Works Department	SPK-2010-01236	May 16, 2012	-	-	-	-	-	0.01		-	-	-	-	-	-	0.03	-	Pond	1:1 (C)	-	-	-	-	0.01	-	Upper Hess
Trash Capture Demonstration Project	City of Pittsburg	SPK-2012-00738	Sept. 28, 2012	-	-	-	-	0.02	-		-	-	-	-	-	-	-	-	Permanent Wetland	1:1 (R)	-	0.034[4]	-	-	-	-	Upper Hess
Chevron Pipeline KLM Site 1357 Repair Project	Chevron	SPK-2012-00895	June 19, 2013	-	-	-	-	-	-		-	-	-	-	0.007	-	-	-	Alkali Wetland	-	-	-	-	-	-	-	-
Marsh Creek Detention Center Bridge Project	Contra Costa County Public Works Department	SPK-2012-00660	Sept. 12, 2013	60	0.0055	-	-	-	-		0.132	60	0.01	-	-	-	-	0.016	Stream	1:1 (R)	60	-	-	-	-	-	Souza II
Chevron Pipeline KLM 32 PIM Repair Project	Chevron	SPK-2014-00032	April 10, 2014	-	-	-	-	-	-		-	-	-	-	0.005	-	-	-	Alkali Wetland	-	-	-		-	-	-	-
Pacifica Ave Sidewalk Project	Contra Costa County Public Works Department	SPK-2013-01093	May 6, 2014	36	0.021	-	-	-	-		0.044	33	0.14	-	-	-	-	0.013	Stream	1:1 (R)	36	-	-	-	-	-	Souza II
Marsh Creek Wingwall Repair Project	Contra Costa County Public Works Department	SPK-2014-00134	June 28, 2014	-[5]	-[5]	-	-	-	-		0.009	105	0.124	-	-	-	-	0.14	Stream[5]	1:1 (R)	-[5]	-	-	-	-	-	Souza II
Marsh Creek Scour Repair Project	Contra Costa County Public Works Department	SPK-2014-00482	Sept. 9, 2014	23	0.005		-	-	-		0.003	30.5	0.051	-	-	-	-	0.038	Stream	1:1 (R)	23		-	-	-	-	Souza II
State Route 4/Balfour Road Interchange Improvements Project	Contra Costa Transportation Authority	SPK-2014-01165	April 30, 2015	310[6]	0.22	-	-	-	-		0.22	-	0.20	-	-	-	-	0.20	Stream[6]	1:1 (R)	310	-	-	-	-	-	Souza II
Canal Road Sidewalk and Bike Lanes Project	Contra Costa County Public Works Department	SPK-2016-00079	May 23, 2016	21	0.005	-	-	-	-		0.034	6	0.004	-	-	-	-	0.006	Stream	1:1 (R)	21	-	-	-	-	-	Souza II
Moita Road Improvement Project	Clayton Estates, LLC	SPK-2016-00424	October 5, 2016	45	0.01	-	-	-	-	-	-	0	0.02	-	-	-	-	-	Stream	1:1 (R)	45	-	-	-	-	-	Souza II

Project Name[1]	Applicant	File No.	Date Issued	Permanent Impacts to Jurisdictional Features								Temporary Impacts to Jurisdictional Features[2]							Feature Type Impacted (Land Cover Type)	Mitigation Ratio per Feature per Project (based on Permanent Impacts only)[3]	Total Acreage or Linear Feet Requiring Mitigation						Interim Mitigation Strategy Site
				Stream (linear ft)	Stream (acre)	Seasonal Wetland (acre)	Alkali Wetland (acre)	Perm. Wetland (acre)	Pond (acre)	Slough/ Channel (acre)	Riparian (acre)	Stream (linear ft)	Stream (acre)	Seasonal Wetland (acre)	Alkali Wetland (acre)	Perm. Wetland (acre)	Pond (acre)	Riparian (acre)			Stream (linear ft)	Seasonal Wetland (acre)	Alkali Wetland (acre)	Perm. Wetland (acre)	Pond (acre)	Ripa-rian (acre)	
Clifton Court Road Bridge Project	Contra Costa County Public Works Department	SPK-2016-00438	August 2, 2017	27[7]	0.004	-	-	-	-	-	-	-	0.034	-	-	-	-	-	Stream	1:1 (R)	27	-	-	-	-	-	Souza II
Gilbert Property Project	Contra Costa County Communities, LLC	SPK-2005-00692	March 6, 2017	-	-	0.25	-	-	-	0.57[8]	-	-	-	-	-	-	-	-	Sough/ Channel to be mitigated with Riparian Seasonal Wetland	1:1 (R) 2:1 (R)		0.50	-	-	-	0.57	Souza I
Marsh Creek Road Bridge 141 Project	Contra Costa County Public Works Department	SPK-2017-00980	March 22, 2018	93	0.019	-	-	-	-	-	-	86	0.264	-	-	-	-	-	Stream	1:1 (R)	93	-	-	-	-	-	Souza II
Morgan Territory Road Bridge Project	Contra Costa County Public Works Department	SPK-2017-00041	June 12, 2017	65	0.03	-	-	-	-	-	-	111	0.022	-	-	-	-	-	Stream	1:1 (R)	65	-	-	-	-	-	Souza II
Oakley Logistics Cernter	NorthPoint Development	SPK-2019-00585	May 18, 2020	-	-	0.983	-	-	-	-	-	-	-	-	-	-	-	-	Seasonal Wetland	2:1 (R)	-	1.966	-	-	-	-	Souza 1, Souza II, Souza II Corral, Upper Hess
Los Charros Pond Project	East Bay Regional Park District	SPK-2020-00043	May 18, 2020	8[9]	0.002	-	-	-	-	-	-	10	0.01	-	-	-	-	-	Stream	1:1 (C)	8	-	-	-	-	-	Souza II
Oil Creek Canyon Culvert Project	East Bay Regional Park District	SPK-2020-00065	May 19, 2020	-	-	-	-	-	-	-	-	304[10]	0.09	-	-	-	-	--	Stream	-	-	-	-	-	-	-	-
Chaparral Springs Spillway and Trench Project	East Bay Regional Park District	SPK-2020-00066	May 19, 2020	-	-	-	-	-	-	-	-	40	0.01	-	-	-	-	-	Stream	-	-	-	-	-	-	-	-
Trembath Basin Geotechnical Investigation Project	Contra Costa Public Works Department	SPK-2010-00664	September 25, 2020	-	-	-	-	-	-	-	-	12	-	0.066	-	0.027	-	0.001	Seasonal Wetland Permanent Wetland Riparian	-	-	-	-	-	-	-	-
Ang Road Crossing Repair	East Contra Costa County Habitat Conservancy	SPK-2020-00308	July 20, 2020	22	-	0.006	-	0.008[11]	-	-	-	12	-	0.002	-	0.011	-	-	Stream Seasonal Wetland Permanent Wetland	1:1 (R) 2:1 (R) 1:1 (R)	22	0.012	-	0.008	-	-	Souza II Corral
Marsh Creek Bridge 143 Replacement Project	Contra Costa County Public Works Department	SPK-2020-00858	April 14, 2023	162	-0.03[12]	-	-	-	-	-	-	215	0.21	-	-	-	-	-	Stream Pond	1:1 (R) 1:1 (C)	162	-	-	-	-	-	Souza II
Marsh Creek Bridge 145 Replacement Project	Contra Costa County Public Works Department	SPK-2020-00861	April 14, 2023	187	0.03	-	-	-	-	-	-	116	0.40	-	-	-	-	-	Stream Pond	1:1 (R) 1:1 (C)	187	-	-	-	-	-	Souza II

Project Name[1]	Applicant	File No.	Date Issued	Permanent Impacts to Jurisdictional Features								Temporary Impacts to Jurisdictional Features[2]							Feature Type Impacted (Land Cover Type)	Mitigation Ratio per Feature per Project (based on Permanent Impacts only)[3]	Total Acreage or Linear Feet Requiring Mitigation						Interim Mitigation Strategy Site
				Stream (linear ft)	Stream (acre)	Seasonal Wetland (acre)	Alkali Wetland (acre)	Perm. Wetland (acre)	Pond (acre)	Slough/ Channel (acre)	Riparian (acre)	Stream (linear ft)	Stream (acre)	Seasonal Wetland (acre)	Alkali Wetland (acre)	Perm. Wetland (acre)	Pond (acre)	Riparian (acre)			Stream (linear ft)	Seasonal Wetland (acre)	Alkali Wetland (acre)	Perm. Wetland (acre)	Pond (acre)	Ripa-rian (acre)	
Marsh Creek Storm Drain Outfall Project	City of Brentwood	SPK-2022-00311	April 28, 2023	10	0.003	-	-	-	-	-	-	-	-	-	-	-	-	-	Stream	1:1 (R)	10	-	-	-	-	-	Souza II
Americana Bypass Channel Project	City of Pittsburg	SPK-2023-00193	July 31, 2023	-	-	-	-	0.037		-	-	-	-	-	-	-	-	-	Permanent Wetland	1:1 (R)	-	-	-	0.037	-	-	Souza II
Gilbert Property – Cypress Road East Project	Contra Costa County Communities, LLC	SPK-2018-00522	Dec. 5, 2023	-	-	-	-	-	-	0.04[13]	-	-	0.01	-	-	-	-	-	Sough/ Channel to be mitigated with Riparian	1:1 (R)	-	-	-	-	-	0.04	Hess Creek
Burroughs Development Property Project	Westgate Ventures	SPK-2005-00824	April 5, 2024	-	-	0.15	-	-	-	-	-	-	-	-	-	-	-	-	Seasonal Wetland	2:1 (R)	-	0.3	-	-	-	-	Souza II Corral
Morgan Territory Road Bridges 5.0 & 5.2 Replacement Project	Contra Costa County Public Works Department	SPK-2024-00236	March 12, 2025	185	-	-	-	-	-	-	-	290	-	-	-	-	-	-	Stream	1:1 (R)	185	-	-	-	-	-	Souza II
East Cypress Road Widening Project (CIP 302 & 310)	City of Oakley	SPK-2025-00147	July 21, 2025					0.258[14]											Permanent Wetland	1:1 (R)	-	-	-	-[14]	-	-	-
Total Impacts and Mitigation Needed				**1,402**	**0.345**	**1.389**	**0.133**	**0.065**	**0.010**	**0.610**	**0.442**	**1,452**	**1.609**	**0.068**	**0.239**	**0.038**	**0.030**	**0.414**	**-**	**-**	**1,402**	**2.812**	**0.266**	**0.04**	**0.010**	**0.610**	**-**

Souza I Total	**-**	**1.10**	**-**	**-**	**-**	
Souza II Total	**1,402**	**1.074**	**0.266**	**0.04**	**-**	
Upper Hess Total	**-**	**0.238**	**-**	**-**	**0.01**	
Hess Creek Total	**-**	**-**	**-**	**-**	**-**	**0.610**
Souza II Corral Total		**0.400**				
Total	**1,402**	**2.812**	**0.266**	**0.04**	**0.01**	**0.610**

[1] Horse Valley Restoration Project was not included in this table because it was a restoration project and not subject to IMS. The file number is SPK-2017-00055, and the date issued was March 28, 2016. It had permanent impacts to 0.1 acres of stream and temporary impacts to 0.37 acres of stream. Contra Costa County Flood Control and Water Conservation District's Three Creeks Parkway Restoration Project was permitted under the RGP (SPK-2016-00934). It is self-mitigating and does not have IMS requirements

[2] Temporary impacts are included for informational purposes and context. However, these do not require mitigation for RGP 1.

[3] As shown in Table 5-16 and Table 5-17 in the HCP. (R) = restoration required and (C) = creation required. The HCP/NCCP requires 1:1 restoration (enhancement) of streams, not creation of linear feet. Per the HCP/NCCP, habitat enhancement is defined as the improvement of an existing degraded community; habitat restoration is defined as the establishment of a vegetation community in an area that historically supported it, but no longer does because of the loss of one or more required ecological factors; habitat creation is defined as the creation of a habitat in an area that previously did not support it.

[4] Although the HCP requires 1:1 mitigation for impacts to permanent wetland, the 401 Water Quality Certification required 0.034 acre of seasonal wetland mitigation. The 401 Water Quality Certification for the Trash Capture Demonstration Project identifies seasonal wetland restoration at Upper Hess as mitigation for impacts to permanent wetland. Therefore 0.034 acres was placed in the seasonal wetland column and mitigation was identified at Upper Hess.

[5] The Corps permit states 0.006 acre permanent impacts which was 26 linear feet. The Corps permit application was based on incomplete project plans. The final project design (as the project was constructed) did not impact any Corps jurisdictional features, only riparian canopy above the ordinary high water mark. Therefore, impacts are listed as 0.

[6] This project had acreage impacts to riparian woodland land cover type (which overhung stream) in the Planning Survey Report so no linear stream impacts or fees were paid. The Corps categorized these impacts to 0.22 acres of stream, and the linear feet (310) were estimated based on the impact maps from the Planning Survey Report.

[7] Impacts were to slough/channel land cover type in the Planning Survey Report so no linear stream impacts or fees were made. The Corps categorized these impacts as 0.004 acres to stream, and the linear feet (27) were estimated based on impact maps from the Planning Survey Report.

[8] Impacts were to slough/channel land cover type in the Planning Survey Report so no linear stream impacts or fees were made. Per the HCP, impacts on sloughs and channels will be compensated by restoration of slough/channel at a ratio of 1:1, where feasible, or restoration of riparian woodland/scrub at a ratio of 1:1.

nd demonstrates no impacts to pond land cover type. Mitigation is included here for the linear feet of stream.
an unrelated project temporarily impacted 220 linear feet of stream and 84 linear feet of ephemeral swale for a total of 304 feet. Therefore, temporary impact fees were paid
out the additional impacts were detailed in a letter to East Bay Regional Park District dated October 5, 2020.
nd permanent and temporary impacts was divided into below and above 'top of bank'. Only the acreage for above top of bank is included here, as below top of bank impacts

4 acres to potentially jurisdictional waters of the United States (WOTUS) and drainage ditch, and the linear feet (75) were estimated based on impact maps from the Planning

g Plan approved by the USACE, Conservancy, USACE and CDFW. These impacts are not included in the Table 1 totals and are not discussed further in this report, though the
n easement documents (submitted to USACE and CDFW in late 2025.

Conservancy Interim Mitigation Strategy Sites (Restoration Projects)
The Souza I, Souza II, and Upper Hess Creek Watershed restoration projects were constructed prior to the implementation of the RGP. The Hess Creek restoration project construction was completed in February 2015. The Souza II Corral Seasonal Wetland restoration project was completed in 2012. These five projects exceed the mitigation requirements needed for all of the projects permitted under the RGP through June 30, 2025.

Souza I Restoration Project

Background

The 2.6-acre Souza I Restoration Project is located in southeastern Contra Costa County in Vasco Caves Regional Preserve in Byron on land owned and managed by the East Bay Regional Park District. The objective of the project was to create a pond that would support seasonal wetland habitat to provide breeding habitat for the federally listed threatened California tiger salamander. The constructed wetland would have sufficient ponding duration to allow larvae to metamorphose, be deep enough to not dry out due to high winds and high evaporation rate, and be shallow enough to support seasonal wetland vegetation growth. The final As-Built acreage was 1.10 acre. Construction of the pond was completed in September and October 2008.

Monitoring Status

The project construction was completed in fall of 2008. Annual monitoring and reporting occurred for seven years from 2009 to 2015. Monitoring activities included hydrologic monitoring, vegetation monitoring, and wildlife monitoring.

In 2015, seven years post construction, a total of 1.10 acre of seasonal wetland was created. Performance criteria have been met including length of inundation, dominance by wetland vegetation, and absence of invasive plant species.

The results of monitoring and recommendations are summarized in Tables 2 and 3 below.

Table 2. Souza I Summary of Performance Criteria, Results and Recommendations for Restoration Activities

Monitoring Activity	Performance Criteria	Results[1]	Recommendations
Hydrology Monitoring	A portion of the created pond will remain inundated for at least 30 days each year. The remainder of the created pond shall remain saturated or inundated for at least 60 days each year.	Performance Criteria was met. The one and two-foot sections of the pond were inundated for at least 60 days during the 2014-2015 rainy season and the three-foot section was inundated for 180 days.	None

Monitoring Activity	Performance Criteria	Results[1]	Recommendations
Wetland Vegetation Monitoring	The pond edges and margin will be dominated by wetland vegetation (FAC, FACW and/or OBL species). An allowance will be made for vegetation suppression in inundated areas of the created pond since one of the desired design parameters was to establish a sufficiently long inundation period that will allow CTS larvae to successfully metamorphose.	Performance Criteria was met. The vegetation transects conducted in the created pond on June 4, 2015, show that the pond edges and margin were dominated by wetland vegetation. Dominant plant species are characteristic of seasonal wetlands and vernal pools.	None
Invasive Weed Monitoring	Council's (CEPPC) Table 1: Invasive Non-native Plants that Threaten Wildlands in California (this list supersedes CEPPC's 1999 List A-1: Most Invasive and Damaging Wildland Pest Plants).	Performance Criteria was met. No invasive weeds were observed.	None

[1]Based on Year 7 Annual Monitoring Report (Monk and Associates 2015)

Table 3. Souza I Restoration Goals and Compensatory Commitment

Habitat	Pre-Project[1] (acre)	Post-Project[2] (acre)	Restored[3] (acre)	Amount Committed to Compensatory Mitigation	Amount Remaining Available for Compensatory Mitigation
Seasonal Wetlands	0	1.10	1.10	1.10	0

[1] Based on the As-Built Report for the Project (Monk and Associates 2009).
[2] Based on the final wetland delineation and sign-off request letter to USACE (Monk and Associates 2017)
[3] Per the HCP/NCCP, habitat enhancement is defined as the improvement of an existing degraded community; habitat restoration is defined as the establishment of a vegetation community in an area that historically supported it, but no longer does because of the loss of one or more required ecological factors; habitat creation is defined as the creation of a habitat in an area that previously did not support it.

Souza II Restoration Project

Background

The 94-acre Souza II Restoration Project is located in southeastern Contra Costa County approximately two miles from the town of Byron. The project area is near the Byron Airport, and bound on the west by Vasco Road, and on the north and east by Armstrong Road. The restoration project includes the unnamed tributary to Brushy Creek. The banks of the Brushy Creek tributary were stabilized and additional seasonal wetlands were restored in association with the tributary. Channel banks were sloped in a manner to promote onsite flooding, and seeded with native grass species. The berms north and south of the tributary were removed to increase tributary connectivity with the adjacent wetlands and floodplain. Rock weirs were installed in the tributary to increase structural diversity and provide ponding for California red-legged frog. Additionally, a pond was created south of the channel to provide breeding habitat for California tiger salamander. An existing dirt road was retired, and restored to wetland habitat in the wetland portions (including removal of a culvert from the Brushy Creek tributary), and seeded with native grasses in the upland portions. Construction of the restoration project was completed in fall/winter of 2009.

Plantings included wetland, emergent wetland, and wetland transition plants and seeding with native grassland and sterile erosion control mix species. Supplemental plantings of native wetland species transplanted from on site and a nearby property were planted in 2011 and 2012.

Monitoring Status

The project construction was completed in fall/winter of 2009. Annual monitoring and reporting occurred for six years from 2010 to 2016. Weed control activities and site monitoring continue to occur annually.

In 2016, six years post construction, a total of 2,178 linear feet of Brushy Creek were restored. A total of 1.344 acre of seasonal alkali wetland and 0.04 acre of permanent wetland have been created. An additional 1.177 acres of seasonal alkali wetland and permanent wetland (were enhanced. A total of 2,178 linear feet of Brushy Creek were restored. The initial performance criteria included an increase on site of 8.3 acres of wetlands. The performance criteria were revised to accept a lower acreage of created wetlands (Table 6) which are still sufficient to exceed compensatory commitments.

Other performance criteria have been met including increasing native plant cover on site particularly on the banks of the tributary to Brushy Creek, reducing erosion along the tributary, increasing wetland capacity on site, increasing acreage of habitat on site capable of supporting California tiger salamander and vernal pool fairy shrimp, and significantly reducing cover of invasive plants.

The results of monitoring and recommendations are summarized in Tables 4, 5, and 6 below. The restoration goals and compensatory commitment by habitat type for the Souza II project are included in Table 7 below.

Table 4. Souza II Summary of Results and Recommendations for Restoration Activities

Monitoring Activity	Performance Criteria	Results	Recommendations
Vegetation Monitoring	See Table 5	See Table 5	See Table 5
	Ensure 8.5 acres of seasonal wetlands have been restored.	1.344 acre of alkali wetland (seasonal/depressional) has been created. 0.639 acres of seasonal wetland and alkali wetland (seasonal/ depressional) have been enhanced. 0.538 acre of alkali wetland (permanent/riverine) have been enhanced. Performance standard not met.	Revise performance criteria to reduce acreage of created wetlands based on site conditions (Table 6).
Erosion Monitoring	Qualitative assessment including photo-documentation before and annually for five years after restoration activity determines that erosion along the Brushy Creek tributary onsite has been reduced.	The large erosional feature was repaired in October 2014 (Souza 2 Repair Project) and is functioning well. Performance standard met.	Continue to monitor cattle activity on the creek banks to prevent damage to vegetation on the banks.

Monitoring Activity	Performance Criteria	Results	Recommendations
Wetland and Pond Acreage Monitoring	Wetland acreage onsite has increased by 8.3 acres and pond acreage onsite has increased by 0.18 acres by five years following restoration construction.	1.344 acre of alkali wetland (seasonal/depressional) has been created. 0.639 acres of seasonal wetland and alkali wetland (seasonal/ depressional) have been enhanced. 0.538 acre of alkali wetland (permanent/riverine) have been enhanced.	Revise performance criteria to reduce acreage of created wetlands based on site conditions (Table 6).
Hydrologic Connectivity Monitoring	Qualitative assessment based on photo-documentation before and annually for five years after restoration activity determines that the Brushy Creek tributary is hydrologically connected with its floodplain and adjacent wetland complexes.	Creek overflowed banks and onto floodplain during storm in March 2011. Creek did not overflow banks in 2012, 2013, or 2014.	None. Monitoring Complete.
Depth and Duration of Inundation Monitoring	The depth and duration of inundation at the newly created pond is not significantly different than at the reference pools (at $\alpha \leq 0.05$ or 95% confidence) over a five-year monitoring period.	The wetlands and pools on site and at the reference site are not significantly different. Performance standard met.	None. Monitoring Complete.
Invasive Weed Monitoring	No milk thistle is present five years after restoration.	Milk thistle was found in a few scattered locations on site and these were controlled. Stinkwort was found on site and removed.	Continue monitoring and controlling milk thistle, stinkwort, and any other invasive weeds annually.
In-stream Pool Monitoring	Qualitative assessment based photo-documentation before and annually for five years after restoration activity determines that pools have formed behind rock weirs along the Brushy Creek Tributary.	Pools did not form behind rock weirs along the Brushy Creek Tributary in 2015, but water did pond in the upstream portion of the tributary. Performance standard not met.	None. Monitoring Complete.
Photo Point Monitoring	See performance criteria for Erosion Monitoring, Hydrologic Connectivity Monitoring, and In-stream Pool Monitoring for these specific photo points. No performance standards for general photo points.	Photo point monitoring completed.	None. Monitoring Complete.

Table 5. Souza II Summary of Results and Recommendations for Restoration Plantings

Performance Period	Performance Indicators	Target Value in Original Restoration Plan	Results	Recommendations
Years 3 - 5	Total relative cover of native wetland vegetation	At least 60% cover	Average relative cover of native wetland plants in wetland transects is 39% which does not meet the performance criteria of 60%. Transects 1, 3, and 8 have the highest relative cover of native wetland species (50%, 61% and 56% cover respectively.) Not likely to meet target value. Target value is not characteristic of high quality native wetlands in the region.	Revise performance criteria to be more realistic based on similar reference wetlands (Table 6).
Years 1 – 5	Total absolute cover of non-native invasive species	No more than 5% cover	No species considered an invasive plant species by Cal-IPC were recorded in the sampling plots. They were observed scattered on site and had less than 1 percent cover overall.	Continue monitoring and controlling milk thistle, stinkwort, and any other invasive weeds annually.

We recommended that the performance standards be modified to be more appropriate for the target vegetation community. Alkali and seasonal wetlands in the region are characterized by overall low vegetative cover, dominance by wetland species, and codominance by native wetland vegetation. The revision of the performance standards (Table 6) better capture these criteria.

Table 6. Recommended Revised Performance Standards for Souza II

Performance Period	Performance Indicators	Target Value	Results
Year 5 (and subsequent years if necessary)	Total relative cover of wetland vegetation	Greater than 50% relative cover.	The wetland transects support greater than 50% relative cover. The average relative cover of wetland plants for transects located in wetlands is 72%. Performance standard met.
	Total relative cover of native wetland vegetation	At least 30% relative cover.	Average relative cover of native wetland plants in the wetland transects is 39%. Performance standard met.
	Wetland and Pond Acreage Monitoring	1.344 acre of alkali wetland (seasonal/depressional) have been created. 1.177 acres of alkali wetland (0.538 riverine/permanent and 0.639 seasonal/depressional) have been enhanced.	Performance standard met.

Table 7. Souza II Restoration Goals and Compensatory Commitment

Habitat	Pre-Project[1] (acre)	Post-Project[2] (acre)	Restored[3] (acre)	Amount Committed to Compensatory Mitigation	Amount Remaining Available for Compensatory Mitigation
Stream Channel (Brushy Creek)	-	-	2,178 (lin. feet)	1,402 (lin. feet)	776 (lin. feet)
Seasonal Wetlands	0.64[5]	1.98[5]	1.34[5]	1.074[6]	0
Alkali Wetlands				0.266[6]	
Permanent Wetlands	0.50	0.54	0.04	0.04	0

[1] Based on the pre-project wetland delineation for the project (Jones and Stokes 2009).
[2] Based on the final wetland delineation for the project (Nomad Ecology 2015).
[3] Per the HCP/NCCP, habitat enhancement is defined as the improvement of an existing degraded community; habitat restoration is defined as the establishment of a vegetation community in an area that historically supported it, but no longer does because of the loss of one or more required ecological factors; habitat creation is defined as the creation of a habitat in an area that previously did not support it. Streams are an exception to this as stream improvement meets the definition of restoration.
[5] In the 2009 pre-project wetland delineation, all wetland features were called seasonal wetlands. In the 2016 wetland delineation after project completion, seasonal and alkali seasonal wetland were differentiated but combined here for reporting. A total 1.34 acres of seasonal wetlands were restored including 0.17 acre of seasonal wetland and 1.81 acre of alkali wetland.
[6] Of the 1.34 acres of seasonal wetlands (including alkali wetlands) created, 0.818 were placed in the seasonal wetland column and 0.266 were placed in the alkali wetland column, in order to meet mitigation requirements. There are 0.262 acre of seasonal wetlands available for mitigation.

Upper Hess Creek Watershed Restoration Project

Background

The Conservancy, in partnership with the East Bay Regional Park District, constructed a wetland and creek channel restoration/enhancement project within a 200.2 acre portion of the Upper Hess Creek Watershed in Contra Costa County. The restoration design includes several habitat types including seasonal wetlands, pond, permanent wetlands, and creek channel. It involved the removal of ranch debris across the site including tires, concrete rubble, metal barrels and other materials, the creation of a California tiger salamander (CTS) breeding pond, removal of a failing ranch road crossing followed by channel restoration, wetland restoration around the main stock pond, and seasonal wetland restoration. Construction of the restoration project was completed in January 2012.

The site was graded and seeded with two native seed mixes: a wetland mix and a native transition mix. Seed was hydroseeded across the entire site.

Monitoring Status

The 2022-2023 monitoring year was the twelfth monitoring year for the Upper Hess Creek Habitat Restoration Project (Monk and Associates 2023). Remedial work was completed by the Conservancy in the fall of 2021 at a portion of the site called the “alluvial valley wetlands”. This remedial work included removal of soils to lower the basin elevation and increase the functionality of the alluvial valley wetlands. A wetland delineation was completed in this area in 2023.

The restoration objectives, performance criteria, and results from the 2022-2023 monitoring year are summarized below in Table 8. The restoration goals and compensatory commitment by habitat type are summarized in Table 9.

Table 8. Upper Hess Creek Watershed Site-specific Restoration Objectives and Performance Criteria

Site-specific Restoration Objectives	Performance Criteria	Results
Site Objective-1. Increase the abundance and distribution of native emergent vegetation in the project area.	Year 1: 5% relative cover of wetland vegetation. Year 2: 10% relative cover of wetland vegetation. Year 3: 20% relative cover of wetland vegetation. Year 4: 35% relative cover of wetland vegetation. Year 5: 50% relative cover of wetland vegetation.	The performance criteria was met in some restoration areas (Main Stock Pond, Channel Restoration Area, and Alluvial Valley Wetlands) and not met in others CTS Pond).
Site Objective -2. Reduce erosion along Upper Hess Creek.	Qualitative assessment including photodocumentation before and annually for 5 years after restoration activity determines that erosion along the Upper Hess Creek onsite has been reduced.	The erosion that was caused by cattle ingress to Upper Hess Creek during Year 6 was controlled in Year 7. Vegetation quickly filled in the barren areas where soil sloughed off the banks. No new signs of erosion were observed along the creek in Year 8 as it was 100 percent vegetated.
Site Objective -3. Increase wetland and pond capacity and water duration in the project area.	Wetland and pond acreage onsite has increased and is in the range of the targeted 2.29 acre of restored wetlands and 0.06-acre of restored pond within 5 years following restoration construction.	Site restoration work increased the wetland and pond capacity and water duration in the project area.

Site-specific Restoration Objectives	Performance Criteria	Results
Site Objective -4. Hydrologically reconnect the Upper Hess Creek from lower stock pond to channel at property boundary.	Qualitative assessment and hydrologic monitoring based on photo-documentation and seasonal shallow groundwater monitoring annually for 5 years after restoration activity shows that Upper Hess Creek is hydrologically connected between the lower stock pond and the restored channel at the property line.	During monitoring water flowed from the Upper Channel to the Main Stock Pond, down through the Alluvial Valley Wetlands and to the Lower Channel. Therefore this restoration objective has been met.
Site Objective -5. Reduce non-native plant species in restored wetlands.	Total absolute cover of non-native invasive plant species no more than 10% relative cover.	Non-native "invasive" (high rated) plant species represented less than 10% of the relative cover within the Restoration Project wetlands, restoration objective SO-5 was met in all years.
Site Objective -6. Restore approximately 2.16 acre of alluvial valley wetlands*.	Approximately 2.16 acre of alluvial valley wetlands have been restored and confirmed via a wetland delineation at the end of 5 years.	The Alluvial Valley Wetlands did not meet specific restoration goals and objectives presented in SO-6. Approximately 1.09-acre of the proposed 2.16 acres of constructed/restored Alluvial Valley Wetlands exhibited wetland hydrology during the 2022-2023 wet season.
Site Objective -7. Create an approximately 0.06-acre California tiger salamander breeding pond.	An approximately 0.06-acre pond will have been restored and confirmed via wetland delineation at the end of 5 years.	The CTS Pond did not achieve the goal of 0.06-acre; thus, site-specific restoration objective 7 was not met during the Year 8 Monitoring Year. The high water mark in 2019 was lower than it's previous level in 2018 when it was measured to be 0.038 acres.
Site Objective -8. Restore approximately 2.16 acre of alluvial valley wetlands.	Same as Site Objective -6	Same as Site Objective -6
Site Objective -9. Create an approximately 0.06-acre California tiger salamander breeding pond in the upper tributary.	Same as for Site Objective -7.	Same as for Site Objective -7.
Site Objective -10. Restore 226 linear feet of stream channel and hydrologically connect Upper Hess Creek from the main stock pond to channel at property boundary.	Same as for Site Objective -4.	Observed direct hydrologic connectivity between all the features so this restoration objective was met.
Site Objective -11. Create 0.06-acre California tiger salamander pond, enhance existing main pond, restore 226 linear feet of channel, restore approximately 2.16 acre of alluvial valley wetlands.	Same as for Site Objective -6, Site Objective -7, and Site Objective -8.	Same as for Site Objective -6, Site Objective -7, and Site Objective -8.

* This objective has changed since submittal of the Restoration Management Plan Outline to match the *installed* acreage of the constructed feature.

Table 9. Upper Hess Creek Watershed Restoration Goals and Compensatory Commitment

Habitat	Pre-Project[1] (acre)	Post Project[2]	Restored[2,3] (acre)	Amount Committed to Compensatory Mitigation	Amount Remaining Available for Compensatory Mitigation
Stream Channel	-	-	226	226[4]	0
Seasonal Wetlands	0.79	1.88	1.09	0.238[5]	0.852
Pond	0.20	0.27	0.07	0.01	0.06

[1] Based on the pre-project wetland delineation for the project (HT Harvey 2011).
[2] Based on the 2019 Annual Monitoring Report and the 2023 Annual Monitoring Report for the project (Monk and Associates 2019; 2023).
[3]Per the HCP/NCCP, habitat enhancement is defined as the improvement of an existing degraded community; habitat restoration is defined as the establishment of a vegetation community in an area that historically supported it, but no longer does because of the loss of one or more required ecological factors; habitat creation is defined as the creation of a habitat in an area that previously did not support it. Streams are an exception to this as stream improvement meets the definition of restoration.
[4] The Waterboard 401 Water Quality Certification required 226 linear feet of mitigation for the Ameresco Keller Canyon Renewable Natural Gas Facility and Pipeline Project for impacts to Waters of the State. There were no impacts to Waters of the U.S.
[5] The 401 Water Quality Certification required for the Trash Capture Demonstration Project identifies seasonal wetland restoration at Upper Hess as appropriate mitigation for impacts to permanent wetland. This total includes 0.034 acre for the Trash Capture Demonstration Project.

Hess Creek Watershed Restoration Project

Background

The East Contra Costa County Habitat Conservancy (Conservancy), in partnership with the East Bay Regional Park District (District), implemented a wetland and riparian habitat restoration project within a 5.22 acre (ac) area on a 48 acre parcel within the Hess Creek Watershed in Contra Costa County. The project is the eighth wetland/riparian restoration project to be implemented as a result of the adoption of the HCP/NCCP by local, state and federal agencies. Construction of the restoration project was completed in February 2015.

The Hess Creek property was identified as a “high priority” for acquisition in the HCP/NCCP (Acquisition Priority Subzone 1c). The addition of this property to the HCP/NCCP preserve system helps achieve the land acquisition requirements for wetlands, streams, and riparian woodland/scrub. Implementation of the proposed restoration also helps meet the Stay Ahead provisions of the HCP/NCCP and provided the opportunity to restore substantial acreage of high-quality wetlands and riparian habitat.

As described in the Project’s Mitigation and Monitoring Plan, the restoration design involved re-routing, stabilization, and enhancement of a 930 linear feet portion of the Hess Creek channel, as well as, re-establishment of seasonal wetland habitat and riparian woodland and streamside habitats. Habitat establishment was primarily achieved through earthwork and planting efforts. Over 1,300 trees and shrubs were planted and over 900 herbaceous seasonal wetland plants were planted.

Monitoring Status

Year 10 of annual monitoring for the Hess Creek Watershed Restoration Project occurred from November 2023 to October 2024 and a final annual monitoring report was prepared (Nomad

Ecology 2024). All restoration monitoring was carried out as detailed in the Mitigation and Monitoring Plan (H.T. Harvey & Associates 2013). A wetland delineation was conducted in Year 5 of monitoring per the Mitigation and Monitoring Plan (Nomad Ecology 2019). Overall, the project met Year 10 performance criteria, with the exception of re-established wetland acreage. The project goal was to create 0.30 acre of seasonal wetland. Based on the wetland delineation conducted in Year 5, 0.172 acre of seasonal wetland was created. The lower acreage of created wetlands are still sufficient to be used for compensatory commitments.

Based on final Year 10 monitoring, a total of 2.57 acres of riparian woodland/scrub, 0.172 acres of seasonal wetland, and 930 linear feet of stream had been created or enhanced (Table 12). The results and recommendations for restoration activities from the 2024 monitoring year are summarized below in Tables 10 and 11. The restoration goals and compensatory commitment by habitat type are summarized in Table 12.

Table 10. Summary of Results and Recommendations for Restoration Activities

Attribute	Project Objective	Performance Criteria	Year 10 Result
Wetland Qualitative Assessment	SO-1: Maintain or increase native emergent wetland vegetation.	Qualitative assessments, including photo- documentation before and after restoration activities in Years 1-3, and 5, determine that native emergent wetland vegetation has been maintained or increased.	Based on qualitative assessments, native wetland vegetation has been maintained or increased. **Met Year 5 performance criteria in Year 5.** **Per MMP, not monitored in Year 10.**
	SO-4: Maintain or increase flows to and connectivity among wetlands and wetland complexes.	Qualitative assessment, including photo documentation before and after restoration activities in Years 1-3, 5, 7 and 10, determines that Hess Creek is hydrologically connected between the restored channel and seasonal wetlands.	Hess Creek is hydrologically connected to all existing and re-establishment wetlands. **Year 10 performance criteria met.**
	SO-5: Eliminate or reduce non-native invasive plant species[1] in the project area wetlands.	Total percent cover of non-native invasive plant species is no more than 10% cover in wetlands.	All seasonal wetlands had 1-5% cover of invasive plants. **Year 10 performance criteria met.**
	SO-6: Maintain or enhance upland habitat in close proximity to wetlands to support the life-history requirements of wetland- dependent covered species.	Qualitative assessment, including photo documentation before and after restoration activities in Years 1-3, 5, 7 and 10, determines that upland habitat in close proximity to the restored wetlands has been maintained or enhanced to support the life-history requirements of wetland-dependent covered species.	Based on qualitative assessments, upland habitat in close proximity to the restored wetlands has been maintained. **Year 10 performance criteria met.**
Wetland Delineation	SO-3: Maintain or increase wetland capacity.	Wetland acreage onsite has been maintained or increased and is in the range of the targeted 0.3 ac of restored wetlands within 5 years following restoration implementation.	Based on Wetland Delineation completed in Year 5 (2019), wetland acreage onsite has been increased by 0.172 acre, which is lower than the targeted 0.30 acre. Mapped seasonal wetlands met the annual vegetation performance criteria.
	SO-7: Restore approximately 0.30 ac of seasonal wetlands to compensate for permanent loss of this habitat.	Approximately 0.30 ac seasonal wetlands have been restored (confirmed via wetland delineation in Year 5) and meet the annual performance criteria in Table 6.	

Attribute	Project Objective	Performance Criteria	Year 10 Result
	SO-8: Restore approximately 0.3 ac of seasonal wetlands to contribute to the recovery of covered species.	Approximately 0.3 ac seasonal wetlands have been restored (confirmed via wetland delineation in Year 5) and meet the annual vegetation performance criteria.	**Created wetland acreage is lower than target.** **Per MMP, not monitored in Year 10.**
	SO-19: Restore native species richness and diversity, vegetative cover, wildlife function and hydrologic function.	Approximately 0.3 ac seasonal wetland and 2.57 ac of riparian woodland/streamside habitat have been restored and meet the annual performance criteria in Table 6 and approximately 930 ln ft of stable channel has been created/maintained that conveys flow through the restoration site in Year 1-3, 5, 7 and 10	
Percent Cover of Wetland Vegetation	SO-7: Restore approximately 0.30 ac of seasonal wetlands to compensate for permanent loss of this habitat.	See Table 6 for Performance Criteria.	**Annual performance criteria in Table 6 were met in Year 5. Per MMP, not monitored in Year 10.** Based on Wetland Delineation completed in Year 5 (2019), wetland acreage onsite has been increased by 0.172 acre, which is lower than the targeted 0.30 acre.
	SO-8: Restore approximately 0.3 ac of seasonal wetlands to contribute to the recovery of covered species.		
	SO-19: Restore native species richness and diversity, vegetative cover, wildlife function and hydrologic function.		
Stream and Riparian Woodland/Streamside Qualitative Assessment	SO-9: Protect a minimum of 0.5 linear mi of Hess Creek.	Qualitative assessment, including photo documentation before and after restoration activities in Years 1-3, 5, 7 and 10, determines that a minimum of 0.5 linear mi of Hess Creek has been protected.	0.5 mile of Hess Creek is in the property. **Year 10 performance criteria met.**
	SO-12: Reduce the biomass, cover, and extent of non-native invasive plant species[1] in riparian woodland habitat.	Total cover of non-native invasive plant species is no more than 10% in riparian woodland habitat.	Overall, invasive weeds comprised 1-5% cover (estimated visually) in riparian woodland habitat. **Year 10 performance criteria met.**

Attribute	Project Objective	Performance Criteria	Year 10 Result
Riparian Canopy Cover	SO-10: Acquire approximately 2.6 ac of riparian/scrub habitat.	Acquire 2.6 ac of riparian/scrub habitat.	The 5.3 acre restoration site contained 0.8 acre of existing riparian and 0.6 acre of black walnut orchard at baseline conditions in 2013. An additional 2.6 acres is "proposed riparian" that was slated for restoration with planting of riparian/scrub habitat. **Year 10 performance criteria met.**
	SO-11: Maintain or increase the cover, width, and connectivity of existing riparian vegetation.	Aerial mapping before and after restoration activities in Years 3, 5, 7 and 10, determines that the cover, width, and connectivity of existing riparian vegetation has been maintained or increased.	Riparian canopy cover increased from 0.61 acre in 2013 (baseline pre-project conditions) to 2.57 acres in 2024. The increase of 1.96 acres is due to planting of riparian species throughout the restoration area. **Year 10 performance criteria met.**
Riparian Woodland/Streamside Plant Survival	—	All dead plants in Years 1 and 2 will be replaced (100% survival criterion) (Table 6). In Year 3 plant survivorship shall not be below 80%. All dead plants will be replaced in Year 3 if survival falls below 80% (Table 6).	Plants were replaced as needed in Years 1-3. **Not monitored in Year 10 per MMP.**
Riparian Woodland/Streamside Percent Cover	SO-13: Restore shaded riverine aquatic habitat to reduce water temperature and temperature variation.	Approximately 0.45 ac riparian streamside habitat has been restored. Riparian woodland/streamside percent cover will be ≥40% in Year 10.	On average, riparian woodland/streamside percent cover was 36%, which falls just below the ≥40% success criteria, but is within the range of sampling error. Therefore we consider that this success criteria has been met. **Year 10 performance criteria met.**
	SO-14: Restore shaded riverine aquatic habitat to increase inputs of organic matter into Hess Creek.		
	SO-18: Restore riparian woodland in addition to that required above as compensation for habitat loss.	Approximately 2.57 ac of riparian woodland/streamside habitat have been restored. Riparian woodland/streamside percent cover will be ≥40% in Year 10.	
	SO-19: See above.	See above.	See above.
Riparian Woodland/Streamside Tree Height	SO-13: See above.	Trees will be measured in Year 5, 7, and 10. No specific tree heights are set but trees should show a steady increasing trend.	In 2021 planting heights ranged between 36 and 87 inches. In 2024 planting heights ranged between 42 and 135 inches (Table 23). Individual species showed an increasing trend through the monitoring years. **Year 10 performance criteria met.**
	SO-14: See above.		
	SO-18: See above.		
	SO-19: See above.		

Attribute	Project Objective	Performance Criteria	Year 10 Result
Channel Stability	SO-2: Reduce sediment deposition and transport along Hess Creek.	Maintenance of a stable channel that conveys flow through the restoration site in Year 1-3, 5, 7 and 10.	No erosion areas were noted and the channel is stable. **Year 10 performance criteria met.**
	SO-19: See above.	See above.	See above.
Restored Channel	SO-15: Reduce sediment input and downstream sediment transport and deposition in Hess Creek.	Maintenance of a stable channel that conveys flow through the restoration site in Year 1-3, 5, 7 and 10.	No erosion areas were noted and channel is stable. **Year 10 performance criteria met.**
	SO-16: Maintain and enhance in-stream structural diversity.		
	SO-17: Improve stream flow and connectivity along Hess Creek for native aquatic wildlife.		
	SO-19: See above.	See above.	See above.

Table 11. Performance Standards for Restoration Plantings

Attribute	Year 1 (2015)	Year 2 (2016)	Year 3 (2017)	Year 5 (2019)	Year 7 (2021)	Year 10 (2024)
Relative Percent Cover of Dominant Wetland Vegetation	5%	10%	20%	50%	-	-
Riparian Woodland/Streamside Percent Cover Criteria	-	-	6%	10%	20%	40%
Riparian Woodland/Streamside Plant Survival	100%	100%	80%	-	-	-

Table 12. Hess Creek Restoration Goals and Compensatory Commitment

Habitat	Pre-Project[1] (acre)	Post-Project[2] (acre)	Restored[3] (acre)	Amount Committed to Compensatory Mitigation	Amount Remaining Available for Compensatory Mitigation
Stream Channel	-	-	2,016	0	2,016
Seasonal Wetlands	0.296	0.468	0.172	0	0.172
Riparian	0.77	3.34[4]	2.57	0.610	1.960

[1] Based on the pre-project wetland delineation for the project as detailed in the Mitigation and Monitoring Plan (HT Harvey 2013).

[2] Based on the Year 5 Annual Monitoring Report for the project (Nomad Ecology 2019).

[3] Per the HCP/NCCP, habitat enhancement is defined as the improvement of an existing degraded community; habitat restoration is defined as the establishment of a vegetation community in an area that historically supported it, but no longer does because of the loss of one or more required ecological factors; habitat creation is defined as the creation of a habitat in an area that previously did not support it. Streams are an exception to this as stream improvement meets the definition of restoration.[4]The net increase goal was 0.30 acre of seasonal wetlands, however only 0.172 acres of seasonal wetlands were created in the re-establishment area.

[4]This includes the 0.77 acre of existing riparian, 2.12 acres of Riparian Woodland Establishment Area and 0.45 acres of Riparian Streamside Establishment Area.

Souza II Corral Seasonal Wetland Restoration Project

Background

In 2012 Monk & Associates, Inc. (M&A) assisted with the design and construction of a 0.34-acre seasonal wetland on approximately 1.50-acres of land near the Byron Regional Airport in Byron, Contra Costa County, California (the project site). Construction of the seasonal wetland was initiated on October 15, 2012 and was completed on October 25, 2012. The approximately 1.60-acre project site is located within a relatively small corral/paddock used in the past for loading livestock on trucks and/or as a horse paddock. The objective was to create a seasonal wetland capable of supporting federal listed endangered brachiopods, specifically vernal pool fairy shrimp (*Branchinecta lynchi*). The final design of the seasonal wetland was that most of the seasonal wetland (0.40 acre) would inundate to 10 inches deep. However, a smaller (0.014 Acre) 14-inch deep "dimple" was also designed in the bottom of the 0.40 acre wetland to ensure that if CTS were to lay eggs in the wetland, that the deeper dimple area would be likely to promote sufficient duration of ponding to support CTS larvae through metamorphosis. Meanwhile the balance of the seasonal wetland would provide optimal conditions for VPFS and colonization by hydrophytic vegetation.

All disturbed areas around the hinge point of the upper rim of the seasonal wetland were hydroseeded with a sterile upland seed mix. The seasonal wetland bottom was not hydroseeded, rather was covered with a thin layer of A-Horizon and B-Horizon soils harvested from a local seasonal wetland known to support vernal pool fairy shrimp. The soil (inoculum) contained cysts of vernal pool fairy shrimp as well as the seeds of native wetland plants species.

Monitoring Status

The 2022-2023 monitoring year was the eleventh monitoring year for the Souza II Corral Seasonal Wetland Project (Monk and Associates 2024).

The restoration objectives, performance criteria, and results from annual monitoring are summarized below in Table 13. The restoration goals and compensatory commitment by habitat type are summarized in Table 14.

Table 13. Souza II Corral Seasonal Wetland Project Performance Criteria and Results

Metric	Performance Criteria	Results
Hydrology	Year 1: The wetland will remain inundated to a depth of 1 inch or greater for at least 3 days. Year 3: The created wetland will remain inundated to a depth of 1 inch or greater for at least 30 days. Year 5: The created seasonal wetland will remain saturated or inundated to the surface for at least 30 days, but not exceed 4 months of continuous standing water.	Performance Criteria were met.
Hydrophytic Vegetation	Year 1: Little hydrophytic plant colonization to 2 percent cover, or as otherwise comparable, and within 25 percent of the vegetation cover typical of natural wetlands located in the region. Year 3: 25 percent total cover of wetland vegetation, including native wetland species,	Performance Criteria were met.

Metric	Performance Criteria	Results
	or as otherwise comparable with natural seasonal wetlands in the region. Year 5: There shall be a minimum of 51% total vegetative cover composed of hydrophytic species in the created seasonal wetland or as otherwise comparable with other natural seasonal wetlands in the region. At least 51% of the vegetative cover will be composed of California native hydrophytic species in the created wetland	
Invasive Weeds	Year 1: None Year 3: The created pond will not have any plant species with a "high" rating on the California Exotic Pest Plant Council's (CEPPC) Table 1: *Invasive Non-native Plants That Threaten Wildlands in California*. If any of these species are observed, they will be removed as necessary. Year 5: The created pond will not have any plant species with a "high" rating on the California Exotic Pest Plant Council's (CEPPC) Table 1: *Invasive Non-native Plants That Threaten Wildlands in California*. If any of these species are observed, they will be removed as necessary.	Performance Criteria were met.
Wetland Delineation	Year 5: Wetland criteria including a dominance of hydrophytic vegetation, hydric soils, and evidence of hydrology must be present in the created wetland at the end of the five-year monitoring period. These criteria will be present as set forth in the Army Corps of Engineers' 1987 manual (U.S. Army Corps of Engineers 1987) and the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (U.S. Army Corps of Engineers 2008).	Performance Criteria were met. 0.40-acre of jurisdictional seasonal wetland was created at the project site.

Table 14. Souza II Corral Seasonal Wetland Project Restoration Goals and Compensatory Commitment

Habitat	Pre-Project (acre)	Post Project[1]	Restored[2,3] (acre)	Amount Committed to Compensatory Mitigation	Amount Remaining Available for Compensatory Mitigation
Seasonal Wetlands	0	0.40	0.40	0.40	0

[1] Based on the 2022-2023 (YEAR 11) Annual Monitoring Report for the project (Monk and Associates 2024.
[3]Per the HCP/NCCP, habitat enhancement is defined as the improvement of an existing degraded community; habitat restoration is defined as the establishment of a vegetation community in an area that historically supported it, but no longer does because of the loss of one or more required ecological factors; habitat creation is defined as the creation of a habitat in an area that previously did not support it.

Summary

Table 15 summarizes the compensatory commitments from Table 1 and the wetland types restored and created at each IMS site.

Table 15. Summary of Compensatory Commitment and Conservancy IMS Projects that Compensate for Impacts under RGP through December 1, 2025

Wetland Types	Total Required Created or Restored (from Table 1)[1]	Committed Restored/Created Acres by Conservancy IMS Site					Total
		Souza I	Souza II	Upper Hess	Hess Creek	Souza II Corral	
Stream (linear ft)	**1,402 (R)**	-	1,402	-	-	-	**1,402**
Seasonal Wetland (acre)	**2.812 (R)**	1.100	1.074[2]	0.238	-	0.400	**2.812**
Alkali Wetland (acre)	**0.266 (R)**	-	0.266[2]	-	-	-	**0.266**
Permanent Wetland (acre)	**0.04 (R)**	-	0.04	-	-	-	**0.04**
Pond (acre)	**0.01 (C)**	-	-	0.01	-	-	**0.010**
Riparian (acre)	**0.610**	-	-	-	0.610	-	**0.610**

[1] As shown in Table 5-16 and Table 5-17 in the HCP. (R) = restoration required and (C) = creation required. For streams, restoration (not creation) is required.

[2] At Souza II, a total 1.17 acres of alkali wetland and 0.17 acres of seasonal wetland were created for a total of 1.34 acres of seasonal wetlands. Of these 1.34 acre, 0.64 were placed in the seasonal wetland column and 0.70 were placed in the alkali wetland column, in order to meet mitigation requirements.

Items Required for Conservancy Restoration Projects

Per the Draft *Compensatory Mitigation Strategy for ECCC HCP/NCCP Prior to Approval of a Proposed In-lieu Fee Program,* the following items are required for the four Conservancy-built existing establishment/rehabilitation projects that are to be counted towards the Compensatory Mitigation Strategy.

- Copy of site protection instrument (copy of the recorded document and grant agreement)
- Copy of MMP, that includes maintenance plan, monitoring requirements, adaptive management, and other relevant documentation of baseline conditions
- Documentation of amount of acreage/linear feet of various types of streams/wetlands restored at each site ("net gain")
- A detailed work plan (Restoration Plan) that includes:

  Geographic boundary, Construction methods, Timing, Construction sequence, Connections to existing waters and uplands, Methods for establishing desired plant communities, Plans to control invasive plant species, Grading plan, Topographic elevations, Soil management, Erosion control measures / best management practices (BMPs).
- Financial assurances letter

These items are included as attachments to this letter.

Please feel free to contact me with any questions or concerns regarding this comment letter.

Sincerely,

Abigail Fateman

Literature Cited:

City of Oakley. 2017. *Cypress Preserve Onsite Habitat Mitigation and Monitoring Plan.* Prepared by Balance Hydrologics, Inc. Oakley, California.

H.T. Harvey and Associates. 2011. Upper Hess Creek Watershed Restoration Planning, Preliminary Delineation of Wetlands and other Waters, Concord, Contra Costa County, California. May.

_____. 2012. Upper Hess Creek Habitat Restoration Project, Biological As-Built Report, Concord, Contra Costa County, California. February.

_____. 2013. Hess Creek Watershed Restoration Mitigation and Monitoring Plan. November 14.

Jones & Stokes. 2009. Delineation of Waters of the United States at the Souza II Project Site.

Monk and Associates. 2009. HCP Pond As-Built Report, East Contra Costa County Habitat Conservancy, Vasco Souza I, HCP Pond, Vasco Caves Regional Park, Byron, California. Project APN #: 005-160-005. September 9.

_____. 2013. As-Built Report East Contra Costa County Habitat Conservancy, Souza II, Corral Seasonal Wetland, Byron, California. September 13.

_____. 2017. Request for Created Wetland Confirmation of Clean Water Act Jurisdiction, East Contra Costa County Habitat Conservancy, Souza I Pool, Vasco Caves Regional Park, East Contra Costa County. October 17.

_____. 2019. Year Eight Created Wetlands and Monitoring Report for East Contra Costa County Habitat Conservancy Upper Hess Creek Restoration Project, Contra Costa County, California. October 14.

_____. 2022. 2020-2021 Monitoring Report Upper Hess Restoration Area and Vaquero Farms Seasonal Wetlands 1, 2, 3. January 3.

_____. 2024. Annual Monitoring Report East Contra Costa County Habitat Conservancy, Souza II, Corral Seasonal Wetland project 2022-2023 (Year 11), Byron, Contra Costa County, California. January 30.

Nomad Ecology LLC. 2015. Sixth Annual Restoration Monitoring Report (Year 6), Souza 2 Restoration Project, Contra Costa County, California. Dec.

_____. 2019. Annual Restoration Monitoring Report (Year 5), Hess Creek Watershed Restoration, East Contra Costa County Habitat Conservancy. December.

_____. 2024. Annual Restoration Monitoring Report (Year 10), Hess Creek Watershed Restoration, East Contra Costa County Habitat Conservancy. December.

Attachments:

Available for download and viewing: https://cocodcd.egnyte.com/fl/gwCccmHpt88p

Attachment A: Souza I Documents
A1: Copy of Site Protection Instrument – Restrictive Covenant
A2: As-Built Report (including Construction Plans)
A3: Year 7 Monitoring Report
A4: Army Corps Sign-Off Request Letter (10/18/2017)

Attachment B: Souza II Documents
B1: Copy of Site Protection Instrument – Restrictive Covenant
B 2: Construction Plans
B 3: As-Built Planting Report
B 4: Restoration Management Plan
B5: Year 6 Monitoring Report (final)

Attachment C: Upper Hess Creek Watershed Documents
C1: Copy of Site Protection Instrument – Restrictive Covenant
C2: Construction Plans
C3: As-Built Report
C4: Mitigation and Monitoring Plan

C5: Year 8 Monitoring Report

Attachment D: Hess Creek Watershed Documents
D1: Copy of Site Protection Instrument – Restrictive Covenant
D2: Construction Plans
D3: As-Built Report
D4: Mitigation and Monitoring Plan
D5: Year 10 Monitoring Report

Attachment E: Souza II Corral Documents
E1: Copy of Site Protection Instrument – Restrictive Covenant
A2: As-Built Report
A3: Year 11 Monitoring Report (final)

Attachment F: Financial Assurances Letter

EAST CONTRA COSTA COUNTY HABITAT CONSERVANCY

DATE: February 23, 2026

TO: Governing Board

FROM: Conservancy Staff

SUBJECT: **East Bay Regional Park District's District Plan**

RECOMMENDATION

ACCEPT update report on the East Bay Regional Park District's (EBRPD) District Plan.

DISCUSSION

The East Bay Regional Park District (EBRPD) is developing a District Plan to guide decisions on how they prioritize public resources and best serve residents of Alameda and Contra Costa counties. In 2013, EBRPD adopted a comprehensive plan that established a robust vision for parks, open space, and regional trails in the East Bay. Implementing this vision will take many years. The District Plan provides a framework for prioritizing and implementing those park and trail improvements to help guide staff workplans, budgeting decisions, and future funding measures.

Public engagement on the District Plan started in 2025 with public surveys and is continuing in 2026 with more focused outreach to agencies, community groups and partners. This approach is intended to inform the development of the District Plan through meaningful, inclusive community input and relationship building that will support long-term implementation. Community engagement is structured in multiple phases, with Round 2 focused on deepening dialogue, strengthening partnerships, and expanding awareness of EBRPD programs and services.

CONTINUED ON ATTACHMENT: Yes
ACTION OF BOARD ON: February 23, 2026 APPROVED AS RECOMMENDED: _____
OTHER: _____

VOTE OF BOARD MEMBERS

___ UNANIMOUS

AYES: _____
NOES: _____
ABSENT: _____
ABSTAIN: _____

I HEREBY CERTIFY THAT THIS IS A TRUE AND CORRECT COPY OF AN ACTION TAKEN AND ENTERED ON THE MEETING RECORD OF THE CONSERVANCY GOVERNING BOARD ON THE DATE SHOWN.

ATTESTED

_____
John Kopchik, SECRETARY OF THE EAST CONTRA COSTA COUNTY HABITAT CONSERVANCY

BY:_____, DEPUTY

The Conservancy Board is invited to participate in outreach sessions or request a presentation from EBRPD staff for the Conservancy or member agencies. Conservancy staff will engage with the EBRPD to ensure that the Conservancy's interests are represented in the discussions around the District Plan.

Attachments:
District Plan Trifold Brochure
A Vision for East Bay Regional Parks – presentation slides


Claremont Canyon Regional Preserve, Oakland


Garin/Dry Creek Pioneer Regional Parks, Hayward/ Union City


Sunol Wilderness Regional Preserve, Sunol


Pleasanton Ridge Regional Park, Pleasanton


San Pablo Bay Regional Shoreline, Pinole

About the District Plan

The District Plan will provide a **strategic roadmap** with key priorities to move toward the vision of an extraordinary and well-managed system of open space parkland in Alameda and Contra Costa counties.

The District Plan process will include summarizing and mapping existing conditions, then identifying future trends based on population, climate change, and other factors. It will incorporate community and staff input. The District Plan will then set out strategies and priorities to further the Park District's mission.

Project Timeline

Development of the District Plan will include three rounds of public engagement, as shown below:

The District Plan

You can help shape the future of East Bay Regional Parks

Help shape the East Bay Regional Park District's new strategic plan by sharing your input through community engagement opportunities.

Claremont Canyon Regional Preserve, Oakland

East Bay Regional Park District

How to Get Engaged in the District Plan Process

The **East Bay Regional Park District** is developing a new District Plan to guide decisions on how we prioritize public resources to best serve residents of Alameda and Contra Costa counties for decades to come — and community input is essential!

The Park District is offering multiple ways for you to **get involved** and **share your ideas**. The Park District is facilitating:

- **Virtual meetings**
- **In-person meetings**
- **Pop-up events in parks and community spaces**
- **Online input opportunities**

Visit **ebparks.org/district-plan** for the latest schedule of events and activities.

What We've Heard So Far:

An initial public survey conducted in summer 2025 helped lift up some areas of interest expressed by survey respondents. Common themes that emerged include a Park District focus on protecting natural resources and places of cultural significance, maintaining and updating existing facilities and park resources, expanding public education and programming, and advocating for improved transportation access that connects people to more parks via public transit.

Ongoing District Plan engagement will explore these findings and leave room for other potential priorities and areas of interest to emerge. Your input is critical every step of the way toward finalizing this critical guiding document for the Park District.

Claremont Canyon Regional Preserve, Oakland

Did You Know...

The Park District contains **73** regional parks, recreation areas, wildernesses, shorelines, preserves, and land banks.

The Park District facilities include over **1,330** miles of trails within the parklands.

Over **90%** of the Park District lands are protected natural landscapes.

The Park District is responsible for the protection, conservation, and recovery of **15** endangered species (including 6 plants), **17** threatened species (including 1 plant), and **27** fully protected or species of special concern.

The Park District strives to meet the needs of all of our growing and evolving population. This includes underrepresented communities across demographics, persons with disabilities, and elderly park visitors.

Our Regional Parklands

A Vision for East Bay Regional Parks

The District Plan
East Bay Regional Park District

Our Park District

- Encompassing Alameda and Contra Costa counties
- Largest regional park district in the nation
  - 73 regional parks
  - Over 126,000 acres
  - 55 miles of shoreline
  - Over 1,330 miles of trails
  - Over 30 million annual visits
- What we do:
  - Preserve nature
  - Provide access to nature
  - Connect people with nature
  - Keep parks welcoming, safe, and enjoyable for all

East Bay Regional Park District

Recreation and Preservation

From Land Acquisition to Park Openings and On-going Operations

Climate Resiliency

Protecting Open Space and Communities through Active Land Management

Wildfire Protection

Year-Round Vegetation Management to Mitigate Wildfire Risks

The District Plan

The Park District is preparing its next District Plan to guide the future of East Bay Regional Parks and address changing conditions, including climate change, the economy, demographics, and park usage.

Desired Outcomes

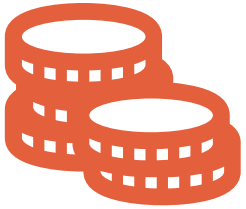
- Provide a strategic roadmap with key priorities.
- Move toward the vision of an extraordinary and well-managed system of open space parkland.
- Analyze existing conditions and future trends encompassing population and climate change.
- The Plan will be informed by the diverse communities that use, benefit from, or seek greater access to Park District resources.

District Plan Themes

Themes will apply throughout all goals and strategies of the Plan.

Equity

Resiliency



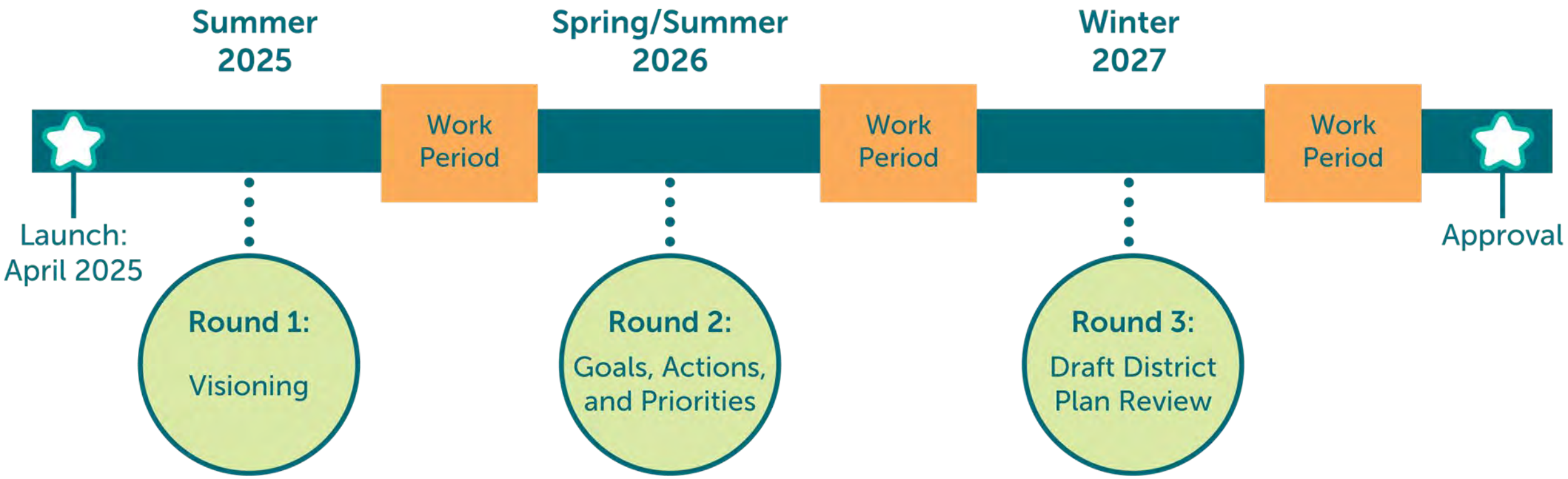
Fiscal Sustainability

Collaboration

Draft District Plan Goals

Goal Area	Draft Goal
Access	Our parks, programs, and facilities should be welcoming and accessible to all.
Experiences	Our lands, programs, and facilities should provide engaging outdoor recreation and enrichment opportunities for the diverse East Bay community.
Resource Protection	Our parks should protect valuable natural and cultural resources and should be part of a healthy ecosystem that is resilient to the impacts of climate change.
Engagement	Our priorities and policies should reflect and respond to the needs of the East Bay community.
Public Lands Management	Our lands and facilities should be well - maintained and support healthy and inclusive recreation.
Organizational Management	East Bay Regional Park District should be an effective and efficient organization, and an excellent workplace.

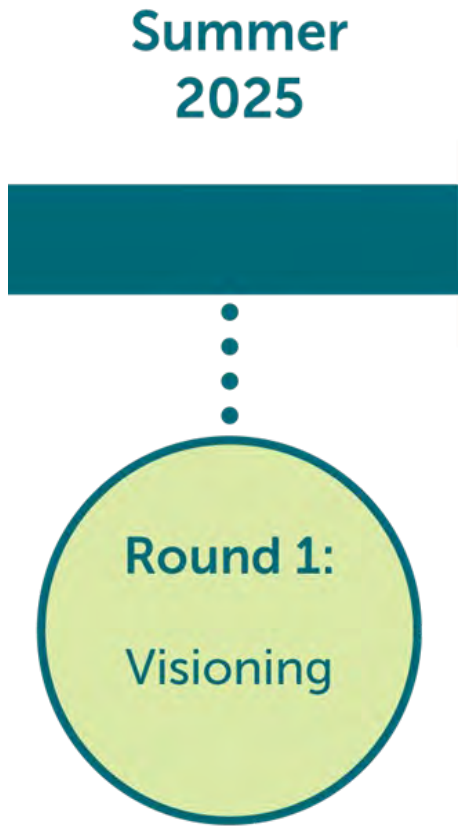
District Plan Timeline



District Plan – Round 1

Engagement to Date

- Research and Planning
  - Community survey
  - Community needs assessment and mapping
  - Literature and document review
- Foundational Engagement
  - Agency and government partner discussions
  - Staff engagement
- Board and Park Advisory Committee Meetings



District Plan – Round 1

Community Priorities Heard So Far

- Investing in existing parklands
- Providing access to newly acquired parklands
- Balancing resource conservation and public access
- Providing new amenities
- Maintaining existing amenities
- Responding to emerging challenges from climate change, wildland fires, etc.
- Conducting equitable community engagement and outreach
- Expanding inclusive educational and interpretive programs

District Plan – Round 2

Goals, Actions, and Priorities

- Build on input from Round 1
- Refine goals
- Develop actions and priorities to support and achieve goals

Engagement Objectives

- Engage diverse communities
- Ensure transparency & accountability
- Strengthen trust & relationships
- Increase visibility & awareness
- Inform a strategic, inclusive plan

Engagement Framework and Community Partners

To guide outreach and ensure meaningful participation, community partners are organized according to their current connection to EBRPD

- Emerging partners
- Established partners
- Institutional partners
- Tribes
- Park visitors
- EBRPD staff

District Plan Timeline

Round 2 - Timeline for Engagement

- Late 2025 – Preparation and material development
- Jan to Mar 2026 – Early outreach and awareness building
- Apr to Jun 2026 – Active engagement
- Summer 2026 – Synthesis and reporting

Round 3 - Public Review of Draft District Plan

- Refining and validating the Draft District Plan and preparing for implementation
  - Does the Draft District Plan reflect the community priorities from Round 2? Do the goals, actions, and priorities strike the right balance?

The District Plan

- A strategic roadmap with key priorities informed by public input, existing conditions, and future trends

Next Steps

- **We want to hear from you!**
  - Complete the online activity at EBParks.org/District-Plan
  - Send the link to your friends and neighbors

- **Coming up for the District Plan:**
  - Findings from Round 2 will be shared in fall 2026
  - The first public draft District Plan will be shared in winter 2027
  - Round 3 of engagement will be a public review of the draft plan

Thank you

For questions, please contact: DistrictPlan@ebparks.org

For more information, please visit: www.ebparks.org/district-plan

EAST CONTRA COSTA COUNTY HABITAT CONSERVANCY

DATE: February 23, 2026

TO: Governing Board

FROM: Conservancy Staff (Abby Fateman)

SUBJECT: **California Department of Fish and Wildlife Local Assistance Grant Award and Contracting**

RECOMMENDATION

Consider the following actions related to the California Department of Fish and Wildlife (CDFW) Local Assistance Grant Award and Contracting:

i) **AUTHORIZE the Executive Director to execute a contract with the Contra Costa Resource Conservation District (CCRCD) not to exceed $49,400 for the term March 15, 2026 through March 31, 2028 to complete a study regarding "Movements and Identifying Nesting Habitat of Western Pond Turtles in East Contra Costa County".**

ii) **DETERMINE the action requested is not a "project" subject to CEQA pursuant to CEQA Guidelines Section 15378(b)(4) and/or (5).**

SUMMARY

In October 2025, the Conservancy Board was updated on grant opportunities from the California Department of Fish and Wildlife (CDFW). At that meeting, the Board directed staff to move forward with applying for funds from the California Department of Fish and Wildlife for funds from CDFW's Natural Community Conservation Planning (NCCP) Local Assistance Grant (LAG) Program.

The Conservancy partnered with the Contra Costa Resource Conservation District to develop the grant proposal titled *Tracking Movements and Identifying Nesting Habitat of Western Pond Turtles in East Contra Costa County.* Western Pond Turtle (WPT) is a species covered by the

CONTINUED ON ATTACHMENT: Yes
ACTION OF BOARD ON: February 23, 2026 APPROVED AS RECOMMENDED: _____
OTHER: _____

VOTE OF BOARD MEMBERS

___ UNANIMOUS

AYES: _____

NOES: _____

ABSENT: _____

ABSTAIN: _____

I HEREBY CERTIFY THAT THIS IS A TRUE AND CORRECT COPY OF AN ACTION TAKEN AND ENTERED ON THE MEETING RECORD OF THE CONSERVANCY GOVERNING BOARD ON THE DATE SHOWN.

ATTESTED

_____
John Kopchik, SECRETARY OF THE EAST CONTRA COSTA COUNTY HABITAT CONSERVANCY

BY: _____, DEPUTY

East Contra Costa County Habitat Conservation Plan/Natural Community Conservation Plan (HCP/NCCP) and this funding provides an opportunity for us to learn more about their behavior and distribution in the Plan Area.

Since that Board meeting, the Conservancy was notified we were awarded these funds. It was anticipated that an award of these grant funds would be accompanied by a contract with the Resource Conservation District to manage and complete the work specified under the grant. This expenditure was incorporated into the 2026 Conservancy budget that was approved in December 2025.

The recommendation is to authorize the Executive Director to execute a contract with the CCRCD to complete the work described in the Local Assistance Grant awarded to the Conservancy for the grant proposal titled *Tracking Movements and Identifying Nesting Habitat of Western Pond Turtles in East Contra Costa County.* A summary of the contract is provided below.

Contract amount: $49,400
Term: March 15, 2026 – March 31, 2028
Primary tasks: Complete all work associated with the Local Assistance Grant including project management, trapping, tracking. and reporting.

Funding source: California Department of Fish and Wildlife Local Assistance Grant

EAST CONTRA COSTA COUNTY HABITAT CONSERVANCY

DATE: February 23, 2026

TO: Governing Board

FROM: Conservancy Staff

SUBJECT: **Knightsen Wetland Restoration Project**

RECOMMENDATION

Consider the following actions related to the Knightsen Wetland Restoration Project:

a) **ACCEPT update on the Knightsen Wetland Restoration Project.**
b) **ADOPT resolution 2026-01 to authorize the Executive Director to amend a contract, and to submit applications for local, state, and federal permits needed to complete designs for and construct the Project.**

DISCUSSION

Background

The Conservancy and EBRPD purchased the Knightsen Wetland Restoration Project (Project) site (formerly the Nunn Ranch property) in 2016 to protect it from development and to restore Delta habitat, consistent with the conservation goals of the HCP/NCCP.

The 645-acre site consists of two parcels adjacent to Delta Road and Byron Highway. One parcel is located north of Delta Road (the North Parcel) and the second is located south of Delta Road (the South Parcel). A portion of the South Parcel is adjacent to No Name Slough.

Following the acquisition, the Project partners have been studying site conditions, developing project designs, informing and engaging the community, and evaluating potential community effects.

The Project will reconnect an area of historic tidal wetlands and seasonal wetland habitats to Delta waters, restore and enhance seasonal wetlands, and restore historic upland interior dune, grassland, and

CONTINUED ON ATTACHMENT: Yes
ACTION OF BOARD ON: February 23, 2026 APPROVED AS RECOMMENDED: _____
OTHER: _____

VOTE OF BOARD MEMBERS

___ UNANIMOUS

AYES: _____
NOES: _____
ABSENT: _____
ABSTAIN: _____

I HEREBY CERTIFY THAT THIS IS A TRUE AND CORRECT COPY OF AN ACTION TAKEN AND ENTERED ON THE MEETING RECORD OF THE CONSERVANCY GOVERNING BOARD ON THE DATE SHOWN.

ATTESTED

_____
John Kopchik, SECRETARY OF THE EAST CONTRA COSTA COUNTY HABITAT CONSERVANCY

BY:_____, DEPUTY

oak savanna habitats. The restored and enhanced wetlands will provide important ecological benefits, such as improved habitat for fish and wildlife, increased habitat diversity, and enhanced food production for wildlife. In addition to restoring habitat, the Project is expected to have the ancillary public benefit of reducing wet season drainage problems that currently occur in some areas adjacent to the site. The Project will create drainage pathways that will allow stormwater to drain onto the Project site to seasonal wetlands and across the site to restored freshwater tidal wetlands connected to No Name Slough. Draining stormwater from nearby parcels and drainage ditches and away from the community will help alleviate wet season drainage problems adjacent to the Project site. The Project does not modify existing drainage pathways that route runoff to the site, and localized flooding in the adjacent community is likely to continue to occur when major storm events occur.

Design Updates

Since the last time that this Project was discussed at an East Contra Costa County Habitat Conservancy Governing Board (Board) meeting, and since the most recent community meeting in November 2024, the Project has moved from 65% to 90% construction design. As a result, there have been design modifications and adaptations, which are highlighted below.

Project Phasing: The Project is now planned to be constructed in two or more phases. Phase 1 will include finished construction of the North Parcel and the northern section of the Central Sub-Parcel, and partial construction of the East Sub-Parcel. Funding for construction for Phase 1 is in place, with construction anticipated to begin in 2027.

Design Modification: A modification to the design to the water control structures results in the change of muted tidal wetlands in the north central sub-parcel to seasonal wetlands. In prior designs, the water control structure between the Central Sub-Parcel and the East Sub-Parcel allowed controlled flows of water in either direction. The updates to those water control structures mean that water will only flow onto the East Sub-Parcel from the Central Sub-Parcel, and not the other direction. This change means that the Central Sub-Parcel will function as a seasonal wetland system. During the wet season these features will capture and direct rainwater into depressions that can drain to the East Sub-Parcel, and will likely be dry during the dry season.

Public Outreach

Starting before the property was acquired, Conservancy staff met with local agencies and residents. Outreach continued through the Project design and feedback from the community and other stakeholders influenced aspects of the Project design.

Conservancy staff conducted several community meetings to present Project information and updates to community members, offer an opportunity for community input, and listen and respond to questions and concerns. Substantial efforts were made to inform the Knightsen community about these meetings and how they could attend or participate. The meetings are listed below.

- Community Meeting #1 – May 2, 2018. Project introduction and opportunity for community member questions/comments early in the Project process (before design alternatives were developed).
- Community Meeting #2 – July 11, 2019. Presentation of study results, a presentation summarizing three Project conceptual design alternatives, and information stations to solicit attendee comments on each alternative.
- Neighbor Meeting #1 – August 26, 2021. Eagle Lane Neighborhood Meeting – neighborhood-specific conditions and concerns.

- Neighbor Meeting #2 – September 1, 2021. Byron Highway-Delta Road Neighborhood Meeting – neighborhood-specific conditions and concerns
- Community Meeting #3 – November 9, 2021. Project overview and updates.
- Community Meeting #4 – December 4, 2021. Public open house and project site visit.
- Community Meeting #5 – March 30, 2022. Consulting regional public agencies panel.
    - East Contra Costa Irrigation District
    - Contra Costa County Public Works
    - Contra Costa County Flood Control and Water Conservation District
    - Contra Costa Mosquito & Vector Control District
- Community Meeting #6 – March 29, 2023. Groundwater Report
- Community Meeting #7 – July 30, 2024. Project Design
- Community Meeting #8 – November 2, 2024 – Public open house and site visit

Conservancy staff also met individually with adjacent property owners, including residents and farming operations. No additional outreach meetings are planned at this time. However, the Conservancy maintains a Project website where materials and updates are available: https://www.contracosta.ca.gov/7624/Knightsen-Wetland-Restoration-Project .

The attached Knightsen Wetland Restoration Project Summary Report V3 is an updated document that was developed to synthesize the Project purpose, design information, and respond to questions from the community. Version 3 is the most current Report that includes the Project changes addressed above.

Contracts
Funded through a grant from the California Department of Fish and Wildlife's Watershed Restoration Grants Branch ($10,308,518), this next phase of work on the Project includes: obtaining permits, completing detailed Phase 2 designs, site preparations, and construction of Phase 1. This grant funding is expected to be augmented later this year, and at that time additional contracts are expected to be amended or entered into to progress the Project. These contracts will be presented to the Board as the Project moves closer to construction.

At this time, one existing contract needs to be amended to move forward with this grant funded work:

- Environmental Science Associates (ESA): Execute a contract amendment with ESA to increase the contracting limit by $450,000 from $1,100,000 to $1,550,000 and extend the term from June 30, 2026 to December 31, 2027.
    - This contract amendment includes funding to complete 100% designs for Phase 2, management of the permitting process, completion of monitoring, management and operations plans, and supporting the bid and construction of the Project.

This contract amendment is consistent with the Conservancy's adopted 2026 budget and is funded by a grant from the California Department of Fish and Wildlife (CDFW).

Permits
The Project team has developed permit applications to federal, state, and local permitting agencies. These permits include but may not be limited to:

- CDFW – Restoration Management Permit

- Central Valley Regional Water Quality Control Board– Clean Water Act Section 401 Water Quality Certification and Waste Discharge Requirements for Restoration Projects Statewide - Statewide Restoration General Order
- United States Army Corps of Engineers– Section 404 – Regional General Permit 16
    - United States Fish and Wildlife Service (USFWS) – informal consultation (provide Biological Assessment and receive a concurrence letter from USFWS)
    - National Marine Fisheries Service– Central Valley Restoration Programmatic Biological Opinion
    - National Historic Preservation Act Section 106
- East Contra Costa County Habitat Conservation Plan/Natural Community Conservation Plan Planning Survey Report
- Conta Costa County 1010 Drainage Permit
- Contra Costa County Grading Permit

The work to develop these permit applications was funded through a grant from CDFW, and submitting these applications is a required action to progress the Project.

California Environmental Quality Act (CEQA)
The Knightsen Wetland Restoration Project is exempt from CEQA under the Statutory Exemption for Restoration Projects (SERP), California Public Resources Code Section 21080.56. The modifications to the Project described above and in the attached documents do not change the applicability of the SERP. The modifications do not substantially change the Project, Project purpose, or Project benefits. With the modifications, the Project will continue to comply with the SERP because it will:

(1) be exclusively for restoration;
(2) have incidental public benefits;
(3) result in long-term net benefits to climate resiliency, biodiversity, and sensitive species recovery;
(4) include procedures and ongoing management to protect the environment; and
(5) include only construction related to habitat restoration.

Attachments:
Knightsen Wetland Restoration Project Summary Report V3.0
Resolution 2026-01

Resolution No. 2026-01

TO AUTHORIZE THE EXECUTIVE DIRECTOR TO ENTER INTO CONTRACTS AND AGREEMENTS, AND TO SUBMIT APPLICATIONS FOR LOCAL, STATE, AND FEDERAL PERMITS, NEEDED TO COMPLETE DESIGNS FOR, AND TO CONSTRUCT, THE KNIGHTSEN WETLAND RESTORATION PROJECT.

WHEREAS, on February 14, 2023, the Conservancy submitted to the Director of the California Department of Fish and Wildlife (CDFW Director) a request for concurrence that the Knightsen Wetland Restoration Project (Project) is exempt from the California Environmental Quality Act (CEQA) pursuant to the Statutory Exemption for Restoration Projects, California Public Resources Code Section 21080.56 (the SERP), and, on March 29, 2023, the CDFW Director issued his concurrence that the Project meets the SERP's eligibility criteria; and

WHEREAS, the Governing Board of the East Contra Costa County Habitat Conservancy ("Conservancy Board") gave full and legal notice of a public hearing to consider and approve the Project based in part on the SERP, which public hearing was duly held on December 18, 2023, and, after duly considering the SERP, the comments of the public, both oral and written, and all written materials in the record connected therewith, and being fully informed thereon, the Conservancy Board determined the Project is exempt from CEQA, pursuant to the SERP; and

WHEREAS, on December 18, 2023, in Resolution 2023-05, the Conservancy Board approved the Project, authorized staff to apply for, and to accept, grant funds for early implementation actions for the Project, and appointed the Executive Director to conduct all negotiations, sign for, execute and submit all documents including, but not limited to applications, agreements, payment requests, amendments, which may be necessary for such purposes; and

WHEREAS, detailed (90%) designs for the Project have been prepared, and the Conservancy, in partnership with the East Bay Regional Park District, wishes to obtain permits for Project construction, finalize project designs in accordance with permit requirements, and initiate construction of the Project according to the final designs; and

WHEREAS, the Project remains exempt from CEQA because the detailed designs for the Project do not include significant Project modifications or affect the applicability of the SERP.

NOW, THEREFORE, BE IT RESOLVED BY THE CONSERVANCY BOARD:

The Executive Director is directed to submit the following permit applications for the Project, and to take other actions as needed to facilitate the review of such applications and issuance of such permits, as needed to complete construction the Project:

- California Department of Fish and Wildlife – Restoration Management Permit

- Central Valley Regional Water Quality Control Board – Clean Water Act Section 401 Water Quality Certification and Waste Discharge Requirements for Restoration Projects Statewide - Statewide Restoration General Order
- United States Army Corps of Engineers – Section 404 – Regional General Permit 16
    - United States Fish and Wildlife Service (USFWS) – informal consultation (provide Biological Assessment and receive a concurrence letter from USFWS)
    - National Marine Fisheries Service – Central Valley Restoration Programmatic Biological Opinion
    - National Historic Preservation Act Section 106
- East Contra Costa County Habitat Conservation Plan/Natural Community Conservation Plan Planning Survey Report
- Conta Costa County 1010 Drainage Permit
- Contra Costa County Grading Permit

BE IT FURTHER RESOLVED:

The Executive Director is directed to execute an amendment of a contract related to Project design, permitting, and site preparation as follows:

- Environmental Science Associates (ESA): An amendment to the existing contract with ESA to increase the contracting limit by $450,000 from $1,100,000 to $1,550,000 and extend the term from June 30, 2026 to December 31, 2027.

CERTIFICATION

I hereby certify that the foregoing is a full, true, and correct copy of a resolution duly and regularly adopted by the Grantee's Governing Board at the meeting thereof held on February 23, 2026.

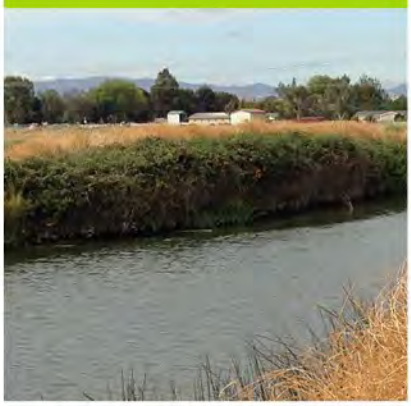
Ayes: _____
Noes: _____
Abstain: _____
Absent: _____

Signature:

_____
Abigail Fateman, Executive Director

KNIGHTSEN WETLAND RESTORATION PROJECT

SUMMARY REPORT






Prepared by The Catalyst Group with technical support from Environmental Science Associates and Balance Hydrologics

February 2026

VERSION 3.0

East Bay Regional Park District

Healthy Parks Healthy People

East Contra Costa County Habitat Conservancy

KNIGHTSEN WETLAND RESTORATION PROJECT SUMMARY REPORT

Version 3.0

Prepared by

The Catalyst Group

With technical support from

Environmental Science Associates

Balance Hydrologics

February 2026

Table of Contents

Glossary of Terms

100-year flood: The term "100-year flood" is used to describe the recurrence interval of floods. The 100-year recurrence interval means that a flood of that magnitude has a one percent chance (1/100) of occurring in any given year.

Acre-foot: Unit of volume equal to one foot in depth over one acre in area; 43,560 cubic feet.

Aquifer: A body of porous rock or sediment saturated with groundwater. Groundwater enters an aquifer as precipitation seeps through the soil. It can move through the aquifer and resurface through springs and wells. A unit of rock or an unconsolidated deposit is called an aquifer when it can yield a usable quantity of water.

Berm: A ridge-like, usually linear feature constructed of compacted soil, loose gravel, stone, or crushed rock to intercept and prevent stormwater runoff from entering an adjacent area and/or to support habitat features.

Certified/jurisdictional levee: An accredited levee system that FEMA has determined to meet the design, data, and documentation requirements of 44 CFR 65.10. Most levees in the Knightsen area are managed and maintained to an agricultural standard and not FEMA-certified.

Channel: A narrow body of water that carries flow between water bodies or drains a watershed. Slough and wetland channels carry tidal flows and support open water (aquatic) and tidal wetland habitat, providing estuarine fish habitat and wildlife corridor connections between the wetland and adjacent transitional and upland habitats.

Ecotone: A transitional zone between two different plant communities, such as wetland and grassland, where the two communities blend together. It has some of the characteristics and plant species of each bordering community. An ecotonal area often supports a greater number of species than are found in either community. Some organisms need a transitional area for activities such as breeding, nesting, or foraging for food.

Engineered levee: A manmade structure, usually an earthen embankment, designed and constructed in accordance with sound engineering practices to contain, control, or divert the flow of water to reduce flood hazards posed by adjacent waterways.

Flap gate: A flap gate is a flow control device that, in principle, functions as a check valve, allowing water to flow through it in only one direction. The flap gate usually consists of a flat plate that is hinged at the top of a culvert outfall to prevent high tides from inundating upgradient areas.

Freeboard: The vertical distance between a surface or water level and the top of the levee, berm, or landform that contains or restrains it. Freeboard is a safety feature that provides extra storage capacity and prevents overtopping from wave runup.

Gradient: The slope or rate of change as measured along a line in feet per foot of length or percentage.

Grassland: Upland vegetation communities characterized by grass and forb species (flowering plants) dominating the land cover and where trees and shrubs comprise less than 5 percent canopy

cover. Grassland plant communities identified on the project site include alkali grassland, annual grassland, and ruderal. Grasslands provide pollination opportunities for insects and birds; grasses and forb and grass seeds can support a variety of birds and small mammals.

Groundwater: The water present beneath the Earth's surface in rock and soil pore spaces and in the fractures of rock formations.

Groundwater recharge: A hydrologic process, where water moves downward from surface water to groundwater. The upper surface of the saturated zone is called the **water table**.

Habitat berm/mound: Areas of raised elevation constructed along excavated wetland channels (habitat berms) or within a restored marsh plain (habitat mounds) to increase habitat complexity, supporting a more diverse range of plant and wildlife species and providing escape space for marsh-dwelling wildlife during extreme high tide and/or storm surge events.

Inboard/outboard: Inboard refers to the landside of a feature such as a berm or levee and outboard to the waterside. In the context of this project, the inboard side of the levee is the side sloping down to the protected dry land area and the outboard side is the opposite side of the levee sloping down to the adjacent created wetland channel network that is connected to No Name Slough.

Interior dune: Wind-formed dune habitat historically occurred in inland areas on large expanses of sandy soils near present-day Oakley that has since been almost completely destroyed by development. This habitat type is characterized by densely packed shrubs interspersed with scattered areas of grasses, wildflowers, and open sand. Remnant dune features supporting rare dune species are present on the project site. Wildlife species including Northern California legless lizards and western burrowing owls could benefit from restoration of interior dune habitat.

Liquefaction: A process that takes place when loosely packed, water-logged sediments at or near the ground surface lose their cohesive strength in response to strong ground shaking.

Oak savanna: Grasslands with a low canopy cover of trees (generally between 5% and 30% canopy cover), primarily valley oak and blue oak. Shrubs are generally scarce and may include scattered individuals or occasional aggregations of chaparral scrub species. Herbaceous species commonly found include many of the species found in grasslands and support a variety of insect pollinators, birds, and small mammals.

Riparian: Zones of vegetation adjacent to water, such as on floodplains and streambanks. Riparian woodland/scrub in the project region is dominated by a mixture of trees and shrubs adapted to saturated and/or flooded soil conditions. Riparian habitats provide shaded aquatic habitat benefiting fish and other species. The structure and cover provided by riparian scrub vegetation can also provide channel bank stabilization and support a variety of bird species.

Seasonal wetland: Wetlands that support ponded or saturated soil conditions during winter and spring and are dry through the summer and fall until the first substantial rainfall. Seasonal wetlands are characterized by varied small-scale land surface elevations that support a mosaic of habitats including small ponds/pools, flats, and seasonally inundated grasslands. Seasonal wetlands in the region are inundated by direct rainfall or stormwater runoff from a couple of inches to one foot or more (pond/pool features).

Slide gate: A movable gate allowing water to flow under it. The gate is typically a movable barrier that can be opened or closed to adjust the amount of water flowing through it. Slide gates are employed to shut down the flow of water if a flap gate fails or leaks.

Special status species: Term used in the scientific community for species that are considered sufficiently rare or at risk that they require special consideration and/or protection and should be, or have been, listed as rare, threatened, or endangered by the Federal and/or State government(s).

Storm surge: The rise in seawater level caused solely by a storm.

Storm tide: The total observed seawater level during a storm, which is the combination of storm surge and normal high tide.

Stormwater retention pond: Basins formed through excavation or diking designed to collect stormwater runoff and release it at a rate that limits or prevents flooding or erosion.

Swale: Shallow, broad, and vegetated channels designed to convey stormwater runoff, promote infiltration, and remove pollutants.

Tidal exchange: The exchange of water, nutrients, and sediment between an estuary and marshes that occurs with the influx and outflow of tides.

Tidal wetland: A wetland formed along coasts and estuaries that floods and drains with the tidal movement of waters of the adjacent estuary or ocean.

Water control structure: A structure that conveys water, controls the direction or rate of flow, or maintains a desired water surface elevation. Water control structures may include open conveyance structures such as culverts or may be fitted with gate mechanisms to control the direction or volume of flow.

Wetland to upland transition: A band of habitat where wetlands and uplands meet that supports vegetation types from both habitats. The transition zone (or **ecotone**) provides an important refuge for marsh wildlife, allows upland wildlife to access the marsh for food and other resources, and can contribute to landscape complexity.

1. INTRODUCTION

1.1 Proposed Project

The Knightsen Wetland Restoration Project (project), led by the East Contra Costa County Habitat Conservancy (Conservancy) in partnership with the East Bay Regional Park District (EBRPD), will restore a mosaic of wetland and upland habitats to a 645-acre site in unincorporated Contra Costa County, in the community of Knightsen.

This report is designed to summarize the technical evaluations and project designs and to address community comments received through the planning process. The report provides an opportunity for the community and decision-makers to better understand the project and the supporting studies and design developments.

1.2 Project Purpose

The project will restore habitat types and ecological functions to the property, including wetland and upland habitats to support special status species identified in the East Contra Costa County Habitat Conservation Plan/Natural Community Conservation Plan (HCP/NCCP, see sidebar page 3), and to contribute the overall conservation goals for the region.

In addition to restoring habitat, the project is expected to have the ancillary benefit of reducing wet season drainage problems that currently occur in some areas adjacent to the site. The project will create drainage pathways that will allow stormwater to drain onto the project site to interior seasonal wetlands and across the site to restored freshwater tidal wetlands connected to No Name Slough. Draining stormwater from nearby parcels and drainage ditches and away from the community will help alleviate wet season drainage problems adjacent to the project site. The project does not modify existing drainage pathways that route runoff to the site, and localized flooding in the adjacent community is likely to continue to occur when major storm events occur.

1.3 Project Goals and Objectives

The Conservancy's goal for the restoration project is to restore historic habitat types and ecological functions on the site including a mosaic of wetland and upland habitats to support species targeted for conservation by the HCP/NCCP.

To realize this goal, the Conservancy developed objectives for the project with input from its partners, stakeholders, and the public. The objectives include the following:

1. Restore to the site habitats and conditions suitable to support special-status species covered by the HCP/NCCP.
2. Maximize areas of permanent freshwater emergent tidal wetland and seasonal wetland habitats.

3. Restore and enhance upland habitats including oak savanna, native grassland, and stabilized interior dune.
4. Create ecological sustainability and consistency with ongoing natural processes.
5. Direct stormwater flows to areas beneficial for target habitats.
6. Create onsite swales and shallow wetlands to improve water quality for runoff that enters the site and is ultimately discharged to the Sacramento-San Joaquin River Delta (Delta).
7. Minimize the potential for adverse effects to neighboring properties.
8. Maintain or increase the current level of flood protection along project boundaries.
9. Preserve future opportunities for passive recreation and access to Delta waterways.

1.4 Project History

The Conservancy and EBRPD purchased the project property (formerly the Nunn Ranch property) in 2016 to protect it from development and to restore Delta habitat, consistent with the conservation goals of the HCP/NCCP. Since acquisition, the project partners have been studying site conditions, developing project designs, informing and engaging the community, and evaluating potential community effects.

Section 3 describes the site conditions and Section 5 describes the project evaluations.

1.5 Project Partners

East Contra Costa County Habitat Conservancy: The Conservancy is a joint exercise of powers authority (JPA) formed by the Cities of Brentwood, Clayton, Oakley, and Pittsburg, and Contra Costa County to implement the East Contra Costa County HCP/NCCP.

East Bay Regional Park District: EBRPD manages a system of parklands in Alameda and Contra Costa counties to the east of San Francisco. The system comprises 73 parks spanning 125,000 acres, 1,250 miles of trails, and 55 miles of shoreline. The agency has a dual mission to preserve natural resources and provide public access to parklands.

The Conservancy is leading the planning and project development efforts for the project. EBRPD is the property owner and long-term manager of the property.

1.6 Funding

Funding for the project, including property acquisition, studies, assessments, and design, has been provided from multiple sources: California Department of Fish and Wildlife, California Wildlife Conservation Board, Contra Costa County Flood Control and Water Conservation District, EBRPD, the Conservancy, Knightsen Town Community Services District, Sacramento - San Joaquin Delta Conservancy, and U.S. Fish and Wildlife Service.

1.7 California Environmental Quality Act (CEQA)

Under Section 21080.56 of the California Public Resources Code, the project qualifies for a Statutory Exemption for Restoration Projects (SERP), which provides a California Environmental Quality Act statutory exemption for fish and wildlife restoration projects that meet certain requirements. In December 2023, the Conservancy filed the required Notice of Exemption, which was posted on the Governor's Office of Planning and Research CEQA site (ceqanet.opr.ca.gov), the Habitat Conservancy's website, and the County Clerk's Office.

Documents related to this filing are available on the project website.

1.8 2026 Design Updates

There have been two important design changes to the project in 2026, based on community feedback, study results, and coordination with regulatory agencies. The project team will continue to work with regulators and conduct any research necessary to finalize the project design.

Project Phasing:

The Project is now planned to be constructed in two or more phases. Phase 1 will include finished construction of the North Parcel and the northern section of the Central Sub-Parcel, and partial construction of the East Sub-Parcel. Funding for construction for Phase 1 is in place, with construction anticipated to begin in 2027. Future phase(s) of the project will include construction of the southern section of the Central Sub-Parcel and completing the East Sub-Parcel. Funding acquisition for construction of future phase(s) is in progress and construction is anticipated to commence after Phase 1. **Figure 2-2a** on page 13 shows the Phase 1 construction area and habitats and **Figure 2-2b** on page 14 shows the planned project at completion (Phase 1 and future phases).

Water Control Structure /Design Change to Exclude Muted Tidal Wetland Habitat:

There have been important updates to the types of water control gates connecting North Central Sub-Parcel to the East Sub-Parcel. In prior designs, the water control structure between the North Central Sub-Parcel allowed controlled flows of water in either direction. The updates to those water control structures mean that water will only flow out to the East Sub-Parcel from the North Central Sub-Parcel, and not the other direction. This change means that the North Central Sub-Parcel will function as a seasonal wetland system, not a muted tidal marsh. It is expected that during the wet season the area will store storm water and release it to the east, and in the dry season it is not expected to hold water. See **Section 2.1** for details.

2. PROJECT DESCRIPTION

The Knightsen Wetland Restoration Project will occur on a 645-acre site consisting of two parcels adjacent to Delta Road and Byron Highway. One parcel is located north of Delta Road (the North Parcel) and the second is located south of Delta Road (the South Parcel). **Figure 2-1** shows site location, the parcels, sub-parcels, and utility easements.

The South Parcel is divided into two distinct areas by existing utility easements, operated by Pacific Gas & Electric (PG&E) and the Western Area Power Administration, on behalf of the U. S. Department of Energy and the U. S. Bureau of Reclamation (referred to in Figure 2-1 as USA Easement). These two areas of the South Parcel are hereinafter referred to as the Central and East Sub-Parcels for planning and descriptive purposes.

The Conservancy team of ecologists, hydrologists, and engineers developed a restoration design that incorporates limitations of the existing built environment surrounding the site and maximizes habitat restoration and creation to benefit target species for the East Contra Costa County HCP/NCCP and the Delta Region.

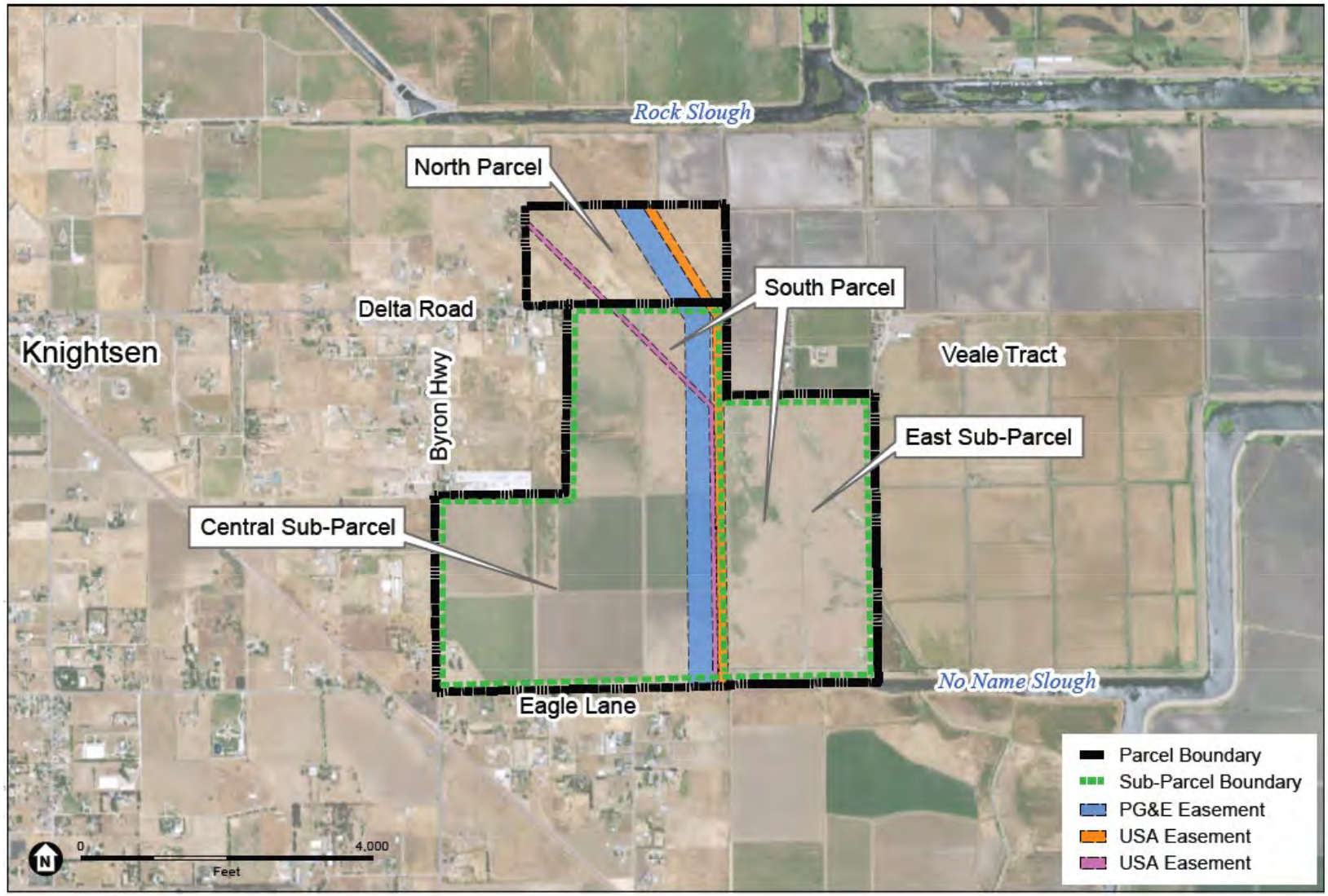
The project will reconnect an area of historic tidal wetlands and seasonal wetland habitats to Delta waters, restore and enhance seasonal wetlands, and restore historic upland interior dune, grassland, and oak savanna habitats. The restored and enhanced wetlands will provide important ecological benefits, such as improved habitat for fish and wildlife, increased habitat diversity, and enhanced food production for wildlife.

The proposed design includes seasonal wetlands, wetland to upland transitional, interior dune, grassland, and oak savanna habitats on the Central Sub-Parcel and freshwater tidal wetlands with riparian, transitional, and grassland habitats on the East Sub-Parcel. An engineered flood protection levee will surround restored habitats on the East Sub-Parcel. On the North Parcel, the design will enhance and restore seasonal wetland, grassland, and interior dune habitats. **Figure 2-2b** shows the mosaic of habitats to be restored with the project and **Figure 2-3** depicts the physical elements and drainage features to be constructed to direct water across the site and support the restored habitat and site management.

East Contra Costa County Habitat Conservation Plan/Natural Community Conservation Plan

The HCP/NCCP was adopted in 2007 by Contra Costa County, the cities of Brentwood, Clayton, Oakley, and Pittsburg, and the East Bay Regional Park District to protect and manage special status species and natural communities in the region. The plan, overseen by the East Contra Costa County Habitat Conservancy, contributes to the recovery of species in the region and mitigates the impact of development on sensitive species and habitats through a science-based approach. Approved by the California Department of Fish and Wildlife and the U.S. Fish and Wildlife Service, the plan has acquired 14,400 acres for the Preserve System (lands protected and managed by the Conservancy under the plan). By the end of its 30-year term, the Conservancy aims to assemble a 30,300-acre Preserve System.

The project will provide approximately 178 acre-feet of stormwater storage and improved drainage, an increase of approximately 20 acre-feet above what is currently available onsite, an increase in storage capacity of 13%. This storage and drainage will relieve flooding along Byron Highway and Delta Road. In an extreme event, flooding could still occur in the surrounding community, but the project will not make conditions worse. The project will cause no change in the FEMA 100-year floodplain.

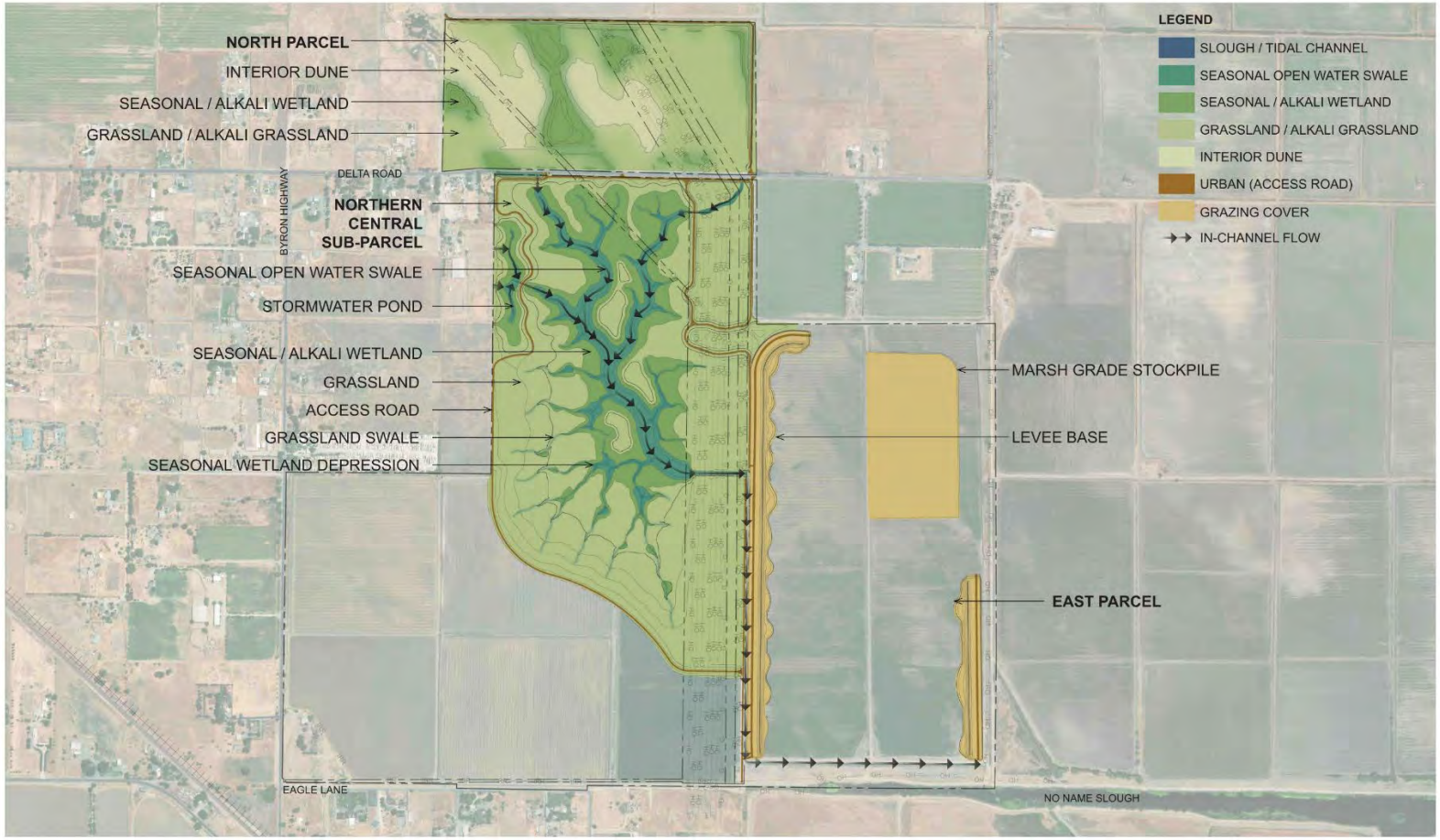


SOURCE: ESRI World Topographic Map

Knightsen Wetland Restoration Project

Figure 2-1
Project Site Map

ESA



ESA

NORTH

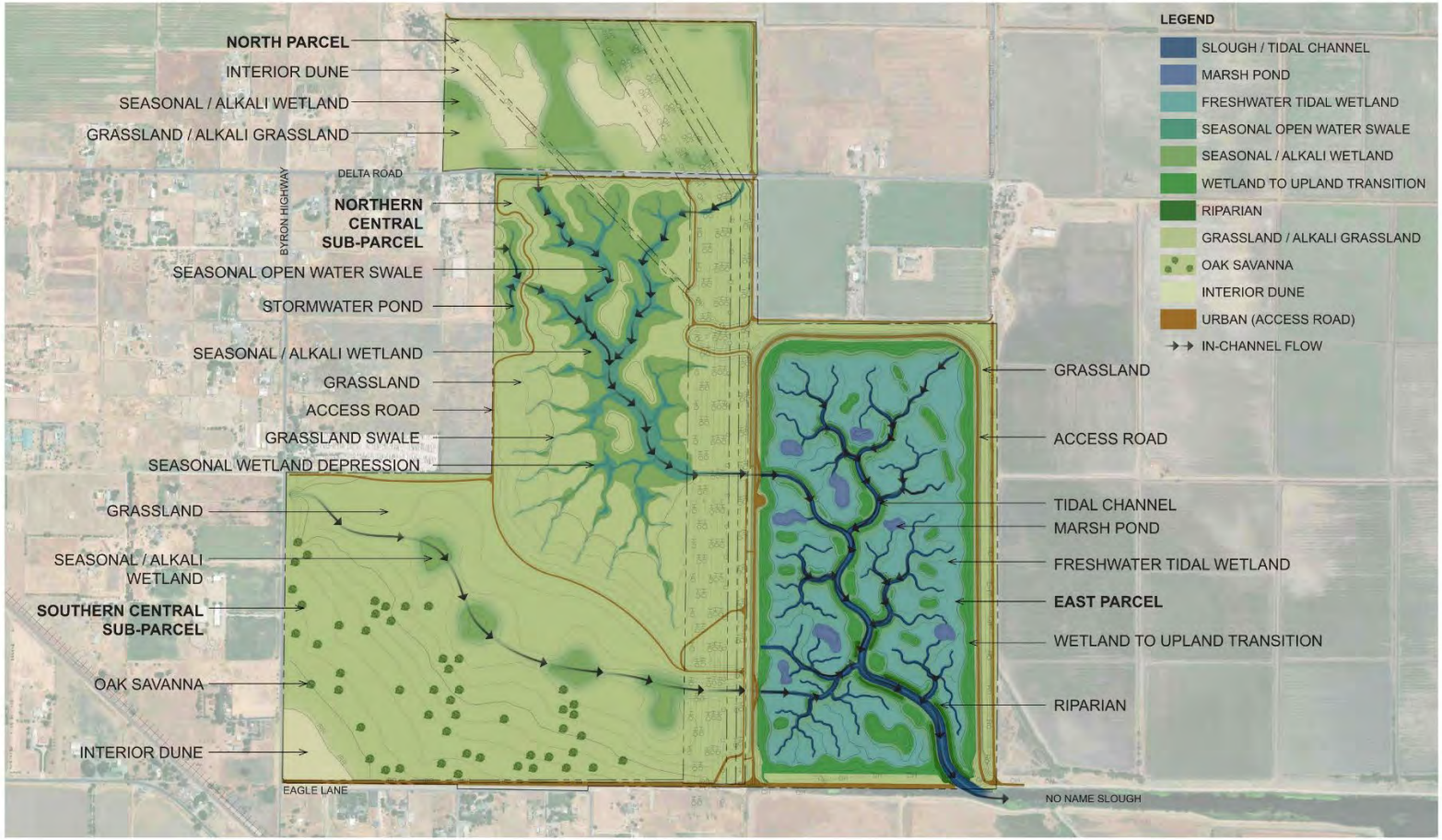
NOT TO SCALE

Knightsen Wetland Restoration Project

Habitat Restoration Plan: Phase 1

Figure 2-2a

02/18/2026



ESA

NORTH

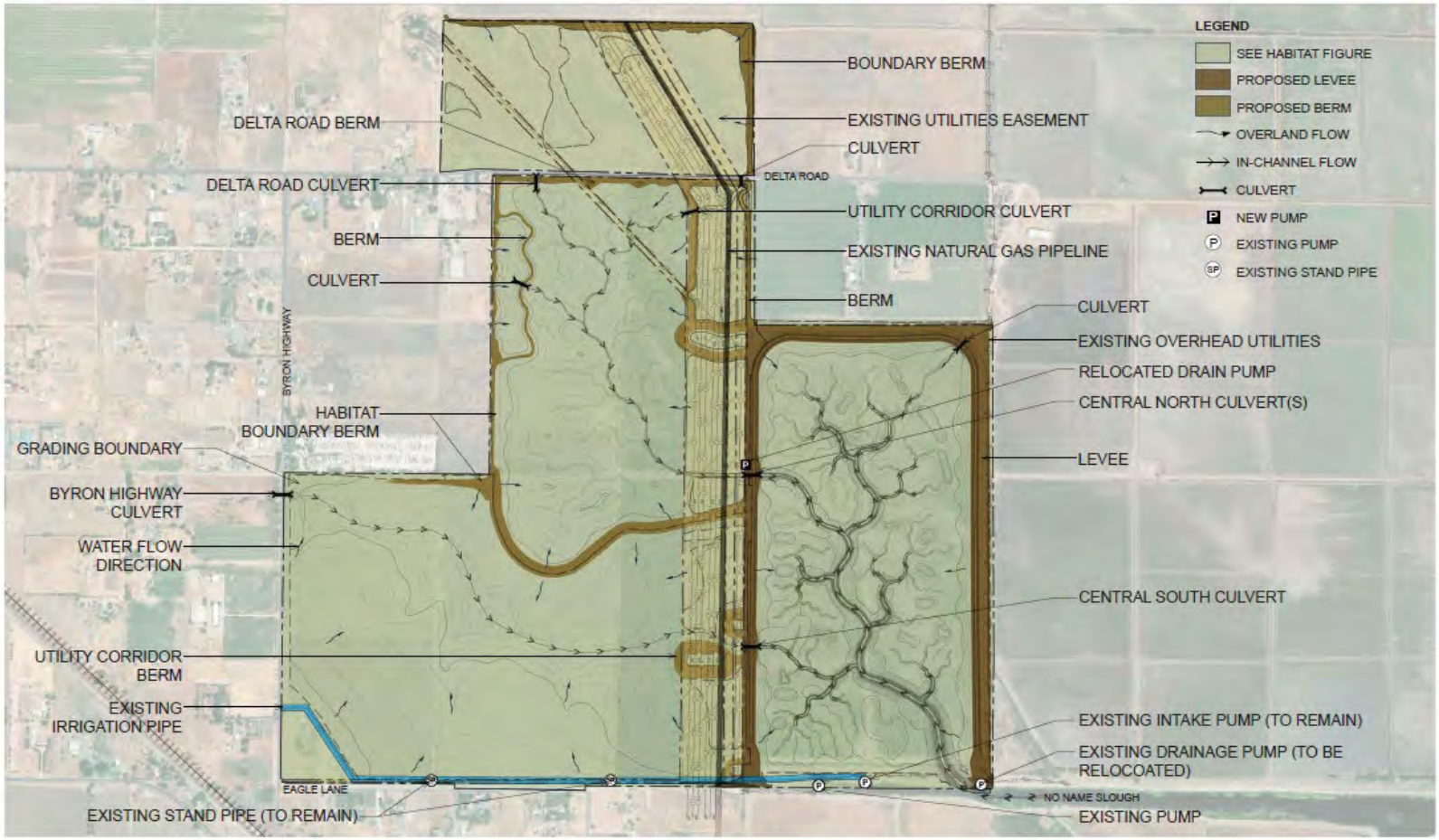
NOT TO SCALE

Knightsen Wetland Restoration Project

Habitat Restoration Plan: Phase 2

Figure 2-2b

02/18/2026



ESA

NORTH

NOT TO SCALE

Knightsen Wetland Restoration Project
Infrastructure Plan
Figure 2-3

2.1 Central Sub-Parcel (within the South Parcel)

Wetland and upland habitats will be restored to the Central Sub-Parcel of the South Parcel. These habitat types will include seasonal wetland, wetland to upland transition, interior dune, grassland, and oak savanna habitats. Water sources for seasonal wetlands will be direct rainfall, stormwater runoff from areas of the site draining toward the wetland features and runoff from areas adjacent to the project site entering the site via inlet features constructed with the project.

North Central Sub-Parcel. On the northern area of the Central Sub-Parcel, seasonal wetland will be formed by excavation of a broad, gently sloping basin and channel network. Undulating topography will be created along the perimeter of the wetland complex to support wetland to upland transition and grassland plant communities. As part of the grading, existing agricultural and stormwater ditches will be filled, and low berms will be created along the boundaries of the seasonal wetlands to increase protection for adjacent properties. Stormwater flow from Delta Road will enter the site in two locations: 1) a new culvert near the northwest corner of the Central Sub-Parcel site will deliver runoff from the western upgradient areas and 2) a culvert on the eastern side of the site through a swale and culvert in the utility corridor berm will collect runoff from Delta Road along the Central Sub-Parcel and direct it to the Central Sub-Parcel wetland channel network. Stormwater drainage from properties to the west of the North Central Sub-Parcel will enter the site via swales to a new seasonal wetland area that will also serve as a stormwater retention pond during winter storm events. On the eastern side of the parcel, low berms will be constructed along and within the utility corridor to separate the restored wetland habitats from power tower footings and portions of the utility corridor area. Areas within the utility corridor adjacent to the East Sub-Parcel will be graded to drain toward the North Central Sub-Parcel seasonal wetland habitats.

South Central Sub-Parcel. In the southern portion of the Central Sub-Parcel, seasonal wetland, interior dune, grassland, and oak savanna will be formed by grading to fill in existing agricultural ditches and excavating a broad, shallow swale. The swale will incorporate depressions to support seasonal wetland habitat while adding stormwater capacity and conveying runoff toward restored tidal wetlands in the East Sub-Parcel. The swale will be designed with sufficient width to meet water quality treatment guidance. The shallow depressions will be designed to allow for evaporative drying by spring to minimize mosquito production potential per recommendations of the Contra Costa County Mosquito & Vector Control District. Runoff diverted from Byron Highway will support groundwater recharge to help support restoration of native grassland and oak savanna habitats in areas surrounding the swale corridor. A remnant dune feature present in the southwest corner of the Central Sub-Parcel will be enhanced with weed removal and revegetation to restore this degraded interior dune habitat. Berms will be constructed within the utility corridor to separate the utility infrastructure (including power tower footings) from the seasonal wetland habitats.

Water Control Structures. Surface water flow on the Central Sub-Parcel will be directed toward the East Sub-Parcel and No Name Slough through the northern and southern Central Sub-Parcel water control structures. One-way flap gates will only allow flow from the northern and southern Central Sub-Parcel into the East Sub-Parcel tidal wetland, precluding tidal influence in the Central Sub-Parcel from the East Sub-Parcel.

Pumps. The existing drainage pump that has been used to move water from the site into No Name Slough will be relocated to the eastern boundary of the Central Sub-Parcel near the Central North water control structure. This pump will be available to pump runoff from the Central Sub-Parcel into No Name Slough via the restored East Sub-Parcel wetland channel network if needed during extreme storm events and the resulting high-water levels in the Delta. An existing supply pump located on the agricultural berm between the East Sub-Parcel and No Name Slough, used for irrigation purposes during past agricultural operations, will be retained for use in restoration construction, post-construction revegetation, and long-term maintenance operations.

2.2 East Sub-Parcel (within the South Parcel)

Tidal and Upland Habitat. In the East Sub-Parcel, the project will establish a network of slough channels and permanent wetlands, reintroducing freshwater tidal influence from Delta waters. Along and between some of the channels, habitat berms and mounds will support wetland to upland transition and riparian habitats, increasing habitat value and providing high tide refuge for wildlife. Water will enter and exit the East Sub-Parcel through a restored tidal channel connecting to No Name Slough. Seasonal runoff will also enter the East Sub-Parcel from the northern and southern portions of the Central Sub-Parcel via the culverts installed in the new levee bordering the East Sub-Parcel. Areas surrounding the restored freshwater tidal wetland complex will be graded and planted to support wetland to upland transitional habitat and grassland. The area overall will be graded to create positive drainage toward the tidal channel network to limit potential for mosquito production. An engineered flood control levee will be constructed along the East Sub-Parcel boundaries. Broad, flat transitional levee slopes between the levee-top upland grasslands and the freshwater tidal wetland will be restored wetland to upland transition habitat and provide wetland accommodation space with future sea level rise.

Levee. The restored freshwater tidal wetland and channel network will be bounded by an engineered levee along the eastern, northern, and western perimeters of the East Sub-Parcel. The levee will provide habitat benefits and protect adjacent onsite and offsite infrastructure and properties. The levee will be designed to the Department of Water Resources Urban Levee standard for seepage and stability. The levee crest will be constructed at an elevation of 15.0 feet NAVD.[1] This elevation provides accommodation for up to 0.5-feet of settlement and 1.9-feet of sea-level rise, providing 5.4-feet of freeboard above the current 100-year flood elevation (9.6 feet NAVD) and 3.0-feet under future conditions. The levee will include an engineered core with a 20-foot top width and 3:1 side slope, bordered by relatively flat, variable inboard and outboard slopes ranging from 7.5:1 to 40:1 to provide valuable ecotone habitat and to limit seepage. This engineered levee will be designed to meet current levee design standards for stability, seismic stability, and seepage. However, the levee will not be a certified or jurisdictional levee because it connects to a broader levee system that is not certified.

[1] The North American Vertical Datum of 1988 (NAVD88) is the vertical control datum of orthometric height established for vertical control surveying in the United States of America based upon the General Adjustment of the North American Datum of 1988.

Water Control Structures. In addition to the water control structures connecting the Central and East Sub-Parcels, an additional structure will be constructed at the northeast corner of the East Sub-Parcel to drain surface water runoff from the new levee slopes away from the adjacent properties to the north and east and into the restored tidal wetlands. The water control structure will have a one-way flap gate that will only allow flow into the restored wetland.

2.3 North Parcel

Interior dune habitat, seasonal wetland, and grassland habitats will be restored and enhanced in the North Parcel. The North Parcel currently contains two large remnant interior dune features with sandy soils supporting some specialized rare dune plants. Grassland and seasonal alkali wetland habitats also exist on the North Parcel and exhibit degraded conditions. Since native vegetation already exists in these habitats, a less intensive restoration approach will be employed, focusing on vegetation management, minor grading, and enhancing seasonal wetlands, grasslands, and interior dunes. The grading will include shallow excavation to expand seasonal wetlands and creation of a low berm with a broad, gentle slope along the north and east boundaries of the North Parcel to minimize drainage effects to the adjacent property that currently occur during extreme storm conditions. Vegetation management will be undertaken to control invasive plant species and enhance existing native dune, grassland, and seasonal wetland and native grassland plant communities via revegetation. The constructed berm feature will be revegetated with grassland species.

2.4 Project Timeline

Construction of Phase 1 is expected to begin in 2027 for one construction season. **Figure 2-2a** shows the Phase 1 plan. Subsequent Phases (size and timing) will be determined by funding availability.

3. CURRENT CONDITIONS

3.1 Project Site

The project site has been used for agricultural purposes following reclamation in the early 20th century. The South Parcel was managed for agricultural purposes, actively irrigated, and cultivated with alfalfa, field corn, tomatoes, and other crops until 2021. Since 2021, the South Parcel has been managed as rangeland with cattle and sheep. The North Parcel lies fallow and has not been recently irrigated or farmed. It is used seasonally for cattle grazing.

The project site is virtually flat, sloping slightly from southwest to northeast. The site has been graded and managed to support agricultural practices. Numerous irrigation and drainage ditches have been cut, and the site has been graded to slope away from irrigation ditches and towards drainage ditches to support agricultural use. A portion of the southeastern boundary of the South Parcel lies adjacent to No Name Slough.

Mean annual rainfall in the vicinity of the project site is relatively low, approximately 10 to 12.5 inches per year. As typical of the regional Mediterranean climate, most rainfall and resulting runoff onto the site from the west occurs between October and May, with very dry summer months. Tidal water levels in the Delta usually achieve their highest levels during king tides, major winter storms, and in the spring, when runoff from the Sierra Nevada peaks.

3.1.1 Surface Water

The project site is located at the downstream portion of a broader 3.46-square-mile drainage area. Currently, wet weather runoff flows are captured in low depressions or intercepted by private and public drainage ditches, roads, railroad embankments, and levees. Beyond the northern and eastern borders of the site, the Reclamation District 2065 (Veale Tract) and other agencies maintain internal berms and levees adjacent to No Name Slough and Rock Slough that limit the natural drainage pathway for runoff.

Within the project South Parcel, agricultural drainage ditches and pumping operations influence the direction of flow. Surface water flows on the site are routed to the pump station in the southeast corner of the project site and pumped to No Name Slough. During dry periods, the site has historically been irrigated with water pumped from No Name Slough. During wet periods, stormwater flows accumulating in the Delta Road drainage ditch back up into the community of Knightsen near the corner of Delta Road and Byron Hwy. In recent years, these flows have been allowed to be released onto the South Parcel to help alleviate standing water and flooding in the community. Runoff from the Delta Road corridor flows to the southeast corner of the project site, where it is pumped into No Name Slough. On the North Parcel, surface water ponding generally persists while it is raining and eventually evaporates and/or percolates to groundwater.

3.1.2 Groundwater

Groundwater monitoring conducted for the project shows that the depth to groundwater across the property generally ranged from 1 to 6 feet below the ground surface with recharge peaks of a foot or more associated with rainfall in the wet season and irrigation in the dry season. An assessment of groundwater conditions on the site was completed in 2019 and supplemented with groundwater modeling in 2022.

Based on a review of well drilling records and other historical information, evaluation of groundwater samples on site and in neighboring water wells, and sampling of surface water quality, the Conservancy documented groundwater conditions beneath the site in the Baseline Soils Evaluation and Hydrologic Monitoring Report. **Figure 3-1** is a schematic west-east cross-section from the report illustrating two types of aquifers underlying the site: 1) shallow groundwater, which is largely interconnected with local surface water, and 2) deeper groundwater from which most domestic wells draw groundwater.

The key findings from this report include the following:

- The stratigraphy under the project area and neighboring parcels is discontinuous, representing the changing depositional environment along the Delta fringe, and can be interpreted into five zones:
    1. An uppermost "water table" aquifer is composed mainly of dune sands but with some clay beds and is capped near the surface with about 9 feet of silty and sandy clay soils. Shallow wells to a depth of about 60 feet draw water from this aquifer, typically but not exclusively, for irrigation and livestock.
    2. A clay unit of variable depth and thickness underlies the upper aquifer. Clay units generally allow very slow movement of water through them but where the clay is substantially thick, there is effectively no movement of water through them.
    3. Another sandy unit underlies the clay unit, comprising a semi-confined aquifer, which is commonly the target aquifer for most domestic wells. An aquifer bounded by clay units is considered confined and isolated from overlying groundwater.
    4. A deeper clay unit with sand and gravel underlies the lower aquifer.
    5. A sand and gravel zone underlies the deeper clay unit.
- Chemistry data independently suggest that the clay layers impede groundwater movement between the upper and lower aquifers.
- The deeper aquifer appears to be recharged from sources to the west of the site, whereas the shallower upper aquifer appears to be interconnected with surface water.
- Water in No Name Slough is tidal freshwater (nearby Rock Slough is a drinking water source for the Contra Costa Water District). Chemistry data indicate that water in No Name Slough is similar to that found at high elevations, and likely sourced primarily from the Sierra Nevada.

As part of further groundwater evaluations, a Groundwater Model Analysis Memorandum was prepared in 2023 to evaluate potential future groundwater conditions with and without the proposed project. The findings from this report are summarized in **Section 5**.

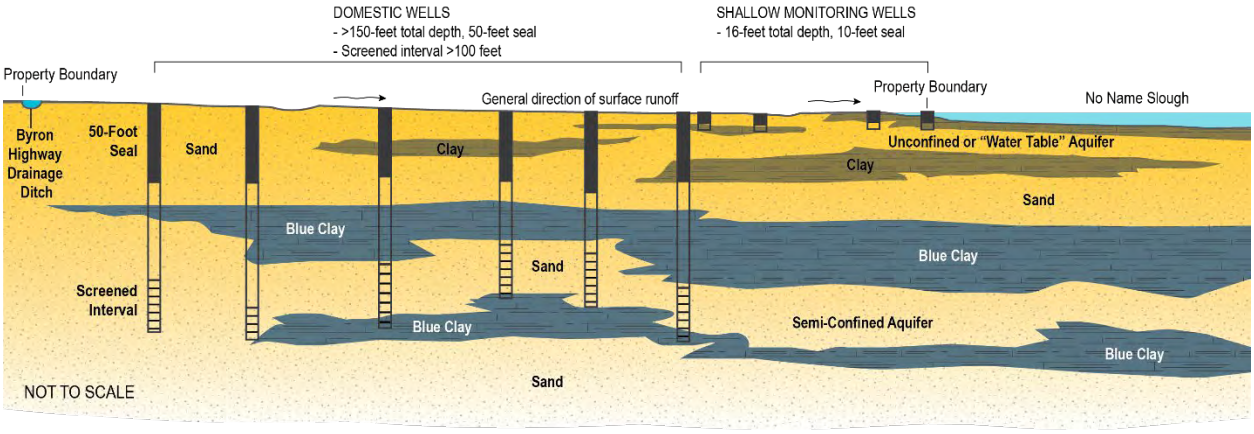


Figure 3-1. Groundwater Cross-Section, Balance Hydrologics

3.1.3 Tides

No Name Slough, which borders a portion of the site to the south, is subject to the tidal signal of the Delta and will be the source of freshwater tidal flows for the tidal wetlands.

The tide signal in No Name Slough is similar to that in Rock Slough, which is located to the north of the site and has a tide gauge at the Contra Costa Canal. Tidal datums derived from Rock Slough tide gage data collected from 2006 through May 2023 are summarized in the table below.

TABLE 1. ROCK SLOUGH TIDAL MEASUREMENTS

Datum	Elevation feet NAVD
Mean Higher High Water (MHHW)	5.89
Mean High Water (MHW)	5.45
Mean Tide Level (MTL)	4.28
Mean Low Water (MLW)	3.11
Mean Lower Low Water (MLLW)	2.66

During periods of extreme rainfall when runoff in the Delta is high, lower water levels in the adjacent sloughs can be elevated by as much as 2 to 2.5 feet for weeks.

3.1.4 Water Quality

The water quality of surface waters on site was sampled on March 22, 2018, during a small late-season storm that delivered one inch of rain over three days. During that period, the site was still being used to cultivate row crops. Surface water entering the site at the Delta Road ditch and leaving the site at the pump station to No Name Slough was sampled and analyzed for common agricultural constituents. Analysis results indicate that water leaving the site had higher total

dissolved solids (TDS) concentrations than the water entering the site, which suggests the flushing of minerals from onsite farm fields, which were likely retained in saline surface soils.

More information can be found in this Baseline Soils Evaluation and Hydrologic Monitoring Report.

Groundwater sampling was conducted from seven water-supply wells along the north, west, and south perimeter of the site and from five shallow monitoring wells on site. At the time, surface water samples from No Name Slough and from the Outflow Station were also collected. Results were used to characterize sources of groundwater as summarized in **Section 3.1.2** (above).

More information can be found in this Interim Groundwater Investigation Memo.

3.1.5 Soils

Soils of the project area and vicinity are described on published maps by the U.S. Department of Agriculture Natural Resources Conservation Service, formerly known as the Soil Conservation Service. Soils on the site form bands related to elevation contours that parallel the low-lying Delta soils. Onsite soil types were field-proofed to inform the restoration design.

Soils on site consist of sand, loam, and clay. Marcuse clay makes up the majority of the soils and is mapped throughout most of the area south of Delta Road. The Delhi and Marcuse sands are mapped in the southern and southwestern sections of the study area. Piper sandy loam is mapped mostly in the area north of Delta Road. Sacramento clay soils are mapped in the northeastern section of the study area. Piper fine sandy loam is mostly found in the western portion of the North Parcel. The presence of clay, sand, and sodic soils is indicative of historical habitats on the site including tidal wetlands, interior dunes, seasonal wetlands, and oak savanna.

More information can be found in the Baseline Soils Evaluation and Hydrologic Monitoring Report.

3.1.6 Vegetation

The land cover types observed at the project site include annual grassland, alkali grassland, ruderal, alkali wetland, seasonal wetland, permanent wetland, slough/channel, riparian, cropland, and urban.[2] Each vegetative type associated with these land cover types can be found in this Biological Resources Assessment and Botanical Resources Survey Report.

[2] Land cover types listed here are consistent with the terminology of the HCP/NCCP classifications.

3.2 Surrounding Area

3.2.1 Surface Water Drainage

Surface water drainage surrounding the project site generally flows to the east and north as shown in **Figure 3-2**. Roadside ditches on Byron Highway and Delta Road collect water on the west and north sides of the South Parcel. The Richardson Drain receives surface and shallow sub-surface water flow from tile drains on the south side of the project site and west of Byron Highway.

Surface runoff from areas to the west of the project site flows toward the property and collects in drainage ditches along Byron Highway and Delta Road. During storm events, stormwater can exceed the storage capacity of those drainage ditches (and conveyed by the culverts under the driveways) causing local ponding on nearby properties. The drainage ditch on the south side of Delta Road, when berm cuts are opened, discharges excess surface flows onto the South Parcel, from where it drains toward No Name Slough via the agricultural drainage ditches. This water is pumped off the property over an existing agricultural berm into No Name Slough.

On the south side of the project site, runoff generated in the southeast portion of Knightsen in the Eagle Lane neighborhood drains towards No Name Slough through a stormwater and tile drain collection system into the Richardson Drain. The Richardson Drain flows by gravity through a flap-gated culvert. The East Contra Costa Irrigation District (ECCID) operates and maintains the stormwater collection system, Richardson drain, and culvert.

ECCID also operates and maintains subsurface drainage facilities for agricultural lands to the west of the project site. Tile drains in this area collect irrigation and wet weather flows from beneath fields and drain to a pump station immediately west of the project site at Byron Highway and Ironhorse Road. The pump station pumps drain water to the Richardson Drain, where it flows by gravity to No Name Slough.

Surface runoff generated in the northern portion of Knightsen drains to the north toward drainage ditches along Sellers Avenue, Knightsen Avenue, and Jersey Island Road.

Winter 2022-2023

On New Year's Eve 2022 into early 2023, the Knightsen community experienced flooding following an extended period of atmospheric river events. Contra Costa County recorded 4.5 inches of rainfall over 12 hours at the Marsh Creek Reservoir gauge located about 8 miles from the project site. This rainfall total significantly exceeds the County's estimated 100-year, 12-hour return period rainfall of approximately 3.14 inches and the County has indicated that the event exceeded the estimated 500-year rainfall total.

The impact to the project site and surrounding neighbors was significant. Along Byron Highway and Delta Road, homes, pastures, and roads suffered widespread flooding, lasting for weeks. The Richardson drain, which collects drainage from properties to the south and west of the project site and delivers this runoff to No Name Slough also suffered a failure, compounding the flooding. As a courtesy to the community, EBRPD responded by employing pumps to move some of the water away from the community.

The eastern and northeastern extents of the Knightsen community are within the Delta 100-year floodplain and therefore subject to Delta flooding from larger storm events. See **Figure 3-3**. The existing agricultural berms along the South Parcel and at the adjacent Veale Tract protect the lands in these areas. These berms are not certified for 100-year flood protection.

3.2.2 Excess Stormwater

The community of Knightsen has occasionally experienced large rainfall events with widespread stormwater impacts and nuisance runoff during more frequent small storms. The major cause is the topography of the area, which slopes only slightly to the northeast, toward the Delta. The land has been extensively modified, which has established low points and barriers such that water does not flow directly away from the community, nor have a natural connection to the Delta. Near the project site, due to railroad tracks, roadways, and changes to natural contours, runoff water currently accumulates in the drainage ditches along Byron Highway to Delta Road. These ditches collect and hold water away from the roadways to keep the road safe for travel until the water can move downgradient, seep into the ground, or evaporate. The ditches do not have an outlet to convey water away from the neighborhood. The Contra Costa County Public Works Department maintains these ditches. Each property owner maintains individual driveway culverts.

Knighten's inefficient drainage paths cause nuisance flooding during prolonged periods of moderate rainfall and more significant stormwater flooding following infrequent heavier storms. Knightsen experienced significant flooding during the record-setting El Nino water years of 1982 and 1998, and the La Nina winter of 2022-2023 (see sidebar on page 16). EBRPD mobilized an additional pump to the site during moderately wet years in 2017, 2019, and 2022 when runoff from the site and upgradient community exceeded the capacity of the existing drainage pump. Prior to EBRPD management, the Knightsen Town Community Services District supplied an extra pump during periods of excessive runoff.

3.2.3 Drainage Facilities

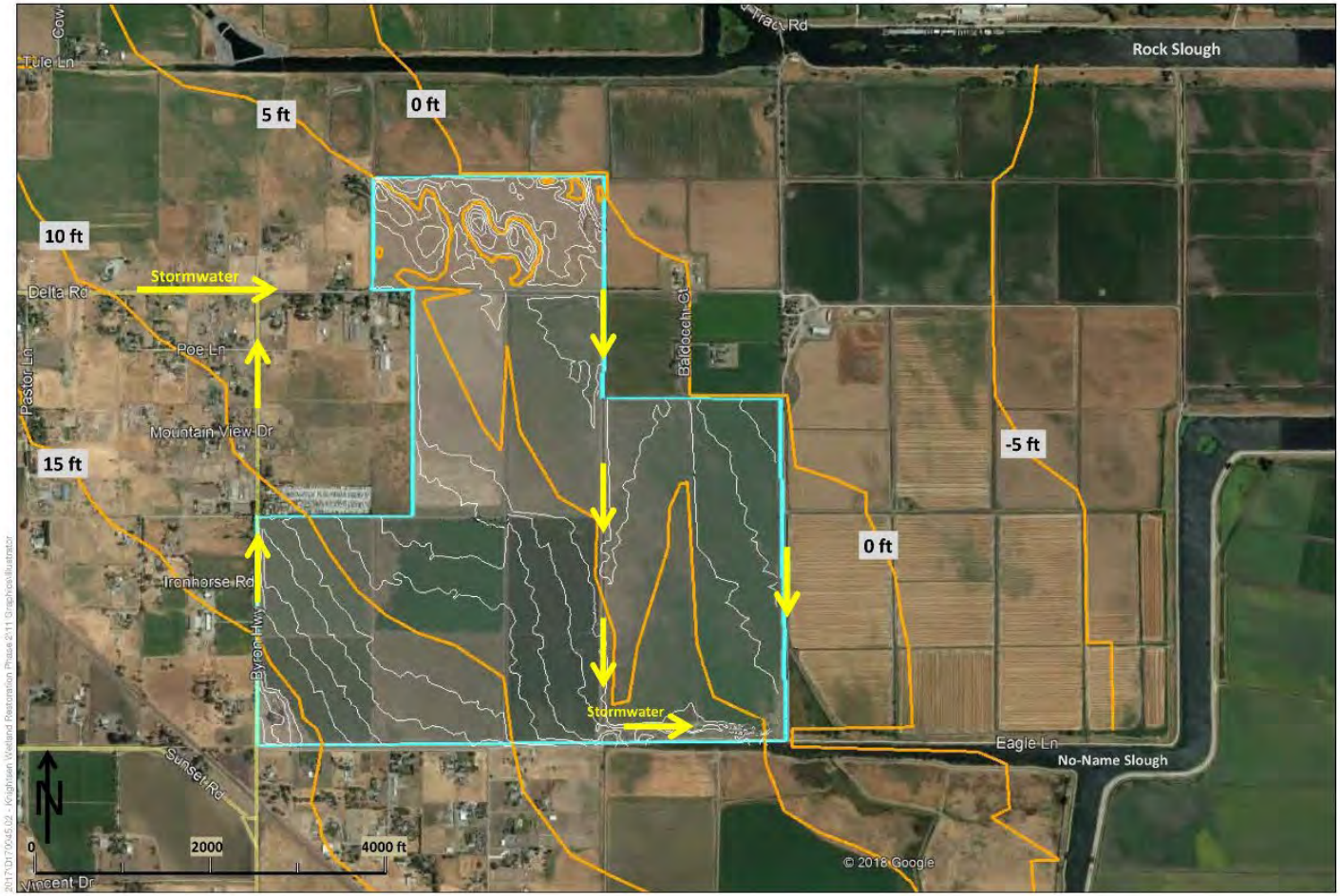
As noted above, several drainage facilities influence surface water flows near and on the project site.

ECCID operates and maintains the stormwater collection system in the Eagle Lane neighborhood, the Richardson Drain, and the subsurface tile drain collection system and pump to the west of the project site.

The Contra Costa County Public Works Department maintains the drainage ditches along Byron Highway and Delta Road. Property owners maintain driveway culverts.

EBRPD operates and maintains a pump on the southeast corner of the project site to pump water from the site into No Name Slough. This pump was originally installed to support on-site irrigated agriculture operations. During extreme wet events, EBRPD uses the pump to help move excess water from nearby drainage ditches as a courtesy to the community.

Veale Tract maintains the levees on the east side of the project site and EBRPD maintains the berm along the southern boundary of the site.



SOURCE: Balance Hydrologics, 2019

Knightsen Wetland Restoration Project

Figure 3-2
Surface Water Drainage

ESA

SOURCE: ESRI World Imagery

Knightsen Wetland Restoration Project

Figure 3-3

Knightsen FEMA Floodplain

4. COMMUNITY, NEIGHBOR, AND LOCAL AGENCY OUTREACH

Throughout project planning, the Conservancy and EBRPD have engaged with adjacent property owners, the Knightsen community, and agencies with intersecting interests. This section summarizes the efforts to inform and engage the community and listen to community questions and concerns about the project. Some questions prompted additional project analyses and modifications to project designs.

Starting in 2012 (before the property was acquired), there were multiple presentations, meetings, and conversations about the acquisition and eventual restoration of the project site. These discussions occurred at Knightsen Town Community Services District meetings and Knightsen Town Advisory Committee meetings. During initial project development, outreach activities included interviews with stakeholders, in-person listening sessions, and outreach meetings. In 2020, the COVID-19 pandemic paused outreach activities.

4.1 Community Outreach

In 2021, the Conservancy reinitiated outreach activities and conducted a series of workshops to update the community on recent studies and designs and to respond to prior questions and concerns. The goals of these workshops were to reestablish communications with the Knightsen community, review the list of community concerns, provide updates on project studies and designs, identify opportunities for project enhancements, and develop agreements and partnerships to address opportunities.

In 2021, the Conservancy and EBRPD developed the initial outreach plan and conducted two meetings with neighbors, one community meeting, and an onsite open house for the community. The meetings with neighbors included residents from the Byron Highway-Delta Road and Eagle Lane areas. All members of the Knightsen community were invited to the community meeting and onsite open house, which focused on the project schedule, recent studies, and the updated project design.

In the first quarter of 2022, the Conservancy and EBRPD hosted a community meeting consisting of a panel representing the local public agencies for the project, including the Conservancy, EBRPD, Contra Costa County Public Works, Contra Costa County Flood Control and Water Conservation District, East Contra Costa Irrigation District, and Contra Costa County Mosquito & Vector Control District.

In the first quarter of 2023, the Conservancy and EBRPD hosted a community meeting to discuss the results of the additional groundwater study and report.

The Conservancy conducted community meetings to present project information and updates to community members, offer an opportunity for community input, and listen and respond to

questions and concerns. Extensive efforts were made to inform the Knightsen community about these meetings and how they could attend or participate. The meetings are listed below.

- Community Meeting #1 – May 2, 2018. Project introduction and opportunity for community member questions/comments early in the project process (before design alternatives were developed).
- Community Meeting #2 – July 11, 2019. Presentation of study results, a presentation summarizing three project conceptual design alternatives, and information stations to solicit attendee comments on each alternative.
- Neighbor Meeting #1 – August 26, 2021. Eagle Lane Neighborhood Meeting – neighborhood-specific conditions and concerns.
- Neighbor Meeting #2 – September 1, 2021. Byron Highway-Delta Road Neighborhood Meeting – neighborhood-specific conditions and concerns
- Community Meeting #3 – November 9, 2021. Project overview and updates.
- Community Meeting #4 – December 4, 2021. Public open house and project site visit.
- Community Meeting #5 – March 30, 2022. Consulting regional public agencies panel.
    - East Contra Costa Irrigation District
    - Contra Costa County Public Works
    - Contra Costa County Flood Control and Water Conservation District
    - Contra Costa Mosquito & Vector Control District
- Community Meeting #6 – March 29, 2023. Groundwater Report
- Community Meeting #7 – July 30, 2024. Project Design
- Community Meeting #8 – November 2, 2024 – Public open house and site visit

The Conservancy also met individually with adjacent property owners, including residents and farming operations.

Community and stakeholder concerns regarding the potential effects of site restoration on neighboring properties have been considered and addressed in the preliminary design. Section 6 of this report summarizes and addresses the concerns identified by the community.

4.2 Agency Coordination

The Conservancy and EBRPD are coordinating closely with local, state, and federal agencies with an interest and/or regulatory role in planning and approving the project. The agencies include the following:

- Contra Costa County Flood Control and Water Conservation District
- Contra Costa County Mosquito & Vector Control District
- Contra Costa Water District
- East Contra Costa Irrigation District
- Knightsen Town Advisory Council
- Reclamation District 2065 (Veale Tract)
- Western Area Power Administration (onsite utility)
- Pacific Gas & Electric (onsite utility)

- Delta Stewardship Council
- Sacramento-San Joaquin Delta Conservancy
- California Department of Fish and Wildlife
- U.S. Fish and Wildlife Service
- Local Agency Formation Committee

4.3 Indigenous Tribes Outreach

The Conservancy and EBRPD initiated tribal consultation with the California Native American Heritage Commission in September 2017 and identified Tribes in the project area. At that time, no Tribes responded or expressed interest in consultation. The consultation was reinitiated in April 2022, which resulted in consultation with the Wilton Rancheria. The Conservancy reviewed and discussed the project goals, design, current status, results of cultural resources investigations, and future requirements for project compliance with Section 106 of the National Historic Preservation Act (Section 106). The Tribal Representative stated that, overall, Wilton Rancheria supports the project, though is concerned about the cultural resource sensitivity of the general vicinity. The Representative stated that Wilton Rancheria is thankful for being included early in the project and the Tribe is interested in opportunities to conduct construction monitoring, assist in planting, and general access. Coordination is ongoing.

5. SITE EVALUATIONS AND PROJECT MODIFICATIONS

This section summarizes the project investigations conducted to date to understand site conditions, develop and improve project designs, and address community concerns. These reports are available on the project website.

5.1 Ecological

The Conservancy conducted biological resources investigations to develop a comprehensive understanding of the existing onsite habitats, native and non-native plants, and special status species occurring or potentially occurring on the site, as well as to inform restoration design and implementation methodologies.

- Biological Resources Assessment and Botanical Resources Survey Report. Prepared by Nomad Ecology. April 2018 (Nomad Ecology 2018a)
- Aquatic Resource Delineation Report. Knightsen Wetland Restoration and Flood Protection Project. Prepared by Nomad Ecology, October 2018. (Nomad Ecology 2018b)
- Technical Memorandum: Update of the 2016 Weed Mapping of Nunn Acquisition. Prepared by Nomad Ecology, April 2019. (Nomad Ecology 2019)

5.2 Soils and Geology

The Conservancy conducted soil and geotechnical investigations to characterize existing soil conditions and evaluate how these conditions may influence restoration options and project designs. Important topographic data were collected, and ground surveys verified available LiDAR[3] elevation data in areas of varying vegetation cover, as well as surveys within existing drainage features (ditches, sloughs, wetlands) on and adjacent to the site. Additional investigations are underway to inform the final designs for project levees.

- Soil Trenching Investigation at North Parcel of Knightsen Wetland and Flood Protection Project. Prepared by Balance Hydrologics, Inc., February 5, 2021. (Balance Hydrologics 2021)
- Geotechnical Data Report. Prepared by Hultgren Tillis, August 2020.

5.3 Water (Groundwater, Surface Water, and Tides)

The project team conducted groundwater monitoring and modeling investigations to develop an understanding of how groundwater levels could change in response to wetland restoration actions.

[3] LiDAR is a method for determining ranges by targeting an object or a surface with a laser and measuring the time for the reflected light to return to the receiver. LiDAR elevations are typically taken from a plane flying over the land sites.

A conceptual understanding of the project site and bordering parcels was developed using publicly available records and monitoring data collected since 2017.

The interface between surface water and groundwater was investigated. Both stormwater runoff and tidal exchange from No Name Slough were investigated. This information was considered in developing the design for wetlands restoration and water quality improvement measures. The team also performed hydraulic modeling of surface water flows to inform the project design, including drainage, levee, berms, and water conveyance/control elements.

The project team developed a groundwater model of the project area to assist in assessing future conditions and potential changes in groundwater levels with and without the proposed project. The groundwater models are a scientific approximation of wetland effects on shallow groundwater levels below and immediately surrounding the project site. The groundwater models were interpreted with consideration of other independent lines of reasoning using groundwater monitoring and chemical data and historical and local information to better understand the hydraulic effects of the project. Study documents prepared in support of these investigations include:

- Baseline Soils Evaluation and Hydrologic Monitoring. Prepared by Balance Hydrologics, Inc., June 2019. (Balance Hydrologics 2019)
- Surface Water Hydrology Assessment. Prepared by Environmental Science Associates, December 6, 2019. (ESA 2019a)
- Interim Progress Reporting on Groundwater Investigation at the Knightsen Wetland Restoration Site. Prepared by Balance Hydrologics, Inc., October 2021. (Balance Hydrologics 2021)
- Groundwater Model Analysis. Prepared by Balance Hydrologics, Inc., February 2023. (Balance Hydrologics 2023)

The study results provided valuable information on how to modify the project design and construction methods for the proposed project to contain changes in groundwater levels within the boundaries of the project. The project team modified project designs to avoid these potential impacts. Following the incorporation of design modifications, modeling suggests that no increases in background groundwater levels would be detected on adjacent residential parcels, and the project will therefore not affect neighboring drinking water wells and septic systems. See Section 6 for additional details.

More information can be found in the Groundwater Model Analysis Memorandum.

Two independent data sources were used to assess the lateral effect to groundwater from surface water-level changes:

- Tidal cycles apparent in No Name Slough are clearly identified at the monitoring well about 250 feet from the slough. At further distance from the slough, tidal cycles are much less apparent to negligible (Baseline Soils Evaluation and Hydrologic Monitoring Report).
- Groundwater modeling also helped assess the lateral distances that surface-water changes could affect groundwater levels (Groundwater Model Analysis Memorandum). The largest increases in shallow groundwater due to the proposed project conditions were

within the East Sub-Parcel where tidal wetlands are proposed and are generally contained within the boundary of the project property. During the wet season, small increases (~1-foot) were shown to extend in sandy zones to the east and south from the East Sub-Parcel within neighboring agricultural blocks with no residences or septic systems. These minor effects can be mitigated during construction of the tidal wetlands. Effects on groundwater in the Central Sub-Parcel were small and mostly contained within the property boundary. No effects to offsite groundwater levels were identified in the Byron Highway, Delta Road, and Eagle Lane areas.

5.4 Cultural Resources

Cultural resources can play a significant role in the formulation of restoration alternatives. Developing an understanding of the likelihood of cultural resources at the project site helps to develop restoration alternatives and construction processes that avoid or accommodate any culturally significant areas should they exist at the site. The Conservancy prepared a preliminary cultural resources assessment in 2017-2018 during the early planning/conceptual design stages of the project. Subsequently, the Conservancy conducted a cultural resources investigation including background research, surface survey, and subsurface investigations. The surveys and testing did not identify archaeological resources or other evidence of past Native American use or occupation of the project area. No historic properties or historic resources were identified. The cultural resources studies prepared in 2018 and 2022 are available for review by Indigenous Tribes and certain state and federal agencies.

5.5 Utilities

Utility constraints are important to understand in developing restoration alternatives. The requirements for access and the limitations on restoration activities along the utility easement informed the feasibility and cost-effectiveness of restoration actions within the corridor. Utility owners including PG&E, Western Area Power Administration, and ECCID were contacted regarding constraints for earthwork within key utility easements. Key features were surveyed, and potholing was performed to identify the location and depth of existing underground utilities. Project design development has been informed by consultation and field data collection as well as direct guidance provided by PG&E and others for crossings under and over utilities infrastructure.

5.6 Past Project Design Modifications

** NOTE: This is a list of past design modifications to the project. For a list of the most recent changes, please see* ***Section 1.8****.*

Through site evaluation and community engagement the project team identified project modifications to address site conditions and community concerns. The project plans and designs were modified to include the following revisions, among others:

- Relocation of new culverts transporting stormwater from roadside ditches onto the project site further away from neighboring properties.

- Addition of new drainage connections to neighboring properties to receive stormwater onto the site and help alleviate nuisance flooding for neighbors south of Delta Road.
- Addition of new drainage swales and culverts to manage runoff from Delta Road east of the main Delta Road intake.
- Relocation of wet weather swales further from project boundaries and neighboring septic systems.
- Improvements to existing berms along the northern parcel boundary to limit the potential for stormwater overflows from the community and the project site.
- Addition of material to fortify areas along the Richardson Drain where the drain failed in 2023 due to a poorly maintained / clogged culvert owned by ECCCID.
- Removal of any plans or concepts for public access or recreation. If there is future interest in public access and recreation at the site, a separate planning process would be initiated with the community.
- Relocation of the connection to No Name Slough. The connection was moved further east to a wider section of the slough.

6. COMMUNITY QUESTIONS

Throughout the community engagement for the project, the project team heard and documented community questions and concerns. This section summarizes the primary questions identified and the study evaluation results relevant to the concerns.

6.1 Drainage and Stormwater

Community Concern/Question

Will the proposed project increase stormwater flooding risk and/or impede existing groundwater-surface water drainage patterns for property owners in the vicinity of the project site?

Project Response

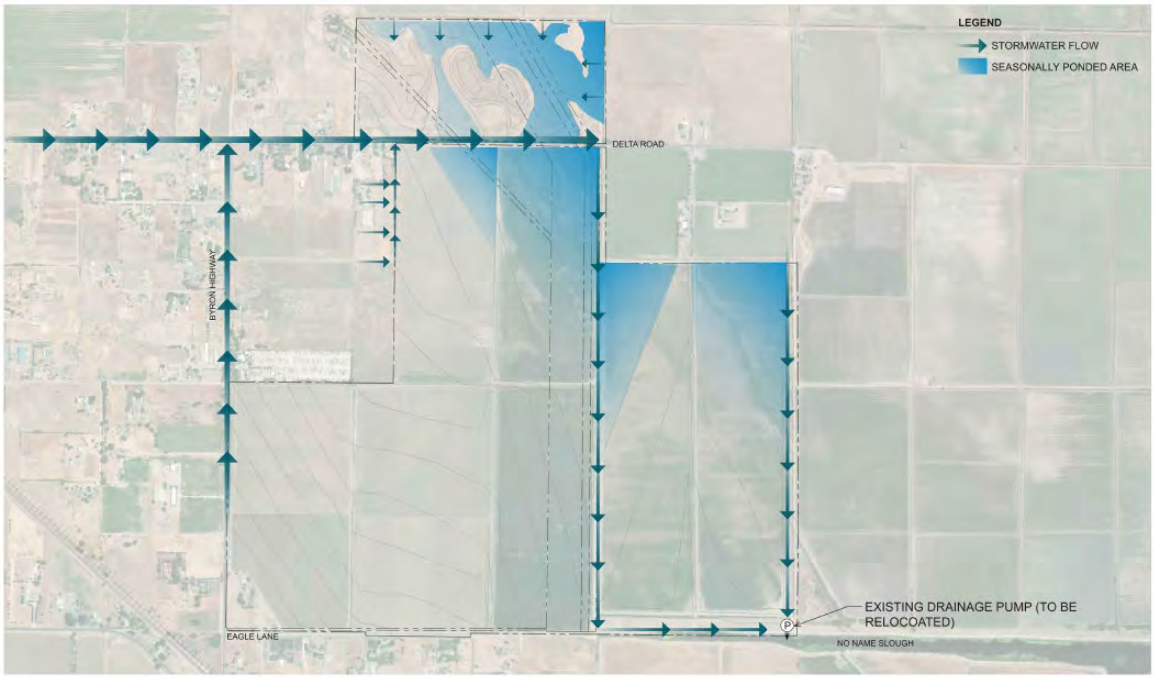
The wetlands project is expected to decrease flooding and ponding and improve drainage issues in the area around the project site, specifically along Byron Highway and Delta Road. The project design includes three locations where stormwater will flow onto the project site and away from drainage ditches and ponding areas – on the east side of Byron Highway near Ironhorse Road and two locations along the south side of Delta Road along the property boundary.

During wet periods, these three locations will allow water that currently ponds in roadside ditches and on some adjacent properties to flow onto the project site and away from residences and drainage ditches. The grading of the project site will increase the capacity to receive, hold, and drain water on the site and away from residences during storm events. The seasonal wetlands on the north portion of the Central Sub-Parcel will provide approximately 125 acre-feet of storage while the swale and depressions in the south portion of the Central Sub-Parcel will provide an additional 53 acre-feet of storage with one foot of freeboard (178 acre-feet total). By comparison, the existing Central and East Sub-Parcels offer about 158 acre-feet of storage. These improvements will increase storage on the parcel while reducing impediments to stormwater flow to No Name Slough.

In addition, the seasonal wetland and culvert along the western border of the North Central Sub-Parcel will remove drainage barriers between adjacent properties and the project site. This change will allow stormwater that currently ponds along the property boundary to flow directly onto the project site, thereby reducing frequent flooding on neighboring parcels. A new water control structure at the northeast corner of the East Sub-Parcel will also divert runoff from the new levee slopes away from adjacent properties and into the project site.

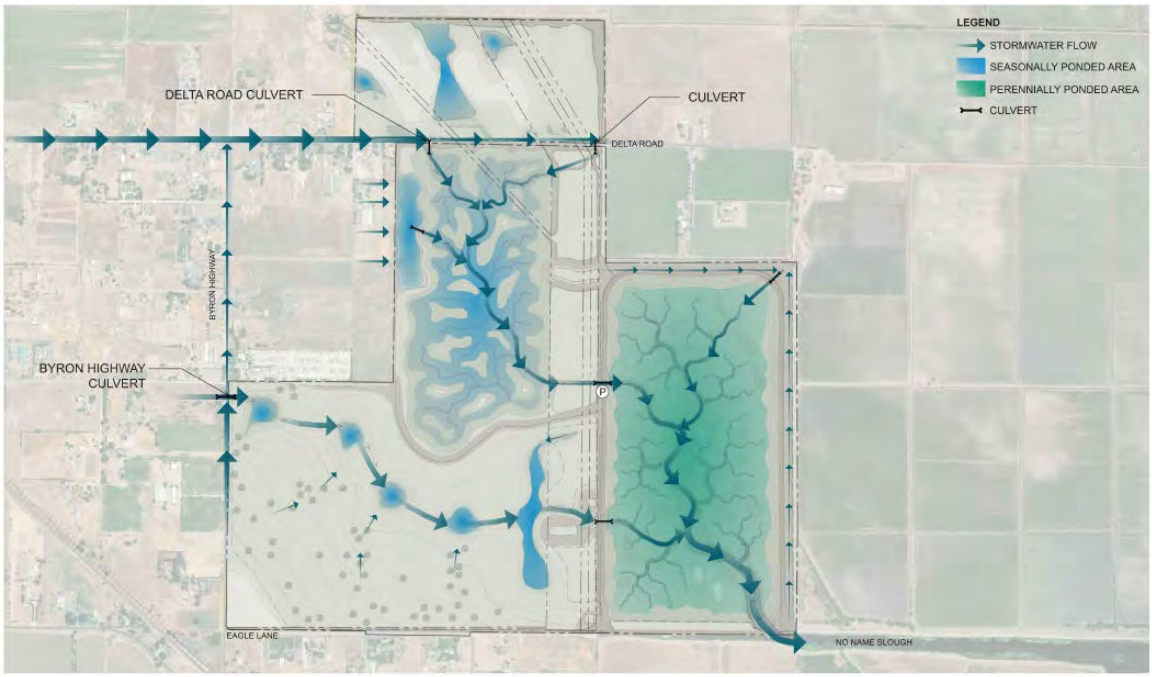
No alterations of drainage facilities or flows are planned outside the project site along Eagle Lane or at the North Parcel. The project may work with the Contra Costa County Public Works Department to regrade the Byron Highway ditch south of Rafter D Ranch and install the Byron Highway Diversion (under Byron Highway) to direct runoff to the project site and reduce runoff that flows north towards Delta Road where there has been ponding during extreme rain events in the past.

Figures 6-1 and 6-2 show the existing and proposed stormwater drainage patterns for the project site and immediate vicinity. For more details on the drainage infrastructure see **Figure 2-3**, Infrastructure and Drainage Plan.



ESA NORTH NOT TO SCALE

Knightsen Wetland Restoration Project
Existing Site Stormwater Drainage
Figure 6-1



ESA NORTH NOT TO SCALE

Knightsen Wetland Restoration Project
Proposed Site Stormwater Drainage
Figure 6-2

6.2 Drinking Water Wells

Community Concern/Question

Will the addition of stormwater on the Central Sub-Parcel and tidal flows on the East and Central Sub-Parcels affect drinking water wells for neighbors?

Project Response

The groundwater studies indicate that stormwater or tidal water on the site because of the restoration project will not negatively affect drinking water wells in the deep aquifer. Most drinking water wells in the project vicinity draw from the deeper aquifer. Based on the groundwater studies, the deeper aquifer appears to be confined and not directly connected to shallow groundwater and surface water.

The Conservancy conducted an extensive evaluation of groundwater conditions, including a review of well driller logs for nearby drinking water wells, onsite test pits, and water quality sampling. The well driller logs and test pits provide a profile of subsurface layers and the depth of drinking water wells. The water-quality sampling identifies the chemical "fingerprint" of the water in different groundwater aquifers to help evaluate the source of recharge to the different aquifers.

The well driller logs indicate that there is a clay layer between the shallow and deeper aquifers. Chemical testing indicates that the water in the deeper aquifer originates from the Marsh Creek watershed, whereas water in No Name Slough and the interconnected shallow aquifer appears to be sourced from the Sierra Nevada by way of the Delta, suggesting a separation of the two aquifers. **Figure 6-3** shows the vertical profile schematic of the groundwater aquifers and drinking water wells as summarized from the Interim Groundwater Investigation Memo.

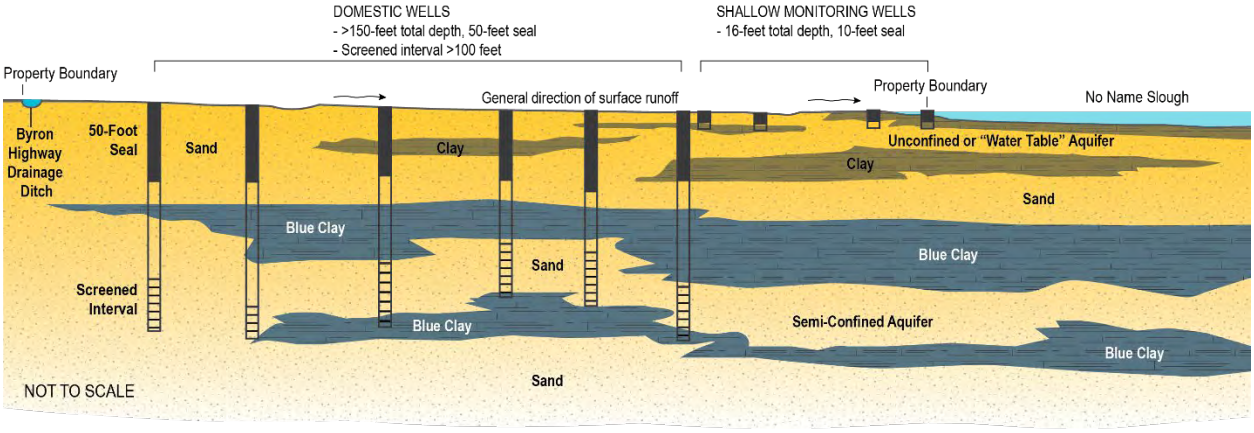


Figure 6-3. Groundwater Cross-Section, Balance Hydrologics.

6.3 Septic Systems

Community Concern/Question

Will the project affect septic systems for nearby residents?

Project Response

The Conservancy conducted groundwater modeling to assess the potential effects of the proposed project on groundwater levels.

The groundwater modeling results indicate that the proposed project will not negatively affect neighboring wells and septic systems.

During the dry season, there will be no agricultural irrigation on site. The past flood irrigation for agriculture has ceased. As a result, groundwater levels near neighbors will remain lower during the dry season than historically.

The designed seasonal wetlands and freshwater tidal wetlands will be located downgradient and relatively far from the neighboring residential properties. The tidal flows for the wetlands on the East Sub-Parcel will be downgradient and hydrologically separated from residences and therefore the model predicts that this area will not influence septic systems in upgradient areas to the west or south. Proposed levee elements are designed to prevent seepage from the wetlands to adjacent properties to the north and east.

During the wet season, stormwater will flow onto the site and away from residents on Byron Highway and Delta Road, reducing standing water near those properties. In response to community concerns, the onsite swales and ponds for receiving stormwater have been relocated farther from residences and outside the distance of potential groundwater effects and design elements have been added to allow drainage from neighboring properties onto the project site.

More information can be found in the Groundwater Model Analysis Memorandum.

6.4 Similar Projects

Community Concern/Question

Are there any similar projects with nearby residents and septic systems? Have there been any surface or groundwater issues for neighbors of these projects?

Project Response

There have been many large wetland restoration projects in the Delta. These projects all have unique features from the Knightsen Wetland Restoration Project. After doing additional research and interviews with other practitioners, the project team has not identified any sites with the specific characteristics of this project.

As another perspective on this question, there are many permitted functioning septic systems throughout the Delta that are closer to tidal wetlands than the closest septic systems to the proposed tidal wetlands at the project site. For example, the following facilities have septic

systems adjacent to wetlands: Brentwood Marina, Holland Riverside Marina, and Cruiser Haven Marina. The Contra Costa County Division of Environmental Health reported that there have been no verifiable issues with these septic systems.

The team has conducted extensive, site-specific studies to inform the design of the project that will provide the most accurate information on predicting project performance. For additional information, most large-scale restoration projects in the state are cataloged in EcoAtlas (www.ecoatlas.org).

6.5 New Levees

Community Concern/Question

Will the breaching of existing levees and the construction of new levees increase the risk to the community from Delta flooding?

Project Response

The risk to the community from Delta flooding will not increase because of this project.

The breach of the existing agricultural berm along No Name Slough will allow tidal flow into the new wetlands on the East Sub-Parcel. A new levee will be constructed around the planned area of new freshwater tidal wetlands on the East Sub-Parcel. The new levee will be built to current California Department of Water Resources Urban Levee and U.S. Army Corps of Engineers standards and guidance meeting current requirements for stability, seismic response, and seepage. By comparison, the existing berm along No Name Slough was built and is maintained for agricultural purposes based on the short-term Department of Water Resources Hazard Mitigation Plan standards for agricultural properties and does not meet the same standard.

Drainage structures will be installed in the two levee crossings on the west side levee to allow stormwater to flow to No Name Slough in wet weather on outgoing tides and prevent water from No Name Slough from flowing to the Central Sub-Parcel. The drainage structures will follow U.S. Army Corps of Engineers guidance for penetrations through levees and will incorporate tide/flap gates to limit inundation from the wetlands and a second redundant slide gate to positively close the culvert for maintenance or a failure of the tide/flap gate.

6.6 Sea Level Rise and Storm Surge

Community Concern/Question

Will the project increase the risks associated with sea level rise to the local community?

Project Response

The risk to Knightsen properties related to sea level rise will not increase.

- The proposed levees will be constructed to accommodate sea level rise of 1.9-feet (projected to occur by about 2065 to 2080 for the intermediate to intermediate-high risk projections).

- Flap gates and redundant slide gates will prevent water from No Name Slough from passing beyond the levee during storms or high-water events.
- The opening and closing of gates are simple tasks, occurring seasonally. The Conservancy will ensure that an entity takes charge of the task, and that long-term funding is secured.
- Pumps will continue to be available to move water off the site in the event of extreme storm events, if needed.

6.7 New Regulations Restricting Local Activity

Community Concern/Question

Will the project result in any future water quality regulations or endangered/protected species issues that could limit landowner activities on adjacent or nearby properties?

Project Response

There are no existing or planned stormwater or wildlife regulations relating to the project that would affect Knightsen residents or the use of their properties.

As a safeguard against unintended impacts on neighboring agricultural properties, the Conservancy has established a "safe harbor" program for agricultural properties. In accordance with this program, the Conservancy sent a letter in 2016 to every property within a one-mile radius of the site, describing the *Neighboring Landowner Assurances Program*. Although the Conservancy does not anticipate any limitations on nearby agricultural activities of the wetlands project, the Assurances Program offers protection against any agricultural use restrictions caused by the increased presence of state- or federally-listed species.

6.8 Community Improvements

Community Concern/Question

Will the project establish a need for new stormwater projects in the Knightsen area or affect any planned stormwater management projects?

Project Response

The proposed project will move forward independently of any community-led or other agency-led stormwater improvements. The project does not depend on additional stormwater improvements in the community. The project will not create conditions that would necessitate changes to existing stormwater management outside the project site.

The Conservancy is interested and willing to collaborate with community projects that could contribute to the project goals and provide a community benefit. The proposed project is being designed to accommodate higher volumes of water should the community decide to implement stormwater drainage improvements, such as increasing the size of existing driveway culverts to increase conveyance capacity. Note that the project is not being designed to function as a regional stormwater management site and any significant increases in stormwater directed to the

community from other activities may result in continued or increased localized drainage issues not related to the wetland project.

6.9 Seismic Risks and Liquefaction

Community Concern/Question

The proposed wetland parcel is in a zone that has been identified by the U.S. Geological Survey as subject to liquefaction in the event of an earthquake. Is the proposed wetlands project design considering liquefaction in wetland flood control designs and potential impacts to structures on neighboring properties?

Project Response

The design of the proposed new flood control levees considers liquefaction as part of slope stability analyses. The geotechnical investigation of the project site provides the basis for the design requirements for the proposed levees. New levees on the project site will be constructed to current geotechnical standards and are less likely to be impacted by liquefaction during a potential earthquake than the existing agricultural berms along No Name Slough.

The project will not alter the soil or groundwater properties below other parcels. The project team has evaluated the potential to increase shallow groundwater levels under adjacent parcels. Project features have been located far enough from property boundaries to avoid potential increases in groundwater levels for residential parcels. Design features have been incorporated to address any potential increases in groundwater levels on neighboring agricultural properties.

6.10 No Name Slough Berms

Community Concern/Question

The new wetlands will increase tidal flows in No Name Slough, which could erode the agricultural berms protecting adjacent agricultural lands.

Project Response

No Name Slough is a dead-end tidal slough excavated in the early 20th century. At and downstream of the planned connection point, the slough ranges from about 90 to 190 feet wide and the base of the slough is at approximately Elevation 0 feet NAVD (about 4.3 feet below mean tide levels). Based on recent surveys, the bottom of the slough is lined with about 6 feet of relatively soft sediment that has deposited over a harder sub-surface layer presumably from the original channel excavation. The slough experiences approximately 3.2 feet of tide range, and during winter storms and spring runoff, water levels in the slough can be elevated by 2+ feet over normal summer-time tides.

The project team looked at estimated velocities in No Name Slough downstream of the planned connection at the eastern side of the East Sub-Parcel. The team used the U.S. Army Corps of Engineers HEC-RAS two-dimensional, unsteady modeling software to estimate peak velocities at 13 locations in No Name Slough with the proposed project and No Name Slough in its current depth. Modeling was performed for typical summer tidal conditions and for more extreme 10- and

100-year storm events discharging into the Delta during higher storm surge tides. The resulting maximum velocities over the simulations ranged from 1.13 to 1.94 feet per second (fps) and averaged 0.71 fps during the 100-year event. The highest estimated velocities were located along the center of No Name Slough within about 1,000 feet of the connection point. The estimated maximum velocities were below the accepted permissible velocities (to limit erosion potential) for unlined channels constructed with sandy clay, silty clay, and clay levee materials that range from 2 to 2.5 fps. Maintaining vegetation on the berms provides an extra level of protection.

The modeling was performed with No Name Slough in its current, silted-in condition. Following restoration, the soft sediments deposited in the channel bed will begin to erode and the existing channel will deepen, which will increase the conveyance capacity and further reduce velocities. The project will include a smaller pilot channel to guide this erosion towards the center portions of No Name Slough. Over time, the team expects a deeper channel to form in the soft deposited sediments in the central portion of No Name Slough. The project team does not expect the project to create erosional conditions along No Name Slough.

6.11 Mosquito and Vector Issues

Community Concern/Question

Will the project cause increased mosquito and vector control issues?

Project Response

The Contra Costa Mosquito & Vector Control District is dedicated to the health and welfare of the county's residents. It plays a vital role in maintaining the environment while protecting residents from insects and animals that can carry diseases. According to the district, reducing mosquito issues involves minimizing standing water, keeping water as far as possible from homes during mosquito season, and applying treatments when necessary.

In the past, agricultural irrigation activities on the project site have resulted in ponding and puddling water during mosquito season. These locations and drainage ditches required regular treatment to reduce mosquito issues.

Agricultural irrigation on the site has ceased. The site is now managed for grazing, which will decrease mosquito issues. Existing agricultural ditches that do not adequately drain to the existing pump station will be filled to reduce any ongoing source of mosquitos at the site.

For the planned project, seasonal wetland ponds and channels will be dry before mosquito season begins. The Conservancy has incorporated recommendations from the Contra Costa Mosquito & Vector Control District to ensure that tidal wetland areas on the site are designed to minimize or avoid mosquito issues by maintaining tidal exchange and positive drainage towards planned channels. In addition, the Conservancy will develop a Management Plan to address any potential future mosquito issues.

6.12 Recreational Opportunities

Community Concern/Question

In the future, will the site provide opportunities for public access and recreation, causing increased visitor numbers, traffic, and parking issues in Knightsen?

Project Response

There are no current plans for public access. Community comments during initial concept planning for the site indicated that the community opposed establishing public access or recreation on the site.

Recreation planning would be a separate planning process many years in the future. EBRPD operates 73 parks and is familiar with working with communities to plan and manage public access. If the community is interested in establishing public access, the planning process would include community engagement, as well as determination that EBRPD has the resources to develop and manage the site for recreational opportunities.

Access to the site is and will remain restricted. To ensure security and safety onsite, EBRPD maintains a police force, helicopter, and fire response team, to patrol and enforce trespassing laws, as well as observe and respond to fire danger and other reported hazards.

6.13 Benefits to the Community

Community Concern/Question

Does the project provide benefits to the community?

Project Response

The project will provide multiple benefits to the community, including:

- The project preserves open space and protects the land from other types of development and uses.
- The project will restore and establish habitat for threatened and endangered species and support their recovery.
- The project will reduce stormwater flooding problems along Delta Road and Byron highway by moving standing water in the roadside ditches away from those properties and onto the project site to drain more directly to No Name Slough.
- The project includes a new levee designed to current flood and earthquake standards, which will provide additional protection to the community when adjacent levees are improved to current standards.

Appendix A List of Preparers

East Contra Costa County Habitat Conservancy

- Abigail Fateman, Executive Director

East Bay Regional Park District

- Neoma Lavalle, Principal Planner
- Alex Casbara, Senior Planner

Environmental Science Associates

- Eve Pier Kieli, Project Manager
- Mark Lindley, Senior Engineer
- Melissa Carter, Project Engineer

Balance Hydrologics

- Dave Shaw, Principal
- Mark Woyshner, Principal

The Catalyst Group

- Charles Gardiner, Principal
- Aaron Pope, Project Manager

Appendix B Habitat Types

As described in this Project Summary Report, the project is designed to restore and enhance a mosaic of native wetland, transitional, and upland habitats across the project site that will provide valuable ecosystem functions to support HCP/NCCP covered and other special status species.

Following completion of project grading and construction of infrastructure elements, revegetation efforts will focus on active planting and vegetation management in the seasonal wetland, wetland to upland transitional ecotone, and interior dune, grassland, and oak savanna upland areas of the restoration site. Only limited active revegetation efforts are planned for tidally inundated areas of the project site because the freshwater tidal wetland plant community is expected to be established primarily through passive recolonization (natural recruitment).

Below are images and descriptions of target habitats planned for restoration and enhancement across the project site.

B.1 Freshwater Tidal Wetlands & Open Water Channels

Channels will be graded into the East Sub-Parcel interior to support open water (aquatic) and wetland habitats. The area overall will be graded to create positive drainage toward the tidal channel network. The tidal channel layout (e.g., channel length per marsh area, branching patterns, and sinuosity) and sizing (cross-sectional dimensions) will be modeled after channels occurring in relatively undisturbed historic tidal wetlands of the western Delta.

Figure B-1. Freshwater Tidal Wetland and Channel

Channels through the tidal wetland provide estuarine fish habitat and wildlife corridor connections between the wetland and adjacent terrestrial ecotones. Tidal channels and the adjacent low-elevation wetland plain provide habitat for native submerged aquatic vegetation, small prey fish, and many waterbirds that may also use adjacent wetland to upland transitional elevation ecotones. Tidal channels and restored tidal drainages are expected to reduce mosquito production and the need for frequent re-entry by vehicles (damaging vegetation and potentially disturbing sensitive wildlife) to treat mosquito larvae. Channels also provide increased transport of fine organic matter and wetland plant litter, providing food web support and increased landward transport of tidal sediment for vertical accretion in pace with sea level rise.

B.2 Seasonal Wetlands

Historically, alkali seasonal wetlands occurred on the project site and the presence of alkali vegetation adjacent to and within recently farmed areas of the site indicates the potential to support this habitat with restoration. Alkali seasonal wetlands are characterized by varied micro-topography, which supports salt-influenced habitats including small brackish ponds/pools, alkali flats, alkali sink-scrub, and seasonally inundated alkali grasslands.

Where located along swales designed to carry stormwater flow, seasonal wetlands may support plant and wildlife species adapted to less alkaline conditions. Seasonal wetlands are seasonally inundated from a depth of a couple of inches (meadow features) to one foot or more (pond/pool features). Seasonal wetlands can support vernal pool branchiopods, Swainson's hawk, golden eagle, and white-tailed kite, as well as other special status species such as northern harrier.

Figure B-2. Seasonal Wetland along swale – Wet season condition.

Figure B-3. Seasonal Wetland along swale – Dry season condition.

Figure B-4. Alkali Seasonal Wetland.

B.3 Wetland to Upland Transition

Wetland to upland transitional habitat will be established along the broad, flat transitional slopes between the upland grasslands and the tidal wetlands on the East Sub-Parcel, increasing habitat complexity. Wetland to upland transitional habitat areas will be planted with species adapted to more frequently saturated conditions in lower elevations within the habitat gradient and those adapted to drier conditions in higher elevations within the zone.

Wetland to upland transition habitats will provide forage and nesting habitat for white-tailed kite, golden eagle, tricolored blackbird, Swainson's hawk, western pond turtle, western burrowing owl, and migratory birds.

Figure B-5. Wetland to Upland Transition – Freshwater tidal wetland to upland grassland and scrub.

B.4 Riparian Scrub

Within the project site, a small area of riparian scrub occurs along the drainage ditch located on the eastern boundary of the East Sub-Parcel. Woody riparian scrub species will be introduced in small patches on higher elevation berms along larger channels of the East Sub-Parcel tidal wetland complex.

Riparian vegetation adjacent to the emergent wetland could contribute plant litter, providing food web support in the emergent wetland and channels, and providing shaded aquatic habitat benefiting fish and other aquatic species. The structure and cover provided by riparian scrub vegetation could also support a variety of bird species, including golden eagle, Swainson' hawk, white-tailed kite, and northern harrier.

Figure B-6. Riparian Scrub along a freshwater tidal wetland channel.

B.5 Interior Dune

The existing native vegetation within both the dune and seasonal alkali wetland habitats in the Northern Parcel indicates that a less intensive approach can be employed with restoration. Habitat enhancement could be accomplished using management actions to control invasive weeds, expand existing native vegetation, and introduce native interior dune plant species. Because existing desirable native vegetation is dispersed in patches across the North Parcel, it may be difficult to grade the site without impacting desirable vegetation. In areas slated for grading, plant salvage may be incorporated to save and replant existing native plant populations.

Target species including Northern California legless lizard and western burrowing owl could benefit from restoration of vegetated dune habitat.

Figure B-7. Interior Dune.

B.6 Grassland

In the restored grassland habitats, showy-flowered forbs will provide pollination opportunities for insects and birds, grasses and grass and forb seeds will support a variety of birds and small mammals. In addition, low herbaceous cover will provide protection for burrowing mammals, reptiles, and ground-nesting birds. These habitat functions are expected to return within a year or two once a diverse assemblage of herbaceous plants has been established. Another important function of the herbaceous community is the stabilization of surface substrate: the shallow root systems of grasses and forbs will hold together the recently graded materials at the soil surface, protecting the area from surface erosion. With sea level rise and attendant tidal wetland transgression, lower elevation areas of grassland habitat will evolve to support lowland terrestrial ecotones, and potentially, well into the future, high marsh habitat.

Figure B-8. Grassland.

B.7 Oak Savanna

The southwestern corner of the South Parcel was historically occupied by oak savanna habitat. One large heritage valley oak exists adjacent to the homesite in the southwest corner of the South Parcel that will be protected during construction. Oak savanna habitat features are characterized by widely spaced blue oak or valley oak trees (generally between 10-30% canopy cover), and an herbaceous understory. Oaks will be planted as acorns or containers in areas first seeded in the grassland species.

Over time, restoration of oak savanna habitat could provide benefits for target species including tricolored blackbird, western burrowing owl, Swainson's hawk, white-tailed kite, golden eagle, and for other special status species including Modesto song sparrow, grasshopper sparrow, California horned lark, loggerhead shrike, and hoary bat, as well as other species of bats. While the establishment of mature oak savanna habitat and attendant species benefits will take decades, immature oaks in the 'shrub stages' will also provide roosting, nesting, and cover habitat for a wide range of species. This function will increase over time as planted oaks have larger canopies that are more protective of nests, roosts, and dens.

Figure B-9. Oak Savanna.