Yolo Habitat Conservancy

County of Yolo • City of Davis • City of Winters • City of West Sacramento
City of Woodland • University of California, Davis

Notice of Public Meeting

Yolo Habitat Conservancy

Implementation Advisory Committee

Time: **4:00 - 5:00 p.m. on Wednesday, June 29, 2022**

Place: **THIS MEETING WILL OCCUR BY TELECONFERENCE**

Teleconference options to join the meeting:
Join Zoom Meeting

By Computer: https://yolocounty.zoom.us/j/87181949176

Or One tap mobile : US: +14086380968,,87181949176# or +16699006833,,87181949176#

Contact Charlie Tschudin at 530-666-8850 or charlie@yolohabitatconservancy.org

NOTICE

If requested, this agenda can be made available in appropriate alternative formats to persons with a disability, as required by Section 202 of the Americans with Disabilities Act of 1990 and the Federal Rules and Regulations adopted in implementation thereof. Persons seeking an alternative format should contact the Clerk of the Board for further information. In addition, a person with a disability who requires a modification or accommodation, including auxiliary aids or services, in order to participate in a public meeting should telephone or otherwise contact the Clerk of the Board as soon as possible and at least 72 hours prior to the meeting at (530) 666-8195.

PUBLIC PARTICIPATION INSTRUCTIONS:

Based on guidance from the California Department of Public Health and the California Governor's Office, in order to minimize the spread of the COVID-19 virus, please do the following:

1. You are strongly encouraged to observe the Yolo Habitat Conservancy meeting via computer: https://yolocounty.zoom.us/j/86038225324, Meeting ID: 860 3822 5324or phone in via 1-408-638-0968 Meeting ID: 860 3822 5324.
2. If you are joining the meeting via zoom and wish to make a comment on an item, press the "raise a hand" button. If you are joining the meeting by phone, press *9 to indicate a desire to make comment. The chair will call you by name or phone number when it is your turn to comment. Speakers will be limited to 3 minutes (subject to change).

Agenda

1. Call meeting to order
2. Roll Call
3. Approve agenda order
4. Public Comment
5. Approve authorization for remote (teleconference/videoconference) meetings by finding, pursuant to Assembly Bill 361, find that the Governor's emergency proclamation for the COVID-19 pandemic remains in effect and that meeting in person would present imminent risks to the health and safety of attendees
6. SPE 2022_04: Receive a staff presentation to consider recommending the Yolo Habitat Conservancy Board of Directors authorize approval for Yolo Habitat Conservancy Executive Director to take necessary actions to execute a Certificate of Inclusion with Knights Landing Ridge Drainage District to allow use of Yolo HCP/NCCP coverage for the Knights Landing Ridge Cut Erosion Repair Project
7. SPE 2022_05: Receive a staff presentation to consider recommending the Yolo Habitat Conservancy Board of Directors authorize approval for Yolo Habitat Conservancy Executive Director to take necessary actions to execute a Certificate of Inclusion with Pacific Gas and Electric to allow use of Yolo HCP/NCCP coverage for the C-1637 L-400 AC Mitigation Project
8. Announcements and updates
9. Adjourn – Next meeting TBD.

I declare under penalty of perjury that the foregoing agenda was posted June 24, 2022 by 5:00 p.m. at the following places:

- On the bulletin board at the east entrance of the Erwin W. Meier Administration Building, 625 Court Street, Woodland, California; and
- On the bulletin board outside the Board of Supervisors Chambers, Room 206 in the Erwin W.Meier Administration Building, 625 Court Street, Woodland, California.
- On the YHC website: www.yolohabitatconservancy.org

By: Julie Dachlter
Julie Dachlter, Clerk

Yolo Habitat Conservancy

County of Yolo • City of Davis • City of Winters • City of West Sacramento
City of Woodland • University of California, Davis

To: Yolo Habitat Conservancy Implementation Advisory Committee

From: Charlie Tschudin
Natural Resources Planner

Re: Receive a staff presentation to consider recommending the Yolo Habitat Conservancy Board of Directors authorize approval for Yolo Habitat Conservancy Executive Director to take necessary actions to execute a Certificate of Inclusion with Knights Landing Ridge Drainage District to allow use of Yolo HCP/NCCP coverage for the Knights Landing Ridge Cut Erosion Repair Project

Date: June 29, 2022

REQUESTED ACTION:
Receive a staff presentation to consider recommending the Yolo Habitat Conservancy Board of Directors authorize approval for Yolo Habitat Conservancy Executive Director to take necessary actions to execute a Certificate of Inclusion with Knights Landing Drainage District to allow use of Yolo HCP/NCCP coverage for the Knights Landing Ridge Cut Erosion Repair Project

BACKGROUND:
The Knights Landing Ridge Drainage District is the local levee entity responsible for the maintenance and repair of the Knights Landing Ridge Cut, a human-made drainage channel constructed in 1914 to relieve flooding in the Colusa Basin by conveying flows into the Yolo Bypass. The Knights Landing Ridge Cut experiences erosion during high flows and is in need of repair to restore the flood damage risk-reduction capability of the originally constructed levee using structurally reliable erosion-control elements. The Knights Landing Ridge Drainage District submitted a Special Participating Entity (SPE) request to the Yolo Habitat Conservancy to mitigate for the proposed levee repairs' biological impacts in May 2022.

The project is being proposed in two phases, Phase 1 of the repairs will begin at County Road 16 and run approximately 2,200 feet along the levee from levee stations 40+00 to 62+00. Phase 2 will continue the repairs approximately 1,900 feet south of levee station 62+00 to levee station 81+00 (see exhibit 1, Project Vicinity Map). The project involves placement of rock slope protection (RSP) in area between 20 and 30 feet wide along the bank of the Ridge Cut to stabilize the eroding levee slope. The first phase anticipates construction beginning August 1, 2022 and Phase 2 commencing as soon as funding becomes available. Both phases would occur when water is naturally low in order to minimize potential for in-water work. A breakdown of the approximately 14.34-acre project, including temporary and permanent impacts, is included below.

Access Road and Staging Area (Phase 1 and 2)

Land Cover Types	Temporary Impact* Acreages
Developed	2.38
Ruderal with Covered Species Habitat	5.88
Total acres	8.26-acres

*Temporary impacts are those that return to pre-project conditions within a year of construction.

Phase 1

Land Cover Types	Perm. Impact	Temp. Impact	Fee Buffer	Total Acres
Lacustrine and Riverine	1.114-acres	0.002-acres	0.508-acres	1.624-acres
Ruderal with Covered Species Habitat	0.286-acres	1.849-acres	0.002-acres	2.137-acres
Total acres	1.4-acres	1.851-acres	0.51-acres	3.761-acres

Phase 2

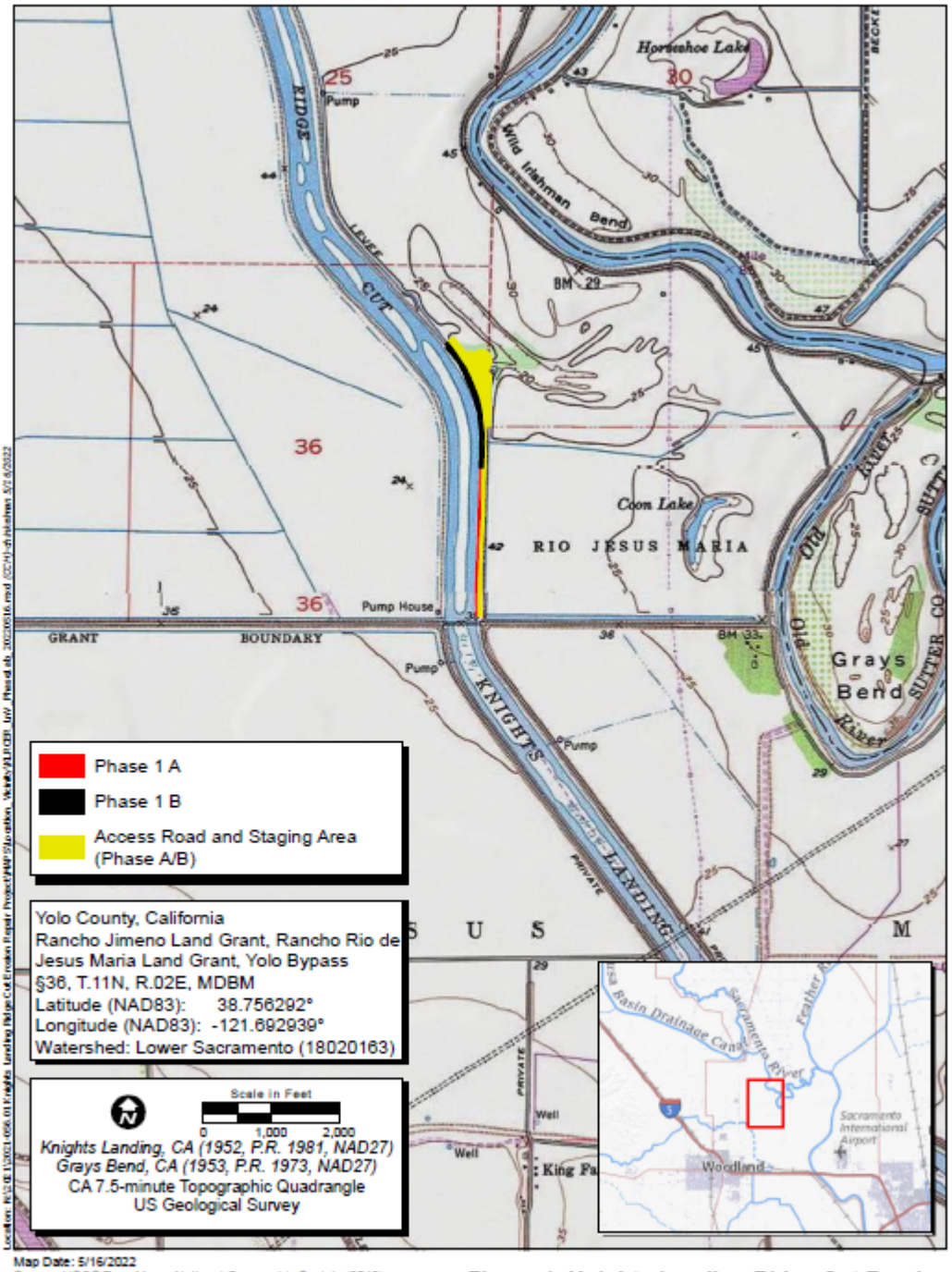
Land Cover Types	Perm. Impact	Temp. Impact	Fee Buffer	Total Acres
Developed	-	0.118-acres	-	0.118-acres
Lacustrine and Riverine	0.681-acres	0.011-acres	0.433-acres	1.125-acres
Ruderal with Covered Species Habitat	0.14-acres	1.66-acres	-	1.8-acres
Valley Foothill Riparian	0.22-acres	-	0.10-acres	0.23-acres
Total acres	0.965-acres	1.865-acres	0.443-acres	3.274-acres

*Table 5-1 of the Yolo HCP/NCCP does not contain temporary take for Valley Foothill Riparian land cover types, those acres are permitted as permanent impacts.

To grant permit coverage to an SPE, the Conservancy must determine the requested permit coverage is available and establish a legally enforceable contract (SPE Agreement) with the SPE. The SPE Agreement binds the SPE to the relevant terms of the Yolo HCP/NCCP permits, Implementing Agreement, and Yolo HCP/NCCP. In addition to executing the SPE Agreement, the SPE entity must submit a complete application package, pay both the standard Yolo HCP/NCCP land cover fees and supplemental SPE charges per the SPE fee policy, and complete any other steps required by the contract. Because the applicant is a local entity, the cost recovery charges for SPEs will not be required and the applicant will only need to pay the mitigation fees. After these steps are complete, the Conservancy will issue a Certificate of Inclusion to the SPE. Total mitigation fees for Phases 1 and 2 are estimated to be $241,000.00.

Staff recommend approval of the Knights Landing Ridge Cut Erosion Repair project because the project will allow a local entity to improve infrastructure to the benefit of the residents and agricultural industry, and only result in impacts to two natural communities that the Conservancy tracks impacts to in the YHC Annual Report, 0.23-acres of the Valley Foothill Riparian land cover type and 2.736-acres of Lacustrine and Riverine land cover type, both of which there is ample acreages remaining for the Conservancy to issue.

Exhibit 1: Vicinity Map



Map Date: 5/16/2022
Source: USGS Topo Maps, National Geographic Society (2013)

ECORP Consulting, Inc.
ENVIRONMENTAL CONSULTANTS

Figure 1. Knights Landing Ridge Cut Erosion Repair

2021-056.01 Knights Landing Ridge Cut Erosion Repair

ATTACHMENTS:

1. **Application for Coverage**
2. **Variance Approval – Reduced Valley Elderberry Buffer**

APPLICATION

PURPOSE OF THIS FORM

Complete this form to apply for incidental take permit coverage under the Yolo Habitat Conservation Plan/Natural Community Conservation Plan (Yolo HCP/NCCP) and submit electronically to your local planning office. The completion of this form satisfies the minimum requirements for permit coverage. The Yolo Habitat Conservancy ("Conservancy") encourages submittal of a preliminary application to your local planning office to ensure timely and accurate completion. Your local agency planning office also may request additional information to clarify or complete your application. Chapter 6 of the Permitting Guide provides instructions for form completion, available along with additional resourceson the Conservancy's web site under the "Permitting" tab. Please note if an application fee is required (see Screening Form, Box D), you should submit this fee to the Conservancy early in the application process. The Conservancy automatically adjusts mitigation fees by March 15th of each year to reflect current land prices and other expenses. If an applicant does not complete their application and issue payment prior to the fee update, the new fees will apply. The applicant may, however, pay mitigation fees early at the previous year's rate consistent with the Conservancy's Early Payment of Mitigation Fees Policy.

Regional-scale data related land cover, sensitive natural communities, and covered species habitats in Yolo is made available through the Yolo HCP/NCCP GeoMapper online mapping tool. The GeoMapper tool is accessible via the Resources tab of the Yolo Habitat Conservancy website below, although it is intended for informational purposes only, All HCP/NCCP permit applicants must have site-specific planning level surveys by a qualified biologist to determine actual land cover and sensitive natural communities and species habitats in and around a project site to determine the correct amount of land cover mitigation fees and project specific Avoidance and Minimization Measures (AMMs).

https://www.yolohabitatconservancy.org/resources

BOX A: Preliminary/Final Application	
Check one box.	
☐ Preliminary Application (signature not required)	☒ Final Application (complete form and signature required)

BOX B: APPLICATION DETAILS		
1 Project name	Knights Landing Ridge Cut Erosion Repair Phase 1 Project	
2 Submittal date		
3 Application/project file number(s) (assigned by local agency)		
4 YHC internal tracking #		
5 Local agency with approval authority	☐ Yolo County ☐ City of Davis ☐ City of Woodland ☐ City of West Sacramento ☐ City of Winters ☐ Other _____	☒ Special Participating Entity (SPE) **Note**: Applicants not subject to approval from the County or cities, or for projects not specifically identified and not specifically excluded as a covered activity under the Plan, should check this box to request permit coverage as an SPE if desired. SPE permit coverage is not guaranteed, are processed by the Conservancy, and must be approved by the Conservancy Board.

BOX C: PROJECT CONTACT			
1 Property Owner			
1.a Property owner name	Knights Landing Ridge Drainage District		
1.b Mailing address	PO Box 50 Grimes, CA 95950		
1.c Phone (home/office)	530-437-2221	1.d Phone (Cellular)	530-812-6269
1.e Email	mnagy@rd108.org		
2 Project Agent/Applicant			
2.a Company/organization	ECORP Consulting, Inc.		
2.b Name of primary contact	Emily Mecke		
2.c Mailing address	2525 Warren Drive, Rocklin, CA 95677		
2.d Phone (office)	916-251-5119	2.e Phone (Cellular)	
2.f Email	emecke@ecorpconsulting.com		
Permissions			
3 Local agency and/or the Conservancy may contact the property owner directly	☐ Yes ☒ No		
4 Local agency and/or the Conservancy may contact the project agent/applicant directly	☒ Yes ☐ No		

BOX D: PROJECT INFORMATION		
1 Project address and location	See planning-level survey document, page 1	
2 Assessor parcel number(s) APNs and acreage by parcel (not applicable for linear projects).	N/A	
3 Total acreage of parcel(s) (not applicable for linear projects spanning multiple parcels)	N/A	
4 Using the GeoMapper's Spatially Defined Planning Unit Map, find your proposed project site. Check the Planning Unit in which your project lies.	**Yolo County Planning Units** ☐ 1 – Little Blue Ridge ☐ 2 – North Blue Ridge ☐ 3 – South Blue Ridge ☐ 4 – Capay Hills ☐ 5 – Dunnigan Hills ☐ 6 – Upper Cache Creek ☐ 7 – Lower Cache Creek ☐ 8 – Upper Putah Creek ☐ 9 – Lower Putah Creek ☐ 10 – Hungry Hollow Basin ☐ 11 – Willow Slough Basin	☒ 12 – Colusa Basin ☐ 13 – Colusa Basin Plains ☐ 14 – North Yolo Basin ☐ 15 – South Yolo Basin ☐ 16 – Yolo Basin Plains ☐ 17 – North Yolo Bypass ☐ 18 – South Yolo Bypass **Cities** ☐ 19 – City of Woodland ☐ 20 – City of Davis ☐ 21 – City of West Sacramento ☐ 22 – City of Winters

BOX D: PROJECT INFORMATION

5 ☒ Provide a project description. Please refer to the Permitting Guide for details to include in the project description. Label as **Attachment 1** or indicate in this box the page numbers of the planning level survey where this information can be found**.** See planning-level survey document, Pages 1-3

6 ☒ Provide a legible vicinity map of the project site and surrounding area (PDF). Refer to the Permitting Guide for more information about details to include on the vicinity map. Label as **Attachment 2.** Rather than a separate PDF, applicant may include the site plan in the planning level survey report.

If so, provide page number here**:** Figure 1

7 ☒ Provide a site plan that shows the proposed project site and surrounding area. (PDF and CAD or GIS-compatible). Refer to the Permitting Guide for more information about details to include in the site plan and details regarding the required CAD or GIS-compatible digital information to be attached. Label as **Attachment 3.** Rather than a separate PDF, applicant may include the site plan in the planning level survey report or other report. If so, attach report or excerpt and provide report name and page number here**:** Figure 2

BOX E: NATURAL COMMUNITY AND LAND COVER IMPACTS AND MITIGATION FEES

Complete Items 1-26 below, referring to the Permitting Guide for calculation methods.

- Total fee amount for each land cover type will be auto-generated based on acreage amount (and for recurring temporary impacts, number of years out of the 50-year permit term the impact will occur).
- Temporary impact fee formula = land cover fee x area of temporary effect in acres x (F/50) where F = the number of years in which the activity will occur during the rest of the permit term (until 2069).
- Must include required land cover fee buffer area associated with the project. This is generally 10 feet for linear projects (e.g. roads, utility corridors, pipelines) and 50 feet for all other projects. See Chapter 3 of the Permitting Guide.
- Fees will be updated annually, typically in March.
- Wetland fees are in addition to land cover fees. For project proponents transplanting elderberry shrubs from a non-riparian habitat, a per acre maintenance fee of $19,104 is assessed. The maintenance fee is subject to the annual increase in fees pursuant to existing methodology.
- Submit a planning level survey, including a field-verified land cover map and the name and qualifications of the qualified biologist(s) responsible for preparation of the report. Label as **Attachment 4.** Mapped areas shown on the site plan (**Attachment 3** in Box D, Item 7) should be consistent with the acreages entered below. Include photographs of temporary impact areas. Label photos as **Attachment 5**.

Land Cover Types	Land Cover Permanently Impacted by Project (in acres)			Land Cover Temporarily Impacted by Project (in acres)	Years of Recurring Temporary Impact	Fees (Auto Generated)				
	Permanent Impact (acres)	Fee Buffer (acres)	TOTAL			Land Cover Fee (per acre)	Wetland Fee (per acre)	Permanent Impact, Land Cover Fee	Temporary Impact, Land Cover Fee	Wetland Fee
1 ☐ Developed (including ruderal with no covered species habitat)[a]			0.0			$0	$0	$ 0.00	$ 0.00	$ 0.00
2 ☐ Ruderal with covered species habitat [a]			0.0			$15,571	$0	$ 0.00	$ 0.00	$ 0.00
3 ☐ Barren, No Covered Species Habitat			0.0			$0	$0	$ 0.00	$ 0.00	$ 0.00
4 ☐ Barren, With Covered Species Habitat			0.0			$15,571	$0	$ 0.00	$ 0.00	$ 0.00
5 ☐ Vegetated Corridor with Covered Species Habitat			0.0			$15,571	$0	$ 0.00	$ 0.00	$ 0.00
6 ☐ Grassland (all types)			0.0			$15,571	$0	$ 0.00	$ 0.00	$ 0.00
7 ☐ Alkali Prairie			0.0			$15,571	$0	$ 0.00	$ 0.00	$ 0.00
8 ☐ Fresh Emergent Wetland (all types)			0.00			$15,571	$80,864	$ 0.00	$ 0.00	$ 0.00

Fee Calculators for each phase (Phase 1A and Phase 1B) are providing in Attachment B of the Planning-Level Survey Report.

BOX E: NATURAL COMMUNITY AND LAND COVER IMPACTS AND MITIGATION FEES

9 ☐ Valley Foothill Riparian			0.00			$15,571	$66,560	$ 0.00	$ 0.00	$ 0.00
10 ☐ Lacustrine and Riverine			0.00			$15,571	$64,854	$ 0.00	$ 0.00	$ 0.00
11 ☐ Cultivated Land (all types)			0.0			$15,571	$0	$ 0.00	$ 0.00	$ 0.00
12 ☐ Citrus/Subtropical			0.0			$15,571	$0	$ 0.00	$ 0.00	$ 0.00
13 ☐ Deciduous Fruits/Nuts			0.0			$15,571	$0	$ 0.00	$ 0.00	$ 0.00
14 ☐ Vineyards			0.0			$15,571	$0	$ 0.00	$ 0.00	$ 0.00
15 ☐ Turf Farm			0.0			$15,571	$0	$ 0.00	$ 0.00	$ 0.00
16 ☐ Flowers/Nursery/Tree Farms			0.0			$15,571	$0	$ 0.00	$ 0.00	$ 0.00
17 ☐ Semiag/Incidental to Agriculture			0.0			$15,571	$0	$ 0.00	$ 0.00	$ 0.00
18 ☐ Eucalyptus			0.0			$15,571	$0	$ 0.00	$ 0.00	$ 0.00
							TOTAL	0.00	0.00	0.00

19	**TOTAL LAND COVER IMPACTS AND MITIGATION FEES**	$ 0.00
20	**APPLICATION FEE** (The application fee is credited towards the cost of the mitigation fees if the application fee is paid prior to the submittal of the mitigation fee payment . Application fee as of January 1, 2020: $1,981)	$
21	**OTHER CREDITS** (Advanced fee payment or in lieu fee credit – must be verified by Conservancy). Add **Attachment 6**	$
22	**TOTAL LAND COVER IMPACTS AND MITIGATION FEES DUE** (Mitigation fees due are determined at the time of payment unless they were paid in accordance with the Yolo HCP/NCCP Early Payment of Mitigation Fees Policy. See www.yolohabitatconservancy.org for current fee schedule.)	$ 0.00

[a] Land cover fees may be applicable if covered species habitat is present.

BOX F: CONDITIONS OF APPROVAL: CONDUCT PLANNING LEVEL SURVEYS

Based on a planning level survey conducted by a qualified biologist using the land cover definitions described in the Permitting Guide in Table 2-1, indicate which sensitive natural communities and covered species are relevant to your project. Indicate below whether suitable covered species habitats are present (Column A) and, where applicable, if there is a need to conduct a more focused survey(s) for covered species (Column B) to confirm presence. Complete species-specific planning level surveys as needed consistent with protocols referenced in Appendix A of the Permitting Guide. Alternatively, covered species presence can be assumed, which would requires adherence to applicable AMMs and implementation of avoidance measures or preconstruction surveys. Attach all species-specific planning level surveys as **Attachment 7**. Describe, map, and tabulate impacts the project will have on each natural community and each species for which habitat is present. Impact calculations must correspond to the permanent and temporary impact calculations in Box E. Label as **Attachment 8**. Alternatively, the impact assessment can be incorporated into the planning level survey. **Important**: Be aware of the timing requirements for conducting a species-specific planning level survey (Table 6-1 in the Permitting Guide) to avoid project delays.

	A. Project Site Conditions Requiring Planning Level Survey	B. Species-Specific Planning Level Survey Results	C. Documentation
Sensitive Natural Communities			
1 Alkali prairie and vernal pool complex	Are vernal pools or alkali seasonal wetlands present within 250 feet of project footprint? ☐ **Yes**. *Design project to avoid vernal pools or alkali seasonal wetlands by 250 feet or lesser buffer if approved by wildlife agencies (see Permitting Guide Table 2-1). Check Box G, AMMs 9 and 10. Go to Column C.* ☒ **No**	N/A	Map attached? (Attachment 4) ☐ **Yes** ☒ **No** If vernal pools or alkali seasonal wetlands are present on or near the site, provide map showing how project avoids these wetlands.
2 Valley foothill riparian	Is valley foothill riparian present within 100 feet of the project site boundary? ☒ **Yes**. *Design project to avoid valley foothill riparian by 100 feet or count all portions within 100 feet in the impact acreage (see Permitting Guide Table 2-1). Check Box G, AMMs 9 and 10. Go to Column C and provide map.* ☐ **No**	N/A	Map attached? (Attachment 4) ☒ **Yes** ☐ **No** Provide map showing the valley foothill riparian in relation to the project footprint.
3 Lacustrine and riverine	Are any streams, rivers, lakes, or ponds within 25 feet of project footprint inside urban planning units, or within 100 feet of project footprint outside urban planning units? ☒ **Yes**. *Design project to avoid these resources by 25 feet inside urban planning units or 100 feet outside urban planning units, or count all portions within these distances in the impact acreage, unless a variance is allowed. Check Box G, AMMs 9 and 10. Go to Column C and provide map.* ☐ **No**	N/A	Map attached? (Attachment 4) ☒ **Yes** ☐ **No** Provide map showing any streams, rivers, lakes, or ponds in relation to the project footprint.

BOX F: CONDITIONS OF APPROVAL: CONDUCT PLANNING LEVEL SURVEYS

	A. Project Site Conditions Requiring Planning Level Survey	B. Species-Specific Planning Level Survey Results	C. Documentation
Sensitive Natural Communities			
4 Fresh emergent wetlands	Are there any fresh emergent wetlands within 50 feet of project footprint outside urban planning units? ☐ **Yes**. *Design project to avoid these resources by 50 feet, or count all portions within 50 feet in the impact acreage. Check Box G, AMMs 9 and 10. Go to Column C and provide map).* ***Survey period: May 31–September 30*** ☒ **No**	N/A	Map attached? (Attachment 4) ☐ **Yes** ☒ **No** Provide map of fresh emergent wetlands in relation to the project footprint.
Plants			
5 Palmate-bracted bird's beak	Is suitable habitat present within 250 feet of the project site boundary? (see Permitting Guide Table 2-2) ☒ **Yes**. *Survey for palmate-bracted bird's beak consistent with Permitting Guide Appendix A. Check Box G, AMM 11. Go to Column B.* ***Survey period: May 31–September 30*** ☐ **No**	Is palmate-bracted bird's beak present? ☐ **Yes**. *Design project to avoid occupied habitat as described in AMM 11. Go to Column C.* ☐ **No.** *Go to Column C.* Planning survey to be completed prior to construction	Species-specific planning level survey report attached? (Attachment 7) ☐ **Yes** ☒ **No** *Include report of species-specific planning level survey and map of habitat and any plants found in relation to project footprint.*
Invertebrates			
6 Valley elderberry longhorn beetle	Is there presence of elderberry shrubs in the project site or within 100 feet outside of the project site boundary that could be impacted by the project? ☒ **Yes**. *Identify and map all elderberry shrubs in and within 100 feet of project footprint with stems greater than one inch in diameter at ground level. For mapped shrubs that cannot be avoided, quantify the number of stems greater than one inch in diameter at ground level, and identify any such stems with valley elderberry longhorn beetle exit holes. Check Box G, AMM 12. Go to Column C and provide survey report.* ***Survey period: Year-round*** ☐ **No**	N/A	Species-specific planning level survey report attached? (Attachment 7) ☒ **Yes** ☐ **No**

BOX F: CONDITIONS OF APPROVAL: CONDUCT PLANNING LEVEL SURVEYS

	A. Project Site Conditions Requiring Planning Level Survey	B. Species-Specific Planning Level Survey Results	C. Documentation
Amphibians			
7 California tiger salamander	Is there presence of California tiger salamander aquatic or upland habitat in the project footprint, or aquatic habitat within 500 feet of the project footprint? ☐ **Yes**. *Check box G, AMM 13. Is the habitat within designated critical habitat for California tiger salamander, as determined using the GeoMapper?* ☐ **Yes**. Design project to avoid designated critical habitat. ☐ **No.** *If aquatic habitat cannot be avoided by 500 feet, either conduct surveys as described in the Permitting Guide Appendix A, or assume species presence.* ***Survey period: After rainfall, November 1 to May 15.*** *Go to Column B.* ■ **No**	Are California tiger salamanders present or assumed to be present in aquatic habitat? ☐ **Yes**. *If the species is present or assumed to be present, the Yolo HCP/NCCP will not allow any loss of occupied aquatic habitat until at least four new occupied breeding pools are discovered or established and protected in the Plan Area. Contact Yolo Habitat Conservancy. Go to Column C.* ■ **No**	Species-specific planning level survey attached? (Attachment 7) ☐ **Yes** ■ **No**
Reptiles			
8 Western Pond Turtle	Is western pond turtle habitat present in the project footprint? ■ **Yes**. Check Box G, AMM 14. A qualified biologist is required to evaluate whether there is moderate to high likelihood of western pond turtle presence. *Go to Columns B and C.* ☐ **No**	Moderate to high likelihood of western pond turtle presence? ■ **Yes:** Check Box F for western pond turtle preconstruction surveys. ☐ **No**	Habitat evaluation attached? (Attachment 7) ■ **Yes** ☐ **No**
9 Giant Garter Snake	Is there any giant garter snake habitat (as defined in the Permitting Guide, Table 2-2) within the project footprint? ■ **Yes**. *Design project to avoid or minimize impact on giant garter snake habitat to the extent practicable. If habitat cannot be avoided, see AMM 15. Check Box F for giant garter snake Preconstruction surveys, and check Box G, AMM 15.* ☐ **No**	N/A	N/A

BOX F: CONDITIONS OF APPROVAL: CONDUCT PLANNING LEVEL SURVEYS

	A. Project Site Conditions Requiring Planning Level Survey	B. Species-Specific Planning Level Survey Results	C. Documentation
Birds			
10 Swainson's Hawk and White-tailed Kite	Are there suitable Swainson's hawk or white-tailed kite nest trees within 1,320 feet of the project footprint? ☒ **Yes**. *If nest trees cannot be avoided by 1,320 feet, check Box F for hawk and kite Preconstruction surveys, and Box G, AMM 16.* ☐ **No**	N/A	N/A
11 Western yellow-billed cuckoo	Is suitable habitat present within 500 feet of the project site boundary? ☐ **Yes**. *If there are breeding records for the western yellow-billed cuckoo within ¼ mile of the project site from the previous three years (as determined by GeoMapper), then assume species is present. If there are no breeding records with ¼ mile, then either assume species is present or survey consistent with Chapter 6 of the Permitting Guide. See columns B and C. Check Box F for western yellow-billed cuckoo Preconstruction surveys and Check Box G, AMM 17.* ***Survey period: June 1–August 30.*** ☒ **No**	Is western yellow-billed cuckoo present or assumed to be present? ☐ **Yes**. *If project cannot avoid occupied habitat by 500 feet, avoid take of nesting birds as described in AMM 17.* ☒ **No.**	Species Survey attached? (Attachment 7) ☐ **Yes** ☒ **No**
12 Western Burrowing Owl	Is western burrowing owl habitat present on the project site, or within 500 feet of the project site? ☒ **Yes**. *Conduct planning level surveys for occupied habitat as described in Permitting Guide Appendix A. Go to Columns B and C.* ***Survey period: February 1–August 31 during the breeding season; September 1–January 31 during nonbreeding season.*** ☐ **No**	Are burrowing owls present? ☐ **Yes**. *Check Box G, AMM18. If burrows cannot be avoided, consistent with Table 2-3 in the Permitting Guide, Check Box F for western burrowing owl preconstruction surveys.* ☐ **No**	Species-specific planning level survey attached? (Attachment 7) ☐ **Yes** ☒ **No** Applicant will conduct pre-construction surveys.

BOX F: CONDITIONS OF APPROVAL: CONDUCT PLANNING LEVEL SURVEYS

	A. Project Site Conditions Requiring Planning Level Survey	B. Species-Specific Planning Level Survey Results	C. Documentation
13 Least Bell's Vireo	Is least Bell's vireo habitat present in and within 500 feet of project footprint? ☒ **Yes**. *Check Box G, AMM 19. Are there nesting records for the species within ¼ mile of the site from the previous three years (determined using the GeoMapper)?* ☐ **Yes**. *Assume species is present. See Column B.* ☒ **No.** *Conduct planning level surveys, as described in Permitting Guide Appendix A. See Columns B and C.* ***Survey period: April 1–July 15*** ☐ **No**	Are least Bell's vireo nests present or assumed to be present? ☐ **Yes**. *Check Box F for least Bell's vireo preconstruction surveys. Avoid take of birds as described in AMM 19.* ☒ **No.**	Species Survey attached? (Attachment 7) ☐ **Yes** ☒ **No**
14 Bank Swallow	Is bank swallow nesting habitat present on the project site, or within 500 feet of the project site? ☐ **Yes**. *Check Box G, AMM 20. Conduct planning level surveys as described in Permitting Guide Appendix A. Go to Columns B and C.* ***Survey period: March 1–August 15*** ☒ **No**	Are nesting bank swallows present? ☐ **Yes**. *Check Box F for bank swallow preconstruction surveys. Avoid take of birds as described in AMM 19.* ☒ **No.**	Species-specific planning level survey attached? (Attachment 7) ☐ **Yes** ☒ **No**
15 Tricolored Blackbird	Is tricolored blackbird nesting habitat present on the project site, or within 1,300 feet of the project site? ☐ **Yes**. *Conduct planning level surveys as described in Permitting Guide Appendix A. Check Box G, AMM 21. Go to Column C.* ***Survey period: March 1–July 30*** ☒ **No**	N/A	Species-specific planning level survey attached? (**Attachment 7**) ☒ **Yes** ☐ **No**

BOX G: CONDITIONS OF APPROVAL: CONDUCT PRE-CONSTRUCTION SURVEYS

Indicate which species in **Items 1-7** are relevant to your project. **Important**: Refer to Chapter 4 of the Permitting Guide for information about survey purpose, the land cover types and site conditions requiring preconstruction surveys, survey area size, and survey timing.

Birds			
1	☒ Swainson's hawk	4	☒ Western burrowing owl
2	☒ White-tailed kite	5	☐ Least-Bell's vireo
3	☐ Western yellow-billed cuckoo		
Reptiles			
6	☒ Giant garter snake	7	☒ Western pond turtle

BOX H: CONDITIONS OF APPROVAL: AVOIDANCE AND MINIMIZATION MEASURES (AMMs)

Check the avoidance and minimization measures below that apply to your project. Refer to the Permitting Guide for assistance. Describe how you will fulfill the requirements of each required condition. Plan your construction carefully around the translocation or other dates required by the AMMs. Label as **Attachment 9**.

1	☒	AMM1: *Establish Resource Protection Buffers*
2	☐	AMM 2: *Design Developments to Minimize Indirect Effects at Urban-Habitat Interfaces (this AMM does not apply to new development where it is immediately adjacent to existing developed lands*)
3	☒	AMM 3: *Confine and Delineate Work Area*
4	☒	AMM 4: *Cover Trenches and Holes during Construction and Maintenance*
5	☒	AMM 5: *Control Fugitive Dust*
6	☐	AMM 6: *Conduct Worker Training*
7	☐	AMM 7: *Control Nighttime Lighting of Project Construction Sites*
8	☐	AMM 8: *Avoid and Minimize Effects of Construction Staging Areas and Temporary Work Areas*
9	☐	AMM 9: *Establish Resource Protection Buffers around Sensitive Natural Communities*
10	☐	AMM 10: *Avoid and Minimize Effects on Wetlands and Waters*
11	☒	AMM 11: *Minimize Take and Adverse Effects on Palmate-Bracted Bird's Beak*
12	☒	AMM 12: *Minimize Take and Adverse Effects on Habitat of Valley Elderberry Longhorn Beetle*
13	☐	AMM 13: *Minimize Take and Adverse Effects on Habitat of California Tiger Salamander*
14	☒	AMM 14: Minimize Take and Adverse Effects on Habitat of Western Pond Turtle
15	☒	AMM 15: *Minimize Take and Adverse Effects on Habitat of Giant Garter Snake*
16	☐	AMM 16: *Minimize Take and Adverse Effects on Habitat of Swainson's Hawk and White-Tailed Kite*
17	☐	AMM 17: *Minimize Take and Adverse Effects on Habitat of Western Yellow-Billed Cuckoo*
18	☒	AMM 18: *Minimize Take and Adverse Effects on Western Burrowing Owl*
19	☐	AMM 19: *Minimize Take and Adverse Effects on Least Bell's Vireo*
20	☐	AMM 20: *Minimize Take and Adverse Effects on Habitat of Bank Swallow*
21	☒	AMM 21: *Minimize Take and Adverse Effects on Habitat of Tricolored Blackbird*

BOX I: ATTACHMENT CHECKLIST

Indicate which attachments are provided below. **Note**: Attachments must meet the requirements described in Permitting Guide. If these requirements are not met, your application may be delayed.

All Projects

- ☒ **Attachment 1**. Project Description (Box C). Attach separately or indicate report page #s here: Pages 1-3
- ☒ **Attachment 2**. Vicinity map PDF (Box C). Attach separately or indicate report page # here: Figure 1
- ☒ **Attachment 3**. Site Plan (Box C). Attach separately or indicate report page # here: Figure 2; Attachment A
  Also include CAD or GIS compatible data.

Projects with Impacts

- ☒ **Attachment 4**. Planning level survey (Box D)
- ☒ **Attachment 5**. Photos of temporary impact areas. Attach separately or indicate report page #s here: Attachment B
- ☐ **Attachment 6**. Documentation if land is offered in lieu of fees (Box D, Item 30)
- ☒ **Attachment 7**. Species-specific planning level survey(s) (Box E). Attach separately or indicate report page #s here: Pages 9-10
- ☐ **Attachment 8**. Unavoidable impacts on covered species. Attach separately or indicate report page #s here:

BOX I: ATTACHMENT CHECKLIST

☒ **Attachment 9**. Description of compliance with avoidance and minimization measures (Box G). Attach separately or indicate report page #s here: Pages 11-12

BOX J: SIGNATURES

☑ **By checking the box and signing below I certify all information in the application is true and correct to the best of my knowledge. I also certify I understand the requirements of the AMMs, including dates for elderberry translocation or other dates that may affect construction timing.**

1	Property owner name and contact information	Name	Meegan Nagy		
		Phone	530-812-6269	Email	mnagy@rd108.org
2	Property owner signature	Meegan M Nagy		Date	5/31/2022
3	Project agent/applicant name and contact information	Name	Emily Mecke		
		Phone	916-251-5119	Email	emecke@ecorpconsulting.com
4	Project agent/applicant signature	Emily Mecke		Date	5/27/2022

FORM SUBMITTAL INSTRUCTIONS

Submit this form electronically to the applicable contact below. If the project applicant is seeking HCP/NCCP permit coverage as an SPE, submit the form to the Yolo Habitat Conservancy. The signed Final Application and payment of all other Plan fees is required following project approval and prior to formal Yolo HCP/NCCP approval.

LOCAL AGENCY PLANNINGOFFICE CONTACT INFORMATION

Yolo County	**City of West Sacramento**	**City of Davis**	**City of Woodland**	**City of Winters**
Stephanie Cormier Planning Division Department of Community Services 292 West Beamer Street, Woodland (530) 666-8041	David Tilley Community Development Department 1110 West Capitol Ave., 2nd Floor, West Sacramento (916) 617-4645	Sherri Metzker Community Development & Sustainability 23 Russell Blvd., Suite 2, Davis (530) 757-5610 ext. 7239	Cindy Norris Planning Division 300 First Street, Woodland (530) 661-5911	Kirk Skierski Community Development Department 318 First Street, Winters (530) 794-6714

YOLO HABITAT CONSERVANCY CONTACT INFORMATION

Address: PO Box 2202, Woodland, CA 95776 Phone: 530-666-8150 Email: info@yolohabitatconservancy.org

FOR STAFF USE ONLY			
Project planner name		Phone number	
Email		Date	
Covered activity type			
HCP/NCCP Application	☐ Complete ☐ Not complete	☐ Special Participating Entity	

MEMORANDUM

TO:	Charlie Tschudin
FROM:	Emily Mecke/ECORP Consulting, Inc.
DATE:	May 26, 2022
RE:	Knights Landing Ridge Cut Erosion Repair Phase 1 Project Yolo Habitat Conservation Plan/Natural Community Conservation Plan Planning Survey Report and Application Information

On behalf of Knights Landing Ridge Drainage District (KLRDD; Applicant), ECORP Consulting, Inc. conducted a biological evaluation for the Knights Landing Ridge Cut Erosion Repair Phase 1 Project (Project) located southeast of the town of Knights Landing in Yolo County, California. The purpose of this evaluation and planning survey report is to provide the necessary information to complete a Yolo Habitat Conservation Plan/Natural Community Conservation Plan (Yolo HCP/NCCP) application. The information provided in this report is consistent with the requirements of the planning survey report outlined in the Yolo HCP/NCCP Permitting Guide, dated February 2020 (Yolo Habitat Conservancy [YHC] 2020) and also provides supplemental information to support the Yolo HCP/NCCP application.

BOX D: PROJECT INFORMATION

1. Project Location

The approximately 14.34-acre Project Area includes the east levee of the Knights Landing Ridge Cut (KLRC), which is approximately 0.86 mile long, located in Yolo County, California (Figure 1). The Project Area corresponds to portions of the unsectioned Rancho Jimeno Land Grant lands, Rancho Rio de Jesus Maria Land Grant lands, and Yolo Bypass; and portions of Section 36, Township 11 North, Range 2 East (Mount Diablo Base Meridian) within the "Knights Landing, California" and "Grays Bend, California" 7.5-minute quadrangle (U.S. Geological Survey [USGS] 1952, photorevised 1981 and 1953, photorevised 1973, respectively; Figure 1). The approximate center of the Project Area is located at 38.756292° North and -121.692939° West within the Sacramento-Stone Corral and Lower Sacramento watersheds (Hydrologic Unit Code #18020104 and #18020163, respectively; Natural Resources Conservation Service, USGS, and U.S. Environmental Protection Agency 2016).

5. Project Description

Background

The KLRC is a human-made leveed drainage channel constructed in 1914 by local parties to relieve flooding in the Colusa Basin. The KLRC was later incorporated into the Sacramento River Flood Control Project. Repairs and improvements to the KLRC have been made as needed since then.

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The KLRC conveys flows from the Colusa Drain to the Yolo Bypass. Flows and water levels within the KLRC are dependent on operations at the Knights Landing Outfall Gate and flows occurring within the Yolo Bypass. The KLRC is approximately 6.25 miles long and its levees are maintained by KLRDD, the local levee maintenance agency. Erosion can and has occurred along the KLRC levees during high flows, requiring repair.

The overall Project, which includes the Phase 1 Project described in this application, is entirely within the study area for Phase II of the U.S. Army Corps of Engineers (USACE) and Central Valley Flood Protection Board (CVFPB) Sacramento River Bank Protection Project (SRBPP) and its associated programmatic Environmental Impact Statement/Environmental Impact Report (EIS/EIR; State Clearinghouse No. 2009012081, dated March 2020) prepared to cover levee erosion repairs (USACE and CVFPB 2020). Specifically, the USACE and CVFPB studied approximately 6 miles of the KLRC under Phase II of the SRBPP. Under the SRBPP site selection process as described in the Post Authorization Change Report for Phase II of the SRBPP (USACE and CVFPB 2020), certain repairs are not economically justified to receive federal funding. Those repairs that are not economically justified would be left within the purview of state and local levee districts.

Therefore, KLRDD is taking the lead for repairs of the levees along the KLRC. The KLRDD proposes repairs in phases over the next 10 years as described below. Although the SRBPP EIS/EIR was intended for use by the USACE and CVFPB for USACE-funded projects, the results of the SRBPP EIS/EIR (USACE and CVFPB 2020) are discussed and incorporated herein by reference. This application discusses Phase 1 of the Project.

Project Objectives

The objective of the Project is to repair existing eroded areas along the KLRC levees to arrest or avoid streambank erosion that threatens the integrity of the KLRC levee system and therefore protect property and the health and safety of residents. The Project is being proposed to occur in two subphases: Phase 1A and Phase 1B. Phase 1A of the repairs will begin at County Road 16 and run approximately 2,200 feet along the levee from levee stations 40+00 to 62+00. Phase 1B will continue the repairs another approximately 1,900 feet from levee stations 62+00 to 81+00. Phase 1A is proposed to commence on or around August 1, 2022.

Project Characteristics

Erosion Repair Methods

Erosion repairs for the Project will include placing quarry stone, or Caltrans Rock Slope Protection (RSP) material, along eroded sections of the waterside toe as described below and depicted in Attachment A. This repair design will control an existing erosion site while minimizing and/or mitigating environmental impacts as well as accomplishing the following criteria:

- Restore the flood damage risk-reduction capability of the originally constructed levee using structurally reliable erosion-control elements.
- Fully mitigate (offsite) significant residual fish and wildlife habitat losses to the extent justified.

- Minimize costs of construction and maintain both erosion control and onsite habitat mitigation elements.

For this Project, placement of RSP would be limited to an area between 20 and 30 feet wide along the bank of the KLRC. The repair measure entails filling the eroded portion of the waterside toe of the levee with RSP material to stabilize the eroding levee slope. The existing slope will be cleared of vegetation down to the ground surface (with the exception of trees greater than 4-inch-diameter at standard height [DSH]), but no grubbing will be done to remove existing root systems. The RSP material will be placed directly on top of cleared areas. Revegetation will occur with as the existing vegetation reestablishes through the voids in the RSP placement over time.

Construction Methods

Prior to placement of RSP, vegetation removal will occur during typical levee operations and maintenance activities. Vegetation will be mowed and/or masticated. If necessary, hydraulic excavators would be utilized to remove vegetation. The removed vegetation will be stockpiled and burned at the staging area. Repair work will be planned during times when the water level in the KLRC is naturally low in order to minimize the potential for in-water work. It is anticipated that during the Phase 1A work, the water level in the KLRC will be very low. However, in-water work may be required if water levels in the KLRC are above the proposed work area. If required, in-water work would include installing RSP below the water line using land-based methods and equipment, and possible installation of silt curtains within the canal using a small boat.

The RSP material would be brought in on trucks on existing levee roads and either stockpiled in the designated staging area or on the levee crown road adjacent to the vicinity of the work. The RSP will be placed into the eroded areas by utilizing a combination of excavators, loaders, and a bulldozer. Construction details for each erosion repair location are as follows:

- Typical heavy construction equipment used for each Project location would include two tracked excavators, one bulldozer, one front-end loader, one water truck for dust control, and several dump trucks.
- Access routes to the Project location would be via State Route 113 in Knights Landing to the northern end, or via County Road 16 near the southern end. Vehicles would then use the existing dirt and gravel levee toe roads and the gravel road on the levee crown.

Project Timing

Phase 1A is set to begin on or around August 1, 2022. Repairs for Phase 1A are expected to take approximately 30 days. Phase 1B will commence as funding allows and will be constructed between August 1 and October 1 of that calendar year.

Site Plan and Land Cover

ECORP biologists Angela Haas, Eric Stitt, Emily Mecke, and Daniel Wong conducted site reconnaissance surveys for the entire 6.25-mile KLRC (Study Area) from March 23 through 25, and May 20, 2021. Angela Haas and Eric Stitt are certified by the Yolo HCP/NCCP for planning-level habitat surveys. Emily Mecke is certified by the Yolo HCP/NCCP for valley elderberry longhorn beetle (VELB) planning-level surveys. The

entire Study Area was systematically surveyed on foot using a Global Positioning System unit with submeter accuracy and aerial imagery to ensure total site coverage. The Study Area is situated in the Sacramento Valley Subregion of the Great Central Valley floristic region of California (Baldwin et. al. 2012). The average minimum low temperature in the vicinity of the Study Area is 38.2 degrees Fahrenheit and the average maximum high temperature is 91.1 degrees Fahrenheit. Average annual precipitation is approximately 21.17 inches of rain (National Oceanic and Atmosphere Administration [NOAA] 2021).

There are four Yolo HCP land cover types within the proposed Fee Area. The Fee Area is defined as the entire Phase 1 Project Area plus the 10-foot fee buffer along the permanent impact area (Figure 2). The land cover types found within the Fee Area include Valley Foothill Riparian, Lacustrine and Riverine, Ruderal with covered species habitat, and Developed (Figure 2). The Valley Foothill Riparian community is found along the bank of the KLRC in the northern portion of the Fee Area, Lacustrine and Riverine correspond to the KLRC, Ruderal with covered species habitat is found on the levee slopes, and Developed is the gravel roads on the levee crown and levee toe. A description of each land cover type within the Fee Area is provided below.

Valley Foothill Riparian

The valley foothill riparian natural community is defined as a multilayered woodland including valley oak, Fremont cottonwood, ash, and willow species. The understory consists of a diverse shrub layer shaded by a mature canopy (Yolo HCP 2018). ECORP biologists identified Valley Foothill Riparian along the bank of the KLRC in the northern portion of the Fee Area. Species present within the Valley Foothill Riparian land cover include valley oak (*Quercus lobata*) within scattered shrubs in the understory consisting primarily of poison oak (*Toxicodendron diversilobum*) and California rose (*Rosa californica*).

Lacustrine and Riverine

According to the Yolo HCP/NCCP (2018) this community includes a variety of lakes, reservoirs, ponds, rivers, streams, and other open-water habitats such as stock ponds, and supports algae, mosses, and aquatic plants such as duckweed. The channel of the KLRC falls under this land cover category due to its perennial nature. Species present in the channel includes water primrose (*Ludwigia peploides* ssp. *peploides*). Emergent vegetation, such as tule (*Schoenoplectus* sp.) is limited to small sliver along the bank below the ordinary high water mark of the KLRC. The amount of emergent vegetation present is likely subject to change depending on the water level of the KLRC, which is subject to fluctuations throughout the year and from year to year.

Ruderal with Covered Species Habitat

Ruderal grassland occurs on the regularly maintained levee slopes. Species present include foxtail barely (*Hordeum murinum*), wild oat (*Avena* sp.), salt grass (*Distichlis spicata*), Italian ryegrass (*Festuca perennis*), red-stemmed filaree (*Erodium cicutarium*), vetch (*Vicia* sp.) and shortpod mustard (*Hirschfeldia incana*).

Developed

Developed areas under the Yolo HCP/NCCP include paved surfaces, buildings, patches of ornamental vegetation, and vegetated corridors associated with developed surfaces. Developed portions of the Fee Area include the levee crown gravel road and other dirt levee roads.

Impacts to Land Cover

Table 1 and Table 2 contain the acres of impact for both temporary and permanent impacts for each of the land cover types for Phase 1A and Phase 1B, respectively. The Applicant is requesting that Yolo HCP/NCCP Development Fees be paid prior to implementation of each phase. The fee calculator provided in the application is for both phases combined. Fee calculators for each phase are provided in Attachment B.

Table 1. Land Cover Types within Phase 1A

Land Cover Type	Buffer	Project		Total Area (acres)
		Permanent Impact (acres)	Temporary Impact (acres)*	
Developed	0.000	0.000	2.380	2.380
Lacustrine and Riverine	0.508	1.114	0.002	1.624
Ruderal with covered species habitat	0.000	0.286	7.729	8.015
Valley Foothill Riparian	0.000	0.000	0.000	0.000
Total	**0.508**	**1.400**	**10.111**	**12.019**

*Temporary impacts include the access road and staging area used for both phases.

Table 2. Land Cover Types within Phase 1A

Land Cover Type	Buffer	Project		Total Area (acres)
		Permanent Impact (acres)	Temporary Impact (acres)*	
Developed	0.000	0.000	2.498	2.498
Lacustrine and Riverine	0.433	0.681	0.011	1.125
Ruderal with covered species habitat	0.000	0.140	7.540	7.680
Valley Foothill Riparian	0.010	0.144	0.076	0.230
Total	**0.443**	**0.965**	**10.125**	**11.533**

*Temporary impacts include the access road and staging area used for both phases.

Buffer Fee Waiver Request

The KLRDD is requesting that the buffer fee requirement be waived for the Project based on the minimal and temporal nature of effects on habitat and species adjacent the Project impacts. As depicted on Figure 2, the Project will result in permanent impacts in the area where RSP will be placed. The

remainder of the Project Area will only be temporarily impacted during construction. Temporary impacts include minor ground disturbance to facilitate placement of RSP, construction of temporary earthen ramps on the levee slopes to facilitate equipment access, equipment access and construction staging. All temporarily impacted areas will be restored to preproject conditions immediately following completion of construction activities.

Indirect effects are defined in Chapter 5 of the Yolo HCP/NCCP (using the California Environmental Quality Act Guidelines definition) as "as those caused by an action that are later in time or farther removed in distance" (YHC 2018). The permanent impacts to Yolo HCP/NCCP land cover, specifically Lacustrine/Riverine and Valley Foothill Riparian, are limited to the placement of RSP. The construction activity to place the RSP is minimal and short term. Ground disturbance will be minimal and limited to equipment access required to place the RSP. The buffer area is comprised of the Lacustrine/Riverine land cover as it corresponds to the KLRC. Placement of RSP along the levee banks will not result in indirect effects after construction (i.e., occurring at a later time) as the KLRC would continue to function under current conditions following construction. Additionally, each phase of the Project will be implemented over a short period of time (likely 30 days or less). Thus, potential indirect effects to species during construction would be short in duration.

Based on the nature of the permanent impacts, retained functions of the KLRC (Lacustrine/Riverine habitat) after construction, and the short duration of construction impacts within the KLRC, ECORP believes potential indirect effects to species and species habitat would be minimal. Because the Project is a public safety project with limited public and state grant funding, KLRDD is requesting the YHC consider the minimal indirect effects of the Project to habitat and species within the standard 10-foot Buffer Area when establishing the fee for the Project. The KLRDD requests that the 10-foot Buffer Area mitigation fee requirement be removed or considered temporarily impacted and assessed at the temporary impact fee.

Temporary Impact Photographs

Temporarily impacted areas include portions of the levee slope that will only be impacted for construction access. Representative photographs are provided in Attachment C.

Covered Species Habitat Present

The Applicant is requesting coverage for Yolo HCP/NCCP covered species. Table 3 provides an evaluation of Yolo HCP/NCCP covered species and the potential for these species to occur within the Project Area.

Table 3. Evaluation of Yolo HCP/NCCP Covered Species for the Fee Area

Species Common Name (*Scientific Name*)	Status[2]			Land Cover/Habitat Requirements[1]	Habitat within Project Area
	FESA	CESA/ NPPA	Other		
Plants					
Palmate-bracted bird's beak (*Chloropyron palmatum*)	FE	CE	1B.1	Suitable habitat.	No mapped covered habitat, but marginally suitable habitat occurs within the Project Area.

Table 3. Evaluation of Yolo HCP/NCCP Covered Species for the Fee Area					
Species Common Name (*Scientific Name*)	**Status[2]**			**Land Cover/Habitat Requirements[1]**	**Habitat within Project Area**
	FESA	**CESA/ NPPA**	**Other**		
Invertebrates					
Valley elderberry longhorn beetle (*Desmocerus californicus dimorphus*)	FT	N/A	—	Suitable habitat.	There are no elderberry shrubs within the Project Area; however, elderberry shrubs are present within 100 feet of the Project Area.
Reptiles					
Northwestern pond turtle (*Actinemys marmorata*)	—	SSC	—	Suitable habitat.	Yes, suitable habitat occurs within the Project Area. Northwestern pond turtles were observed by ECORP biologist Eric Stitt within the KLRC during March 2021 surveys.
Giant garter snake (*Thamnophis gigas*)	FT	CT	—	Suitable habitat.	Yes, suitable habitat occurs within the Project Area.
Amphibians					
California tiger salamander (*Ambystoma californiense*)	FT	CT	SSC	Suitable habitat.	None.
Birds					
Swainson's hawk (*Buteo swainsoni*)	—	CT	BCC	Suitable habitat.	Yes, nesting and foraging habitat present within and adjacent to the Project Area.
White-tailed kite (*Elanus leucurus*)	—	—	CFP	Suitable habitat.	Yes, nesting and foraging habitat present within and adjacent to the Project Area.
Burrowing owl *(Athene cunicularia)*	—		BCC, SSC	Suitable habitat.	Yes, marginal nesting habitat and nonprimary habitat is mapped within the Project Area.
Yellow-billed cuckoo (*Coccyzus americanus*)	FT	CE	BCC	Suitable habitat.	None
Least Bell's vireo (*Vireo bellii pusillus*)	FE	CE	—	Suitable habitat.	None, but potential habitat occurs within 500 feet of the Project Area. Please see discussion provided below.

Table 3. Evaluation of Yolo HCP/NCCP Covered Species for the Fee Area

Species Common Name (*Scientific Name*)	Status[2]			Land Cover/Habitat Requirements[1]	Habitat within Project Area
	FESA	CESA/ NPPA	Other		
Bank swallow (*Riparia riparia*)	—	CT	—	Suitable habitat.	None
Tricolored blackbird (*Agelaius tricolor*)	—	CT	BCC, SSC	Suitable habitat.	None, but suitable nesting and foraging habitat occurs within 1,300 feet of the Project Area.

Suitable habitat[1]: Habitat suitable for supporting the covered species based on specific species habitat criteria. Suitable habitat may be determined on a site-by-site basis by a qualified biologist. This term is used for assessing whether avoidance and minimization measures (AMMs) need to be implemented. Compare with modeled habitat (YHC 2020).

Status Codes[2]:

FESA	Federal Endangered Species Act
CESA	California Endangered Species Act
FE	ESA listed, Endangered
FT	ESA listed, Threatened
CE	CESA or NPPA listed, Endangered
CFP	California Fully Protected Species
CT	CESA or NPPA listed, Threatened
SSC	California Department of Fish and Wildlife (CDFW) Species of Special Concern
BCC	U.S. Fish and Wildlife Service (USFWS) Bird of Conservation Concern
1B	CRPR/Rare or Endangered in California and elsewhere
0.1	Threat Rank/Seriously threatened in California (over 80% of occurrences threatened / high degree and immediacy of threat)

Based on a review of land cover/habitat requirements for federally listed Yolo HCP/NCCP covered species, habitat for the following nine species occurs within the Fee Area or within Yolo HCP/NCCP designated habitat buffers: palmate-bracted bird's beak, VELB, northwestern pond turtle, giant garter snake, Swainson's hawk, white-tailed kite, burrowing owl, least Bell's vireo, and tricolored blackbird.

Palmate-Bracted Bird's Beak

There is no mapped habitat in the Project Area for palmate-bracted bird's beak. However, the Project Area provides marginally suitable habitat for palmate-bracted bird's beak. Due to the temporary nature of impacts to marginally suitable habitat for this species, this Project is unlikely to adversely affect the species. A species-specific planning survey is scheduled to be conducted in June during the appropriate bloom period for this species. If individuals are identified on site, their location will be marked with high-visibility flagging and workers will be instructed to avoid mortality of the species.

Valley Elderberry Longhorn Beetle

There are three elderberry shrubs mapped within 100 feet of the Project Area and there is Yolo HCP/NCCP modeled habitat within the Project Area and the 100-foot buffer (Figure 3). No shrubs will be removed, but work will occur within 100 feet of elderberry shrubs. All elderberry shrubs will be avoided within a minimum 20-foot buffer. A variance request has been submitted to request a reduced elderberry shrub avoidance buffer from 100 feet to 20 feet.

Northwestern Pond Turtle

There is Yolo HCP/NCCP modeled habitat within the Project Area provides suitable habitat for northwestern pond turtles (Figure 4). Northwestern pond turtles were observed onsite during reconnaissance surveys.

Giant Garter Snake

There is Yolo HCP/NCCP modeled habitat within the Project Area for giant garter snake (Figure 5). The channel within the KLRC provides suitable aquatic habitat and the Valley Foothill Riparian and Ruderal areas (levee slopes) provide suitable upland habitat.

Swainson's Hawk

There is Yolo HCP/NCCP modeled habitat within the Project Area for Swainson's hawk (Figure 6). Suitable habitat includes trees within the Valley Foothill Riparian land cover and on the land side of the levee. Scrub/shrub vegetation along the KLRC may be removed to facilitate placement of RSP. No trees greater than 4 inches DSH that could provide nesting habitat for Swainson's hawk will be removed.

White-Tailed Kite

There is Yolo HCP/NCCP modeled habitat within the Project Area for white-tailed kite (Figure 7). Suitable habitat includes trees within the Valley Foothill Riparian land cover and on the land side of the levee. Scrub/shrub vegetation along the KLRC may be removed to facilitate placement of RSP. No trees greater than 4 inches DSH that could provide nesting habitat for white-tailed kite will be removed.

Burrowing Owl

There is Yolo HCP/NCCP modeled habitat within the Project Area for burrowing owl (Figure 8). Suitable habitat corresponds to ruderal grassland on the levee slopes.

Least Bell's Vireo

There is Yolo HCP/NCCP modeled habitat within the Project Area for least Bell's vireo (Figure 9). There have been no breeding season records of least Bell's vireo within 0.25 mile of the Project within the last three years (California Department of Fish and Wildlife [CDFW] 2022; eBird 2022).

The Valley Foothill Riparian present within the Project Area does not provide suitable breeding habitat for least Bell's vireo because there is very little understory willow riparian vegetation. In central and southern California least Bell's vireo nests heights were generally less than 2 meters above ground level, usually in a variety of willow species or other dense vegetation (Kus et al. 2020) The Valley Foothill Riparian within the Project Area is dominated by valley oak with sparsely distributed shrubs, and there is no continuous canopy or understory on the bank of the KLRC. This area is largely open and does not provide suitable breeding habitat.

The only potential suitable habitat within the vicinity of the Project Area is the vegetated island within the center of the KLRC, which is approximately 100 feet from the Project. While the Project Area is within the historic range of the least Bell's vireo, occupation of this location is not expected due to the extreme rarity of this species in northern California. The only documented occurrences of this species in

the region in the eBird database include one heard-only individual on May 18, 2012, along Putah Creek west of Davis; up to four individuals in 2010 and 2011, and one on May 9, 2013, at the Yolo Basin Wildlife Area; and an individual at the Sacramento County Bufferlands on April 29 to 30, 2013 (eBird 2022). The Yolo Basin Wildlife Area, which is approximately 13 miles south of the Project, occurrences in 2010 and 2011 represent the nearest documented breeding occurrence of least Bell's vireo, and there are no documented breeding occurrences within the KLRC in the CNDDB (CDFW 2022).

Tricolored Blackbird

There is no Yolo HCP/NCCP modeled habitat within the Project Area for tricolored blackbird (Figure 10). There is suitable foraging and nesting habitat within 1,300 feet of the Project Area (Figure 10).

Table 4. Proximity to Resources and Additional Avoidance and Minimization Measures

Sensitive Natural Community or Covered Species	Additional AMMs[1]
Lacustrine and Riverine/Valley Foothill Riparian	AMM 9: Establish Resource Protection Buffers around Sensitive Natural Communities; AMM 10: Avoid and Minimize Effects on Wetlands and Waters
Palmate-bracted bird's beak	AMM 11: Minimize Take and Adverse Effects on Palmate-Bracted Bird's Beak
VELB	AMM 12: Minimize Take and Adverse Effects on Habitat of VELB
Northwestern pond turtle	AMM 14: Minimize Take and Adverse Effects on Habitat of Western Pond Turtle
Giant garter snake	AMM 15: Minimize Take and Adverse Effects on Habitat of Giant Garter Snake
Swainson's Hawk and White-Tailed Kite	AMM 16: Minimize Take and Adverse Effects on Habitat of Swainson's Hawk and White-Tailed Kite
Burrowing owl	AMM 18: Minimize Take and Adverse Effects on Western Burrowing Owl
Least Bell's Vireo	AMM 19: Minimize Take and Adverse Effects on Least Bell's Vireo
Tricolored blackbird	AMM 21: Minimize Take and Adverse Effects on Habitat of Tricolored Blackbird

[1]Based on Table 4-1 of the Yolo HCP/NCCP (YHC 2018).

Proximity to Resources

Based on a review of Table 2-2 of the Yolo HCP/NCCP Permitting Guide (YHC 2020), the Project Area is within proximity of two sensitive natural communities (Lacustrine and Riverine, Valley Foothill Riparian) and nine covered species' habitat (palmate-bracted bird's beak, VELB, northwestern pond turtle, giant garter snake, Swainson's hawk, white-tailed kite, burrowing owl, least Bell's vireo, and tricolored blackbird) that would trigger additional AMMs. Table 4 outlines the additional AMMs (as described in Table 4-1 of the Yolo HCP/NCCP [YHC 2018]) that may be applicable to the Project.

Planning Surveys Needed and Completed

Palmate-Bracted Bird's Beak

A planning-level survey for palmate-bracted bird's beak will be required before construction can begin. Suitable habitat in and within 250 feet of the Project footprint must be identified and quantified. If suitable habitat is present, surveys will be conducted between May 31 and September 30 within this habitat, consistent with CDFW guidance (YHC 2018). This survey is planned for June of 2022 and will occur prior to initiation of construction.

Valley Elderberry Longhorn Beetle

The VELB survey conducted concurrently with the Biological Resources Assessment site visits on March 23 and 25, 2021, and May 20, 2021, satisfies the planning-level survey requirements for the Fee Area. The Applicant is assuming presence of suitable VELB habitat (Figure 3), so no additional species-specific planning-level surveys are required.

Northwestern Pond Turtle

The site visits that occurred in March 2021 identified suitable habitat for northwestern pond turtle and individuals were observed within the KLRC. This satisfies the planning-level survey and no further planning-level surveys are required.

Giant Garter Snake

The site visits that occurred in March 2021 identified suitable habitat for giant garter snake. This habitat has been quantified on Figure 5. This satisfies the planning-level survey, and no further planning-level surveys are required.

Swainson's Hawk

The site visits that occurred in March 2021 identified and quantified suitable habitat for Swainson's hawk (Figure 6). Suitable nesting trees were observed. This satisfies the planning-level survey, and no further planning-level surveys are required.

White-Tailed Kite

The site visits that occurred in March 2021 identified and quantified suitable habitat for white-tailed kite (Figure 7). Suitable nesting trees were observed. This satisfies the planning-level survey, and no further planning-level surveys are required.

Burrowing Owl

Per the Yolo HCP/NCCP modeled habitat, suitable habitat for burrowing owl occurs within the Project Area (Figure 8). The potential for burrows to occur along the maintained banks of the KLRC within the Project Area provides marginal suitable habitat for this species. Because habitat for this species was identified, additional planning-level surveys are required consistent with CDFW guidelines (California Department of Fish and Game [CDFG] 2012). However, the Yolo HCP/NCCP Permitting Guide allows applicants to forgo planning-level surveys and assume presence. The Applicant has chosen this option for burrowing owl. Preconstruction surveys and applicable AMMs will be implemented prior to and

during construction to satisfy the requirements of the Yolo HCP/NCCP. Survey timing will correspond to the periods outlined in Table 6-2 of the Yolo HCP/NCCP Permitting Guide (2020).

Least Bell's Vireo

The Project will not remove suitable habitat for least Bell's vireo. Additionally, the Project is proposed to be constructed between August 1 and October 1, which is outside the breeding season (April 1 through July 15). While the Project will work within 500 feet of potential suitable habitat, all work will be conducted outside the breeding season. Additionally, the Project will conduct general preconstruction nesting bird surveys as required by the Project's Mitigation and Monitoring Reporting Program. Due to the unlikelihood for least Bell's vireo to nest in the vicinity of the Project based on its known range and the Project occurring outside the breeding season, the Project will not impact breeding least Bell's vireo. Therefore, the Project requests that the requirement for least Bell's vireo-specific planning-level surveys and preconstruction surveys as required by AMM 19 not be applicable to the Project.

Tricolored Blackbird

Per the Yolo HCP/NCCP modeled habitat, no suitable habitat occurs within the Project Area (Figure 10); however, suitable nesting and foraging habitat is present within 1,300 feet of the Project Area. A planning-level survey consistent with AMM 21 was conducted by ECORP biologist Angela Haas on May 19, 2022. No nesting or foraging tricolored blackbirds were observed within the Project Area.

Design-Level Avoidance

The Applicant will complete construction activities in a manner that avoids impacts to the maximum practical extent by following Design Requirements and Construction, Operations, and Maintenance Requirements as specified in Table 4-1 of the Yolo HCP/NCCP (2018). In some cases, the requirements described in Table 4-1 are unavoidable due to the nature of the construction activity. Specifically, AMM 1 stipulates that project proponents design projects to avoid and minimize impacts to sensitive natural communities and covered species habitat by establishing buffers. This Project requires work to occur on covered species habitat in order to complete the necessary levee repairs. As described in the Project Description, the purpose of this Project is to repair erosion on a portion of the east levee of the KLRC. The impacts of such activities have been identified and analyzed as part of the Yolo HCP/NCCP under the covered activities category Rural Public Services, Infrastructure, and Utilities (Section 3.5.2.2, Yolo HCP/NCCP 2018). The following design-level avoidance requirements are species-specific.

Palmate-Bracted Bird's Beak

The Applicant will design the Project to avoid activity within 250 feet of occupied habitat, or greater distance depending on site-specific topography to avoid hydrologic effects, unless a shorter distance is determined to avoid effects and approved by the YHC, USFWS, and CDFW.

Valley Elderberry Longhorn Beetle

The Applicant will design the Project to avoid mapped elderberry shrubs. To avoid effects on shrubs, a setback of at least 100 feet from any elderberry shrubs with stems measuring 1 inch or greater in diameter at ground level is required. Additionally, protective measures are required, consistent with USFWS (1999) guidelines. All restoration projects will avoid removal of elderberry shrubs. The Applicant

has requested a variance to AMM 12 for this Project, as avoidance of elderberry shrubs by 100 feet is not feasible.

Northwestern Pond Turtle

No design requirements are specified for western pond turtle.

Giant Garter Snake

Avoid development in giant garter snake habitat. For avoidance, there must be no activity in or within 200 feet of aquatic habitat. This is not feasible for this Project. As a result, the Applicant will implement the preconstruction and construction-related avoidance and minimization measures.

Swainson's Hawk and White-Tailed Kite

The Applicant will avoid potential nesting trees, with 1,320-foot setbacks from trees during nesting, to the extent practicable. Because it is likely that all potential nesting trees cannot be avoided with a 1,320-foot setback, preconstruction surveys will be conducted consistent with AMM 16.

Burrowing Owl

Design the Project to minimize activities in the vicinity of occupied burrows, consistent with Table 4-2 of the Yolo HCP/NCCP.

Preconstruction Surveys and Construction-Related Measures

Valley Elderberry Longhorn Beetle

According to Table 4-1 of the Yolo HCP/NCCP (YHC 2018), no preconstruction surveys are required for the federally listed covered species (VELB) that occur within the Project Area. There are three shrubs located within 100 feet of the Project Area. The Applicant has requested a variance to AMM 12 to change the 100-foot avoidance buffer to 20 feet.

Western Pond Turtle

Per AMM 14 of the Yolo HCP, a qualified biologist will conduct a preconstruction survey for northwestern pond turtles to assess the likelihood of nests occurring in the disturbed area. If there is a high likelihood of northwestern pond turtle nests in the disturbed area, a qualified biologist will be onsite to monitor initial ground-disturbing activities and will move any turtles or hatchlings if discovered.

Giant Garter Snake

Per Yolo HCP/NCCP AMM 15 for giant garter snake, there are numerous preconstruction and construction-related measures associated with the avoidance of take for giant garter snake. The Project proponent cannot avoid effects of construction activities on aquatic habitat; therefore, the Project proponent will implement the measures below to minimize effects of construction projects.

- Conduct preconstruction clearance surveys using USFWS-approved methods within 24 hours prior to construction activities within identified giant garter snake aquatic and adjacent upland

habitat. If construction activities stop for a period of two weeks or more, conduct another preconstruction clearance survey within 24 hours prior to resuming construction activity.

- Restrict all construction activity involving disturbance of giant garter snake habitat to the snake's active season, May 1 through October 1. During this period, the potential for direct mortality is reduced because snakes are expected to move and avoid danger.
- Dewatering is not feasible for the KLRC, therefore netting and salvage of giant garter snake prey items may be necessary to discourage use by snakes.
- Provide YHC-approved environmental awareness training for construction personnel. Training may consist of showing a video prepared by a qualified biologist, or an in-person presentation by a qualified biologist. In addition to the video or in-person presentation, training may be supplemented with the distribution of approved brochures and other materials that describe resources protected under the Yolo HCP/NCCP and methods for avoiding effects. The training may be conducted simultaneously with the Workers Awareness Training described in Section 5.2.1 of the Yolo HCP/NCCP.
- A qualified biologist will prepare a giant garter snake relocation plan, which must be approved by the YHC prior to work in giant garter snake habitat. The qualified biologist will base the relocation plan on criteria provided by CDFW or USFWS, through the YHC.
- If a live giant garter snake is encountered during construction activities, immediately notify the Project's biological monitor, USFWS, and CDFW. The monitor will stop construction in the vicinity of the snake, monitor the snake, and allow the snake to leave on its own. The monitor will remain in the area for the remainder of the workday to ensure the snake is not harmed or, if it leaves the site, does not return. If the giant garter snake does not leave on its own, the qualified biologist will relocate the snake consistent with the relocation plan described above.
- Implement the following management practices to minimize disturbances to habitat:
    - Install temporary fencing to identify and protect adjacent marshes, wetlands, and ditches from encroachment from construction equipment and personnel.
    - Maintain water quality and limit construction runoff into wetland areas through the use of hay bales, filter fences, vegetative buffer strips, or other accepted practices. No plastic, monofilament, jute, or similar erosion-control matting that could entangle snakes or other wildlife will be permitted.

Swainson's Hawk and White-Tailed Kite

Per Yolo HCP/NCCP AMM 16, the Project proponent must minimize impacts to Swainson's hawk and white-tailed kite by implementing the following measures prior to and during construction:

- According to Table 4-1 of the Yolo HCP/NCCP and AMM 16 (YHC 2018), preconstruction surveys are required for Swainson's hawk and white-tailed kite if construction of a project cannot avoid potential nest trees (as determined by the qualified biologist) within 1,320 feet. The qualified biologist will conduct preconstruction surveys for active nests consistent with guidelines provided by the Swainson's Hawk Technical Advisory Committee (2000), between March 15 and

August 30, within 15 days prior to the beginning of the construction activity. The results of the survey will be submitted to the YHC and CDFW.

- If active nests are found during preconstruction surveys, a 1,320-foot initial temporary nest resource protection buffer shall be established. If Project-related activities within the temporary nest resource protection buffer are determined to be necessary during the nesting season, the qualified biologist will monitor the nest and will, along with the Project proponent, consult with CDFW to determine the best course of action necessary to avoid nest abandonment or take of individuals. Work may be allowed to proceed only within the temporary nest resource protection buffer if Swainson's hawk or white-tailed kite are not exhibiting agitated behavior, such as defensive flights at intruders, getting up from a brooding position, or flying off the nest, and only with the agreement of CDFW and USFWS. The designated onsite biologist/monitor shall be onsite daily while construction-related activities are taking place within the 1,320-foot resource protection buffer and shall have the authority to stop work if raptors are exhibiting agitated behavior.

Burrowing Owl

In accordance with Yolo HCP/NCCP AMM18 to avoid impacts to burrowing owl to the maximum extent practicable, the following will be implemented:

- Prior to any ground disturbance during the breeding season (February 1 to August 31) related to covered activities, the qualified biologist will conduct preconstruction surveys for burrowing owl within 14 days prior to ground disturbance consistent with CDFW preconstruction survey guidelines (CDFG 2012).
- If the biologist finds the site to be occupied by burrowing owls during the breeding season, the Project proponent will avoid all nest sites per the Yolo HCP/NCCP during the remainder of the breeding season or while the nest is occupied by adults or young (occupation includes individuals or family groups that forage on or near the site following fledging). Construction may occur inside of the no-disturbance buffer during the breeding season if the nest is not disturbed and the Project proponent develops an AMM plan that is approved by the YHC, CDFW, and USFWS prior to Project construction, based on the following criteria:
    - The YHC, CDFW, and USFWS approves the Project proponent's AMM plan.
    - A qualified biologist monitors the owls for at least three days prior to construction to determine baseline nesting and foraging behavior (i.e., behavior without construction).
    - The same qualified biologist monitors the owls during construction and finds no change in owl nesting and foraging behavior in response to construction activities.
    - If the qualified biologist identifies a change in owl nesting and foraging behavior as a result of construction activities, the qualified biologist will have the authority to stop all construction-related activities within the no-disturbance buffer described above. The qualified biologist will report this information to the YHC, CDFW, and USFWS within 24 hours, and the YHC will require that these activities immediately cease within the no-disturbance buffer. Construction cannot resume within the buffer until the adults and

juveniles from the occupied burrows have moved away from the Project site, and the YHC, CDFW, and USFWS agree.

- If monitoring indicates that the nest is abandoned prior to the end of nesting season and the burrow is no longer in use by owls, the Project proponent may remove the no-disturbance buffer, only with concurrence from CDFW and USFWS. If the burrow cannot be avoided by construction activity, the biologist will excavate and collapse the burrow in accordance with CDFW's guidelines (CDFG 2012) to prevent reoccupation after receiving approval from the wildlife agencies.
- If evidence of burrowing owl is detected outside the breeding season (December 1 to January 31), the Project proponent will establish a no-disturbance buffer around occupied burrows, consistent with the Yolo HCP/NCCP, as determined by a qualified biologist. Construction.

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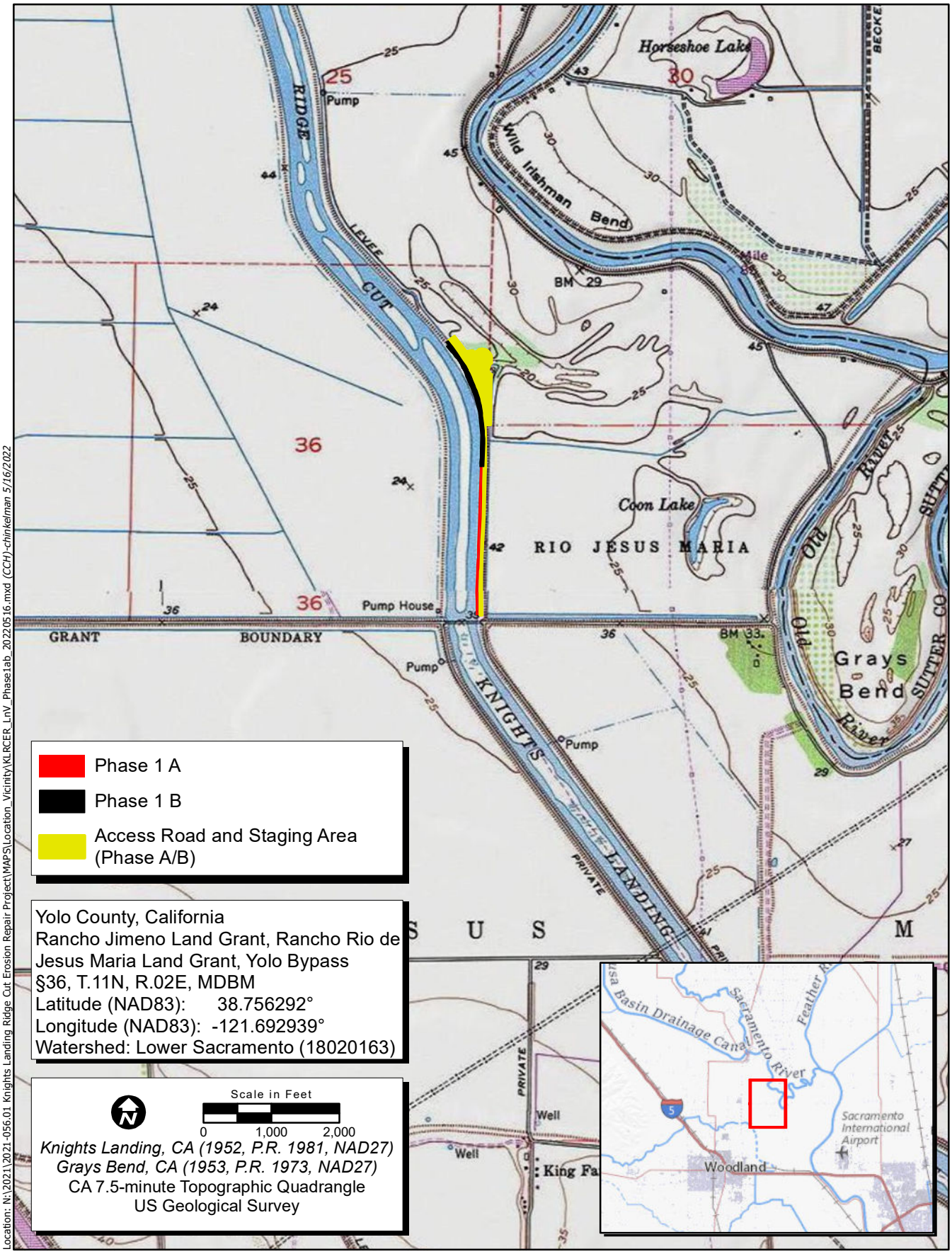
LIST OF FIGURES



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Map Date: 5/16/2022
Source: USGS Topo Maps, National Geographic Society (2013)

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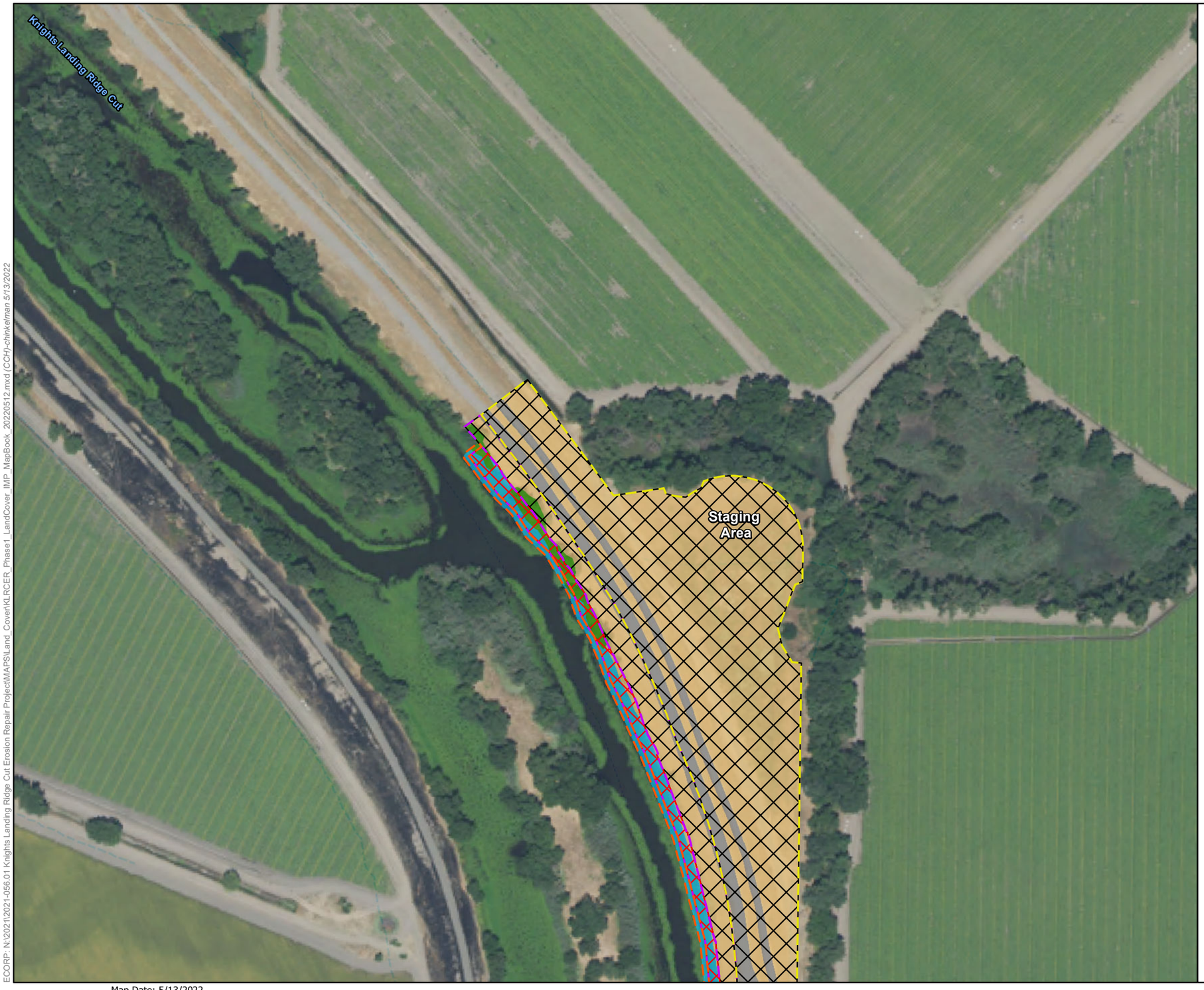
Figure 1. Knights Landing Ridge Cut Erosion Repair

2021-056.01 Knights Landing Ridge Cut Erosion Repair



Map Features

Phase
- Access Road and Staging Area (Phase A/B)
- Buffer
- Phase 1 B

Impact Type
- Permanent
- Temporary

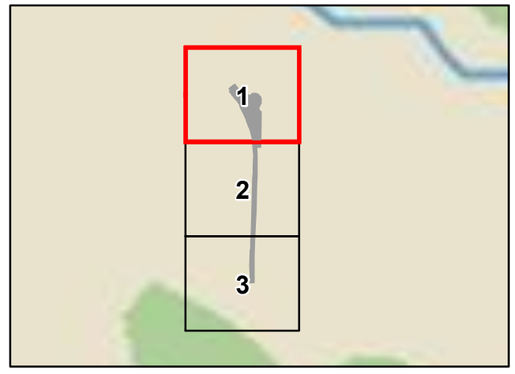
Land Cover Types
- Developed
- Lacustrine and Riverine
- Ruderal
- Valley Foothill Riparian

Phase 1 A/B Access Road and Staging Area		
Land Cover Types	**Temporary**	**Total**
Developed	2.380	2.380
Ruderal	5.880	5.880
Valley Foothill Riparian	0.000	0.000
Total (acres)	**8.260**	**8.260**

Phase 1A				
Land Cover Types	**Permanent Impact**	**Temporary Impact**	**Buffer Area**	**Total (acres)**
Developed		0.000		0.000
Lacustrine and Riverine	1.114	0.002	0.508	1.624
Ruderal	0.286	1.849	0.002	2.137
Total (acres)	**1.400**	**1.851**	**0.510**	**3.761**

Phase 1B				
Land Cover Types	**Permanent Impact**	**Temporary Impact**	**Buffer Area**	**Total (acres)**
Developed		0.118		0.118
Lacustrine and Riverine	0.681	0.011	0.433	1.125
Ruderal	0.140	1.660		1.800
Valley Foothill Riparian	0.144	0.076	0.010	0.230
Total (acres)	**0.965**	**1.865**	**0.443**	**3.274**

Photo Source: Yolo County NAIP (2018)
Boundary Source: KSN, Inc.
Coordinate System: NAD 1983 StatePlane California II FIPS 0402 Feet



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Map Date: 5/13/2022

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Scale in Feet
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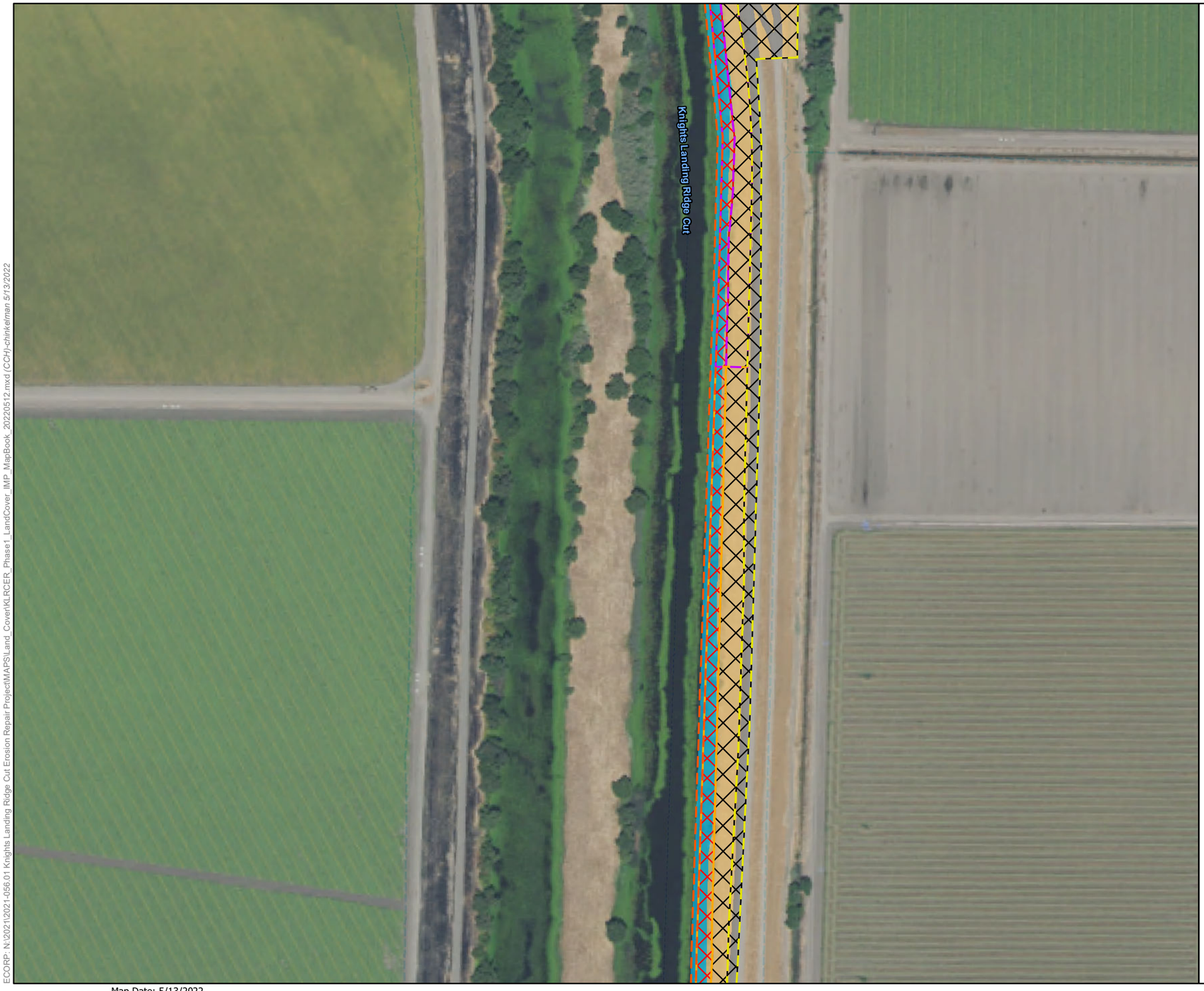
Figure 2. Land Cover Within the Fee Area

2021-056.01 Knights Landing Ridge Cut Erosion Repair



Map Features

Phase
- Access Road and Staging Area (Phase A/B)
- Buffer
- Phase 1 A
- Phase 1 B

Impact Type
- Permanent
- Temporary

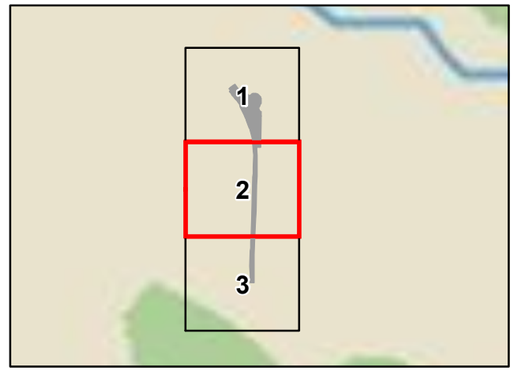
Land Cover Types
- Developed
- Lacustrine and Riverine
- Ruderal

Phase 1 A/B Access Road and Staging Area		
Land Cover Types	**Temporary**	**Total**
Developed	2.380	2.380
Ruderal	5.880	5.880
Valley Foothill Riparian	0.000	0.000
Total (acres)	**8.260**	**8.260**

Phase 1A				
Land Cover Types	**Permanent Impact**	**Temporary Impact**	**Buffer Area**	**Total (acres)**
Developed		0.000		0.000
Lacustrine and Riverine	1.114	0.002	0.508	1.624
Ruderal	0.286	1.849	0.002	2.137
Total (acres)	**1.400**	**1.851**	**0.510**	**3.761**

Phase 1B				
Land Cover Types	**Permanent Impact**	**Temporary Impact**	**Buffer Area**	**Total (acres)**
Developed		0.118		0.118
Lacustrine and Riverine	0.681	0.011	0.433	1.125
Ruderal	0.140	1.660		1.800
Valley Foothill Riparian	0.144	0.076	0.010	0.230
Total (acres)	**0.965**	**1.865**	**0.443**	**3.274**

Photo Source: Yolo County NAIP (2018)
Boundary Source: KSN, Inc.
Coordinate System: NAD 1983 StatePlane California II FIPS 0402 Feet



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Map Date: 5/13/2022

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Scale in Feet
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Figure 2. Land Cover Within the Fee Area

2021-056.01 Knights Landing Ridge Cut Erosion Repair

Map Features

Phase
- Access Road and Staging Area (Phase A/B)
- Buffer
- Phase 1 A

Impact Type
- Permanent
- Temporary

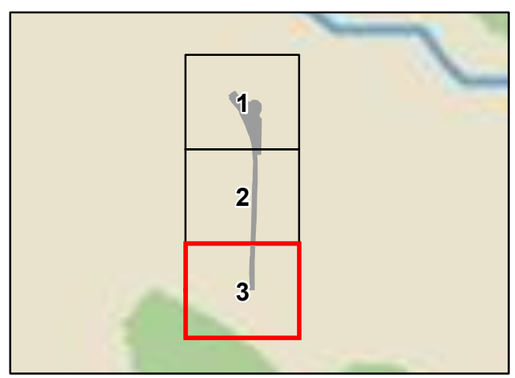
Land Cover Types
- Developed
- Lacustrine and Riverine
- Ruderal

Phase 1 A/B Access Road and Staging Area		
Land Cover Types	**Temporary**	**Total**
Developed	2.380	2.380
Ruderal	5.880	5.880
Valley Foothill Riparian	0.000	0.000
Total (acres)	**8.260**	**8.260**

Phase 1A				
Land Cover Types	**Permanent Impact**	**Temporary Impact**	**Buffer Area**	**Total (acres)**
Developed		0.000		0.000
Lacustrine and Riverine	1.114	0.002	0.508	1.624
Ruderal	0.286	1.849	0.002	2.137
Total (acres)	**1.400**	**1.851**	**0.510**	**3.761**

Phase 1B				
Land Cover Types	**Permanent Impact**	**Temporary Impact**	**Buffer Area**	**Total (acres)**
Developed		0.118		0.118
Lacustrine and Riverine	0.681	0.011	0.433	1.125
Ruderal	0.140	1.660		1.800
Valley Foothill Riparian	0.144	0.076	0.010	0.230
Total (acres)	**0.965**	**1.865**	**0.443**	**3.274**

Photo Source: Yolo County NAIP (2018)
Boundary Source: KSN, Inc.
Coordinate System: NAD 1983 StatePlane California II FIPS 0402 Feet



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Map Date: 5/13/2022

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Scale in Feet
0 200

Figure 2. Land Cover Within the Fee Area

2021-056.01 Knights Landing Ridge Cut Erosion Repair

Map Features

- Access Road and Staging Area (Phase A/B)
- Phase 1 A
- Phase 1 B
- 100' Buffer
- 20' Buffer
- Elderberry Locations

Valley Elderberry Longhorn Beetle Habitat Type

- Riparian Habitat

Photo Source: Yolo County NAIP (2018)

VELB Habitat Type	Buffer Area (100')	Phase A/B Staging Area & Access Rd	Phase A	Phase B	Total (acres)
100' Buffer	0.696	0.000	0.000	0.000	0.696
Riparian Habitat	0.696	0.000	0.000	0.000	0.696
Permanent Impact	0.000	0.000	0.000	0.192	0.192
Riparian Habitat	0.000	0.000	0.000	0.192	0.192
Temporary Impact	0.000	0.143	0.000	0.412	0.555
Riparian Habitat	0.000	0.143	0.000	0.412	0.555
Total (acres)	*0.696*	*0.143*	*0.000*	*0.604*	*1.443*

Phase

Map Date: 5/20/2022

ECORP Consulting, Inc.
ENVIRONMENTAL CONSULTANTS

Scale in Feet
0 450

Figure 3. Modeled Species Habitat
Valley Elderberry Longhorn Beetle
2021-056.01 Knights Landing Ridge Cut Erosion Repair

ECORP: N:\2021\2021-056.01 Knights Landing Ridge Cut Erosion Repair Project\MAPS\Biological_Resources\KLRCER_VELB_Phase1ab_20220520.mxd (CCH)-chinkelman 5/20/2022

Map Features

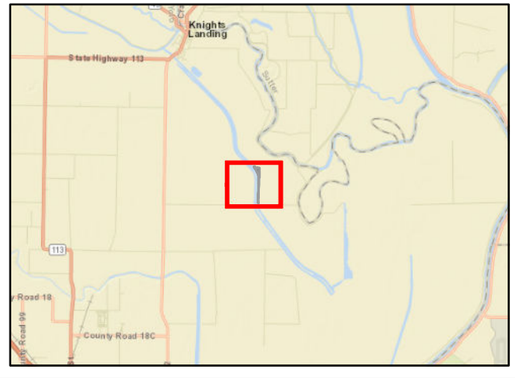
- Access Road and Staging Area (Phase A/B)
- Phase 1 A
- Phase 1 B

Western Pond Turtle Habitat Type

- Aquatic Habitat
- Nesting and Overwintering Habitat

WPT Habitat Type	Access Road and Staging Area (Phase A/B)	Phase 1 A	Phase 1 B	Total (acres)
Permanent Impact	**0.000**	**2.010**	**0.000**	**2.010**
Aquatic habitat	0.000	2.010	0.000	**2.010**
Temporary Impact	**0.151**	**0.000**	**2.371**	**2.523**
Aquatic habitat	0.001	0.000	1.767	**1.769**
Nesting and overwintering habitat	0.150	0.000	0.604	**0.754**
Total (acres)	***0.151***	***2.010***	***2.371***	***4.533***

Photo Source: Yolo County NAIP (2018)



Map Date: 5/24/2022

ECORP Consulting, Inc.
ENVIRONMENTAL CONSULTANTS

Scale in Feet
0 500

Figure 4. Modeled Species Habitat
Western Pond Turtle
2021-056.01 Knights Landing Ridge Cut Erosion Repair

ECORP- N:\2021\2021-056.01 Knights Landing Ridge Cut Erosion Repair Project\MAPS\Biological_Resources\KLRCER_WPT_Phase1ab_20220523.mxd (CCH)-chinkelman 5/24/2022

Map Features

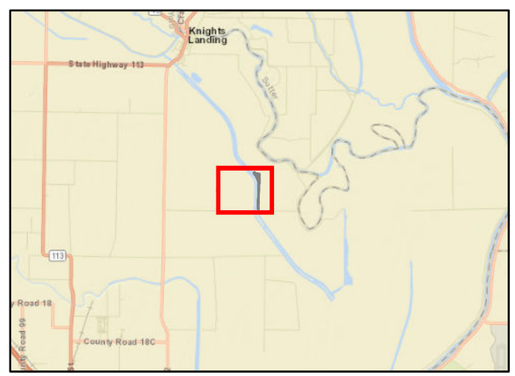
- Access Road and Staging Area (Phase A/B)
- Phase 1 A
- Phase 1 B
- Buffer

Giant Garter Snake Habitat Type

- Active Season Upland Movement
- Aquatic Habitat
- Overwintering Habitat

GGS Habitat Type	Access Road and Staging Area (Phase A/B)	Phase 1 A	Phase 1 B	Total (acres)
Permanent Impact	**0.000**	**3.250**	**0.000**	**3.250**
Active Season Upland Movement	0.000	1.241	0.000	**1.241**
Aquatic Habitat	0.000	2.010	0.000	**2.010**
Temporary Impact	**0.434**	**0.000**	**2.784**	**3.218**
Active Season Upland Movement	0.401	0.000	1.016	**1.418**
Aquatic Habitat	0.001	0.000	1.767	**1.769**
Overwintering Habitat	0.032	0.000	0.000	**0.032**
Total (acres)	***0.434***	***3.250***	***2.784***	***6.468***

Photo Source: Yolo County NAIP (2018)



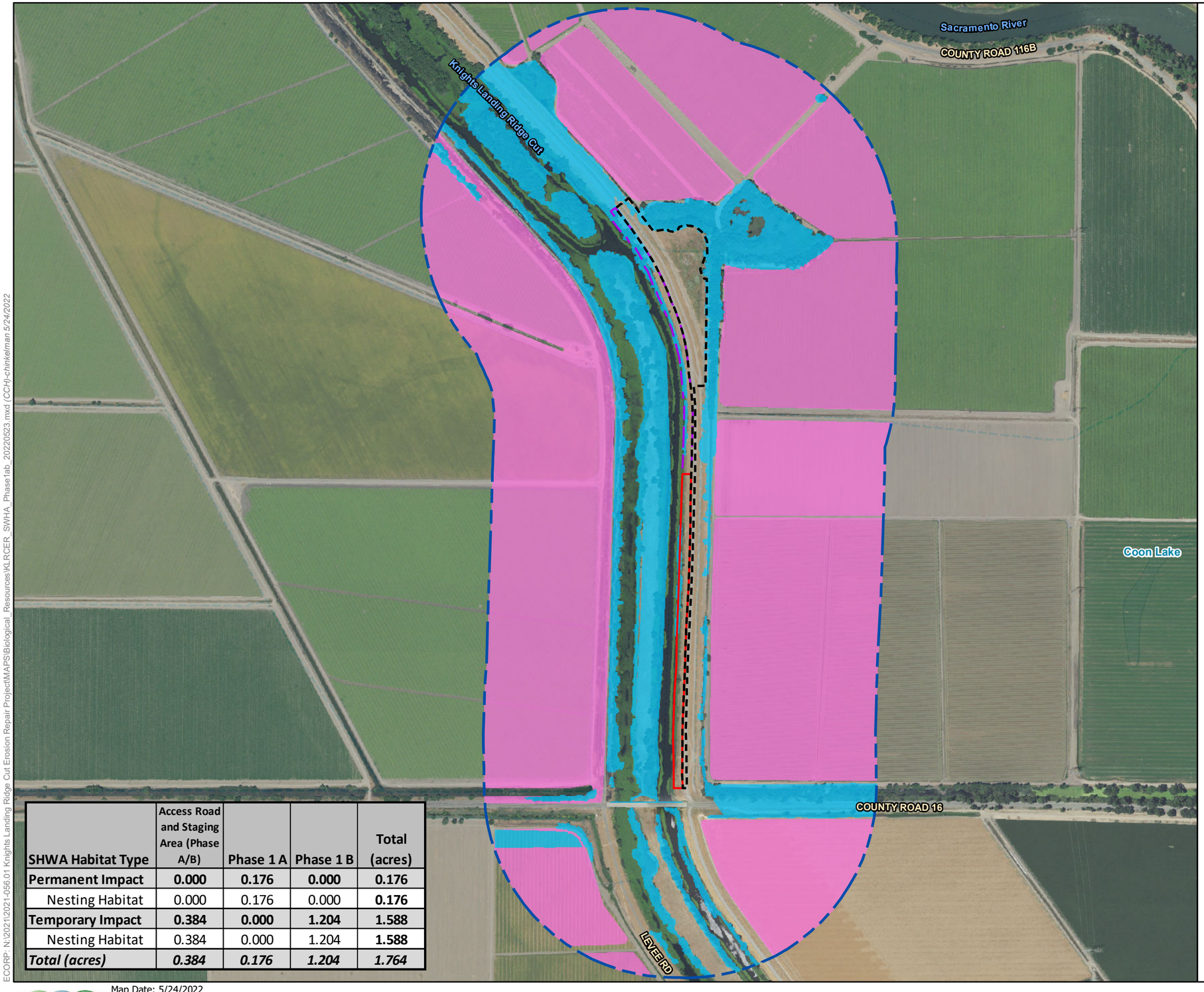
ECORP N:\2021\2021-056.01 Knights Landing Ridge Cut Erosion Repair Project\MAPS\Biological_Resources\KLRCER_GGS_Phase1ab_20220523.mxd (CCH)-chinkelman 5/24/2022

Map Date: 5/24/2022

ECORP Consulting, Inc.
ENVIRONMENTAL CONSULTANTS

Scale in Feet
0 500

Figure 5. Modeled Species Habitat
Giant Garter Snake
2021-056.01 Knights Landing Ridge Cut Erosion Repair



Map Features

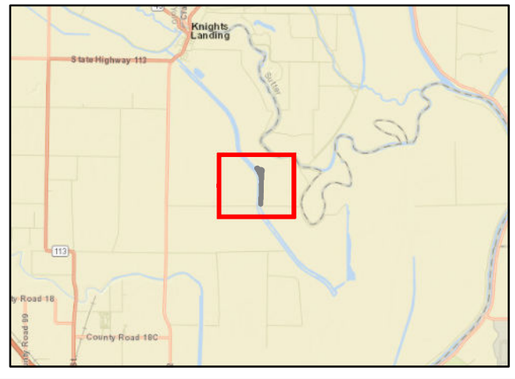
- Access Road and Staging Area (Phase A/B)
- Phase 1 A
- Phase 1 B
- 1,320' Buffer

Swainson's Hawk Habitat Type

- Agricultural Foraging
- Nesting Habitat

SHWA Habitat Type	Access Road and Staging Area (Phase A/B)	Phase 1 A	Phase 1 B	Total (acres)
Permanent Impact	**0.000**	**0.176**	**0.000**	**0.176**
Nesting Habitat	0.000	0.176	0.000	**0.176**
Temporary Impact	**0.384**	**0.000**	**1.204**	**1.588**
Nesting Habitat	0.384	0.000	1.204	**1.588**
Total (acres)	***0.384***	***0.176***	***1.204***	***1.764***

Photo Source: Yolo County NAIP (2018)



ECORP: N:\2021\2021-056.01 Knights Landing Ridge Cut Erosion Repair Project\MAPS\Biological_Resources\KLRCER_SWHA_Phase1ab_20220523.mxd (CCH)-chinkelman 5/24/2022

Map Date: 5/24/2022

ECORP Consulting, Inc.
ENVIRONMENTAL CONSULTANTS

Scale in Feet
0 500

Figure 6. Modeled Species Habitat
Swainson's Hawk
2021-056.01 Knights Landing Ridge Cut Erosion Repair

WTKI Habitat Type	Access Road and Staging Area (Phase A/B)	Phase 1A	Phase 1B	Total (acres)
Permanent Impact	**0.000**	**0.176**	**0.000**	**0.176**
Nesting Habitat	0.000	0.176	0.000	**0.176**
Temporary Impact	**0.384**	**0.000**	**1.204**	**1.588**
Nesting Habitat	0.384	0.000	1.204	**1.588**
Total (acres)	***0.384***	***0.176***	***1.204***	***1.764***

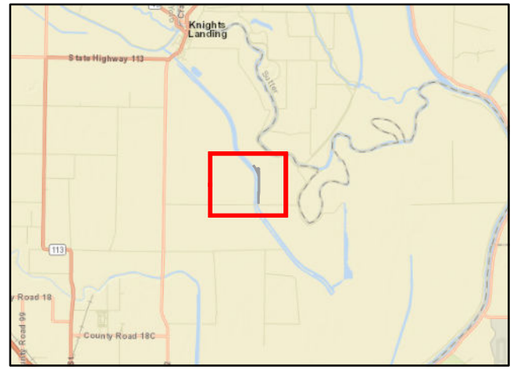
Map Features

- Access Road and Staging Area (Phase A/B)
- Phase 1 A
- Phase 1 B
- 1,320' Buffer

White-tailed Kite Habitat Type

- Nesting Habitat
- Primary Foraging
- Secondary Foraging

Photo Source: Yolo County NAIP (2018)



ECORP: N:\2021\2021-056.01 Knights Landing Ridge Cut Erosion Repair Project\MAPS\Biological_Resources\KLRCER_WTKI_Phase1ab_20220523.mxd (CCH)-chinkelman 5/24/2022

Map Date: 5/24/2022

ECORP Consulting, Inc.
ENVIRONMENTAL CONSULTANTS

Scale in Feet
0 700

Figure 7. Modeled Species Habitat
White-tailed Kite
2021-056.01 Knights Landing Ridge Cut Erosion Repair

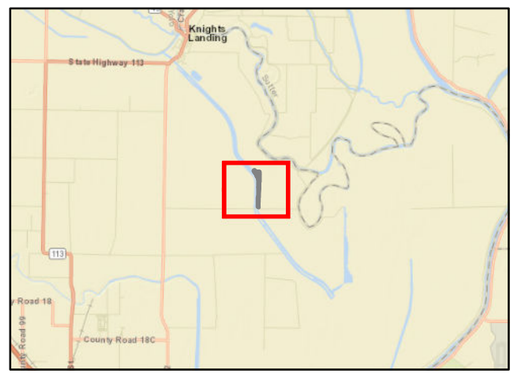
Map Features

- Access Road and Staging Area (Phase A/B)
- Phase 1 A
- Phase 1 B
- 500' Buffer

Western Burrowing Owl Habitat Type

- Other Habitat

Photo Source: Yolo County NAIP (2018)



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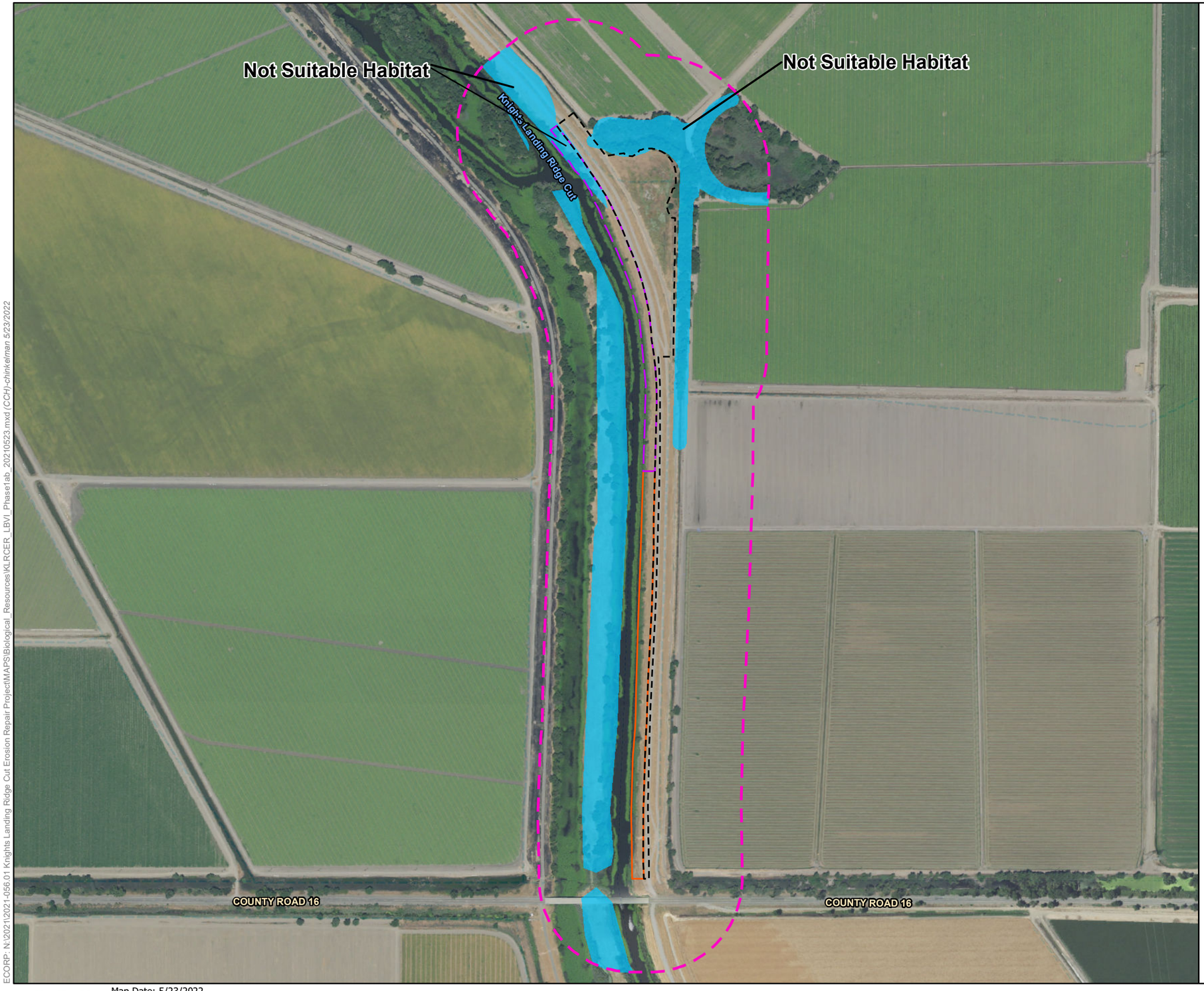
Map Date: 5/24/2022

ECORP Consulting, Inc.
ENVIRONMENTAL CONSULTANTS

Scale in Feet
0 600

Figure 8. Modeled Species Habitat
Burrowing Owl
2021-056.01 Knights Landing Ridge Cut Erosion Repair



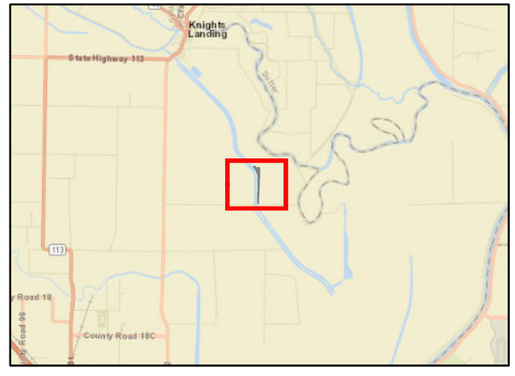
Map Features

- Access Road and Staging Area (Phase A/B)
- Phase 1 A
- Phase 1 B
- 500' Buffer

Least Bells Vireo Habitat Type

- Nesting/foraging habitat

Photo Source: Yolo County NAIP (2018)



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Map Date: 5/23/2022

ECORP Consulting, Inc.
ENVIRONMENTAL CONSULTANTS

Scale in Feet
0 540

Figure 9. Modeled Species Habitat
Least Bell's Viero
2021-056.01 Knights Landing Ridge Cut Erosion Repair

Map Features

- Access Road and Staging Area (Phase A/B)
- Phase 1 A
- Phase 1 B
- 1,300' Buffer

Tricolored Blackbird Habitat Type

- Foraging Habitat
- Nesting Habitat

Photo Source: Yolo County NAIP (2018)

ECORP: N:\2021\2021-056.01 Knights Landing Ridge Cut Erosion Repair Project\MAPS\Biological_Resources\KLRCER_TRBL_Phase1ab_20220523.mxd (CCH)-chinkelman 5/24/2022

Map Date: 5/24/2022

ECORP Consulting, Inc.
ENVIRONMENTAL CONSULTANTS

Scale in Feet
0 700

Figure 10. Modeled Species Habitat
Tricolored Blackbird
2021-056.01 Knights Landing Ridge Cut Erosion Repair

LIST OF ATTACHMENTS

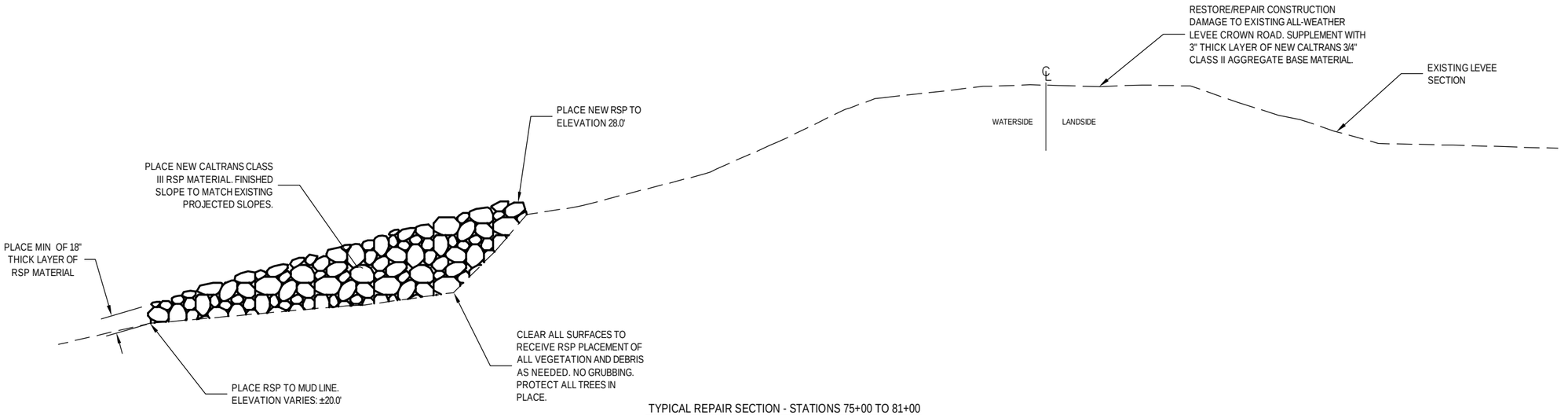
Attachment A. Cross-section Details

Attachment B. Fee Calculators for Phase 1A and Phase 1B

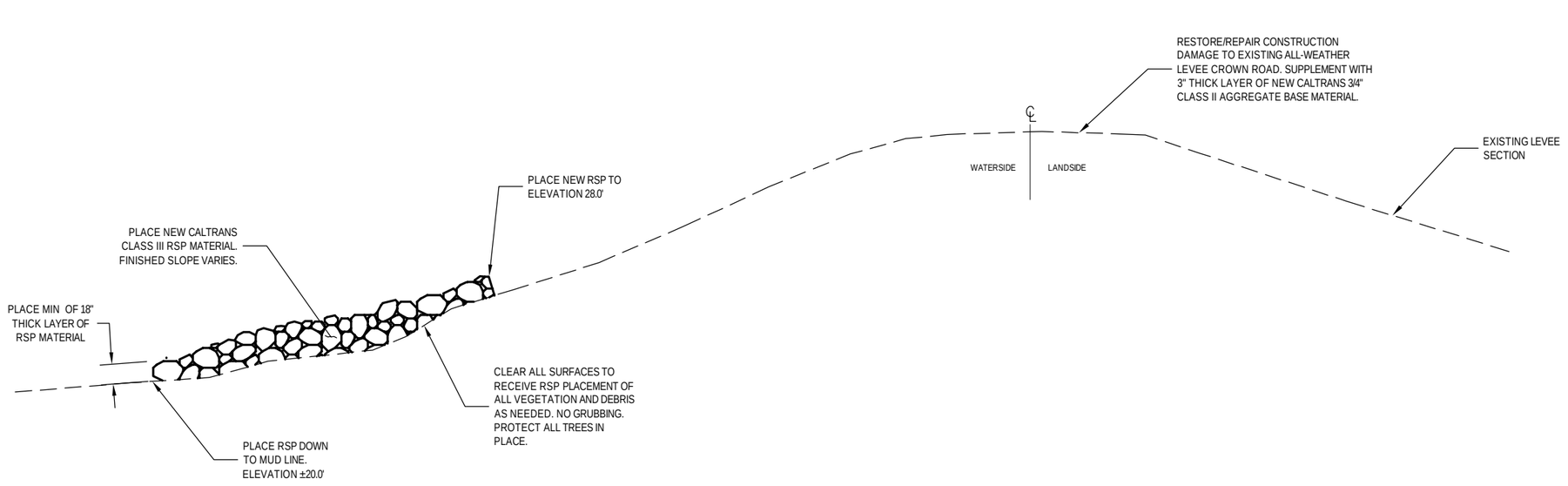
Attachment C. Temporary Impact Area Representative Site Photographs

ATTACHMENT A

Cross-section Details



TYPICAL REPAIR SECTION - STATIONS 75+00 TO 81+00



TYPICAL REPAIR SECTION - STATIONS 40+00 TO 75+00

FILE SPEC: P:\2166_Knights_Landing_Levee_Repair\0110_Ridge_Cut_Erosion_Repair\08_Civil\400_Plans\020_CAD\Sheets\C-501-Details.dwg
PLOT DATE: May 12, 2022 - 4:15pm

811 Know what's below. Call before you dig.

SUBMITTAL	
%	Date
100	MAY 2022

PROJECT ENGINEER — REGISTERED PROFESSIONAL ENGINEER — WILSON ZHU — NO. 89544 — EXP. 6/31/2023 — CIVIL — STATE OF CALIFORNIA

NO.	DESCRIPTION	DATE	APPR.

DESIGN BY BGG
DRAWN BY BGG
CHECK BY WZ
HORIZONTAL DATUM CCS83, ZONE 2
VERTICAL DATUM NAVD88

DRAWING SCALE N.T.S.

ORIGINAL DRAWING SCALE 0 ½" 1"

KSN inc. KJELDSEN SINNOCK NEUDECK
CIVIL ENGINEERS & LAND SURVEYORS
www.ksninc.com
711 N. Pershing Avenue
Stockton, CA 95203
209-946-0268
1550 Harbor Blvd., Suite 212
West Sacramento, CA 95691
916-403-5900

KNIGHT'S LANDING RIDGE CUT EROSION REPAIR PROJECT
KNIGHT'S LANDING RIDGE DRAINAGE DISTRICT
YOLO COUNTY

TYPICAL REPAIR DETAIL

DATE MAY 2022
SHEET IDENTIFICATION C-501
SHEET 9 OF 8
KSN PROJECT FILE NO. 2166-0110

ATTACHMENT B

Fee Calculators for Phase 1A and Phase 1B

BOX E: NATURAL COMMUNITY AND LAND COVER IMPACTS AND MITIGATION FEES

Complete Items 1-26 below, referring to the Permitting Guide for calculation methods.

- Total fee amount for each land cover type will be auto-generated based on acreage amount (and for recurring temporary impacts, number of years out of the 50-year permit term the impact will occur).
- Temporary impact fee formula = land cover fee x area of temporary effect in acres x (F/50) where F = the number of years in which the activity will occur during the rest of the permit term (until 2069).
- Must include required land cover fee buffer area associated with the project. This is generally 10 feet for linear projects (e.g. roads, utility corridors, pipelines) and 50 feet for all other projects. See Chapter 3 of the Permitting Guide.
- Fees will be updated annually, typically in March.
- Wetland fees are in addition to land cover fees. For project proponents transplanting elderberry shrubs from a non-riparian habitat, a per acre maintenance fee of $19,104 is assessed. The maintenance fee is subject to the annual increase in fees pursuant to existing methodology.
- Submit a planning level survey, including a field-verified land cover map and the name and qualifications of the qualified biologist(s) responsible for preparation of the report. Label as **Attachment 4.** Mapped areas shown on the site plan (**Attachment 3** in Box D, Item 7) should be consistent with the acreages entered below. Include photographs of temporary impact areas. Label photos as **Attachment 5**.

Land Cover Types	Land Cover Permanently Impacted by Project (in acres)			Land Cover Temporarily Impacted by Project (in acres)	Years of Recurring Temporary Impact	Fees (Auto Generated)				
	Permanent Impact (acres)	Fee Buffer (acres)	TOTAL			Land Cover Fee (per acre)	Wetland Fee (per acre)	Permanent Impact, Land Cover Fee	Temporary Impact, Land Cover Fee	Wetland Fee
1 ☐ Developed (including ruderal with no covered species habitat)[a]		0.0	0.0	2.4	0	$0	$0	$ 0.00	$ 185.29	$ 0.00
2 ☐ Ruderal with covered species habitat [a]	0.3	0.0	0.3	7.7	0	$15,571	$0	$ 4,453.31	$ 601.51	$ 0.00
3 ☐ Barren, No Covered Species Habitat			0.0			$0	$0	$ 0.00	$ 0.00	$ 0.00
4 ☐ Barren, With Covered Species Habitat			0.0			$15,571	$0	$ 0.00	$ 0.00	$ 0.00
5 ☐ Vegetated Corridor with Covered Species Habitat			0.0			$15,571	$0	$ 0.00	$ 0.00	$ 0.00
6 ☐ Grassland (all types)			0.0			$15,571	$0	$ 0.00	$ 0.00	$ 0.00
7 ☐ Alkali Prairie			0.0			$15,571	$0	$ 0.00	$ 0.00	$ 0.00
8 ☐ Fresh Emergent Wetland (all types)			0.00			$15,571	$80,864	$ 0.00	$ 0.00	$ 0.00

BOX E: NATURAL COMMUNITY AND LAND COVER IMPACTS AND MITIGATION FEES

9	☐ Valley Foothill Riparian			0.00		0	$15,571	$66,560	$ 0.00	$ 0.00	$ 0.00
10	☐ Lacustrine and Riverine	1.11	0.51	1.62	0.00	0	$15,571	$64,854	$25,256.16	$ 0.16	$105,193.84
11	☐ Cultivated Land (all types)			0.0			$15,571	$0	$ 0.00	$ 0.00	$ 0.00
12	☐ Citrus/Subtropical			0.0			$15,571	$0	$ 0.00	$ 0.00	$ 0.00
13	☐ Deciduous Fruits/Nuts			0.0			$15,571	$0	$ 0.00	$ 0.00	$ 0.00
14	☐ Vineyards			0.0			$15,571	$0	$ 0.00	$ 0.00	$ 0.00
15	☐ Turf Farm			0.0			$15,571	$0	$ 0.00	$ 0.00	$ 0.00
16	☐ Flowers/Nursery/Tree Farms			0.0			$15,571	$0	$ 0.00	$ 0.00	$ 0.00
17	☐ Semiag/Incidental to Agriculture			0.0			$15,571	$0	$ 0.00	$ 0.00	$ 0.00
18	☐ Eucalyptus			0.0			$15,571	$0	$ 0.00	$ 0.00	$ 0.00
								TOTAL	29,709.47	786.96	105,193.84

19	**TOTAL LAND COVER IMPACTS AND MITIGATION FEES**	$ 135,690.26
20	**APPLICATION FEE** (The application fee is credited towards the cost of the mitigation fees if the application fee is paid prior to the submittal of the mitigation fee payment . Application fee as of January 1, 2020: $1,981)	$ 1,981.00
21	**OTHER CREDITS** (Advanced fee payment or in lieu fee credit – must be verified by Conservancy). Add **Attachment 6**	$
22	**TOTAL LAND COVER IMPACTS AND MITIGATION FEES DUE** (Mitigation fees due are determined at the time of payment unless they were paid in accordance with the Yolo HCP/NCCP Early Payment of Mitigation Fees Policy. See www.yolohabitatconservancy.org for current fee schedule.)	$ 133,709.26

[a] Land cover fees may be applicable if covered species habitat is present.

BOX E: NATURAL COMMUNITY AND LAND COVER IMPACTS AND MITIGATION FEES

Complete Items 1-26 below, referring to the Permitting Guide for calculation methods.

- Total fee amount for each land cover type will be auto-generated based on acreage amount (and for recurring temporary impacts, number of years out of the 50-year permit term the impact will occur).
- Temporary impact fee formula = land cover fee x area of temporary effect in acres x (F/50) where F = the number of years in which the activity will occur during the rest of the permit term (until 2069).
- Must include required land cover fee buffer area associated with the project. This is generally 10 feet for linear projects (e.g. roads, utility corridors, pipelines) and 50 feet for all other projects. See Chapter 3 of the Permitting Guide.
- Fees will be updated annually, typically in March.
- Wetland fees are in addition to land cover fees. For project proponents transplanting elderberry shrubs from a non-riparian habitat, a per acre maintenance fee of $19,104 is assessed. The maintenance fee is subject to the annual increase in fees pursuant to existing methodology.
- Submit a planning level survey, including a field-verified land cover map and the name and qualifications of the qualified biologist(s) responsible for preparation of the report. Label as **Attachment 4.** Mapped areas shown on the site plan (**Attachment 3** in Box D, Item 7) should be consistent with the acreages entered below. Include photographs of temporary impact areas. Label photos as **Attachment 5**.

Land Cover Types	Land Cover Permanently Impacted by Project (in acres)			Land Cover Temporarily Impacted by Project (in acres)	Years of Recurring Temporary Impact	Fees (Auto Generated)				
	Permanent Impact (acres)	Fee Buffer (acres)	TOTAL			Land Cover Fee (per acre)	Wetland Fee (per acre)	Permanent Impact, Land Cover Fee	Temporary Impact, Land Cover Fee	Wetland Fee
1 ☐ Developed (including ruderal with no covered species habitat)[a]		0.0	0.0	2.5	0	$0	$0	$ 0.00	$ 194.48	$ 0.00
2 ☐ Ruderal with covered species habitat [a]	0.1	0.0	0.1	7.5	0	$15,571	$0	$ 2,179.94	$ 587.03	$ 0.00
3 ☐ Barren, No Covered Species Habitat			0.0			$0	$0	$ 0.00	$ 0.00	$ 0.00
4 ☐ Barren, With Covered Species Habitat			0.0			$15,571	$0	$ 0.00	$ 0.00	$ 0.00
5 ☐ Vegetated Corridor with Covered Species Habitat			0.0			$15,571	$0	$ 0.00	$ 0.00	$ 0.00
6 ☐ Grassland (all types)			0.0			$15,571	$0	$ 0.00	$ 0.00	$ 0.00
7 ☐ Alkali Prairie			0.0			$15,571	$0	$ 0.00	$ 0.00	$ 0.00
8 ☐ Fresh Emergent Wetland (all types)			0.00			$15,571	$80,864	$ 0.00	$ 0.00	$ 0.00

BOX E: NATURAL COMMUNITY AND LAND COVER IMPACTS AND MITIGATION FEES

9	☐ Valley Foothill Riparian	0.14	0.01	0.15	0.08	0	$15,571	$66,560	$ 2,397.93	$ 5.92	$ 10,275.53
10	☐ Lacustrine and Riverine	0.68	0.43	1.11	0.01	0	$15,571	$64,854	$ 17,346.09	$ 0.86	$ 72,250.92
11	☐ Cultivated Land (all types)			0.0			$15,571	$0	$ 0.00	$ 0.00	$ 0.00
12	☐ Citrus/Subtropical			0.0			$15,571	$0	$ 0.00	$ 0.00	$ 0.00
13	☐ Deciduous Fruits/Nuts			0.0			$15,571	$0	$ 0.00	$ 0.00	$ 0.00
14	☐ Vineyards			0.0			$15,571	$0	$ 0.00	$ 0.00	$ 0.00
15	☐ Turf Farm			0.0			$15,571	$0	$ 0.00	$ 0.00	$ 0.00
16	☐ Flowers/Nursery/Tree Farms			0.0			$15,571	$0	$ 0.00	$ 0.00	$ 0.00
17	☐ Semiag/Incidental to Agriculture			0.0			$15,571	$0	$ 0.00	$ 0.00	$ 0.00
18	☐ Eucalyptus			0.0			$15,571	$0	$ 0.00	$ 0.00	$ 0.00
								TOTAL	21,923.97	788.28	82,526.46

19	**TOTAL LAND COVER IMPACTS AND MITIGATION FEES**	$ 105,238.71
20	**APPLICATION FEE** (The application fee is credited towards the cost of the mitigation fees if the application fee is paid prior to the submittal of the mitigation fee payment . Application fee as of January 1, 2020: $1,981)	$
21	**OTHER CREDITS** (Advanced fee payment or in lieu fee credit – must be verified by Conservancy). Add **Attachment 6**	$
22	**TOTAL LAND COVER IMPACTS AND MITIGATION FEES DUE** (Mitigation fees due are determined at the time of payment unless they were paid in accordance with the Yolo HCP/NCCP Early Payment of Mitigation Fees Policy. See www.yolohabitatconservancy.org for current fee schedule.)	$ 105,238.71

[a] Land cover fees may be applicable if covered species habitat is present.

ATTACHMENT C

Representative Site Photographs

Photo 1. Overview of waterside levee, view south, May 19, 2022.

Photo 2. Overview of waterside levee, view north, May 19, 2022.

Photo 3. Overview of staging area, view west, April 14, 2022.

Photo 4. Overview of waterside levee and valley foothill riparian, view north, May 19, 2022.

Charlie Tschudin

From: Quillman, Gabriele@Wildlife <Gabriele.Quillman@wildlife.ca.gov>
Sent: Tuesday, June 7, 2022 2:08 PM
To: samuel_sosa@fws.gov; Charlie Tschudin; Chris Alford; Alexander Tengolics; Perkins-Taylor, Ian E; Boyd, Ian@Wildlife; Xiong, Mary@Wildlife
Cc: Barker, Kelley@Wildlife
Subject: RE: [EXTERNAL] RE: Yolo HCP/NCCP Monthly Coordination Meeting

Hi Charlie,

Mary and I have reviewed the variance request and agree with Sam that it looks fine. The one thing I wanted to add is that since the work will be done within 100 feet of the elderberry bushes, it should avoid the VELB flight season (March – July) which doesn't seem like it'll be a problem since it looks like the project proponent is planning to work August-October anyway. So, CDFW approves the variance request as long as the project proponent continues to avoid the March-July season.

We are still discussing the Whitworth candidate site and will let you know if/when we have any comments on that.

Thanks,

Gabriele (Gabe) Quillman
She/Her
California Department of Fish and Wildlife – North Central Region
1701 Nimbus Road, Suite A
Rancho Cordova, CA 95670
(916) 358-2955

From: Sosa, Samuel C <samuel_sosa@fws.gov>
Sent: Wednesday, May 25, 2022 7:58 AM
To: Charlie Tschudin <Charlie.Tschudin@yolocounty.org>; Chris Alford <chris@yolohabitatconservancy.org>; Alexander Tengolics <alexander@yolohabitatconservancy.org>; Quillman, Gabriele@Wildlife <Gabriele.Quillman@wildlife.ca.gov>; Perkins-Taylor, Ian E <ian_perkins-taylor@fws.gov>; Boyd, Ian@Wildlife <Ian.Boyd@Wildlife.ca.gov>
Cc: Barker, Kelley@Wildlife <Kelley.Barker@wildlife.ca.gov>
Subject: Re: [EXTERNAL] RE: Yolo HCP/NCCP Monthly Coordination Meeting

Hi Charlie,

Thank you for sending this early as I'll be on vacation next week (this is a reminder that I won't be attending the June coordination meeting). I don't have any questions regarding their request.

The Service approves the variance request.

Thanks,

Sam

_____

Sam Sosa (he/him/his)
Senior Fish and Wildlife Biologist
Sacramento Fish and Wildlife Office
2800 Cottage Way, Room W-2605
Sacramento, California 95825
p: 916-414-6560

From: Charlie Tschudin <Charlie.Tschudin@yolocounty.org>
Sent: Tuesday, May 24, 2022 2:45 PM
To: Chris Alford <chris@yolohabitatconservancy.org>; Chris Alford <chris@yolohabitatconservancy.org>; Alexander Tengolics <alexander@yolohabitatconservancy.org>; Quillman, Gabriele@Wildlife <Gabriele.Quillman@wildlife.ca.gov>; Sheya, Tanya@Wildlife <Tanya.Sheya@wildlife.ca.gov>; Havens, Michelle R <michelle_havens@fws.gov>; Sosa, Samuel C <samuel_sosa@fws.gov>
Cc: Barker, Kelley@Wildlife <Kelley.Barker@wildlife.ca.gov>
Subject: [EXTERNAL] RE: Yolo HCP/NCCP Monthly Coordination Meeting

Hi All,

Ahead of our next call, I've included a variance request from a project applicant related to an upcoming YHC project. We received the request only yesterday afternoon so the YHC biologist is still reviewing the request while we wait for a complete application. I expect to have the application early next week and will include it in the meeting materials shared folder. Prior to the call, I'll circle back and include the YHC biologist's review of the request, since the YHC and the agencies need to approve the request.

There are two species-specific requests included in the attached variance request. The first is a request for a reduced buffer from VELB per AMM12, from 100' to 20' to be consistent with the USFWS 20' buffer recommendations in the 2017 Framework for Assessing Impacts to the Valley Elderberry Longhorn Beetle (*Desmocerus californicus dimorphus*). The second variance request relates to the Least Bell's Vireo and includes a request to bypass species-specific planning level surveys and preconstruction surveys as required by AMM19 for work within 500' of LBV habitat.

If you have any immediate questions, I'm happy to answer them ahead of next Thursday by email or call.

Thank you!

Charlie Tschudin
Natural Resources Planner
Yolo County Administrator's Office
Charlie.tschudin@yolocounty.org
Yolo Habitat Conservancy

Charlie@yolohabitatconservancy.org
(530) 666 – 8850

-----Original Appointment-----
From: Chris Alford <chris@yolohabitatconservancy.org>
Sent: Monday, November 29, 2021 10:03 AM
To: Chris Alford; Alexander Tengolics; 'Charlie Tschudin'; Quillman, Gabriele@Wildlife; Sheya, Tanya@Wildlife; michelle_havens@fws.gov; samuel_sosa@fws.gov
Cc: Barker, Kelley@Wildlife
Subject: Yolo HCP/NCCP Monthly Coordination Meeting
When: Thursday, June 2, 2022 10:00 AM-12:00 PM (UTC-08:00) Pacific Time (US & Canada).
Where: conf call: (605) 472-5637, access code: 314 759

Yolo HCP/NCCP Monthly Coordination Meeting

This is the scheduled time for the monthly Yolo HCP/NCCP Monthly Coordination Meeting.

The specific agenda for each meeting and a link to a folder containing associated materials will be sent prior to each meeting.

Current schedule of meetings for 2022:

January 6th 10 am-noon
February 3rd 10 am-noon
March 3rd 10 am-noon
April 7th 10 am-noon
May 5th 10 am-noon
June 2nd 10 am-noon
July 7st 10 am-noon
August 4th 10 am-noon
September 1nd 10 am-noon
October 6th 10 am-noon
November 3rd 4th 10 am-noon
December 1st 10 am-noon

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Yolo Habitat Conservancy

County of Yolo • City of Davis • City of Winters • City of West Sacramento
City of Woodland • University of California, Davis

To: Yolo Habitat Conservancy Implementation Advisory Committee

From: Charlie Tschudin
Natural Resources Planner

Re: Receive a staff presentation to consider recommending the Yolo Habitat Conservancy Board of Directors authorize approval for Yolo Habitat Conservancy Executive Director to take necessary actions to execute a Certificate of Inclusion with Pacific Gas and Electric to allow use of Yolo HCP/NCCP coverage for the C-1637 L-400 AC Mitigation Project

Date: June 29, 2022

REQUESTED ACTION:

Receive a staff presentation to consider recommending the Yolo Habitat Conservancy Board of Directors authorize approval for Yolo Habitat Conservancy Executive Director to take necessary actions to execute a Certificate of Inclusion with Pacific Gas and Electric to allow use of Yolo HCP/NCCP coverage for the C-1637 L-400 AC Mitigation Project

BACKGROUND:

Pacific Gas and Electric submitted an application to Yolo Habitat Conservancy staff requesting coverage through the Yolo HCP/NCCP as a Special Participating Entity (SPE) in May 2022. The project, referred to as C-1637, involves installation of approximately 5,100 feet of horizontal mitigation wire and five SSD cabinets in the western half of the Dunnigan Hills. The project location is included below in Exhibit 1, Vicinity Map. The C-1637 project wire will be installed between Gas Lines 400 and 401, within PG&E's existing easement, and to minimize orchard crop loss and impacts, roughly 1,275 feet of wire will be installed via horizontal directional drilling (HDD). The remaining wire will be installed via open trench. Each of the five SSD cabinets will require two 4' x 4' bell holes and a 1' by 30' trench connecting them. A bulldozer-mounted plow will be used to install the mitigation wire, placing it near the same depth of the gas lines which ranges from 3 to 6 feet. In areas where a plow is not feasible, a backhoe will be used to excavate the trenches. A backhoe will be used to dig the HDD splice/termination locations and the trenches to the SSD locations. Staging and workspace areas will be located within the orchard at the northern end of the project and along the wire installation.

A breakdown of the project's impacts are included below.

PG&E, C-1637, Project Impacts

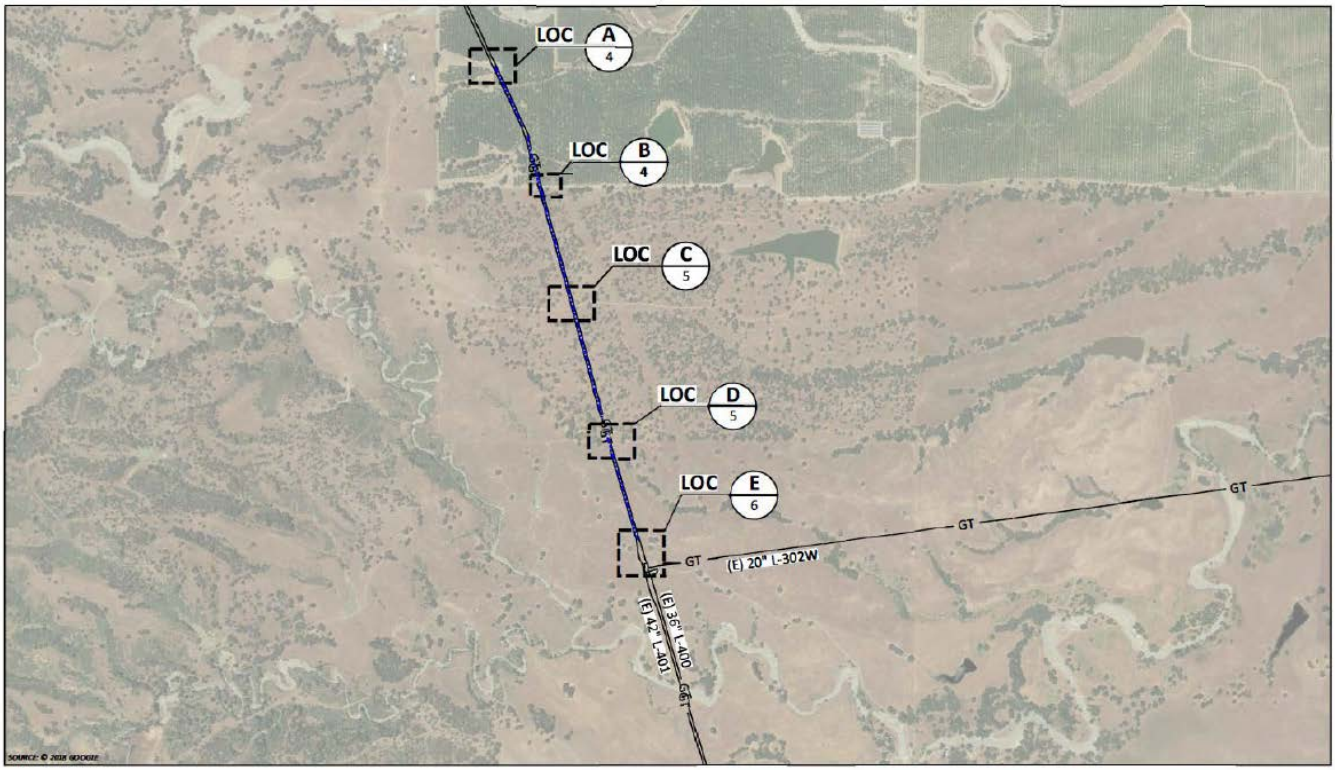
Land Cover Types	Temp. Impact
Semiagricultural	0.06-acres
Grassland (all types)	3.94-acres
Deciduous Fruits/Nuts	0.15-acres
Total acres	**4.15-acres**

To grant permit coverage to an SPE, the Conservancy must determine the requested permit coverage is available and establish a legally enforceable contract (SPE Agreement) with the SPE. The SPE Agreement binds the SPE to the relevant terms of the Yolo HCP/NCCP permits, Implementing Agreement, and Yolo HCP/NCCP. In addition to executing the SPE Agreement, the SPE entity must submit a complete application package, pay both the standard Yolo HCP/NCCP land cover fees and supplemental SPE charges per the SPE fee policy and complete any other steps required by the contract. After these steps are complete, the Conservancy will issue a Certificate of Inclusion to the SPE.

PG&E has completed the full application package for Yolo HCP/NCCP coverage and will sign a cost recovery agreement that covers the PG&E C-1637 L-400 AC project. PG&E will also deposit $10,000 to cover the costs of reviewing the PG&E C-1637 L-400 AC project application for coverage, in addition to the application fee. In this case because the dollar amount required mitigate for the 4.15-acres of temporary impact is less than the $1,981 application fee, the application fee is credited towards the mitigation fees and the Conservancy will not collect the additional $1,292.39 identified in Attachment A.

Staff recommend approval of Pacific Gas and Electric's C-1637 project as the impacts of the proposed project only occur on a small amount of the grassland land cover type, 3.94-acres, for which there is ample Yolo HCP/NCCP coverage, and the project will not deplete the amount of permit coverage available to projects subject to the jurisdiction of the member agencies.

Exhibit 1, PG&E C-1637 Vicinity Map



ATTACHMENT:
Application for Coverage

APPLICATION

PURPOSE OF THIS FORM

Complete this form to apply for incidental take permit coverage under the Yolo Habitat Conservation Plan/Natural Community Conservation Plan (Yolo HCP/NCCP) and submit electronically to your local planning office. The completion of this form satisfies the minimum requirements for permit coverage. The Yolo Habitat Conservancy ("Conservancy") encourages submittal of a preliminary application to your local planning office to ensure timely and accurate completion. Your local agency planning office also may request additional information to clarify or complete your application. Chapter 6 of the Permitting Guide provides instructions for form completion, available along with additional resourceson the Conservancy's web site under the "Permitting" tab. Please note if an application fee is required (see Screening Form, Box D), you should submit this fee to the Conservancy early in the application process. The Conservancy automatically adjusts mitigation fees by March 15th of each year to reflect current land prices and other expenses. If an applicant does not complete their application and issue payment prior to the fee update, the new fees will apply. The applicant may, however, pay mitigation fees early at the previous year's rate consistent with the Conservancy's Early Payment of Mitigation Fees Policy.

Regional-scale data related land cover, sensitive natural communities, and covered species habitats in Yolo is made available through the Yolo HCP/NCCP GeoMapper online mapping tool. The GeoMapper tool is accessible via the Resources tab of the Yolo Habitat Conservancy website below, although it is intended for informational purposes only, All HCP/NCCP permit applicants must have site-specific planning level surveys by a qualified biologist to determine actual land cover and sensitive natural communities and species habitats in and around a project site to determine the correct amount of land cover mitigation fees and project specific Avoidance and Minimization Measures (AMMs).

https://www.yolohabitatconservancy.org/resources

BOX A: Preliminary/Final Application	
Check one box.	
☒ Preliminary Application (signature not required)	☐ Final Application (complete form and signature required)

BOX B: APPLICATION DETAILS		
1 Project name	PG&E C-1637 L-400 AC Mitigation	
2 Submittal date	5/11/2022	
3 Application/project file number(s) (assigned by local agency)		
4 YHC internal tracking #		
5 Local agency with approval authority	☐ Yolo County ☐ City of Davis ☐ City of Woodland ☐ City of West Sacramento ☐ City of Winters ☐ Other _____	☒ Special Participating Entity (SPE) **Note**: Applicants not subject to approval from the County or cities, or for projects not specifically identified and not specifically excluded as a covered activity under the Plan, should check this box to request permit coverage as an SPE if desired. SPE permit coverage is not guaranteed, are processed by the Conservancy, and must be approved by the Conservancy Board.

BOX C: PROJECT CONTACT			
1 Property Owner			
1.a Property owner name	See Attachment 1		
1.b Mailing address			
1.c Phone (home/office)		1.d Phone (Cellular)	
1.e Email			
2 Project Agent/Applicant			
2.a Company/organization	Pacific Gas and Electric Co.		
2.b Name of primary contact	Laura Bond		
2.c Mailing address	4040 West Lane, Stockton, CA 95204		
2.d Phone (office)	916-617-0169	2.e Phone (Cellular)	
2.f Email	L1KR@pge.com		
Permissions			
3 Local agency and/or the Conservancy may contact the property owner directly	☐ Yes ☒ No		
4 Local agency and/or the Conservancy may contact the project agent/applicant directly	☒ Yes ☐ No		

BOX D: PROJECT INFORMATION	
1 Project address and location	Wildwood Road/Rd 84, 4.7 miles west of Dunnigan, CA
2 Assessor parcel number(s) APNs and acreage by parcel (not applicable for linear projects).	
3 Total acreage of parcel(s) (not applicable for linear projects spanning multiple parcels)	
4 Using the GeoMapper's Spatially Defined Planning Unit Map, find your proposed project site. Check the Planning Unit in which your project lies.	**Yolo County Planning Units** ☐ 1 – Little Blue Ridge ☐ 2 – North Blue Ridge ☐ 3 – South Blue Ridge ☒ 4 – Capay Hills ☐ 5 – Dunnigan Hills ☐ 6 – Upper Cache Creek ☐ 7 – Lower Cache Creek ☐ 8 – Upper Putah Creek ☐ 9 – Lower Putah Creek ☐ 10 – Hungry Hollow Basin ☐ 11 – Willow Slough Basin ☐ 12 – Colusa Basin ☐ 13 – Colusa Basin Plains ☐ 14 – North Yolo Basin ☐ 15 – South Yolo Basin ☐ 16 – Yolo Basin Plains ☐ 17 – North Yolo Bypass ☐ 18 – South Yolo Bypass **Cities** ☐ 19 – City of Woodland ☐ 20 – City of Davis ☐ 21 – City of West Sacramento ☐ 22 – City of Winters

BOX D: PROJECT INFORMATION

5	▣	Provide a project description. Please refer to the Permitting Guide for details to include in the project description. Label as **Attachment 1** or indicate in this box the page numbers of the planning level survey where this information can be found**.**
6	▣	Provide a legible vicinity map of the project site and surrounding area (PDF). Refer to the Permitting Guide for more information about details to include on the vicinity map. Label as **Attachment 2.** Rather than a separate PDF, applicant may include the site plan in the planning level survey report. If so, provide page number here**:** _____
7	▣	Provide a site plan that shows the proposed project site and surrounding area. (PDF and CAD or GIS-compatible). Refer to the Permitting Guide for more information about details to include in the site plan and details regarding the required CAD or GIS-compatible digital information to be attached. Label as **Attachment 3.** Rather than a separate PDF, applicant may include the site plan in the planning level survey report or other report. If so, attach report or excerpt and provide report name and page number here**:** _____

BOX E: NATURAL COMMUNITY AND LAND COVER IMPACTS AND MITIGATION FEES

Complete Items 1-26 below, referring to the Permitting Guide for calculation methods.

- Total fee amount for each land cover type will be auto-generated based on acreage amount (and for recurring temporary impacts, number of years out of the 50-year permit term the impact will occur).
- Temporary impact fee formula = land cover fee x area of temporary effect in acres x (F/50) where F = the number of years in which the activity will occur during the rest of the permit term (until 2069).
- Must include required land cover fee buffer area associated with the project. This is generally 10 feet for linear projects (e.g. roads, utility corridors, pipelines) and 50 feet for all other projects. See Chapter 3 of the Permitting Guide.
- Fees will be updated annually, typically in March.
- Wetland fees are in addition to land cover fees. For project proponents transplanting elderberry shrubs from a non-riparian habitat, a per acre maintenance fee of $19,104 is assessed. The maintenance fee is subject to the annual increase in fees pursuant to existing methodology.
- Submit a planning level survey, including a field-verified land cover map and the name and qualifications of the qualified biologist(s) responsible for preparation of the report. Label as **Attachment 4.** Mapped areas shown on the site plan (**Attachment 3** in Box D, Item 7) should be consistent with the acreages entered below. Include photographs of temporary impact areas. Label photos as **Attachment 5**.

Land Cover Types	Land Cover Permanently Impacted by Project (in acres)			Land Cover Temporarily Impacted by Project (in acres)	Years of Recurring Temporary Impact	Fees (Auto Generated)				
	Permanent Impact (acres)	Fee Buffer (acres)	TOTAL			Land Cover Fee (per acre)	Wetland Fee (per acre)	Permanent Impact, Land Cover Fee	Temporary Impact, Land Cover Fee	Wetland Fee
1 ☐ Developed (including ruderal with no covered species habitat)[a]			0.0			$0	$0	$ 0.00	$ 0.00	$ 0.00
2 ☐ Ruderal with covered species habitat [a]			0.0			$15,571	$0	$ 0.00	$ 0.00	$ 0.00
3 ☐ Barren, No Covered Species Habitat			0.0			$0	$0	$ 0.00	$ 0.00	$ 0.00
4 ☐ Barren, With Covered Species Habitat			0.0			$15,571	$0	$ 0.00	$ 0.00	$ 0.00
5 ☐ Vegetated Corridor with Covered Species Habitat			0.0			$15,571	$0	$ 0.00	$ 0.00	$ 0.00
6 ■ Grassland (all types)	0.0	0.0	0.0	3.9	1	$15,571	$0	$ 0.00	$ 1,226.99	$ 0.00
7 ☐ Alkali Prairie			0.0			$15,571	$0	$ 0.00	$ 0.00	$ 0.00
8 ☐ Fresh Emergent Wetland (all types)			0.00			$15,571	$80,864	$ 0.00	$ 0.00	$ 0.00

BOX E: NATURAL COMMUNITY AND LAND COVER IMPACTS AND MITIGATION FEES

9 ☐ Valley Foothill Riparian			0.00			$15,571	$66,560	$ 0.00	$ 0.00	$ 0.00
10 ☐ Lacustrine and Riverine			0.00			$15,571	$64,854	$ 0.00	$ 0.00	$ 0.00
11 ☐ Cultivated Land (all types)			0.0			$15,571	$0	$ 0.00	$ 0.00	$ 0.00
12 ☐ Citrus/Subtropical			0.0			$15,571	$0	$ 0.00	$ 0.00	$ 0.00
13 ■ Deciduous Fruits/Nuts			0.0	0.2	1	$15,571	$0	$ 0.00	$ 46.71	$ 0.00
14 ☐ Vineyards			0.0			$15,571	$0	$ 0.00	$ 0.00	$ 0.00
15 ☐ Turf Farm			0.0			$15,571	$0	$ 0.00	$ 0.00	$ 0.00
16 ☐ Flowers/Nursery/Tree Farms			0.0			$15,571	$0	$ 0.00	$ 0.00	$ 0.00
17 ■ Semiag/Incidental to Agriculture	0.0	0.0	0.0	0.1	1	$15,571	$0	$ 0.00	$ 18.69	$ 0.00
18 ☐ Eucalyptus			0.0			$15,571	$0	$ 0.00	$ 0.00	$ 0.00
							TOTAL	0.00	1,292.39	0.00

19	**TOTAL LAND COVER IMPACTS AND MITIGATION FEES**	$ 1,292.39
20	**APPLICATION FEE** (The application fee is credited towards the cost of the mitigation fees if the application fee is paid prior to the submittal of the mitigation fee payment . Application fee as of January 1, 2020: $1,981)	$
21	**OTHER CREDITS** (Advanced fee payment or in lieu fee credit – must be verified by Conservancy). Add **Attachment 6**	$
22	**TOTAL LAND COVER IMPACTS AND MITIGATION FEES DUE** (Mitigation fees due are determined at the time of payment unless they were paid in accordance with the Yolo HCP/NCCP Early Payment of Mitigation Fees Policy. See www.yolohabitatconservancy.org for current fee schedule.)	$ 1,292.39

[a] Land cover fees may be applicable if covered species habitat is present.

BOX F: CONDITIONS OF APPROVAL: CONDUCT PLANNING LEVEL SURVEYS

Based on a planning level survey conducted by a qualified biologist using the land cover definitions described in the Permitting Guide in Table 2-1, indicate which sensitive natural communities and covered species are relevant to your project. Indicate below whether suitable covered species habitats are present (Column A) and, where applicable, if there is a need to conduct a more focused survey(s) for covered species (Column B) to confirm presence. Complete species-specific planning level surveys as needed consistent with protocols referenced in Appendix A of the Permitting Guide. Alternatively, covered species presence can be assumed, which would requires adherence to applicable AMMs and implementation of avoidance measures or preconstruction surveys. Attach all species-specific planning level surveys as **Attachment 7**. Describe, map, and tabulate impacts the project will have on each natural community and each species for which habitat is present. Impact calculations must correspond to the permanent and temporary impact calculations in Box E. Label as **Attachment 8**. Alternatively, the impact assessment can be incorporated into the planning level survey. **Important**: Be aware of the timing requirements for conducting a species-specific planning level survey (Table 6-1 in the Permitting Guide) to avoid project delays.

	A. Project Site Conditions Requiring Planning Level Survey	B. Species-Specific Planning Level Survey Results	C. Documentation
Sensitive Natural Communities			
1 Alkali prairie and vernal pool complex	Are vernal pools or alkali seasonal wetlands present within 250 feet of project footprint? ☐ **Yes**. *Design project to avoid vernal pools or alkali seasonal wetlands by 250 feet or lesser buffer if approved by wildlife agencies (see Permitting Guide Table 2-1). Check Box G, AMMs 9 and 10. Go to Column C.* ■ **No**	N/A	Map attached? (Attachment 4) ■ **Yes** ☐ **No** If vernal pools or alkali seasonal wetlands are present on or near the site, provide map showing how project avoids these wetlands.
2 Valley foothill riparian	Is valley foothill riparian present within 100 feet of the project site boundary? ☐ **Yes**. *Design project to avoid valley foothill riparian by 100 feet or count all portions within 100 feet in the impact acreage (see Permitting Guide Table 2-1). Check Box G, AMMs 9 and 10. Go to Column C and provide map.* ■ **No**	N/A	Map attached? (Attachment 4) ■ **Yes** ☐ **No** Provide map showing the valley foothill riparian in relation to the project footprint.
3 Lacustrine and riverine	Are any streams, rivers, lakes, or ponds within 25 feet of project footprint inside urban planning units, or within 100 feet of project footprint outside urban planning units? ☐ **Yes**. *Design project to avoid these resources by 25 feet inside urban planning units or 100 feet outside urban planning units, or count all portions within these distances in the impact acreage, unless a variance is allowed. Check Box G, AMMs 9 and 10. Go to Column C and provide map.* ■ **No**	N/A	Map attached? (Attachment 4) ■ **Yes** ☐ **No** Provide map showing any streams, rivers, lakes, or ponds in relation to the project footprint.

BOX F: CONDITIONS OF APPROVAL: CONDUCT PLANNING LEVEL SURVEYS			
	A. Project Site Conditions Requiring Planning Level Survey	B. Species-Specific Planning Level Survey Results	C. Documentation
Sensitive Natural Communities			
4 Fresh emergent wetlands	Are there any fresh emergent wetlands within 50 feet of project footprint outside urban planning units? ☐ **Yes**. *Design project to avoid these resources by 50 feet, or count all portions within 50 feet in the impact acreage. Check Box G, AMMs 9 and 10. Go to Column C and provide map).* ***Survey period: May 31–September 30*** ☒ **No**	N/A	Map attached? (Attachment 4) ☒ **Yes** ☐ **No** Provide map of fresh emergent wetlands in relation to the project footprint.
Plants			
5 Palmate-bracted bird's beak	Is suitable habitat present within 250 feet of the project site boundary? (see Permitting Guide Table 2-2) ☐ **Yes**. *Survey for palmate-bracted bird's beak consistent with Permitting Guide Appendix A. Check Box G, AMM 11. Go to Column B.* ***Survey period: May 31–September 30*** ☒ **No**	Is palmate-bracted bird's beak present? ☐ **Yes**. *Design project to avoid occupied habitat as described in AMM 11. Go to Column C.* ☒ **No.** *Go to Column C.*	Species-specific planning level survey report attached? (Attachment 7) ☐ **Yes** ☐ **No** *Include report of species-specific planning level survey and map of habitat and any plants found in relation to project footprint.*
Invertebrates			
6 Valley elderberry longhorn beetle	Is there presence of elderberry shrubs in the project site or within 100 feet outside of the project site boundary that could be impacted by the project? ☐ **Yes**. *Identify and map all elderberry shrubs in and within 100 feet of project footprint with stems greater than one inch in diameter at ground level. For mapped shrubs that cannot be avoided, quantify the number of stems greater than one inch in diameter at ground level, and identify any such stems with valley elderberry longhorn beetle exit holes. Check Box G, AMM 12. Go to Column C and provide survey report.* ***Survey period: Year-round*** ☒ **No**	N/A	Species-specific planning level survey report attached? (Attachment 7) ☐ **Yes** ☐ **No**

BOX F: CONDITIONS OF APPROVAL: CONDUCT PLANNING LEVEL SURVEYS			
	A. Project Site Conditions Requiring Planning Level Survey	B. Species-Specific Planning Level Survey Results	C. Documentation
Amphibians			
7 California tiger salamander	Is there presence of California tiger salamander aquatic or upland habitat in the project footprint, or aquatic habitat within 500 feet of the project footprint? ☒ **Yes**. *Check box G, AMM 13. Is the habitat within designated critical habitat for California tiger salamander, as determined using the GeoMapper?* ☐ **Yes**. Design project to avoid designated critical habitat. ☒ **No.** *If aquatic habitat cannot be avoided by 500 feet, either conduct surveys as described in the Permitting Guide Appendix A, or assume species presence.* ***Survey period: After rainfall, November 1 to May 15.*** *Go to Column B.* ☐ **No**	Are California tiger salamanders present or assumed to be present in aquatic habitat? ☒ **Yes**. *If the species is present or assumed to be present, the Yolo HCP/NCCP will not allow any loss of occupied aquatic habitat until at least four new occupied breeding pools are discovered or established and protected in the Plan Area. Contact Yolo Habitat Conservancy. Go to Column C.* ☐ **No**	Species-specific planning level survey attached? (Attachment 7) ☐ **Yes** ☒ **No**
Reptiles			
8 Western Pond Turtle	Is western pond turtle habitat present in the project footprint? ☒ **Yes**. Check Box G, AMM 14. A qualified biologist is required to evaluate whether there is moderate to high likelihood of western pond turtle presence. *Go to Columns B and C.* ☐ **No**	Moderate to high likelihood of western pond turtle presence? ☐ **Yes:** Check Box F for western pond turtle preconstruction surveys. ☒ **No**	Habitat evaluation attached? (Attachment 7) ☐ **Yes** ☒ **No**
9 Giant Garter Snake	Is there any giant garter snake habitat (as defined in the Permitting Guide, Table 2-2) within the project footprint? ☐ **Yes**. *Design project to avoid or minimize impact on giant garter snake habitat to the extent practicable. If habitat cannot be avoided, see AMM 15. Check Box F for giant garter snake Preconstruction surveys, and check Box G, AMM 15.* ☒ **No**	N/A	N/A

BOX F: CONDITIONS OF APPROVAL: CONDUCT PLANNING LEVEL SURVEYS			
	A. Project Site Conditions Requiring Planning Level Survey	B. Species-Specific Planning Level Survey Results	C. Documentation
Birds			
10 Swainson's Hawk and White-tailed Kite	Are there suitable Swainson's hawk or white-tailed kite nest trees within 1,320 feet of the project footprint? ☒ **Yes**. *If nest trees cannot be avoided by 1,320 feet, check Box F for hawk and kite Preconstruction surveys, and Box G, AMM 16.* ☐ **No**	N/A	N/A
11 Western yellow-billed cuckoo	Is suitable habitat present within 500 feet of the project site boundary? ☐ **Yes**. *If there are breeding records for the western yellow-billed cuckoo within ¼ mile of the project site from the previous three years (as determined by GeoMapper), then assume species is present. If there are no breeding records with ¼ mile, then either assume species is present or survey consistent with Chapter 6 of the Permitting Guide. See columns B and C. Check Box F for western yellow-billed cuckoo Preconstruction surveys and Check Box G, AMM 17.* ***Survey period: June 1–August 30.*** ☒ **No**	Is western yellow-billed cuckoo present or assumed to be present? ☐ **Yes**. *If project cannot avoid occupied habitat by 500 feet, avoid take of nesting birds as described in AMM 17.* ☒ **No.**	Species Survey attached? (Attachment 7) ☐ **Yes** ☒ **No**
12 Western Burrowing Owl	Is western burrowing owl habitat present on the project site, or within 500 feet of the project site? ☒ **Yes**. *Conduct planning level surveys for occupied habitat as described in Permitting Guide Appendix A. Go to Columns B and C.* ***Survey period: February 1–August 31 during the breeding season; September 1–January 31 during nonbreeding season.*** ☐ **No**	Are burrowing owls present? ☐ **Yes**. *Check Box G, AMM18. If burrows cannot be avoided, consistent with Table 2-3 in the Permitting Guide, Check Box F for western burrowing owl preconstruction surveys.* ☒ **No**	Species-specific planning level survey attached? (Attachment 7) ☐ **Yes** ☒ **No**

BOX F: CONDITIONS OF APPROVAL: CONDUCT PLANNING LEVEL SURVEYS

	A. Project Site Conditions Requiring Planning Level Survey	B. Species-Specific Planning Level Survey Results	C. Documentation
13 Least Bell's Vireo	Is least Bell's vireo habitat present in and within 500 feet of project footprint? ☐ **Yes**. *Check Box G, AMM 19. Are there nesting records for the species within ¼ mile of the site from the previous three years (determined using the GeoMapper)?* ☐ **Yes**. *Assume species is present. See Column B.* ☐ **No.** *Conduct planning level surveys, as described in Permitting Guide Appendix A. See Columns B and C.* ***Survey period: April 1–July 15*** ■ **No**	Are least Bell's vireo nests present or assumed to be present? ☐ **Yes**. *Check Box F for least Bell's vireo preconstruction surveys. Avoid take of birds as described in AMM 19.* ■ **No.**	Species Survey attached? (Attachment 7) ☐ **Yes** ■ **No**
14 Bank Swallow	Is bank swallow nesting habitat present on the project site, or within 500 feet of the project site? ☐ **Yes**. *Check Box G, AMM 20. Conduct planning level surveys as described in Permitting Guide Appendix A. Go to Columns B and C.* ***Survey period: March 1–August 15*** ■ **No**	Are nesting bank swallows present? ☐ **Yes**. *Check Box F for bank swallow preconstruction surveys. Avoid take of birds as described in AMM 19.* ■ **No.**	Species-specific planning level survey attached? (Attachment 7) ☐ **Yes** ■ **No**
15 Tricolored Blackbird	Is tricolored blackbird nesting habitat present on the project site, or within 1,300 feet of the project site? ☐ **Yes**. *Conduct planning level surveys as described in Permitting Guide Appendix A. Check Box G, AMM 21. Go to Column C.* ***Survey period: March 1–July 30*** ■ **No**	N/A	Species-specific planning level survey attached? (**Attachment 7**) ☐ **Yes** ■ **No**

BOX G: CONDITIONS OF APPROVAL: CONDUCT PRE-CONSTRUCTION SURVEYS

Indicate which species in **Items 1-7** are relevant to your project. **Important**: Refer to Chapter 4 of the Permitting Guide for information about survey purpose, the land cover types and site conditions requiring preconstruction surveys, survey area size, and survey timing.

Birds			
1	■ Swainson's hawk	4	■ Western burrowing owl
2	■ White-tailed kite	5	☐ Least-Bell's vireo
3	☐ Western yellow-billed cuckoo		
Reptiles			
6	☐ Giant garter snake	7	■ Western pond turtle

BOX H: CONDITIONS OF APPROVAL: AVOIDANCE AND MINIMIZATION MEASURES (AMMs)

Check the avoidance and minimization measures below that apply to your project. Refer to the Permitting Guide for assistance. Describe how you will fulfill the requirements of each required condition. Plan your construction carefully around the translocation or other dates required by the AMMs. Label as **Attachment 9**.

1	☒	AMM1: *Establish Resource Protection Buffers*
2	☐	AMM 2: *Design Developments to Minimize Indirect Effects at Urban-Habitat Interfaces (this AMM does not apply to new development where it is immediately adjacent to existing developed lands*)
3	☒	AMM 3: *Confine and Delineate Work Area*
4	☒	AMM 4: *Cover Trenches and Holes during Construction and Maintenance*
5	☒	AMM 5: *Control Fugitive Dust*
6	☒	AMM 6: *Conduct Worker Training*
7	☒	AMM 7: *Control Nighttime Lighting of Project Construction Sites*
8	☒	AMM 8: *Avoid and Minimize Effects of Construction Staging Areas and Temporary Work Areas*
9	☒	AMM 9: *Establish Resource Protection Buffers around Sensitive Natural Communities*
10	☐	AMM 10: *Avoid and Minimize Effects on Wetlands and Waters*
11	☐	AMM 11: *Minimize Take and Adverse Effects on Palmate-Bracted Bird's Beak*
12	☐	AMM 12: *Minimize Take and Adverse Effects on Habitat of Valley Elderberry Longhorn Beetle*
13	☒	AMM 13: *Minimize Take and Adverse Effects on Habitat of California Tiger Salamander*
14	☒	AMM 14: Minimize Take and Adverse Effects on Habitat of Western Pond Turtle
15	☐	AMM 15: *Minimize Take and Adverse Effects on Habitat of Giant Garter Snake*
16	☒	AMM 16: *Minimize Take and Adverse Effects on Habitat of Swainson's Hawk and White-Tailed Kite*
17	☐	AMM 17: *Minimize Take and Adverse Effects on Habitat of Western Yellow-Billed Cuckoo*
18	☒	AMM 18: *Minimize Take and Adverse Effects on Western Burrowing Owl*
19	☐	AMM 19: *Minimize Take and Adverse Effects on Least Bell's Vireo*
20	☐	AMM 20: *Minimize Take and Adverse Effects on Habitat of Bank Swallow*
21	☐	AMM 21: *Minimize Take and Adverse Effects on Habitat of Tricolored Blackbird*

BOX I: ATTACHMENT CHECKLIST

Indicate which attachments are provided below. **Note**: Attachments must meet the requirements described in Permitting Guide. If these requirements are not met, your application may be delayed.

All Projects
☒ **Attachment 1**. Project Description (Box C). Attach separately or indicate report page #s here:
☒ **Attachment 2**. Vicinity map PDF (Box C). Attach separately or indicate report page # here:
☐ **Attachment 3**. Site Plan (Box C). Attach separately or indicate report page # here: Also include CAD or GIS compatible data.
Projects with Impacts
☒ **Attachment 4**. Planning level survey (Box D)
☒ **Attachment 5**. Photos of temporary impact areas. Attach separately or indicate report page #s here:
☒ **Attachment 6**. Documentation if land is offered in lieu of fees (Box D, Item 30)
☐ **Attachment 7**. Species-specific planning level survey(s) (Box E). Attach separately or indicate report page #s here:
☒ **Attachment 8**. Unavoidable impacts on covered species. Attach separately or indicate report page #s here:

BOX I: ATTACHMENT CHECKLIST

☐ **Attachment 9**. Description of compliance with avoidance and minimization measures (Box G). Attach separately or indicate report page #s here:

BOX J: SIGNATURES

☑ **By checking the box and signing below I certify all information in the application is true and correct to the best of my knowledge. I also certify I understand the requirements of the AMMs, including dates for elderberry translocation or other dates that may affect construction timing.**

1	Property owner name and contact information	Name			
		Phone		Email	
2	Property owner signature			Date	
3	Project agent/applicant name and contact information	Name	Laura Bond		
		Phone	916-617-0169	Email	L1KR@pge.com
4	Project agent/applicant signature			Date	

FORM SUBMITTAL INSTRUCTIONS

Submit this form electronically to the applicable contact below. If the project applicant is seeking HCP/NCCP permit coverage as an SPE, submit the form to the Yolo Habitat Conservancy. The signed Final Application and payment of all other Plan fees is required following project approval and prior to formal Yolo HCP/NCCP approval.

LOCAL AGENCY PLANNINGOFFICE CONTACT INFORMATION

Yolo County	**City of West Sacramento**	**City of Davis**	**City of Woodland**	**City of Winters**
Stephanie Cormier Planning Division Department of Community Services 292 West Beamer Street, Woodland (530) 666-8041	David Tilley Community Development Department 1110 West Capitol Ave., 2nd Floor, West Sacramento (916) 617-4645	Sherri Metzker Community Development & Sustainability 23 Russell Blvd., Suite 2, Davis (530) 757-5610 ext. 7239	Cindy Norris Planning Division 300 First Street, Woodland (530) 661-5911	Kirk Skierski Community Development Department 318 First Street, Winters (530) 794-6714

YOLO HABITAT CONSERVANCY CONTACT INFORMATION

Address: PO Box 2202, Woodland, CA 95776 Phone: 530-666-8150 Email: info@yolohabitatconservancy.org

FOR STAFF USE ONLY			
Project planner name		Phone number	
Email		Date	
Covered activity type			
HCP/NCCP Application	☐ Complete ☐ Not complete	☐ Special Participating Entity	

Attachment 1 – Project Description

PG&E plans to install approximately 5,100 feet of horizontal mitigation wire and five SSD cabinets west of the town of Dunnigan in Yolo County. The project, referred to as C-1637, includes an impact area of 4.96 acres and includes access routes and temporary workspaces north of PG&E's existing Buckeye Station. The C-1637 includes five work locations spanning four private parcels in Yolo County. The mitigation wire will be installed between Gas Lines 400 and 401, within PG&E's existing easement. To minimize orchard crop loss and impacts, roughly 1,275 feet of wire will be installed via horizontal directional drilling (HDD). The remaining wire will be installed via open trench, with an approximate workspace of 79,494 square feet. Each of the five SSD cabinets will require two 4' x 4' bell holes and a 1' by 30' trench connecting them. A bulldozer-mounted plow will be used to install the mitigation wire, placing it near the same depth of the gas lines which ranges from 3 to 6 feet. In areas where a plow is not feasible, a backhoe will be used to excavate the trenches. A backhoe will be used to dig the HDD splice/termination locations and the trenches to the SSD locations. Staging and workspace areas will be located within the orchard at the northern end of the project and along the wire installation.

Property Ownership:

APN 062-050-004

- Owner – N/A
- Site Address – 2580 County Road 84, Arbuckle, CA

APN 062-080-009

- Owner – T&P Farms
- Site Address – County Road 84, Arbuckle, CA

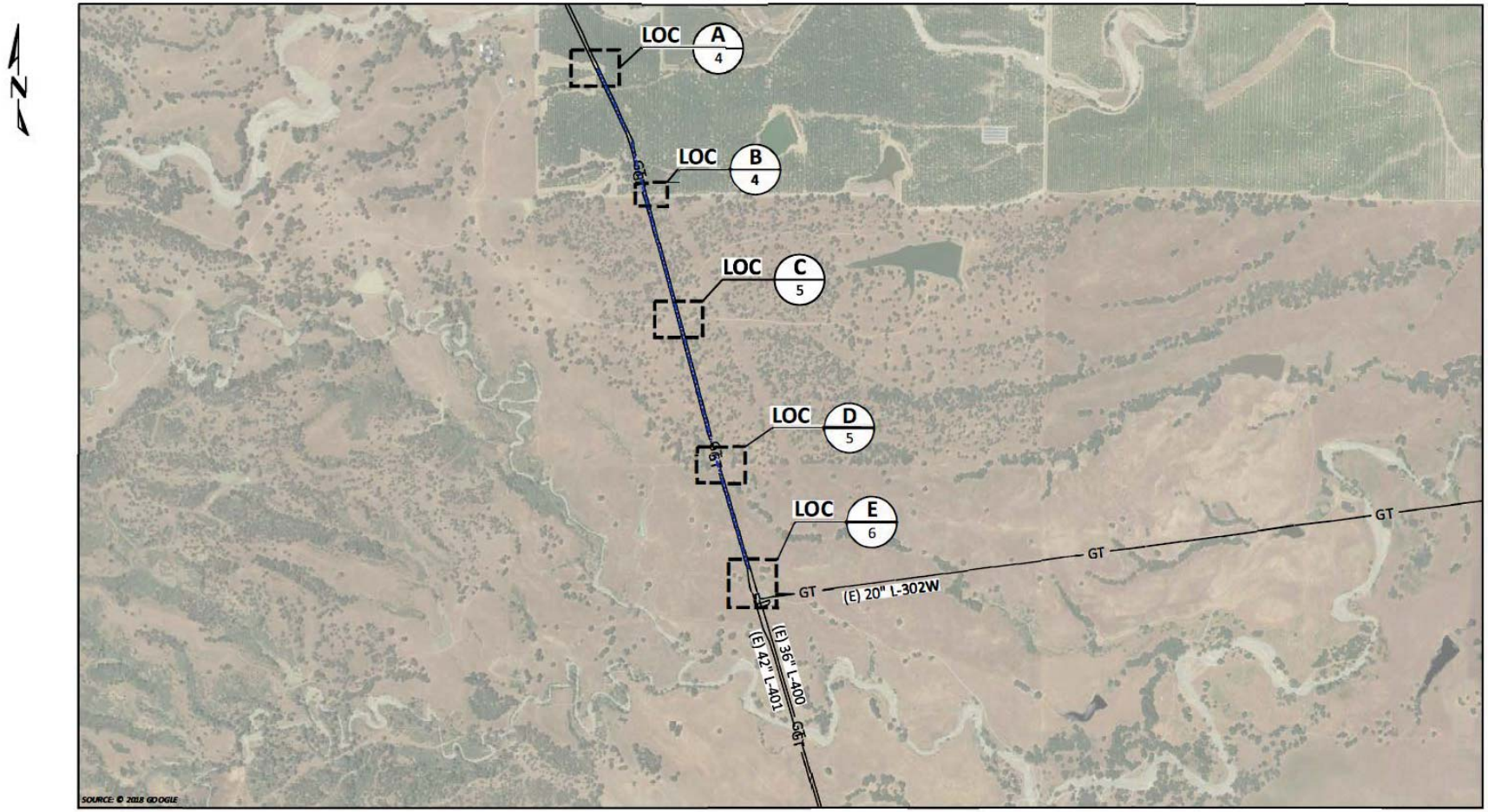
APN 062-080-010

- Owner –T&P Farms
- Site Address – Road 84, Arbuckle, CA

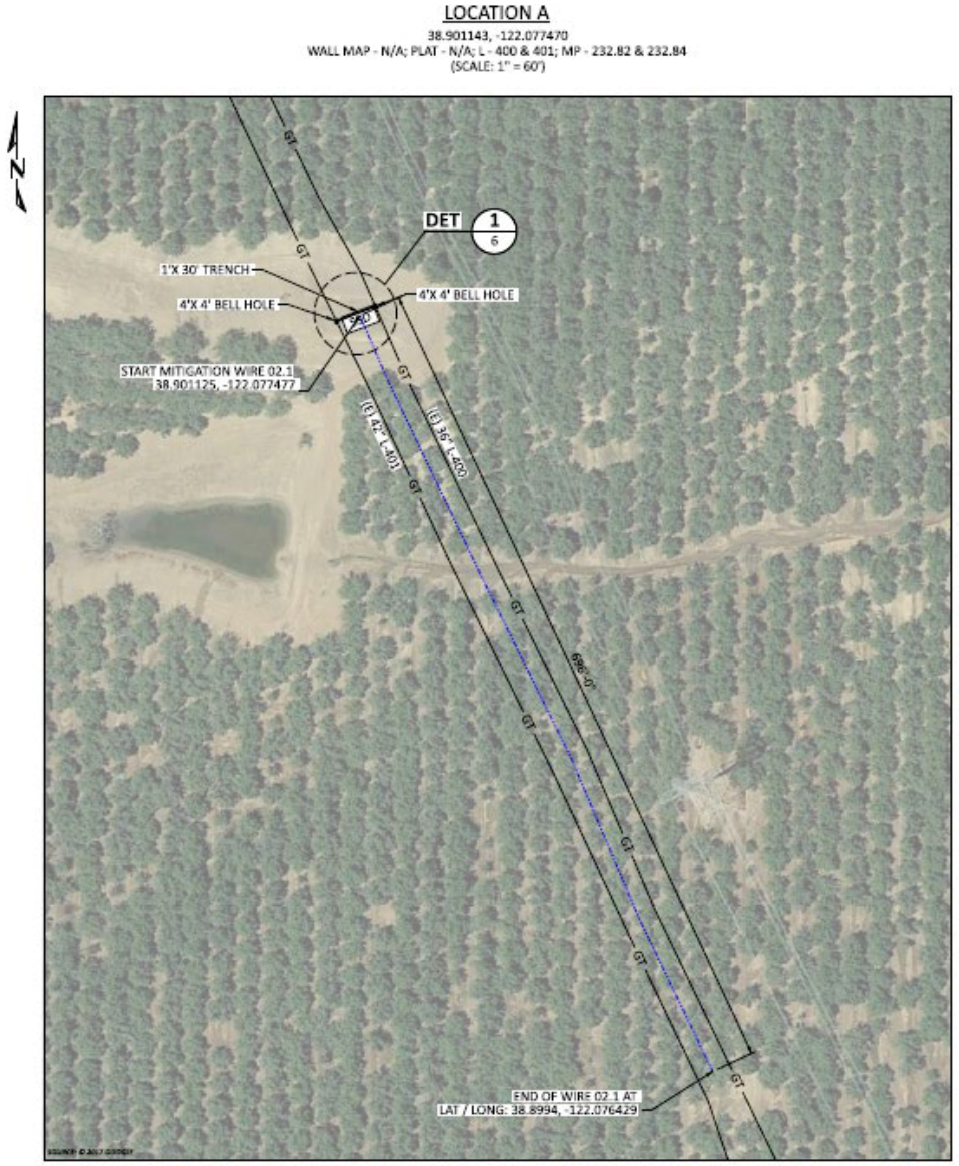
APN 062-080-003

- Owner –Durst Home Ranch, LLC
- Site Address – 23710 County Road 13, Capay, CA

Attachment 2 – Vicinity Map

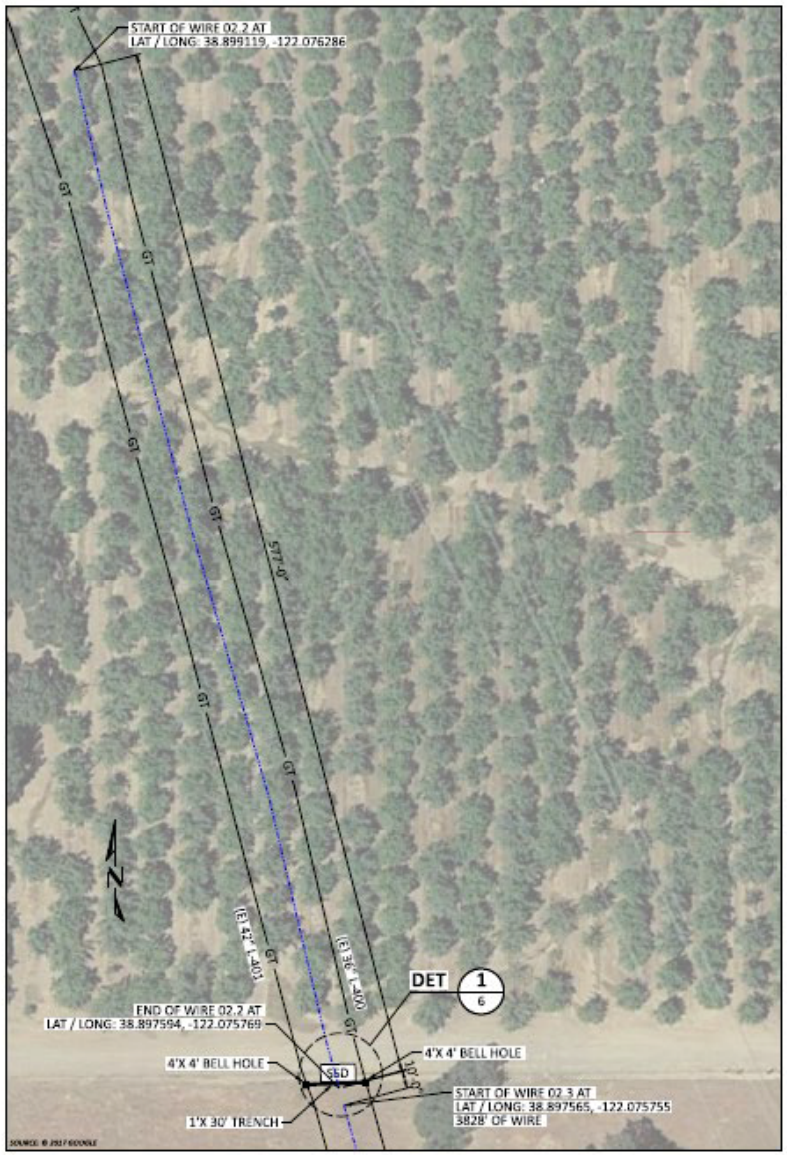


Attachment 3 – Site Plan



LOCATION B

38.897621, -122.075773
WALL MAP - N/A; PLAT - N/A; L - 400 & 401; MP - 233.10 & 233.10
(SCALE: 1" = 60')



LOCATION C

38.894174, -122.074569
WALL MAP - N/A; PLAT - N/A; L - 400 & L-401; MP - 233.35 & 233.34
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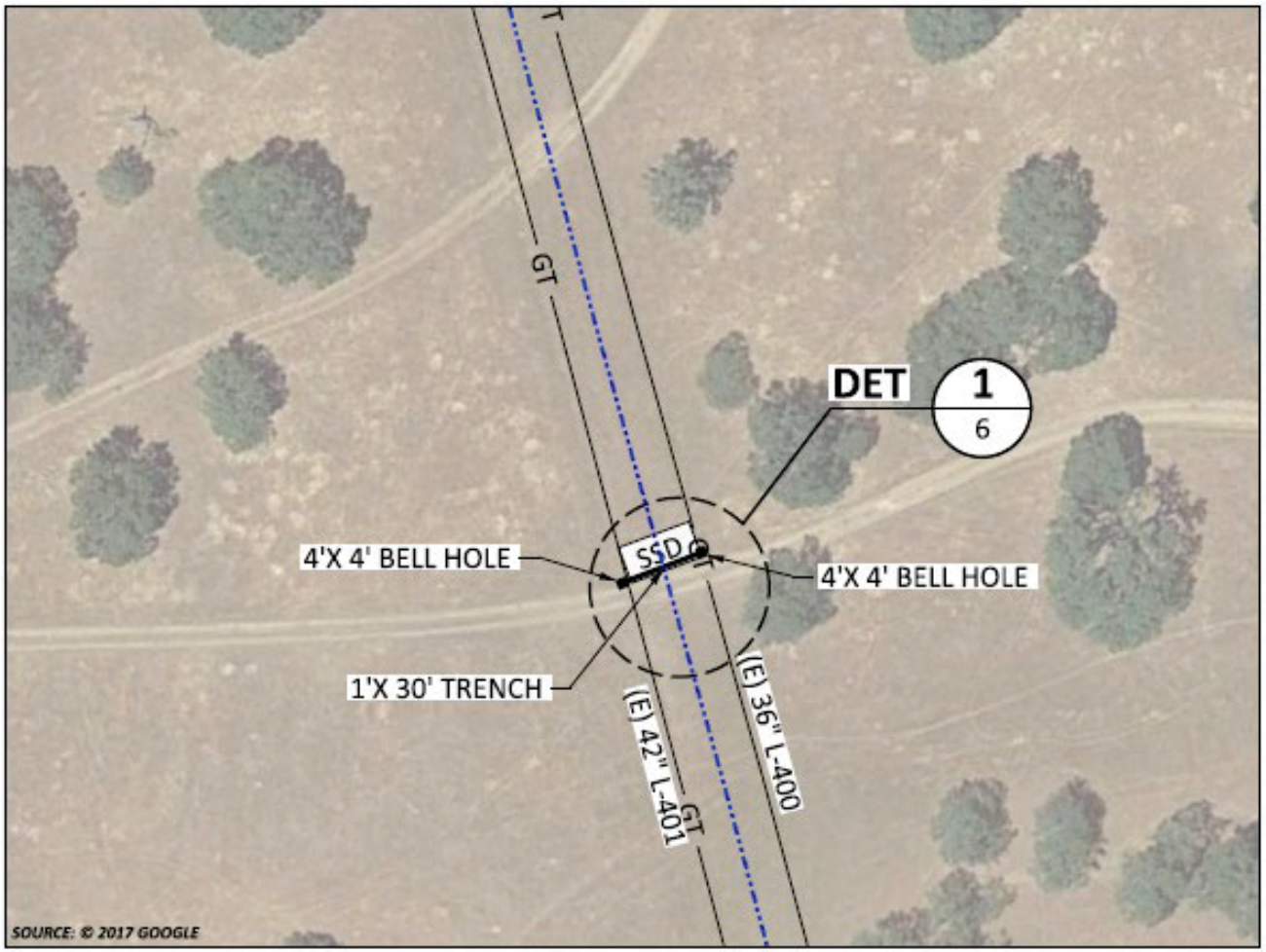

LOCATION D

38.890334, -122.073227
WALL MAP - N/A; PLAT - N/A; L - 400 & L-401; MP - 233.63 & 233.59
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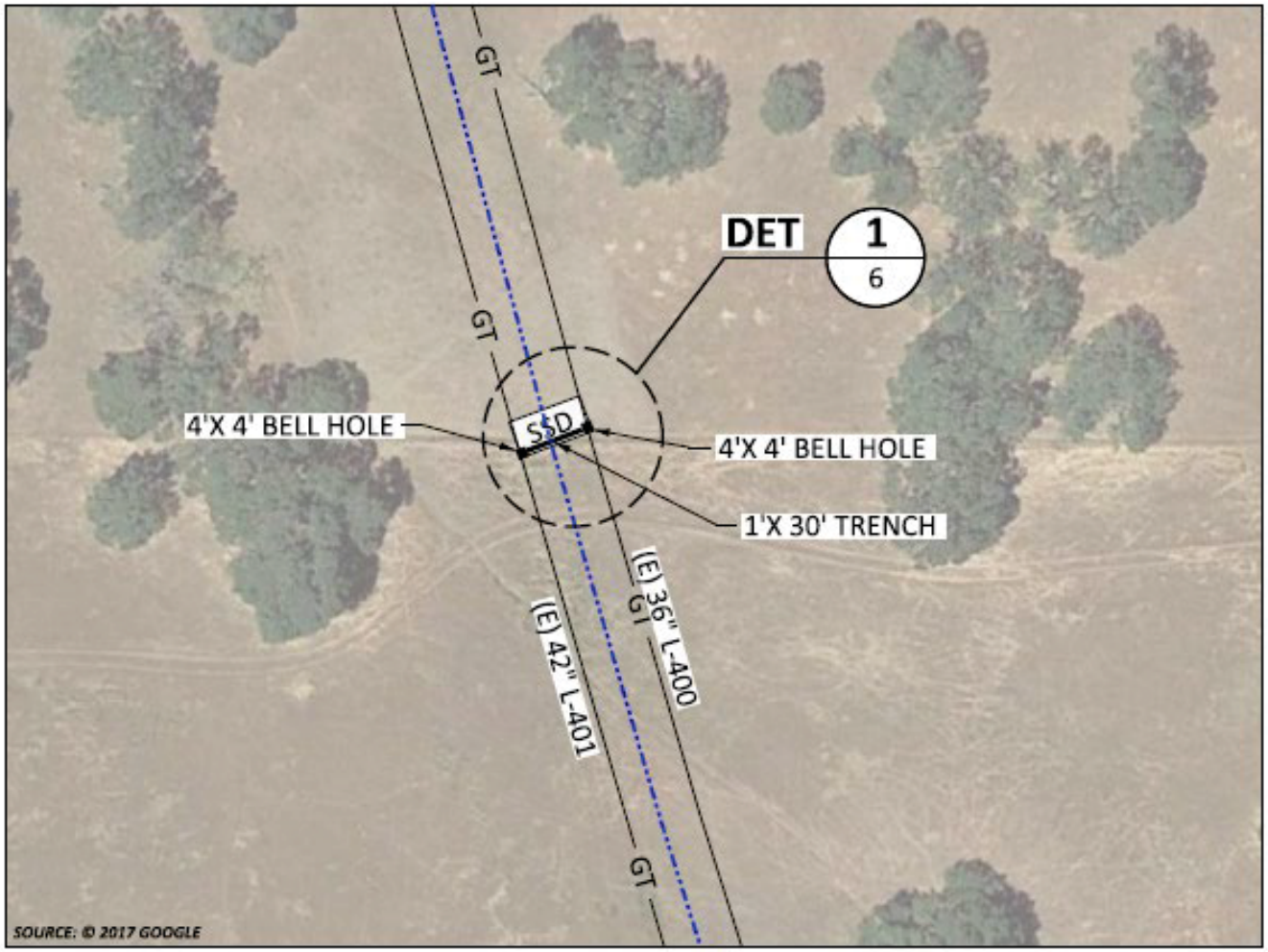

LOCATION E

38.887445, -122.072131
WALL MAP - N/A; PLAT - N/A; L - 400 & L-401; MP - 233.84 & 233.80
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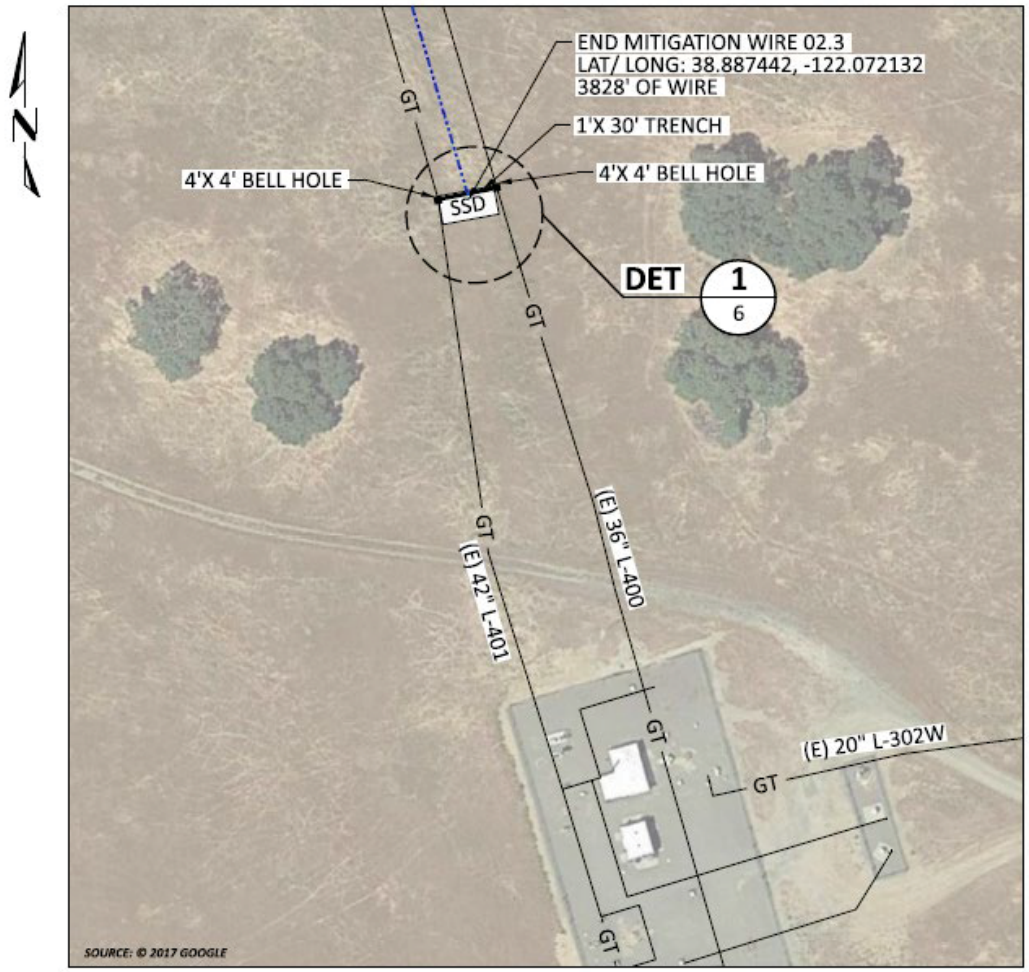

Attachment 4 – Planning Survey Report

Swaim Biological Incorporated
4435 First Street
Livermore, CA 94551

To: Marjorie Eisert
Jacobs Engineering Group Inc.

From: Eric Britt
Swaim Biological Incorporated

Date: April 12, 2022 (revised May 2, 2022)

Re: C-1637 Yolo County – Planning Level Assessment

PG&E plans to install approximately 5,100 feet of horizontal mitigation wire and five SSD cabinets west of the town of Dunnigan in Yolo County. The project, referred to as C-1637, includes an impact area of 4.15 acres and includes access routes and temporary workspaces north of PG&E's existing Buckeye Station. PG&E is seeking take coverage for the project under the Yolo Habitat Conservation Plan/Natural Community Conservation Plan (HCP/NCCP) and the Yolo Habitat Conservancy (Conservancy) considers this a public utility infrastructure operations and maintenance project, which is an HCP/NCCP covered activity.

This memorandum presents the results of a planning level assessment of the C-1637 workspace. A summary of the existing land cover within a 500-foot and ¼-mile buffer of the proposed project area and known species data from the California Natural Diversity Database (CNDDB) within 5-miles of the project area are presented in Figures 1-15. Representative site photographs are presented in Attachment 1.

Project Description

This linear project includes five work locations spanning four private parcels in Yolo County. The mitigation wire will be installed between Gas Lines 400 and 401, within PG&E's existing easement. To minimize orchard crop loss and impacts, roughly 1,275 feet of wire will be installed via horizontal directional drilling (HDD). The remaining wire will be installed via open trench. Each of the five SSD cabinets will require two 4' x 4' bell holes and a 1' by 30' trench connecting them. A bulldozer-mounted plow will be used to install the mitigation wire, placing it near the same depth of the gas lines which ranges from 3 to 6 feet. In areas where a plow is not feasible, a backhoe will be used to excavate the trenches. A backhoe will be used to dig the HDD splice/termination locations and the trenches to the SSD locations.

Staging and workspace areas will be located within the orchard at the northern end of the project and along the wire installation. In areas where PG&E's workspaces extend beyond the existing PG&E easement, a Temporary Construction Easement (TCE) will be acquired. All workspaces and staging areas will be located on private property. To access the project area, existing dirt road will be used.

Access to the project area will be from Road 84 (Wildwood Rd.) from the northeast, and from an approximately 2.8-mile existing graveled ranch road accessed from Road 8 from the south.

Methods

A desktop level assessment of the project area, including a review of modeled habitat and database query, was performed prior to the field survey. A review of the project area using the HCP/NCCP online GeoMapper tool (Yolo Habitat Conservancy 2022) identified modeled habitat for six species covered under the HCP/NCCP within the project footprint and a search of the California Natural Diversity Database (CNDDB 2022) identified records of some of the species in the project vicinity. Covered Species that were identified as having the potential to be affected by the project included the California tiger salamander (*Ambystoma californiense*; CTS, upland habitat), tricolored blackbird (*Agelaius tricolor*; TRBL foraging habitat), Swainson's hawk (*Buteo swainsoni*; SWHA, natural foraging habitat), white-tailed kite (*Elanus leucurus,* WTKI, primary foraging and nesting habitat), burrowing owl (*Athene cunicularia*; BUOW, primary habitat), and western pond turtle (*Actinemys marmorata*; WPT, nesting and overwintering habitat).

The planning survey was conducted by Conservancy-approved biologist Eric Britt and by biologist Ryan Byrnes on March 17, 2022. The biologists walked the entirety of the project footprint and adjacent habitat within a 500-foot buffer to evaluate the suitability of habitat for CTS, BUOW, and other special status wildlife species. Transects were walked in accordance with California Department of Fish and Wildlife (CDFW) guidelines for Phase II BUOW burrow surveys. Burrows suitable for use by BUOW were recorded by a hand-held GPS. The area was surveyed on foot or scanned with binoculars within a 0.25-mile buffer for potential foraging and nesting habitat suitable for use by SWHA and WTKI. Representative photos were taken during the survey and are provided in Attachment 1. Special-status species habitat and impact areas are shown in Tables 1 and 2.

Results

C-1637 Temporary Workspace

The temporary workspace is dominated by an almond orchard in its northern third, oak savanna in its middle third and annual grassland in its southern third. The areas dominated by annual grassland and oak savanna were separated by a barbed-wire fence and both areas were heavily grazed by cattle. The property on the south side (annual grassland) was un-grazed and was dominated by annual grasses.

The workspace is located approximately two miles west of U.S. Fish and Wildlife Service designated critical habitat for CTS, Unit 1, Dunnigan Creek (USFWS 2005) and eight records of CTS occur within 5.0 miles of the site (CNDDB 2022), with all but one record presumed extant. There are no records of CTS within 1.3 miles of the project site, which is the maximum distance CTS have been observed from a breeding site (Orloff 2007; CDFW

2010). An assessment conducted in 2018 for PG&E of the area surrounding Buckeye Station and eight other work areas identified approximately 30 ponds within 1.24 miles of the project and concluded that most of them were suitable for CTS breeding (Stantec 2018). The assessment concluded that there was potential for CTS to occur within the project area due to the presence of small mammal burrows, potential breeding sites, and known database records of CTS in the surrounding area.

During the field survey, no suitable aquatic breeding habitat for CTS was observed within 500 feet of the project area, however potentially suitable aquatic breeding habitat is present within 1.3 miles. Suitable aquatic habitat observed during the survey included an agricultural stock pond located within the almond orchard just south of the northern terminus of the project alignment, and a second stock pond approximately 0.21 mile west of the project area also may be suitable to support CTS. An examination of past aerial imagery indicated that it retained water until early to mid-summer during most years (Google Earth 2022). A small dried seasonal depression was observed approximately 400 ft. west of the project alignment within the oak savanna area that could be suitable to support CTS breeding during some years. Suitable upland habitat and a high density of small mammal burrows were found within 500 feet of the alignment south of the agricultural area.

No ground squirrel activity was observed in the almond orchard surrounding the northern third of the project area and burrows suitable for use by BUOW were limited. Only two burrows suitable for use by BUOW were found within the survey area. One was located in the oak savanna area approximately 390 feet to the west of the project alignment, and the other was within the staging area at the north end of the project within the almond orchard. No evidence of use by BUOW (feathers, pellets, whitewash, etc.) was observed during the field survey.

One stick nest suitable for use by raptors was observed in a steel electrical tower located within the almond orchard (Figure 1). The nest was located approximately 78 feet east of the gas line and 200 feet north of an HDD work and staging area. This nest was composed partly of human-made items and is unlikely to be used by SWHA. A raven was observed on the tower at the time of the survey. The nearest SWHA nest record is located approximately 2.5 miles to the southeast (CNDDB 2022). All five nesting records within five miles of the project area are associated with row crop or orchards immediately adjacent to the nest site (CNDDB 2022).

Habitat suitable for nesting by TRBL was absent from the project footprint and from a buffer of at least 1,300 feet. The HCP/NCCP defines tricolored blackbird nesting habitat as containing one of five vegetation types which include Alkali Bulrush, Bulrush – Cattail Wetland Alliance, Bulrush – Cattail Fresh Water Marsh NFD Super Alliance, Blackberry NFD Super Alliance, or Undifferentiated Riparian Bramble and Other (ICF 2018-Appendix A). These vegetation types were absent from the 0.25-mile buffer around the project area (Figure 1). The CNDDB contained one nesting record of TRBL within eight miles of the project which consisted of a nesting colony located about three miles to the northeast (CNDDB 2022). There is some potential for TRBL to forage in the project area

and vicinity, and the project will impact modeled TRBL foraging habitat. However, no nesting habitat will be impacted, and nesting by TRBL within 1,300 feet of the project is not expected.

The HCP/NCCP land cover types found at this location consist of Grassland – California Annual Grassland Alliance, Valley Oak Woodland – Valley Oak Alliance, Fresh Emergent Wetland – Undetermined Alliance/Managed, Other Agriculture – Deciduous Fruit/Nuts, Dry Creek, Scrub and Barren and Developed – Barren-Anthropogenic. Construction activities will temporarily affect 1.18 acres of Grassland, 2.76 acres of Blue Oak Woodland, 0.06 acres of Semiagricultural, and 0.15 acres of Other Agriculture.

C-1637 Access Road

Access to the C-1637 workspace will make use of existing roads used for agricultural use. No impacts to habitat for Covered Species are anticipated to facilitate project access.

Table 1. Special-Status Species Modeled Habitat Found Within Project Area.

Species (Buffer)	Habitat Type	Total Area within Buffer (Acres)	Total Area of Impacts (Acres)
CTS (500 feet)	Aquatic	0.00	0.00
	Upland	111.90	3.94
SWHA (1/4 mile)	Foraging and nesting	190.59	1.18
TRBL (1,300 feet)	Foraging	190.59	1.18
BUOW (500 feet)	Foraging and nesting	2.45	0.20
WPT (500 feet)	Nesting and overwintering	68.30	2.05

Table 2. Project Impacts by Land Cover Types.

Land Cover Types	Area Within Workspace (Acres)	Area within 500 ft. (Acres)	Area within 0.25 miles (Acres)	Total Area of Impacts (Acres)
Annual Grassland	1.18	38.38	187.00	1.18
Barren	0.00	1.47	17.06	0.00
Blue Oak Woodland	2.76	70.20	158.60	2.76
Fresh Emergent Wetland	0.00	0.00	0.07	0.00
Lacustrine and Riverine	0.00	0.00	0.66	0.00
Other Agriculture	0.15	38.56	97.57	0.15
Semiagricultural	0.06	1.01	5.95	0.06
Valley Foothill Riparian	0.00	0.00	1.89	0.00

Conclusion

A desktop level review identified the potential for six HCP/NCCP Covered Species to occur in the C-1637 project area. These included the CTS, TRBL, SWHA, WTKI, BUOW and WPT, and based on the planning level survey, there is some potential for all of these species to occur in the project area. Although TRBL could occur in the project area as foragers, nesting by TRBL within 1,300 feet of the project area is not expected. Implementing the avoidance and minimization measures (AMMs) listed below including conducting preconstruction nesting bird surveys, will help to further reduce or eliminate the risk of impacts to this and other species. Due to the presence of friable soils and sun exposure, there is potential for the WPT to use the project area for nesting, however the distance of the project alignment of at least 0.2 mile from suitable aquatic habitat is expected to reduce the potential for WPT to nest in the project footprint. The implementation of AMM 14 will further help to minimize the potential for impacts to the WPT and its nests.

Approximately 1.18 acres of Grassland, 2.76 acres of Blue Oak Woodland, 0.06 acre of Semiagricultural, and 0.15 acres of Other Agricultural land will be temporarily impacted as a result of project implementation. The land cover types that will be affected by the project area shown below in Figures 1 and 2.

Literature Cited

CDFW. 2010. California Department of Fish and Wildlife, State of California. A Status Review of the California Tiger Salamander (*Ambystoma californiense*). Report to the Fish and Game Commission.

California Natural Diversity Database. 2022. [CNDDB] GIS dataset for March 2022.

Google Earth. 20222 Historical Imagery data layer. [Online] Available at: http://www.google.com/earth/index.html [Accessed March 22, 2022].

ICF. 2018. Yolo Habitat Conservation Plan/Natural Community Conservation Plan, Volume 1. Final. Prepared for Yolo Habitat Conservancy.

Orloff, S. 2007. Migratory movements of California tiger salamander in upland habitat – a five-year study (Pittsburg, California). Ibis Environmental, Inc., prepared for Bailey Estates LLC. Dated May.

Stantec. 2018. California Tiger Salamander Site Assessment for the I-236B Buckeye Station Expansion Project. Technical memorandum to Rick Williams, Pacific Gas and Electric Company.

U.S. Fish and Wildlife Service. 2005. [USFWS]. Endangered and Threatened Wildlife and Plants; Designation of Critical Habitat for the California Tiger Salamander, Central Population; Final Rule. 49380-49458.

Yolo Habitat Conservancy. 2022. GeoMapper online web application. Query for PG&E's C-1637 project area. Available online at: https://yolo.maps.arcgis.com/apps/webappviewer/index.html. Accessed March 18, 2022.

The following Yolo HCP/NCCP AMMs are proposed for minimizing impacts to these species:

AMM1, Establish Buffers

AMM3, Confine and Delineate Work Area

AMM4, Cover Trenches and Holes During Construction and Maintenance

AMM5, Control Fugitive Dust

AMM6, Conduct Worker Training

AMM7, Control Night-Time Lighting of Project Construction Sites

AMM8, Avoid and Minimize Effects of Construction Staging Areas and Temporary Work Areas

AMM9, Establish Buffers Around Sensitive Natural Communities

AMM13, Minimize Take and Adverse Effects on Habitat of California Tiger Salamander

AMM14, Minimize Take and Adverse Effects on Habitat of Western Pond Turtle

AMM16, Swainson's hawk and white-tailed kite (This AMM does not apply if the construction period is between September 1 and March 14)

AMM18, Minimize Take and Adverse Effects on Western Burrowing Owl

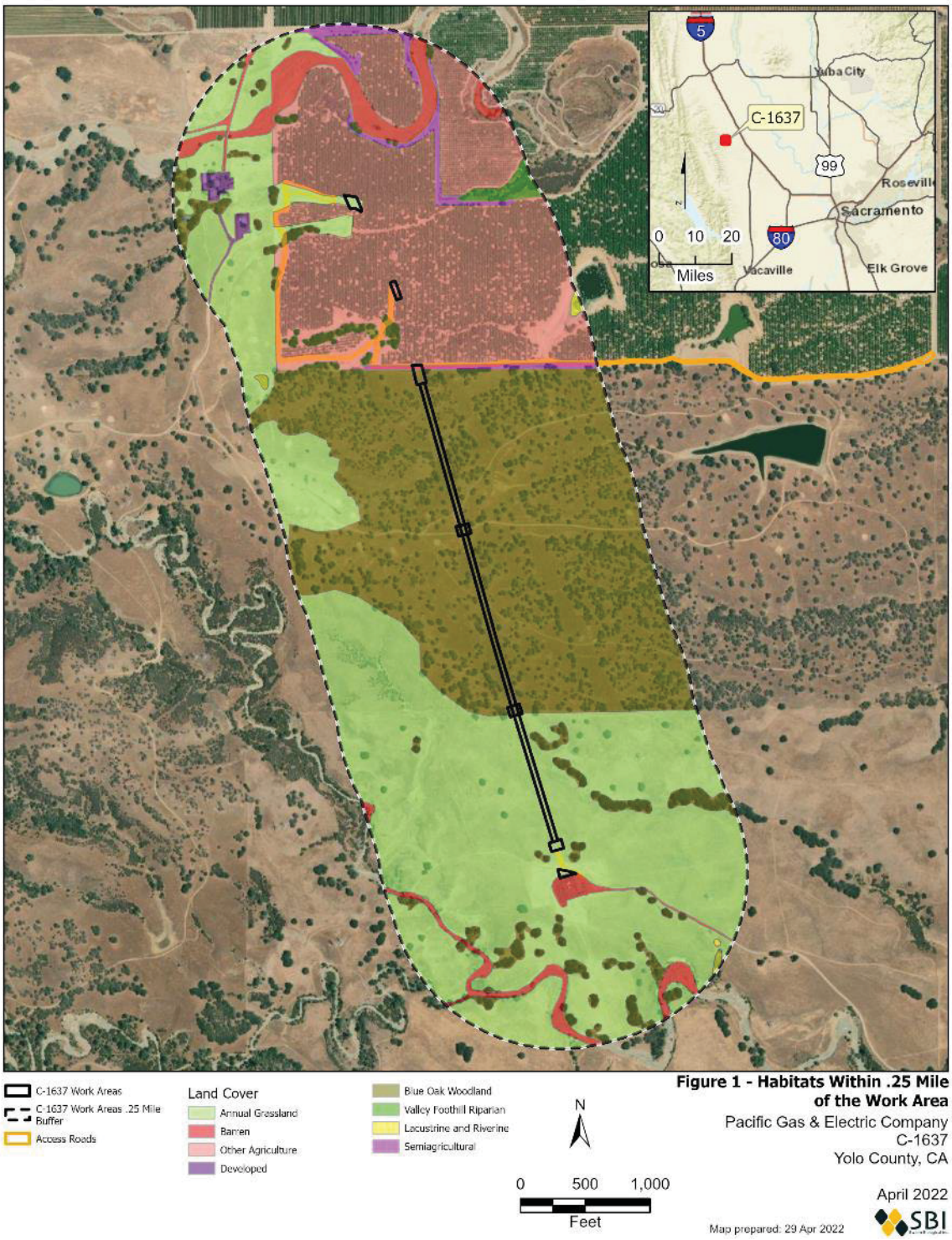

Figure 1. Land cover types within 0.25-mile of project footprint.

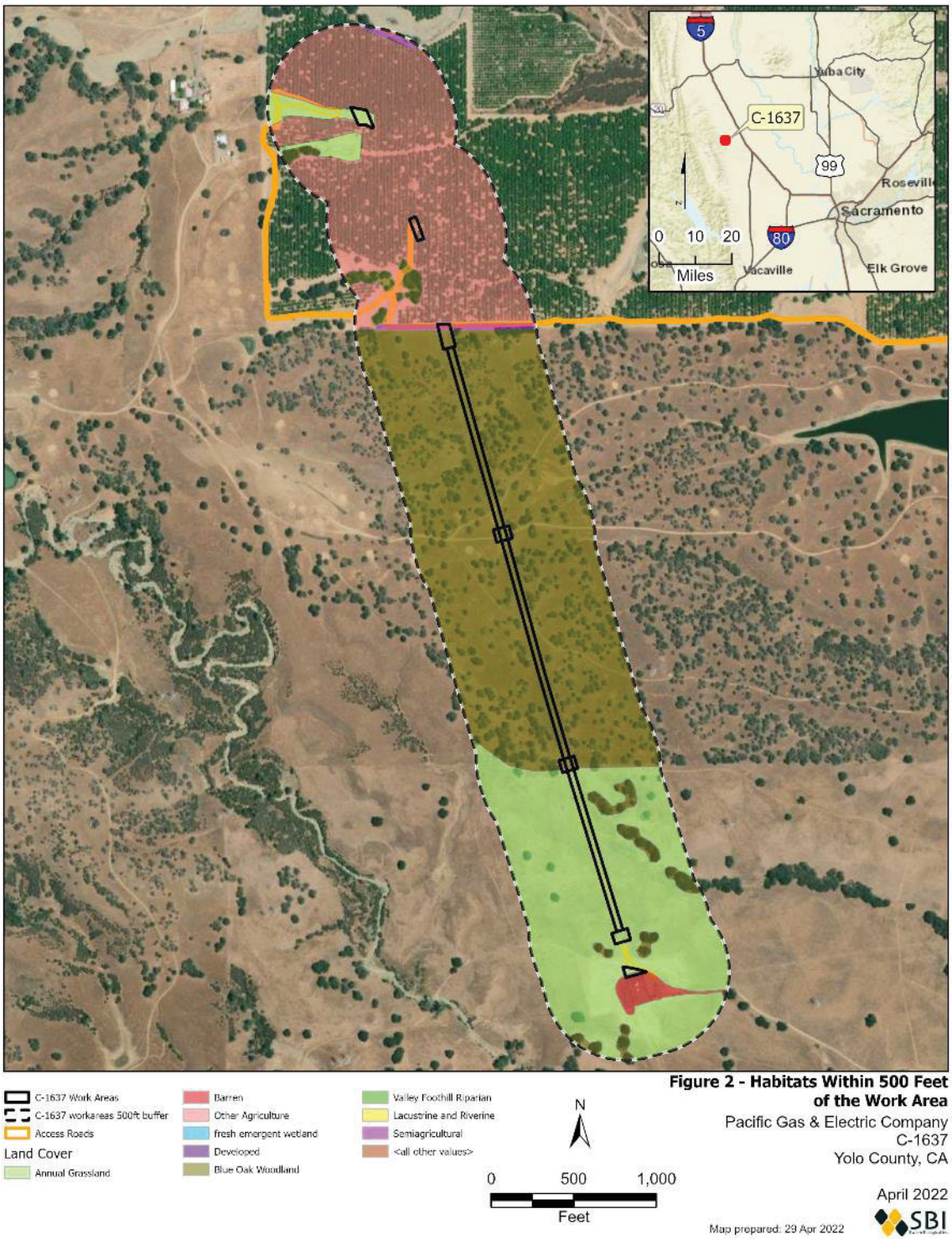

Figure 2. Land cover types within 500-feet of project footprint.

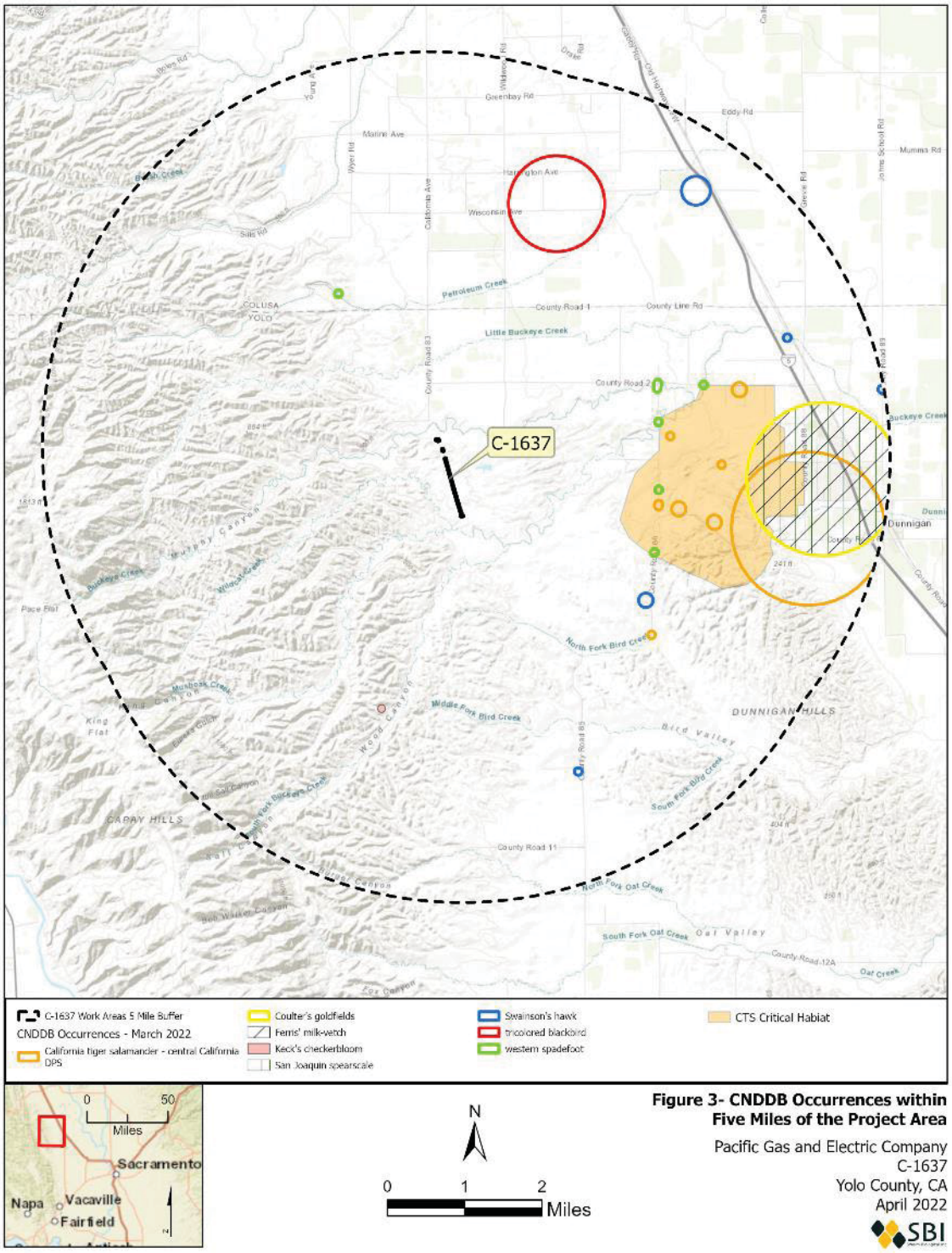

Figure 3. CNDDB Occurrences within 5-miles of project footprint.

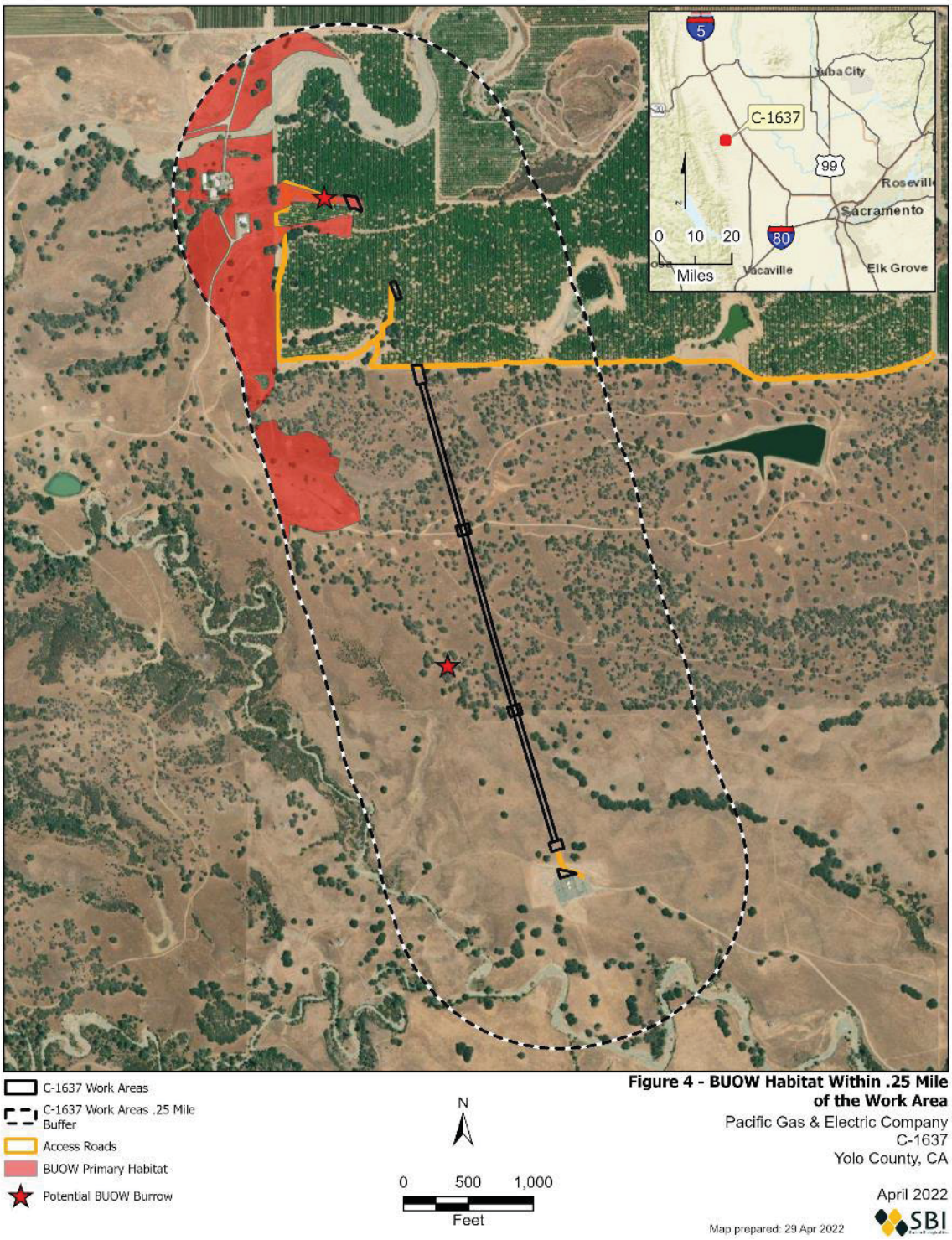

Figure 4. Modeled burrowing owl habitat within 0.25 mile of project footprint.

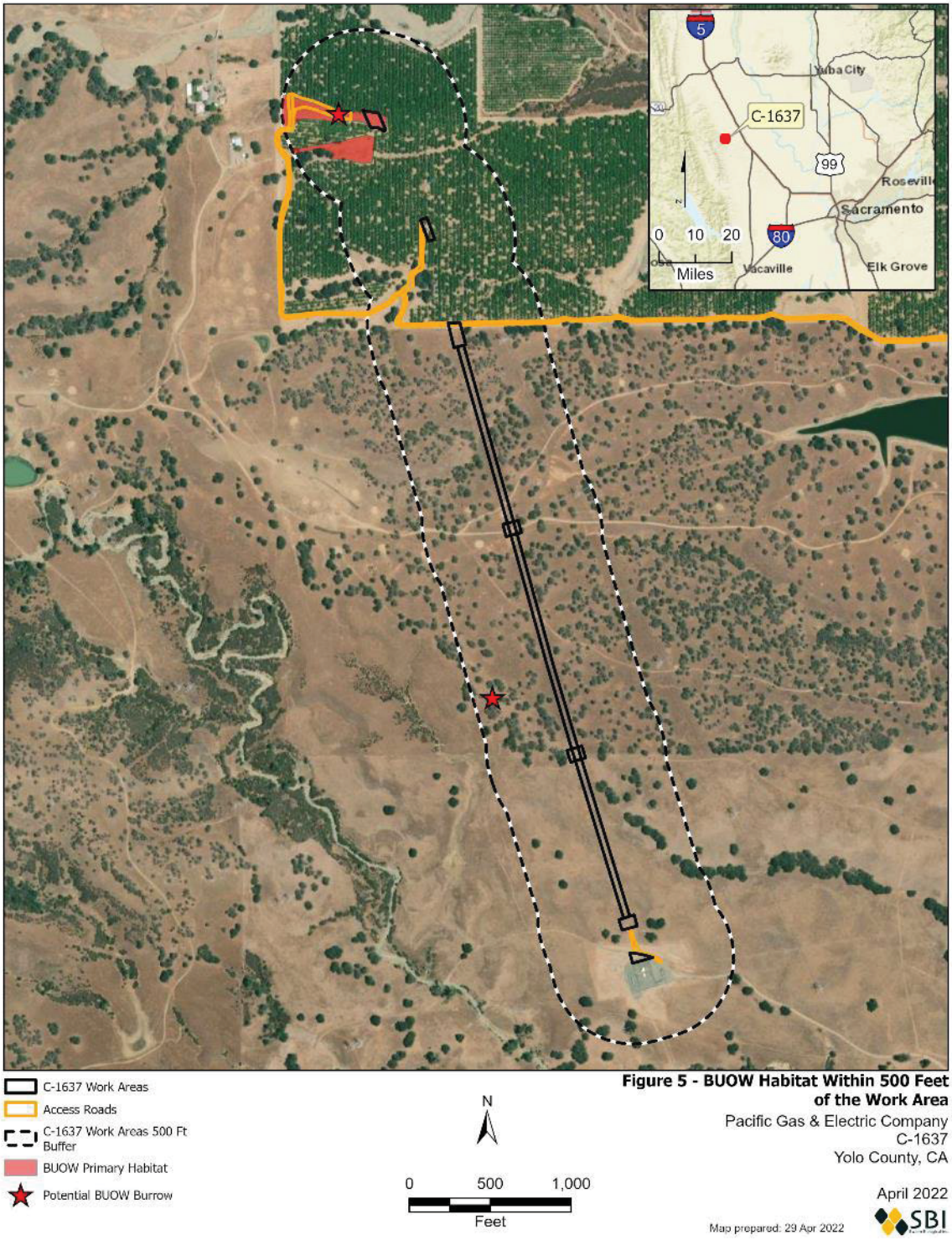

Figure 5. Modeled burrowing owl habitat within 500 feet of project footprint.

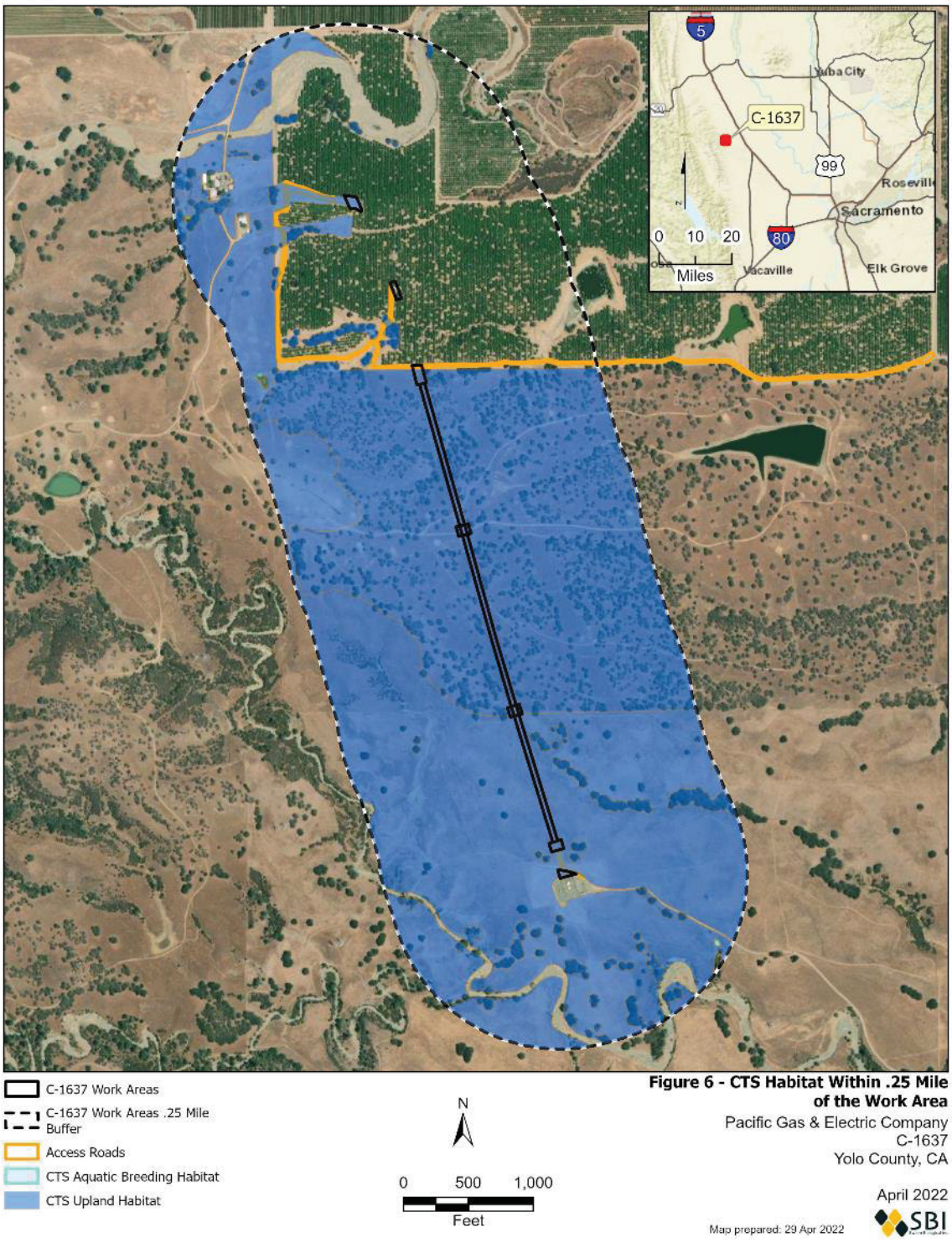

Figure 6. Modeled California tiger salamander habitat within 0.25 mile of project footprint.

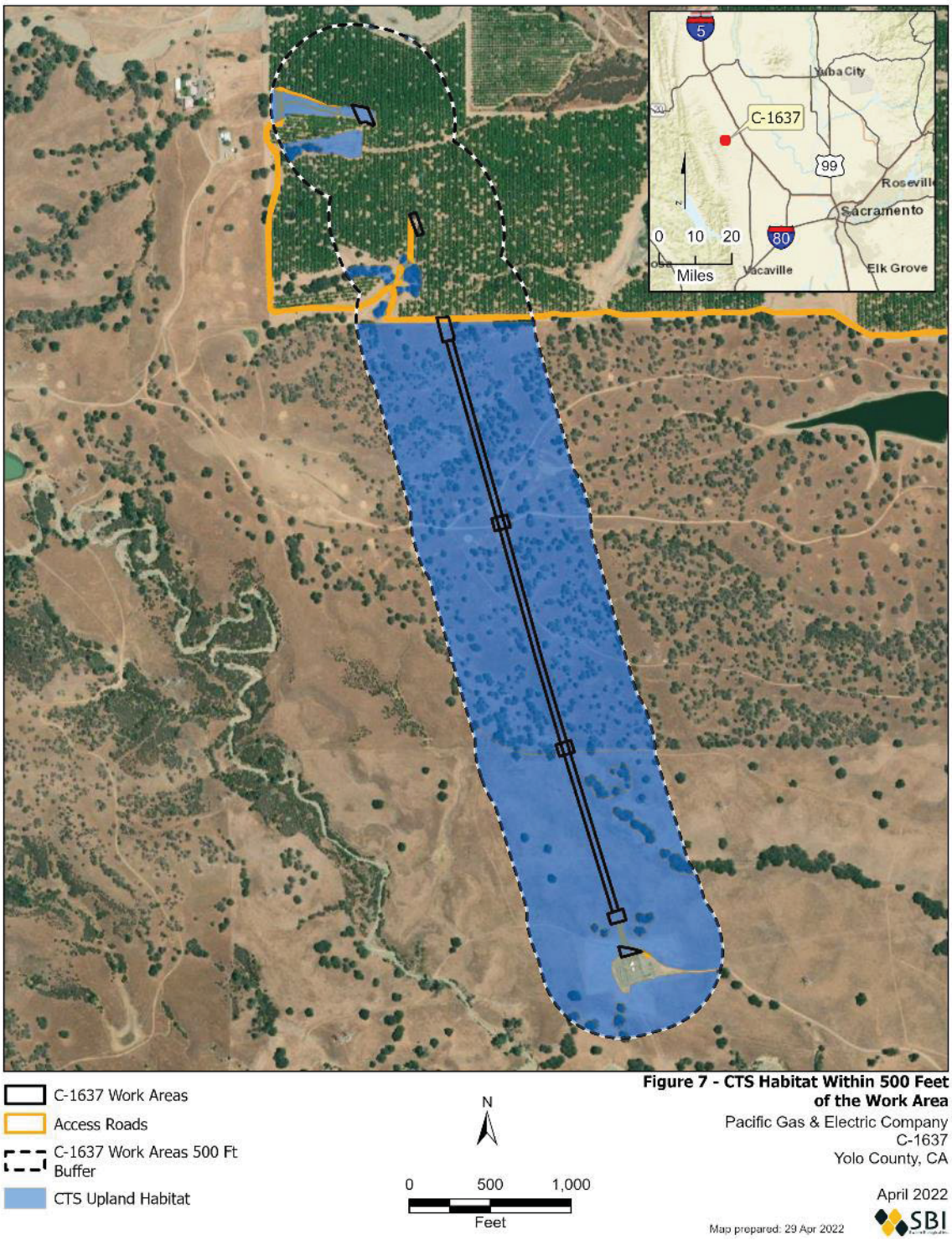

Figure 7. Modeled California tiger salamander habitat within 500 feet of project footprint.

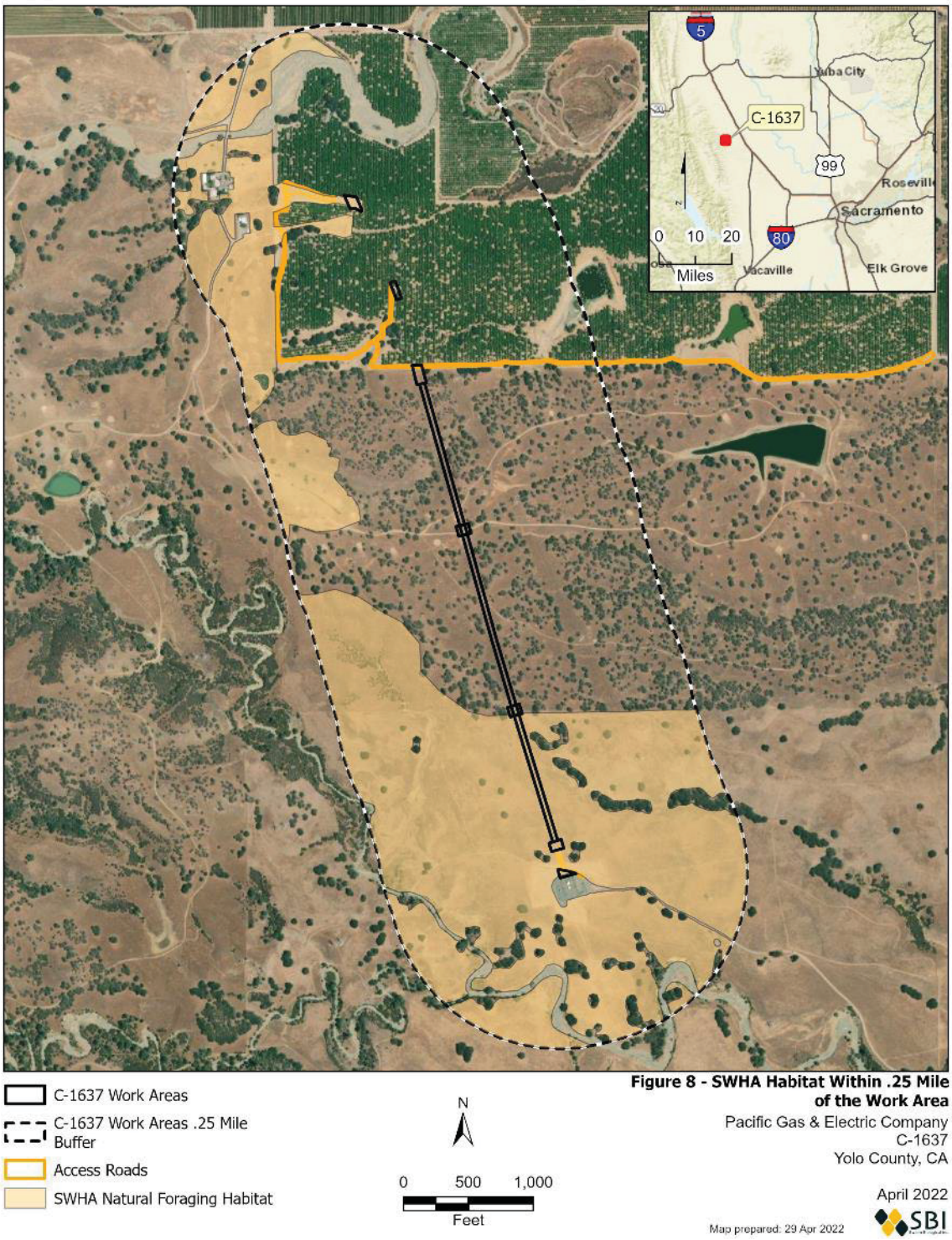

Figure 8. Modeled Swainson's hawk habitat within 0.25 mile of project footprint.

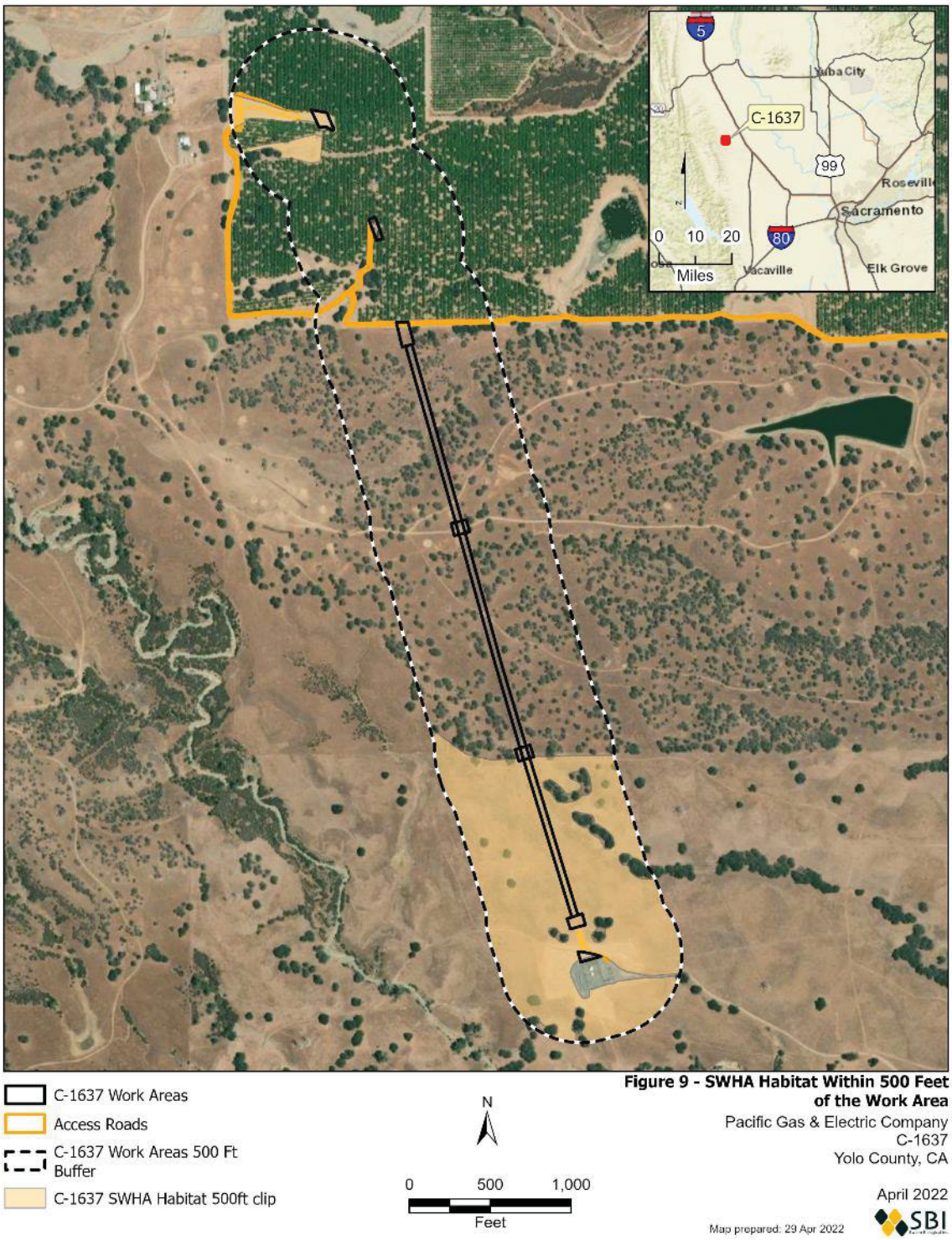

Figure 9. Modeled Swainson's hawk habitat within 500 feet of project footprint.

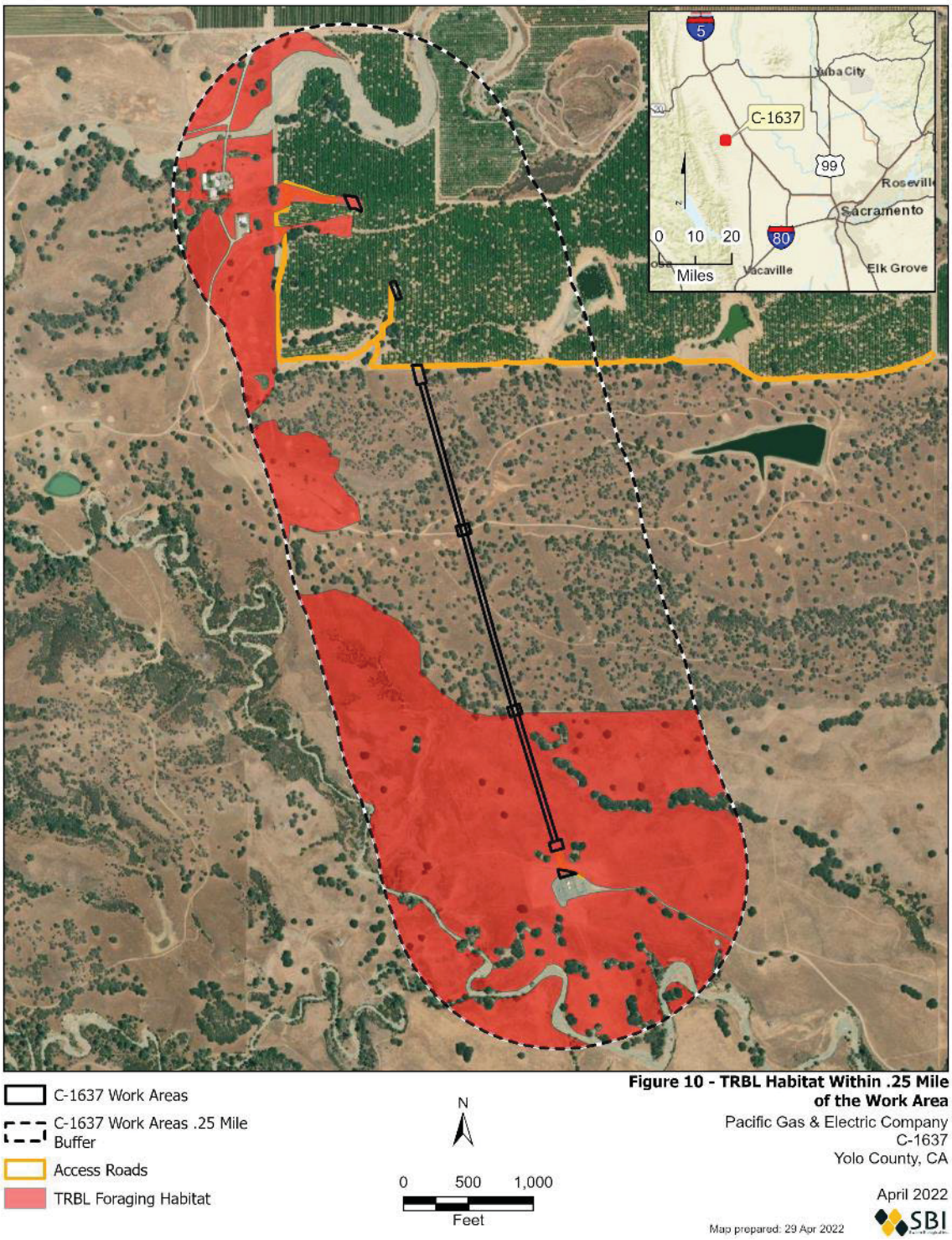

Figure 10. Modeled tricolored blackbird habitat within 0.25 mile of project footprint.

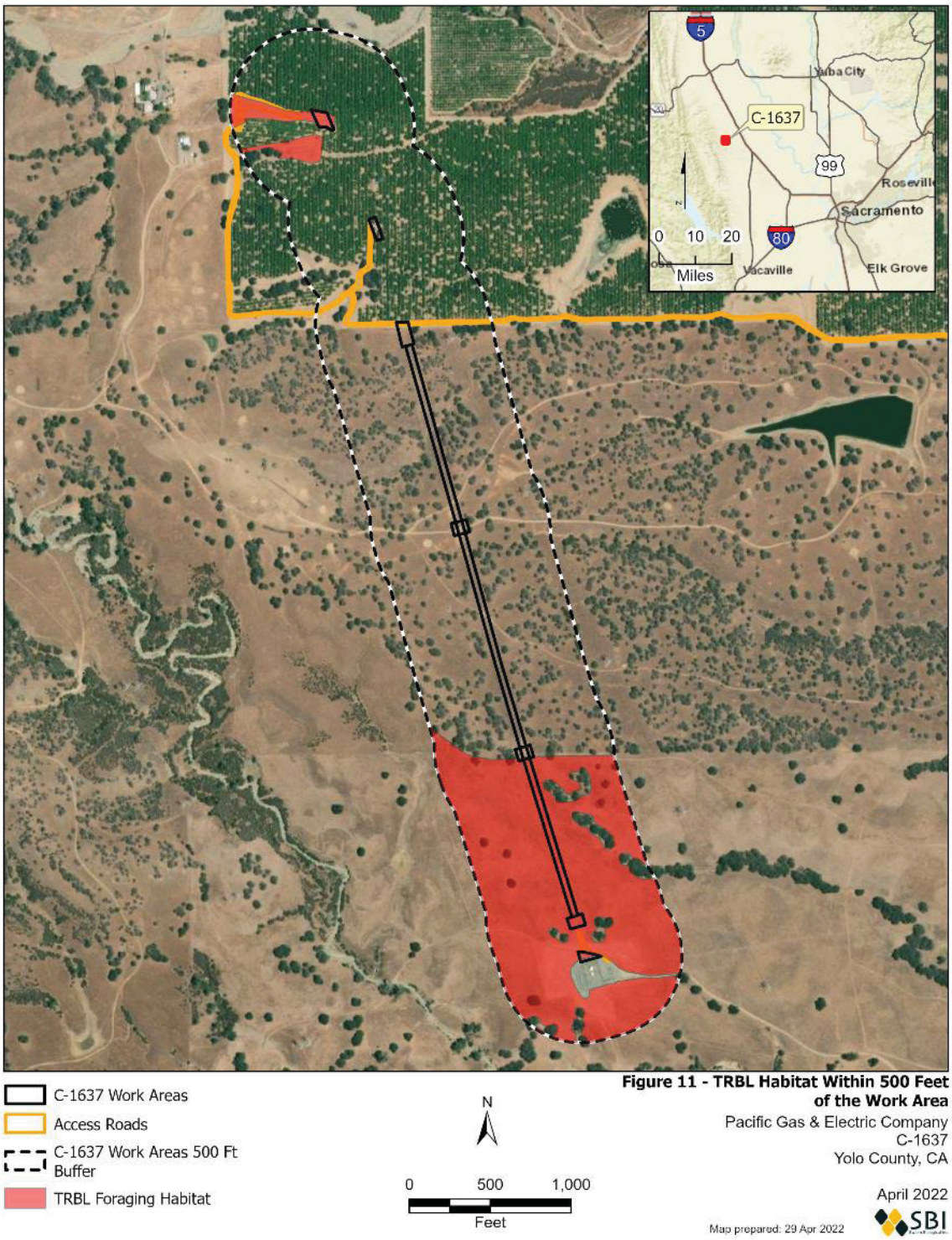

Figure 11. Modeled tricolored blackbird habitat within 500 feet of project footprint.

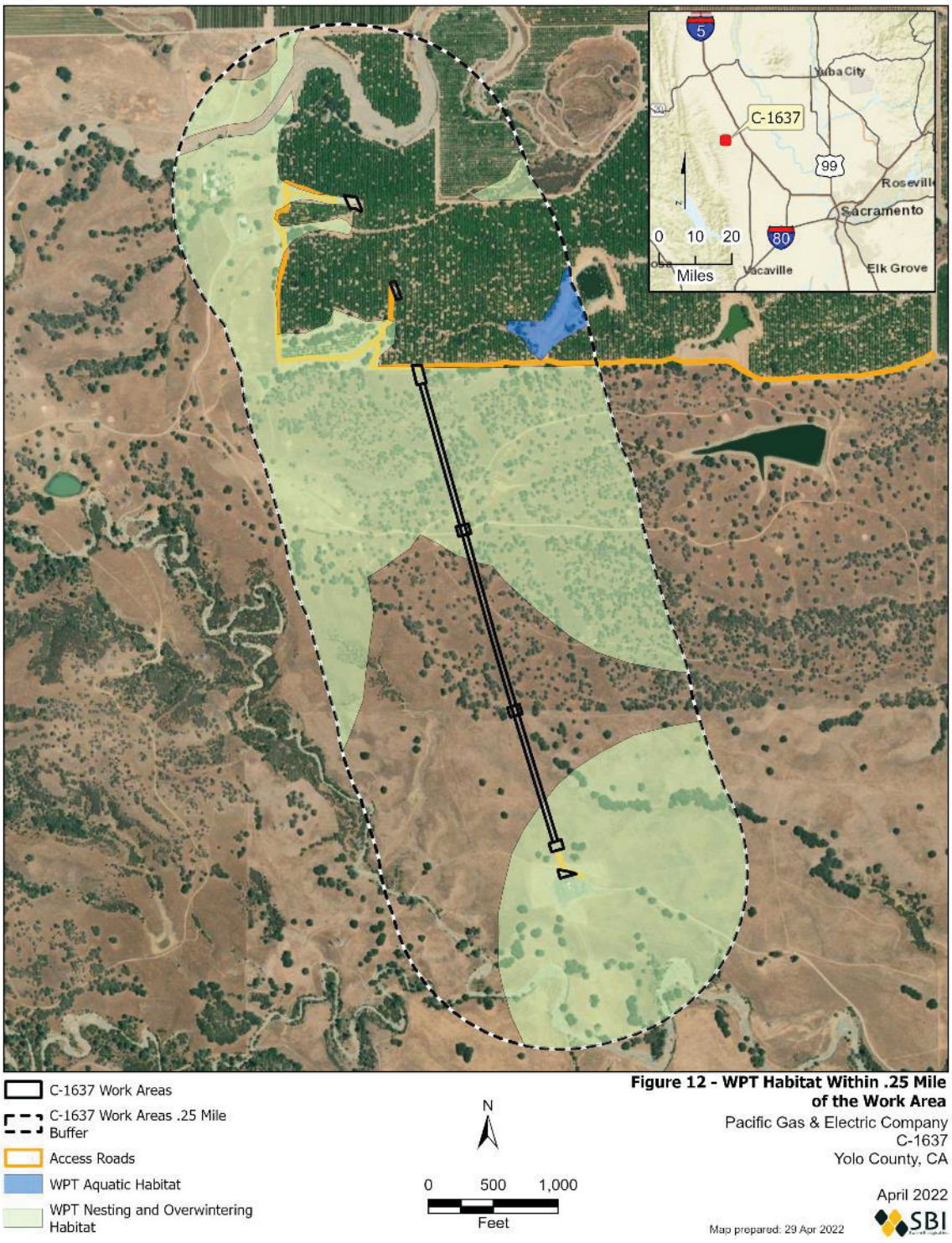

Figure 12. Modeled western pond turtle habitat within 0.25 mile of project footprint.

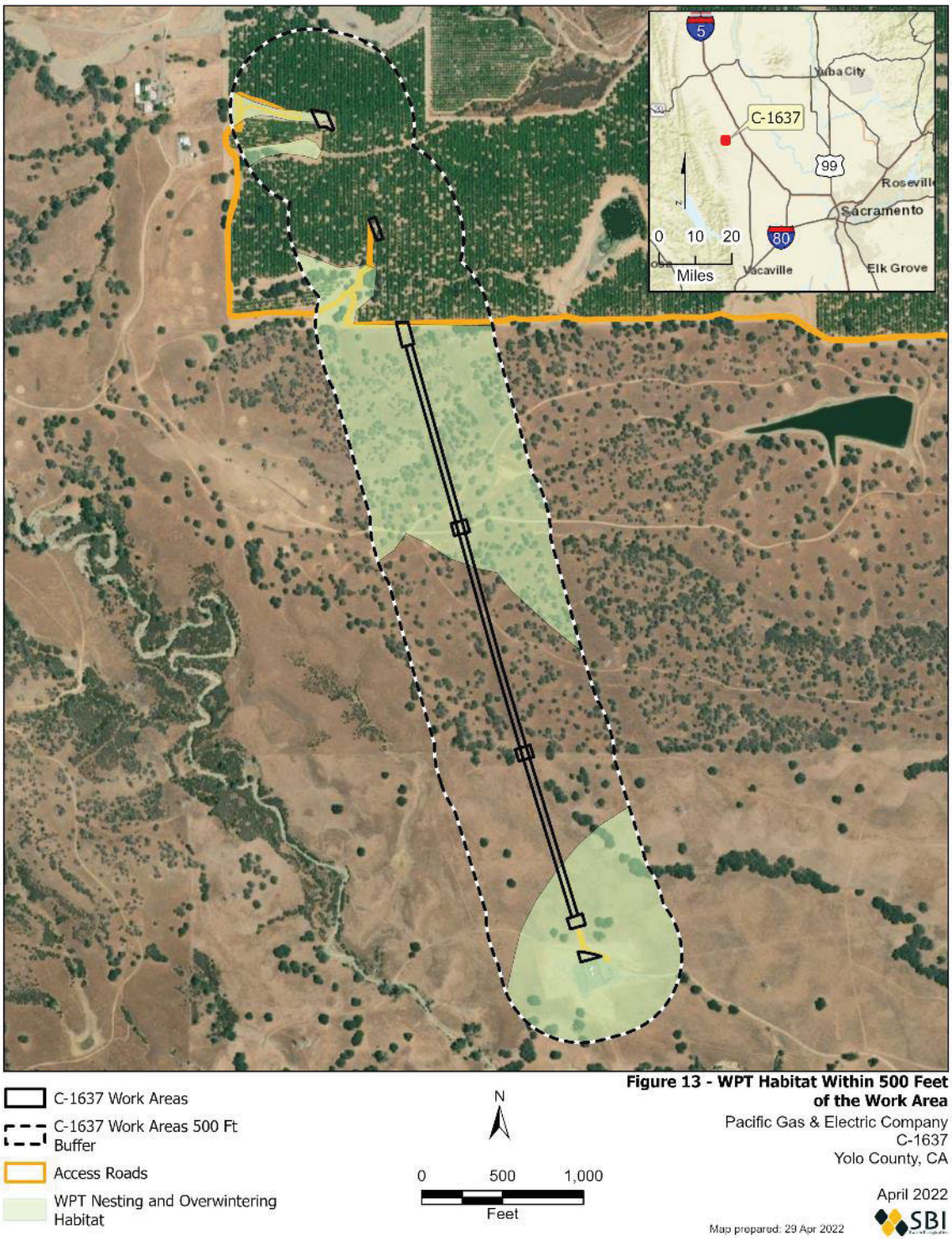

Figure 12. Modeled western pond turtle habitat within 500 feet of project footprint.

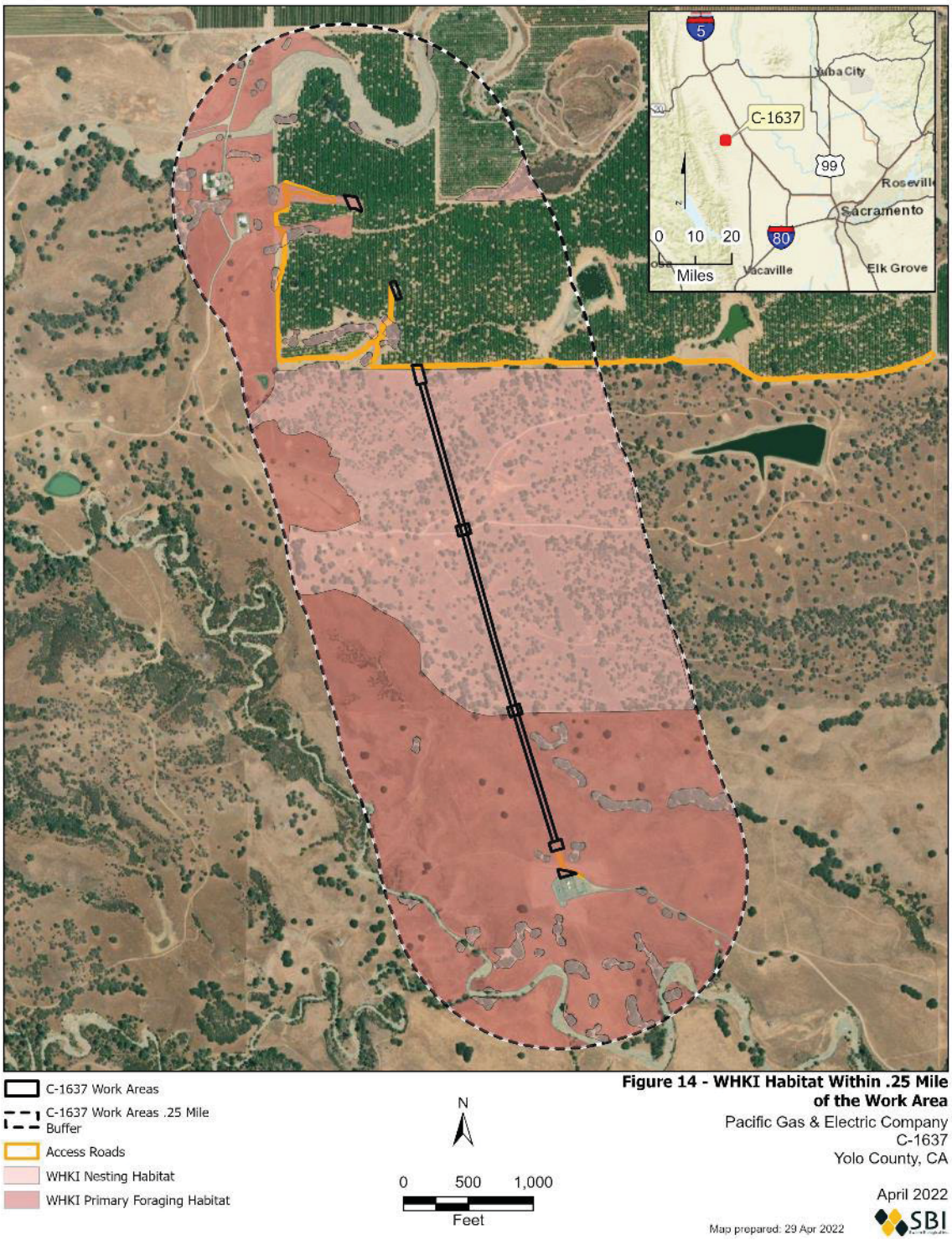

Figure 14. Modeled white-tailed kite habitat within0.25-mile of project footprint.

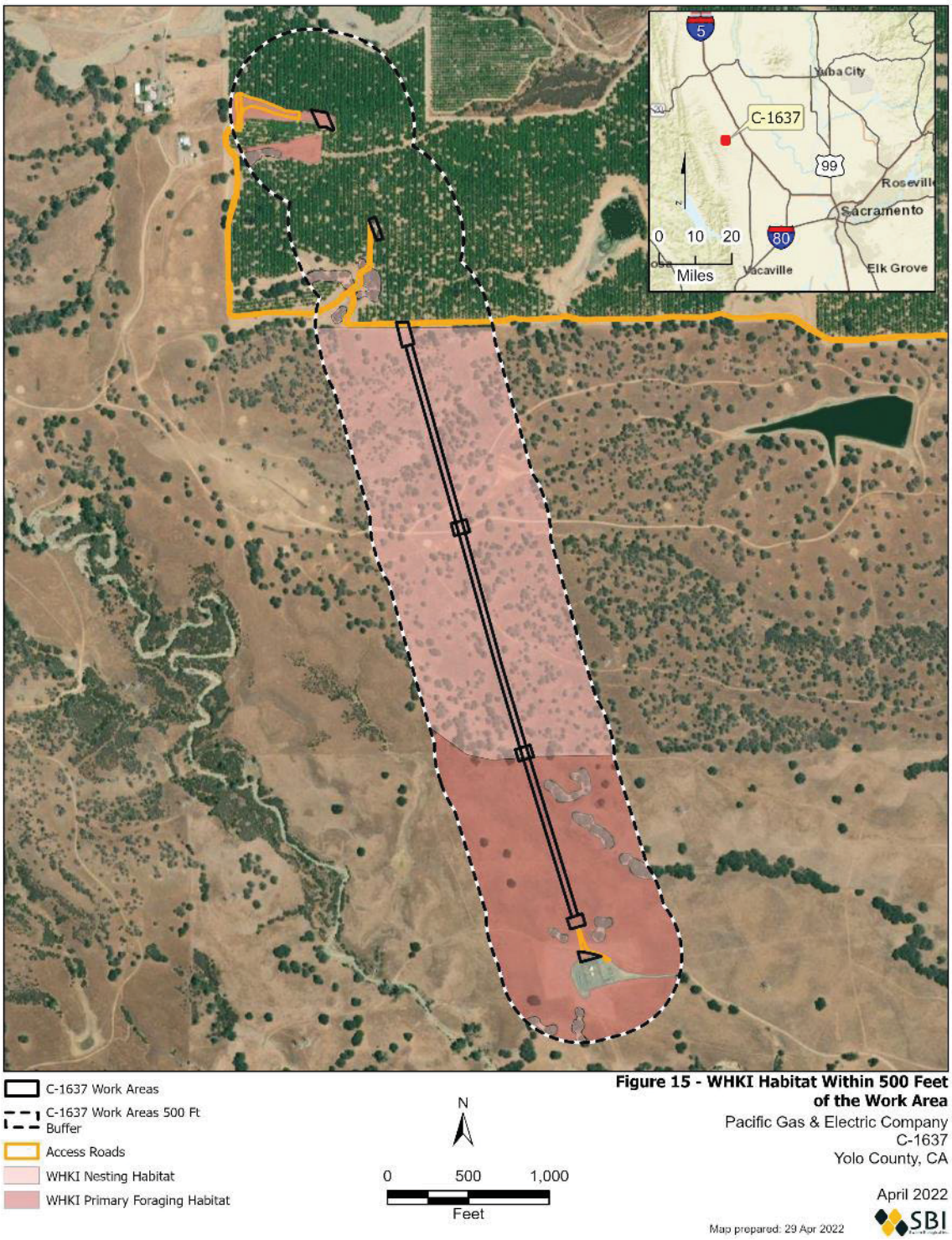

Figure 15. Modeled white-tailed kite habitat within 500 feet of project footprint.

Attachment 1 – Representative Site Photos

Photo 1: Wire 02.1 Start location in almond orchard. Taken facing east.

Photo 2: Embankment near Wire 02.1 Start work area where potential BUOW burrow was observed during survey. Taken facing southeast.

Photo 3: Fresh emergent wetland stock pond within almond orchard agricultural area, adjacent to project area. Taken facing south.

Photo 4: Inactive stick nest located in electrical tower near Wire 02.1 work area, presumed raven nest. Taken facing north.

Photo 5: Burrow cluster adjacent to barbed wire fence line separating oak savanna and annual grassland. Taken facing west.

Photo 6: Burrow located within oak savanna within 10 feet of project footprint. Taken facing west.

Photo 7: Center of project alignment at northern end of Oak Savanna. Taken facing north.

Photo 8: Center of project alignment at southern end of annual grassland. Taken facing north.

Attachment 5 – Photographs of Temporary Impact Areas

Please see Attachment 4 (Planning Level Survey Report) for photographs of the project locations and temporary impact areas.

Attachment 6 – Documentation if Land is Offered in Lieu of Fees

Not applicable to this application.

Attachment 7 – Covered Species Planning Survey Reports

Species-specific surveys were not conducted, so presence is assumed for California tiger salamander, Swainson's hawk, white-tailed kite, burrowing owl, and Western pond turtle. The planning level survey encompassed the entirety of the project footprint and adjacent habitat within a 500-foot buffer to evaluate the suitability of habitat for California tiger salamander and burrowing owl. Transects were walked in accordance with California Department of Fish and Wildlife (CDFW) guidelines for Phase II burrowing owl surveys. The area was surveyed on foot or scanned with binoculars within a 0.25-mile buffer for potential foraging and nesting habitat suitable for use by Swainson's hawk and white-tailed kite.

Preconstruction surveys to determine presence/absence will be conducted and buffers and timing restrictions will apply to the project per the applicable Yolo HCP/NCCP AMMs.

Attachment 8 – Unavoidable Impacts on Covered Species

Please see Attachment 4 (Planning Level and Survey Report) for maps and summary of impacts to HCP/NCCP land cover habitats.

Attachment 9 –Description of Compliance with Avoidance and Minimization Measures

PG&E will incorporate avoidance and minimization measures and compensatory mitigation measures to avoid, minimize, and mitigate impacts to covered species in the Project area. PG&E's overarching strategy is to avoid and minimize impacts to covered species and their suitable habitat to the maximum extent possible by following Yolo County HCP/NCCP avoidance and minimization measures (AMMs), construction site best management practices (BMPs), and implementation of a Storm Water Pollution Prevention Plan (SWPPP).

The following AMMs will apply to the C-1637 project:

AMM1 - Establish Buffers. PG&E will design projects to avoid and minimize direct and indirect effects of permanent development on the sensitive natural communities and covered species habitat by providing buffers, as stipulated in the relevant sensitive natural community AMMs and covered species AMMs.

AMM3 - Confine and Delineate Work Area. Where natural communities and covered species habitat are present, workers will confine land clearing to the minimum area necessary to facilitate construction activities. Workers will restrict movement of heavy equipment to and from the project site to established roadways to minimize natural community and covered species habitat disturbance. PG&E will clearly identify boundaries of work areas using temporary fencing or equivalent and will identify areas designated as environmentally sensitive. All construction vehicles, other equipment, and personnel will avoid these designated areas.

AMM4 – Cover Trenches and Holes during Construction and Maintenance. To prevent injury and mortality of giant garter snake, western pond turtle, and California tiger salamander, workers will cover open trenches and holes associated with implementation of covered activities that affect habitat for these species or design the trenches and holes with escape ramps that can be used during non-working hours. The construction contractor will inspect open trenches and holes prior to filling and contact a qualified biologist to remove or release any trapped wildlife found in the trenches or holes.

AMM5 - Control Fugitive Dust. Workers will minimize the spread of dust from work sites to natural communities or covered species habitats on adjacent lands.

AMM6 - Conduct Worker Training. All construction personnel will participate in a worker environmental training program approved/authorized by the Conservancy and administered by a qualified biologist. The training will provide education regarding sensitive natural communities and covered species and their habitats, the need to avoid adverse effects, state and federal protection, and the legal implications of violating the FESA and NCCPA Permits. A pre-recorded video presentation by a qualified biologist shown to construction personnel may fulfill the training requirement.

AMM7 - Control Nighttime Lighting of Project Construction Sites. Workers will direct all lights for nighttime lighting of project construction sites into the project construction area and minimize the lighting of natural habitat areas adjacent to the project construction area.

AMM8 - Avoid and Minimize Effects of Construction Staging Areas and Temporary Work Areas. PG&E should locate construction staging and other temporary work areas for covered activities in areas that will ultimately be a part of the permanent project development footprint. If construction staging and other temporary work areas must be located outside of permanent project footprints, they will be located either in areas that do not support habitat for covered species or are easily restored to prior or

improved ecological functions (e.g., grassland and agricultural land). Construction staging and other temporary work areas located outside of project footprints will be sited in areas that avoid adverse effects on the following:

- Serpentine, valley oak woodland, alkali prairie, vernal pool complex, valley foothill riparian, and fresh emergent wetland land cover types.
- Occupied western burrowing owl burrows.
- Nest sites for covered bird species and all raptors, including noncovered raptors, during the breeding season.

PG&E will follow specific AMMs for sensitive natural communities and covered species in temporary staging and work areas. For establishment of temporary work areas outside of the project footprint, PG&E will conduct surveys to determine if any of the biological resources listed above are present.

Within one year following removal of land cover, PG&E will restore temporary work and staging areas to a condition equal to or greater than the covered species habitat function of the affected habitat. Restoration of vegetation in temporary work and staging areas will use clean, native seed mixes approved by the Conservancy that are free of noxious plant species seeds.

AMM9 - Establish Buffers around Sensitive Natural Communities. The buffers for each sensitive natural community are as follows:

- Valley foothill riparian: One hundred feet from canopy drip-line. If avoidance is infeasible, a lesser resource protection buffer or encroachment into the sensitive natural community may be allowed if approved by the Conservancy and the wildlife agencies, based on the criteria listed in AMM1. Transportation or utility crossings may encroach into this sensitive natural community provided effects are minimized and all other applicable AMMs are followed.
- Fresh emergent wetland: Fifty feet from the edge of the natural community.

AMM1 provides additional details for resource protection buffers around natural communities. Additional resource protection buffers may be necessary for covered species, as described in species-specific AMMs.

AMM13- Minimize Take and Adverse Effects on Habitat of California Tiger Salamander. PG&E will retain a qualified biologist to identify any suitable aquatic and upland habitats for California salamander present in and within 500 feet of the project footprint during planning-level surveys. The qualified biologist will also assess whether critical habitat could be affected by the covered activity.

Except for habitat management and enhancement, all covered activities will provide a 500-foot setback from aquatic California tiger salamander habitat. If a covered activity is outside the Dunnigan Creek Unit of California tiger salamander critical habitat and, as designed, will not avoid aquatic habitat by at least 500 feet, the project proponent will either conduct visual and dip-net surveys, consistent with CDFW protocol, during the period for November 1 to May 15 (California Department of Fish and Game 2003) or assume presence. If the species is present or assumed to be present, the covered activity will not remove aquatic habitat until at least four new occupied breeding pools are discovered or established in the Plan Area and protected in the Plan Area. After the four new occupied breeding pools are protected, and with concurrence of USFWS and CDFW, up to three breeding pools may be affected. The breeding habitat may not be removed if USFWS and CDFW determine that the covered activity would remove a significant occurrence of this species that could be necessary for maintaining the genetic diversity or regional distribution of the species. This AMM applies to California tiger salamander aquatic habitat and surrounding uplands, as defined by reference to the setbacks described above; it does not apply to

cultivated agricultural lands (i.e., agricultural lands other than grazing lands) or other low-value upland habitat for California tiger salamander.

AMM14- Minimize Take and Adverse Effects on Habitat of Western Pond Turtle. There are no specific design requirements for western pond turtle habitat, however, PG&E must follow design requirements that require a 100-foot (minimum) permanent buffer zone from the canopy drip-line (the farthest edge on the ground where water will drip from the tree canopy, based on the outer boundary of the tree canopy). If modeled upland habitat will be impacted, a qualified biologist must be present and will assess the likelihood of western pond turtle nests occurring in the disturbance area (based on sun exposure, soil conditions, and other species habitat requirements).

If a qualified biologist determines that there is a moderate to high likelihood of western pond turtle nests within the disturbance area, the qualified biologist will monitor all initial ground disturbing activity for nests that may be unearthed during the disturbance and will move out of harm's way any turtles or hatchlings found.

AMM16 - Minimize Take and Adverse Effects on Habitat of Swainson's Hawk and White-Tailed Kite. PG&E will retain a qualified biologist to conduct planning-level surveys and identify any nesting habitat present within 1,320 feet of the project footprint. Adjacent parcels under different land ownership will be surveyed only if access is granted or if the parcels are visible from authorized areas.

If a construction project cannot avoid potential nest trees (as determined by the qualified biologist) by 1,320 feet, PG&E will retain a qualified biologist to conduct preconstruction surveys for active nests consistent, with guidelines provided by the Swainson's Hawk Technical Advisory Committee (2000), between March 15 and August 30, within 15 days prior to the beginning of the construction activity. The results of the survey will be submitted to the Conservancy and CDFW. If active nests are found during preconstruction surveys, a 1,320-foot initial temporary nest disturbance buffer shall be established. If project related activities within the temporary nest disturbance buffer are determined to be necessary during the nesting season, then the qualified biologist will monitor the nest and will, along with PG&E, consult with CDFW to determine the best course of action necessary to avoid nest abandonment or take of individuals. Work may be allowed only to proceed within the temporary nest disturbance buffer if Swainson's hawk or white-tailed kite are not exhibiting agitated behavior, such as defensive flights at intruders, getting up from a brooding position, or flying off the nest, and only with the agreement of CDFW and USFWS. The designated on-site biologist/monitor shall be on-site daily while construction-related activities are taking place within the 1,320-foot buffer and shall have the authority to stop work if raptors are exhibiting agitated behavior.

For covered activities that involve pruning or removal of a potential Swainson's hawk or white-tailed kite nest tree, the PG&E will conduct preconstruction surveys that are consistent with the guidelines provided by the Swainson's Hawk Technical Advisory Committee (2000). If active nests are found during preconstruction surveys, no tree pruning or removal of the nest tree will occur during the period between March 1 and August 30 within 1,320 feet of an active nest, unless a qualified biologist determines that the young have fledged and the nest is no longer active.

AMM18 - Minimize Take and Adverse Effects on Western Burrowing Owl. PG&E will retain a qualified biologist to conduct planning-level surveys and identify western burrowing owl habitat (as defined in Appendix A, Covered Species Accounts) within or adjacent to (i.e., within 500 feet of) a covered activity. If habitat for this species is present, additional surveys for the species by a qualified biologist are required, consistent with CDFW guidelines (2012).

If burrowing owls are identified during the planning-level survey, PG&E will minimize activities that will affect occupied habitat as follows. Occupied habitat is considered fully avoided if the project footprint

does not impinge on a nondisturbance buffer around the suitable burrow. For occupied burrowing owl nest burrows, this nondisturbance buffer could range from 150 to 1,500 feet (Table 1, Recommended Restricted Activity Dates and Setback Distances by Level of Disturbance for Burrowing Owls), depending on the time of year and the level of disturbance, based on current guidelines (California Department of Fish and Game 2012). The Yolo HCP/NCCP generally defines low, medium, and high levels of disturbances of burrowing owls as follows.

- Low: Typically 71-80 dB, generally characterized by the presence of passenger vehicles, small gas-powered engines (e.g., lawn mowers, small chain saws, portable generators), and high-tension power lines. Includes electric hand tools (except circular saws, impact wrenches and similar). Management and enhancement activities would typically fall under this category. Human activity in the immediate vicinity of burrowing owls would also constitute a low level of disturbance, regardless of the noise levels.
- Moderate: Typically 81-90 dB, and would include medium- and large-sized construction equipment, such as backhoes, front end loaders, large pumps and generators, road graders, dozers, dump trucks, drill rigs, and other moderate to large diesel engines. Also includes power saws, large chainsaws, pneumatic drills and impact wrenches, and large gasoline-powered tools. Construction activities would normally fall under this category.
- High: Typically 91-100 dB, and is generally characterized by impacting devices, jackhammers, compression ("jake") brakes on large trucks, and trains. This category includes both vibratory and impact pile drivers (smaller steel or wood piles) such as used to install piles and guard rails, and large pneumatic tools such as chipping machines. It may also include large diesel and gasoline engines, especially if in concert with other impacting devices. Felling of large trees (defined as dominant or subdominant trees in mature forests), truck horns, yarding tower whistles, and muffled or underground explosives are also included. Very few covered activities are expected to fall under this category, but some construction activities may result in this level of disturbance.

Table 1. Recommended Restricted Activity Dates and Setback Distances by Level of Disturbance for Burrowing Owls

	Level of Disturbance (feet) from Occupied Burrows		
Time of Year	**Low**	**Medium**	**High**
April 1 – August 15	600	1,500	1,500
August 16 – October 15	600	600	1,500
October 16 – March 31	150	300	1,500

If the project does not fully avoid direct and indirect effects on nesting sites (i.e., if the project cannot adhere to the buffers described above), PG&E will retain a qualified biologist to conduct preconstruction surveys and document the presence or absence of western burrowing owls that could be affected by the covered activity. Prior to any ground disturbance related to covered activities, the qualified biologist will conduct the preconstruction surveys within three days prior to ground disturbance in areas identified in the planning-level surveys as having suitable burrowing owl burrows, consistent with CDFW preconstruction survey guidelines. The qualified biologist will conduct the preconstruction surveys three days prior to ground disturbance. Time lapses between ground disturbing activities will trigger subsequent surveys prior to ground disturbance.

If the biologist finds the site to be occupied (occupancy of burrowing owl habitat during preconstruction surveys is confirmed at a site when at least one burrowing owl or sign [fresh whitewash, fresh pellets,

feathers, or nest ornamentation] is observed at or near a burrow entrance) by western burrowing owls during the breeding season (February 1 to August 31), PG&E will avoid all nest sites, based on the buffer distances described above, during the remainder of the breeding season or while the nest is occupied by adults or young (occupation includes individuals or family groups that forage on or near the site following fledging). Construction may occur inside of the disturbance buffer during the breeding season if the nest is not disturbed and PG&E develops an AMM plan that is approved by the Conservancy, CDFW, and USFWS prior to project construction, based on the following criteria:

- The Conservancy, CDFW, and USFWS approves the AMM plan provided by PG&E.
- A qualified biologist monitors the owls for at least three days prior to construction to determine baseline nesting and foraging behavior (i.e., behavior without construction).
- The same qualified biologist monitors the owls during construction and finds no change in owl nesting and foraging behavior in response to construction activities.
- If the qualified biologist identifies a change in owl nesting and foraging behavior as a result of construction activities, the qualified biologist will have the authority to stop all construction related activities within the non-disturbance buffers described above. The qualified biologist will report this information to the Conservancy, CDFW, and USFWS within 24 hours, and the Conservancy will require that these activities immediately cease within the non-disturbance buffer. Construction cannot resume within the buffer until the adults and juveniles from the occupied burrows have moved out of the project site, and the Conservancy, CDFW, and USFWS agree.
- If monitoring indicates that the nest is abandoned prior to the end of nesting season and the burrow is no longer in use by owls, PG&E may remove the nondisturbance buffer, only with concurrence from CDFW and USFWS. If the burrow cannot be avoided by construction activity, the biologist will excavate and collapse the burrow in accordance with CDFW's 2012 guidelines to prevent reoccupation after receiving approval from the wildlife agencies.

If evidence of western burrowing owl is detected outside the breeding season (December 1 to January 31), PG&E will establish a non-disturbance buffer around occupied burrows, consistent with Table 8-1, as determined by a qualified biologist. Construction activities within the disturbance buffer are allowed if the following criteria are met to prevent owls from abandoning important overwintering sites:

- A qualified biologist monitors the owls for at least three days prior to construction to determine baseline foraging behavior (i.e., behavior without construction).
- The same qualified biologist monitors the owls during construction and finds no change in owl foraging behavior in response to construction activities.
- If there is any change in owl roosting and foraging behavior as a result of construction activities, these activities will cease within the buffer.
- If the owls are gone for at least one week, PG&E may request approval from the Conservancy, CDFW, and USFWS for a qualified biologist to excavate and collapse usable burrows to prevent owls from reoccupying the site if the burrow cannot be avoided by construction activities. The qualified biologist will install one-way doors for a 48-hour period prior to collapsing any potentially occupied burrows. After all usable burrows are excavated, the buffer will be removed, and construction may continue.

Monitoring must continue as described above for the nonbreeding season as long as the burrow remains active.