



Habitat Conservation Plan / Natural Community Conservation Plan



# Yolo HCP/NCCP Annual Report

for Fiscal Year 2021/2022

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## for Fiscal Year 2021/2022

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# Table of Contents

<b>List of Tables</b> .....	<b>ii</b>
<b>List of Figures</b> .....	<b>ii</b>
<b>List of Acronymns and Terms</b> .....	<b>iii</b>
<b>1. Introduction and Overview</b> .....	<b>1</b>
Overview .....	3
<b>2. Covered Activities and Impacts</b> .....	<b>5</b>
Reporting Period Activities .....	5
Urban Projects and Activities.....	6
Rural Projects and Activities .....	6
Public and Private Operations and Maintenance .....	7
Conservation Strategy Implementation Projects.....	8
<b>3. Acquisition, Restoration, &amp; Enhancement</b> .....	<b>17</b>
Acquisition .....	17
Restoration and Enhancement .....	22
<b>4. Management, Monitoring, and Research</b> .....	<b>26</b>
Reserve Management .....	26
Monitoring .....	26
Adaptive Management .....	29
<b>5. Stay Ahead Compliance and Changed Circumstances</b> .....	<b>30</b>
Stay-Ahead Provision Compliance .....	30
Unforeseen and Changed Circumstances Compliance .....	32
<b>6. Program Administration</b> .....	<b>36</b>
Administrative Changes .....	36
Minor Modifications .....	36
Amendments.....	36
<b>7. Finances</b> .....	<b>37</b>
Financial Structure .....	37
Annual Budget.....	38
Revenue Sources.....	38

Endowment Funding.....	39
Mitigation Fee Act Annual Reporting.....	40
<b>References.....</b>	<b>43</b>

## List of Tables

Table 1-1: Yolo HCP/NCCP Covered Species.....	4
Table 2-1: Covered activities for which coverage was granted in FY21/22.....	10
Table 3-1: Sites enrolled in the reserve system in FY21/22.....	19
Table 3-2: Natural community land cover acres enrolled in the reserve system.....	20
Table 3-3: Covered species modeled habitat enrolled in the reserve system.....	21
Table 3-4: Restoration and enhancement activities conducted through FY21/22.....	22
Table 3-5: Woodland Reiff restoration planting monitoring results for FY21/22.....	24
Table 3-6: Correll restoration planting monitoring results for FY21/22.....	25
Table 4-1: Reserve sites with occupied Swainson's hawk nests.....	29
Table 5-1: Natural communities impacts and enrollment through FY21/22.....	31
Table 5-2: Average temperatures for three baseline periods (i.e., average annual temperature, average summer temperature [June, July, and August], and average winter temperature [December, January, and February]).....	33
Table 5-3: Swainson's hawk suitable agricultural foraging habitat within Yolo County.....	35
Table 7-1: Adopted budget, actual revenue, and actual expenditures for FY21/22.....	38
Table 7-2: State and federal grant revenue expenditures for FY21/22.....	39
Table 7-3: Mitigation Fee Fund FY21/22 Accounting.....	39
Table 7-4: Yolo HCP/NCCP Fees at the end of FY21/22.....	40

## List of Figures

Figure 2-1: Kinect Southport Landcover Map.....	6
Figure 2-2: Yolo Bypass West Levee Culvert Replacement ( <i>Source: Sycamore Environmental</i> ).....	7
Figure 2-3: Huffs Corner Channel Reconfiguration ( <i>Source: MBK Engineering</i> ).....	8
Figure 2-4: Covered Activities.....	9
Figure 3-1: Sites enrolled in the Yolo HCP/NCCP reserve system.....	18
Figure 3-2: Actual vs. projected reserve system enrollment.....	20
Figure 4-1: Woodland Reiff elderberry shrub locations.....	27
Figure 4-2: Correll elderberry shrub locations.....	28
Figure 4-3: Correll elderberry shrub locations.....	28
Figure 5-1: Comparison of the % of total acres of allowable permanent impacts incurred and the % of total committed conservation acres enrolled by land cover type.....	32

# Acronyms and Terms

AMM	Avoidance and Minimization Measure
CCRMP	Creek Resources Management Plan
CDFW	California Department of Fish and Wildlife
CE	Conservation Easement
Conservancy	Yolo Habitat Conservancy
CRA	Conservation Reserve Area
FY21/22	Fiscal Year 2021/2022 (July 1, 2021 – June 30, 2022)
GIS	geographic information system
HCP	Habitat Conservation Plan
LAG	Local Assistance Grant
NCCP	Natural Community Conservation Plan
Permits	incidental take permits
Permittees	Yolo Habitat Conservancy, County of Yolo, and the Cities of Davis, Winters, West Sacramento, and Woodland
Plan Area	all lands within the boundary of Yolo County and an expanded area consisting of 1,174 acres for riparian conservation along Putah Creek in Solano County
RCD	Yolo County Resource Conservation District
SPE	Special Participating Entity
STAC	science and technical advisory committee
USFWS	U.S. Fish and Wildlife Service
VELB	valley elderberry longhorn beetle
WCB	Wildlife Conservation Board

# 1. Introduction and Overview

This is the fourth Annual Report for the Yolo Habitat Conservation Plan/Natural Community Conservation Plan (Yolo HCP/NCCP or Plan). This Annual Report summarizes activities undertaken by the Yolo Habitat Conservancy (Conservancy) and its partners between July 1, 2021 and June 30, 2022, which was the third full year of Yolo HCP/NCCP implementation. The content of this report provides information per the Plan, the Implementing Agreement, and permits. It also provides the Conservancy Board of Directors, U.S. Fish and Wildlife Service (USFWS), California Department of Fish and Wildlife (CDFW), and the general public the opportunity to review the Conservancy's actions and progress toward Yolo HCP/NCCP implementation.

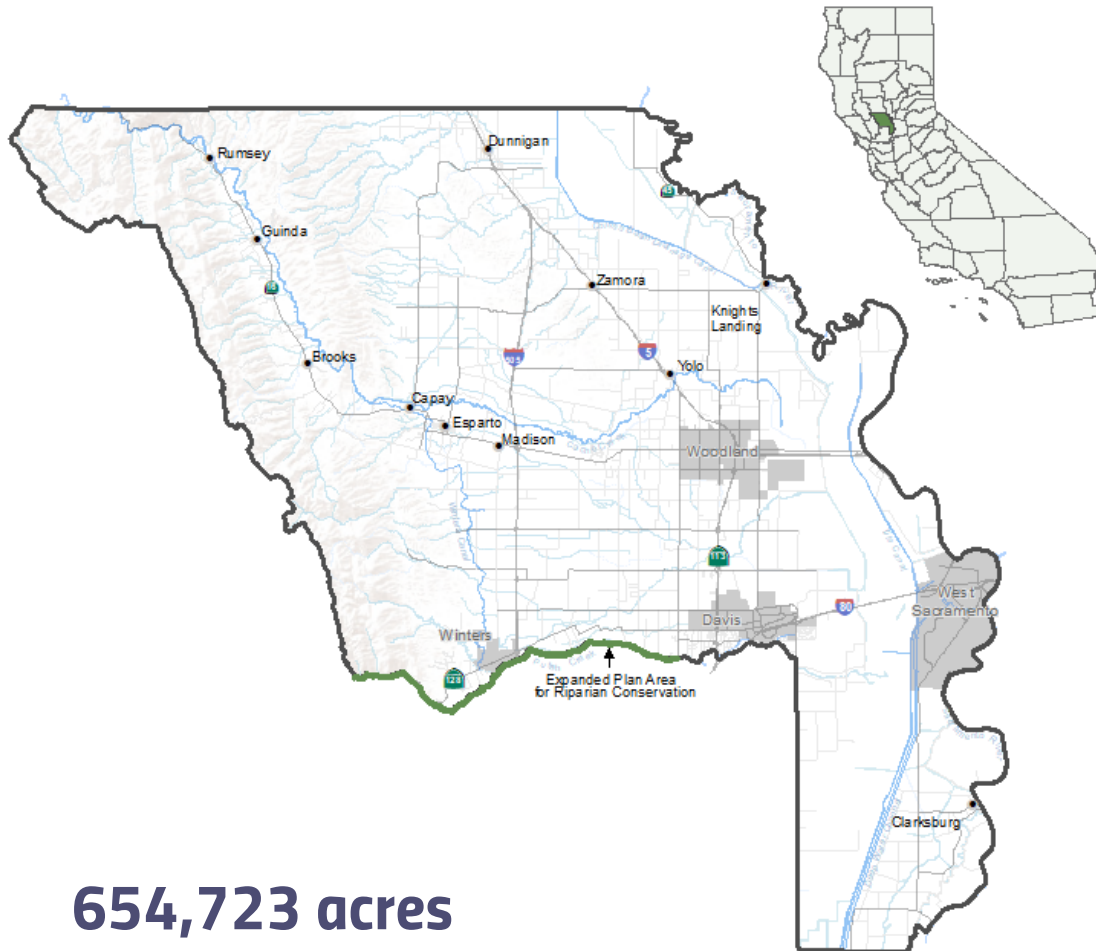
## The components of this annual report include:

- **Covered Activities and Impacts**
- **Acquisition and Restoration**
- **Reserve Management**
- **Monitoring, Research, and Adaptive Management**
- **Stay-Ahead Provision**
- **Changed and Unforeseen Circumstances**
- **Program Administration**
- **Finances**



*The Yolo HCP/NCCP is a locally developed plan that offers a streamlined permitting process for development activities while implementing a regional conservation strategy that protects, enhances, and restores valuable natural resources in Yolo County and contributes to the recovery of 12 covered plant and wildlife species. The Yolo HCP/NCCP strikes a sensible balance between natural resource conservation and economic growth in the region.*

**Figure 1-1: Yolo HCP/NCCP Plan Area**



**654,723 acres**

**653,549 acres in Yolo County**

Primary Plan Area that encompasses Yolo County and defines the area where the Yolo HCP/NCCP can provide permit coverage for development and other covered activities.

**1,174 acres in Solano County**

Expanded Plan Area that encompasses the riparian habitat on the southern half of Putah Creek that is included in the Yolo HCP/NCCP conservation strategy.

## Overview

The Yolo HCP/NCCP is a 50-year regional plan to protect endangered species and natural resources while allowing for orderly development in Yolo County consistent with local General Plans. The Yolo HCP/NCCP is both a Habitat Conservation Plan (HCP) and Natural Community Conservation Plan (NCCP). This means that the Conservancy and the member agencies (County of Yolo, City of Davis, City of West Sacramento, City of Winters, and City of Woodland), known together as the Permittees, have obtained permits issued by USFWS and CDFW that allow the Permittees to comply with Section 10 of the federal Endangered Species Act and California’s Natural Community Conservation Planning Act. The Permittees received permits from USFWS on September 26, 2018. The permits issued by CDFW were signed on January 10, 2019, which is the effective start date of the 50-year term of the Yolo HCP/NCCP.

Over the 50-year permit term of the Yolo HCP/NCCP, impacts from urban and rural projects, including operations and maintenance activities, will be offset by the creation of a reserve system managed for the benefit of 12 covered species (See Table 1-1), as well as the natural communities that they—and hundreds of other species—depend upon for habitat. Unlike individual site mitigation efforts, the Yolo HCP/NCCP reserve system takes a regional approach to species conservation that includes the protection of a network of habitat areas that support the life cycle and population needs of covered species to aid in the recovery of these species. The Yolo HCP/NCCP also commits to providing 8,231 acres of new conservation and the enrollment of 8,000 acres of existing conservation land in addition to the 16,175 acres of mitigation for development activities covered by the Yolo HCP/NCCP permits.

Through the Permittees, the Yolo HCP/NCCP provides local public agencies, private developers, consultants, and property owners a streamlined and cost-effective approach for requesting and receiving incidental take coverage for development projects. Prior to the Yolo HCP/NCCP, an applicant for any development that involved loss of federally or state protected plants, wildlife, or their habitats was, in many cases, required to obtain permits directly from state or federal agencies—a process that could take several years and incur high costs.

Yolo HCP/NCCP permit coverage applies only to eligible projects, known as covered activities, undertaken within the Yolo HCP/NCCP Plan Area (Plan Area). The Yolo HCP/NCCP covers a total of 21,559 acres of activities within five categories, including: urban and rural projects (17,550 acres), public/private operations and maintenance (706 acres), conservation strategy implementation (956 acres), and neighboring landowner agreements (2,347 acres). The Plan Area is 654,723 acres, including 653,549 acres contained within Yolo County and 1,174 acres in the expanded area for riparian conservation in Solano County on the south side of Putah Creek (See Figure 1-1).



**Table 1-1: Yolo HCP/NCCP Covered Species**

Common Name	Scientific Name	Status Federa/State <sup>a</sup>
<b>Plants</b>		
Palmate-bracted bird’s beak	<i>Chloropyron palmatum</i>	E/E
<b>Invertebrates</b>		
Valley elderberry longhorn beetle	<i>Desmocerus californicus</i>	T/ -
<b>Amphibians</b>		
California tiger salamander (Central California DPS)	<i>Ambystoma californiense</i>	T/T
<b>Reptiles</b>		
Western pond turtle	<i>Actinemys marmorata</i>	- /CSC
Giant garter snake	<i>Thamnophis gigas</i>	T/T
<b>Birds</b>		
Swainson’s hawk	<i>Buteo swainsoni</i>	- /T
White-tailed kite	<i>Elanus leucurus</i>	- /FP
Western yellow-billed cuckoo	<i>Coccyzus americanus occidentalis</i>	T/E
Western burrowing owl	<i>Athene cunicularia hypugaea</i>	- /CSC
Least Bell’s vireo	<i>Vireo bellii pusillus</i>	E/E
Bank swallow	<i>Riparia riparia</i>	-/T
Tricolored blackbird	<i>Agelaius tricolor</i>	- /T

a. Status: C= Candidate for listing, CSC=California species of special concern, E=Endangered, FP= Fully protected under California Fish and Game Code, T=Threatened, - = no designation

## Benefits of the Yolo HCP/NCCP



### Local control.

The Yolo HCP/NCCP moves compliance with state and federal endangered species laws for public and private activities from state and federal agencies to the local level. The Yolo Habitat Conservancy administers the permits and implements the Yolo HCP/NCCP in coordination with the member agencies (Yolo County, City of Davis, City of West Sacramento, City of Winters, and City of Woodland) with oversight from the CDFW and the USFWS to streamline the existing process while still providing comprehensive regulatory coverage.



### Improved and increased species conservation.

Coordinated conservation planning through the Yolo HCP/NCCP will provide significant benefits to endangered and threatened species in Yolo County during and beyond the 50-year permit term as it replaces piecemeal mitigation with a regional conservation strategy and adds conservation beyond mitigation.



### Streamlined permitting process.

The Yolo HCP/NCCP replaces a project-by-project mitigation process characterized by uncertainties associated with timing, costs, and litigation. This efficiency provides an economic benefit to public agencies and other projects in the form of streamlined Endangered Species Act permitting.



### Preservation of working agricultural land.

The Yolo HCP/NCCP recognizes that many agricultural working landscapes provide habitat. The premise of habitat and species conservation through preserved and carefully managed agriculture is foundational to the HCP/NCCP and integral to the values of Yolo County.

## 2. Covered Activities and Impacts

- *This chapter provides an overview of the covered activities to which Permittees granted a certificate of approval, compliance, or inclusion during the reporting period.*

### Reporting Period Activities

Between July 1, 2021 and June 30, 2022, a total of twenty-eight projects received permit coverage through the Yolo HCP/NCCP. The projects include fourteen urban projects and activities, seven rural projects and activities, six public operation and maintenance projects and one conservation strategy implementation project. Table 2-1 provides a list of all covered activities for which a Permittee granted take coverage during the reporting period. Information provided for each project includes a brief description of the covered activity, the Permittee extending the coverage, and permanent and temporary acreages disturbed. Figure 2-1 provides a map showing the location of covered activities. Table 2-2 provides a summary of permanent and temporary acreages disturbed by land cover type for the collective covered activities in the reporting period and cumulatively. Table 2-3 provides a summary of permanent and temporary acreages disturbed by modeled habitat for the collective covered activities in the reporting period and cumulatively. A total of 49 projects have received permit coverage between the start of Yolo HCP/NCCP implementation and the end of this reporting period.

No Permittee, applicant, or Special Participating Entity (SPE) reported observations of harassment or mortality of covered species occurred during the reporting period.

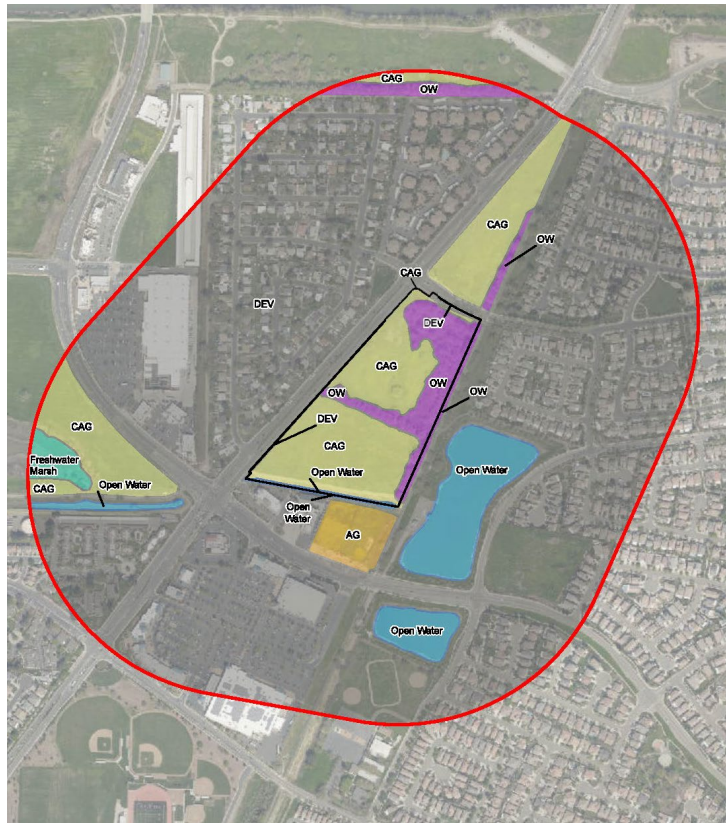


## Urban Projects and Activities

Urban projects and activities include covered activities that consist of general urban development, urban public services, infrastructure, and utilities within urban planning units (Planning Units 19, 20, 21, and 22). During the reporting period, fourteen urban projects received streamlined permits through the Yolo HCP/NCCP. These projects included twelve residential developments, one elderberry transplant, and one industrial facility.

### General Urban Development:

The City of West Sacramento issued permits for seven residential development projects. The City of Winters issued two permits for subdivision maps for future residential development. The City of Woodland issued a permit for a project to facilitate the transplant of elderberry shrubs that were located adjacent to an ongoing development project to one of the Yolo HCP/NCCP reserve system sites and a separate permit to provide coverage for an industrial development.



**Figure 2-1: Kinect Southport Landcover Map**  
(Source: SWCA)

### Urban Projects in Rural Areas:

The City of West Sacramento issued a permit to provide coverage for the Yarbrough Southport Phase 1A project. This project is multi-phased and the current phase will facilitate later phases of development.

## Rural Projects and Activities

Rural projects and activities include roads and bridges, bike lanes and multi-use trails, airports, agricultural economic development and open space, habitat conservation projects, parks and recreation, and aggregate mining within the 18 rural planning units (Planning Units 1 through 18). During this reporting period, seven rural projects received streamlined permits through the Yolo HCP/NCCP. These projects included two general rural development projects, one aggregate mining

project, one agricultural economic development project, and three rural public services, infrastructure, and utilities projects.

**General Rural Development:** The County of Yolo issued two permits to private applicants. One project was to construct a third home on an agriculturally zoned parcel and the other was for the expansion of Wilbur Ellis' existing facilities.

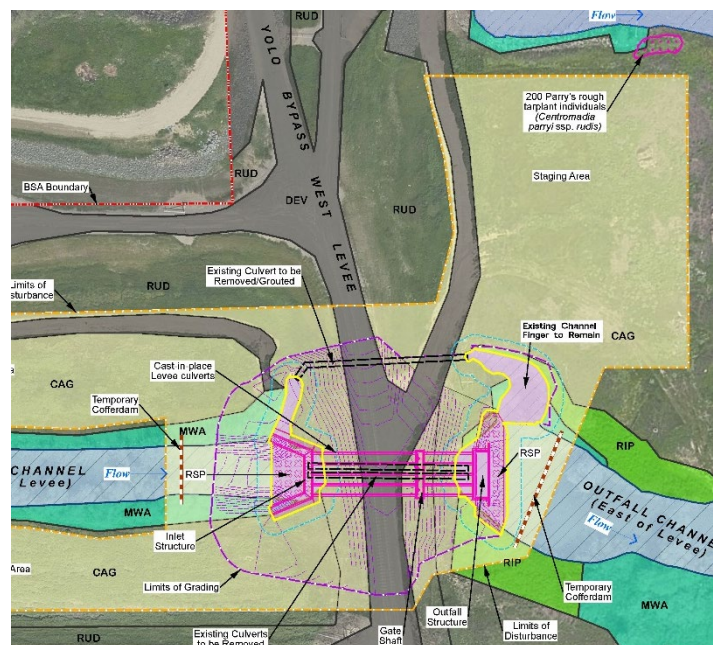
**Aggregate Mining:** The County of Yolo issued a permit to Teichert Aggregates to provide 62.9 acres of coverage for the first phase of the project referred to as the Shifler Mining and Reclamation Project. The Conservancy expects to provide approximately an additional 215 acres of coverage in subsequent phases of mining.

**Agricultural Economic Development:** The County of Yolo issued itself a permit to provide coverage for an expansion at an existing hay distribution facility.

**Rural Public Services, Infrastructure, and Utilities:** The Conservancy Board approved three Special Participating Entity requests and issued permits to provide coverage for three separate Pacific Gas & Electric infrastructure projects.

## Public and Private Operations and Maintenance

Operations and maintenance activities include activities that are necessary for the ongoing operations and maintenance of existing and planned land uses, facilities, and services in both urban and rural planning units throughout the Plan Area. Activity types eligible for coverage for operations and maintenance include: general urban and rural development operations and maintenance; public services, infrastructure, and utilities operations and maintenance; roads, bridges, bike lanes, and multi-use pathways; flood control facilities; general utilities; and activities associated with the Cache Creek Resources Management Plan. Six operation and maintenance activities received permit coverage under the



**Figure 2-2: Yolo Bypass West Levee Culvert Replacement** (Source: Sycamore Environmental)

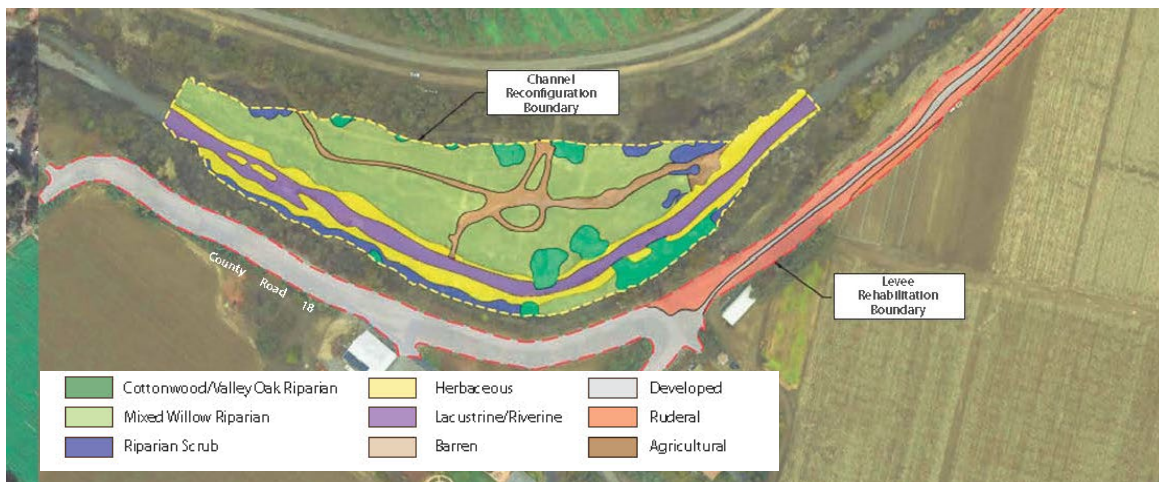
Yolo HCP/NCCP during FY21/22. The County issued itself five permits for various projects along various levees in the unincorporated area and the City of Woodland itself a permit to replace three culverts that connect to the conveyance system leading to the Yolo Bypass.

## Conservation Strategy Implementation Projects

The Yolo HCP/NCCP provides take authorization for the actions described in Chapter 6, *Conservation Strategy*, of the Plan. The activity types include all the habitat modification, management and monitoring activities undertaken for the purposes of implementing this HCP/NCCP, as well as projects implemented by other groups that build on and support decades of local, state, and federal conservation efforts in the Plan Area, including conservation activities within the Yolo Bypass Wildlife Area, implementation of the Cache Creek Resources Management Plan (CCRMP) and Willow Slough Watershed Integrated Resources Management Plan, and the efforts of the Lower Putah Creek Coordinating Committee.

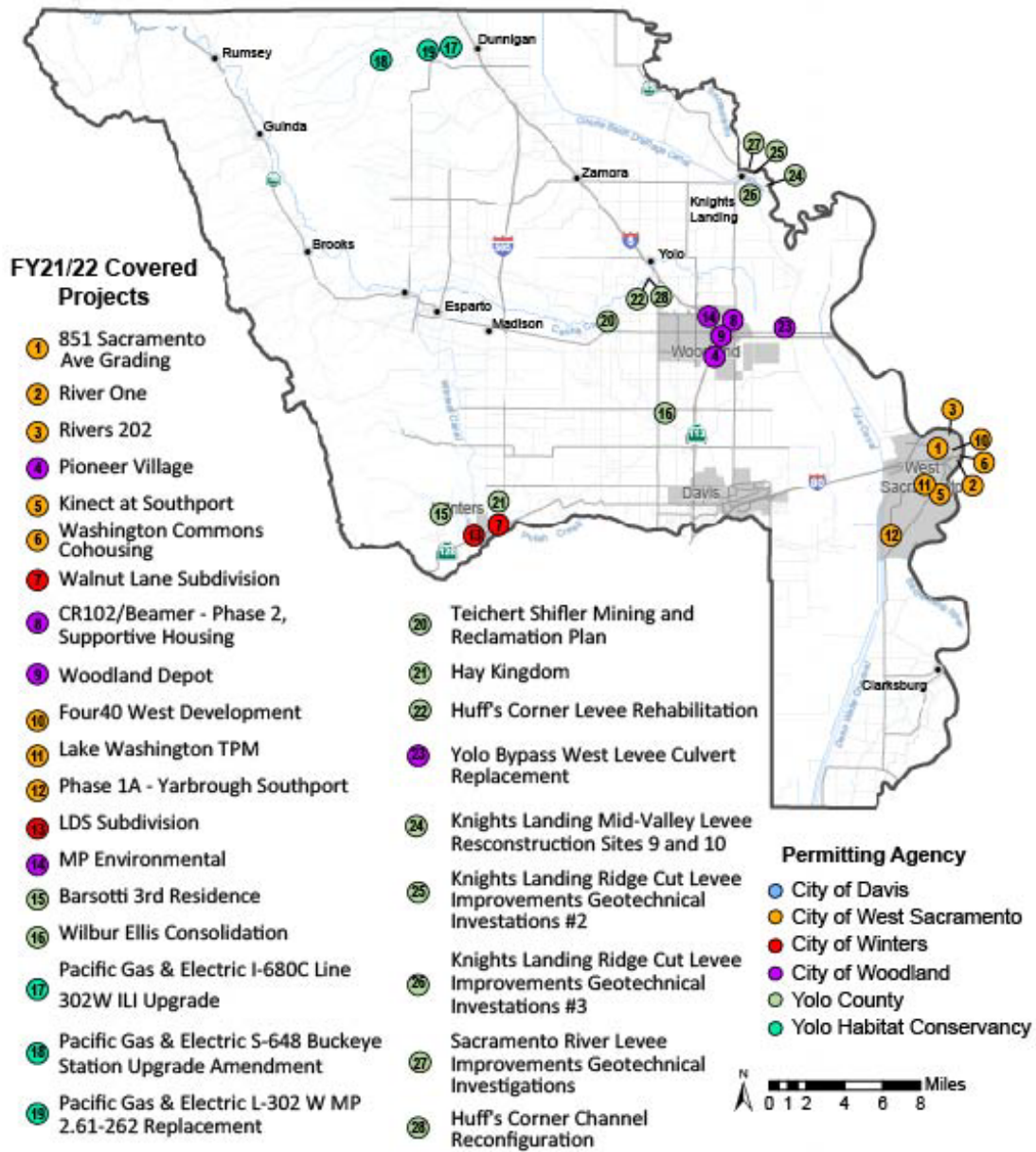
### Cache Creek Resources Management Plan (CCRMP):

The Conservancy issued permits for the Huff’s Corners Channel Reconfiguration project. Yolo County Natural Resources Division staff determined that this project be considered two distinct components: 1) a levee ‘raise’ to return the levee to its original height, and 2) reconfiguration of the Cache Creek channel. The first component of the project is reported as a County permitted Public Operations and Maintenance project in this report. The second component, the channel reconfiguration, is considered a general CCRMP activity. CCRMP activities are not counted the Yolo HCP/NCCP take limits and do not count against the stay-ahead provision of the Yolo HCP/NCCP.



**Figure 2-3: Huff's Corner Channel Reconfiguration** (Source: MBK Engineering)

Figure 2-4: Covered Activities



**Table 2-1: Covered activities for which coverage was granted in FY21/22**

Project ID	Project Name	Activity Type	Covered By	Description	Natural Community	
					Perm. Impacts (acres)	Temp. Impacts (acres)
<b>Urban Projects and Activities</b>						
(1) 2021_23	851 Sacramento Ave Grading	General urban development	City of West Sacramento	Grading permit to support 5-story residential development, with single-story retail building and ground flood residential parking.	0.11	0
(2) 2020_01	River One	General urban development	City of West Sacramento	7-story hotel with approximately 196 guest rooms and a 7-story condominium building offering 55 residential units.	0	0
(3) 2021_24	Rivers 202	General urban development	City of West Sacramento	202 single-family residential units, a two-acre park, and supporting infrastructure. Project involved transplanting two elderberry shrubs to the Correll reserve system site.	19.12	0
(4) 2021_17	Pioneer Village	General urban development	City of Woodland	Project only required compliance with Avoidance and Minimization Measure 12, Minimize Take and Adverse Effects on Habitat of Valley Elderberry Longhorn Beetle. Project proponent planted 36 elderberry seedlings and 36 native associate plantings on the Correll reserve system site.	0	0
(5) 2021_09	Kinect at Southport	General urban development	City of West Sacramento	Residential development with 322 apartment units and 543 parking spaces.	11.15	1.5
(6) 2020_17	Washington Commons Cohousing	General urban development	City of West Sacramento	35-unit condominium cohousing project.	0	0
(7) 2021_12	Walnut Lane Subdivision	General urban development	City of Winters	54 single family residential units, associated amenities, and infrastructure improvements.	0	0
(8) 2019_02	CR102/Beamer - Phase 2, Supportive Housing	General urban development	City of Woodland	61-units of permanent supportive housing.	0	0
(9) 2021_06	Woodland Depot	General urban development	City of Woodland	86-room hotel and adjoining commercial use.	0	0
(10) 2021_19	Four40 West Development	General urban development	City of West Sacramento	Development of 65 residential units, a park, dog park, and garden area	4.3	0
(11) 2022_02	Lake Washington TPM	General urban development	City of West Sacramento	Tentative parcel map to divide one existing lot into two.	0	0

Table 2-1: Continued

Project ID	Project Name	Activity Type	Covered By	Description	Natural Community	
					Perm. Impacts (acres)	Temp. Impacts (acres)
<b>Urban Projects and Activities</b>						
(12) 2019_17	Phase 1A - Yarbrough Southport	Urban projects in rural areas	City of West Sacramento	The overall project approvals include a residential village with approximately 3,004 residences, a village core with commercial and mixed uses, 18-hole golf course, and recreational facilities along newly constructed lakes that will provide stormwater detention for the development and other portions of the City of West Sacramento. A separately planned elementary school will be constructed within the development by the Washington Unified School District. This Phase 1A CoA only covers those portions of the Project that would directly impact habitat for federally-listed species (in this case, giant garter snake) that occurs within the U.S. Army Corps of Engineers permit area.	15.44	0.02
(13) 2021_11	LDS Subdivision	General urban development	City of Winters	The Project includes subdividing the existing approximately 3.25-acre parcel into 18 single-family residential lots.	1.8	0
(14) 2020_19	MP Environmental	General urban development	City of Woodland	Regional office for industrial development.	11.763	0
<b>Rural Projects and Activities</b>						
(15) 2021_10	Barsotti 3rd Residence	General rural development	Yolo County	3rd residence on an agricultural parcel	0.54	0
(16) 2020_14	Wilbur Ellis Consolidation	General rural development	Yolo County	Plan to construct an additional building with equipment parking and storage areas immediately adjacent to the existing administration building in the built-up (developed) area of the property. Additionally, a small detention basin will be constructed.	14.47	4
(17) 2022_06	Pacific Gas & Electric I-680C Line 302W ILI Upgrade	Rural public services, infrastructure, and utilities	YHC (SPE)	Excavation of an a half-acre to expose the top of an existing natural gas transmission line to PG&E to update records and determine the pipeline's readiness for future inspections required by the CA Public Utilities Commission	0	0.51



**Table 2-1: Continued**

Project ID	Project Name	Activity Type	Covered By	Description	Natural Community	
					Perm. Impacts (acres)	Temp. Impacts (acres)
<b>Rural Projects and Activities</b>						
(18) 2021_01	Pacific Gas & Electric S-648 Buckeye Station Upgrade Amendment	Rural public services, infrastructure, and utilities	YHC (SPE)	Project to provide additional coverage for PG&E substation, which previously received coverage under SPE-2020-01-COI and SPE-2020-02-COI.	3.1	0
(19) 2022_07	Pacific Gas & Electric L-302 W MP 2.61-262 Replacement	Rural public services, infrastructure, and utilities	YHC (SPE)	Excavation to allow for PG&E to replace section of pipe to address gas pressurization in the line as well meet the criteria for pipe operating in a Class 1 public road crossing.	0	1
(20) 2020_11	Teichert Shifler Mining and Reclamation Plan	Aggregate mining	Yolo County	Phase A of Shifler Mining and Reclamation Plan, Yolo County ZF2018-0078	62.9	0
(21) 2021_04	Hay Kingdom	Agricultural economic development	Yolo County	Permitting to an existing hay distribution facility to improve processing and storage capacity.	4.3	0
<b>Public and Private Operations and Maintenances</b>						
(22) 2020_13	Huff's Corner Levee Rehabilitation	Rural public services, infrastructure, and utilities	Yolo County	This is an action that will return the levee to the original design height	0.13	0.3
(23) 2020_16	Yolo Bypass West Levee Culvert Replacement	Rural public services, infrastructure, and utilities	City of Woodland	The project consists of the replacement of three culverts in the City of Woodland's Outfall Channel, which conveys drainage from the City to the Yolo Bypass.	0.45	1.63
(24) 2021_25	Knights Landing Mid-Valley Levee Reconstruction Sites 9 and 10	Rural public services, infrastructure, and utilities	Yolo County	The project involves constructing slurry cutoff walls in the existing Sacramento River right bank levee at sites 9 and 10 to address through seepage.	0.27	0.7
(25) 2021_07	Knights Landing Ridge Cut Levee Improvements Geotechnical Investigations #2	Rural public services, infrastructure, and utilities	Yolo County	Investigative borings to inform future infrastructure project design, engineering, and permit requirements.	0	0.1
(26) 2021_07	Knights Landing Ridge Cut Levee Improvements Geotechnical Investigations #3	Rural public services, infrastructure, and utilities	Yolo County	Investigative borings to inform future infrastructure project design, engineering, and permit requirements.	0	0

**Table 2-1: Continued**

Project ID	Project Name	Activity Type	Covered By	Description	Natural Community	
					Perm. Impacts (acres)	Temp. Impacts (acres)
<b>Public and Private Operations and Maintenances</b>						
(27) 2021_27	Sacramento River Levee Improvements Geotechnical Investigations	Rural public services, infrastructure, and utilities	Yolo County	Investigative borings to inform future infrastructure project design, engineering, and permit requirements.	0.01	0
<b>Conservation Strategy Implementation <sup>a b</sup></b>						
(28) 2020_13	Huff's Corner Channel Reconfiguration	CCRMP	Yolo County	The channel reconfiguration component is one of the general types of Cache Creek Resource Management Plan (CCRMP) activities.	4.42	4.16

<sup>a</sup> The Yolo HCP/NCCP take limits do not apply to area of impact on natural communities or covered species habitat when the impacts result from conservation measures because the Yolo HCP/NCCP assumes conservation measures will have substantial net benefits to covered species. The limits imposed by the permits only apply to acres of natural communities or habitat for covered species that are lost to covered activities that are not conservation measures.

<sup>b</sup> The Yolo HCP/NCCP incorporated the CCRMP restoration and enhancement actions into its conservation strategy to help meet the HCP/NCCP's biological objectives for ecosystem processes, natural communities and covered species, as described in Section 6.5.8.1.1 of the HCP/NCCP. Implementation of the CCRMP is both a covered activity and a conservation measure. The exception to this rule is for bank swallow nesting habitat, the HCP/NCCP provides for no more than 37 acres of barren floodplain to be permanently affected by bank stabilization activities along Cache Creek to protect property or valuable resources (Yolo HCP/NCCP, Section 5.7.11.1.1).

**Table 2-2: Avoidance and minimization measures applied to activities that received coverage during FY21/22**

Project ID	Avoidance and Minimization Measures <sup>a</sup>																				
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
(1) 2021_23			■	■	■	■	■	■						■	■						
(2) 2020_01	■		■		■	■	■	■	■	■						■		■			
(3) 2021_24	■	■	■	■	■	■	■	■	■	■		■		■	■	■		■			■
(4) 2021_17			■	■	■	■	■					■				■					
(5) 2021_09	■	■	■	■	■	■	■	■	■	■				■	■	■		■			■
(6) 2020_17			■	■	■	■	■									■					
(7) 2021_12			■	■	■	■	■									■		■			
(8) 2019_02			■	■	■	■	■									■		■			■
(9) 2021_06			■	■	■	■	■	■								■					
(10) 2021_19			■	■	■	■	■	■								■					
(11) 2022_02	■		■	■	■	■	■	■								■		■			■
(12) 2019_17	■	■	■	■	■	■	■	■	■	■				■	■	■		■			■
(13) 2021_11			■	■	■	■	■									■		■			
(14) 2020_19			■	■	■	■	■			■						■					
(15) 2021_10			■													■		■			
(16) 2020_14	■		■	■	■	■	■	■								■					
(17) 2022_06	■	■	■	■	■	■	■	■	■				■	■	■	■		■			
(18) 2021_01	■	■	■	■	■	■	■	■	■	■			■	■	■	■		■			■
(19) 2022_07	■		■	■	■	■	■	■	■					■	■	■		■			
(20) 2020_11			■	■	■	■	■					■		■	■	■		■			■
(21) 2021_04																■		■			■
(22) 2020_13			■	■	■	■	■					■				■					
(23) 2020_16			■	■	■	■	■							■	■	■		■	■		■
(24) 2021_25			■	■	■	■	■					■		■	■	■		■		■	■
(25) 2021_07			■	■		■								■	■	■		■			■
(26) 2021_07			■	■	■	■								■	■	■			■		
(27) 2021_27			■	■	■	■								■	■				■	■	
(28) 2020_13			■	■	■	■	■					■				■					

**<sup>a</sup> Avoidance and Minimization Measures (AMMs)**

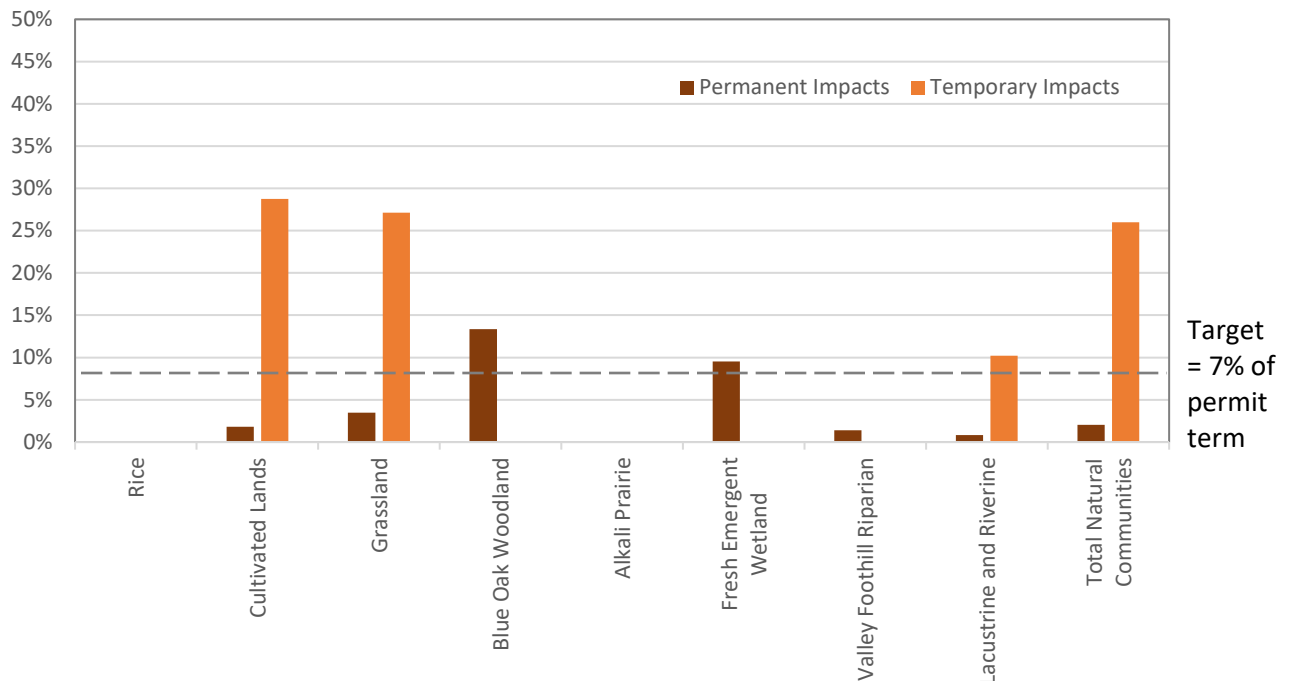
- |  |   |
|--|---|
| <b>AMM 1</b> Establish Buffers   | <b>AMM 12</b> Minimize Take and Adverse Effects on Habitat of Valley Elderberry Longhorn Beetle     |
| <b>AMM 2</b> Design Developments to Minimize Indirect Effects at Urban-Habitat Interfaces      | <b>AMM 13</b> Minimize Take and Adverse Effects on Habitat of California Tiger Salamander           |
| <b>AMM 3</b> Confine and Delineate Work Area   | <b>AMM 14</b> Minimize Take and Adverse Effects on Habitat of Western Pond Turtle                   |
| <b>AMM 4</b> Cover Trenches and Holes During Construction and Maintenance                      | <b>AMM 15</b> Minimize Take and Adverse Effects on Habitat of Giant Garter Snake                    |
| <b>AMM 5</b> Control Fugitive Dust   | <b>AMM 16</b> Minimize Take and Adverse Effects on Habitat of Swainson's Hawk and White-Tailed Kite |
| <b>AMM 6</b> Conduct Worker Training   | <b>AMM 17</b> Minimize Take and Adverse Effects on Habitat of Western Yellow-                       |
| <b>AMM 7</b> Control Night-Time Lighting of Project Construction Sites                         | <b>AMM 18</b> Minimize Take and Adverse Effects on Western Burrowing Owl                            |
| <b>AMM 8</b> Avoid and Minimize Effects of Construction Staging Areas and Temporary Work Areas | <b>AMM 19</b> Minimize Take and Adverse Effects on Least Bell's Vireo                               |
| <b>AMM 9</b> Establish Buffers Around Sensitive Natural Communities                            | <b>AMM 20</b> Minimize Take and Adverse Effects on Habitat of Bank Swallow                          |
| <b>AMM 10</b> Avoid and Minimize Effects on Wetlands and Waters                                | <b>AMM 21</b> Minimize Take and Adverse Effects on Tricolored Blackbird                             |
| <b>AMM 11</b> Minimize Take and Adverse Effects on Palmate-Bracted Bird's Beak                 |   |

**Table 2-3: Permanent and temporary acreages disturbed by land cover type**

Natural Communities	Reporting Period		Cumulative		Total Allowed		Cumulative	
	Impacts (acres)		Impacts (acres)		Impacts (acres)		Impacts (% toward cap)	
	Permanent	Temporary	Permanent	Temporary	Permanent	Temporary	Permanent	Temporary
Rice	--	--	--	--	87	--	0%	--
Cultivated Lands (non-rice)	90.7	5.9	179.5	58.4	9,910	203	1.8%	28.8%
Grassland	48.8	3.7	59.9	7.6	1,734	28	3.5%	27.1%
Blue Oak Woodland	--	--	0.40	--	3	--	13.3%	--
Alkali Prairie	--	--	--	--	4	4	0.0%	0%
Fresh Emergent Wetland	7.8	--	8.4	--	88	--	9.5%	--
Valley Foothill Riparian	5.93	--	8.2	--	588	--	1.4%	--
Lacustrine and Riverine	0.9	0.2	2.0	3.2	236	31	0.8%	10.2%
<b>Total Natural Communities <sup>a</sup></b>	<b>154.17</b>	<b>9.8</b>	<b>258.3</b>	<b>69.2</b>	<b>12,649</b>	<b>266</b>	<b>2.0%</b>	<b>26.0%</b>

<sup>a</sup>The totals for natural community loss do not match the total impacts in Table 2-1 because some of the impacts consisted of land cover types that provide covered species habitat but do not belong to any natural communities with the maximum allowable loss as listed in Table 5-1 of the HCP/NCCP (e.g., barren land that may support covered species)

**Figure 2-2: Percent total allowed permanent and temporary impacts incurred by land cover type**



**Table 2-4: Permanent and temporary impacts to modeled habitat**

Covered Species	Reporting Period Impacts (acres except where noted)		Cumulative Impacts (acres except where noted)		Total Allowed Impacts (acres except where noted)		Cumulative Impacts (% toward cap)	
	Permanent	Temporary	Permanent	Temporary	Permanent	Temporary	Permanent	Temporary
<b>Valley elderberry longhorn beetle</b>								
Riparian habitat	0.28	--	3.28	--	523.00	--	0.01	--
Non-riparian habitat	0.00	0.00	0.00	0.00	61.00	1.00	0.00	0.00
<b>Total</b>	<b>0.28</b>	<b>0.00</b>	<b>3.28</b>	<b>0.00</b>	<b>584.00</b>	<b>1.00</b>	<b>0.01</b>	<b>0.00</b>
<b>California tiger salamander</b>								
Aquatic breeding habitat	0.00	0.00	0.00	0.00	12.00	1.00	0.00	0.00
Upland habitat	3.10	0.00	9.30	0.00	398.00	1.00	0.02	0.00
<b>Total</b>	<b>3.10</b>	<b>0.00</b>	<b>9.30</b>	<b>0.00</b>	<b>410.00</b>	<b>2.00</b>	<b>0.02</b>	<b>0.00</b>
Ponds - seasonal aquatic breeding habitat (# of ponds)	0.00	--	0.00	--	3.00	--	0.00	--
<b>Western pond turtle</b>								
Aquatic habitat	6.09	0.15	8.23	1.07	369.00	31.00	0.02	0.03
Nesting and overwintering habitat	18.92	4.51	25.79	4.51	3133.00	112.00	0.01	0.04
<b>Total</b>	<b>25.01</b>	<b>4.66</b>	<b>34.02</b>	<b>5.58</b>	<b>3502.00</b>	<b>143.00</b>	<b>0.01</b>	<b>0.04</b>
Ponds - perennial aquatic habitat (#of ponds)	0.00	0.00	0.00	0.00	19.00	1.00	0.00	0.00
Ponds - perennial nesting and overwintering habitat (# of ponds)	0.00	--	0.00	--	5.00	--	0.00	--
<b>Total (no. of ponds)</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>24.00</b>	<b>1.00</b>	<b>0.00</b>	<b>0.00</b>
<b>Giant garter snake</b>								
Rice habitat	0.00	--	0.00	--	87.00	--	0.00	--
Aquatic habitat	0.14	0.15	0.69	0.51	109.00	1.00	0.01	0.51
Freshwater emergent habitat	5.59	--	5.64	--	76.00	--	0.07	--
Active season upland movement	10.23	0.00	11.03	0.42	441.00	3.00	0.03	0.14
Overwintering habitat	0.51	0.00	0.57	0.00	1235.00	5.00	0.00	0.00
<b>Total</b>	<b>16.47</b>	<b>0.15</b>	<b>17.93</b>	<b>0.93</b>	<b>1948.00</b>	<b>9.00</b>	<b>0.01</b>	<b>0.11</b>
Drainage (miles)	0.00	--	0.00	--	57.00	--	0.00	--
<b>Swainson's hawk</b>								
Nesting habitat	9.77	--	12.44	--	651.00	--	0.02	--
Natural foraging habitat	45.99	3.51	57.24	7.22	1407.00	22.00	0.04	0.33
Cultivated lands foraging habitat	99.08	5.30	193.70	23.31	9399.00	202.00	0.02	0.12
<b>Total</b>	<b>154.84</b>	<b>8.81</b>	<b>250.94</b>	<b>30.53</b>	<b>10806.00</b>	<b>224.00</b>	<b>0.02</b>	<b>0.14</b>
Nest trees	0.00	--	0.00	--	20 <sup>a</sup>	--	0.00	--
<b>White-tailed kite</b>								
Nesting habitat	9.77	--	13.19	--	661.00	--	0.02	--
Primary foraging habitat	45.99	3.51	56.49	7.22	2609.00	29.00	0.02	0.25
Secondary foraging habitat	99.08	5.30	193.70	23.31	7969.00	205.00	0.00	0.11
<b>Total</b>	<b>154.84</b>	<b>8.81</b>	<b>250.19</b>	<b>30.53</b>	<b>10578.00</b>	<b>234.00</b>	<b>0.02</b>	<b>0.13</b>
<b>Western yellow-billed cuckoo</b>								
Nesting/foraging habitat	0.27	--	0.27	--	59.00	--	0.00	--
<b>Western burrowing owl</b>								
Primary habitat	42.64	0.51	52.14	0.51	861.00	1.00	0.06	0.51
Other habitat	4.94	1.00	10.57	3.28	2311.00	218.00	0.00	0.02
<b>Total</b>	<b>47.58</b>	<b>1.51</b>	<b>62.71</b>	<b>3.79</b>	<b>3172.00</b>	<b>219.00</b>	<b>0.00</b>	<b>0.02</b>
<b>Least Bell's vireo</b>								
Nesting/foraging habitat	0.42	--	2.24	--	39.00	--	0.05	--
<b>Bank swallow</b>								
Nesting habitat	0.00	--	1.90	--	37.00	--	0.05	--
<b>Tricolored blackbird</b>								
Nesting habitat	8.90	--	9.25	--	86.00	--	0.11	--
Foraging habitat	34.50	3.00	119.22	21.86	8942.00	230.00	0.01	0.10
<b>Total</b>	<b>43.40</b>	<b>3.00</b>	<b>128.47</b>	<b>21.86</b>	<b>9028.00</b>	<b>230.00</b>	<b>0.00</b>	<b>0.00</b>
<b>Palmate-bracted bird's beak</b>								
Habitat	0.00	--	0.00	--	4.00	--	0.00	--

<sup>a</sup> The Swainson's hawk nest tree take limit is set at 20 to account for the implementation of avoidance and minimization measures. The number of nest trees per planning unit will not exceed those provided in Yolo HCP/NCCP Table 5-5 and the total will not exceed 20 nest trees.

## 3. Acquisition, Restoration, & Enhancement

- *This chapter describes Yolo HCP/NCCP land acquisition and restoration activities that occurred during the reporting period.*

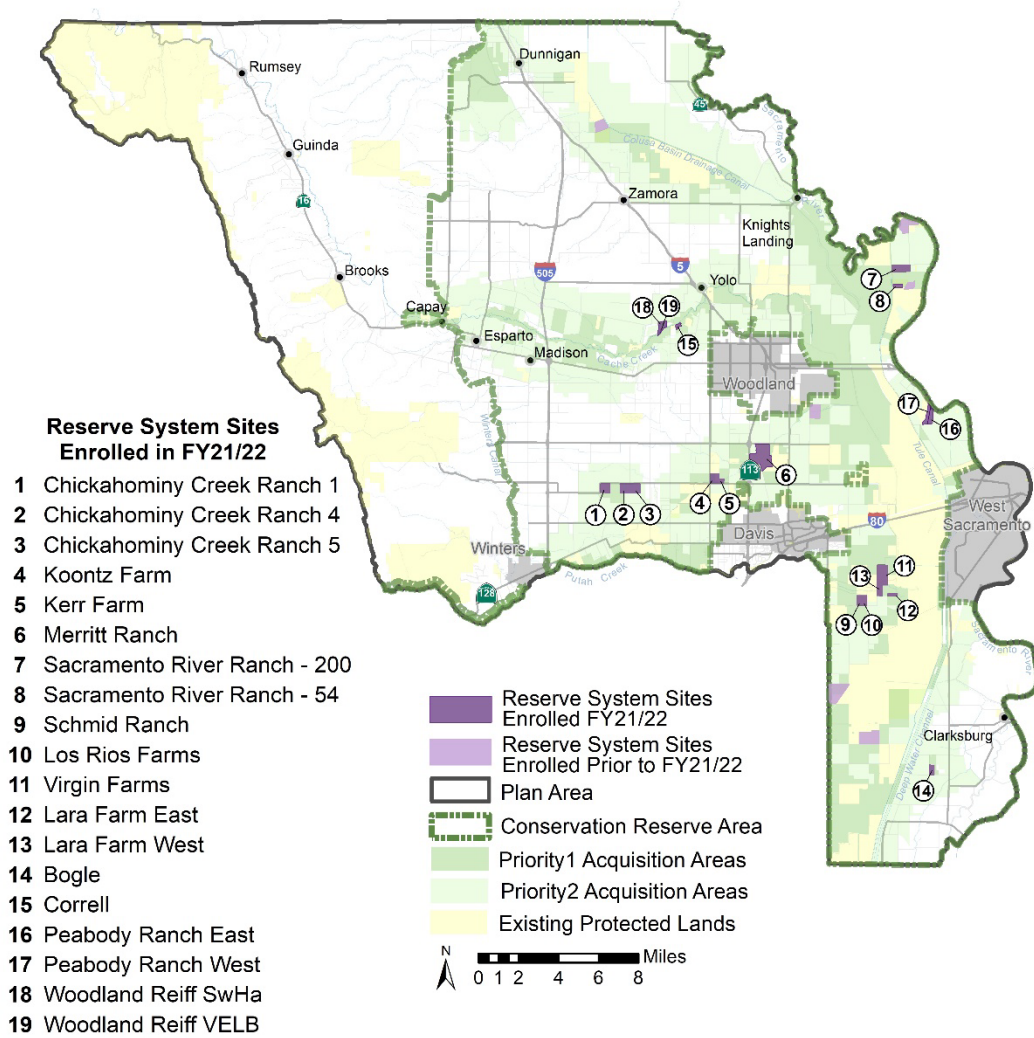
### Acquisition

The heart of the Yolo HCP/NCCP conservation strategy is the creation of a reserve system that will include at least 33,406 acres (and up to 956 acres of additional restored natural community if loss of all allowable acres occurs) for the benefit of covered species, natural communities, biological diversity, and ecosystem function. The Conservancy will select lands for the reserve system based on reserve system assembly principles, criteria, and guidelines described in Yolo HCP/NCCP Section 6.4.1 Conservation Measure 1: Establish Reserve System. Of the 32,406 acres, 24,406 acres will consist of newly protected lands and 8,000 acres will consist of pre-permit reserve lands that the Conservancy enrolls into the reserve system and manages and monitors consistent with the Yolo HCP/NCCP.

During FY21/22 the Conservancy actively pursued the enrollment of both newly protected lands and pre-permit reserve lands into the reserve system. Two newly protected land sites and seventeen pre-permit sites were enrolled in the reserve system during FY21/22. Of the pre-permit sites enrolled, fourteen were previously established Swainson’s hawk habitat conservation easement sites or Swainson’s hawk mitigation receiving sites, which are considered Category 1 baseline easement lands. These sites were enrolled in the reserve system consistent with the enrollment requirements described in Yolo HCP/NCCP Section 6.4.1.7. The remaining pre-permit sites were Category 2 baseline public lands held in fee title by Yolo County and were enrolled consistent with the acquisition process described in Yolo HCP/NCCP Section 7.5.2. The enrollment dates and acreages for all of the sites enrolled during FY21/22 are included in Table 3-1. The natural community land cover contributions of the sites enrolled in the reserve system are summarized in Table 3-2 and the habitat contributions are summarized in Table 3-3.

Substantial progress was made towards the enrollment of two additional newly protected land sites and two additional pre-permit sites. The Science and Technical Advisory Committee (STAC) also resumed site visits after a hiatus due to COVID. During FY21/22 the STAC conducted three site visits and recommended two of the three sites that were evaluated for reserve system enrollment.

**Figure 3-1: Sites enrolled in the Yolo HCP/NCCP reserve system**



**Table 3-1: Sites enrolled in the reserve system in FY21/22**

Site Name	Reporting Year	Date Enrolled	Site Type	Total Acres Enrolled	Conservation Acres Enrolled <sup>a</sup>
Chickahominy Creek Ranch 1	FY21/22	9/22/2021 <sup>b</sup>	Pre-Permit	151.90	148.90
Chickahominy Creek Ranch 4	FY21/22	9/22/2021 <sup>b</sup>	Pre-Permit	160.74	160.74
Chickahominy Creek Ranch 5	FY21/22	9/22/2021 <sup>b</sup>	Pre-Permit	161.11	161.11
Koontz Farm	FY21/22	9/22/2021 <sup>b</sup>	Pre-Permit	91.27	86.77
Kerr Farm	FY21/22	9/22/2021 <sup>b</sup>	Pre-Permit	90.58	88.08
Merritt Ranch	FY21/22	9/22/2021 <sup>b</sup>	Pre-Permit	648.00	643.00
Sacramento River Ranch - 200	FY21/22	9/22/2021 <sup>b</sup>	Pre-Permit	200.00	200.00
Sacramento River Ranch - 54	FY21/22	9/22/2021 <sup>b</sup>	Pre-Permit	54.00	54.00
Schmid Ranch	FY21/22	9/22/2021 <sup>b</sup>	Pre-Permit	80.16	80.16
Los Rios Farms	FY21/22	9/22/2021 <sup>b</sup>	Pre-Permit	80.16	80.16
Virgin Farm	FY21/22	9/22/2021 <sup>b</sup>	Pre-Permit	347.91	342.91
Lara Farm East	FY21/22	9/22/2021 <sup>b</sup>	Pre-Permit	41.02	41.02
Lara Farm West	FY21/22	9/22/2021 <sup>b</sup>	Pre-Permit	86.48	83.48
Bogle	FY21/22	9/22/2021 <sup>b</sup>	Pre-Permit	80.00	76.00
Correll	FY21/22	10/28/2021	Pre-Permit	38.90	38.90
Peabody Ranch East	FY21/22	11/10/2021	Newly Protected	101.16	98.69
Peabody Ranch West	FY21/22	11/10/2021	Newly Protected	101.18	97.86
Woodland Reiff SwHa	FY21/22	2/1/2022	Pre-Permit	110.57	107.07
Woodland Reiff VELB	FY21/22	2/1/2022	Pre-Permit	4.95	4.95
<b>Pre-Permit Lands Enrolled in FY21/22:</b>					<b>2,397.25</b>
<b>Total Pre-Permit Lands Enrolled:</b>					<b>3,626.88</b>
<b>Newly Protected Lands Enrolled in FY21/22:</b>					<b>196.55</b>
<b>Total Newly Protected Lands Enrolled:</b>					<b>277.80</b>
<b>Total Conservation Acres Enrolled:</b>					<b>3,904.68</b>

<sup>a</sup> Conservation land acres are the natural community and semi-natural community land cover acres that are protected or restored and count towards the commitments of the Yolo HCP/NCCP. Areas within easement development envelopes and other land cover types within an easement area are included in the total acres enrolled but do not count towards the Yolo HCP/NCCP commitments.

<sup>b</sup> The enrollment date of this property is the date the Swainson's Hawk Pre-Permit Reserve Lands Management Plan was finalized.



Figure 3-2: Actual vs. projected reserve system enrollment

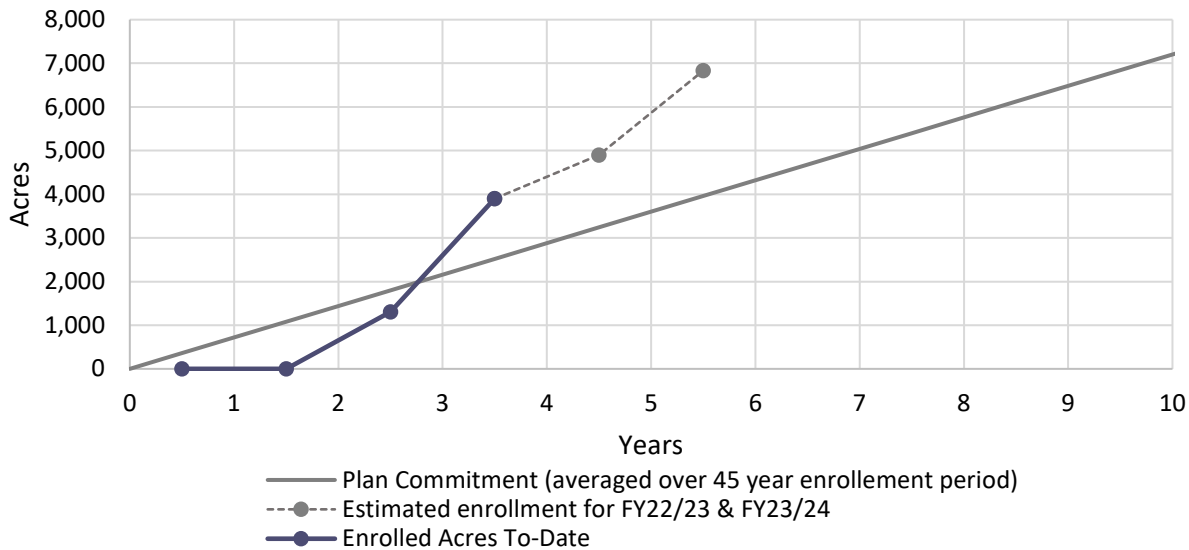


Table 3-2: Natural community land cover acres enrolled in the reserve system

Natural Communities	Total Enrollment Requirements (acres)			Reporting Period Enrollment (acres)			Cumulative Enrollment (acres)			Percent Complete (%)		
	Pre-Permit	Newly Protected	Restoration/Creation	Pre-Permit	Newly Protected	Restoration/Creation	Pre-Permit	Newly Protected	Restoration/Creation	Pre-Permit	Newly Protected	Restoration/Creation
Rice	1,775	2,800	--	0.0	0.0	--	109.0	0.0	--	6.1%	0%	--
Cultivated Lands (non-rice)	3,649	14,362	--	2028.5	173.1	--	2360.2	238.6	--	64.7%	1.7%	--
Grassland	335	4,430	--	102.2	--	--	107.6	12.0	--	32.1%	0.3%	--
Oak Woodland (Valley Oak Woodland+ Blue Oak Woodland)	--	30	--	--	0.0	--	--	0.0	--	--	0%	--
Alkali Prairie <sup>a</sup>	--	33.7	--	--	0.0	--	--	0.0	--	--	0%	--
Fresh Emergent Wetland	750	500	8.4 <sup>b</sup>	0.7	0.0	0.0	565.5	2.2	0.0	75.4%	0.4%	0%
Valley Foothill Riparian	--	1,600	28.2 <sup>c</sup>	75.6	10.5	3.8	237.8	10.5	3.8	--	1%	0.6%
Lacustrine and Riverine	--	600	26 <sup>d</sup>	27.9	0.0	0.0	40.4	1.5	0.0	--	0.2%	0%
<b>Total Natural Communities<sup>e</sup></b>	<b>8,000</b>	<b>24,406</b>	<b>62.6 (up to 956)</b>	<b>2,234.9</b>	<b>183.6</b>	<b>3.8</b>	<b>3,420.5</b>	<b>264.8</b>	<b>3.8</b>	<b>42.8%</b>	<b>1.1%</b>	<b>6.1%</b>

<sup>a</sup> Must be on Woodland Regional Park.

<sup>b</sup> The fresh emergent wetland requirement is to restore an acre of fresh emergent wetland for each acre removed as a result of covered activities up to a maximum of 88 acres. The amount identified is the total acres removed as of the end of FY21/22.

<sup>c</sup> The valley foothill riparian requirement is to restore 20 acres of valley foothill riparian and an additional acre of valley foothill riparian for each acre removed as a result of covered activities up to a maximum of 588 additional acres. The amount identified is the sum of the 20 acre commitment and the total acres removed as of the end of FY21/22.

<sup>d</sup> The lacustrine and riverine requirement is to restore 24 acres of lacustrine specifically for California tiger salamander aquatic habitat and to restore up to 236 acres of lacustrine and riverine for each acre removed as a result of covered activities. The 24 acres may be subsumed within the 236 acres as long as the total restored California tiger salamander aquatic habitat is at least 36 acres. The amount identified is the sum of the 24 acre commitment and the total acres removed as of the end of FY21/22.

<sup>e</sup> The total acreages shown in this table are less than what is shown as the total acres enrolled in Table 3-2 because some of the enrolled acres include other land cover types.

**Table 3-3: Covered species modeled habitat enrolled in the reserve system**

Covered Species Habitat	Reporting Period Conservation (acres except where noted)			Cumulative Conservation (acres except where noted)			Total Conservation Commitment (acres except where noted)			Percent Complete (% toward conservation commitment)		
	Pre-Permit	Newly Protected	Restored	Pre-Permit	Newly Protected	Restored	Pre-Permit	Newly Protected	Restored (for max. allowable loss)	Pre-Permit	Newly Protected	Restored
<b>Valley elderberry longhorn beetle</b>												
Riparian habitat	58	11	4	220	11	4	10	1600	576	100%	1%	0.7%
Non-riparian habitat	36	--	--	36	--	--	120	--	--	30%	--	--
<b>Total</b>	<b>94</b>	<b>11</b>	<b>4</b>	<b>256</b>	<b>11</b>	<b>4</b>	<b>130</b>	<b>1600</b>	<b>576</b>	<b>100%</b>	<b>1%</b>	<b>0.7%</b>
<b>California tiger salamander</b>												
Aquatic breeding habitat	0	0	0	0	0	0	27	36	36	0%	0%	0%
Upland habitat	0	0	--	0	0	--	340	2,000	--	0%	0%	--
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>367</b>	<b>2,036</b>	<b>36</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>
Ponds - seasonal aquatic breeding habitat (no. of ponds)	--	0	0	--	0	0	--	36	36	--	0%	0%
<b>Western pond turtle</b>												
Aquatic habitat	34	0	0	312	1	0	2098	2400	369	14.9%	0.1%	0%
Nesting and overwintering habitat	160	11	--	583	25	--	978	3475	--	59.6%	0.7%	--
<b>Total</b>	<b>194</b>	<b>11</b>	<b>0</b>	<b>895</b>	<b>26</b>	<b>0</b>	<b>3076</b>	<b>5875</b>	<b>369</b>	<b>29.1%</b>	<b>0.4%</b>	<b>0%</b>
<b>Giant garter snake</b>												
Rice habitat	0	0	--	109	0	--	1775	2800	--	6.1%	0%	--
Aquatic habitat	22	0	0	30	1	0	140	420	109	21.4%	0.3%	0%
Freshwater emergent habitat	0	0	0	569	2	0	750	500	76	75.8%	0.4%	0%
Active season upland movement	16	0	--	27	0	--	130	1160	--	21.0%	0.0%	--
Overwintering habitat	19	0	--	10	11	--	115	2315	--	9.0%	0%	--
<b>Total</b>	<b>57</b>	<b>0</b>	<b>0</b>	<b>745</b>	<b>0</b>	<b>0</b>	<b>2910</b>	<b>7195</b>	<b>185</b>	<b>25.6%</b>	<b>0.0%</b>	<b>0%</b>
<b>Swainson's hawk</b>												
Nesting habitat	85	11	0	94	11	0	215	1,600	651	43.8%	0.7%	0%
Natural foraging habitat	77	0	--	83	12	--	980	4,430	--	8.4%	0.3%	--
Cultivated lands foraging habitat	2,018	184	--	2,309	290	--	3,600	14,362	--	64.1%	2.0%	--
<b>Total</b>	<b>2,180</b>	<b>194</b>	<b>0</b>	<b>2,486</b>	<b>312</b>	<b>0</b>	<b>4,795</b>	<b>20,392</b>	<b>651</b>	<b>51.8%</b>	<b>1.5%</b>	<b>0%</b>
<b>White-tailed kite</b>												
Nesting habitat	85	11	0	94	11	0	215	1,600	965	43.8%	1%	0%
Foraging habitat	1,893	173	--	2,034	173	--	3,330	18,792	--	61.1%	1%	--
<b>Total</b>	<b>1,978</b>	<b>184</b>	<b>--</b>	<b>1,978</b>	<b>184</b>	<b>--</b>	<b>3,545</b>	<b>18,792</b>	<b>--</b>	<b>55.8%</b>	<b>1%</b>	<b>--</b>
<b>Western yellow-billed cuckoo</b>												
Nesting/foraging habitat <sup>a</sup>	1	0	0	164	0	0	135	500	60	100%	0%	0%
<b>Western burrowing owl</b>												
Primary habitat	77	0	--	85	12	--	330	3,000	--	25.8%	0.4%	--
Other habitat	837	186	--	843	186	--	770	2,500	--	109.5%	7.4%	--
<b>Total</b>	<b>914</b>	<b>186</b>	<b>0</b>	<b>928</b>	<b>186</b>	<b>0</b>	<b>1,100</b>	<b>5,500</b>	<b>0</b>	<b>84.4%</b>	<b>3.4%</b>	<b>0%</b>
<b>Least Bell's vireo</b>												
Nesting/foraging habitat <sup>a</sup>	24	0	0	186.60	0	0	110	600	608	169.6%	0%	0%
<b>Bank swallow</b>												
Nesting habitat	1.8	0	--	--	0	--	--	50	--	100%	0%	--
<b>Tricolored blackbird</b>												
Nesting habitat <sup>a</sup>	0	0	0	254	0	0	150	200	86	100%	0%	0%
Foraging habitat	1,466	173	0	1,861	302	0	4,000	16,610	--	46.5%	1.8%	--
<b>Total</b>	<b>1,466</b>	<b>173</b>	<b>0</b>	<b>2,115</b>	<b>302</b>	<b>0</b>	<b>4,150</b>	<b>16,810</b>	<b>86</b>	<b>51.0%</b>	<b>1.8%</b>	<b>0%</b>
<b>Palmate-bracted bird's beak</b>												
Habitat	0	0	0	0	0	0	141	33	--	0%	0%	0%

<sup>a</sup> The dataset used to establish the land coverage acreage requirements for reserve lands was prepared several years prior to when the Yolo HCP/NCCP began implementation. Two of the pre-permit sites had significant land cover changes that resulted a reduction in cultivated lands and an increase in foothill valley riparian and fresh emergent wetland land cover types prior to Yolo HCP/NCCP, resulting in modeled habitat acreages within pre-permit lands that exceed what was previously anticipated for some habitat types.

## Restoration and Enhancement

Restoration and enhancement are important components of the overall Yolo HCP/NCCP conservation strategy. Restoration is defined as the manipulation of the physical, chemical, or biological characteristics of a site, with the goal of returning natural or historic functions to a site that historically supported such functions but no longer does because of the loss of one or more required ecological factors or as a result of past disturbance. Enhancement is defined as the manipulation of the physical, chemical, or biological characteristics of a land cover type to heighten, intensify, or improve one or more specific existing ecological functions. Natural community enhancement in the reserve system will result in an increase or improvement in specific ecological function without changing the land cover type.

Under the Yolo HCP/NCCP at least 20 acres of valley foothill riparian and 24 acres of lacustrine and riverine natural communities and will be restored independent of impacts to these natural communities. Additional acres of fresh emergent wetland, valley foothill riparian, and lacustrine and riverine natural communities will be restored at a ratio of one acre restored for each acre of loss that is covered by the Yolo HCP/NCCP permits. The Yolo HCP/NCCP allows for a maximum loss of 88 acres of fresh emergent wetland, 588 acres of valley foothill riparian, and 212 acres of lacustrine and riverine natural communities. The Conservancy will complete construction of all habitat restoration projects by Year 40 of the permit term.

During FY21/22, there were three Yolo HCP/NCCP sites undergoing restoration and/or monitoring of recent restoration activities. These sites include the Woodland Regional Park Preserve wetlands restoration, monitoring and maintenance of valley foothill riparian plantings and elderberry transplants within previously restored portions of the Woodland Reiff site, and active valley foothill riparian restoration and elderberry transplants within portions the Correll site. Summaries of each of these efforts are provided below.

**Table 3-4: Restoration and enhancement activities conducted through FY21/22**

Restoration Project Name	Year Constructed	Year Completed <sup>a</sup>	Restoration/Creation (acres)			Enhancement (acres)		
			Fresh Emergent Wetland	Valley Foothill Riparian	Lacustrine and Riverine	Fresh Emergent Wetland	Valley Foothill Riparian	Lacustrine and Riverine
Woodland Reiff VELB1	2020	2020	--	3.14	--	--	--	--
Correll VELB - Rivers 202	2021	2022	--	0.09	--	--	--	--
Correll VELB - Pioneer Village	2021	2022	--	0.58	--	--	--	--
Woodland Regional Park Preserve Wetland Restoration <sup>b</sup>	2019		7.26	0.80	6.56	--	1.23	--
<b>TOTAL</b>			<b>7.26</b>	<b>4.61</b>	<b>6.56</b>	<b>0.00</b>	<b>1.23</b>	<b>0.00</b>

<sup>a</sup> If year completed is not noted, acreages are design targets but not yet final.

<sup>b</sup> Woodland Regional Park Preserve restoration acres will not count towards HCP/NCCP commitments until the site is enrolled in the reserve system.

## **Woodland Regional Park Preserve Wetlands Restoration**

The City of Woodland, Tuleyome, and the California Waterfowl Association, in coordination with the Conservancy and a variety of project partners, developed a restoration plan for the former borrow pit located at Woodland Regional Park Preserve that was approved by USFWS and CDFW during FY19/20. Initial restoration efforts began during FY19/20. These efforts included excavating deeper open water areas to provide lacustrine habitat; leveling and grading seasonal wetlands to provide fresh emergent wetland habitat; enhancing and restoring riparian habitat; constructing disturbance-free habitat islands and features that provide shelter, nesting, or foraging habitat for various life stages of the covered species; and planting a variety of native riparian and wetland plants. A new well was drilled on site during FY21/22, equipped with a variable speed pump to provide groundwater with which the pond water level can be raised. This dedicated water supply system is critical to managing late-summer water levels for aquatic and wetland habitat and will be used to help ensure aquatic habitat is available even during periods of drought. During FY21/22, weed maintenance, watering of previous plantings, and additional native plants were planted along the edge of the restoration area.

Overall, the restoration project is anticipated to provide 1.23 acres of enhanced riparian habitat, 0.8 acres of restored riparian habitat, 7.26 acres of restored seasonal wetland habitat, and 6.56 acres of restored lacustrine habitat (ICF, 2020). The Conservancy is in the process of enrolling Woodland Regional Park Preserve in the Yolo HCP/NCCP reserve system and will only count the restoration of this project towards the conservation commitments of the Yolo HCP/NCCP once conservation easement is recorded on the property.



*Source: Chris Alford*

### Woodland Reiff VELB

In 2020, the Conservancy issued a permit to cover a project that was required implement Avoidance and Minimization Measure 12, Minimize Take and Adverse Effects on Habitat of Valley Elderberry Longhorn Beetle. Compliance required the transplanting of 37 elderberry shrubs, planting, maintenance, and monitoring of 290 blue elderberry seedlings, and 465 native associate species seedlings (755 total plantings) within a 3.14-acre portion of the Woodland-Reiff VELB site. A minimum of 60% of the required plantings must be surviving at the end of the 5-year monitoring term. Since initial planting efforts at the site, numerous site visits have been made to establish and monitor the revegetation progress and its overall success. A total of 878 elderberry seedlings and native associates were planted to help ensure that survival criteria are met and to reduce the need for future re-planting because of plant mortality. Specific maintenance activities have included providing supplemental irrigation, weed control, minimizing herbivory, mowing, and trash removal. During 2022, the third year of annual monitoring, 95.4% of the 878 total plants (elderberry and native associates) planted have survived and all elderberry transplants have survived. A summary of the status of planting survivorship is provided in Table 3-5. Most mortality has been attributed to consecutive drought conditions experienced in 2021 and 2022. As a result, plantings were provided supplemental irrigation by importing water to the site during very dry periods.

**Table 3-5: Woodland Reiff restoration planting monitoring results for FY21/22**

Planting	Min. # Required to be Planted	Total # Planted	Total # Surviving <sup>a</sup>	% Survival
Blue elderberry	290	327	312	108%
Native Associate Plantings	465	551	408	88%
Overall Total	755	878	720	95%

<sup>a</sup> Calculated by dividing the "Total # Surviving" by the "Min. # Required to be Planted".



Source: Triangle Properties

## Correll

After enrolling the Correll site into the reserve system in FY21/22, the Conservancy developed a restoration plan for 3.4 acres of the site to provide a blueprint for providing habitat mitigation for the valley elderberry longhorn beetle on the site (VELB mitigation area). During FY21/22, a total of 58 elderberries and 58 native associates were planted within 0.67-acres of the VELB mitigation area to mitigate for impacts associated with two projects that received Yolo HCP/NCCP coverage during FY21/22 (Rivers 202 and Pioneer Village). A summary of the plantings after one year of monitoring is provided in Table 3-6.

**Table 3-6: Correll restoration planting monitoring results for FY21/22**

Planting	Min. # Required to be Planted <sup>a</sup>	Total # Planted	Total # Surviving	% Survival
Blue elderberry	58	58	37	64%
Native Associate Plantings	58	58	56	97%
Overall Total	116	116	93	80%

<sup>a</sup> Amounts shown are the combined planting requirements for the Pioneer Village and Rivers 202 developments. Both projects needed to comply with Avoidance and Minimization Measure 12, Minimize Take and Adverse Effects on Habitat of Valley Elderberry Longhorn Beetle.



Source: Chris Alford

## 4. Management, Monitoring, and Research

- *This chapter summarizes the management, monitoring, and research activities the Conservancy and partners conducted within the Yolo HCP/NCCP Plan Area and reserve system lands during the reporting period.*

### Reserve Management

No management issues were encountered by the Conservancy during the reporting period.

#### Management Plans

The Conservancy completed the Swainson's Hawk Pre-Permit Reserve Lands Management Plan and Cultivated Lands Reserve Unit Management Plan during FY21/22. Both of these Reserve Management Plans were reviewed and approved by CDFW and USFWS August and September of 2021 and finalized in September 2021. The Swainson's Hawk Pre-Permit Reserve Lands Management Plan covers all pre-permit sites that were established under the former Yolo County Swainson's hawk foraging habitat mitigation program. The development of this management plan is required to enroll these sites as pre-permit sites in the Yolo HCP/NCCP reserve system as described in Yolo HCP/NCCP Section 7.3.6. The Yolo HCP/NCCP requires that a reserve unit management plan be developed, and subsequently approved by USFWS and CDFW, within five years of the first parcel acquired in each reserve unit. Since the majority of the reserve system will be cultivated lands and each of the Swainson's hawk pre-permit sites are cultivated lands, the Conservancy proactively prepared a Cultivated Lands Reserve Unit Management Plan in tandem with the development of the Swainson's Hawk Pre-Permit Reserve Lands Management Plan to ensure that the Swainson's Hawk Pre-Permit Reserve Lands Management Plan is consistent with the over-arching Cultivated Lands Reserve Unit Management Plan.

Initial efforts to prepare the Cache Creek Reserve Unit Management Plan, which includes activities on natural communities within Planning Unit 7, began in FY21/22. Completion of the Cache Creek Reserve Unit Management Plan is anticipated to occur during FY22/23.

### Monitoring

#### Effectiveness Monitoring

Restoration effectiveness monitoring was conducted on the Woodland Reiff site by Triangle Properties and on the Correll site by the Yolo RCD. As described in Section 3, this is the third year of monitoring the plantings at the Woodland Reiff site and the first year of monitoring the plantings at the Correll site. Each planting is monitored for five years with a focus on growth, survival, and natural regeneration of the elderberry shrubs and associated native plantings. The FY21/22 monitoring

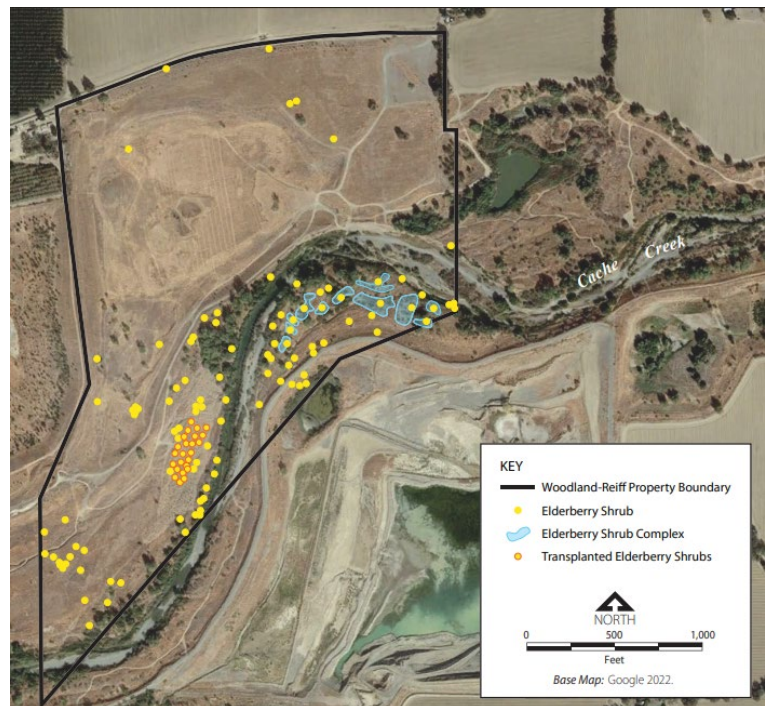
results for plant survival rates at the Woodland Reiff and Correll restoration planting sites are summarized above in Tables 3-5 and 3-6.

Based on the qualitative assessment included in the monitoring reports provided by Triangle Properties and the Yolo RCD, no corrective action is needed at this time. The survival rates of individual plantings at Woodland Reiff will be monitored for two more years and the plantings at Correll will be monitored for four more years, with re-plantings conducted if needed, to ensure that each riparian restoration planting area is successfully establishing on a self-sustaining trajectory and developing into diverse riparian habitat found along the Cache Creek corridor within Planning Unit 7 and representative of the broader goals of the Yolo HCP/NCCP.

### VELB baseline survey

The Conservancy completed a comprehensive elderberry shrub and VELB occupancy baseline assessment on the Woodland Reiff, Correll, and Rogers properties within and adjacent to the Hoppin Reach of Lower Cache Creek (Planning Unit 7) in June 2022. The Woodland Reiff and Correll sites were enrolled in the reserve system during FY21/22 and the Rodgers site was approved by the Conservancy's Board of Directors, CDFW, and USFWS as a candidate conservation easement site and is in the process of being enrolled in the reserve system. A summary of the three sites, including documentation of elderberry shrubs and their characteristics and the presence or absence of valley elderberry longhorn beetle (VELB) exit holes, is included below.

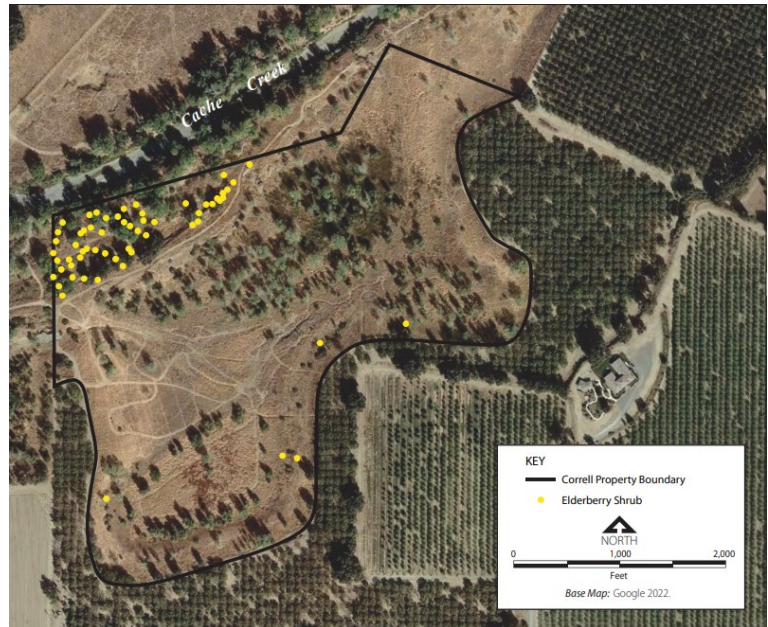
**Woodland Reiff:** A total of 107 elderberry shrub locations were identified on the Woodland-Reiff property during the 2022 survey, including 17 shrub complexes, for a total of 207 elderberry shrubs. Thirty-nine of the shrubs were outside of the Cache Creek basin and were considered upland shrubs, and 168 were considered riparian (inside the levees within the Cache Creek basin). Shrub height ranged from 3 to 20 feet tall with a mean shrub height of approximately 11 feet. Possible VELB exit holes were documented at seventeen (16 percent) of the shrubs or shrub complexes.



**Figure 4-1: Woodland Reiff elderberry shrub locations**  
Source: Estep, 2022



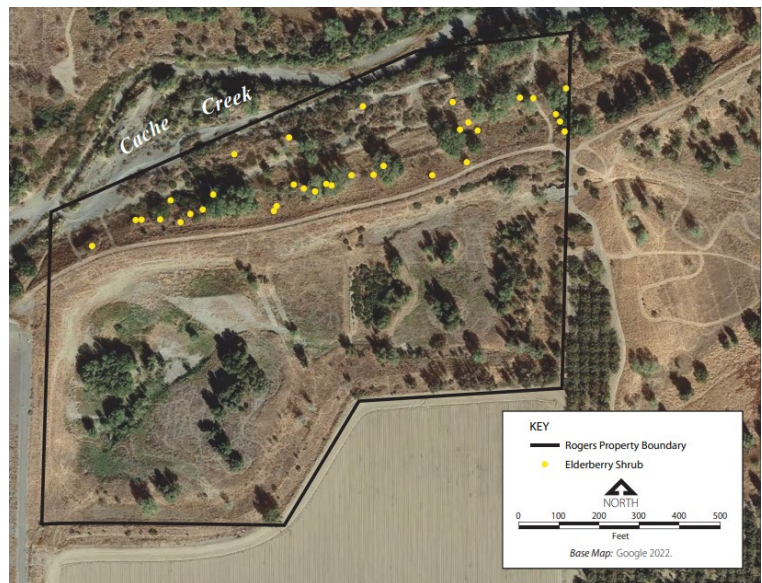
**Correll:** A total of 58 elderberry shrubs and 5 elderberry shrub complexes were identified on the Correll property during the 2022 survey, for a total of 79 elderberry shrubs. Eight of the shrubs were outside of the Cache Creek basin and considered upland shrubs, and 50 were considered riparian (inside the levees within the Cache Creek basin). Shrub height ranged from approximately 8 to 20 feet tall with a mean shrub height of approximately 14 feet. Possible VELB exit holes were documented at 10 (17 percent) of the shrubs or shrub complexes.



**Figure 4-2: Correll elderberry shrub locations**

Source: Estep, 2022

**Rogers:** A total of 33 elderberry shrub locations were documented on the Rogers property during the 2022 survey, including 3 shrub complexes, for a total of 48 elderberry shrubs. All elderberry shrubs on the Rogers property occur within the Cache Creek basin and were considered riparian. There were no upland shrubs outside of the Cache Creek basin. Shrub height ranged from 6 to 20-feet with a mean shrub height of approximately 12 feet. Possible VELB exit holes were documented at six (18 percent) of the shrubs or shrub complexes.



**Figure 4-3: Correll elderberry shrub locations**

Source: Estep, 2022

## Swainson’s hawk baseline survey

A baseline Swainson’s hawk nest survey was conducted for the Woodland Reiff and Correll reserve system sites and the Rodgers candidate reserve system site in June 2022 (Estep, 2022). No nest sites were observed on Woodland Reiff, however, one active Swainson’s hawk nest was observed in a cottonwood tree along Cache Creek approximately 230 feet east of the eastern property boundary. Two active Swainson’s hawk nests were observed near the Correll property line, one within the site, and one immediately adjacent to the site. The first is in a valley oak tree within the northeast corner of the property. The second is in a valley oak tree 565 feet south of the southwest corner of the property. Two active Swainson’s hawk nests were observed near the Rogers site. The first is in a cottonwood tree along Cache Creek near the northwest corner of the Rogers property. The second is in a valley oak tree 565 feet south of the southwest corner of the property.

A Plan-wide Swainson’s hawk and white-tailed kite nest survey was conducted in 2020 to determine the nesting population within the Plan Area close to the start of HCP/NCCP implementation (Estep, 2020). Table 4-1 identifies the Yolo HCP/NCCP reserve sites that had occupied Swainson’s hawk nest sites observed during the 2020 or 2022 surveys.

**Table 4-1: Reserve sites with occupied Swainson's hawk nests**

Reserve Site	Occupied Nest Sites	Year of Observation
Conaway Ranch TCBB CE	2	2020
Peabody Ranch West	1	2020
CCR1	1	2020
Koontz	1	2020
Merritt Ranch	3	2020
Correll	1	2022
<b>Overall Total</b>	<b>9</b>	

## Easement Compliance Monitoring

The Yolo RCD and Yolo Land Trust conducted easement compliance monitoring on all of the sites that are enrolled in the Yolo HCP/NCCP and have easements that are held by the Conservancy. Other parties, including the Cache Creek Conservancy, California Waterfowl Association, and the Wildlife Heritage Foundation each hold easements on sites that are enrolled as pre-permit sites in the Yolo HCP/NCCP reserve system and conduct easement compliance for their respective sites. The Conservancy maintains records of all monitoring compliance activities conducted on Yolo HCP/NCCP reserve system sites.

No sites were out of compliance with the terms of the HCP/NCCP easements.

## Adaptive Management

The only adaptive management activity that occurred during FY21/22 was the supplemental watering of previously planted and transplanted plants associated with the 2020 Woodland Reiff VELB restoration planting. Due to the prolonged drought, water was trucked into the site to reduce plant mortality during the extensive dry period in 2022.

## 5. Stay Ahead Compliance and Changed Circumstances

- *This chapter includes key components of the Yolo HCP/NCCP's compliance monitoring requirements for the stay-ahead provision and for changes and unforeseen circumstances.*

### Stay-Ahead Provision Compliance

The conservation strategy of an NCCP must be implemented at or faster than the rate at which the loss of natural communities or habitat for covered species occurs so that conservation always stays ahead of effects and rough proportionality is maintained between adverse effects on natural communities or covered species and conservation measures (California Fish and Game Code Section 2820(b)(3)(B)). The Yolo HCP/NCCP stay-ahead provision requires the Conservancy to ensure the amount of each natural community conserved, restored, or created by the Conservancy as a proportion of the total requirement for each natural community is roughly proportional to the impact on that natural community as a proportion of the total impact expected by all covered activities. Per Section 7.5.3.1 of the Yolo HCP/NCCP, the stay-ahead provision of the Yolo HCP/NCCP is being met as long as conservation measure implementation (i.e., preservation, restoration, or creation) does not fall behind the pace of covered activity impacts by more than 10 percent (conservation overall and by each land cover type). In situations where the stay-ahead provision is not met, the Conservancy will notify USFWS and CDFW staff within 30 days of completion of the annual report and will meet to develop and implement a mutually agreed upon plan of action to address any deficits in land conservation as described in Yolo HCP/NCCP Section 7.5.3.3.

As shown in Table 5-1, the percentage of the total amount of natural communities acreage enrolled in the Yolo HCP/NCCP reserve system by the end of FY21/22 was 9.9 percent greater than the percentage of the total allowable permanent impacts that had been incurred by the end of FY21/22, meaning that the overall permanent conservation efforts of the Yolo HCP/NCCP implemented by the end of FY20/21 were proportionally greater than the permanent impacts covered by the Yolo HCP/NCCP. Of the eight natural community classifications that are used to track impacts that are covered under the Yolo HCP/NCCP and conserved lands that are enrolled in the Yolo HCP/NCCP reserve system, the grassland and blue oak woodland natural community types are the only ones where the cumulative reserve system enrollment (% towards completing the overall commitment) was less than the cumulative impact (% towards the maximum amount of allowable impacts).

The permanent impacts to the grassland natural community at the end of FY21/22 were 3.5 percent of the total allowable permanent impacts to this community type while the reserve system enrollment of this natural community type was 2.5 percent of the overall conservation commitment for this natural community type, resulting in the cumulative percentage met towards completing reserve system enrollment requirements being 1 percent less than the cumulative percentage of permanent impact for this natural community. This amount is well within the allowable 10 percent allowable deviation, so it is considered to still be roughly proportional. Additionally, there are

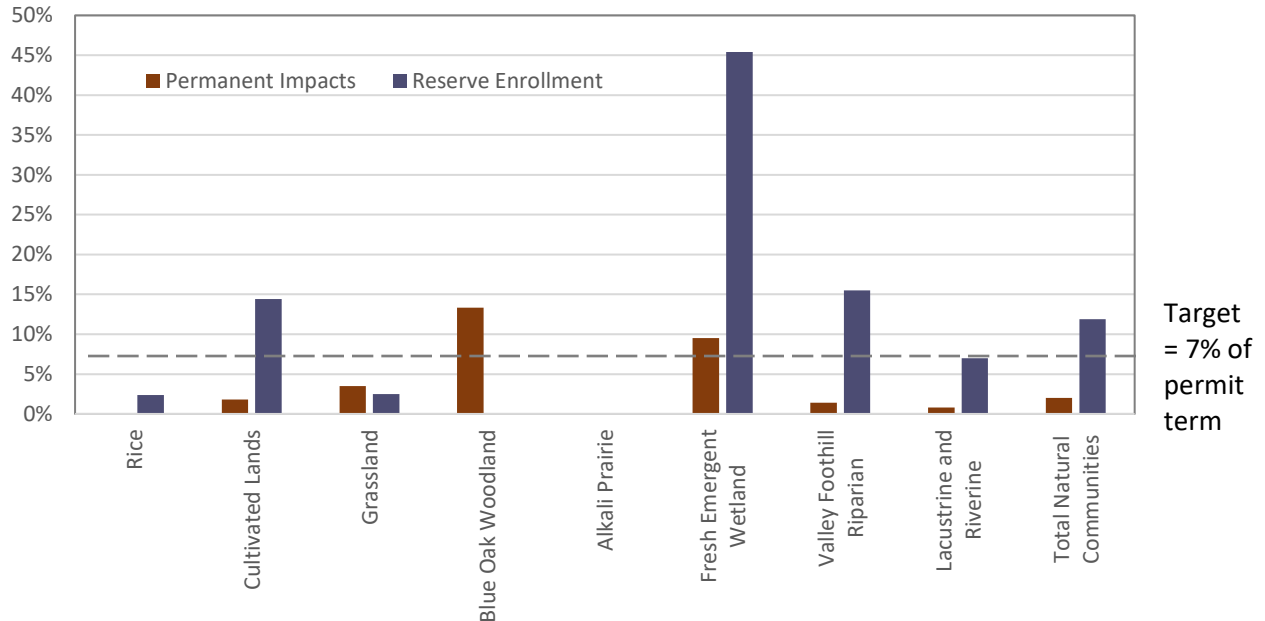
multiple candidate reserve system sites that the Conservancy is in the process of enrolling into the reserve system that include grassland natural community. The Conservancy intends to enroll at least one of these sites in the reserve system in FY22/23, which will increase the cumulative reserve system enrollment of this natural community such that it is greater than the permanent impacts incurred to-date.

The impacts to the blue oak woodland natural community at the end of FY21/22 were 0.4 acres. While this acreage is small, the total allowable take for this natural community is only 3 acres so the 0.4-acre impact represents 13.3 percent of the total allowable impacts to this community type. At the end of FY21/22, no acres of blue oak woodland natural community had been enrolled in the reserve system. This difference between the percentage of impacts and percentage toward meeting the conservation commitments for this natural community type is greater than 10 percent, meaning that the stay-ahead commitment for this natural community type was not met during FY21/22. The Conservancy notified USFWS and CDFW staff of this deficit in land conservation during an HCP/NCCP coordination meeting that occurred on April 7, 2022, shortly after the FY20/21 annual report was prepared and presented to the Conservancy Board on March 21, 2022. Conservancy representatives proposed, and USFWS and CDFW liaisons agreed, that the Conservancy should prioritize enrollment of a property that had already been approved as a candidate conservation easement site that, if enrolled in the reserve system, would meet over 100 percent of the Yolo HCP/NCCP reserve system enrollment commitment for blue oak woodlands. During FY21/22, the Conservancy completed due diligence activities associated with the proposed site and made significant progress towards enrolling the site in the reserve system. Enrollment of the site is pending the Wildlife Conservation Board’s sub-granting of funds from an already awarded USFWS Section 6 Land Acquisition Grant to the escrow account that has been established for the conservation easement purchase. This process has been delayed due to staff shortages at the Wildlife Conservation Board but is anticipated to occur in FY22/23.

**Table 5-1: Natural communities impacts and enrollment through FY21/22**

Natural Communities	Cumulative Permanent Impacts (% of cap)	Cumulative Reserve Enrollment (% complete)	Difference (%)
Rice	0%	2.4%	2.4%
Cultivated Lands (non-rice)	1.8%	14.4%	12.6%
Grassland	3.5%	2.5%	-1.0%
Blue Oak Woodland	13.3%	0.0%	-13.3%
Alkali Prairie	0.0%	0.0%	0.0%
Fresh Emergent Wetland	9.5%	45.4%	35.9%
Valley Foothill Riparian	1.4%	15.5%	14.1%
Lacustrine and Riverine	0.8%	7.0%	6.2%
<b>Total Natural Communities</b>	<b>2.0%</b>	<b>11.9%</b>	<b>9.9%</b>

**Figure 5-1: Comparison of the % of total acres of allowable permanent impacts incurred and the % of total committed conservation acres enrolled by land cover type**



## Unforeseen and Changed Circumstances Compliance

Unforeseen circumstances are events the Conservancy could not reasonably anticipate during development of the Yolo HCP/NCCP. If unforeseen circumstances arise during the life of the Yolo HCP/NCCP, wildlife agencies will not require the commitment of additional land or financial compensation or additional restrictions on the use of land, water, or other natural resources, other than those in the HCP/NCCP, unless the Permittees authorize consent. Within these constraints, the wildlife agencies may require additional measures, but only if (1) they prove an unforeseen circumstance exists, (2) such measures are limited to modifications of the Yolo HCP/NCCP’s operating conservation program for the affected species, (3) the original terms of the Yolo HCP/NCCP are maintained to the maximum extent practicable, and (4) the overall cost of implementing the Yolo HCP/NCCP is not increased by the modification. This section provides a description of actions implemented to respond to unforeseen circumstances.

Changed circumstances are changes in circumstances that affect a species or geographic area covered by an HCP that plan developers and wildlife agencies and can reasonably anticipate and for which they can plan. The Yolo HCP/NCCP identifies eight categories of changed circumstances and the triggers for when a changed circumstance occurs. This section provides a description of actions implemented to respond to changed circumstances.

## Unforeseen Circumstances

An unforeseen circumstance **did not occur** during the reporting period.

## Changed Circumstances

The eight categories of changed circumstances identified in the Yolo HCP/NCCP and a summary of status during the reporting period are provided below.

**1. New species listings.** In the event that USFWS or CDFW lists a species whose range includes any portion of the Plan Area and that species is not already covered by the Yolo HCP/NCCP, the provisions of this changed circumstance will be automatically triggered.

A changed circumstance due to new species listing **did not occur** in the reporting period.

**2. Climate change.** Under the Yolo HCP/NCCP, an increase in temperature of up to 2.5°C (4.5°F), measured as a 10-year running average for three baseline periods (i.e., average annual temperature, average summer temperature [June, July, and August], and average winter temperature [December, January, and February]) is considered a changed circumstance. Table 5-2 tracks the 10-year running average for three baseline periods.

A changed circumstance due to climate change **did not occur** in the reporting period.

**Table 5-2: Average temperatures for three baseline periods (i.e., average annual temperature, average summer temperature [June, July, and August], and average winter temperature [December, January, and February])**

Year	Average Annual Temperature		Average Summer Temperature <sup>a</sup>		Average Winter Temperature <sup>b</sup>	
	C°	F°	C°	F°	C°	F°
2019	16.2	61.2	24.1	75.4	8.32	47
2020	16.9	62.4	24.4	75.9	9.79	49.6
2021	17.9	61.5	24.4	75.6	8.1	48.8
2022	17.1	62.7	25.2	77.3	8.4	47.2

<sup>a</sup> Summer months are June, July, and August.

<sup>b</sup> Winter months are December, January, and February. Winter average is calculated using the previous year's December value.

Source: Sacramento International Airport Weather Station as reported by Weather Underground:

<https://www.wunderground.com/history/monthly/us/ca/sacramento/KSMF/>. Note that the data presented in the first annual report used a weather station in Woodland, CA that has been discontinued so all data reported in this table is from weather station KSMF.

**3. Wildfire.** The Yolo HCP/NCCP anticipates up to four catastrophic fires (each more than 10,000 acres) within the study area over the course of the permit term. This level of fire occurrence would be considered a changed circumstance for the purposes of the Yolo HCP/NCCP. In the event of a wildfire, the Conservancy will assess the proportion of the protected habitat area that has burned

and likely effects on habitat use by covered species. The Conservancy will make an initial determination of whether or not the fire constitutes a changed circumstance and notify the wildlife agencies of the fire event.

A changed circumstance due to wildfire **did not occur** in the reporting period.

**4. Nonnative invasive species or disease.** Under the Yolo HCP/NCCP, the following are considered changed circumstances:

- Infestations of new diseases or new nonnative invasive species that affect up to 25 percent of the extent (i.e., acres) of a predominant natural community (i.e., valley foothill riparian) or occupied covered species habitat within the reserve system in any given year; and
- Spread of nonnative species or diseases on up to 25 percent within the reserve system in any given year.

A changed circumstance due to nonnative invasive species or disease **did not occur** in the reporting period.

**5. Flooding.** Flood damage in protected natural communities and habitats caused by storms that are at or greater than a 100-year flood event on a given stream is a changed circumstance.

A changed circumstance due to flooding **did not occur** in the reporting period.

**6. Drought.** The Yolo HCP/NCCP will fund remedial actions for up to five droughts that occur during the permit term. Of the five droughts, only one is anticipated to be more than six years in duration.

In the second half of FY21/22, California at-large was entering its third year of drought, with 2022 having the driest January, February, and March in over 100 years. This event is considered the first drought during the permit term of the Yolo HCP/NCCP. Riparian restoration areas at the Woodland Reiff and Correll sites actively receiving supplemental watering during FY21/22. Due to the plants within these restoration areas having either been planted during FY21/22 or within the past three years, watering was already anticipated to occur at these sites; however, the timeframe in which plants received supplemental watering was extended due to dry weather conditions.

A changed circumstance due to drought **did not occur** in the reporting period.

**7. Earthquakes.** The Yolo HCP/NCCP will fund remedial actions for damage to reserve system infrastructure, natural communities, and covered species from any earthquake of magnitude 7.1 or lower.

A changed circumstance due to earthquake **did not occur** in the reporting period.

**8. Loss of Swainson's hawk habitat and populations decline below threshold.**

Under the Yolo HCP/NCCP, the Conservancy committed to evaluating the effects on the Swainson's hawk nesting population if the amount of Swainson's hawk foraging habitat falls below 24,560 acres

of high-value cultivated lands foraging habitat or 267,750 total acres of suitable foraging habitat. These two criteria were identified during the planning and development of the Yolo HCP/NCCP to be potential threshold indicators for sustaining the Swainson’s hawk population within the Plan Area. The Conservancy has committed to conduct a Swainson’s hawk breeding population survey consistent with Section 6.5.6.3.6 of the Yolo HCP/NCCP if either of the foraging habitat acreage criteria are not met. A drop in the Swainson’s hawk population below 240 breeding pairs is considered a changed circumstance. If the survey finds that the population has fallen below 240 breeding pairs then the Conservancy must meet and confer with the wildlife agencies to develop and implement a mutually agreed upon plan of action to try to increase the Swainson’s hawk population within the Plan Area.

Table 5-3 tracks Swainson’s hawk habitat data as specified in Section 7.7.1.2.8, *Regional Loss of Swainson’s Hawk Habitat*. During FY21/22 the amount of high-value agricultural foraging habitat acres fell below the 24,560-acre threshold for the second year in a row, however, total acres of habitat did not fall below the 267,750-acre threshold. The Plan Area has been experiencing drought conditions for several years so it is assumed that at least a portion of the recent decrease in high-value agricultural foraging habitat is a result of temporary fallowing in response to drought conditions. Since the amount of high-value cultivated lands foraging habitat was close to the 24,560 acre threshold during FY19/20, the Conservancy proactively hired Estep Environmental Consulting to conduct a countywide Swainson’s hawk nest survey in 2020, to assess the number of breeding pairs within the Plan Area. A total of 381 occupied nesting territories, with a total of 377 active nests, were identified during this survey effort, which is significantly greater than both the 240-pair threshold and the 290 occupied nesting territories observed by Estep during the 2007 survey that was used to inform the criteria included in the Yolo HCP/NCCP (Estep, 2020).

A changed circumstance due to Swainson’s hawk populations declining below the threshold **did not occur** in the reporting period.

**Table 5-3: Swainson’s hawk suitable agricultural foraging habitat within Yolo County**

Foraging Habitat	Evaluation Threshold (acres)	Reporting Period <sup>a</sup>
High Value Foraging Habitat	24,584	23,782
Total Suitable Foraging Habitat	267,750	279,524

<sup>a</sup> Reporting years for crop types are 1 year behind the Yolo HCP/NCCP reporting year due to the timing of when the County’s annual crop reports are released. Natural foraging habitat (i.e. non-agricultural) is the baseline acreage identified in the HCP/NCCP minus the amount authorized for loss under the HCP/NCCP.



## 6. Program Administration

- *This chapter summarizes administrative changes, minor modifications and revisions, and formal amendments to the HCP/NCCP proposed or approved during the reporting period.*

### Administrative Changes

Administrative changes are actions taken on the basis of Yolo HCP/NCCP interpretations that do not substantively change the purpose or intent of the Yolo HCP/NCCP's provisions and do not require modification or amendment of the Yolo HCP/NCCP or its associated authorizations. During the reporting period the following administrative changes were made:

#### **Annual Fee Adjustment**

The Conservancy adjusted the HCP/NCCP fees on March 28, 2022, consistent with Yolo HCP/NCCP Section 8.4.1.6.1 *Automatic Adjustment of Fees* and the *Ordinance Amending the Conservancy's Adopted Fee Ordinance to Authorize the Executive Director to Implement Annual Fee Adjustments* (Ordinance No. 2019-02). The fee adjustments made in 2022 are listed below in Table 7-4.

### Minor Modifications

Minor modifications are changes to the Yolo HCP/NCCP document made in response to new information, changes in scientific understanding, technological advances, and other such circumstances. Minor modifications do not include changes that would adversely affect covered species, the level of take, or the obligations of Permittees. No minor modifications to the Yolo HCP/NCCP were made during the reporting period.

### Amendments

Amendments are changes to the Yolo HCP/NCCP that are more significant than administrative actions or the minor modifications described above. Any proposed changes to the Yolo HCP/NCCP that do not qualify for treatment as administrative actions or minor modification require an amendment to the Yolo HCP/NCCP document and corresponding amendment to the permits, in accordance with applicable laws and regulations regarding permit amendments. No amendments to the Yolo HCP/NCCP were completed during the reporting period.

## 7. Finances

- *This chapter summarizes funds collected by the Conservancy for Yolo HCP/NCCP implementation and the source of those funds (e.g., fees, grants), annual and cumulative expenditures by major cost category, and an explanation of deviations in expenditures from the annual budget. This chapter also includes other relevant information as appropriate for annual reporting purposes.*

### Financial Structure

The financial structure used to manage the finances of the Yolo HCP/NCCP has six separate funds:

- **Mitigation Fee Fund.** The Conservancy places revenue collected from mitigation fees in this fund and tracks expenditures of mitigation fees.

The Conservancy places revenue from four types of mitigation fees in the Mitigation Fee Fund:

- **Land Cover Fee**
- **Fresh Emergent Wetlands Fee**
- **Valley Foothill Riparian Fee**
- **Lacustrine and Riverine Fee**
- **Grant Fund.** The Conservancy tracks all grant revenues and expenditures through this fund.
- **Other Revenue Fund.** The Conservancy places contribution to recovery fee revenue collected from Special Participating Entities, landowner contributions, and other non-mitigation fee revenue in this fund.
- **Mitigation Trust Account.** This fund contains mitigation fees collected under the Swainson's hawk foraging habitat mitigation program. The Swainson's hawk foraging habitat mitigation program was replaced by the Yolo HCP/NCCP as of January 11, 2019. The Conservancy will eventually exhaust these funds by purchasing conservation easements and close the account.
- **Pre-permit Endowment Fund.** This fund contains endowment funds collected to monitor conservation easements established prior to the official start of Yolo HCP/NCCP implementation (January 11, 2019).
- **Post-permit Endowment Fund.** The Conservancy places a portion of every HCP/NCCP mitigation fee collected in this fund to save for management and monitoring of the reserve system after the permit term ends in 50 years.

## Annual Budget

The Conservancy adopted the annual budget for FY21/22 on May 17, 2021. Table 7-1 below, provides the adopted budget summary along with actual revenue and expenditures accrued during FY21/22.

**Table 7-1: Adopted budget, actual revenue, and actual expenditures for FY21/22**

Description	Mitigation Fee Fund	Mitigation Account Fund	Grant Fund	Pre-Permit Endowment	Post Permit Endowment	Other Revenue Fund	Total
Beginning Balance	\$603,255	\$737,411	\$83,779	384,161	32,204	23,876	<b>\$1,864,686</b>
Revenue (Actual) <sup>a</sup>	\$3,480,551	( \$13,916)	\$12,002	(\$5,246)	74,187	45,253	<b>\$3,592,831</b>
Revenue (Budgeted)	\$1,500,000	\$10,000	\$133,792	\$10,000	\$40,000	\$25,000	<b>\$1,718,792</b>
Expenditure (Actual)	( \$566,533)	(\$189,527)	(\$67,483)	(\$541)	0	0	<b>(\$824,084)</b>
Expenditure (Budgeted)	(\$1,410,000)	(\$755,775)	(\$100,000)	(\$2,000)	0	(\$25,000)	<b>(\$2,292,775)</b>
Actual Revenue vs. Expenditure	\$2,914,018	(\$203,443)	(\$55,481)	(\$5,787)	74,187	45,253	<b>\$2,768,747</b>
Closing Balance	\$3,517,273	\$533,968	\$28,298	378,374	106,391	69,129	<b>\$4,633,433</b>
Revenue Budget to Actual	\$1,980,551	(\$23,916)	(\$121,790)	(\$15,246)	\$34,187	\$20,253	<b>\$1,874,039</b>
Expenditure Budget to Actual	( \$843,467)	(\$566,248)	(\$32,517)	(\$1,459)	0	(\$25,000)	<b>(\$1,468,691)</b>

## Revenue Sources

The Yolo HCP/NCCP received revenue from state and federal grants, as well as mitigation fees. Table 7-2 summarizes the state and federal grants that were actively used during FY21/22 and Table 7-3 summarizes the mitigation fee fund revenue and expenditures for FY21/22.

**Table 7-2: State and federal grant revenue expenditures for FY21/22**

Funding Source	Funding Entity	Purpose	Amount Awarded	Required Match	Expended through FY20/21
<b>Direct <sup>a</sup></b>					
Prop 84 (WC-1831CR)	WCB	Development Phase IV	\$275,000	\$68,500	\$244,129
NCCP Local Assistance (Q20200101)	CDFW	Mapping and prioritization of cultivated lands habitat	\$50,000	\$5,000	\$12,957
NCCP Local Assistance (Q20200102)	CDFW	Cache Creek Reserve Unit Management Plan	\$125,000	\$46,500	\$55,166
<b>Indirect <sup>b</sup></b>					
Non-Traditional Section 6 (F20AP11994-00)	USFWS	Easement Acquisitions	\$5,000,000	\$2,200,000	\$833,280
Prop 84 (WC-216CM)	WCB	Easement Acquisitions	\$183,360	\$416,640	\$183,360
Prop 84 (WC-2162CM)	WCB	Easement Acquisitions	\$183,360	\$416,640	\$183,360
<b>TOTAL</b>			<b>\$5,816,720</b>	<b>\$3,153,280</b>	<b>\$1,512,252</b>

*a. Direct grants: Grant funds that reimburse the Conservancy for Yolo HCP/NCCP activities and therefore are included in the Conservancy's budget and financial documents as revenue.*

*b. Indirect grants: Grant funds that are deposited directly into an escrow account for an easement acquisition and are not deposited into any financial accounts held or managed by the Conservancy so they are not documented as revenue in the Conservancy's budget and financial documents.*

**Table 7-3: Mitigation Fee Fund FY21/22 Accounting**

	Beginning Balance	Revenue	Interest	Expenditures	Closing Balance
Total Balance	\$603,255	\$3,571,459	(\$90,908)	(\$566,533)	\$3,517,273

## Endowment Funding

The Conservancy is setting aside 2.5% of every land cover fee and wetlands fee for the Post-Permit Endowment Fund. The Conservancy transferred the Pre-Permit Endowment Fund and the Post-

Permit Endowment Fund to the Sacramento Region Community Foundation to better ensure returns expected for long-term investments.

## Mitigation Fee Act Annual Reporting

The Conservancy provides regular reports on the budget, which include summaries of the acquisition and use of mitigation fee funds to the Conservancy’s Board of Directors during public meetings that comply with the Brown Act. This annual report also contains information necessary to meet the requirements of Govt. Code Sec. 66006 (b) (1) related to the Mitigation Fee Act as follows:

For each separate account or fund established pursuant to subdivision (a), the local agency shall, within 180 days after the last day of each fiscal year, make available to the public the following information for the fiscal year:

*(A) A brief description of the type of fee in the account or fund.*

The purpose of the Land Cover Fee is to mitigate for direct (project impact acreage) and indirect (project land cover fee buffer acreage) impacts on species covered by the Yolo HCP/NCCP. The Land Cover Fee revenues will be used to fund the acquisition of land that does or could provide habitat for covered species, the management and enhancement of such land and habitat, and the administrative actions necessary to accomplish these tasks, as more particularly set forth in the Yolo HCP/NCCP.

The purpose of the Wetlands Fee is to mitigate (in addition to the Land Cover Fee) for impacts to fresh emergent marsh, valley foothill riparian, and lacustrine and riverine land cover types. Revenue from the three Wetlands Fee types will be used to fund the restoration, creation and management of fresh emergent wetland, valley foothill riparian, and lacustrine and riverine lands and the administrative actions necessary to perform these tasks, as more particularly set forth in the Yolo HCP/NCCP.

The purpose of the Non-Riparian Elderberry Transplant Maintenance Fee is to cover the costs associated with the required five years of monitoring and maintenance of elderberry shrubs transplanted from non-riparian land cover types. Previously there was no established fee for this activity type.

*(B) The amount of the fee.*

The Yolo HCP/NCCP updates its fees annually on or about March 15. As of the March 28, 2022 update, the Yolo HCP/NCCP per acre fees were as shown in Table 7-4.

In September 2021, the Conservancy adjusted its Valley Foothill Riparian fee and elderberry bush transplant policy. Under the previous policy the project proponent was responsible for elderberry

**Table 7-4: Yolo HCP/NCCP Fees at the end of FY21/22**

Fee Type	Fee Amount (per acre)
Land Cover Fee	\$15,629
Wetlands Fee	
Fresh Emergent Wetland	\$80,864
Valley Foothill Riparian	\$85,009
Lacustrine and Riverine	\$64,854
Non-Riparian Elderberry Transplant Maintenance Fee	\$19,104

shrub transplantation and the wetland fee rate funded the following three additional costs:

1. Identifying and developing plans and specifications for restoration sites
2. Planting specific amounts of elderberry shrub native associates
3. Five years of post-construction irrigation, maintenance, and monitoring

Under the new policy, the responsibility for planting elderberry shrub native associates, the second cost component, was shifted to project proponents, thereby removing this cost from the wetland fee, and reducing the fee by 26%. The Conservancy remains responsible for the two other cost components. For project proponents transplanting elderberry shrubs from non-riparian habitat, a per acre maintenance fee was created. Previously there was no established fee for this activity type.

*(C) The beginning and ending balance of the account or fund.*

See Table 7-3.

*(D) The amount of the fees collected and the interest earned.*

See Table 7-3.

*(E) An identification of each public improvement on which fees were expended and the amount of the expenditures on each improvement, including the total percentage of the cost of the public improvement that was funded with fees.*

None reportable within this period.

*(F) An identification of an approximate date by which the construction of the public improvement will commence if the local agency determines that sufficient funds have been collected to complete financing on an incomplete public improvement, as identified in paragraph (2) of subdivision (a) of Section 66001, and the public improvement remains incomplete.*

None reportable within this period.

*(G) A description of each interfund transfer or loan made from the account or fund, including the public improvement on which the transferred or loaned fees will be expended, and, in the*

*case of an interfund loan, the date on which the loan will be repaid, and the rate of interest that the account or fund will receive on the loan.*

None reportable within this period.

*(H) The amount of refunds made pursuant to subdivision (e) of Section 66001 and any allocations pursuant to subdivision (f) of Section 66001.*

None reportable within this period.

## References

Estep, J. September 2020. The 2020 Distribution, Abundance, and Habitat Associations of the Swainson's Hawk (*Buteo swainsoni*) in Yolo County, California. Woodland, California.

Estep, J. September 2022. Elderberry Shrub Assessment on the Woodland-Rieff, Correll, and Rogers Properties along Lower Cache Creek, Yolo County. Woodland, California.

ICF. October 2020. Woodland Regional Park Natural Community Restoration Plan. Sacramento, California. Prepared for the Yolo Habitat Conservancy. Woodland, California.

Triangle Properties, Inc. October 2022. Yolo Habitat Conservancy Elderberry Seedlings and Native Associates Planting Project: 3<sup>rd</sup> Year Monitoring Report (2022). Yolo County, California.





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