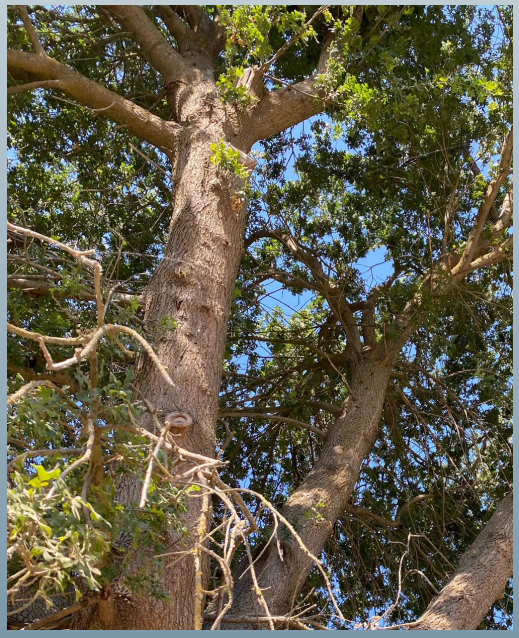
Yolo

Habitat Conservation Plan / Natural Community Conservation Plan



Yolo HCP/NCCP Annual Report

for Fiscal Year 2020/2021

www.yolohabitatconservancy.org

Yolo HCP/NCCP Annual Report
for Fiscal Year 2020/2021

Yolo Habitat Conservancy
Board Members during FY20/21

Don Saylor, Yolo County

Gary Sandy, Yolo County

Will Arnold, City of Davis

Martha Guerrero, City of West Sacramento

Chris Ledesma, City of West Sacramento

Pierre Neu, City of Winters

Xochitl Rodriguez, City of Woodland

Victoria Fernandez, City of Woodland

Matt Dulcich, UC Davis

Prepared By:

Yolo Habitat Conservancy & Alford Environmental

March 2022

Table of Contents

Tables

Figures

Acronyms and Abbreviations

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
FY20/21	Fiscal Year 2020/2021
HCP	Habitat Conservation Plan
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
Plan	Yolo Habitat Conservation Plan / Natural Community Conservation Plan
RCD	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 third 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, 2020 and June 30, 2021, which was the second 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.

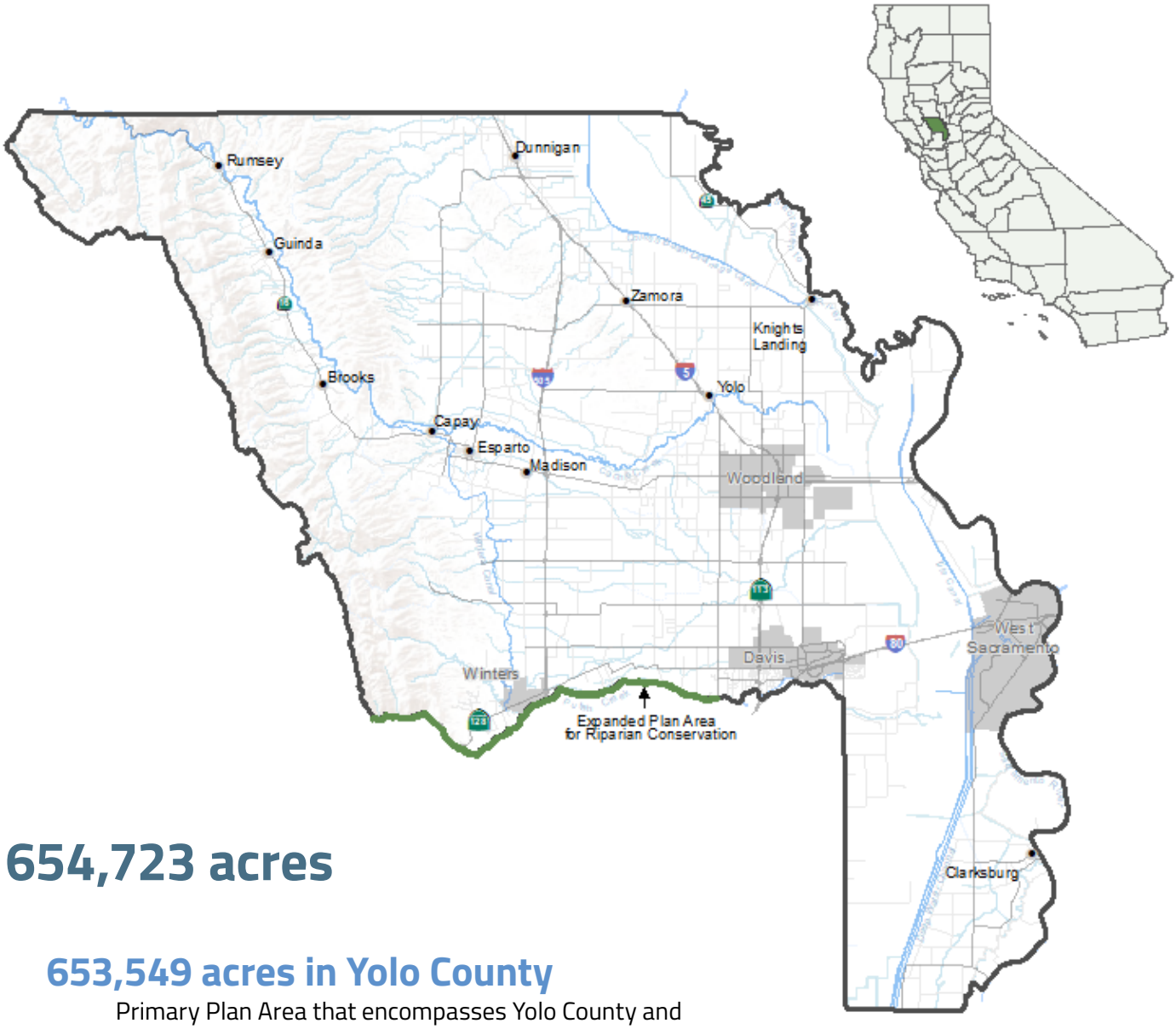
The components of this annual report include:

- **Covered Activities and Impacts**
- **Acquisition and Restoration**
- **Reserve Management**
- **Enhancement, Monitoring, and Research**
- **Stay-Ahead Provisions**
- **Changed and Unforseen Circumstances**
- **Program Administration**
- **Finances**

Yolo Habitat Conservation Plan / Natural Community Conservation Plan

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.

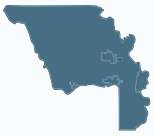
Yolo HCP/NCCP permit coverage applies only to eligible projects, known as covered activities, undertaken within the Yolo HCP/NCCP Plan Area (Plan Area). The Yolo HCP/NCCP covers a total of 21,559 acres of activities within five categories, including: urban and rural projects (17,550 acres), public/private 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[a] Federal/State
Plants		
Palmate-bracted bird's beak	*Chloropyron palmatum*	E/E
Invertebrates		
Valley elderberry longhorn beetle	*Desmocerus californicus dimorphus*	T/-
Amphibians		
California tiger salamander (Central California DPS)	*Ambystoma californiense*	T/T
Reptiles		
Western pond turtle	*Actinemys marmorata*	-/CSC
Giant garter snake	*Thamnophis gigas*	T/T
Birds		
Swainson's hawk	*Buteo swainsoni*	-/T
White-tailed kite	*Elanus leucurus*	-/FP
Western yellow-billed cuckoo	*Coccyzus americanus occidentalis*	T/E
Western burrowing owl	*Athene cunicularia hypugaea*	-/CSC
Least Bell's vireo	*Vireo bellii pusillus*	E/E
Bank swallow	*Riparia riparia*	-/T
Tricolored blackbird	*Agelaius tricolor*	-/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 for currently listed species and those that may be listed in the future.

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 coservation 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 lands.
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

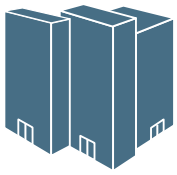
- This chapter provides an overview of the covered activities to which Permittees granted a certificate of approval, compliance, or inclusion during the reporting period.

Reporting Period Activities

Between July 1, 2020 and June 30, 2021, a total of seven projects received permit coverage through the Yolo HCP/NCCP. The projects include four urban projects and activities, two rural projects and activities, 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 21 projects have received permit coverage between the start of Yolo HCP/NCCP implementation and the end of this reporting period.

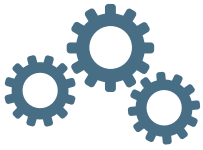
No Permittee, applicant, or Special Participating Entity (SPE) reported observations of harassment or mortality of covered species occurred during the reporting period.

Covered Activity Categories



Urban Projects and Activities

Rural Projects and Activities



Public/Private Operations and Maintenance

Conservation Strategy Implementation

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, four urban projects received streamlined permits through the Yolo HCP/NCCP. These projects included three residential developments, residential roads and storm water collection associated with existing development. Highlights of these approved projects are provided below.

General Urban Development:

The City of West Sacramento issued permits for two parcel maps to allow for later residential development, the Jefferson Boulevard Parcel Map and the Otis Avenue Parcel Map.

The City of Davis issued a permit for the Bretton Woods residential development, which consists of 560 dwelling units and 4.5 miles of off-street biking and walking paths within the project area and an additional mixed-use area.

General Urban Development and Public Services:

The City of West Sacramento issued a permit to itself for the replacement of water and sewer mains, sewer lining, and curb, gutter, and pavement rehabilitation in an area bounded by Jefferson Boulevard to the east/northeast, Park Boulevard to the west, and Stone Boulevard to the south of West Sacramento.

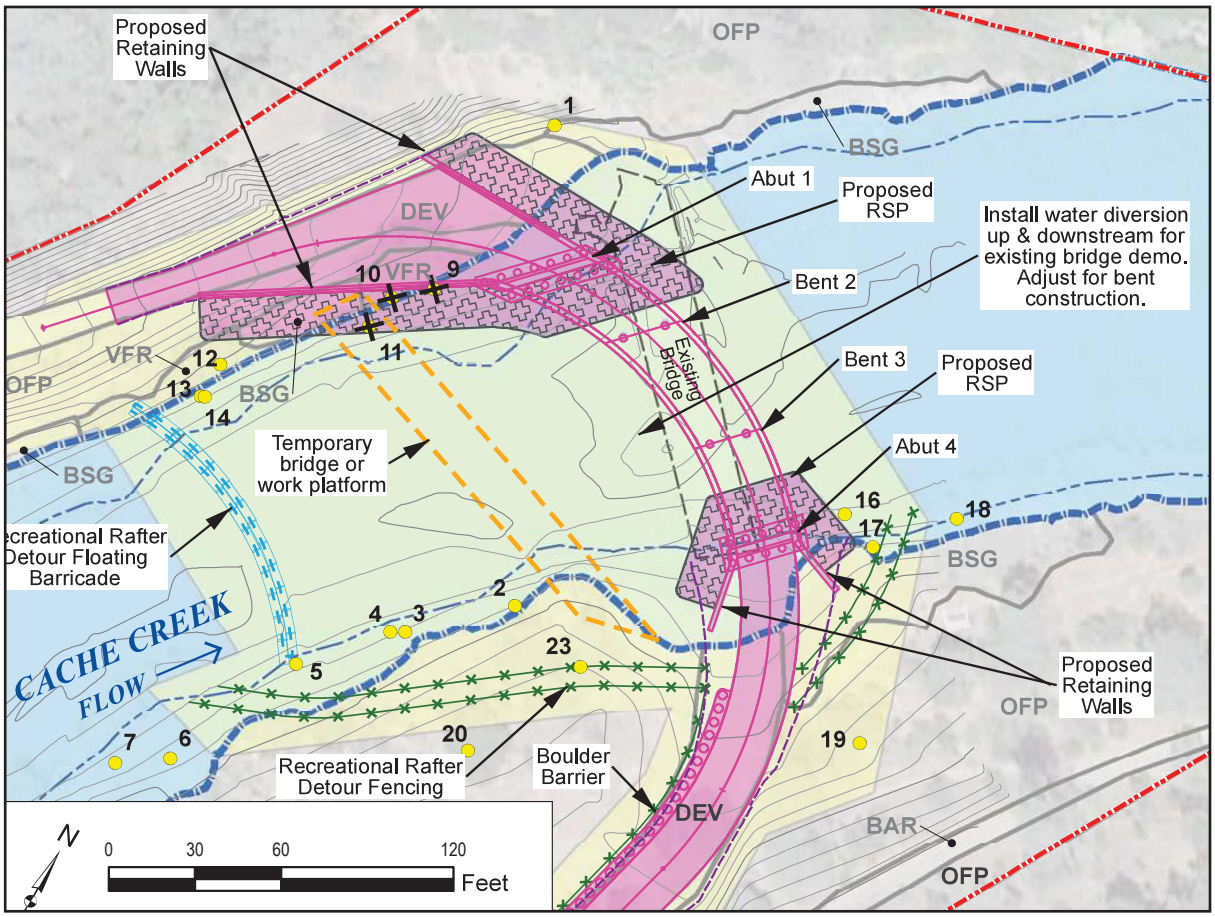
Bretton Woods Preliminary Site Map
Source: Bretton Woods, LLC

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, two rural projects received streamlined permits through the Yolo HCP/NCCP. These projects included two rural infrastructure and utilities projects.

Rural Public Services, Infrastructure, and Utilities:

The County of Yolo issued itself a permit to replace the existing County Road 40 Bridge over Cache Creek (22C-0091) located in northwestern Yolo County, near the intersection of County Road 40 and CA-16, approximately 5 miles northwest of the town of Rumsey with a new six-cell, reinforced concrete box culvert-bridge. The County of Yolo also issued itself a permit to perform subsurface geotechnical investigations to evaluate and document site characteristics using borings to obtain data needed to inform the project design, engineering, and permit requirements for the proposed future Small Communities Flood Risk Reduction Phase 2 Knights Landing Flood Management Project - Knights Landing Ridge Cut Levee Improvements.



County Road 40 Bridge Project Design
Source: MGE Engineering, Inc.

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 that are 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 (CCRMP). No operations and maintenance activities received permit coverage under the Yolo HCP/NCCP during FY20/21.

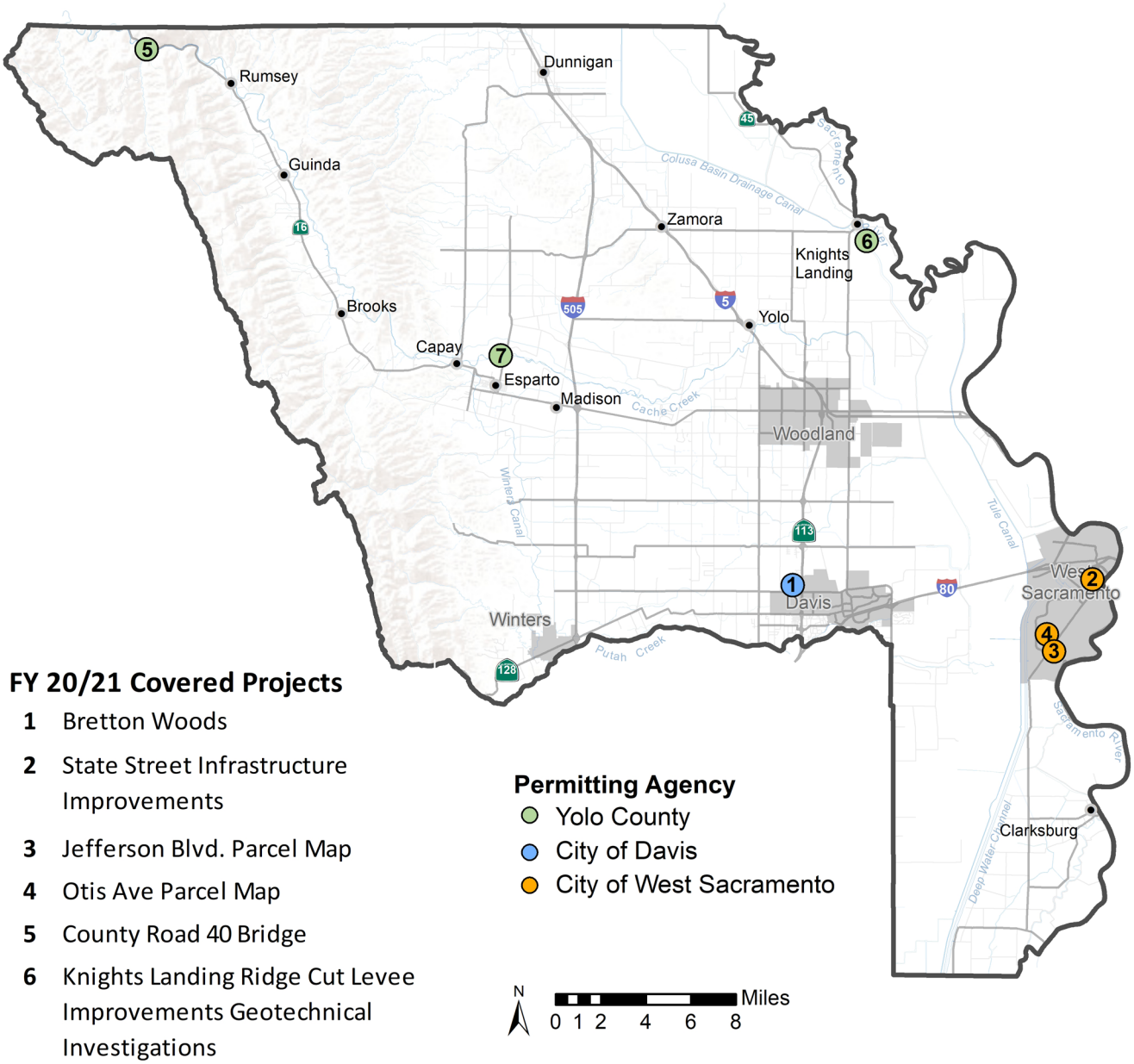
Conservation Strategy Implementation Projects

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 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 County of Yolo issued permits to Granite Construction Company to implement a CCRMP activity consistent with the HCP/NCCP Conservation Strategy. The project involved repair and stabilization of approximately 1,975-foot section of creek bank.

Figure 2-1: Covered activities FY20/21



FY 20/21 Covered Projects

1. Bretton Woods
2. State Street Infrastructure Improvements
3. Jefferson Blvd. Parcel Map
4. Otis Ave Parcel Map
5. County Road 40 Bridge
6. Knights Landing Ridge Cut Levee Improvements Geotechnical Investigations
7. Granite Esparto Bank Improvements

Table 2-1: Covered activities for which take coverage was granted during FY20/21

Project ID	Project Name	Activity Type	Covered By	Description	Perm. Impacts (acres)	Temp. Impacts (acres)
Urban Projects and Activities						
(1) 2018_07	Bretton Woods	General Urban Development	City of Davis	Residential development consisting of 560 dwelling units, 4.5-miles of biking and walking paths, and a mixed use area.	81.28	55.3
(2) 2020_05	State Street Infrastructure Improvements	Urban public services, infrastructure and utilities	City of West Sacramento	Underground infrastructure improvments.	0	0
(3) 2020_10	Jefferson Blvd. Parcel Map	General Urban Development	City of West Sacramento	Parcel map to divide one parcel totaling 7.56-aces into three parcels.	1.49	0.9
(4) 2021_05	Otis Ave Parcel Map	General Urban Development	City of West Sacramento	Parcel map to divide one parcel totaling 2.5-aces into two 1.25-acre parcels.	1.25	0
Rural Projects and Activities						
(5) 2020_06	County Road 40 Bridge Replacement	Rural public services, infrastructure, and utilities	Yolo County	Replacement of an existing bridge with a new one.	0.26	0.51
(6) 2021_07	Knights Landing Ridge Cut Levee Improvements Geotechnical Investigations	Rural public services, infrastructure, and utilities	Yolo County	Subsurface geotechnical investigations to evaluate and document site characteristics using borings.	0.2	0
Public and Private Operations and Maintenances						
None	-	-	-	-	-	-
Conservation Strategy Implementation[a]						
(7) 2020_08	Granite Esparto Bank Improvements	CCRMP	Yolo County	Repair and stablization of an approximately 1,975-foot section of creek bank within Cache Creek.	1.9	0

a. The Yolo HCP/NCCP incorporated the CCRMP restoration and enhancement actions into its conservation strategy to help meet the HCP/NCCP's biological goals and objectives for ecosystem processes, natural communities, and covered species as described in Section 6.5.8.1.1 of the Yolo 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 Yolo 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: Permanent and temporary acreages disturbed by land cover type for the collective covered activities in the reporting period and cumulatively

Natural Communities	Reporting Period Impacts (acres)		Cumulative Impacts (acres)		Total Allowed Impacts (acres)		Cumulative Impacts (% toward cap)	
	Permanent	Temporary	Permanent	Temporary	Permanent	Temporary	Permanent	Temporary
Rice	--	--	--	--	87	--	0%	--
Cultivated Lands (non-rice)	69.9	52.5	88.8	52.5	9,910	203	0.9%	25.9%
Grassland	2.3	1.9	11.1	3.9	1,734	28	0.6%	13.9%
Blue Oak Woodland	--	--	0.40	--	3	--	13.3%	--
Alkali Prairie	--	--	--	--	4	4	0.0%	0%
Fresh Emergent Wetland	0.4	--	0.6	--	88	--	0.7%	--
Valley Foothill Riparian	0.03	--	2.3	--	588	--	0.4%	--
Lacustrine and Riverine	0.2	0.5	1.0	3.0	236	31	0.4%	9.7%
Total Natural Communities	***72.82***	***54.9***	***104.2***	***59.4***	***12,649***	***266***	***0.8%***	***22.3%***

[a] *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)*

Table 2-3: Permanent and temporary acreages disturbed by modeled habitat for the collective covered activities in the reporting period and cumulatively.

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
Valley elderberry longhorn beetle								
Riparian habitat	0	--	3.00	--	523	--	0.6%	--
Non-riparian habitat	0	0	0	0	61	1	0%	0%
Total	***0***	***0***	***3***	***0***	***584***	***1***	**0.5%**	**0%**
California tiger salamander								
Aquatic breeding habitat	0	0	0	0	12	1	0%	0%
Upland habitat	0	0	6.20	0	398	1	1.6%	0%
Total	***0***	***0***	***6.20***	***0***	***410***	***2***	**1.5%**	**0%**
Ponds - seasonal aquatic breeding habitat (no. of ponds)	0	--	0	--	3	--	0%	--
Western pond turtle								
Aquatic habitat	0.58	0.51	1.56	0.92	369	31	0.4%	3.0%
Nesting and overwintering habitat	0	0	6.87	0	3,133	112	0.2%	0.2%
Total	***0.61***	***0.51***	***8.43***	***0.92***	***3,502***	***143***	**0.2%**	**0.0%**
Ponds - perennial aquatic habitat (no. of ponds)	0	0	0	0	19	1	0%	0%
Ponds - perennial nesting and overwintering habitat (no. of ponds)	0	--	0	--	5	--	0%	--
Total (no. of ponds)	***0***	***0***	***0***	***0***	***24***	***1***	**0%**	**0%**
Giant garter snake								
Rice habitat	0	--	0	--	87	--	0%	--
Aquatic habitat	0.35	0	0.55	0.36	109	1	0.5%	36.0%
Freshwater emergent habitat	0	--	0.05	--	76	--	0.07%	--
Active season upland movement	0	0	0.80	0.42	441	3	0.2%	14.0%
Overwintering habitat	0	0	0.06	0	1,235	5	0%	0%
Total	***0.35***	***0***	***1.46***	***0.78***	***1,948***	***9***	**0.1%**	**11.1%**
Drainage (miles)	0	--	0	--	57	--	0%	--
Swainson's hawk								
Nesting habitat	0.03	--	2.67	--	651	--	0.4%	--
Natural foraging habitat	2.48	1.86	11.25	3.71	1,407	22	0.8%	16.9%
Cultivated lands foraging habitat	78.04	18.01	94.62	18.01	9,399	202	1.0%	8.9%
Total	***80.55***	***19.87***	***105.87***	***21.72***	***10,806***	***224***	**1.0%**	**9.7%**
Nest trees	0	--	0	--	20[a]	--	0%	--
White-tailed kite								
Nesting habitat	0	--	3.42	--	661	--	0.5%	--
Primary foraging habitat	2.13	1.86	10.50	3.71	2,609	29	0.4%	12.8%
Secondary foraging habitat	78.04	18.01	94.62	18.01	7,969	205	0.2%	8.8%
Total	***80.17***	***19.87***	***105.12***	***21.72***	***10,578***	***234***	**1.0%**	**9.3%**
Western yellow-billed cuckoo								
Nesting/foraging habitat	0	--	0	--	59	--	0%	--
Western burrowing owl								
Primary habitat	0	0	9.50	0	861	1	1.1%	0%
Other habitat	5.63	2.28	5.63	2.28	2,311	218	0.2%	1.0%
Total	***5.63***	***2.28***	***15.13***	***2.28***	***3,172***	***219***	**0.3%**	**1.0%**
Least Bell's vireo								
Nesting/foraging habitat	0	--	1.82	--	39	--	4.7%	--
Bank swallow								
Nesting habitat	1.90	--	1.90	--	37	--	5.1%	--
Tricolored blackbird								
Nesting habitat	0.35	--	0.35	--	86	--	0.4%	--
Foraging habitat	78.92	18.86	84.72	18.86	8,942	230	0.9%	8.2%
Total	***79.27***	***18.86***	***85.07***	***18.86***	***9,028***	***230***	**0%**	**0%**
Palmate-bracted bird's beak								
Habitat	0	--	0	--	4	--	0%	--

[a] *The Swainon'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 and Restoration

- 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 selects 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 FY20/21 the Conservancy actively pursued the enrollment of both pre-permit reserve lands and newly protected lands into the reserve system. Conservancy representatives presented and discussed an enrollment approach for pre-permit reserve lands to CDFW and USFWS staff during the monthly Yolo HCP/NCCP coordination meeting that took place on August 6, 2020. This pre-permit enrollment approach identified the mitigation banks, Swainson's hawk conservation easement sites, and other specific pre-permit lands identified in Table 6-6 and Table 8-3 of the Yolo HCP/NCCP that the Conservancy would prioritize enrolling in the reserve system along with the steps for doing so, consistent with Yolo HCP/NCCP Section 6.4.1.7. Five pre-permit sites and one site, Tule Ranch, that is partially pre-permit and partially newly protected lands were enrolled during FY20/21. The enrollment dates and acreages for each of these sites are included in Table 3-1. The natural communities 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 also made towards the enrollment of sixteen additional pre-permit sites, including fourteen Swainson's hawk conservation easement sites and two sites owned by the County of Yolo along Cache Creek. Due diligence activities were also completed for two newly protected lands sites recognized as Peabody Ranch East and Peabody Ranch West. These two sites were approved by the Conservancy, CDFW, and USFWS during FY20/21 for reserve system enrollment. The Conservancy anticipates that the Peabody Ranch East and Peabody Ranch West sites will receive final funding and be enrolled in the Yolo HCP/NCCP reserve system during the first half of FY21/22.

Figure 3-1: Sites enrolled in the reserve system in FY20/21

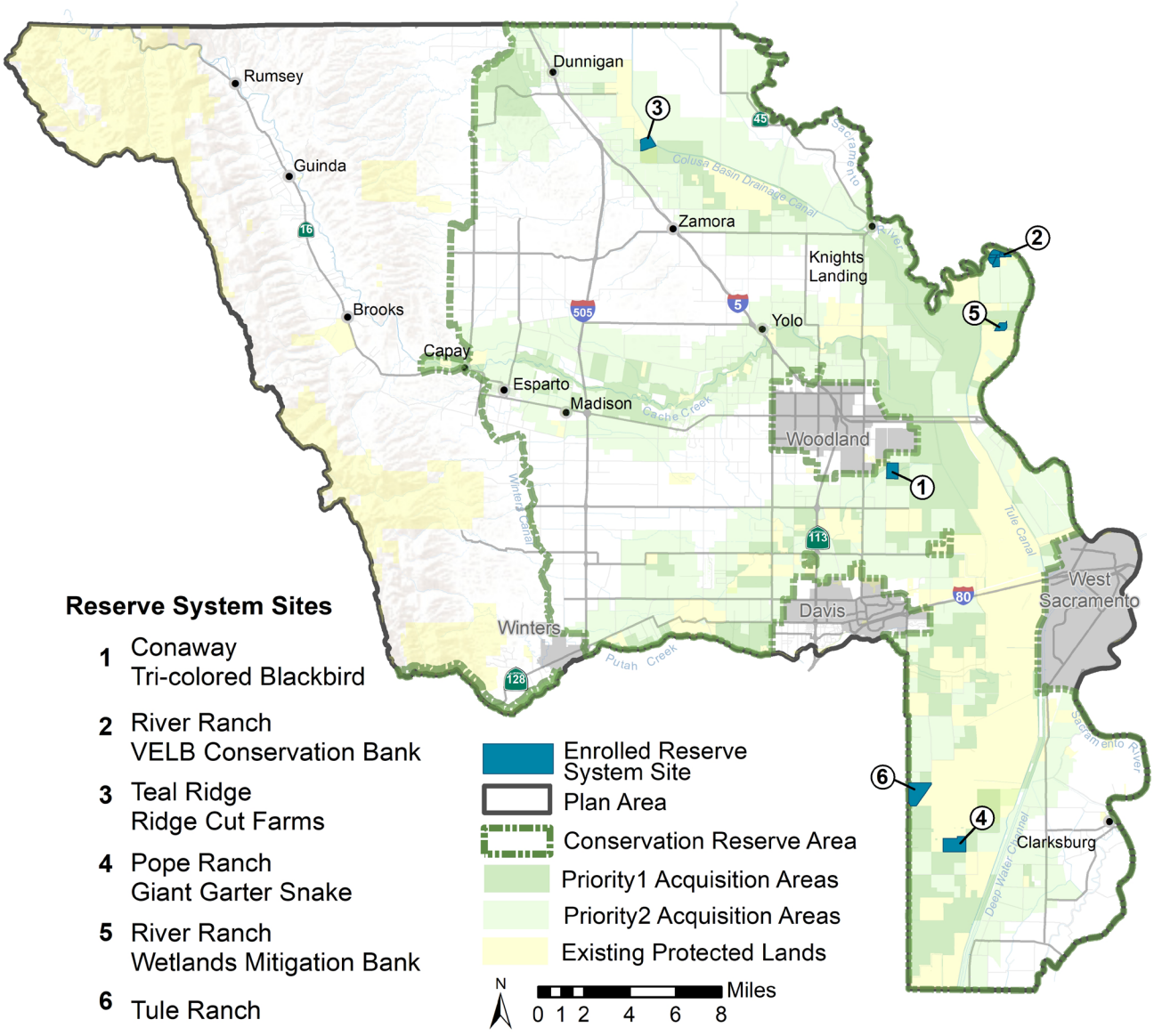


Table 3-1: Sites enrolled in the reserve system in FY20/21

Site Name	Reporting Year	Date Enrolled	Site Type	Total Acres Enrolled	Conservation Acres Enrolled
Conaway - Tri-colored Blackbird	FY20/21	7/30/2020[a]	Pre-Permit	224.20	224.20
River Ranch - VELB Conservation Bank	FY20/21	9/15/2020[b]	Pre-Permit	152.55	152.55
Teal Ridge - Ridge Cut Farms Mitigation Bank	FY20/21	9/15/2020[b]	Pre-Permit	77.73	77.73
Pope Ranch - Giant Garter Snake	FY20/21	9/15/2020[b]	Pre-Permit	391.00	391.00
River Ranch - Wetlands Mitigation Bank	FY20/21	9/15/2020[b]	Pre-Permit	32.42	32.42
Tule Ranch	FY20/21	11/24/2020	Pre-Permit / Newly	433.01	300.54
					132.47
				Total Pre-Permit Lands Enrolled:	**1,178.44**
				Total Newly Protected Lands Enrolled:	**132.47**
				Total Conservation Acres Enrolled:	**1,310.91**

[a] The date identified for enrollment of this site is the date that CDFW staff provided a fully executed copy of the site management plan to the Yolo Habitat Conservancy

[b] The date identified for enrollment of this site is the date the credits sold prior to the permitting of the Yolo HCP/NCCP were verified in RIBITS (https://ribits.ops.usace.army.mil)

[c] This site is a Swainson's hawk conservation easement site that the landowner has voluntarily upgraded to an HCP/NCCP site. Acres applied towards meeting Swainson's hawk foraging habitat mitigation count as pre-permit acres while all other conservation acres count as newly protected land acres.

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	--	109.0	0.0	--	109.0	0.0	--	6.1%	0%	--
Cultivated Lands (non-rice)	3,649	14,362	--	280.5	116.8	--	280.5	116.8	--	7.7%	0.8%	--
Grassland	335	4,430	--	5.4	12.0	--	5.4	12.0	--	1.6%	0.3%	--
Oak Woodland (Valley Oak Woodland+ Blue Oak Woodland)	--	30	--	--	0.0	--	--	0.0	--	--	0%	--
Alkali Prairie[a]	--	33.7	--	--	0.0	--	--	0.0	--	--	0%	--
Fresh Emergent Wetland	750	500	88	564.8	2.2	0.0	564.8	2.2	0.0	75.3%	0.4%	0%
Valley Foothill Riparian	--	1,600	608	162.2	0.0	3.1[b]	162.2	0.0	3.1	100%[c]	0%	0.5%
Lacustrine and Riverine	--	600	236	12.5	1.5	0.0	12.5	1.5	0.0	--	0.2%	0%
Bank swallow	--	50	--	--	0.0	--	--	0.0	--	--	0%	--
Total Natural Communities[d]	***8,000***	***24,406***	***932***	***1,134.4***	***132.5***	***0.0***	***1,134.4***	***132.5***	***3.1***	14.2%	0.5%	0.3%

[a] Must be on Woodland Regional Park.
[b] Includes completed restoration at Woodland-Reiff which is actively undergoing enrollment.

[c] The dataset used to establish the land coverage acerage 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 recuction in cultivated lands and an increase in foothill valley riparian and fresh emergent wetland land cover types prior to Yolo HCP/NCCP, resulting in acerages for these land cover types that exceeds what was previously anticipated for pre-permit lands.

[d] 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: Modeled species 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
Valley elderberry longhorn beetle												
Riparian habitat	0	0	3.14	0	0	3.14	10	1,600	576	0%	0%	0.5%
Non-riparian habitat	0	--	--	0	--	--	120	--	--	0%	--	--
Total	***0***	***0***	***3.14***	***0***	***0***	***3.14***	***130***	***1,600***	***576***	***0%***	***0%***	***0.5%***
California tiger salamander												
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%	--
Total	***0***	***0***	***0***	***0***	***0***	***0***	***367***	***2,036***	***36***	***0%***	***0%***	***0%***
Ponds - seasonal aquatic breeding habitat (no. of ponds)	--	0	0	--	0	0	--	36	36	--	0%	0%
Western pond turtle												
Aquatic habitat	278.16	1.45	0	278.16	1.45	0	2,098	2,400	369	13.3%	0.1%	0%
Nesting and overwintering habitat	422.58	14.19	--	422.58	14.19	--	978	3,475	--	43.2%	0.4%	--
Total	***700.74***	***15.64***	***0.00***	***700.74***	***15.64***	***0.00***	***3,076***	***5,875***	***369***	***22.8%***	***0.3%***	***0%***
Giant garter snake												
Rice habitat	109.01	0	--	109.01	0.00	--	1,775	2,800	--	6.1%	0%	--
Aquatic habitat	8.41	1.45	0	8.41	1.45	0	140	420	109	6.0%	0.3%	0%
Freshwater emergent habitat	568.87	2.19	0	568.87	2.19	0	750	500	76	75.8%	0.4%	0%
Active season upland movement	11.03	12.00	--	11.03	12.00	--	130	1,160	--	8.5%	1.0%	--
Overwintering habitat	1.60	0.20	--	1.60	0.20	--	115	2,315	--	1.4%	0%	--
Total	***698.92***	***15.84***	***0***	***698.92***	***15.84***	***0***	***2,910***	***7,195***	***185***	***24.0%***	***0.2%***	***0%***
Swainson's hawk												
Nesting habitat	9.65	0	0	9.65	0.00	0	215	1,600	651	4.5%	0.0%	0%
Natural foraging habitat	410.70	12.00	--	410.70	12.00	--	980	4,430	--	41.9%	0.3%	--
Cultivated lands foraging habitat	280.49	116.79	--	280.49	116.79	--	3,600	14,362	--	7.8%	0.8%	--
Total	***700.84***	***128.79***	***0***	***700.84***	***128.79***	***0***	***4,795***	20,392	***651***	***14.6%***	***0.6%***	0%
Nest trees[a]	2	0	0	2	0	0	--	20	--	100%	0%	0%
White-tailed kite												
Nesting habitat	9.65	0.00	0	9.65	0.00	0.00	215	1,600	965	4.5%	0%	0%
Foraging habitat	175.21	0.00	--	175.21	0.00	--	3,330	18,792	--	5.3%	0%	--
Total	***184.86***	***0.00***	--	***184.86***	***0.00***	--	***3,545***	***18,792***	--	***5.2%***	***0%***	--
Western yellow-billed cuckoo												
Nesting/foraging habitat[b]	***162.20***	***0***	***0***	***162.20***	***0***	***0***	***135***	***500***	***60***	***120%***	***0%***	***0%***
Western burrowing owl												
Primary habitat	7.98	12.00	--	7.98	12.00	--	330	3,000	--	2.4%	0.4%	--
Other habitat	286.89	116.79	--	286.89	116.79	--	770	2,500	--	37.3%	4.7%	--
Total	***294.87***	***128.79***	***0***	***294.87***	***128.79***	***0***	***1,100***	***5,500***	***0***	***26.8%***	***2.3%***	***0%***
Least Bell's vireo												
Nesting/foraging habitat[b]	***162***	***0***	***0***	***162.20***	***0***	***0***	***110***	***600***	***608***	***147.5%***	***0%***	***0%***
Bank swallow												
Nesting habitat	--	***0***	--	--	***0***	--	--	***50***	--	--	***0%***	--
Tricolored blackbird												
Nesting habitat[b]	254.10	0.00	0	254.10	0	0	150	200	86	169.4%	0%	0%
Foraging habitat	395.01	128.80	--	395.01	128.80	--	4,000	16,610	--	9.9%	0.8%	--
Total	***649.11***	***128.80***	***0.00***	***649.11***	***128.80***	***0.00***	***4,150***	***16,810***	***86***	***15.6%***	***0.8%***	***0%***
Palmate-bracted bird's												
Habitat	***0***	***0***	***0***	***0***	***0***	***0***	***141***	***33***	--	***0%***	***0%***	***0%***

[a] Two active Swainson's hawk nests were documented on the Conaway Tricolored Blackbird Conservation Easement site during the Yolo HCP/NCCP Plan-wide nest survey conducted by Estep in 2020.

[b] The dataset used to establish the land coverage acerage 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 recuction 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 acerages within pre-permit lands that exceed what was previously anticipated for some habitat types.

Restoration

Restoration is an important part of the overall Yolo HCP/NCCP conservation strategy. The Conservancy will restore riparian, wetland, and aquatic land cover types at a ratio of one acre restored for each acre lost. If all allowable loss occurs, the Conservancy will restore up to 956 acres of riparian woodland and scrub, fresh emergent wetlands, and lacustrine and riverine natural communities. During FY20/21, continued restoration efforts associated with the Woodland Regional Park wetlands restoration project occurred, as discussed below.

Woodland Regional Park 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 that was approved by USFWS and CDFW. 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, 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 FY20/21, additional native shrubs and trees were planted within the area designated for riparian restoration and enhancement and irrigation lines were installed to provide supplemental water to plantings.

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 the Woodland Regional Park Preserve in the Yolo HCP/NCCP reserve system and will only count the restoration project towards the conservation commitments of the Yolo HCP/NCCP once the primary restoration activities included in the restoration plan have been completed and a Yolo HCP/NCCP conservation easement is recorded on the property.

4. Reserve Management, Enhancment, Monitoring, and Research

This chapter summarizes the management, enhancement, monitoring, and research activities the Conservancy and partners conducted during the reporting period. This chapter provides a summary of all land management activities undertaken on Yolo HCP/NCCP reserve lands, discusses any overall and site-specific management issues encountered by the Conservancy during the reporting period, and adaptive management approaches that were developed or implemented during the reporting period. For monitoring activities, information provided includes a description of monitoring activities undertaken during the reporting period, a summary of monitoring results, data analysis results, and any knowledge gained from monitoring that is valuable to adaptive management. For research, information provided includes a description of each research effort or study conducted during the reporting period, a summary of study results, and a description of how results were or will be integrated into implementation.

Reserve Management

Management Plans

The Conservancy initiated efforts to prepare a Swainson's Hawk Pre-Permit Reserve Lands Managment Plan and Cultivated Lands Reserve Unit Management Plan during FY20/21. 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 managment plan, and subsequent approval of it by USFWS and CDFW, 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 decided to proactively prepare 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. Significant progress was made on both of these management plans during FY20/21. Completion and final approval of each of these management plans is anticipated to occur in the first half of FY21/22.

In addition to the multi-site management plans described above, the Conservancy also completed the development of four site-specific management plans and received approval from USFWS and CDFW for each of these management plans during FY20/21. The site-specific management plans for two cultivated lands sites, Peabody Ranch East and Peabody Ranch West, were approved by USFWS and CDFW on September 14, 2020. The site-specific management plans for two natural lands sites dominated by grasslands and valley foothill riparian land cover types along Cache Creek, Woodland-Reiff and Correll, were both approved by USFWS and CDFW on May 6, 2021.

Woodland Reiff Restoration Site Management

A 3.14-acre portion of the Woodland Reiff site was restored to valley foothill riparian in 2020. This effort included the transplanting of elderberry (Sambucus nigra, ssp. cerulea) shrubs in 24 locations , planting 327 elderberry seedlings, and planting 567 other associated native plant seedlings. The native plants that were planted within the area in addition to elderberry include: 17 California blackberry (Rubus ursinus), 55 California box elder (Acer negundo), 42 California wild grape (Vitis californica), 78 California wild rose (Rosa californica), 55 Coyote brush (Baccharis pilularis), 59 Fremont cottonwood (Populus fremontii), 18 mule fat (Baccharis salicifolia), 33 Oregon ash (Fraxinus latifolia), 29 red willow (Salix laevigata), 23 sandbar willow (S. exigua), 118 valley oak (Quercus lobata), and 40 western sycamore (Platanus racemosa) (Triangle Properties, Inc. 2021). During FY20/21 the plantings and transplanted shrubs were watered once weekly in July and August and twice monthly in September, October, April, May, and June. A 4-foot-diameter weed-free circle was cleared around each seedling and weeds growing in shrub shelters, cages, and around existing and transplanted elderberry shrubs were hand-pulled. The entire Project Site, plus a 20-foot buffer, was mowed in the summer to reduce vole activity. Routine maintenance included checking that shrub shelters and cages were properly maintained, removing all trash and litter as encountered during routine site visits, repairing damage to irrigation lines, and inspecting individual plants for signs of herbivory damage.

Adaptive Management

No adaptive management occurred during the reporting period.

Enhancement

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. No enhancement activities were conducted during FY20/21.

Monitoring

Baseline Land Cover Surveying

Baseline land cover surveying was conducted for all Swainson's hawk pre-permit sites and four candidate conservation easement sites that are anticipated to be enrolled in the reserve system in FY21/22. The results of the surveys for the Swainson's hawk pre-permit sites will be described and shown in the Swainson's Pre-Permit Reserve Lands Management Plan. The results of the surveys for the candidate conservation easement sites are documented in the site-specific management plan for the individual site.

Woodland Reiff Valley Foothill Riparian Restoration and Elderberry Transplant Monitoring

A total of 3.14 acres of the Woodland Reiff Property was restored as valley foothill ripairan habitat in 2020. Planting numbers and spacing used for this effort followed the "Conservation Guidelines for the Valley Elderberry Longhorn Beetle" (USFWS 1999). Project success criteria require that 60% of the planted elderberry shrubs and 60% of the planted native associate seedlings must be surviving at the end of a 5-year monitoring period. Since initial planting efforts at the site, numerous site visits have been made to establish and monitor the revegetation progress and its overall success. During FY20/21, a survey of plant survivorship and overall condition was conducted in June 2021. A summary of the monitoring results are shown in Table 4-1 below and are described in greater detail in the Yolo County Elderberry Seedling and Native Associates Planing Project 2nd Year Monitoring Report (Triangle Properties, 2021).

Table 4-1: Summary of Woodland-Reiff June 2021 Monitoring Results

Planting	Min. # Required to be Planted	Total # Planted	Total # Surviving[a]	% Survival
Blue elderberry	290	327	321	111%
Native Associate Plantings	465	551	509	109%
Overall Total	755	878	830	110%

[a] *Calculated by dividing the "Total # Surviving" by the "Min. # Required to be Planted". Initial overplanting has resulted in survivorship greater than 100%.*

5. Stay Ahead Compliance and Changed 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 allowed to occur during the permit term 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 to be enrolled in the Yolo HCP/NCCP reserve system that was enrolled by the end of FY20/21 was 3.1 percent greater than the percentage of the total allowable impacts that had been incurred by the end of FY20/21, meaning that the overall conservation efforts of the Yolo HCP/NCCP implemented by the end of FY20/21 were proportionally greater than the 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 cap). The impacts to the grassland natural community at the end of FY20/21 were 0.6 percent of the total allowable impacts to this community type while the reserve system enrollment of this natural community type was 0.4 percent of the overall conservation commitment for this natural community type, resulting in the cumulative percentage met towards completing reserve system enrollment requirements being 0.2 percent less than the cumulative percentage of 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 enrollseveral of these sites in the reserve system in FY21/22, which will increase the cumulative reserve system enrollment of this natural community. The impacts to the blue oak woodland natural community at the end of FY20/21 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 FY20/21, no acres of grassland 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 FY20/21. The Conservancy will notify USFWS and CDFW staff of this deficit in land conservation and discuss a plan of action for moving forward within 30 days of approval of this annual report by the Conservancy's Board of Directors. The Conservancy already has a property that has 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. Pending approval from USFWS and CDFW, the Conservancy intends to prioritize enrollment of this candidate site into the reserve system in order to address the current deficit in land conservation of blue oak woodland natural community.

Table 5-1: Natural communities impacts and enrollment through FY20/21

Natural Communities	Cumulative Impacts (% of cap)	Cumulative Reserve Enrollment (% complete)	Difference (%)
Rice	0%	2.4%	2.4%
Cultivated Lands (non-rice)	0.9%	2.2%	1.3%
Grassland	0.6%	0.4%	-0.2%
Blue Oak Woodland	13.3%	0.0%	-13.3%
Alkali Prairie	0.0%	0.0%	0.0%
Fresh Emergent Wetland	0.7%	45.4%	44.7%
Valley Foothill Riparian	0.4%	10.1%	9.7%
Lacustrine and Riverine	0.4%	2.3%	1.9%
Total Natural Communities	**0.8%**	**3.9%**	**3.1%**

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** in the reporting period.

Changed Circumstances

The eight categories of changed circumstances identified in the Yolo HCP/NCCP and a summary of their 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 monthly temperatures recorded at the Sacramento International Airport weather station (KSMF)

Year	Jan		Feb		Mar		Apr		May		Jun		Jul		Aug	
	C°	F°	C°	F°	C°	F°	C°	F°	C°	F°	C°	F°	C°	F°	C°	F°
2019	9	48.2	7.37	45.3	11.6	52.9	16.9	62.5	16.9	62.5	23.5	74.2	24.1	75.4	24.9	76.7
2020	8.7	47.6	11.3	52.3	11.7	53	16.1	60.9	20.4	68.7	23.4	74.1	24	75.3	25.7	78.3
2021	9.0	48.2	10.9	51.6	11.7	53.1	16.4	61.5	20.6	69.1	23.6	74.4	24.8	76.7	24	75.2
2022																
2023																
2024																
2025																
2026																
2027																
2028																

Year	Sep		Oct		Nov		Dec		Avg Annual		Avg Summer[a]		Avg Winter[b]	
	C°	F°	C°	F°	C°	F°	C°	F°	C°	F°	C°	F°	C°	F°
2019	21.5	70.7	16.1	61.1	13.2	55.7	9.39	48.9	16.2	61.2	24.1	75.4	8.32	47
2020	23.3	74	19.8	66.7	10.7	51.2	8.08	46.6	16.9	62.4	24.4	75.9	9.79	49.6
2021	22.7	72.9	16.5	61.7	11.7	53.0	7.5	45.6	17.9	61.5	24.4	75.6	8.1	48.8
2022														
2023														
2024														
2025														
2026														
2027														
2028														
10-yr. Running Averages														
Change from 2019 Baseline														

[a] *Summer months are June, July, and August.*

[b] *Winter months are December, January, and February. Winter average is calcuated using the previous year's December value.*

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 below 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.

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 declining below the 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 267,750 total acres or 24,560 high-value acres. The Conservancy committed to then meet and confer with the wildlife agencies if this evaluation determines that the nesting population has fallen below 240 breeding pairs.

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. This table indicates that the amount of high-value foraging habitat fell below the 24,560-acre threshold while the total acres of foraging habitat did not fall below the 267,750-acre threshold. The amount of high-value and total habitat, has dropped significantly since Estep's evaluation on which the Conservancy based the changed circumstances strategy (Estep, 2015). While the acreage amounts during FY19/20 were not below the identified thresholds, they were close to the threshold amounts so the Conservancy proactively hired Estep Environmental Consulting to conduct a countywide Swainson's hawk nest survey in 2020 to assess the number of active breeding pairs and whether that number has fallen below the 240-pair threshold. A total of 381 occupied nesting territories, with a total of 377 active nests, were identified during this survey effort. This amount of active nest sites is greater than both the 240-pair threshold and the 290 occupied nesting territories observed by Estep during the 2007 survey (Estep, 2020).

A changed circumstance due to the Swainson's hawk population 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	Minimum Threshold (acres)	Reporting Period[a]
High Value Foraging Habitat	24,584	24,210
Total Suitable Foraging Habitat	267,750	276,025

[a] *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. Non-agricultural land cover types are based on baseline acres provided in Chapter 2 of 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 Yolo 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 22 2021, 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 2021 are listed below in Table 7-4.

Management and Monitoring Services

On May 17, 2021, the Conservancy's Board of Directors approved a new contract with the Yolo County Resource Conservation District (RCD) for easement management and monitoring services through June 30, 2024. As the Conservancy adds conservation easement sites to its reserve system, it is important that a comprehensive management and monitoring program be established to ensure the easements maintain their habitat value. Through this contract, the RCD will be lead on the Conservancy's reserve system management and monitoring activities.

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 end of the 50-year permit term.

Annual Budget

The Conservancy adopted the annual budget for FY20/21 in May 2020. Table 7-1 below, provides the adopted budget summary along with actual revenue and expenditures accrued during FY20/21.

Table 7-1: Adopted budget, actual revenue, and actual expenditures for FY20/21

Description	Mitigation Fee Fund	Mitigation Account Fund	Grant Fund	Pre-Permit Endowment	Post Permit Endowment	Other Revenue Fund	Total
Beginning Balance	$336,543	$736,373	$26,295	$413,427	$19,825	$42,255	**$1,574,718**
Revenue (Actual)[a]	$650,283	$1,038	$193,754	($28,668)	$12,379	($583)	**$828,203**
Revenue (Budgeted)	$397,600	$10,000	$4,969,890	$7,500	$11,600	$60,002	**$5,456,592**
Expenditure (Actual)	($383,571)	$0	($136,270)	($598)	$0	($17,796)	**($538,235)**
Expenditure (Budgeted)	($878,297)	($745,000)	($4,970,890)	($15,000)	($6,000)	($45,265)	**($6,660,452)**
Actual Revenue vs. Expenditure	$266,712	$1,038	$57,484	($29,266)	$12,379	($18,379)	**$289,968**
Closing Balance	$603,255	$737,411	$83,779	$384,161	$32,204	$23,876	**$1,864,686**
Revenue Budget to Actual	$252,683	($8,962)	($4,776,136)	($36,168)	$779	($60,585)	**($4,628,389)**
Expenditure Budget to Actual	$494,726	$745,000	$4,834,620	$14,402	$6,000	($27,469)	**$6,067,279**

[a] *Includes accrued interest*

Revenue Sources

The Conservancy receives revenue from state and federal grants, as well as mitigation fees. Table 7-2 summarizes the state and federal grants that were active during FY20/21 and Table 7-3 summarizes the mitigation fee fund revenue and expenditures for FY20/21.

Table 7-2: State and federal grant revenue and expenditures for FY20/21

Funding Source	Funding Entity	Purpose	Amount Awarded	Required Match	Expended through FY20/21
NCCP Local Assistance (P1720901)	CDFW	Early Implementation Framework	$75,000	$15,000	$72,732
NCCP Local Assistance (P1820101)	CDFW	Reserve System Pre-Acquisition Protocols and Pre-Permit Reserve Lands Enrollment	$93,000	27,000	$89,015
Prop 84	WCB	Development Phase IV	$275,000	$68,500	$238,153
Non-Traditional Section 6 (F20AP11994-00)	CDFW/USFWS	Easement Acquistions	$5,000,000	$2,200,000	$0
NCCP Local Assistance (Q20200101)	CDFW	Mapping and priotitization of cultivated lands habitat	$50,000	$5,000	$5,150
NCCP Local Assistance (Q20200102)	CDFW	Cache Creek Reserve Unit Management Plan	$125,000	$46,500	$5,213
		TOTAL	**$5,618,000**	**$2,335,000**	**$410,263**

Table 7-3: Mitigation Fee Fund revenue and expenditures for FY20/21

	Beginning Balance	Revenue	Interest	Expenditures	Closing Balance
Total Balance	$336,543	$647,087	$3,196	($383,571)	$603,255

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 expects to explore transferring the Post-Permit Endowment Fund to a community foundation in the near future to 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 Government Code Section 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.

(B) The amount of the fee.

The Yolo HCP/NCCP fees are updated annually on or about March 15. The Yolo HCP/NCCP per acre fees, as of the March 2021 update, are shown in Table 7-4.

Table 7-4: Yolo HCP/NCCP fees at the end of FY20/21

Fee Type	Fee Amount (per acre)
Land Cover Fee	$15,169
Wetlands Fee	
Fresh Emergent Wetland	$77,366
Valley Foothill Riparian	$85,683
Lacustrine and Riverine	$62,048

(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. 2015. A Proposed Conservation Strategy for the Swainson's Hawk in Yolo County, California. Prepared for the Yolo County Natural Heritage Program. March 2015.

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

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

Triangle Properties, Inc. November 2021. Yolo Habitat Conservancy Elderberry Seedlings and Native Associates Planting Project: 2nd Year Monitoring Report (2021). Yolo County, California.

U.S. Fish and Wildlife Service (USFWS). 1999. Conservation Guidelines for the Valley Elderberry Longhorn Beetle. Prepared July 1999. U.S. Fish and Wildlife Service; Sacramento, California.

U.S. Fish and Wildlife Service (USFWS). 2017. Framework for Assessing Impacts to the Valley Elderberry Longhorn Beetle (Desmocerus californicus dimorphus). Prepared May 2017. U.S. Fish and Wildlife Service; Sacramento, California.

Appendix A
Woodland-Reiff Restoration
Annual Monitoring Report

Yolo Habitat Conservancy
PO Box 2202
Woodland, CA 95776
info@yolohabitatconservancy.org
www.yolohabitatconservancy.org