

The Yolo Habitat Conservation Plan/Natural Communities Conservation Plan (Yolo HCP/NCCP) is a comprehensive, countywide plan to provide for the conservation of 12 sensitive species and the natural communities and agricultural land on which they depend, as well as provide a streamline permitting process to address the effects of a range of future anticipated activities on these 12 species. The Yolo HCP/NCCP refers to the range of future anticipated activities as *covered activities*, and the 12 sensitive species covered by the HCP/NCCP as *covered species*. The Yolo HCP/NCCP will improve habitat conservation efforts in Yolo County, encourage smart, sustainable economic activity, and maintain and enhance agricultural production.

The Yolo County Habitat/Natural Community Conservation Plan Joint Powers Agency (JPA), which consists of Yolo County and the incorporated Cities of Davis, West Sacramento, Winters, and Woodland, and the University of California, Davis as an *ex officio* member, developed the Yolo HCP/NCCP. The HCP/NCCP provides the basis for issuance of long-term permits under the Federal Endangered Species Act (FESA) and California Natural Community Conservation Planning Act (NCCPA) that cover an array of public and private activities, including activities essential to the ongoing viability of Yolo County's agricultural and urban economies. Specifically, the Yolo HCP/NCCP will provide the Permittees (Yolo County, the four incorporated cities, and the JPA) with incidental take permits (Permits) from both the U.S. Fish and Wildlife Service (USFWS) and the California Department of Fish and Wildlife (CDFW) for the 12 covered species. This action is pursuant to Section 10(a)(1)(B) of the FESA and Section 2835 of the NCCPA chapter of the California Fish and Game Code (Fish and Game Code). The Yolo HCP/NCCP ensures compliance with the FESA, NCCPA, and the California Endangered Species Act (CESA) for the covered activities that may affect the covered species. In addition to the Permittees, the Yolo HCP/NCCP permits may cover the activities of other entities through certificates of inclusion, as described further in Chapter 3, *Covered Activities*, and Chapter 7, *Plan Implementation*.

## 1.1 Purpose and Background

### 1.1.1 Purpose

The Yolo HCP/NCCP is a comprehensive, county-wide plan designed to meet the following purposes.

- I Provide a comprehensive means to coordinate and standardize mitigation and compensation requirements of FESA, NCCPA, the California Environmental Quality Act (CEQA), the National Environmental Policy Act (NEPA), and other applicable laws and regulations relating to covered species and associated natural communities in Yolo County, referred to as the Plan Area (Figure 1-1). This will ensure that public and private actions will be governed equally and consistently, thus reducing delays, expenses and regulatory duplication.
- I Provide a less costly, more efficient project review process that results in greater conservation values than the current project-by-project, species-by-species review and regulatory regime.

- | Serve as a platform for the coordination of and cooperation among the various and ongoing conservation planning efforts, occurring both within Yolo County and in neighboring jurisdictions.
- | Provide for the conservation in the Plan Area of covered species and the natural and seminatural communities upon which they depend, including the agricultural landscape that supports covered species, while accommodating appropriate and compatible economic growth and development consistent with applicable local land use laws and associated general plans.
- | Provide a basis for permits and authorizations necessary to lawfully take covered species that have been listed as threatened or endangered pursuant to the terms of FESA and/or CESA.
- | Provide a process for issuance of take authorizations for covered species that are not currently listed but may be listed in the future without the imposition of additional mitigation requirements outside of the HCP/NCCP process.
- | Reinforce the role of local government in overseeing local land use planning and decision-making.
- | Support agriculture as a critical economic engine and habitat community.
- | Streamline and coordinate existing processes for review and permitting of public and private activities that potentially affect the covered species.
- | Provide clear expectations and regulatory predictability for the land users and other conservation efforts related to the covered species and associated natural communities within the Plan Area by identifying relevant conservation requirements for ongoing and future activities.

The Yolo HCP/NCCP is intended to meet the requirements for an HCP pursuant to section 10(a)(2)(A) of FESA, and an NCCP pursuant to the NCCPA. To fulfill this purpose, this HCP/NCCP provides a strategy that includes measures to conserve the 12 covered species in perpetuity, and to ensure that effects on covered species are minimized and mitigated. To meet NCCPA requirements, the JPA developed the Yolo HCP/NCCP to conserve representative natural and seminatural landscapes and to maintain the ecological integrity of large habitat blocks, ecosystem function, and biological diversity.

The Yolo HCP/NCCP strikes a sensible balance between natural resource conservation and economic growth in the region. The covered activities encompass existing and future activities associated with buildout of local general plans and other expected economic activities as described in Chapter 3, *Covered Activities*. This HCP/NCCP provides for the issuance of Permits that will authorize take of the listed covered species over a 50-year period, pursuant to the FESA and NCCPA (Section 1.2.3, *Covered Species*). The Permits will also provide take authorization for any of the covered species that are not currently listed (nonlisted covered species) if they become listed during the 50-year permit term. If any of the covered species become de-listed during the Permit term, the JPA is still required to conserve the species consistent with obligations in the Yolo HCP/NCCP.

## 1.1.2 Background

In 2001, the Permittees rejected a conservation plan that consisted of an HCP only, with no NCCP component, and that encompassed only the eastern portion of Yolo County. At that time, the Permittees embarked on an HCP/NCCP that encompassed the entire county. The JPA was formed in

August 2002 to serve as the lead agency for the preparation of this HCP/NCCP. A first administrative draft of this HCP/NCCP, completed in June 2013, proposed 32 covered species. The JPA determined, however, that the conservation commitments in the first administrative draft were economically infeasible for the Permittees to achieve. Therefore, in late 2013, USFWS and CDFW coordinated closely with the JPA to scale back the scope of the Yolo HCP/NCCP, decreasing the number of covered species, and developing a Conservation Reserve Area in which to focus future conservation efforts.

### 1.1.3 Local Conservation Strategy

The Local Conservation Strategy, a compatible but separate plan from the Yolo HCP/NCCP, guides the conservation of a selected range of plant and animal species that are not covered by this HCP/NCCP, and the natural communities upon which they depend. The Local Conservation Strategy is not a part of the HCP/NCCP and implementation of the strategy is voluntary. While the Yolo HCP/NCCP will have benefits to many of these species and natural communities, the Local Conservation Strategy extends the benefits of this HCP/NCCP to species and natural communities addressed at the project level through CEQA. The Local Conservation Strategy establishes conservation priorities to help focus implementation efforts, and provides guidelines for measures (avoidance, minimization, and mitigation) to conserve these other biological resources. The Local Conservation Strategy is included as Appendix E, *Local Conservation Strategy*.

## 1.2 Scope of the Yolo HCP/NCCP

### 1.2.1 Geographic Scope of the Plan Area and Planning Units

The Plan Area encompasses all areas within the boundaries of Yolo County that are eligible for regulatory coverage under this HCP/NCCP, totaling approximately 653,817 acres (Figure 1-1).<sup>1</sup> The Plan Area is subdivided into 22 geographically based planning units to facilitate development and execution of the analysis of potential effects associated with implementation of the covered activities (Chapter 6, *Effects on Covered Species and Natural Communities*) (Figure 1-2), and the conservation strategy (Chapter 5, *Conservation Strategy*).

### 1.2.2 Natural Communities

The Yolo HCP/NCCP addresses the following natural communities, grouped into five categories. Though cultivated lands are not a “natural” community, crop types providing covered species habitat are included within the scope of this HCP/NCCP as a “seminatural” community.

#### Cultivated lands

- | Cultivated lands seminatural community

#### Grassland

- | Grassland natural community

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<sup>1</sup> The HCP/NCCP acreage for the Plan Area (i.e., Yolo County) differs from the 653,549 acres of land within Yolo County stated in the *Yolo County 2030 Countywide General Plan* (Yolo County 2009). The 268-acre difference in the area of the County is attributable to the use of different datasets in the preparation of this HCP/NCCP and the general plan.

- | **Serpentine natural community**

- Shrubland and scrub

- | **Chamise natural community**
  - | **Mixed chaparral natural community**

- Woodland and forest

- | **Blue oak—foothill pine natural community**
  - | **Blue oak woodland natural community**
  - | **Closed-cone pine cypress natural community**
  - | **Montane hardwood natural community**
  - | **Valley oak woodland natural community**

- Riparian and wetland

- | **Alkali prairie natural community**
  - | **Vernal pool complex natural community**
  - | **Fresh emergent wetland natural community**
  - | **Valley foothill riparian natural community**
  - | **Lacustrine and riverine natural community**

Chapter 2, *Existing Ecological Conditions*, provides definitions and descriptions for each of these natural communities.

### 1.2.3 Covered Species

The Yolo HCP/NCCP was designed to provide the basis for federal and state endangered species permits for 12 species, including seven species currently listed (either state or federal, including jointly listed species) and five species that are not listed but could become listed during the term of the Permits (Table 1-1). These species, for which incidental take coverage is sought, are collectively referred to as *covered species*. Section 2.6.1, *Development of the Covered Species List* and Appendix C, *Evaluation of Species Considered for Coverage*, describe the process by which the JPA developed the covered species list.

Table 1-1. Covered Species

Common Name	Scientific Name	Status Federal/State/Other <sup>a</sup>
<b>Plants</b>		
1 Palmate-bracted bird's beak	<i>Chloropyron palmatum</i> <sup>2</sup>	E/E/1B
<b>Invertebrates</b>		
2 Valley elderberry longhorn beetle	<i>Desmocerus californicus dimorphus</i>	T/-/-
<b>Amphibians</b>		
3 California tiger salamander (Central California DPS)	<i>Ambystoma californiense</i>	T/T/-
<b>Reptiles</b>		
4 Western pond turtle	<i>Actinemys marmorata</i>	-/CSC/-
5 Giant garter snake	<i>Thamnophis gigas</i>	T/T/-
<b>Birds</b>		
6 Swainson's hawk	<i>Buteo swainsoni</i>	-/T/-
7 White-tailed kite	<i>Elanus leucurus</i>	-/FP/-
8 Western yellow-billed cuckoo	<i>Coccyzus americanus occidentalis</i>	T/E/-
9 Western burrowing owl	<i>Athene cunicularia hypugaea</i>	-/CSC/-
10 Least Bell's vireo	<i>Vireo bellii pusillus</i>	E/E/-
11 Bank swallow	<i>Riparia riparia</i>	-/T/-
12 Tricolored blackbird	<i>Agelaius tricolor</i>	-/CSC/-

<sup>a</sup> Status:Federal

C = Candidate for listing under FESA

E = Listed as endangered under FESA

PT = Proposed as threatened under FESA

T = Listed as threatened under FESA

- = no designation

State

CSC = California species of special concern

E = Listed as endangered under CESA

FP = Fully protected under California Fish and Game Code

T = Listed as threatened under CESA

- = No designation

Other:

1B = California Native Plant Society (CNPS) designation for species rare or endangered in California and elsewhere.

- = no designation

<sup>2</sup> Formerly *Cordylanthus palmatus*.

DPS = distinct population segment; FESA = federal Endangered Species Act; CESA = California Endangered Species Act

## 1.2.4 Covered Activities

A primary purpose of the Yolo HCP/NCCP is to obtain authorization for the incidental take of species under FESA and the NCCPA for a variety of public and private activities that occur or are likely to occur in the Plan Area. By covering a broad range of activities, this HCP/NCCP facilitates comprehensive protection of the covered species, while providing assurances that existing land uses and future growth and development within the Plan Area can proceed in a streamlined and efficient manner.

The Yolo HCP/NCCP sets out the following seven broad classes of activities for which the Permittees are seeking take coverage.

- | Urban projects and activities
- | Rural projects and activities
- | Rural public services, infrastructure, and utilities
- | Agriculture economic development and open space
- | Public and private operations and maintenance activities
- | Conservation strategy implementation
- | Neighboring landowner agreements

Chapter 3, *Covered Activities*, identifies the types of activities and specific projects covered under each of these five classes of activities.

## 1.2.5 Permit Term

The permit term is the period during which all covered activities can receive take authorization under the Yolo HCP/NCCP, consistent with requirements of this HCP/NCCP. The permit term is also the period during which all conservation actions must be successfully completed to offset the adverse effects of covered activities.

The Permittees are seeking take permits from USFWS and CDFW for a term of 50 years. The 50-year permit term is necessary to allow for full implementation of the covered activities, the conservation strategy, the monitoring and adaptive management program, and the funding strategy. Each of these components is discussed below.

USFWS regulations for incidental take permits outline factors to consider when determining permit duration (50 Code of Federal Regulations [CFR] 17.32 and 222.307). These regulations state that the duration of incidental take permits issued with HCPs will be such as to provide adequate assurances to the permit holder to commit funding necessary for the activities authorized by the permit, including conservation actions. USFWS' Five-Point Policy provides further guidance on factors to consider when determining permit duration (U.S. Fish and Wildlife Service 2000a). These factors include the expected duration of the activities proposed for coverage and the length of time necessary to implement and achieve the benefits of the operating conservation program. Factors considered in determining the permit duration for the Yolo HCP/NCCP are described below.

### 1.2.5.1 Time to Implement Covered Activities

The 50-year permit term will provide adequate time to implement activities covered under the Yolo HCP/NCCP. Growth scenarios developed by Sacramento Area Council of Governments (2012) predict that 80% of residential development and 56% of nonresidential development will build out by 2035. Extrapolating these economic assumptions forward, the residential development would be completely built out by approximately 2042, and non-residential development by 2056. Therefore, a minimum of 40 years is necessary to cover build-out of the covered activities.

### 1.2.5.2 Time to Implement, Monitor, and Adjust Conservation Actions

USFWS policy guidance states that the permit term must be of sufficient length to implement and achieve the benefits of the operating conservation program (U.S. Fish and Wildlife Service 2000a). Within the permit term all reserve land must be acquired, monitoring and adaptive management

must be in place, and there must be sufficient time to ensure that the program is operating effectively and allow for adjustments as needed.

The 50-year length of the permit term provides adequate time for the assembly of a reserve system and development of a management program on conservation lands. This includes time necessary for willing landowners<sup>2</sup> to become available and for the land agents of the Yolo HCP/NCCP to negotiate a fair price for the land in fee title or conservation easement. It may take several years to complete a single land acquisition or purchase a conservation easement. Given the large number of transactions required to assemble the reserve system, adequate time is needed to ensure this can happen before the end of the permit term. A permit term of 50 years also allows the monitoring and adaptive management programs to become well established so that they will successfully continue in perpetuity. As described in Chapter 6, *Conservation Strategy*, the adaptive management and monitoring program will go through three distinct phases: data inventory, targeted studies, and long-term monitoring. Each phase will take many years to complete.

The JPA also needs a permit term of 50 years to ensure sufficient numbers of willing sellers. There is currently a trend toward converting agricultural lands to orchards and vineyards. Between 2006 and 2012, the amount of harvested orchards in Yolo County increased by 10,029 acres. Since harvested acreage excludes trees too young to bear fruit, this is an underestimate of the actual amount of conversion to orchards. In the short term it may be difficult for the JPA to find willing sellers for the reserve system while orchards and vineyards are in high demand. Therefore, a 50-year permit term is necessary to ensure affordable acquisition costs and to ensure that there are sufficient willing sellers to meet the Yolo HCP/NCCP conservation commitments.

One type of monitoring used in the Yolo HCP/NCCP, status and trend monitoring, will track long-term trajectories of species populations and other physical and biological conditions in the Plan Area. The 50-year permit term will provide adequate time (approximately 10 years beyond Plan Area build-out) to collect enough trend data for all of the covered species and will allow sufficient time for any necessary adjustments to management techniques. Monitoring the success of restoration actions is expected to take 5 to 10 years for each restoration project. Most restoration actions cannot be initiated until land is acquired for the reserve system. A permit term of 50 years is necessary to allow enough time to complete land acquisition with at least 5 to 10 years to successfully initiate or complete (and remediate, if necessary) all restoration actions.

A successful program for management, monitoring, and adaptive management is essential to the continued success of the reserve system after the permit term. The Permittees will be obligated during the permit term to address potential changes in circumstances and to remediate the conservation areas affected by these changes. A longer permit term is more likely to encompass a changed circumstance that will require a remedial action.

### 1.2.5.3 Time to Secure Adequate Funding and Maintain Acceptable Fees

The JPA needs a 50-year permit term to generate the necessary funding for implementation. As described in Chapter 8, *Costs and Funding*, the Yolo HCP/NCCP will be funded by a wide variety of local, state, and federal sources. The JPA based this funding strategy for this HCP/NCCP on 50 years of local funding from the City of Davis open space tax, the Cache Creek Resources Management Plan, and Solano County Water Agency funding for the Lower Putah Creek Coordinating Committee (see

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<sup>2</sup> The JPA will only acquire land from willing sellers.

Chapter 8, *Costs and Funding*, for details). These three funds are the only known available sources of local funding to support Yolo HCP/NCCP implementation. They will provide an estimated \$0.5 million per year (in 2014 dollars) to support acquisition of conservation easements on agricultural lands that will support covered species, among other critical conservation actions. Shorter permit terms of 30 and 40 years were evaluated but were found to provide insufficient revenue from these sources to support the conservation strategy and to provide essential local matching funds to accompany state and federal funding sources. A 30- or 40-year permit term would reduce these local funding sources by approximately \$25 million (a 44% reduction in local funding) or \$13 million (a 23% decrease), respectively (both in 2014 dollars). Based on an average conservation easement cost of \$6,100 per acres (see Chapter 8 for cost estimates), this is equivalent to approximately 4,100 acres or 2,100 acres less acquisition of conservation easements, respectively. Without this additional contribution, the JPA will be unable to meet its land acquisition commitment under the Yolo HCP/NCCP.

Funding is also needed during the permit term for management and monitoring after the permit expires (e.g., an endowment), described in Chapter 8, *Costs and Funding*. The permit term must therefore allow sufficient time to accrue the long-term funding. A shorter permit term would increase total costs (and the per acre fees), because fewer years would be available over which to build the endowment before the need to start funding post-permit costs. That is, a longer permit term provides more years to take advantage of compounding returns to the endowment during the permit term and thus keeps endowment costs lower than would be the case with a shorter permit term. The JPA has estimated that a 30- or 40-year permit term would raise the cost of the endowment by 8% or 4%, respectively (the shortest permit term raises the cost of the endowment the most). This would also raise the Yolo HCP/NCCP fees charged to development by the same proportion. Therefore, a 50-year permit term will allow the JPA to fully utilize local funding sources, meet local commitments to fund open space preservation under the Yolo HCP/NCCP, be able to meet NCCP standards for conservation, and keep Yolo HCP/NCCP fees to acceptable levels.

#### 1.2.5.4 Conclusions

Based on the implementation horizon for covered activities, the need to acquire lands and ensure successful implementation of the conservation strategy through monitoring and adaptive management, and the need for adequate funding, the JPA has determined a 50-year permit term will best address regulatory, financial, and biological considerations. The 50-year permit term provides sufficient time to accomplish the following critical elements of this HCP/NCCP.

- | Fully implement the general plans and other long range plans of the cities and Yolo County.
- | Assemble the reserve system from willing sellers and partnerships with local agencies and private landowners.
- | Develop an effective adaptive management program that will be implemented *in perpetuity*, given the current uncertainties in knowledge about the ecology of covered species and responses to resource management.
- | Secure all necessary funding for implementation during the permit term from local, state, and federal sources, and generate funding for the Yolo HCP/NCCP in perpetuity.



- | Charge an acceptable fee on development that will facilitate local approvals and continued support of the Yolo HCP/NCCP by the development community during implementation.
- | Provide sufficient incentive for the JPA to commit the substantial resources necessary to complete the Yolo HCP/NCCP.

## 1.3 Overview of the Planning Process

### 1.3.1 Role of the JPA

The JPA was formed in 2002 by Yolo County, and the incorporated Cities of Davis, West Sacramento, Winters, and Woodland (with UC Davis as an *ex officio* member) to oversee the development of a regional conservation plan for Yolo County. The JPA Board of Directors, which consists of elected representatives appointed by the member jurisdictions, has two primary functions: to assist in the planning, preparation, and subsequent administration of the Yolo HCP/NCCP; and to facilitate acquisition of conservation easements to preserve habitat to mitigate for specific adverse effects on Swainson's hawk foraging habitat. The JPA's role in overseeing the Swainson's hawk mitigation program arose out of a 2002 Memorandum of Understanding between the JPA and CDFW that established a process to allow development activities to proceed during the development of the Yolo HCP/NCCP.

In 2004, the JPA entered into a Planning Agreement with CDFW and the USFWS, pursuant to the NCCPA, that defined the initial scope of the program and defined the roles and responsibilities of the parties in the development of this HCP/NCCP. In 2009, the JPA and the wildlife agencies extended the Planning Agreement.

### 1.3.2 Role of the Advisory Committee

In 2004, the JPA appointed the Advisory Committee<sup>3</sup> to provide input and advice during the development of this HCP/NCCP. The Advisory Committee consists of representatives of the primary groups with an interest in this HCP/NCCP (the stakeholders), including JPA member agency staff, landowners, the agricultural community, conservation organizations, and land developers. The group held open meetings on a regular basis (generally monthly) to review relevant materials and documents; evaluate and synthesize ideas, data, and information; and discuss and resolve complex issues. The Advisory Committee sought to reach consensus when possible and provide recommendations to the JPA Board on a range of matters reflected in the Yolo HCP/NCCP.

Advisory Committee member agencies and organizations<sup>4</sup> are listed below. Members were selected based on their expertise, interest in the program, and capacity to represent the interests of their particular stakeholders.

- | Building Industry Association
- | California Native Plant Society
- | Tuleyome

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<sup>3</sup> The Advisory Committee was formerly known as the Steering Advisory Committee or SAC with the name changed to Advisory Committee in 2012.

<sup>4</sup> See Chapter 10, *List of Preparers*, for past and present Advisory Committee representatives.

- | Chambers of Commerce
- | City of Davis
- | City of West Sacramento
- | City of Winters
- | City of Woodland
- | Institute for Ecological Health
- | Various landowners
- | University of California, Davis
- | Yolo Audubon Society
- | Yolo County
- | Yolo County Agricultural Commissioner
- | Yolo County Farm Bureau
- | Yolo County Flood Control & Water Conservation District

### 1.3.2.1 Yolo County Resource Conservation District

During meetings conducted between August and October 2008, the Advisory Committee prepared and unanimously adopted the following planning principles to help guide the preparation of the Yolo HCP/NCCP.

- | The planning process will be a collaborative effort that is open, inclusive, and actively participatory.
- | Everyone participating in the process will be treated with respect, dignity, courtesy, and responsiveness, and the same will be expected from them.
- | When shared values and goals are identified, they will be articulated and written into the Yolo HCP/NCCP.
- | Partnerships that promote the Yolo HCP/NCCP and its implementation will be cultivated.
- | The planning process will be conducted in a cost-effective and efficient manner without compromising conservation values and goals.
- | Administration of the program will provide predictability, permit streamlining, and efficiency related to state and federal regulatory programs that protect covered species, including endangered species.
- | The process and the HCP/NCCP will complement other efforts designed to protect, enhance, restore, and manage biodiversity, as well as natural and intrinsic resource values in Yolo County.
- | The process will seek to leverage local, state, and federal funding to help achieve the HCP/NCCP's goals and objectives.
- | The Yolo HCP/NCCP will assemble a shared knowledge base that describes the key concepts of the HCP/NCCP planning process.

- | The Yolo HCP/NCCP is based on willing participants, landowners, and sellers interested in preserving their land and the predominantly rural and agricultural character of Yolo County for future generations.
- | The Yolo HCP/NCCP will be based on a strong scientific foundation.
- | The Yolo HCP/NCCP will encourage farm and rangeland management practices that are compatible with species and habitat conservation objectives.
- | The goal of the Yolo HCP/NCCP is to restore, enhance, and conserve the natural heritage of Yolo County while encouraging smart, sensible, and sustainable economic activity; maintaining and enhancing agricultural production; and including and expanding recreational opportunities.

The Advisory Committee formed working groups to focus on specific issues regarding development of the Yolo HCP/NCCP. These groups include the Biological Working Group, Agriculture Working Group, Urban Interface Working Group, and Riparian Resources Working Group. The working groups met on an *ad hoc* basis to develop supporting information and to consider how HCP/NCCP components—including scientific data and analysis, approaches to conservation strategies, adaptive management and monitoring—should be shaped in relation to the specific issues considered by each working group. Many of the results of workgroup deliberations were used in the development of the conservation strategy (Chapter 6, *Conservation Strategy*).

The Advisory Committee engaged extensively in reviewing elements of the first draft of the HCP/NCCP, and in providing recommendations for HCP/NCCP content for consideration by JPA staff and consultant personnel. In general, the overall framework for the conservation approaches presented in the HCP/NCCP reflects substantial engagement and input from Advisory Committee members during the course of plan development.

In 2013, the JPA initiated a process to review and resolve remaining substantive HCP/NCCP planning and implementation issues. The Advisory Committee reviewed and provided input to five issue papers prepared by the JPA that served as the framework for resolving these issues with USFWS and CDFW:

- | The JPA's proposed approach for conserving agricultural habitat values for covered species during the 50-year permit period.
- | Coordination and implementation issues related to implementation of Bay-Delta Conservation Plan (BDCP) conservation actions in the HCP/NCCP Plan Area.
- | The JPA's proposed approach for conserving Swainson's hawk.
- | The JPA's proposed approach for conserving giant garter snake.
- | A proposed approach for addressing conservation for Yolo County Species of Local Concern Issue Paper.

### 1.3.3 Coordination with Federal and State Agencies

Since the release of the first administrative draft plan in June 2013, the USFWS and CDFW participated in over a dozen half-day and full-day meetings to resolve important issues related to the first administrative draft plan. These agencies provided technical input on the baseline data, covered species list, covered species accounts, existing ecological conditions report, covered activities, effects analysis, and conservation strategy. USFWS and CDFW involvement also included

attendance at Advisory Committee meetings and regular communications with and attendance at meetings of the JPA Board. USFWS and CDFW reviewed and commented on each of the 2013 issue papers (Section 1.3.2, *Role of the Advisory Committee*), and reviewed and commented on each chapter prior to release of the second administrative draft plan. In addition, the USFWS and CDFW assisted the JPA with securing sufficient grant funding to prepare this HCP/NCCP.

### 1.3.4 Public Participation and Engagement

The NCCPA requires the establishment of a process for public participation and outreach throughout the development of an NCCP (Fish & Game Code Section 2815). Similarly, policies governing the FESA emphasize the importance of public involvement in the development of large-scale HCPs, and encourage plan participants to seek the engagement of the public (U.S. Fish and Wildlife Service 2000a). At the initial stage of the HCP/NCCP planning process, the JPA developed an outreach program to create a wide range of opportunities for the public to learn about the various elements of the Yolo HCP/NCCP and to facilitate public input during the course of its development.

All meetings of the Advisory Committee and its working groups were open to the public. An electronic mailing list server was developed and maintained to ensure that interested members of the public were notified of upcoming meetings and that draft documents pertaining to the planning process were distributed as they became available. All documents reviewed or prepared by the Advisory Committee, including its working groups, were made available to the public. At meetings, both oral and written public comments were received by the Advisory Committee, and comments received in writing were posted to the website. The notes and records of Advisory Committee meetings also reflect comments and input offered by the public.

Throughout the planning process, representatives of this HCP/NCCP conducted dozens of briefings for community organizations, local jurisdictions within and adjacent to the Plan Area, and environmental organizations. Representatives made public presentations throughout the Plan Area, and regularly distributed information about this HCP/NCCP through newsletters and updated fact sheets explaining its purpose and describing its various components. Representatives conducted additional public outreach and involvement activities around major milestones in the planning process, and in compliance with NEPA and CEQA environmental review processes.

To facilitate the dissemination of information, the JPA has maintained a Yolo HCP/NCCP website.<sup>5</sup> The website provides the following information.

- | Relevant background information and agreements.
- | Draft chapters, appendices, and sections of the Yolo HCP/NCCP during document development.
- | Information on landscapes, natural communities, and covered species.
- | Maps.
- | Schedule of Advisory Committee and JPA Board meetings with agendas, handouts, and meeting summaries.
- | Contact information for the JPA and means for leaving direct comments.
- | Links to other relevant websites, including USFWS, CDFW, and other nearby HCPs and NCCPs.

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<sup>5</sup> <http://www.yoloconservationplan.org>.

### 1.3.5 Integration of Science

Use of the best available science is a priority for this HCP/NCCP. In 2006, the JPA and Advisory Committee assembled the Independent Science Advisors, a group composed of experts in conservation ecology and the specific biological resources in the Plan Area. The JPA hired a science advisor facilitator to assist in the formation of and to coordinate with the Independent Science Advisors.

The Independent Science Advisors (Spencer et al. 2006) submitted a report to the JPA and Advisory Committee in May 2006 summarizing its recommendations on the Yolo HCP/NCCP. This NCCPA-required scientific input was provided early in the planning process, before preparation of the draft HCP/NCCP, to ensure that the Yolo HCP/NCCP was developed using best available science.

To ensure objectivity, the advisors operated independent of the Permittees, their consultants, and other entities involved in the Yolo HCP/NCCP. The advisors reviewed information prepared by the consultants, attended a workshop, completed subsequent research, and engaged in discussions. The Independent Science Advisors met August 15 and 16, 2005, to review information gathered for the HCP/NCCP planning process, hear the concerns of the Advisory Committee, tour portions of the Plan Area, and begin formulating recommendations for HCP/NCCP development and implementation. Advisors were also encouraged to seek expert input from other scientists.

Recommendations were provided to the JPA in the *Report of Independent Science Advisors for Yolo County Natural Community Conservation Plan/Habitat Conservation Plan (NCCP/HCP)* (Spencer et al. 2006) regarding the scope of this HCP/NCCP, information gaps, the conservation design, the conservation analyses, and the adaptive management and monitoring. Independent Science Advisor recommendations were used to guide subsequent HCP/NCCP planning. Major recommendations incorporated into this HCP/NCCP included updating and refining HCP/NCCP vegetation mapping, and refining conservation design principles. In addition, the Local Conservation Strategy (Appendix L) incorporates a number of recommendations in concept from the Independent Sciences Advisors' report as elements in the conservation of natural ecosystem elements in Yolo County.

## 1.4 Regulatory Context

The Yolo HCP/NCCP operates within and assists in achieving the requirements of numerous applicable federal and state laws and regulations. This section describes the federal and state laws and regulations with which this HCP/NCCP complies.

### 1.4.1 Federal and State Endangered Species Laws

#### 1.4.1.1 Federal Endangered Species Act

FESA, which is administered by USFWS, requires USFWS to maintain lists of threatened and endangered species and affords substantial protection to listed species. USFWS can list species as either *endangered* or *threatened*. An *endangered* species is at risk of extinction throughout all or a significant portion of its range (FESA Section 3[6]). A *threatened* species is likely to become *endangered* in the near future (FESA Section 3[19]). Section 9 of FESA prohibits the take of any fish

or wildlife species listed under FESA as endangered or threatened.<sup>6</sup> **Take**, as defined by FESA, means “to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct.” **Harm** is defined as “any act that kills or injures the species, including significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding, or sheltering” (50 CFR 17.3). Section 9 prohibits the “removal or reduction to possession” of any listed plant species “under federal jurisdiction” (i.e., on federal land, where federal funding is provided, or where federal authorization is required).

FESA includes mechanisms that provide exceptions to the Section 9 take prohibitions. These are addressed in Section 7 for federal actions and Section 10 for nonfederal actions.

#### 1.4.1.1.1 Section 7

Section 7 of FESA requires all federal agencies to ensure that any action they authorize, fund, or carry out is not likely to jeopardize the continued existence of any listed species or result in the destruction or adverse modification of habitat critical to such species’ survival. To ensure that its actions do not result in jeopardy to listed species or in the adverse modification of critical habitat,<sup>7</sup> each federal agency must consult with USFWS regarding federal agency actions that may affect listed species. The issuance of Permits for this HCP/NCCP is a federal action that triggers a Section 7 consultation. Consultation begins when the federal agency submits a written request for initiation to USFWS, along with the agency’s biological assessment of its proposed action, and when USFWS accepts that biological assessment as complete. If USFWS concludes that the action is not likely to adversely affect a listed species, the action may be conducted without further review under ESA. Otherwise, USFWS must prepare a written biological opinion describing how the agency’s action will affect the listed species and its critical habitat. For this HCP/NCCP, USFWS will consult internally (with itself) to comply with Section 7 of FESA.

If the biological opinion concludes that the proposed action would jeopardize the continued existence of a listed species or adversely modify its critical habitat, the opinion will suggest “reasonable and prudent alternatives” that would avoid that result. If the biological opinion concludes that the proposed action would take a listed species but would not jeopardize its continued existence, the biological opinion will include an incidental take statement. *Incidental take* is take that is “incidental to, and not intended as part of, an otherwise lawful activity” (64 CFR 60728). The incidental take statement specifies an amount of take that is allowed to occur because of the action and may require reasonable and prudent measures to minimize the impact of the take.

Any project with a federal lead agency or federal involvement (e.g., a federal permit, federal funding, or a project on federal land) must obtain take authorization through Section 7 rather than Section 10 and an HCP. This means that projects with federal involvement, including some of the covered activities described in Chapter 3, *Covered Activities*, cannot directly use an approved HCP for take authorization. If the applicant complies with the conservation measures in this HCP/NCCP,

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<sup>6</sup> The protection of threatened species under Section 9 is discretionary through a rule issued under Section 4(d) of FESA. By regulation, USFWS automatically affords Section 9 protections to threatened species at the time of listing. These protections can later be modified by USFWS through a 4(d) rule.

<sup>7</sup> *Critical habitat* is defined as specific geographic areas, whether occupied by listed species or not, that are determined to be essential for the conservation and management of listed species, and that have been formally described in the Federal Register.

however, the Section 7 consultation process is expected to be greatly streamlined. Unless otherwise required by law or regulation, USFWS will ensure that a biological opinion for a project with a federal lead agency that is addressed by this HCP/NCCP is consistent with the biological opinion for this HCP/NCCP. USFWS will not impose measures for coverage under this HCP/NCCP in excess of those that have been or will be required by the Implementing Agreement,<sup>8</sup> this HCP/NCCP, and the permits, unless otherwise required by law or regulation. Federal agencies cannot receive the regulatory assurances available under Section 10 of FESA.

#### 1.4.1.1.2 Section 10

Until 1982, state, local, and private entities had no means to acquire incidental take authorization, as could federal agencies under Section 7. Private landowners and local and state agencies risked direct violation of FESA no matter how carefully their projects were implemented. This statutory dilemma led Congress to amend Section 10 of FESA in 1982 to authorize the issuance of an incidental take permit to nonfederal project proponents upon completion of an approved conservation plan. The term *conservation plan* has evolved into *habitat conservation plan*.

In cases where federal land, funding, or authorization is not required for an action by a nonfederal entity, the take of listed fish and wildlife species can be permitted by USFWS and/or the National Marine Fisheries Service (NMFS) through the Section 10 process. Private landowners, corporations, state agencies, local agencies, and other nonfederal entities must obtain a Section 10(a)(1)(B) *incidental take permit* for take of federally listed fish and wildlife species “that is incidental to, but not the purpose of, otherwise lawful activities.”

The take prohibition for listed plants is more limited than for listed fish and wildlife. Under Section 9(a)(2)(B) of FESA, endangered plants are protected from “removal, reduction to possession, and malicious damage or destruction” in areas that are under federal jurisdiction. Section 9(a)(2)(B) of FESA also provides protection to plants from removal, cutting, digging up, damage, or destruction where the action takes place in violation of any state law or regulation or in violation of a state criminal trespass law. Thus, the FESA does not prohibit the incidental take of federally listed plants on private or other nonfederal lands unless the action requires federal authorization or is in violation of state law. Section 10 incidental take permits are not required for plant species. The Section 7(a)(2) prohibition against jeopardy applies to plants, however, and issuance of a Section 10(a)(1)(B) incidental take permit cannot result in jeopardy to a listed plant species.

The Yolo HCP/NCCP provides the following mandatory elements of an HCP.

- 1 The impact that will likely result from the taking of covered species (Chapter 5, *Effects on Covered Species and Natural Communities*).
- 1 The steps the applicant will take to monitor, minimize, and mitigate such impacts to the maximum extent practicable (Section 4.3.4, *Covered Species*; and Chapter 6, *Conservation Strategy*).
- 1 The funding that will be available to implement such steps (Chapter 8, *Cost and Funding*).

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<sup>8</sup> The Implementing Agreement is a legal document, signed by all parties, that identifies roles and responsibilities of all parties, including the Permittees, USFWS, and CDFW. The agreement typically incorporates actions from the conservation plan that are agreed to by all parties. See Appendix X, *Implementing Agreement*.

- | The procedures to be used to deal with unforeseen circumstances (Chapter 7, *Plan Implementation*).<sup>9</sup>
- | The alternative actions to such taking the applicant considered and the reasons why such alternatives will not be used (Chapter 9, *Alternatives to Take*).
- | Such other measures that the Director [of the Department of Interior or Commerce] may require as being necessary or appropriate for purposes of the plan (50 CFR 17.22(b)).

To receive an incidental take permit, Section 10(a)(2)(B) of FESA requires that the following criteria be met.

- | The taking will be incidental to otherwise lawful activities (Chapter 3, *Covered Activities*).
- | The applicant will, to the maximum extent practicable, minimize and mitigate the impacts of such taking (Chapter 5, *Effects on Covered Species and Natural Communities*, and Chapter 6, *Conservation Strategy*).
- | The applicant will ensure adequate funding for the HCP and procedures to deal with unforeseen circumstances (Chapter 8, *Cost and Funding*).
- | The taking will not appreciably reduce the likelihood of survival and recovery of the species in the wild (Chapter 5, *Effects on Covered Species and Natural Communities*).
- | The applicant will ensure that other measures that USFWS may require as being necessary or appropriate will be provided.
- | USFWS has received such other assurances as may be required that the HCP will be implemented.

Prior to the approval of an HCP, USFWS is required to undertake an internal Section 7 consultation<sup>10</sup> because issuance of an incidental take permit is a federal action (Section 1.4.1.1.1, *Section 7*). Elements specific to the Section 7 process that are not required under the Section 10 process (e.g., analysis of impacts on designated critical habitat and analysis of cumulative impacts on listed species) are included in this HCP/NCCP to meet the requirements of Section 7. The Plan Area includes designated critical habitat for only one covered species, the California tiger salamander, and the critical habitat analysis for this species is included in Section 6.9, *Critical Habitat*. Cumulative effects on covered species consisted with Section 7 of FESA are addressed in Section 6.8, *Cumulative Effects*.

#### 1.4.1.1.3 Five-Point Policy

In June 2000, USFWS adopted the Five-Point Policy designed to clarify elements of the HCP program as they relate to biological goals, adaptive management, monitoring, permit duration, and public participation (U.S. Fish and Wildlife Service 2000a). The Five-Point Policy directs that the following elements be addressed in the development of HCPs.

- | **Biological Goals and Objectives.** HCPs are required to define biological goals and objectives that the plan is intended to achieve to clarify the purpose and direction of the plan's

<sup>9</sup> *Unforeseen circumstances* are changes in circumstances affecting a covered species or geographic area covered by the HCP that could not reasonably have been anticipated by the plan developers, and that result in a substantial and adverse change in the status of a covered species.

<sup>10</sup> When USFWS issues a permit, they will consult internally and with NMFS, if necessary.



conservation program. This HCP/NCCP sets out extensive biological goals and objectives, including specific measurable targets the HCP/NCCP is designed to meet. These targets were developed based on the best available scientific information and have been used as parameters and benchmarks to guide the conservation strategies for the covered species and natural communities. The biological goals and objectives of this HCP/NCCP are described in Chapter 6, Section 6.3, *Biological Goals and Objectives*. Chapter 7, *Plan Implementation*, describes how the JPA will demonstrate at regular intervals that it is meeting the conservation commitments.

- I **Adaptive Management.** The Five-Point Policy encourages the inclusion of adaptive management strategies in HCPs in appropriate circumstances to address uncertainty related to species covered by a plan. The agencies describe adaptive management as a “method for examining alternative strategies for meeting measurable biological goals and objectives, and then if necessary, adjusting future conservation management actions according to what is learned” (U.S. Fish and Wildlife Service 2000a). This HCP/NCCP incorporates an adaptive management process that is designed to facilitate and improve decision-making during the implementation of this HCP/NCCP and identify adjustments and modifications, as defined in this HCP/NCCP, to the conservation strategy as new information becomes available over time. The framework for the adaptive management program is set out in Chapter 6, Section 6.5, *Monitoring and Adaptive Management*.
- I **Monitoring.** HCPs are required to include provisions for monitoring to gauge the effectiveness of the plan in meeting the biological goals and objectives and to verify that the terms and conditions of the plan are being properly implemented. The biological and compliance monitoring provisions of this HCP/NCCP are found in Chapter 6, Section 6.5, *Monitoring and Adaptive Management*.
- I **Permit Duration.** Consistent with the Five-Point Policy, USFWS considers several factors in determining the term of an incidental take permit. The agency, for instance, takes into account the expected duration of the activities proposed for coverage and the anticipated positive and negative effects on covered species that will likely occur during the course of the plan. The agency also factors in the level of scientific and commercial data underlying the proposed conservation strategy, the length of time necessary to implement and achieve the benefits of the operating conservation program, and the extent to which the program incorporates adaptive management strategies. The duration of the Permits to be issued pursuant to this HCP/NCCP is proposed to be 50 years (Section 1.2.5, *Permit Term*).
- I **Public Participation.** The Five-Point Policy increases public participation in the HCP process by including greater opportunities for the public to assess, review, and analyze HCPs and associated NEPA documentation. As part of this effort, the agencies have encouraged greater engagement of the public for most HCPs, particularly those with regional scopes. As described in Section 1.3.4, *Public Participation and Engagement*, the planning process afforded extensive opportunities for public involvement and input throughout the development of this HCP/NCCP.

#### 1.4.1.2 California Endangered Species Act

CESA prohibits take of wildlife and plants listed as threatened or endangered by the California Fish and Game Commission. *Take* is defined under the Fish & Game Code (more narrowly than under FESA) as any action or attempt to “hunt, pursue, catch, capture, or kill.” Therefore, take under CESA

does not include “the taking of habitat alone or the impacts of the taking”. Rather, the courts have affirmed that under CESA, “taking involves mortality.”<sup>11</sup>

Like FESA, CESA allows exceptions to the prohibition for take that occurs during otherwise lawful activities. The requirements of an application for incidental take under CESA are described in Section 2081 of the California Fish and Game Code. Incidental take of state-listed species may be authorized if an applicant submits an approved plan that minimizes and “fully mitigates” the impacts of this take. The Permittees are not seeking incidental take authorizations under CESA, but are instead seeking state take authorization through the NCCPA as described below.

### 1.4.1.3 Natural Community Conservation Planning Act

In 1991, California’s NCCPA (Fish & Game Code Section 2800 *et seq.*) was enacted to implement broad-based planning that balances appropriate development and growth with conservation of wildlife and habitat. Pursuant to the NCCPA, local, state, and federal agencies are encouraged to prepare NCCPs to provide comprehensive management and conservation of multiple species and their habitats under a single plan, rather than through preparation of numerous individual plans on a project-by-project basis. The NCCPA is broader in its orientation and objectives than are FESA and CESA. Preparation of an NCCP is voluntary. The primary objective of the NCCP program is to conserve natural communities at the ecosystem scale while accommodating compatible land use. To be approved by CDFW, an NCCP must provide for the conservation of species and protection and management of natural communities in perpetuity within the area covered by permits. **Conservation** is defined by the NCCPA and the California Fish and Game Code as actions that result in the delisting of state-listed species. Thus, NCCPs must provide for the conservation of covered species, rather than just mitigate the effects of covered activities. This conservation standard is one of the major differences between an NCCP and an HCP prepared to satisfy FESA or CESA.

The 1991 NCCPA was replaced with a substantially revised and expanded NCCPA in 2002. The revised NCCPA established new standards and guidance on many facets of the program, including scientific information, public participation, biological goals, interim project review, and approval criteria. The new NCCPA took effect on January 1, 2003. To approve an NCCP under the new NCCPA, CDFW must make a series of findings.

- | The plan must be consistent with the Planning Agreement.
- | The plan must provide for the conservation and management of the covered species (**conservation** is defined to mean that the plan must contribute to species recovery).
- | The plan must protect habitat, natural communities, and species diversity<sup>12</sup> on the landscape level.
- | The plan must conserve the ecological integrity of large habitat blocks, ecosystem function, and biodiversity.
- | The plan must support sustainable populations of covered species.
- | The plan must provide a range of environmental gradients and habitat diversity to support shifting species distributions.
- | The plan must sustain movement of species among reserves.

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<sup>11</sup> *Environmental Council of Sacramento v. City of Sacramento*, 142 Cal. App. 4th 1018 (2006).

<sup>12</sup> Definitions of these and other NCCP terms are provided in Appendix D, *Glossary*

- l Mitigation and conservation must be roughly proportional to impacts in timing and extent.
- l Funding for conservation, monitoring, and adaptive management must be adequately assured.

The Yolo HCP/NCCP complies with the NCCPA to conserve the covered species and ecosystems of a significant part of Yolo County and provides authorization for take of covered species in accordance with Section 2835 of the Fish & Game Code. Table 1-2 provides a checklist of NCCP findings that CDFW must make to issue its NCCP permit along with the locations in the Yolo HCP/NCCP where those findings are supported.

**Table 1-2. Checklist for Natural Community Conservation Planning Act Requirements**

<b>Natural Community Conservation Planning Act Requirement (California Fish and Game Code Section)</b>	<b>Applicable HCP/NCCP Chapter/Section<sup>a</sup></b>
The plan was developed in accordance with the process identified in the planning agreement per Section 2810. (2820(a)(1))	Chapter 1, Section 1.2.1, <i>Geographic Scope of the Plan Area and Planning Units</i> Chapter 1, Section 1.3, <i>Overview of the Planning Process</i> Chapter 8, <i>Costs and Funding</i>
The plan integrates adaptive management strategies that are periodically evaluated and modified based on information from monitoring programs and other sources; these strategies assist conservation of covered species and ecosystems within the plan area. (2820(a)(2))	Chapter 6, Section 6.5, <i>Monitoring and Adaptive Management</i>
[The plan] Protects habitat, natural communities, and species diversity on a landscape or ecosystem basis through the creation and long-term management of habitat reserves or other measures that provide equivalent conservation of covered species appropriate for land, aquatic, and marine habitats within the plan area. (2820(a)(3))	Chapter 6, <i>Conservation Strategy</i>
[The plan] Conserves, restores, and manages representative natural and seminatural landscapes to maintain the ecological integrity of large habitat blocks, ecosystem function, and biological diversity. (2820(a)(4)(A))	Chapter 6, <i>Conservation Strategy</i>
[The plan] Establishes one or more reserves or proposes other measures that provide equivalent conservation of covered species within the plan area and linkages between them and adjacent habitat areas outside of the plan area. (2820(a)(4)(B))	Chapter 6, <i>Conservation Strategy</i>
[The plan] Protects and maintains habitat areas that are large enough to support sustainable populations of covered species. (2820(a)(4)(C))	Chapter 6, <i>Conservation Strategy</i>
[The plan] Sustains the effective movement and interchange of organisms between habitat areas to maintain ecological integrity of habitat within the plan area. (2820(a)(4)(E))	Chapter 6, Section 6.3.2, <i>Landscape-Level Biological Goals and Objectives</i>
The plan incorporates a range of environmental gradients (such as slope, elevation, aspect, and coastal or inland characteristics) and high habitat diversity; this provides for shifting distributions of species due to changed circumstances. (2820(a)(4)(D))	Chapter 6, Section 6.3.2, <i>Landscape-Level Biological Goals and Objectives</i>
The plan identifies allowable activities and restrictions within reserve areas compatible with conservation of species, habitats, natural communities, and associated ecological functions. (2820(a)(5))	Chapter 4, <i>Application Process and Conditions on Covered Activities</i>

<b>Natural Community Conservation Planning Act Requirement (California Fish and Game Code Section)</b>	<b>Applicable HCP/NCCP Chapter/Section<sup>a</sup></b>
The plan contains specific conservation measures that meet the biological needs of covered species and that are based on the best available scientific information about the status of covered species and the impacts of permitted activities on those species. (2820(a)(6))	Chapter 6, Section 6.4, <i>Conservation Measures</i>
The plan contains a monitoring program. (2820(a)(7))	Chapter 6, Section 6.5, <i>Monitoring and Adaptive Management</i>
The plan contains an adaptive management program. (2820(a)(8))	Chapter 6, Section 6.5, <i>Monitoring and Adaptive Management</i>
The plan includes an estimated timeframe and process for implementing reserves or other conservation measures, including obligations of landowners and plan signatories and consequences for failure to acquire lands in a timely manner. (2820(a)(9))	Chapter 6, Section 6.3, <i>Biological Goals and Objectives</i> Chapter 7, <i>Plan Implementation</i>
The plan ensures that mitigation and conservation measures are roughly proportional in time and extent to the impact on habitat or covered species authorized under the plan. These provisions identify (a) the conservation measures—including assembly of reserves where appropriate and implementation of monitoring and management activities—that the landowner will maintain or carry out in rough proportion to the impact on habitat or covered species and (b) the measurements that will be used to determine if this occurs. (2820(b)(3)(D)(9))	Chapter 6, <i>Conservation Strategy</i>
The plan ensures adequate funding to carry out the conservation measures identified in the plan. (2820(a)(10))	Chapter 8, <i>Costs and Funding</i>
The plan defines species coverage, including any conditions of coverage (2820(b)(1)).	Chapter 4, <i>Application Process and Conditions on Covered Activities</i>
The plan establishes long-term protection of habitat reserves or provides equivalent conservation of covered species (2820(b)(2)).	Chapter 6, <i>Conservation Strategy</i>
The plan defines specific terms and conditions, which, if violated, would result in the suspension or revocation of the permit, in whole or in part. CDFW will include a provision requiring notification to the plan participant of a specified period of time to cure any default prior to suspension or revocation of the permit in whole or in part. These terms and conditions will address, but are not limited to, provisions specifying the actions CDFW will take under all of the following circumstances (2820(b)(3)): The plan participant fails to provide adequate funding. The plan participant fails to maintain the rough proportionality between impacts on habitat or covered species and conservation measures. The plan participant adopts, amends, or approves any plan or project without the concurrence of the wildlife agencies that is inconsistent with the objectives and requirements of the approved plan. The level of take exceeds that authorized by the permit.	Chapter 7, <i>Plan Implementation</i>
The plan specifies procedures for amendment of the plan and the implementation agreement (2820(b)(4)).	Chapter 7, <i>Plan Implementation</i>
The plan ensures implementation of a monitoring program and adaptive management program. (2820(b)(5)).	Chapter 6, Section 6.5, <i>Monitoring and Adaptive Management</i>
The plan provides for oversight of plan implementation to assess mitigation performance, funding, and habitat protection measures. (2820(b)(6))	Chapter 7, <i>Plan Implementation</i>

<b>Natural Community Conservation Planning Act Requirement (California Fish and Game Code Section)</b>	<b>Applicable HCP/NCCP Chapter/Section<sup>a</sup></b>
The plan provides for periodic reporting to the wildlife agencies and the public for purposes of information and evaluation of plan progress. (2820(b)(7))	Chapter 7, <i>Plan Implementation</i>
The plan provides mechanisms to ensure adequate funding to carry out the conservation actions identified in the plan. (2820(b)(8))	Chapter 8, <i>Costs and Funding</i>
The plan stipulates that if a participant does not maintain proportionality between <i>take</i> and conservation measures specified in the implementation agreement and does not either (a) cure the default within 45 days or (b) enter into an agreement with CDFW within 45 days to expeditiously cure the default, CDFW will suspend or revoke the permit, in whole or in part. (2820(c))	Chapter 7, <i>Plan Implementation</i>
The plan requires that data and reports associated with monitoring programs be available for public review; the landowner must also conduct public workshops on an annual basis to provide information and evaluate progress toward attaining the conservation objectives of the plan. (2820(d))	Chapter 6, Section 6.5 <i>Monitoring and Adaptive Management</i> Chapter 7 <i>Plan Implementation</i>
<b>Note:</b> <sup>a</sup> Only the primary applicable sections of this HCP/NCCP are listed. Other sections may apply or be cross-referenced by the sections listed in this table.	

## 1.4.2 Other Federal and State Wildlife Laws and Regulations

This section describes the relationships between this HCP/NCCP and other federal and state wildlife laws and environmental regulations. The HCP/NCCP provides take authorization under the CESA, FESA, and NCCPA, but a covered activity may require other permits for implementation under the following laws and regulations.

### 1.4.2.1 Migratory Bird Treaty Act

The Migratory Bird Treaty Act of 1918 (MBTA) (16 United States Code [USC] 703 *et seq.*) implements various treaties and conventions between the United States and Canada, Japan, Mexico, and countries of the former Soviet Union for the protection of migratory birds. Under the MBTA, taking, killing, or possessing migratory birds is unlawful as is taking of any parts, nests, or eggs of such birds (16 USC 703). *Taking* is defined more narrowly under the MBTA than under FESA and includes only the death or injury of individuals of a migratory bird species or their eggs. *Taking* under the MBTA does not include the concepts of harm and harassment as defined by FESA. The MBTA defines migratory birds broadly and all covered birds in this HCP/NCCP are listed as migratory birds under the MBTA.

USFWS has developed policy guidance regarding the incidental take of bird species that are listed as threatened or endangered under FESA but are also protected under the MBTA (U.S. Fish and Wildlife Service 2000a, Appendix 5). According to these guidelines, an incidental take permit can function as a Special Purpose Permit under the MBTA (50 CFR 21.27) for the take of all FESA-listed covered species subject to the terms and conditions specified in an HCP. Any such take will not be in violation of the MBTA.

Least Bell's vireo is the only bird species covered by this HCP/NCCP that is currently listed under FESA. Measures set forth in the conservation strategy to minimize and mitigate effects on covered species will provide a significant "benefit to the migratory bird resource" as required by the MBTA regulations to obtain a Special Purpose Permit.<sup>13</sup> Therefore, if any of the covered bird species become listed under FESA during the permit term, the FESA permit would also constitute an MBTA Special Purpose Permit for that species for a 3-year term (50 CFR 21.27), subject to renewal by the Permittees. Until a covered bird species is listed under FESA, however, it will be the responsibility of individual project applicants to comply fully with the MBTA. Project applicants, however, will be required to implement the applicable conditions described in Section 4.3, *Conditions on Covered Activities*, however, and these conditions are expected to result in compliance with the MBTA for the covered bird species.

#### 1.4.2.2 Bald and Golden Eagle Protection Act

The Bald and Golden Eagle Protection Act (Eagle Act) prohibits the taking or possession of and commerce in bald and golden eagles, with limited exceptions. Under the Eagle Act, it is a violation to "take, possess, sell, purchase, barter, offer to sell, transport, export or import, at any time or in any manner, any bald eagle commonly known as the American eagle, or golden eagle, alive or dead, or any part, nest, or egg, thereof." *Take* is defined to include pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, destroy, molest, and disturb. *Disturb* is further defined as "to agitate or bother a bald or golden eagle to a degree that causes, or is likely to cause, based on the best scientific information available (1) injury to an eagle, (2) a decrease in its productivity, by substantially interfering with normal breeding, feeding, or sheltering behavior, or (3) nest abandonment, by substantially interfering with normal breeding, feeding, or sheltering behavior" (50 CFR Part 22.3).

Recent revisions to the Eagle Act authorize take of bald eagles and golden eagles if all of the following conditions are met.

- | The take is compatible with the preservation of the bald eagle and golden eagle.
- | The take is necessary to protect a property interest in a particular locality.
- | The take is associated with but not the purpose of an otherwise lawful activity.
- | The take cannot be avoided (applies to individual instances of take).

Programmatic take is also permissible if the take is unavoidable even though advanced conservation practices are being implemented (50 CFR 22.26). Permits issued under this regulation usually authorize disturbance only; however, in limited cases a Permit may authorize lethal take that results from but is not the purpose of an otherwise lawful activity.

Bald and golden eagles are not covered species in this HCP/NCCP.

#### 1.4.2.3 California Fully Protected Species

In the 1960s, before CESA was enacted, the California Legislature identified specific species for protection under the Fish & Game Code. These *fully protected* species may not be taken or possessed at any time, and no licenses or permits may be issued for their take except for collecting these species for necessary scientific research and relocation of bird species for the protection of livestock.

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<sup>13</sup> Likewise, migratory birds that are not specifically covered by this HCP/NCCP will benefit from its seasonal restrictions on construction and other conservation measures.

Fully protected species are described in Sections 3511 (birds), 4700 (mammals), 5050 (reptiles and amphibians), and 5515 (fish) of the California Fish and Game Code. These protections state that “...no provision of this code or any other law shall be construed to authorize the issuance of permits or licenses to take any fully protected [bird], [mammal], [reptile or amphibian], [fish].” Recent legislation allows NCCPs to provide take authorization for fully protected species covered by an NCCP; white-tailed kite is the only fully protected species covered by this HCP/NCCP, however, and take of other fully protected species must be avoided. This HCP/NCCP includes conservation measures to avoid taking fully protected species as defined by the Fish & Game Code. Fully protected species expected to occur in the Plan Area include, but are not restricted to, those listed below.

- | Golden eagle
- | American peregrine falcon
- | Bald eagle
- | White-tailed kite
- | Western snowy plover
- | Ring-tailed cat

Of these species, only white-tailed kite is proposed as a covered species in this HCP/NCCP.

#### **1.4.2.4 Section 3503 of the California Fish and Game Code (Bird Nests)**

Section 3503 of the California Fish and Game Code makes it “unlawful to take, possess, or needlessly destroy the nests or eggs of any bird, except as otherwise provided by this code or any regulation made pursuant thereto.” Therefore, CDFW may issue permits authorizing take. This HCP/NCCP contains conservation measures to avoid and minimize such take to the maximum extent practicable to comply with Section 3503. However, some take of covered birds may still occur. The NCCP permit will serve as the authorization to take nests or eggs of covered birds pursuant to Section 3503.

#### **1.4.2.5 Section 3503.5 of the California Fish and Game Code (Birds of Prey)**

Section 3503.5 of the Fish & Game Code prohibits the take, possession, or destruction of any birds of prey or their nests or eggs “except as otherwise provided by this code or any regulation adopted pursuant thereto.” CDFW may issue permits authorizing take of birds of prey or their nests or eggs pursuant to CESA or the NCCPA. Two birds of prey are covered by this HCP/NCCP: Swainson’s hawk and western burrowing owl. This HCP/NCCP contains conservation measures to avoid and minimize take of Swainson’s hawk and western burrowing owl in order to comply with Section 3503.5. The NCCP permit will serve as the authorization for take of birds, eggs, or nests of the Swainson’s hawk and western burrowing owl that cannot be avoided pursuant to Section 3503.5.

### **1.4.3 National Environmental Policy Act**

NEPA requires federal agencies to include in their decision-making process appropriate and careful consideration of all environmental effects of a proposed action and of possible alternatives.

Documentation of the environmental effects analysis and efforts to avoid or minimize the adverse

effects of proposed actions must be made available for public notice and review. This analysis is documented in either an environmental assessment or an environmental impact statement (EIS). Project proponents must disclose in these documents whether their proposed action will adversely affect the human or natural environment. NEPA's requirements are primarily procedural rather than substantive in that NEPA requires disclosure of environmental effects and mitigation possibilities but includes no requirement to mitigate.

The issuance by USFWS of an incidental take permit under Section 10 of FESA constitutes a federal action. Therefore, USFWS must comply with NEPA. To satisfy NEPA requirements, USFWS released a draft EIS on [REDACTED] for a 90-day comment period that closed on [REDACTED]. The final EIS accompanies this final HCP/NCCP.

## 1.4.4 California Environmental Quality Act

CEQA is similar to but more extensive than NEPA in that it requires significant environmental impacts of proposed projects to be reduced to a less-than-significant level through adoption of feasible avoidance, minimization, or mitigation measures unless unavoidable adverse impacts are overridden by specific economic, social, or other stated benefits (overriding considerations). CEQA applies to certain activities in California undertaken by either a public agency or a private entity that must receive some discretionary approval from a California government agency. In issuing the NCCPA permit, CDFW must comply with CEQA. Similarly, the action of Yolo County and four incorporated cities adopting this HCP/NCCP is subject to CEQA compliance. The JPA is serving as the lead agency under CEQA. To comply with CEQA, the JPA released a draft joint environmental impact report/environmental impact statement (EIS/EIR) on [REDACTED]. The public comment period on the EIS/EIR closed on [REDACTED], and the final EIS/EIR was certified by the JPA on [REDACTED].

An EIS/EIR will provide programmatic compliance with CEQA for all activities covered by this HCP/NCCP. Future projects that receive take coverage under this HCP/NCCP must also comply with CEQA at the project level through their local jurisdiction. The conservation strategy was designed to meet all CEQA mitigation standards for impacts on the special-status species and natural communities that are covered in this HCP/NCCP. Project-specific CEQA documents will still be necessary, however, for covered activities. Barring major changes, it is expected that future CEQA documents for Yolo HCP/NCCP covered activities will incorporate the conservation measures in this HCP/NCCP by reference to comply with CEQA for the covered species and natural communities addressed in this HCP/NCCP. Many of the conservation measures in this HCP/NCCP will benefit noncovered special-status species as well, and may be sufficient to meet CEQA standards for these species. This will be determined on a project-by-project basis through the CEQA process.

## 1.4.5 Federal and State Wetland Laws and Regulations

### 1.4.5.1 Section 404 of the Clean Water Act

In 1972, Congress passed the federal Water Pollution Control Act, commonly known as the Clean Water Act (CWA), with the goal of "restor[ing] and maintain[ing] the chemical, physical, and biological integrity of the Nation's waters" (33 USC 1251(a)). In furtherance of this goal, the CWA prohibits the discharge of any pollutants into navigable waters, except as allowed by permit issued under certain sections of the CWA (33 USC 1311, 1342, and 1344). Specifically, Section 404 authorizes the U.S. Army Corps of Engineers (USACE) to issue permits for and regulate the



discharge of dredged or fill materials into wetlands or other waters of the United States. Under the CWA and its implementing regulations, *waters of the United States* are broadly defined to consist of rivers, creeks, streams, and lakes extending to their headwaters, including adjacent wetlands (33 CFR 328.3(a)(3)).

Some covered activities will result in the discharge of dredged or fill materials into waters of the United States and will need to be authorized by USACE. These HCP/NCCP actions will receive such authorizations through both General Permits and Individual Permits. Typically, General Permits apply to specific classes of activities that have been determined to cause no more than minimal impact to the aquatic environment (e.g., construction of road crossings, installation of utility lines, and operations and maintenance activities) (33 CFR 325.5(c)). Individual Permits are designed for activities that have the potential to have more than a minimal effect on jurisdictional waters or that otherwise do not qualify under the conditions of a General Permit. Substantively, USACE must evaluate applications for Individual Permits to determine their consistency with the requirements of the Section 404(b)(1) Guidelines (40 CFR 230) and USACE regulations (33 CFR 325). Federal agency actions are subject to NEPA, and the USACE will complete NEPA requirements for required actions. It is the intent of the JPA that the EIS/EIS prepared for this HCP/NCCP largely address the substantive NEPA issues that may arise for the federal agency reviews for General Permits or Individual Permits.

#### 1.4.5.2 Clean Water Act Section 401 and the Porter-Cologne Water Quality Control Act

Under Section 401 of the CWA, states have the authority to certify federal permits for discharges to waters under state jurisdiction. States may review proposed federal permits (e.g., Section 404 permits) for compliance with state water quality standards. The permit cannot be issued if the state denies certification. In California, the State Water Resources Control Board (State Board) and the Regional Water Quality Control Boards (usually referred to as the Regional Boards) are responsible for the issuance of Section 401 certifications.

The Porter-Cologne Water Quality Control Act is the primary state law concerning water quality. It authorizes the State Board and Regional Boards to prepare management plans such as regional water quality plans to address the quality of groundwater and surface water. The Porter-Cologne Water Quality Control Act also authorizes the Regional Boards to issue waste discharge requirements defining limitations on allowable discharge to waters of the state. In addition to issuing Section 401 certifications on Section 404 applications to fill waters, the Regional Boards may issue waste discharge requirements for such activities. Because the authority for waste discharge requirements is derived from the Porter-Cologne Water Quality Control Act and not the CWA, waste discharge requirements may apply to a broader range of aquatic resources than do Section 404 permits and Section 401 water quality certifications. Applicants that obtain a permit from USACE under Section 404 must also obtain certification of that permit by the Regional Board with jurisdiction over the project site. . Even if no Section 404 approvals are required, waste discharge requirements may be required for actions that affect waters of the state. In the Plan Area, the Central Valley Regional Board has jurisdiction. This HCP/NCCP does not include certifications under Section 401 or waste discharge requirements under the Porter-Cologne Water Quality Control Act. These authorizations, if required, must be obtained separately.

### 1.4.5.3 Lake or Streambed Alteration Agreement

California has adopted regulations to address impacts on many of the resources subject to Section 404 of the CWA. Although not entirely overlapping, these programs frequently intersect. Project proponents are required to obtain separate authorizations from USACE and CDFW.

Section 1602 of the Fish & Game Code requires any person, state, or local government agency to provide advance written notification to CDFW prior to initiating any activity that would divert or obstruct the natural flow of, or substantially change or remove material from the bed, channel, or bank of any river, stream, or lake; or result in the disposal or deposition of debris, waste, or other material into any river, stream, or lake. The state definition of “lake, rivers, and streams” includes all rivers or streams that flow at least periodically or permanently through a bed or channel with banks that support fish or other aquatic life, and watercourses with surface or subsurface flows that support or have supported riparian vegetation (14 California Code of Regulations 1.72).

Certain covered activities will require streambed alteration agreements under Section 1602. As part of that process, CDFW will review notifications submitted by the Permittees or third-party participants to determine if the proposed project would affect existing fish and wildlife resources that are directly dependent on a lake, river, or stream. If CDFW determines that the proposed activity will not substantially adversely affect an existing fish and wildlife resource, it will notify the applicant that no streambed alteration agreement is required and the project may proceed (Fish & Game Code 1602(a)(4)(A)(i)). If CDFW determines that the project may substantially adversely affect an existing fish and wildlife resource, it will require, as part of a streambed alteration agreement, reasonable measures necessary to protect the fish and wildlife resource (Fish & Game Code 1603(a)).

### 1.4.6 National Historic Preservation Act

The National Historic Preservation Act of 1996, as amended (16 USC 470 *et seq.*), requires federal agencies to take into account the effects of federal undertakings on historic properties listed or eligible for listing on the National Register of Historic Places (National Register). Historic property means any prehistoric or historic district, site, building, structure, and object included on or eligible for inclusion on the National Register. *Federal undertaking* is defined to include the issuance of permits, such as permits under Section 10 of FESA, including the HCP/NCCP’s Section 10 permit. In undertaking its review under Section 106, the federal agency must confer with the State Historic Preservation Officer and the Advisory Council on Historic Preservation. The EIS/EIR will address compliance of HCP/NCCP conservation actions with Section 106 of the National Historic Preservation Act.

## 1.5 Organization of this Document

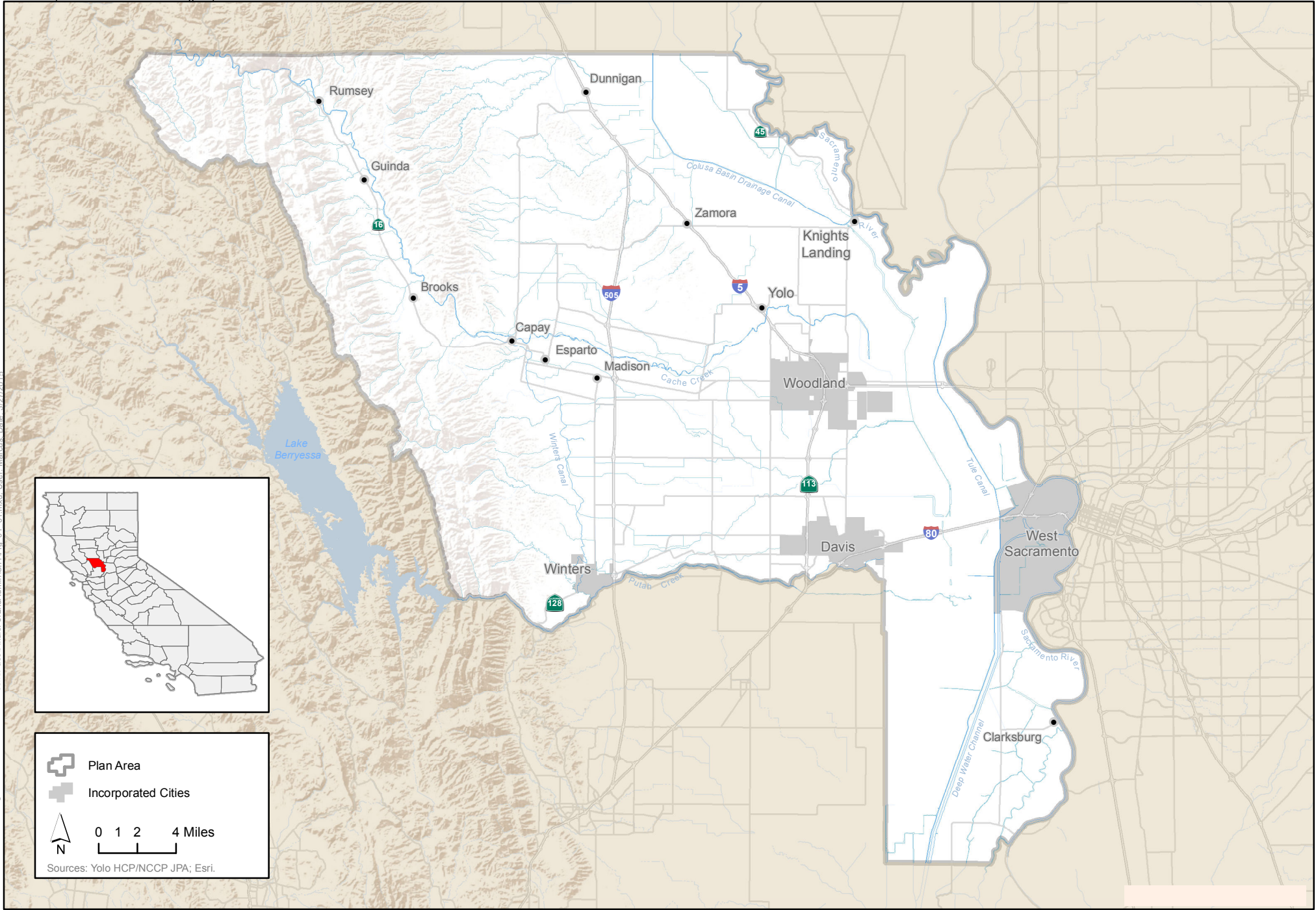
This section provides a brief overview of the contents of the chapters and appendices. The document consists of 11 chapters.

- I Chapter 1, *Introduction*, sets the context for the development of the Yolo HCP/NCCP, including the background, purpose, regulatory context, and scope; describes the process that guided the development of this HCP/NCCP; and provides an overview of the document contents and organization.

- | Chapter 2, *Existing Ecological Conditions*, describes the existing environmental conditions within the Plan Area, providing the context in which this HCP/NCCP and its various elements have been developed.
- | Chapter 3, *Covered Activities*, describes the activities identified for regulatory coverage in the Plan Area, including activities within conservation lands.
- | Chapter 4, *Application Process and Conditions on Covered Activities*, describes the conditions that project applicants must meet to be covered under this HCP/NCCP, including avoidance and minimization measures, and the process through which applicants are covered.
- | Chapter 5, *Effects on Covered Species and Natural Communities*, includes an analysis of the adverse and beneficial effects of the covered activities and conservation strategy on natural communities and covered species in the Plan Area. It also describes the cumulative effects resulting from other future state or private activities, not involving federal activities, that are reasonable certain to occur in the Plan Area.
- | Chapter 6, *Conservation Strategy*, describes the conservation strategy, including the biological goals and objectives, approach to conservation, conservation measures for species and habitats, and avoidance and minimization measures. Also describes the adaptive management decision-making process and monitoring requirements.
- | Chapter 7, *Plan Implementation*, addresses implementation of this HCP/NCCP, including a description of the JPA, structure, and decision-making process; schedule for the implementation of actions; monitoring and reporting process to ensure compliance; regulatory assurances anticipated by the Permittees; changed circumstances and the approach to unforeseen circumstances; and a discussion of duration, amendment, renewal and enforcement of Permits.
- | Chapter 8, *Costs and Funding Sources*, provides estimates of the costs of implementation and identifies the sources of funding on which the Permittees will rely.
- | Chapter 9, *Alternatives to Take*, describes the alternatives to take of covered species that were developed and considered and the reasons why they were not adopted.
- | Chapter 10, *List of Preparers*, lists the preparers of this HCP/NCCP.
- | Chapter 11, *References*, lists the printed references and personal communications cited in this HCP/NCCP.

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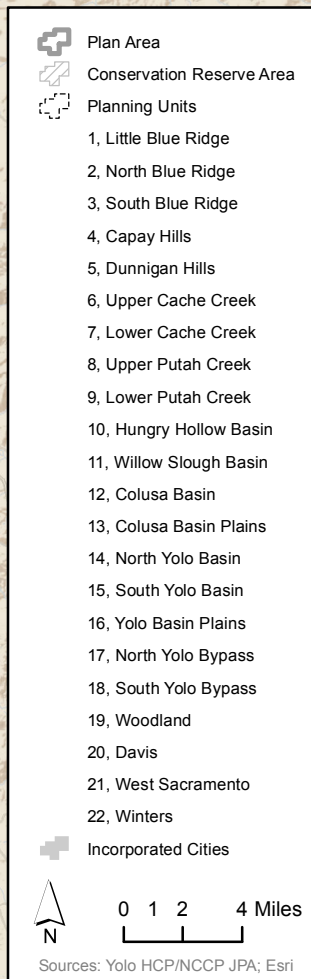
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**DRAFT**  
Figure 1-1  
Regional Location of the Yolo County HCP/NCCP Plan Area



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**Conservation Reserve Area also includes the following creek corridors:**

**Willow and Dry Slough; Salt Creek-Chickahominy Slough and Enos-Dry Creek; Oat Creek and Bird Creek; Buckeye Creek; Cache Creek; Putah Creek; Union Creek and Cottonwood Creek.**



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Figure 1-2  
Planning Units and Conservation Reserve Area