6 AGRICULTURAL AND FORESTRY RESOURCES

6.1 INTRODUCTION

This chapter provides information relevant to agricultural and forestry resources impacts under NEPA and CEQA in connection with the Proposed Action and alternatives. This chapter includes: introduction, environmental and regulatory setting, impact analysis methods and assumptions, significance criteria, environmental effects of the action and alternatives, and mitigation measures to address effects that are identified as significant.

6.1.1 Data Sources

The following sources of data and information were reviewed to prepare the agricultural and forestry resources chapter.

- ▲ Yolo County 2030 Countywide General Plan (Yolo County General Plan) (Yolo County 2009);
- ▲ Yolo Habitat Conservation Plan/Natural Community Conservation Plan (Yolo HCP/NCCP) (Yolo Habitat Conservancy 2017);
- ▲ California Department of Conservation, Division of Land Resource Protection for Williamson Act parcel data for Yolo County; and
- California Department of Conservation Farmland Mapping and Monitoring Program (California Department of Conservation [DOC] 2012).

6.1.2 Definitions

AGRICULTURAL RESOURCES

DOC classifies farmlands based on a system that combines technical soil ratings and current land use, as part of the Farmland Mapping and Monitoring Program (FMMP). Descriptions of the FMMP farmland mapping categories are presented in Table 6-1. Note that Prime Farmland, Farmland of Statewide Importance, and Unique Farmland are the most suitable for agriculture and are considered especially important agricultural resources. Local jurisdictions also define farmland or agricultural land through land use designations. These are described below in the description of *Local Laws and Regulations*.

Table 6-1 FMMP Mapping Category Definitions				
Mapping Category		Definition		
Agricultural Lands				
Prime Farmland		Prime Farmland is land that has the best combination of physical and chemical characteristics able to sustain long-term agricultural production. This land has the soil quality, growing season, and moisture supply needed to produce sustained high yields. Land must have been used for irrigated agricultural production at some time during the four years prior to the mapping date.		

Table 6-1 FMMI	P Mapping Category Def	initions
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Mapping Category	Definition
Farmland of Statewide Importance	This land is similar to Prime Farmland but with minor shortcomings, such as greater slopes or less ability to hold and store moisture. Farmland of Statewide Importance must have been used for the production of irrigated crops at some time during the two update cycles prior to the mapping date.
Unique Farmland	This is land of lesser quality soils used for the production of the state's leading agricultural crops. This land is usually irrigated, but may include non-irrigated orchards or vineyards as found in some climatic zones in California. Land must have been cropped at some time during the four years prior to the mapping date.
Farmland of Local Importance	This is land of importance to the local agricultural economy and is determined by each county's Board of Supervisors and local advisory committee.
Grazing Land	Grazing land is land on which the existing vegetation, whether grown naturally or through management, is suitable for grazing or browsing of livestock.
Non-Agricultural Lands	
Urban and Built-up Land	This is used for residential, industrial, commercial, construction, institutional, and public administrative purposes; railroad yards; cemeteries; airports; golf courses; sanitary landfills; sewage treatment plants; water control structures; and other development purposes.
Other Land	Other land is that which is not included in any of the other mapping categories. The following types of land are generally included low-density rural development; brush, timber, and other lands not suitable for livestock grazing; government lands not available for agricultural use; roads systems for freeway interchanges; vacant and nonagricultural land larger than 40 acres in size and surrounded on all sides by urban development; confined livestock facilities of 10 or more acres; strip mines and borrow and gravel pits; a variety of other rural land uses.
Water	Perennial water bodes with an extent of at least 40 acres.

FORESTRY RESOURCES

Forestry resources include forest land, timberland, and timberland production zones. Definitions used for these categories are those found in the California Public Resources Code (PRC) and California Government Code. Forest land is defined as land that can support 10 percent native tree cover of any species, including hardwoods, under natural conditions, and that allows for management of one or more forestry resources, including timber, aesthetics, fish and wildlife, biodiversity, water quality, recreation, and other public benefits (PRC Section 12220(g)). Timberland is land, other than land owned by the federal government or land that is designated as experimental forest, which is available for, and capable of, growing a crop of trees of a commercial species used to produce lumber and other forest products (PRC Section 4526). Timberland production zones are areas that have been devoted to and used for growing and harvesting timber and compatible uses (Government Code Section 51104(g)).

6.2 AFFECTED ENVIRONMENT

6.2.1 Environmental Setting

AGRICULTURAL RESOURCES

A defining characteristic of Yolo County is its agricultural resources. The Yolo County General Plan designates approximately 544,909 acres of land in Yolo County for agricultural use (Yolo County 2009a; page LU-9), which is approximately 83 percent of the Plan Area. Agriculture in Yolo County is varied and includes farms

of all sizes, as well as equestrian, ranching, and other related uses. Additional detail on the extent and type of agricultural resources in the County is provided below.

Soils

The U.S. Department of Agriculture Natural Resources Conservation Service (NRCS) classifies farmland according to soil type and the availability of irrigation. The NRCS Land Capability Classification System (LCC) is based on the limitations of soils for irrigated field crops, the risk of damage if soils are used for crops, and the way soils respond to management. The LCC system places soils into eight classes (I–VIII), depending on the limitations to agricultural use imposed by 13 specific soil and climatic criteria. The higher the class, the more restrictive the limitation. Classes I through IV are generally considered lands suitable for cultivation. The classes are defined as follows.

- ▲ Class I soils have slight limitations that restrict their use.
- Class II soils have moderate limitations that restrict the crop selection or that require moderate conservation practices.
- ✓ Class III soils have severe limitations that restrict the choice of plants or that require special conservation practices, or both.
- Class IV soils have very severe limitation that restrict the choice of plants or that require very careful management, or both.
- Class V soils are subject to little or no erosion but have other limitations, impractical to remove, that restrict their use mainly to pasture, rangeland, forestland, and/or wildlife habitat. There are no Class V soils in Yolo County.
- ✓ Class VI soils have severe limitations that make them generally unsuitable for cultivation and that restrict their use mainly to pasture, rangeland, forestland, or wildlife habitat.
- Class VII soils have very severe limitations that make them unsuitable for cultivation and that restrict their use mainly to grazing, forestland, and/or wildlife habitat.

Acreages of each NRCS land LCC classification in Yolo County are presented in Table 6-2. Class I, II, and selected Class III soils comprise over 63 percent of farmland in Yolo County (Yolo County 2009) and over 50 percent of the total land in the County. Other Class III and Class IV soils comprise 11 percent, and Class VI and VII soils comprise 26 percent of County farmland (Yolo County 2009) and roughly 40 percent of the total land in the County. The majority of soils in the unincorporated County are considered of higher quality, with poorer quality soils in the Dunnigan Hills, along the Colusa Basin Drain and the Yolo Bypass, and in the western foothills (Yolo County 2009).

Table 6-2	Yolo County Agricultural Soils (NRCS Land Capability Classification System)

Soil Class	Acres	Percent of Total County Lands
Class I	107,835	16.5
Class II	182,994	28.0
Class III	67,316	10.3
Class IV	109,143	16.7
Class V	0	0
Class VI	73,197	11.2

Table 6-2 Yolo County Agricultural Soils (NRCS Land Capability Classification System)

Soil Class	Acres	Percent of Total County Lands
Class VII	66,662	10.2
Class VIII	37,906	5.8
Water	8,496	1.3
Total	653,549°	100

Notes: Assumes irrigation where irrigation data was not available, the non-irrigated classification was included.

Source: Yolo County 2009

Important Farmland

FMMP farmland categories are described above in Table 6-1. The categories of Prime Farmland, Farmland of Statewide Importance, Unique Farmland, and Farmland of Local Importance are collectively considered "Important Farmland." The majority of the County's farmland is in the broad category of Important Farmland (approximately 365,626 acres). Prime Farmland alone (250,435 acres) makes up approximately 38 percent of total County lands (Table 6-3 and Exhibit 6-1). The majority of the County's cities and unincorporated communities are surrounded by Prime Farmland. Combined, Farmlands of Statewide and Local Importance, and Unique Farmland comprise less than 20 percent of the County's land area. FMMP designated Grazing Land makes up approximately 25 percent of total County lands, and the western foothills of the County are characterized predominantly by Grazing Land.

Table 6-3 Important Farmland Acreages in Yolo County (2014)

Farmland Type	Acres	Percent of Total County Lands*
Prime Farmland	250,435	38.3
Farmland of Statewide Importance	18,861	2.9
Unique Farmland	44,604	6.8
Farmland of Local Importance	51,726	7.9
IMPORTANT FARMLAND SUBTOTAL	365,626	55.9
Grazing Land	166,367	25.5
Urban and Built-Up Land	31,051	4.8
Other Land	82,693	12.7
Water	7,805	1.2
TOTAL	653,450	100.0

Source: DOC 2012

a Adjusted slightly to match current County GIS data

^{*} Percent is based on 653,451 total acres as calculated by California Department of Conservation 2012. This number differs slightly than the Yolo HCP/NCCP total Plan Area acreage. The acre difference in the area of the County is attributable to the use of different datasets.

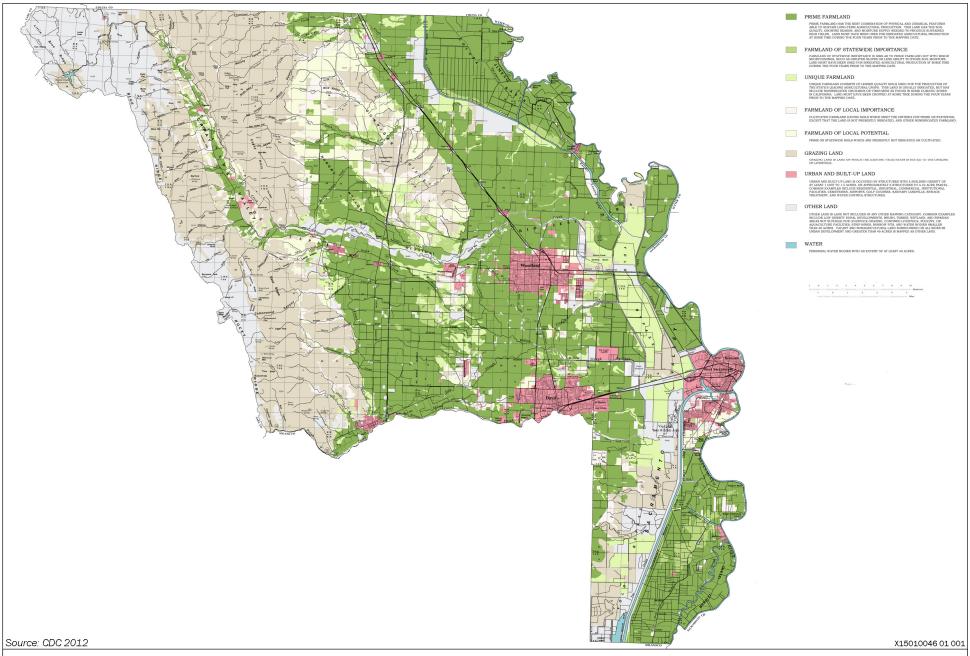


Exhibit 6-1

Yolo County Important Farmland 2012



Crops

Fertile soils, a long growing season, and the reliable availability of irrigation water in the project area provide a favorable combination of conditions that support a wide variety of crops. Chapter 4, Biological Resources, describes the three agricultural land cover types (Cultivated Lands Seminatural Community, Other Agriculture, and Semiagricultural/Incidental to Agriculture) in the County as described in the HCP/NCCP. Acreages of these land cover types are listed below in Table 6-4. The values in Table 6-4 are based on the land cover GIS dataset developed for the HCP/NCCP. Actual acres of crop types will vary from year to year as different crops are planted or fields are left fallow. Also, other data sources, such as information that may be collected by the Agricultural Commissioner, may provide different acreage totals. The HCP/NCCP land cover dataset was selected for use because it provides a single consolidated data source that covers both the unincorporated County and the incorporated cities. The methods used to develop this data source are described in Section 2.3 of the HCP/NCCP titled Land Cover Mapping (Yolo Habitat Conservancy 2017). Cultivated Semi-natural Community crops (e.g., corn, alfalfa, grain, pasture, wheat and rice) have been, and continue to be, the predominant crop in Yolo County in terms of total acreage (Table 6-4) occupying 38 percent of the Plan Area. As shown in Table 6-4, of all agricultural crop types, alfalfa and grain/hay crops occupy the largest total acreage in the County (Yolo Habitat Conservancy 2017). Deciduous fruits/nuts are another dominant crop type by acreage in the county. Additional information on crop types cultivated in the County and their value, based on the Yolo County Agricultural Crop Report (Yolo County 2015), is provided in Tables 6-5 and 6-6.

Table 6-4 Agricultural Crops and Acreages in the Plan Area

Crop Category/Land Cover	Acres	Percent Plan Area ¹	
Cultivated Lands (non-rice)			
Alfalfa	48,879	7.48	
Field Crops	42,131	6.43	
Truck/Berry Crops	43,464	6.65	
Grain/Hay Crops	65,303	9.98	
Cultivated Lands (rice)	35,724	5.46	
Pasture	15,197	2.32	
Cultivated Lands Seminatural Community	250,698	38.32	
Citrus/Subtropical	1,159	0.18	
Deciduous Fruits/Nuts	43,591	6.67	
Vineyard	17,151	2.62	
Pasture - Turf Farm	141	0.02	
Truck/Nursery/Berry Crops - Flowers/Nursery/Tree Farms	122	0.02	
Other Agriculture	62,164	9.51	
Semiagricultural/ Incidental to Agriculture ²	30,510	4.66	
Total	343,372	52.49	

Source: Yolo Habitat Conservancy 2017 (data source shared by Yolo HCP/NCCP Table 2-1). See Chapter 4 of this EIS/EIR for a description of each land cover type.

¹ Yolo HCP/NCCP Plan Area acreage = 653,549 acres.

² Semiagricultural areas include livestock feedlots, farm steads, and miscellaneous semiagricultural features such as small roads, ditches and unplanted areas of cropped fields (e.g., field edges).

Table 6-5 Yolo County Crop Types and Value (2013 and 2014)

Crop Type									
Harvested Acreage/ Value (\$)	Field	Seed	Vegetable	Fruit and Nut	Wine Grapes	Organic Production	Nursery Products	Livestock and Poultry	Apiary, Livestock and Poultry Products
2014									
Harvested Acreage	175,960	24,205	45,544	64,436	12,578	14,928	422	N/A	N/A
Total Value	185,081,000	48,119,000	174,400,000	219,158,000	68,960,000	52,383,000	13,053,000	23,268,000	8,365,000
2013									
Harvested Acreage	372,336	33,011	40,530	56,426	13,030	35,456	347	N/A	N/A
Total Value	191,477,000	51,291,000	129,126,000	160,103,000	69,493,000	60,112,000	15,102,000	20,891,000	7,701,000
Source: Yolo County 2015									

The top ten commodities, by dollar value, produced in Yolo County in 2014 were tomatoes, hay (alfalfa), rice, wine grapes, seed crops, almonds, organic produce, wheat, walnuts, and cattle and calves (Table 6-6 [Yolo County 2015]). These top ten commodities accounted for approximately 81 percent of the County's total gross valuation (\$801,205,000) for all agricultural commodities produced in 2014 (Yolo County 2015). Processing tomatoes is Yolo County's leading commodity with a gross value of \$151,714,000. The remainder of the top five commodities includes crops of almonds, walnuts, rice, and wine grapes. The County also produces many other agricultural products including, but not limited to sunflowers, hay (grain), nursery stock, milk, apiary products, safflower, field corn, prunes, and lambs.

Commodity	Value (dollars)
Tomatoes, Processing	151,714,000
Almonds (Meats)	107,409,000
Walnuts (All)	76,399,000
Rice	69,202,000
Grapes, Wine (All)	68,960,000
Hay, alfalfa	55,246,000
Organic Production (All)	52,383,000
Sunflower Seed	28,921,000
Cattle and calves	20,327,000
Wheat	14,771,000
Total	645,332,000

FORESTRY RESOURCES

Forest Land

As described above, for the purposes of this analysis, forest land is defined as land that can support 10 percent native tree cover of any species that allows for management of timber, aesthetics, fish and wildlife, recreation, and other public benefits (PRC Section 12220(g)). The Yolo County General Plan does not designate any forest resources within the County (Yolo County 2009a; page LU-9). The County General Plan

addresses forests and forestland only as related to woodland habitats because the County has no commercial forestland or timber resources (Yolo County 2009a; page CO-5). HCP/NCCP land cover types in the Plan Area that may be considered forest lands include oak-foothill pine, blue oak woodland, closed-cone pine-cypress, montane hardwood, valley oak woodland, and valley foothill riparian. Table 6-7 indicates the acreage of each of these land cover types within the Plan Area.

Table 6-7	Potential Forestr	Resources in the Plan Area
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Land Cover Type	Acreage	Percentage of Plan Area
Oak-foothill pine	43,772	7%
Blue oak woodland	35,891	5%
Closed-cone pine-cypress	212	<1%
Montane hardwood	3,087	<1%
Valley oak woodland	181	<1%
Valley foothill riparian	12,565	2%
Total	95,708	15%

Source: Yolo Habitat Conservancy 2017

To promote the fullest consideration of potential forestry resource effects, for the purposes of this analysis it is assumed that these lands have 10 percent or more native tree cover and would be defined as forest land; however, the exact acreage of lands meeting this criterion within the Plan Area is not known and actual acreages may less.

Timberland

Timberland, a subset of forest land, is defined by PRC Section 4526 and consists of non-federal land that is available for, and capable of, growing a crop of trees of any commercial species used to produce lumber and other forest products. Although forest types in Yolo County may support smaller scale uses, such as firewood, the type, size, and density of trees is not suitable for supporting lumber production or other commercial timber uses. As noted above, the County has no commercial forestland or timber resources. Based on this definition and the species composition of forest land within the Plan Area, the Plan Area is not considered to support timberlands.

Timberland Production Zone

Timberland Production Zone is defined as an area which has been zoned as such and is devoted to and used for growing and harvesting timber, or for growing and harvesting timber and compatible uses, which include construction and maintenance of electric transmission facilities (Government Code Section 51104(g)). The County Zoning Code does not establish a Timberland Production Zone or any related zone. As stated in the Yolo County General Plan, the only forests and forest lands within the county are woodland habitats as the County has no commercial forestland or timber resources (Yolo County 2009). Therefore, no Timberland Production Zones exist within the Plan Area.

6.2.2 Regulatory Setting

This section describes the federal, state, and local policies and regulations relevant to agricultural and forestry resources in the Plan Area.

FEDERAL LAWS AND REGULATIONS

Farmland Protection Policy Act

The Farmland Protection Policy Act (FPPA) of 1984 requires federal agencies to consider how their activities or responsibilities that involve financing or assisting construction of improvement projects, or acquiring, managing, or disposing of federal land and facilities may affect farmland. This act does not apply to projects related to federal permits or licensing (7 CFR Section 658.2[a][1][i]); therefore, it is not applicable to the Yolo HCP/NCCP.

STATE LAWS AND REGULATIONS

Farmland Mapping and Monitoring Program

The DOC has the primary responsibility for reporting statewide farmland data and trends. As described previously, the DOC's FMMP categorizes and maps Important Farmlands every two years based on information from local agencies. Types of Important Farmlands are defined in Table 6-1. Prime Farmland, Farmland of Statewide Importance, and Unique Farmland are the most suitable for agriculture and are often referred to collectively as "Important Farmland". In addition, counties may, at their discretion, establish criteria for the designation of Farmland of Local Importance, and consider other lands within their jurisdiction as important agricultural lands.

California Land Conservation Act of 1965

The California Land Conservation Act of 1965, or Williamson Act, established the state's primary program for the retention of private land in agriculture and open space use. The Act creates an arrangement whereby private landowners enter into a 10-year contract with counties and cities to maintain their land in agricultural and compatible open-space uses in exchange for a reduction in property taxes. The contract is automatically renewed for an additional year unless it is cancelled. The contract may be cancelled if the land is being converted to an incompatible use. Local governments receive an annual subvention of forgone property tax revenues from the state via the Open Space Subvention Act of 1971.

In August 1998, the California State Legislature expanded the Williamson Act by amending it to provide for the establishment of "Farmland Security Zones." The Farmland Security Zone legislation authorizes landowners to petition the County board of supervisors (Board) to rescind their existing Williamson Act contract in favor of a new Farmland Security Zone Contract (FSZ Contract). The landowner must have an existing Williamson Act contract before the Board can approve a FSZ Contract. For land not currently in a Williamson Act contract, the Board may allow enrollment of the land into a Williamson Act contract, then authorize the immediate rescission of those contracts in favor of FSZ Contracts.

In 2008, Assembly Bill 2921 was enacted, providing for a mechanism to rescind Williamson Act agricultural contracts in order to enter into either an open space contract under the Williamson Act, or an open space easement. Under the new provisions, the resulting agreement must be at least as restrictive as the contract it replaced, and the affected parcel large enough to provide open space benefits.

The Williamson Act was further amended by AB 1265 in July 2011. This legislation reduced the term of Williamson Act contracts from 10 years to nine years, accompanied by an addition to the assessed value of affected properties. The amendment also allowed landowners to retain at least 90 percent of the tax savings created by participation in the Williamson Act.

In 2013 there were 312,984 acres of land tied to Williamson Act contracts in Yolo County (California Department of Conservation 2015).

1992 Delta Protection Act

The Delta Protection Act of 1992 (California Water Code Section 12220) established the Delta Protection Commission (DPC). The Delta Reform Act of 2009 (SBX7-1) amended the 1992 act in November 2009. The

Commission has land use planning jurisdiction over the Delta Primary Zone, which generally consists of lands in the central portion of the Delta that were not within either the urban limit line or sphere of influence of any local government's general plan. The Primary Zone, which comprises 487,625 acres, or approximately 66%, of the Delta, encompasses portions of San Joaquin, Contra Costa, Solano, Yolo, and Sacramento Counties. The Secondary Zone is the area outside the Primary Zone and within the "Legal Delta." The Primary Zone is within the planning area of the DPC but the Secondary Zone is not. Lands in Yolo County that are overlaid by the Primary and Secondary Delta Zones are shown in Figure 5-3, and are comprised of areas in the southeastern corner of the county, which includes lands that are part of the Yolo Bypass (Yolo County 2009a).

The Delta Protection Commission is charged with preparing a regional plan for the Primary Zone to address land uses and resources management, with particular emphasis on agriculture, which was designated by the Delta Protection Act as the primary use of this zone. This plan, the Land Use & Resource Management Plan provides guidance to local governments. Specifically, Land Use Policy P-2 and Agriculture Policies P-1 through P-10 address the role of local governments in preserving and protecting long-term agricultural viability and open space values in the Primary Zone through implementation of general plan policies and zoning codes.

Z'Berg-Nejedly Forest Practice Act of 1973

The Z'Berg-Nejedly Forest Practice Act of 1973 (Public Resources Code Section 4511-4517) established the state Board of Forestry and Fire Protection, whose mandate is to protect and enhance the state's unique forest and wildland resources. This mandate is carried out through enforcement of the California Forest Practice Rules (14 CCR Chapters 4, 4.5 and 10). The California Department of Forestry and Fire Protection enforces the laws that regulate logging on non-federal lands in California. Additional rules enacted by the State Board of Forestry and Fire Protection are also enforced to protect forest and wildland resources.

Senate Bill 1334

The California Legislature enacted Senate Bill 1334 (Chapter 732, Statutes of 2004), which added oak woodland conservation regulations to the PRC. This law requires each county to determine whether a project within its jurisdiction may result in a conversion of oak woodland resulting in a significant effect on the environment. If a county determines that there may be a significant effect to oak woodland resources, the county must consider alternative approaches to mitigate the effect. Such mitigation alternatives include conservation easements; planting and maintaining an appropriate number of replacement trees; contributing funds to the Oak Woodlands Conservation Fund to purchase oak woodlands conservation easements; and/or other mitigation measures developed by the County.

LOCAL LAWS AND REGULATIONS

Yolo County General Plan

Agriculture and Economic Development Element

The Yolo County General Plan establishes one agricultural land use designation, Agriculture (AG). Several zoning districts are associated with this land use designation. These districts are discussed below. County lands designated as AG may be used for:

"the full range of cultivated agriculture, such as row crops, orchards, vineyards, dryland farming, livestock grazing, forest products, horticulture, floriculture, apiaries, confined animal facilities and equestrian facilities. It also includes agricultural industrial uses (e.g. agricultural research, processing and storage; supply; service; crop dusting; agricultural chemical and equipment sales; surface mining; etc.) as well as agricultural commercial uses (e.g. roadside stands, "Yolo Stores," wineries, farm-based tourism (e.g., u-pick, dude ranches, lodging), horseshows, rodeos, crop-based seasonal events, ancillary restaurants and/or stores) serving rural areas."

AG-designated lands may also be used for farmworker housing, surface mining, and habitat (with some limitations).

The Yolo County General Plan does not contain policies related to timberland. Any relevant policies related to woodland and riparian lands are included in Chapter 4, *Biological Resources* of this EIS/EIR. One agriculture and Economic Development Element policy related to agricultural and forestry resources and potentially relevant to the Plan is listed below:

■ Policy ED-1.3. Encourage businesses that promote, provide services, and support farming, with an emphasis on value-added agriculture, agri-tourism, food processing and agricultural suppliers.

Land Use and Community Character Element

Land Use and Community Character Element policies related to agricultural and forestry resources and potentially relevant to the Plan are listed below:

- ✔ Policy LU-2.1 The intent of this policy is to protect existing farm operations from impacts related to the encroachment of urban uses. Ensure that development will not have a significant adverse effect on the economic viability or constrain the lawful practices of adjoining or nearby agricultural operations, except for land within the Sphere of Influence (SOI) around a city of within the growth boundary of an unincorporated community. New urban (non-agricultural) development should be setback a minimum of 300 feet from adjoining agricultural land where possible, but special circumstances can be considered by the decision-making body. Except as noted below where no buffer is required, in no case shall the buffer be reduced to less than 100 feet. The buffer area shall generally be designated Open Space (OS), but may also be designated Public and Quasi- Public (PQ) or Parks and Recreation (PR) based on applicable circumstances. Agricultural buffers are not required for planned urban growth elsewhere within a growth boundary because the agricultural-urban will be temporary until full build-out occurs. (DEIR MM AG-4)
- ▶ Policy LU-2.2 Allow additional agricultural commercial and agricultural industrial land uses in any designated agricultural area, where appropriate, depending on site characteristics and project specifics. Manage agricultural parcels of less than 20 acres, including antiquated subdivisions where appropriate, to create compatibility with surrounding agricultural uses to the greatest extent possible.
- Policy LU-2.3 Prohibit the division of land in an agricultural area if the division is for non-agricultural purposes and/or if the result of the division will be parcels that are infeasible for farming. Projects related to clustering and/or transfers of development rights are considered to be compatible with agriculture.
- Policy LU-2.4 Vigorously conserve, preserve, and enhance the productivity of the agricultural lands in areas outside of adopted community growth boundaries and outside of city SOIs.
- Policy LU-2.5 Where planned growth would occur on lands under Williamson Act contract, ensure that development is phased to avoid the need for contract cancellation, where feasible.
- ▶ Policy LU-2.6 Encourage interim agricultural production on farmland designated for future development, prior to the start of construction, to reduce the potential for pest vectors, weeds, and fire hazards.
- Policy LU-3.1 Direct all of the County's residential growth to designated areas within the cities and within the growth boundaries of existing unincorporated communities.
- Policy LU-3.5 Avoid or minimize conflicts and/or incompatibilities between land uses.
- Policy LU-3.8 The intent of allowing residences in the agricultural areas is to provide dwellings for those directly involved in on-site farming activity, including farm employees, the landowners and their immediate families. All such dwellings shall be encouraged to locate on lands least suited for agricultural

use and/or in "clustered" configurations to minimize the conversion of agricultural lands to any other uses.

■ Policy CC-4.27 Design highway service commercial uses at identified rural interchanges to preserve surrounding agriculture, rural character, scenic quality and the natural environment.

Yolo County Zoning Code

The Yolo County Zoning Code contains several zoning districts that are associated with the agricultural land use designation described in the Yolo County General Plan (Zoning Ordinance Table 8-2.107). The agricultural zoning districts include agricultural intensive (A-N), agricultural extensive (A-X), agricultural commercial (A-C), agricultural industrial (A-I), and agricultural residential (A-R). The purpose of the Agricultural Zones is to allow for land uses that support and enhance agriculture land uses in the unincorporated area of the County. The allowed land uses are compatible with agriculture, and may include open space, natural resource management, outdoor recreation, and enjoyment of scenic beauty.

Agricultural Land Conversion Ordinance

Yolo County requires mitigation when farmland is converted to non-agricultural uses for development purposes (Zoning Ordinance Section 8-2.404). This ordinance requires preservation of between 1-3 acres of equivalent agricultural land for each acre of agricultural land converted. The ordinance outlines the soil, irrigation and other requirements of land that can qualify as agricultural mitigation, with location and other factors influencing the applicable mitigation ratio. Yolo County does not allow for payment of a fee in-lieu of land and/or easement acquisition except for conversions totaling less than 20 acres. The ordinance also prohibits "stacked mitigation," which would allow credit for agricultural mitigation and habitat or other mitigation on the same property (Yolo County 2009).

Cache Creek Resources Management Plan

The Cache Creek Resources Management Plan (CCRMP) was developed by Yolo County as part of the Cache Creek Area Plan and establishes goals to assist in the overall management of the resources associated with Cache Creek. The CCRMP includes an agricultural resources element that contains goals and objectives related to preserving agricultural lands along Cache Creek (Yolo County 2002).

Yolo County Local Agency Formation Commission Agricultural Conservation Policy

The Yolo County Local Agency Formation Commission (LAFCo) is an independent agency responsible for the implementation of the Cortese-Knox-Hertzberg Local Government Reorganization Act of 2000 (Government Code, Section 56000 et seq.). The Yolo County LAFCo Agricultural Conservation Policy includes six considerations against which all proposals are reviewed. It emphasizes that, where feasible, non-prime land should be annexed before prime land and requires that a land's current zoning, pre-zoning, or land use designations are considered in determining whether mitigation will be required for the loss of agricultural land. This policy allows for protection for the County's agricultural lands and enforces preservation of agricultural lands for productive agricultural uses to the greatest extent feasible. Further, annexation for land uses in conflict with an existing agricultural preserve contract are prohibited unless specific criteria outlined in the policy are met (Yolo County 2009).

Swainson's Hawk Interim Mitigation Fee Program

This program, established in 1993, utilizes mitigation fees to acquire conservation easements, including easements on appropriate agricultural lands, to protect Swainson's hawk habitat. In 2005, Yolo County established a program of "mitigation receiving sites" to provide developers with a fast, market-based system of mitigation for impacts on Swainson's hawk habitat. Changes to the program in 2006 require project applicants with projects over 40 acres in size to mitigate directly by providing land for conservation. Currently, this program has expired but is still being implemented voluntarily by all parties. The Yolo Habitat Conservancy (formerly the Yolo County HCP/NCCP Joint Powers Agency) administers this program. Once approved, the Yolo HCP/NCCP will replace the county's Swainson's Hawk Mitigation Fee Program.

City of Davis General Plan

The City of Davis General Plan establishes one agricultural related land use designation, Urban Agriculture Transition Area. Allowable uses in this area are passive open space recreation such as trails and bikeways, wildlife and habitat preservation, drainage ways, community gardens, plant stock portions of nurseries, and agriculture. There are no policies related to timberland, and any relevant policies related to woodland and riparian lands are included in Chapter 4, *Biological Resources* of this EIS/EIR. The City of Davis General Plan policies related to agricultural resources and potentially relevant to the Plan are listed below:

- Policy LU N.6 Prime agricultural land should remain in agricultural production in the wider segments of the Urban Agriculture Transition Area.
- Policy LU P.1 Give priority to development on lands designated "Urban Reserve" over development on lands designated as Urban Agricultural Transition Area, Agriculture or Habitat Areas.
- Policy AG 1.1 Protect agricultural land from urban development except where the general plan land use map has designated the land for urban uses.
- Policy AG 1.2 Promote and enhance local agriculture.

City of Davis Open Space Program

The City of Davis Open Space Program was established in 1990 to implement long-standing policies that called for the protection of the farmlands and wild areas that surround the community for preservation and the public's enjoyment, engaging citizens in caring for open space, and partnering with other organizations to meet the goals of the program. One of the major goals of the program is to secure long-term protection of open space lands around Davis, including maintaining the quality, quantity, and connectivity of agricultural lands and habitats. The Open Space Program has allowed for protection of approximately 5,300 acres of agricultural lands (City of Davis 2016).

City of West Sacramento General Plan

The City of West Sacramento General Plan agricultural land use designation (AG) provides for agricultural uses, single-family homes, limited commercial and industrial uses directly related to agriculture, public and quasi-public uses, and similar and compatible uses in a rural setting. Residential uses are limited to one (1) unit per parcel. The AG designation is applied in two areas within the city: the area of Southport generally south of Bevan Road and a small part of the Yolo Bypass at the western edge of the city, immediately north of West Capitol Avenue and south of the Southern Pacific tracks.

The City of West Sacramento General Plan does not contain policies related to timberland. Any relevant policies related to woodland and riparian land covers are included in Chapter 4, *Biological Resources*. The City of West Sacramento General Plan policies related to agricultural resources and potentially relevant to the Plan are listed below:

Natural Resource Goals and Policies

Goal NCR-1: To promote the economic viability of agriculture in West Sacramento and to discourage premature development of agricultural land with non-agricultural uses, while providing for urban needs.

- Policy NCR-1.1 Continuation of Agriculture. The City shall support the continuation of agricultural uses on lands designated for urban uses until urban development is imminent.
- Policy NCR-1.2 Development near Agriculture. The City shall ensure, in approving urban development near agricultural lands, that such development will minimize conflicts with adjacent agricultural uses, and not constrain agricultural practices or adversely affect the economic viability of nearby agricultural operations, where feasible.

- Policy NCR-1.3 Agricultural Buffer. The City shall encourage Yolo County to retain agricultural uses on lands adjacent to the city to create a buffer around the city.
- Policy NCR-1.4 Agricultural Incentives. The City shall support tax and economic incentives, at both the local and State levels, to enhance the economic competitiveness of agriculture.

City of Winters General Plan

The City of Winters General Plan agricultural land use designation provides for agricultural uses, single-family homes, limited commercial and industrial uses directly related to agriculture, public and quasi-public uses, and similar and compatible uses. Residential uses are limited to one (1) unit per parcel.

The City of Winters General Plan policies related to agricultural resources and potentially relevant to the Plan are listed below. The City of Winters General Plan does not contain policies related to timberland. Policies related to woodland and riparian land covers are included in Chapter 4, *Biological Resources*.

- Policy VI.B.7. The City shall support tax and economic incentives at both the local and state levels to enhance the economic competitiveness of agriculture.
- ✔ Policy VI.C.6. The City shall undertake a feasibility study for the establishment of an Open Space Preserve between the Urban Limit Line and Grant Avenue west of I-505. Such preserve should be designed to provide for a combination of uses including agriculture, habitat protection, groundwater recharge, and educational and recreational activities. The Open Space Preserve should, to the maximum extent possible, be designed to function as part of the City's flood control and wastewater discharge system. The City should consider requiring developments that cannot mitigate wetlands or riparian habitat impacts on-site to make in-lieu contributions to the establishment, development, and maintenance of the Open Space Preserve or other mitigations consistent with the regional Habitat Management Plan.

City of Woodland General Plan

The City of Woodland General Plan agricultural land use designation provides for agricultural uses, limited agricultural support service uses (e.g., barns, animal feed facilities, silos, stables, fruit stands, and feed stores), industrial uses related directly to agriculture, public and quasi-public uses, and similar and compatible uses. Allowable residential development in areas designated Agriculture includes single family homes, secondary residential units, caretaker/employee housing, and farmworker housing.

The City of Woodland General Plan does not contain policies related to timberland. Any relevant policies related to woodland and riparian land covers are included in Chapter 4, *Biological Resources* of this EIS/EIR. Policies related to agricultural and forestry resources and potentially relevant to the Plan are listed below:

- Policy 1.I.1. The City shall discourage leapfrog development and development in peninsulas extending into agricultural lands to avoid adverse effects on agricultural operations.
- Policy 1.1.2. The City shall retain agricultural zoning and shall encourage continued agricultural production on properties within the Urban Limit Line until the land is needed for urban development.
- Policy 1.I.3. The City shall ensure that new development and public works projects do not encourage expansion of urban uses outside the Planning Area into areas designated for Agriculture on the Land Use Diagram.
- Policy 1.I.4. The City shall require development within or adjacent to designated agricultural areas to minimize conflicts with adjacent agricultural uses.
- Policy 1.1.5. The City shall continue to support the County's right-to-farm ordinance.

- Policy 1.I.6. The City shall encourage and support Yolo County in the implementation of its agricultural preserve program.
- ✓ Policy 1.I.9. The City shall promote good neighbor policy between residential property owners and adjacent farming operations by supporting the right of the farmers to conduct agricultural operations in compliance with state laws.

6.3 ENVIRONMENTAL CONSEQUENCES

6.3.1 Methodology and Significance Criteria

METHODS AND ASSUMPTIONS

The evaluation of potential impacts to agricultural resources is based on three comparisons:

- 1. A comparison of the covered activities GIS layer and the land cover GIS datasets created as part of the HCP/NCCP process. The land covers GIS dataset represents the existing land uses in Yolo County, including agricultural use categories, while the covered activities GIS dataset represents the anticipated future land uses. These two datasets were compared to identify the total acreages of agricultural land to be affected by the anticipated future land uses. The HCP/NCCP land cover dataset was selected for use because it provides a single consolidated data source that covers both the unincorporated County and the incorporated cities. The methods used to develop this data source are described in Section 2.3 of the HCP/NCCP titled Land Cover Mapping (Yolo Habitat Conservancy 2017). Although the land cover dataset includes a category for Pasture, this category does not represent all land used for grazing land in the County. Therefore, the Grassland land cover is included in the impact analysis to represent other available grazing land. Although not all Grassland in the County is used for grazing, this approach prevents an underrepresentation of effects on grazing land in the impact analysis.
- Additionally, GIS data from the FMMP was used to compare the agricultural land indicated as Important
 Farmland to the anticipated future land uses as shown in the covered activities GIS layer. This identified
 total acreages of Important Farmland that may be affected by the anticipated future land uses and
 potential conversion of, or conflicts with these lands resulting from each alternative.
- 3. To estimate potential impacts to Williamson Act lands, this analysis used Yolo County's assessor's data, which indicates which properties are under Williamson Act contracts. Evaluation of the potential impacts of the alternatives on forestry resources was based on comparing the covered activities GIS layer with the natural communities GIS layer created as part of the HCP/NCCP process. For both agricultural and forestry resources, laws, regulations, and policies described above in Section 6.2.2, Regulatory Setting, were considered.

As described in Section 3.3, the issuance of ITPs by the Wildlife Agencies for take of 12 covered species associated with five categories of covered activities—together with subsequent adoption and implementation of the Plan by the Applicants consistent with the Permits—is the Proposed Action considered in this EIS/EIR. Issuance of permits by the Wildlife Agencies only provides compliance with the FESA and NCCPA. All Covered Activities are subject to the approval authority of one or more of the Applicants with jurisdiction over such projects, and HCP/NCCP approval and permit issuance for take of covered species does not confer or imply approval from any entity other than the U.S. Fish and Wildlife Service (USFWS) or CDFW to implement the Covered Activities. Rather, as part of the standard approval process, individual projects will be considered for further environmental analysis and generally will receive separate, project-level environmental analysis review under CEQA and, in some cases, NEPA for those projects involving federal Agencies.

The assessment of potential effects on agricultural and forestry resources in the Plan Area is based on the anticipated changes in land cover and land uses over 50 years, corresponding to the permit term under the Proposed Action.

Anticipated changes in land cover/land use for each alternative are described in Chapter 2, *Proposed Action and Alternatives*. See Chapter 3, *Approach to the Analysis*, for a description of the methodology used across all resource chapters for the analysis of cumulative effects.

SIGNIFICANCE CRITERIA

Impacts would be significant if an alternative would result in the following:

- ✓ result in conversion of Prime Farmland, Unique Farmland, or Farmland of Statewide Importance
 (collectively Important Farmlands) as shown on the maps prepared pursuant to the Farmland Mapping
 and Monitoring Program of the California Resources Agency, to a non- agricultural use;;
- conflict with existing zoning for agricultural use, or a Williamson Act contract;
- involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use;
- ▲ conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220[g]), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104[g]); or
- involve other changes in the existing environment, which, due to their location or nature, could result in substantial conversion of forest land to non-forest use.

6.3.2 Effects of Proposed Action and Alternatives

ALTERNATIVE A—NO ACTION ALTERNATIVE (NO PERMIT/NO PLAN IMPLEMENTATION)

Environmental Consequences/Environmental Effects

As described previously in Chapter 2, *Proposed Action and Alternatives*, under the No Action Alternative (Alternative A), take associated with development would occur over the 50-year study period consistent with the local general plans and other applicable planning documents (e.g., community plans, specific plans, recreation plans). As also described in Chapter 2, for purposes of this analysis, development and related activities (e.g., operations and maintenance) under the No Action Alternative are considered using the same organizational categories identified in the Yolo HCP/NCCP; urban projects and activities; rural projects and activities, which includes rural public services, infrastructure, and utilities; agricultural economic development and open space; and public and private operations and maintenance. Under the No Action Alternative, the Plan would not be approved and implemented and no Endangered Species Act authorizations would be issued by USFWS or CDFW related to the Plan. Endangered species permitting and mitigation would continue on an individual project-by-project basis.

Table 6-8 summarizes the anticipated acreages of conversion of agricultural and forest lands to other uses under the No Action Alternative based on the HCP/NCCP land cover dataset. Table 6-9 summarizes the anticipated acreages of conversion of FMMP Important Farmlands under the No Action Alternative.

Table 6-8 Agricultural and Forest Land Conversion under the No Action Alternative

Land Cover Type	Impact (acres)	Percentage of Land Cover Type within Plan Area
Cultivated Lands Seminatural Community		
Cultivated Lands (non-rice)	9,910 ¹	4%
Cultivated Lands (rice)	87	<1%
Grassland (representing Grazing Land)	1,734	2%
Other Agriculture	1,628	3%
Semiagricultural/Incidental to Agriculture	1,294	4%
Total Agricultural Land Impact	14,653	3.4%
Forest Lands		
Oak-foothill pine	0	0%
Blue oak woodland	3	<1%
Closed-cone pine-cypress	0	0%
Montane hardwood	0	0%
Valley oak woodland	0	0%
Valley foothill riparian	588	5%
Total Forest Land Impact	591	<1%

Source: Yolo Habitat Conservancy 2017 (data source shared by Yolo HCP/NCCP Table 5-3).

Table 6-9 Important Farmland Conversion under the No Action Alternative

Farmland Type	Acreage	Percentage of Farmland Type within Plan Area
Prime Farmland	7,515	3.0%
Farmland of Statewide Importance	465	2.5%
Farmland of Local Importance	4,055	7.8%
Unique Farmland	944	2.1%
Total for Important Farmland	12,979	3.6%

Source: DOC 2012 overlaid with future land use data

Under the No Action Alternative over 14,500 acres of land covers identified as agricultural or incidental to agriculture would be converted to a non-agricultural use under the No Action Alternative (Table 6-8). Almost 13,000 acres of land designated by the FMMP as Important Farmland would be converted to a non-agricultural use (Table 6-9). Approximately 1,900 acres of land currently under Williamson Act contract could be converted to a use that would be in conflict with the contract. It should be noted that these numbers are not additive; rather, they present analysis results from different datasets representing difference categories of agricultural resources. These results do overlap to a certain degree, in that a parcel of land may simultaneously be designated as agricultural land in HCP/NCCP land cover GIS dataset, be considered as Important Farmland in the FMMP, and have a Williamson Act contract on the parcel.

Approximately 600 acres of land covers that could be considered forest land would be converted to another land cover under the No Action Alternative, mostly in the valley foothill riparian land cover category (Table 6-

¹ Includes an assumed 702 acres of impact associated with converting agricultural land to habitat as part of mitigating for development allowed under the No Action Alternative.

8). Woodland land covers that are being considered as "forest lands" for this analysis are primarily located along the western boundary and in the northwestern corner of the Plan Area. No covered activities are proposed for this area. However, there are some isolated areas of forest land, primarily along waterways, that would be affected by development.

Urban projects and activities would occur within areas planned for future urban growth but would contribute to the conversion of agricultural land as the entire county, including the incorporated cities, is located on generally productive soils.

Conversion of agricultural and forest lands would also result from rural projects and activities that would occur within and around the existing communities within the unincorporated County including Elkhorn, Madison, Clarksburg, Dunnigan, Esparto, and Knights Landing).

Activities under the rural public services, infrastructure, and utilities category include facilities and activities outside of the incorporated cities and rural communities, such as construction of roadways and bridges; water supply, treatment, storage, and distribution facilities; wastewater collection, treatment, and disposal facilities; energy generation and distribution facilities; landfills; flood control facilities; levees; and an airport. Similar to development proposed in rural and urban areas, these activities could contribute to the conversion of agricultural and forest land to other uses.

Although activities under the agricultural economic development category could result in relatively large structures being constructed in a rural/agricultural area (e.g., processing plants), these facilities would generally support agricultural uses and be consistent with continued agricultural uses on the affected lands. Because activities under this category would be consistent with agricultural land uses, they are expected to result in little or no conversion of agricultural to other uses.

The anticipated activities in the Plan Area would also include continued operation of, or development of new mining sites. Development, use, and reclamation of a mining site typically follows a phased plan, which entails clearing of surface vegetation, removal and stockpiling of topsoil for future use in reclamation activities, mining of material (e.g., construction aggregate), processing of mined material at the mine area, and reclamation of the mined lands to such uses as agricultural, lake, habitat, and open space uses. These activities may include reclamation to agriculture, habitat and open space, and open water lakes with habitat and/or recreational uses. Ongoing mining activities at existing facilities would be a continuation of existing conditions. However, development of new mining lands would result in a temporary conversion of lands from agricultural or forest land to mining.

Expansion of open space, parks, and recreation opportunities inside and outside of planned urban area boundaries would also occur. New open space and parks could contain facilities to support recreation-related activities (e.g., camp sites, picnic areas). Such areas could require supporting infrastructure (e.g., roads, support buildings). In some cases, recreational, park, or open space land uses may be compatible with agricultural or forest land uses, however, construction of recreational facilities could result in conversion of agricultural lands to non-agricultural uses and forest lands to non-forest uses.

Public and private operations and maintenance activities would occur both in the incorporated cities and the unincorporated County and would generally have minor effects on conversion of agricultural and forest lands to other uses due to the size and nature of the activities and because they would frequently be located in already developed areas.

Under the No Action Alternative, it is assumed that there would primarily be a continuation of existing conditions in the expanded Plan Area along the south side of Putah Creek in Solano County. The land is primarily used for agriculture and this land use would continue. There is also valley foothill riparian along Putah Creek that would be considered forest land. Some agricultural land in this area is currently under agricultural or other conservation easements, such as those purchased through the City of Davis Open Space Program, and it is anticipated that some additional landowners would also place their land under easement in the future, which would increase the amount of protected agricultural lands. It is also expected

that under the No Action Alternative, the riparian forest along Putah Creek would continue to be protected via various laws and regulations (e.g., Section 1600 of the Fish and Game Code, see Chapter 4, *Biological Resources*) and enhanced through activities such as those implemented by the Lower Putah Creek Coordinating Committee.

Agricultural and forest land impacts associated with individual development projects would be addressed on a project-by-project basis. Various County and City policies related to agricultural and forestry resources would minimize the potential for new development to convert agricultural land to non-agricultural uses and forest land to non-forest uses. For example, the Swainson's Hawk Interim Mitigation Fee Program, (described above in "Local Laws and Regulations") to preserve agricultural and forest lands would continue to be implemented. The Yolo County Agricultural Land Conversion Ordinance requires preservation of between 2 to 3 acres of equivalent agricultural land for each acre of agricultural land converted when farmland is converted to non-agricultural uses for development purposes (Zoning Ordinance Section 8-2.404). In addition, City programs, such as the City of Davis Open Space Program, secure long-term protection of open space lands around Davis, including maintaining the quality, quantity, and connectivity of agricultural lands and habitats. These ordinances and programs would minimize development-related impacts to agricultural and forest lands, although a net decrease in the acreage of these land cover types in the Plan Area would still occur.

As necessary, under the No Action Alternative, project applicants would be required to implement mitigation measures to reduce potentially significant and significant impacts to biological resources. Mitigation measures are likely to include on-site areas of preservation within a specific project site, and smaller, noncontiguous areas of preservation lands throughout Yolo County. Generally, these required mitigation actions under the No Action Alternative would either retain lands in their existing condition (i.e., preserve habitat, including agricultural lands), or convert lands to a more natural state (i.e., habitat enhancement, restoration, or creation), which may have a beneficial effect (e.g., creation of wind row), neutral effect (a portion of an agricultural parcel not used for cultivation is converted to habitat) or adverse effect (e.g., conversion of land currently in agricultural production to habitat) on agricultural lands depending upon whether the habitat type and the specific location is compatible with agricultural uses. Like the Proposed Action (see impact analysis below), it is estimated that a total of 702 acres of agricultural land and 210 acres of grazing land would be converted to non-agricultural land because of habitat restoration activities. Implementation of mitigation actions may also be beneficial for forest lands if oak woodlands and/or riparian forest is preserved or enhanced.

Cumulative Effects

Historical land use activities and patterns within the County have resulted in conversion of natural habitat to agricultural lands. This has increased the amount of agricultural lands within the County and decreased the amount of forest lands. However, more recent expansion of development in urban and rural areas (i.e., Davis, West Sacramento, Winters, Woodland), has resulted in the conversion of agricultural and forest lands to developed uses and a cumulative decrease in agricultural and forest lands.

Projects and activities included within the categories of urban and rural development would result in future conversion of agricultural and forest lands to other uses and could combine with other projects within the County to result in a cumulative decrease in agricultural and forest lands. Consistent with the general plans of Yolo County, West Sacramento, Davis, Winters, and Woodland, further development would be required to mitigate for conversions of agricultural and forest lands.

It is assumed that future development would comply with the policies set forth in city and County General Plans. The *Yolo County General Plan* contains policies intended to preserve agricultural lands and forest lands (i.e., woodland habitats). Development in rural areas would be limited to preserve the rural landscape as established by Policy LU-2.1 of the *Yolo County General Plan*. Potential impacts would be further reduced with Policy LU-2.4, which instructs the County to vigorously conserve, preserve, and enhance the productivity of the agricultural lands in areas outside of adopted community growth boundaries and outside of city SOIs, and Policy LU-2.5, which states that development should be phased to avoid the need for cancellation of

Williamson Act contracts. Additional policies from the Land Use and Community Character Element (provided in the setting of this section) of the *Yolo County General Plan* require the County to minimize impacts on agricultural lands. Policies from the Conservation and Open Space Element of the Yolo County General Plan related to biological resources as described in Chapter 4, *Biological Resources*, are protective of woodland habitats, which are the only forest lands within the county. In addition, the general plans of the Davis, West Sacramento, Winters, and Woodland contain policies applicable to minimizing impacts on agricultural and forestry resources. Wind and solar projects (although the general plans do encourage alternative energy) that could adversely affect agricultural and forest lands would also be required to mitigate for impacts to these resources. Compliance with general plan policies, County and city ordinances, project-related mitigation, and programs such as the City of Davis Open Space Program, described above, would direct future development, on an individual project and cumulative basis, to minimize impacts on agricultural resources and would result in long-term protection of agricultural and forest lands.

ALTERNATIVE B—PROPOSED ACTION ALTERNATIVE (PERMIT ISSUANCE/PLAN IMPLEMENTATION)

Environmental Consequences/Environmental Effects

The Proposed Action Alternative (Alternative B) incorporates the same development-related activities identified for the No Action Alternative (urban projects and activities, rural projects and activities, and public and private operations and maintenance), with the HCP/NCCP providing a mechanism for the Wildlife Agencies to provide incidental take authorization for these lawfully undertaken covered activities. Agricultural and forestry resource impacts as a result of these activities would be the same as described under the No Action Alternative.

Where the Proposed Project Alternative differs from the No Action Alternative is the implementation of the Yolo HCP/HCCP, including its conservation strategy and neighboring landowner protection program, as well as the required use of Avoidance and Minimization Measures during implementation of covered activities. The following impact discussion focuses on these elements of the HCP/NCCP that differ from the No Action Alternative. Components of the conservation strategy include but are not limited to habitat assessment surveys and population surveys; habitat management; restoration, enhancement, and creation of habitats; conversion of agricultural lands to create habitat; construction of facilities necessary for management and maintenance; and monitoring; and control of invasive nonnative species.

Effect AG-1: Potential to convert farmland to non-agricultural use.

As stated above, agricultural and forestry resource impacts from take associated with lawfully undertaken covered activities for the Proposed Action Alternative would be the same as described development and related activities under the No Action Alternative (for example, see Tables 6-8 and 6-9). This impact analysis focusses on where the Proposed Project Alternative differs from the No Action Alternative, which is the implementation of the Yolo HCP/HCCP and associated conservation strategy and neighboring landowner protection program.

A primary activity of the conservation strategy is the protection of agricultural lands in the reserve system. Most of the lands protected as part of the reserve system would have conservation easements purchased on them and would be subject to a management plan. Agricultural lands would have some restrictions on the types of crops that could be grown on the land (i.e., not converting the lands to vineyards, orchards, nurseries, livestock feed lots) and grazing lands would be subject to provisions guiding appropriate grazing practices. Although restrictions may be placed on the lands acquired by easement that are to be retained as agricultural lands, these lands would remain in agricultural production under the proposed Yolo HCP/NCCP and would not be converted to non-agricultural use. Because agricultural operations would continue, there would not be a conflict with Williamson Act provisions.

In the Plan, it is identified that implementation of the conservation strategy could result in the conversion of up to 702 acres of the Cultivated Lands (non-rice) land cover to habitat as part of habitat restoration activities (Yolo Habitat Conservancy 2017, see Table 5-3). The conversion of cultivated lands to habitat is considered a conversion of existing agricultural land to a non-agricultural use. Because it is not known at this

time where the habitat restoration would occur, all, or part of this agricultural land conversion could also occur on FMMP designated Important Farmland. The Plan also identifies the conversion of up to 210 acres of grassland to another habitat type as part of habitat restoration activities. Because the location of the habitat restoration is not known at this time, all or part of the 210 acres could be located grassland that serves as grazing land, and the ongoing management of the restoration area could require exclusion of grazing activity. Although it is unlikely that all of the 210 acres of grassland land cover converted to another habitat would result in the removal of grazing lands, for the purposes of this analysis, it is assumed that this could occur for up to the entire 210 acres.

Implementation of the conservation strategy under the Yolo HCP/NCCP may also increase populations of covered species in the reserve system. As a result, some individuals may disperse to neighboring private lands where the presence of listed species could interfere with routine agricultural activities, other activities, or allowed use of the land. With certain provisions and restrictions described in the HCP/NCCP, farmlands in the vicinity of the reserve system boundary are eligible for take coverage through the neighboring landowner protection program. For neighboring landowners that do not participate in the protection program, implementation of the conservation strategy could increase the presence of endangered species on adjacent agricultural lands. The presence of listed species could interfere with (e.g., delay) routine agricultural activities if those activities would result in take of listed species. For example, if mowing would take a listed species, the activity could require a permit before being carried out. However, it is unlikely to result in conversion of agricultural lands to non-agricultural uses.

NEPA Level of Significance: As compared to the No Action Alternative, this impact is **less than significant**. The Proposed Action Alternative would result in conversion of up to 702 acres of cultivated lands (Yolo Habitat Conservancy 2017, Table 5-3) and up to 210 acres of grazing land. The Yolo HCP/NCCP would result in protection in perpetuity of 14,362 acres of cultivated lands (non-rice), 2,800 acres of cultivated lands (rice), and at least 4,430 acres of grassland natural community (potentially suitable for grazing) as a part of the reserve system. Although the important farmlands converted under the Proposed Action would be converted from agriculture, they would be restored to habitat which was its original historic use, the soil properties important for agricultural production would be retained, and the acreage would remain in open space in perpetuity.

CEQA Level of Significance: As compared to Existing Conditions, this impact is significant and unavoidable. The Proposed Action Alternative would result in the conversion of up to 702 acres of cultivated lands and up to 210 acres of grazing lands to a non-agricultural use. This loss is considered significant at the local level. The Yolo HCP/NCCP would result in protection in perpetuity of 14,362 acres of cultivated lands (non-rice), 2,800 acres of cultivated lands (rice), and at least 4,430 acres of Grassland (potentially suitable for grazing) as part of the reserve system. The Proposed Action Alternative would result in permanent protection of more than 21,000 acres of agriculture as habitat for various species and permanent loss of approximately 700 acres of agricultural land for riparian restoration. This would result in a net increase of protected land due to the conservation strategy. While the Proposed Action Alternative would result in permanent protection of many acres of agricultural land, the loss of agricultural land is permanent. Permanently protecting some agricultural land cannot fully mitigate for the loss of other agricultural land to non-agricultural use. Therefore, impacts to agricultural lands, including Important Farmland, as a result of implementation of the Proposed Action Alternative would be significant and unavoidable compared to an existing conditions baseline.

Minimizing this significant and unavoidable impact by reducing the amount of agricultural land placed in the reserve system, as well as minimizing habitat enhancement/restoration/creation on agricultural lands would not meet the project objectives. As described in Section 2.2, *Alternatives Eliminated from Further Analysis*, a *Reduced Agricultural Impacts* alternative was considered where placement of agricultural lands into the reserve system would be minimized and purchases of conservation easements and habitat enhancement/restoration/creation would be shifted to non-agricultural habitat types. This alternative was eliminated from further analysis during the screening process primarily because of the inability to provide a sufficient reserve system for all covered species and natural communities (see Section 2.2.5 for further details). Conversely, if more agricultural land was placed in the reserve system to increase the acreage of

agricultural land protected by conservation easement, this could adversely affect the economic viability of the Yolo HCP/NCCP because fees would need to be raised to fund the additional easement acquisition. Elevated fees could adversely affect the ability to obtain local approvals and continued support of the Yolo HCP/NCCP by the development community during implementation. In addition, the impact would remain significant and unavoidable even if more agricultural land were put under conservation easements, because, as stated above, permanently protecting some agricultural land cannot fully mitigate for the loss of other agricultural land to non-agricultural use.

No further mitigation is feasible.

Effect AG-2: Conflict with existing zoning for agricultural use or conflict with a Williamson Act contract. Similar to what is described above for the No Action Alternative, the Proposed Action Alternative would result in the conversion of over 1,900 acres of Williamson Act land to non-agricultural uses. However, most of this would be because of urban development also anticipated under the No Action Alternative. Under the proposed conservation strategy as part of the Yolo HCP/NCCP, lands currently zoned for agriculture or under Williamson Act contract may have conservation easements purchased on them and would be subject to a management plan. On the majority of the agricultural lands brought into the HCP/NCCP reserve system, agricultural operations would continue. Yolo County does not prohibit habitat restoration on agriculturally-zoned land. Continuing agricultural operations on lands within areas zoned for agricultural use would not conflict with the permitted uses of agriculturally zoned lands, even if some restrictions are place on the land, such as limiting certain crop rotations or not allowing planting of vineyards or orchards to protect values for covered species. In addition, in accordance with Section 51293 of the Williamson Act, acquisition of a fee interest or conservation easement for a term of at least 10 years to restrict the land to agricultural or open space uses does not conflict with the Act. Therefore, conservation easements under the HCP/NCCP would not conflict with the Williamson Act.

There is the possibility, although remote, that lands under Williamson Act contract would be planned for habitat restoration or creation, resulting in the conversion of agricultural land to habitat. However, open space is consistent with Williamson Act contracts.

NEPA Level of Significance: As compared to the No Action Alternative, this impact is **less than significant** because implementation of the conservation strategy under the Proposed Action Alternative would not cause a conflict with a Williamson Act contract or agricultural zoning. This would be similar as for mitigation actions under the No Action Alternative.

CEQA Level of Significance: As compared to Existing Conditions, this impact is **less than significant** because implementation of the conservation strategy under the Proposed Action Alternative would not cause a conflict with Williamson Act contracts or agricultural zoning

No mitigation is required.

Effect AG-3: Conflict with existing zoning/loss of forest land.

There is no zoning in Yolo County which is specifically for forest or timberland; therefore, this analysis does not discuss whether there would be a conflict with zoning. Implementation of the conservation strategy is not expected to convert forest lands to non-forest uses as there are not circumstances where forest land would be converted to a non-forest habitat type. In addition, the Proposed Action Alternative would involve natural resources conservation, and implementation of the conservation strategy, which would result in preservation and creation of woodland and riparian forest lands. The Yolo HCP/NCCP would protect as least 1,600 acres of currently unprotected valley foothill riparian natural community distributed primarily in the Cache Creek and Putah Creek planning units (planning units are shown in Figure 2-1) (Yolo Habitat Conservancy 2017; Table 6-2(a)). The HCP/NCCP would also restore sufficient acres of the valley foothill riparian natural community to yield no net loss as a result of covered activities, and would restore another 20 acres independent of habitat losses (Yolo Habitat Conservancy 2017; Objective NC-VFR1.2).

NEPA Level of Significance: As compared to the No Action Alternative, this impact is beneficial. The Yolo HCP/NCCP would result in the conservation of 1,600 acres of the valley foothill riparian natural community in the Plan Area within the reserve system (Yolo Habitat Conservancy 2017; Table 6-2(a)). This represents 30 percent of the total acreage within that natural community. In addition, any losses of this community would be replaced resulting in no net loss of acreage, plus an additional 20-acres of restoration would be implemented. This would not occur under the No Action Alternative where mitigation under CEQA would be required but the extra conservation that would be achieved under the HCP/NCCP would not be required.

CEQA Level of Significance: As compared to Existing Conditions, this impact is **beneficial** because there would be a net gain of protected forest land within the Plan Area compared to existing conditions,

No mitigation is required.

Cumulative Effects

The existing cumulative condition in the Plan Area resulting from past and present projects is described above for the No Action Alternative and remains the same for the Proposed Action Alternative.

The contribution of the Proposed Action Alternative to cumulative conditions for agricultural and forestry resources would include an increase in the acres of preserved agricultural lands including Important Farmland and an increase in restored and preserved forest lands in the Plan Area. As described above, protection of agricultural and forest lands would be improved as a result of the implementation of the conservation strategy and neighboring landowner protection program under the Proposed Action Alternative through preservation and enhancement of large areas of agricultural lands and valley foothill riparian natural community compared to the existing conditions and the opportunity for Endangered Species Act protection for neighboring agricultural lands.

NEPA Level of Significance: As compared to the No Action Alternative, this impact is **beneficial** because Proposed Action Alternative would have the same potential contribution to adverse cumulative effects as the No Action Alternative, but would result in more preservation and creation through the reserve system.

CEQA Level of Significance: As compared to Existing Conditions, this impact is **significant and unavoidable**. As stated previously, up to approximately 700 acres of cultivated land and 210 acres of grazing land could be permanently converted to a non-agricultural use. This would be a substantial contribution to a significant cumulative effect relative to the existing conditions baseline.

ALTERNATIVE C-REDUCED TAKE ALTERNATIVE

The Reduced Take Alternative (Alternative C) would include the same categories of covered activities as the Proposed Action Alternative (Alternative B); however, under the Reduced Take Alternative, there are eight areas designated for development under the Proposed Action Alternative in which no activities that would result in take of covered species would be permitted. See Chapter 2, Section 2.3.3, Alternative C-Reduced Take Alternative for more information on this alternative. Impacts to agricultural and forestry resources as a result of implementation of the Reduced Take Alternative would be similar to those discussed under the No Action Alternative and the Proposed Action Alternative; however, given that less take would be allowed, there is also potential for less conversion of agricultural lands to non-agricultural uses and less conversion of forest land to non-forest uses in some circumstances. The combined eight areas included under the Reduced Take Alternative cover approximately 1,335 acres and contain approximately 1,100 acres of agricultural land, approximately 80 acres considered grazing land, and approximately 95 acres of riparian habitat that could be considered forest land. Depending on the activities that would ultimately be undertaken in these areas, varying amounts of these land cover types could be converted to another use without resulting in take. The most likely scenario is that less conversion would occur in these areas than under the No Action or Proposed Action Alternatives. However, development which is displaced by the Reduced Take Alternative could potentially be placed on other agricultural, grazing, or forest lands, thereby resulting in similar impacts to agricultural land as the No Action and Proposed Action Alternatives. There are

approximately 1,090 acres of FMMP designated Important Farmland on in the eight areas included in the Reduced Take Alternative. Specifically considering Important Farmland, assuming displaced development is not placed on Important Farmland, Table 6-10 summarizes the minimum anticipated acreages of conversion of Important Farmland by covered activities under the Reduced Take Alternative

Table 6-10 Minimum Important Farmland Conversion under Alternative (Table 6-10	Minimum Impor	rtant Farmland	Conversion un	der Alternative C
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Farmland Type	Acreage	Percentage of Farmland Type within Plan Area
Prime Farmland	6,901	2.4%
Farmland of Statewide Importance	454	2.4%
Farmland of Local Importance	3,592	6.9%
Unique Farmland	943	2.1%
Total	11,890	3.3%

The Reduced Take Alternative could affect between 11,890 acres and 12,979 acres of Important Farmland depending on the extent and location of displaced development. It would also affect between 1,753 acres and 1,916 acres of Williamson Act land depending on the location and extent of displaced development.

Overall, if the prohibition on take of covered species in the eight designated areas resulted in less overall development in the Plan Area, conversion of agricultural and forest lands from development related activities could be slightly less under the Reduced Take Alternative than under the No Action and Proposed Action Alternatives. However, the prohibition on take in the eight areas could result in the development planned for these locations being diverted to another part of the Plan Area. If development in any of the new locations removed agricultural or forest lands, impacts would become more similar to the No Action and Proposed Action Alternatives.

Overall, under the Reduced Take Alternative, Effects AG-1 through AG-3 would not be appreciably different from what is described for the Proposed Action Alternative.

NEPA Level of Significance: As compared to the No Action Alternative, this impact is similar and is **less than significant**.

CEQA Level of Significance: As compared to the Proposed Action Alternative, this alternative could result in less impact; however, the impact remains **significant and unavoidable**.

No mitigation is required.

Cumulative Effects

The existing cumulative condition in the Plan Area is the same as described for the Proposed Action Alternative. The individual effects on agricultural and forestry resources under Alternative C could be slightly less than those described for the No Action and Proposed Action Alternatives. Overall, implementation of the Reduced Take Alternative would make a similar contribution to cumulative impacts on agricultural and forestry resources as the No Action and Proposed Action Alternatives.

NEPA Level of Significance: As compared to the No Action Alternative, this impact is similar and is **less than significant**.

CEQA Level of Significance: As compared to the Proposed Action Alternative, this alternative could result in less impact; however, the impact remains **significant and unavoidable**.

ALTERNATIVE D—REDUCED DEVELOPMENT ALTERNATIVE

Environmental Consequences/Environmental Effects

The Reduced Development Alternative (Alternative D) would include the same categories of covered activities as the Proposed Action Alternative (Alternative B), but under the Reduced Development Alternative, development within a portion of the west side of the Dunnigan Specific Plan Area, and the Elkhorn Specific Plan Area, would not be covered activities and therefore could not be provided incidental take authorization through the Plan. There are no immediate plans to develop these areas, but some type of development could potentially occur within the term of the permit. If such development were to occur, it would not be considered a covered activity under the HCP/NCCP. (See Chapter 2, Section 2.3.4, Alternative D-Reduced Development Alternative for more information on this alternative). Impacts to agricultural and forestry resources as a result of implementation of the Reduced Development Alternative would be similar to those discussed under the No Action Alternative and the Proposed Action Alternatives. If less development were to occur within the two designated areas, there is the potential for the Reduced Development Alternative to result in somewhat less conversion of agricultural lands to non-agricultural uses and less conversion of forest land to non-forest uses. However, if these areas were developed some time in the future, effects on agricultural and forest lands would be the same as those for the Proposed Action. The two areas included in the Reduced Development Alternative cover approximately 1,495 acres, with almost all the area considered either agricultural land or grazing land, or riparian habitat considered as forest land. Agricultural land and grazing land are the dominant land covers. As stated above, conversion of agricultural, grazing, and forest land could vary depending on the future use of each of the two areas. Table 6-11 summarizes the minimum acreages of conversion of Important Farmland under Alternative D if no development were to occur in the two areas.

Table 6-11 Minimum Important Farmland Conversion under Alternative D

Farmland Type	Acreage	Percentage of Farmland Type within Plan Area
Prime Farmland	6,959	2.8%
Farmland of Statewide Importance	279	1.5%
Farmland of Local Importance	3,605	7.0%
Unique Farmland	901	2.0%
Total	11,744	3.2%

Depending on future land uses on the two areas, the Reduced Development Alternative would affect between 11,744 and 12,979 acres of Important Farmland and between 1,832 and 1,916 acres of Williamson Act land.

Overall, if under the Reduced Development Alternative there was ultimately no development or other activities that resulted in the conversion of agricultural land and forest land to another use in the two areas considered, conversion of agricultural and forest lands could be less under the Reduced Development Alternative than under the No Action and Proposed Action Alternatives. However, if development or other activities that resulted in conversion of agricultural land and forest land to another use were ultimately implemented, effects on these resources would become more similar to the No Action and Proposed Action Alternatives.

Overall, under the Reduced Development Alternative, Effects AG-1 through AG-3 would not be appreciably different from what is described for the Proposed Action Alternative.

NEPA Level of Significance: As compared to the No Action Alternative, this impact is similar and is **less than significant**.

CEQA Level of Significance: As compared to the Proposed Action Alternative, this alternative would result in less impact; however, the impact remains **significant and unavoidable**.

No mitigation is required.

Cumulative Effects

The existing cumulative condition in the Plan Area is the same as described for the Proposed Action Alternative. The individual effects on agricultural and forestry resources under Alternative D could be slightly less than those described for the No Action and Proposed Action Alternatives. Overall, implementation of Alternative D would make a similar contribution to cumulative impacts on agricultural and forestry resources as the No Action and Proposed Action Alternatives on agricultural or forestry resources.

NEPA Level of Significance: As compared to the No Action Alternative, this impact is similar and is **less than significant**.

CEQA Level of Significance: As compared to the Proposed Action Alternative, this alternative would result in less impact; however, the impact remains **significant and unavoidable**.